



In-Depth investigation of motorcycle accidents

Report on the
Project Methodology and Process

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Association des Constructeurs Européens de Motocycles

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Executive Summary

Powered two wheelers (PTWs) form an integral part of the European transport infrastructure. Their relatively small size and low cost make them a viable solution for congested European roadways. However, little detailed information is known about the casualties and accidents associated with PTWs in Europe.

With the support of the European Commission and the Association of European Motorcycle Manufacturers (ACEM) an extensive motorcycle accident in-depth study was conducted in five countries. The objective was to gather a comprehensive and representative accident database that could be used to improve motorcycle safety. A common methodology for on-scene in-depth motorcycle accident investigations developed by the Organisation for Economic Co-operation and Development (OECD) was used by all five research groups in order to maintain consistency in the data collected in each region. This study represented the first application of the common methodology.

A total of 921 accidents were collected. Each accident was investigated in detail, resulting in approximately 2000 variables for each accident. The investigation included a full reconstruction of the accident, including human, environment and vehicle factors, and an identification of all accident cause factors. Accident data for each accident were merged into a database for each sampling region to form an aggregate database which was representative of Western Europe. To identify risk factors and countermeasures, this data was compared to a sample of non-involved motorcycle riders within the same sampling region using an exposure data collection methodology developed specifically for this study. The methodology involved conducting detailed interviews of motorcycle riders that were refueling their motorcycles at a petrol station within the sampling region. A total of 923 rider interviews were conducted as part of this study. Statistical data analysis provided identification of motorcycle accident risk factors by comparing the accident data to the petrol station exposure data.

The final report has been divided into two summary reports. The first summary report contains detailed information regarding the methodology and the data collection process. The second summary report contains the most important data trends along with conclusions and recommended countermeasures.

1.0 Introduction

Powered Two Wheelers (PTWs) play an increasing role in European transport policy because of their potential benefits for the environment, reduction of congestion in urban areas and their relatively low cost for purchase, operation and infrastructure requirements. PTW usage has increased but little specific information is known about the casualties and accidents associated with this usage.

PTW riders are among the most vulnerable road users on European roads. Their relative risk of death on EU roads is higher than for car occupants (ref. 1). PTW rider casualties in Western Europe declined by 25% from 1980-90, and by an additional 20% from 1990 to 1995. However, since then, the downward trend has stopped. A serious problem for the PTW industry is the lack of detailed statistical data on motorcycle accidents. At present, European statistical reporting of motorcycle accidents is insufficient in coverage and in detail and is not harmonised. Causation data and analysis of a full range of standardized parameters necessary for countermeasure identification are also not available.

Considering the fact that improved motorcycle accident causation data are required for targeting remedial action by all stakeholders of the PTW transport mode, the Association of European Motorcycle Manufacturers (ACEM) undertook the development of a project dealing with in-depth studies of motorcycle accidents. The Motorcycle Accident in Depth Study (MAIDS) project aimed at providing a harmonised system for the accident data collection and analysis at the European level.

Improved motorcycle accident causation data are essential to focus and target remedial action by all stakeholders of the PTW transport mode, specifically:

- Transport and safety policy makers;
- Safety organisations and authorities;
- Rider licensing and rider education legislators;
- Road infrastructure planners;
- Traffic code legislators;
- Local and regional traffic management authorities;
- PTW vehicle and component manufacturers;
- Insurance sector/health service.

1.1 Objectives of the MAIDS project

The objective of the MAIDS project was to gather comprehensive motorcycle accident causation data from a representative cross section of European countries and regions, using a group of specialised traffic research institutes from the European member states.

ACEM, the project co-ordinator and its main contributor, defined the project strategy, and the global direction of the project. ACEM also developed suitable dissemination measures to ensure that the results are made available to stakeholders of the PTW transport mode so that appropriate countermeasures for Europe can be identified based upon the results of the study.

To ensure a scientific validity and harmonisation, ACEM joined the OECD/DTSI/RTR/RS9 international technical experts group to develop at an international level, a motorcycle accident investigation methodology which has similar characteristics as those considered by ACEM. This resulting methodology became known as "Motorcycles: A common international methodology for In-Depth Accident Investigations" (Ref. 2).

With the assistance of five specialised traffic research institutes, and sponsorship from both ACEM and the European Commission, the MAIDS study was initiated in 1998. Both the complexity of the methodology and the fact that it was applied for the first time in Europe led the ACEM research organisation to develop an extensive communication and training network in order to help ensure that the methodology was applied in the same manner in all regions.

2.0 Scope and methodology development

Whilst many programmes have been developed for promoting motorcycle safety and reducing injuries resulting from motorcycle collisions, it has been difficult to link potential improvements with reductions in frequency and severity of injuries. This is due to different countries, agencies and institutes utilizing different methods of collecting accident data as well as different methods for reporting and compiling local, regional and national statistics.

When a motorcycle crash happens, the first task of police and rescue teams is to quickly assist any injured people and clear the site of the accident in order to restore normal traffic flow. Police also have to collect some evidence of what happened and to assign legal responsibility for the accident if necessary. Since many accidents may occur in a large urban area, the amount of information obtained for a given accident is kept to a minimum. Historically, only accidents involving severe injuries or fatalities were evaluated in greater detail.

Therefore, most important research questions about motorcycle accidents cannot be evaluated using police traffic reports. Police reports do not focus upon the cause of the accident or the specific events which took place immediately prior to the accident. The reconstruction and detailed evaluation of an accident requires investigation and analysis skills which are typically not included in basic police officer training programmes.

This lack of detailed information and variation in accident data collection and reporting creates an additional challenge for EU public officials and safety professionals who rely upon this data. There is, therefore, a clear need for a harmonious and comprehensive motorcycle accident database within Europe.

In response to this need, the Organisation for Economic Co-operation and Development (OECD) proposed that an international co-ordinating committee of motorcycle technical experts develop a common methodology for motorcycle accident data collection. The group was composed of members of the motorcycle industry, motorcyclist associations as well as motorcycle accident researchers. The

first meeting of this group took place in 1997.

The primary objective of this committee was to develop and specify a common international methodology for conducting motorcycle accident investigations which are:

- i. on-scene, at the time of the accident as much as possible;
- ii. in-depth;
- iii. multi-disciplinary;
- iv. multi-level;
- v. inclusive of accident causation and injury causation factors;
- vi. inclusive of relevant human, vehicle and environmental factors and their associated interactions;
- vii. capable of identifying possible countermeasures;
- viii. applicable to all powered two wheeler accidents, excluding non-injury cases;
- ix. recommended to use sample sizes of at least 100 accidents per sampling area, taken during any one year period;
- x. including concurrent exposure data to allow for case-control analyses;
- xi. involving investigation team members who comply with a minimum set of academic or professional requirements that will enable them to conduct in-depth motorcycle accident investigations;
- xii. able to provide an audit path, between the raw data that has been collected and the final result;
- xiii. including a method for generating reproducible data (i.e. given the same raw data, different investigation teams would produce the same final results);
- xiv. unbiased, in terms of sampling, results and interpretations;
- xv. useful for comparisons between different regions in different countries;
- xvi. to the extent practicable, based on a census of qualified motorcycle accidents meeting the sampling criteria in a given region;
- xvii. for a sampling period which covers accidents occurring during 24 hours per day, 365 days per year;
- xviii. involving standardized, minimum statistical analysis procedures, for single and multi-variable analysis;
- xix. resulting in final databases which have a common structure and format.

This international co-ordinating committee regularly met to develop all of the necessary components for this common international methodology. It was agreed that this common international methodology should apply to all international studies which are intended to identify accident causation factors and injury causation factors, and which involve any L1 mopeds or L3 motorcycles as defined by UN/ECE/TRANS/WP.29/R.821.

The original draft documents were based on manuscripts provided by Professor Hugh H. Hurt, Jr. of the Head Protection Research Laboratory in Paramount, California, USA. Professor Hurt was the principal investigator of the only in-depth motorcycle accident study ever to be undertaken by the United States government (National Highway Traffic Safety Administration, or NHTSA), (Ref. 3), and his

experience, knowledge and contributions proved invaluable to the international co-ordinating committee.

Using the manuscripts provided by Professor Hurt as a framework for development, thirteen separate sections or parts were developed for the internationally harmonised common methodology. The goal of the common methodology was to adequately define the minimum requirements for conducting in-depth motorcycle accident investigations. These sections are as follows:

- Part 1: Definitions
- Part 2: Sampling requirements
- Part 3: Accident data collection: on-scene, follow-up, and concurrent exposure data activities
- Part 4: Data assembly, accident reconstruction, and causation analysis
- Part 5: Personnel selection and special training requirements
- Part 6: Quality control requirements
- Part 7: Liaison and cooperative agreement requirements
- Part 8: Equipment and facility requirements
- Part 9: Study implementation and schedule
- Part 10: Database requirements
- Part 11: Minimum statistical analysis
- Part 12: Reporting and publication
- Part 13: Coding manual

The first major sections to be completed were the first three parts of this common methodology. Initially, a common set of definitions had to be developed in order to communicate minimum requirements and in order to ensure that during the discussions, all committee members understood the terms which were being discussed. Every effort was made to eliminate local, slang or colloquial terms which often appear in popular motorcycling literature. The development and use of common engineering and motorcycle dynamics terms greatly improved the understanding of several complex issues that arose during the development of these documents.

The goal of this part of the methodology was to adequately define the minimum requirements for conducting in-depth motorcycle accident investigations. Once a first draft of the definitions had been prepared by the international co-ordinating committee, the sampling requirements for the common methodology were developed. The methodology included criteria for an adequate sample size as well as an adequate sampling area. In order to minimize sampling bias, it was agreed, to the extent practicable, that the sampling would be a census of all notified powered two wheel accidents in the sampling area. The minimum sampling requirement for

any research group or organization conducting a study using the common methodology was 100 in-depth on-scene motorcycle accident investigations.

The methodology also specified that only accidents which involved a PTW and in injured rider on a trafficway were acceptable for further in-depth evaluation. A brief summary of the case sampling criteria is provided in Figure 1.

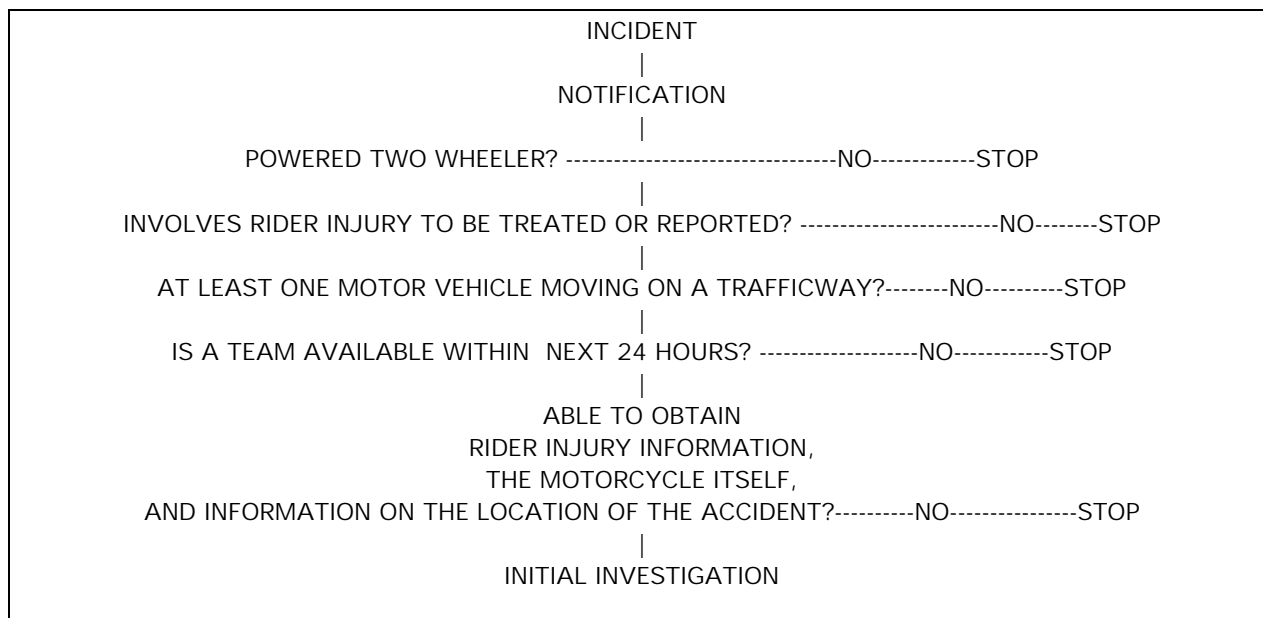


Figure 1. Sampling criteria for the common methodology

The methodology also included a comprehensive description of the sampling requirements for the concurrent exposure samples. The concurrent exposure sample provides a description of typical or normal powered two wheelers and other vehicle traffic in the sampling area, at a similar time and day of the week as each accident, for the purpose of comparison to the accident-involved sample.

Once the specific sampling requirements had been established for an in-depth motorcycle study, a thorough data questionnaire to be completed by the research team, was developed. This included both basic questions critical to understanding motorcycle accident causation and specialised questions that either provide additional insight into motorcycle accident cause factors, or represent a very specific component of a motorcycle accident. A total of 2765 questions were developed and agreed upon by the international co-ordinating committee. The basic questions and the specialised questions were summarized and organised into data summary sheets (DSS) that were added to the common methodology. The international co-ordinating committee also agreed that any group participating in the common international methodology was required to complete the basic data summary sheets which included 1627 questions.

The major sections of the common methodology are as follows:

Annex A - On-scene and follow up data collection.

Section A.1 Administration data log. All general and administrative information about the accident is recorded, such as the notifying agency, and the accident location. A preliminary description of the accident is provided along with the time and date of crash notification, team departure and arrival on scene.

Section A.2 Accident typology, classification. Basic information about the crash is coded: time of day, day of week and date in which accident occurred, the collision partner, number of other vehicles (OVs) involved, as well as the presence of pedestrians or passengers. This section also indicates if there is a fatality involved along with a more technical description of the accident configuration.

Section A.3 Environmental factors. The accident scene is described in detail for both the rider and the OV. Information regarding the pre-crash path of travel is documented, including: type of area, illumination (daylight, dusk, night lighted, night not lighted, or dawn), type of intersection, traffic direction, lane dividers, roadside environment and obstacles, traffic way description, posted speed limits and roadway surface characteristics. Information about traffic conditions and weather at time of accident is coded in this section.

Section A.4.1 Motorcycle mechanical factors. This part of the DSS contains all the information obtained during the motorcycle inspection. Each motorcycle drivetrain and braking component is described with respect to its type (i.e. footbrake or lever brake, etc.) and pre-crash condition. Additional information regarding motorcycle manufacturer, model and style, year, colors, tire and rim sizes, suspension characteristics, brake system type and conditions, frame, handlebar, seat, fuel tank, drivetrain, throttle control and exhaust system are also recorded. A comprehensive table of 60 motorcycle components is completed for each crash involved motorcycle. Specific information is coded to describe if a particular component was equipped on the bike at the time of the accident, if it was original equipment or aftermarket, if it was operational, in use at the time of the accident, or modified. Information regarding whether or not a component was damaged in the accident is also included.

Section A.4.2 Motorcycle dynamics. The dynamics of the motorcycle motion are coded in detail, describing speeds and movements of the motorcycle before the precipitating event, at the time of the precipitating event, at impact and after impact. Recording of physical evidence (e.g. skid marks on the roadway) is also contained in this section.

Section A.4.3 Other vehicle mechanical factors. The other vehicle (OV) is described briefly in terms of its characteristics: manufacturer, model, year, kerb mass, ABS and the presence of any mechanical problems.

Section A.4.4 Other vehicle dynamics. The dynamics of the other vehicle motion is coded, describing the OV speeds and movements before the precipitating event, at the precipitating event, at impact and after impact. In addition, OV skid marks on the roadway and their measurements are recorded in this section.

Section A.5.1 Human factors, general information. Human factor data, collected during the in-depth interviews, are coded in this section. Information for all accident involved persons (rider, passenger and other vehicle driver) are recorded. Extensive background information (e.g. date of birth, age, gender, educational status, occupation and eyes correction), and riding/driving experience (e.g., all vehicle experience, on any street motorcycle, on accident vehicle, number of days motorcycle is ridden, the ridden distance per year, training, motorcycle percent use estimate, experience with a passenger or a cargo, moving traffic violations or accidents in the past five years) is obtained. Information regarding the trip (i.e., origin, destination, trip length, frequency of road use, length of time since departure), and possible impairment (i.e., alcohol/drug type of use, impairment, blood concentration, source of BAC information, physiological impairment, permanent or transient condition, presence of stress etc.) are also recorded. Any particular or unique situations that may have led to the crash (e.g. rider and passenger position at time of collision, attention tasks, etc.) are also recorded.

Section A.5.2 Injury analysis. In order to be as comprehensive as possible, nine potential injury regions are described, i.e. head, neck, thorax, upper extremities, abdomen, pelvis, spine, lower extremities, and whole body. For each body region, up to nine injuries may be coded using the AIS 90 coding conventions. Injury information is coded for the rider, the passenger, the other vehicle driver as well as any pedestrians that may have been involved in the accident.

Section A.5.3 Human factors, personal protective equipment. This section collects all information regarding the rider's and passenger's clothing (i.e., when present), divided into upper torso coverage, lower torso coverage, footwear, glove, and eye coverage in use separate from the helmet. For each body region, the type of garment, its material and whether or not it is motorcycle specific clothing is coded. Helmet characteristics are coded in this part of the DSS as well. Information regarding status (e.g., if it was on the rider's head), type of helmet, type of coverage, color, manufacturer, model, and helmet condition both before and after the accident are recorded.

Section A.6 Contributing factors. The last part of Annex A involves the coding of all contributing factors which may have had an influence on accident causation. This section is divided into five contributing areas: *contributing environmental factors* (e.g., roadway condition and design, traffic controls defects, traffic hazard weather related problems, etc), *contributing vehicle factors* (e.g., tyre size, tyre inflation pressure, motorcycle mechanical component related problems, pre-crash fires, and any contribution of the cargo/luggage), *motorcycle contributing factors*, indicating which mechanical element may have contributed to rider injury causation, *contributing human factors* (e.g., attention failure, lane choice, traffic scan, faulty traffic strategy, safe position, skills deficiencies, etc.), and *overall contributing factors*, where the primary contributing factor is coded. The specific contact codes for each injury identified in section A.5.2 is also recorded in this section.

Annex B - Concurrent exposure data collection.

Accident data can provide information about the distribution of a particular characteristic (e.g., helmeted riders) or safety feature (e.g., ABS brakes) within the

accident population, but it is of limited value without concurrent exposure data, since the latter provides information about the distribution of the given characteristic or safety feature within the exposed population (i.e., within the group of all motorcycle riders in the sampling region). Only by comparing the distributions of the accident and exposed population can the true effect of a safety feature (e.g., ABS brakes) or the true risk of a characteristic (e.g., not wearing a helmet) be quantified.

In order to be able to compare the accident data to the exposed population of motorcycle riders in the sampling region, the international co-ordinating committee developed three methodologies to collect exposure data which could be used as controls for future statistical analyses. It was recommended that the research group collect exposure data using one of the following methodologies:

- 1) photography or video recording of traffic, plus follow-up of motorcycles via licence plate number, plus signs indicating voluntary or police assisted stopping of motorcycles for questionnaire interviews; or
- 2) photography or video recording of traffic, plus follow-up of motorcycle riders via licence plate number; or
- 3) only photography or video recording of traffic.

The data from these exposure collections were contained in the following DSS:

Section B.2 CED Methods. This section indicates the type of method used for the collection of concurrent exposure data (CED).

Section B.3 CED Environmental factors. This data summary sheet records the count of different types of vehicles and pedestrians that passed along the motorcycle and other vehicle pre-crash path precisely one week after the accident (i.e. same day of week, same time of day). Weather information is also included in order to confirm that the conditions of the concurrent exposure data collection match those of the accident.

Section B.4 CED Motorcycle mechanical factors.

Section B.4.1.1 CED Motorcycle mechanical factors – Methods 1 and 2;

Section B.4.1.3 CED Motorcycle mechanical factors – Method 3;

Section B.5 CED Human factors and personal protective equipment;

Section B.5.1.1 CED Human factors, general information – Methods 1 and 2;

Section B.5.1.3 CED Human factors, general information – Method 3;

Section B.5.3.1 CED personal protective equipment – Methods 1 and 2;

Section B.5.3.3 CED personal protective equipment – Method 3;

Annex C – Specialized modules

The specialised questions were grouped according to their major category (i.e. human, vehicle, and environmental). Specific modules were developed for helmet investigations, personal protective equipment as well as mopeds and mofas. Each

of these specific modules was defined as a specialised module which represented optional investigations that went beyond the basic level of investigation. A summary of the specialised modules is as follows:

Section C.3.1 Environmental factors, special module (weather);

Section C.3.1 Environmental factors, special module;

Section C.4.1 Moped/mofa module;

Section C.4.1.3 Moped/mofa module additional environmental factors; Section

C.4.1.4.1 Moped/mofa module additional mechanical factors;

Section C.4.1.5 Moped/mofa module additional human factors;

Section C.4.1.6.1 Moped/mofa module additional contributing factors: accident causation evaluation;

Section C.4.2 Motorcycle other factors;

Section C.5.1 Helmet special module;

Section C.5.2.1 Human factors, special module;

Section C.5.2.2 Injury Analysis, special module;

Section C.5.3 Human factors, personal protective equipment, special module;

Concurrently with the development of these questions and DSS, a unique coding manual was also developed by the international co-ordinating committee. This coding manual was designated as part 13 of the common methodology and provided any user of the data summary sheets with guidelines for interpretation of specific questions as well as descriptions of coding conventions that were to be applied during the data coding of a given motorcycle accident. The international co-ordinating committee agreed that this document was essential to the international harmonisation of different research projects based on this common methodology.

The next task for the international co-ordinating committee was to develop a common methodology for specific on-scene investigation activities as well as specific follow-up investigation activities. As shown in Figure 1, the common methodology requires the research group to conduct an on-scene investigation within 24 hours of the accident. In many cases, it is not possible to stop traffic in order to conduct detailed on-scene measurements and investigations. Therefore, the methodology provided information and a complete list of all information that had to be collected as quickly as possible. All on-scene data collection activities had an immediate link to a question or series of questions within the data questionnaire. The common methodology provided minimum requirements for the collection of all human, vehicle and environmental data whilst the team members were on-scene as well as after the team members had left the scene (i.e., follow-up activities).

The follow-up investigation activities of the common methodology also provided guidelines with respect to the method by which the motorcycle accident was to be reconstructed and the method by which the causal factors for the accident would be identified. Given the complex nature of motorcycle accidents, it was necessary that these guidelines be as inclusive as possible, with illustrative examples (Part 4: Data assembly, accident reconstruction and causation analysis). Whenever possible, scientific literature was provided as a reference to assist in the accident reconstruction analysis.

With the knowledge of the data that must be collected during an in-depth motorcycle accident study, the international co-ordinating committee developed specific guidelines for the selection and training of personnel that were expected to participate in any in-depth motorcycle accident study (Part 5: Personnel selection and special training requirements). The staff selection requirements and recommendations were intended to provide each research organisation and research group with information regarding the skills and experience necessary to develop a multi-disciplinary investigative team. The international co-ordinating committee recommended that a principal investigator be responsible for each sampling area's research project and that a programme manager be responsible for the day to day operations and management of the research team. Within the research team, a data analyst and a group of team members conducted the on-scene investigation activities and all follow-up activities. The suggested organisation structure as developed by the international co-ordinating committee is illustrated in Figure 2.

The methodology recommended that as a minimum requirement, the principal investigator of the research group shall have an advanced degree, plus a clearly demonstrated research publication record in either engineering or medicine, motorcycle technology, accident reconstruction, helmet technology, injury biomechanics, human factors, statistical data analysis or another similar scientific discipline. It was also required that the principal investigator have professional experience in communicating with public agencies.

The common methodology recommended that the programme manager shall be responsible for the organization, coordination and supervision of the research team. The programme manager shall also be responsible for direct liaison with all jurisdictions and authorities responsible for the notification and cooperation for data collection.

The methodology identified the requirements of a data analyst for each research team. The data analyst was required to be responsible for the assembly of data collected by the research team and the preparation of all electronic data files for analysis according to part 10 of the common methodology (Part 10: Database requirements).

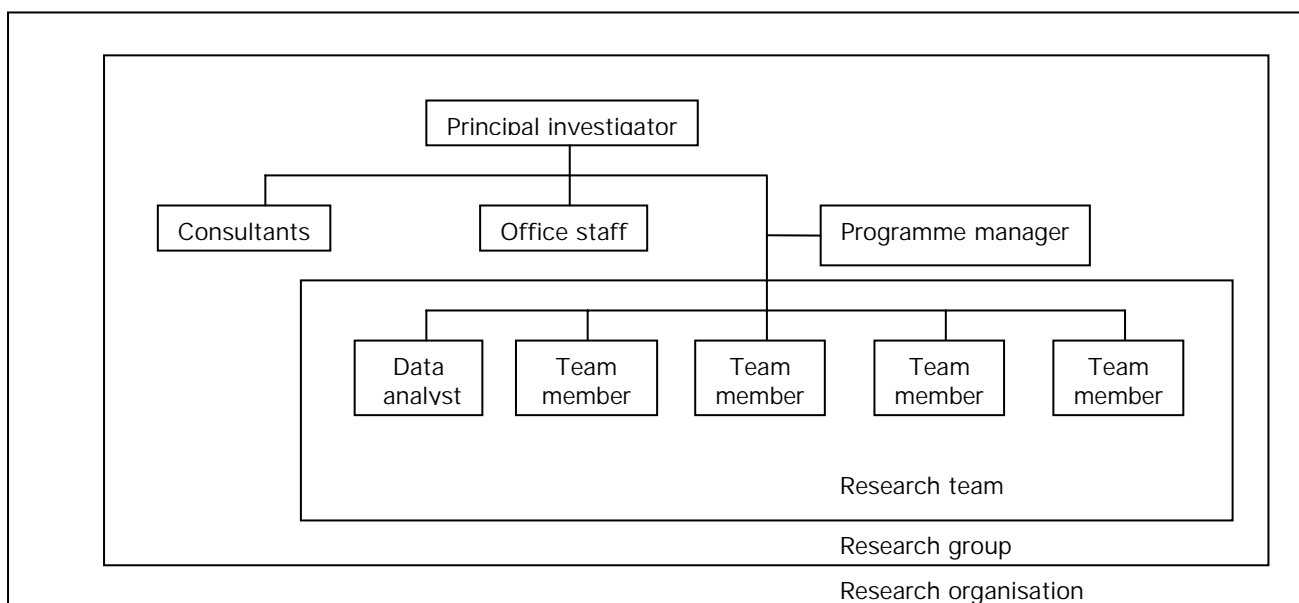


Figure 2. Example of research organisation structure

The common methodology recommends that each team member hold at least a basic degree, or have a research publication record in a relevant discipline. The methodology also prescribes two levels of expertise within a research team, the first one being fundamental skills, i.e. those skills that were critical for the conduct of proper in-depth motorcycle accident investigations. The common methodology recommends that each member of the research team have the necessary expertise in the fundamental topics, which are listed in Table 1.

Table 1. Fundamental topics of expertise

Fundamental topics
Principles of motorcycle accident investigation
Collection and analysis of witness information
Photographic methods of accident investigation
Vehicle systems technology
Vehicle dynamics technology
Human factors in motorcycle accidents
Motorcycle accident injury mechanisms
Ductile and brittle failure modes, macroscopic examination of materials
Event sequencing for accident reconstruction
Fundamental analysis of motorcycle crash fires, including analysis of origin, fuel spill sources, ignition sources
Fundamental helmet damage analysis

The second level of expertise described by the common methodology consists of specific topics within the area of motorcycle accidentology that the international co-ordinating committee felt were important to the in-depth investigation and analysis of motorcycle accidents. The common methodology requires that at least one team member have an expertise in each of the specific topics listed in Table 2.

Table 2. Specific topics of expertise.

Specific topics
Motorcycle accident reconstruction methodology
Scientific laboratory methods in deformation and damage analysis and accident reconstruction
Fires and explosions
Legal aspects of accident investigation
Advanced photographic analysis, including photogrammetry
Advanced vehicle systems technology, including oxidation effects, glass fragment fusing and advanced rubber technology
Motorcycle traffic proficiency
Motorcycle helmet evaluation
Specialized logical analysis of accident contributing factors, including change analysis

Prior to the initiation of data collection, each principal investigator was required to identify which staff member or members had the knowledge, experience or training in each of these specific topics. A specific expertise worksheet was provided as part of the common methodology.

The common methodology also provided guidelines with respect to what equipment would be necessary in order to conduct in-depth motorcycle accident investigations (Part 8: Equipment and facility requirements). A complete list of on-scene investigative and analysis materials was provided in order to maximize the quality of the data collected. A common set of measurement tools also ensured that data collected by different investigating teams would have a consistent level of quality.

Since any research organisation participating in in-depth motorcycle accident research needs to collect both public and private information in a timely fashion, the common methodology established guidelines and information regarding the liaison and cooperative agreements necessary to conduct such investigations (Part 7: Liaison and cooperative agreement requirements) and be consistent with local laws regarding privacy. It was acknowledged that different countries would have different public organisational structures, therefore, in this area, the common methodology was written primarily as a series of recommendations which would help to maximize the quality of the data collected.

In addition to establishing minimum levels of knowledge, skills and expertise or research team members, the common methodology provided specific minimum requirements for the quality control of all procedures, data collection, and accident data that were collected by any team using the common methodology (Part 6: Quality control requirements). The specific duties of the programme manager as well as the principal investigator were described with reference to their role in the quality control of the data collection, data analysis, data coding and data entry into the database.

In order to co-ordinate and to monitor all activities for the various research organisations and research groups using the common methodology, the international co-ordinating committee established a quality control subcommittee (QCSC). The QCSC was responsible for the review of the capabilities of any research organisation or group that reported to the international coordinating committee that it was going to use the common methodology. This review included an evaluation of the accident reconstruction capabilities of the research group by requiring them to reconstruct several specific accident cases or several specific full scale crash tests.

In addition to this calibration activity, the common methodology established QCSC guidelines for the random review of at least 10% of the cases collected by any research group that was participating in the common methodology. The methodology stated that cases could be selected at random by the QCSC and reviewed to reinforce the international harmonisation of the data.

An implementation plan was also provided in Part 9 of the common methodology (Part 9: Study implementation and schedule) to provide those groups using the common methodology with a comprehensive list of all activities which must be completed prior to actual data collection and what activities must be completed during the data collection. Descriptions, recommendations and requirements were provided with respect to staffing and facilities as well as liaison with the international co-ordinating committee and with the QCSC. Reporting schedules were provided as well as recommendations regarding an analysis schedule for the data collected as part of the common methodology.

As part of the analysis and documentation requirements described in part 9 of the common international methodology, a comprehensive summary of the structure of the common database is provided in part 10 (Part 10: Database requirements). It was decided by the international co-ordinating committee that a hierarchical and archival database would be developed to store all relevant accident data and all variables collected as part of any in-depth motorcycle study, including MAIDS. This requirement of a common database structure ensured that all teams participating in any research project that utilized the common methodology would develop data in at least one common database format. Therefore, it was proposed that future studies would be harmonised in such a manner that all data could be shared or exchanged if desired.

The reporting of statistical results using a minimum set of common statistical analysis procedures was also required as part of the common methodology. This was developed in order to ensure that data trends from different studies could be compared on a common basis (Part 11: Minimum statistical analysis).

The twelfth part of this common international methodology provides the reporting requirements for any team that wishes to participate in an in-depth motorcycle accident study which utilizes the common methodology. This reporting requirement was considered necessary in order to provide clear and concise information for anyone that would make use of any data that was provided during the international harmonisation activities, in terms of clearly defining the sample size, sampling area and any deviations from the common methodology.

3.0 Implementation of the common methodology – the MAIDS experience

In 1998, concurrent with the development of the common international methodology, in 1998 ACEM started to develop a co-ordinated research project with the European Commission to conduct in-depth research into motorcycle accidents. The use and application of the common international methodology was strongly supported as the methodology to use for this important transportation research project.

3.1 Structure and organisation of the MAIDS project

On behalf of the research programmes in the five participating countries (Italy, Spain, France, Netherlands, Germany), ACEM informed the international co-ordinating committee of its intention to use the common methodology to collect in-depth motorcycle accident information. The overall management of the research project was performed by an ACEM committee referred to as the MAIDS management group whilst the operations of the research teams were managed by the individual research groups (see Figure 3). This unique experimental design was an enhancement to the common methodology, because the study involved co-ordination among five different research groups which reported to one research organisation (ACEM).

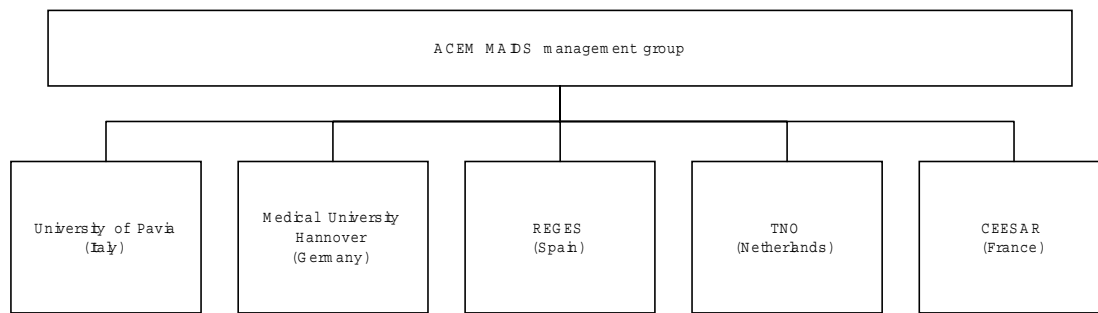


Figure 3. Overall structure of the MAIDS project

From the beginning of the research project, it was important that the same methodology be applied by each of the research groups to form a co-ordinated research effort. This was a challenge because each European country had developed its own set of laws, regulations and traffic and emergency authority networks. Therefore, each research group was asked to take the necessary steps to comply with the common methodology requirements and to obtain the necessary cooperation of both local and national authorities. Each principal investigator of each research team was responsible for obtaining the necessary cooperation in the following matters:

- i. Accident notification from law enforcement, medical response, rescue ambulance or the coroner, medical examiner.
- ii. Access to:
 - a. The accident scene by law enforcement,
 - b. Witnesses for interviews,
 - c. Medical treatment facilities for interviews,
 - d. Medical records for authoritative injury data,
 - e. Autopsy reports, coroner's investigations,
 - f. Driver records
 - g. Vehicle records
 - h. Traffic accident reports, and
 - i. Traffic statistics.

Since the provisions for protection of individual privacy are important throughout Europe but different in each nation, each research group had to develop specific methods by which to obtain critical and necessary research data, without violating national privacy laws.

3.2 Team development and training

Prior to any actual data collection, each of the MAIDS research groups had to form research teams and this required the application of part 5 of the common methodology – personnel selection and special training requirements. The MAIDS project followed the guidelines and developed five multi-disciplinary research groups that included personnel from the fields of medicine, engineering, psychology, and human factors. Each group followed the guidelines of the common methodology and identified a principal investigator who was responsible for the entire research project in each sampling area and a programme manager who was responsible for

the day to day operations of the research team. The overall structure of the MAIDS project is illustrated in Figure 3. The structure of each of the research groups is illustrated in Appendix A.

ACEM recommended that a series of special workshops be held to provide the special training needed and to provide common datasets for analysis by the individual teams, since it was very difficult to hire sufficient staffing to cover all fundamental and all specific topics. Each workshop was hosted by one of the MAIDS research teams and international experts in motorcycle in-depth accident investigations were asked to attend the meetings and provide training for the MAIDS research teams. This last task was very effective for the MAIDS project because it helped produce comparable and consistent data within the project, thereby meeting one of the original objectives of the common methodology. These workshops also served as a quality control tool, since any deviations in procedures or analysis that were identified in workshops could be corrected and applied to both previous and future cases.

It was agreed by the MAIDS management group, that all research groups would complete the basic data summary sheets for each collected accident within the MAIDS research project. It was also agreed that specialised data summary sheets related to mopeds and mofas would be included in the MAIDS research project. A complete set of data summary sheets as used by the MAIDS project appears in Appendix B.

3.3 Data collection and data coding

All data collected during the MAIDS project was coded using the data summary sheets (DSS) published in the common methodology. Table 3 summarizes the DSS sections coded as part of the MAIDS project and includes the total number of variables presented within each section.

Table 3. Summary of DSS sections included in the MAIDS project.

DSS Section	Number of variables
A.1 Administration data log	8
A.2 Accident typology, classification	9
A.3 Environmental factors	81
A.4.1 Motorcycle mechanical factors	483
A.4.2 Motorcycle dynamics	42
A.4.3 Other vehicle mechanical factors	10
A.4.4 Other vehicle dynamic	24
A.5.1 Human factors	175
A.5.2 Injury analysis	214
A.5.3 Human factors, personal protective equipment	127
A.6 Contributing factors analysis	415
B.2-B.3 CED data collection	39
C.4.1 Moped/mofa special module	94
Total number of variables in the DSS	1721

3.4 Quality control – reconstruction and causation analysis

After the data collection was initiated by all of the teams the QCSC began to co-ordinate with each of the MAIDS research groups in order to ensure that all the minimum quality control requirements were being met within the MAIDS research project. In order to ensure that the accident reconstruction methodologies were as similar as possible within each of the five research teams, ACEM co-ordinated and developed two specific documents to aid each of the research groups. Upon completion of these documents, ACEM provided them to the international co-ordinating committee in order to aid in the further refinement of the common methodology.

The first document developed to aid the research groups was a set of “accident reconstruction guidelines” (Ref 4). Within this document, experts from within the MAIDS project provided guidelines for the development, reconstruction and analysis of motorcycle speeds in an accident. All available public domain literature was collected together to form a comprehensive compendium of motorcycle crash reconstruction information. This included information such as wheelbase deformation as well as friction coefficients on various roadway and roadside surfaces. Values were provided in both graphical and tabular format so that they would form a reference for all participating MAIDS accident reconstructionists and maximize the consistency of the accident reconstructions between the different MAIDS research groups.

In addition, a second reference document was developed known as the causation analysis or “contributing factors guidelines” (Ref 5). These guidelines provided a summary of the analytical techniques available to determine causes of a particular accident. Special attention was given to the existing format of the questionnaire that was used by the international common methodology and every effort was made to promote consistency in the analysis techniques used by each of the MAIDS research teams.

3.5 Concurrent exposure data collection

As the research project began to develop in 1999, the MAIDS research groups began to collect pilot data and apply the common international methodology to five sampling areas within the European Union. Data collection included both on-scene accident investigations as well as the capture of concurrent exposure information in order to identify the population-at-risk. This latter collection could be in the form of one of three specific methods as stated in the common methodology. The first two methods (i.e., stopping and interviewing motorcycle riders and video capture of rider license plates) were both strictly prohibited within the European Union due to traffic regulations as well as privacy laws. The third method, indirect video observation involved counting and video recording of the motorcycles that passed through the accident scene exactly one week after the accident event.

Both the MAIDS management group and the five research groups quickly realized that whilst this third method did collect sufficient motorcycle and other vehicle frequency information, it was impossible to collect critical human factor information that might give a better insight into the human factors aspects in motorcycle

accidents. Specifically, the video monitoring method of exposure collection did not allow for the collection of information about the rider license status, the rider training experience or the number of kilometres ridden annually by the rider.

In response to this problem, the MAIDS research groups developed a new exposure collection methodology that would be more suitable for the European Union. This new methodology was referred to as the “petrol station exposure data collection” protocol and it involved interviewing motorcycle riders at petrol stations located within the sampling region of the research group.

Petrol stations were randomly selected from all petrol stations within the sampling region. Data collection times were also randomly selected from the hours of operation of the selected petrol station. Research group members then waited at the petrol station for a motorcycle rider that had entered the petrol station to refuel his or her motorcycle. The team members then asked the rider if they wished to participate in the study. If the rider agreed, the team members then conducted a detailed interview with the rider, asking human factors questions which were an exact duplicate of the questions that appear in the data summary sheets of the common methodology. Whilst the rider interview was going on, other team members conducted a detailed vehicle inspection to collect specific vehicle information (e.g., engine size, aftermarket parts added, etc.). This rider and vehicle data was used as the exposure population for the analysis of the accident data.

Since this petrol station methodology was used for the first time within the MAIDS project, one of the research groups (University of Pavia, ref. 6) completed a validation study to evaluate the effectiveness of this particular exposure data collection methodology in comparison with the only other available methodology for the European teams (i.e. video observation).

The results of this validation study were that while the petrol station methodology does not provide as large a sample as the video collection methodology, it provided a representative sampling of vehicles that were traveling in the sampling region. For many of the measurement variables that may be collected using either method, no significant difference was found between the data collected using the petrol station methodology and the video observation methodology. A complete copy of the report is located in Appendix C.

The validation study found that an advantage of the petrol station methodology was that it collected detailed human factor information from the motorcycle rider and more detailed information about the motorcycle. Therefore, more factors are available for analysis as accident risk factors.

Based on these results, and the success reported by other research groups in the MAIDS project, this methodology was formally introduced into the common methodology as a fourth method that was available for the collection of concurrent exposure information.

3.6 The Electronic Data Template (EDT)

In order to record or code each accident electronically, the MAIDS project used the support of an electronic database template (EDT) software to record information from the hard copy Data Summary Sheets (DSS) into an electronic format. The development of the EDT was supported by the international co-ordinating committee and it was available to any team that participated in a study that used the common methodology. The MAIDS project was the first project to fully apply the common methodology, and therefore it was also the first to use the EDT.

Although several versions of the program were developed by the international co-ordinating committee, (i.e., version 0.95, version 1.0, version 1.1 and version 1.2); the MAIDS management group decided to use version 1.1 for data input. This version supported data entry for all sections identified above. A summary of the minimum computer requirements of the EDT software is presented in Table 4.

Table 4. Minimum system requirements for EDT software

Item	Minimum Requirement
Computer	Personal computer with Pentium processor with CD-Rom drive
Memory (RAM)	32 MB
Hard disk	16 MB
Operating system and additional software	Microsoft Windows 95 or higher, and Microsoft Office 97

The main components of the EDT software are the data entry program and a database configuration (DBC) file which is automatically read into and modified by the data entry program. The data entry program has a Windows style interface that allows the user to enter data from the DSSs in order to create the electronic database. A standardized list of questions, answers, and database formatting information are stored in a DBC file. These DBC files are used to identify the combination of the basic and specialised DSSs that are to be used, and the desired input language of the user.

Each specific accident case that was coded or entered into the EDT software was stored as an ASCII flat file (AFF). This is a hierarchical and archival format that is used in many large database systems. Some of the advantages of the AFF are that it is very compact, and independent of computer hardware, operating system and database software (i.e., it does not rely upon evolving or obsolete database software). For this reason it is well suited to being archival and enduring, since it is readable on a primitive level on virtually any digital computer. A complete description of the ASCII flat file appears in Appendix D. The EDT software allowed each of the MAIDS teams to create, read, and modify an AFF database that contained one or more accident data sets. Each accident data set was uniquely identified by an accident identification number (AIN).

3.7 Internal quality control procedures

The internal quality control monitoring of the MAIDS project database was the responsibility of the research group within Italy, the University of Pavia. All completed database files were sent electronically to the University of Pavia where they were scanned by a quality control program for detection of visible incoherencies, input errors and missing data among variables. Incoherencies, input errors and missing data were then listed in an Excel file and sent to the research group for correction. A list of the computer programs used for the internal quality control procedure is shown in Table 5. An illustration of the internal quality control procedure is shown in Figure 4.

The first phase of the MAIDS project internal quality control procedure began in March 2001, when the first accident files were received from the MAIDS research groups. The quality control procedure was based on four main steps:

1. Each file was scanned by a specific quality control program to preliminarily assess and identify any input error patterns for missing data;
2. For each MAIDS team, frequency distributions of all variables were produced approximately every two to three weeks to identify missing data and out of range values;
3. A series of cross-tabulations was produced for each MAIDS team in order to confirm logical consistencies between variables (e.g., accident in residential area with speed limit greater than 50 km/h);
4. A complete summary was provided to each team which identifies missing, out of range and incoherent elements in the database and a request that each team review and correct the database as needed.

Table 5. Summary of programs used during internal quality control procedures

Program	Purpose
EDT Version 1.1	Review of cases and control files sent by teams
AFF Assembler (MS-DOS Program)	Used to assemble all files input in EDT in one unique file in txt format
ADF Converter Program (Visual Basic Program)	Used to convert the list created from the AFF Assembler into an Excel summary sheet.
SPSS Program (Version 11.0, Chicago, Illinois)	Converted data into an easier analysable format for statistical analysis.
Microsoft Access	A database used to record all input errors, data incoherencies and missing data for each MAIDS team.
Microsoft Excel	Used to generate an error summary file for each MAIDS team.

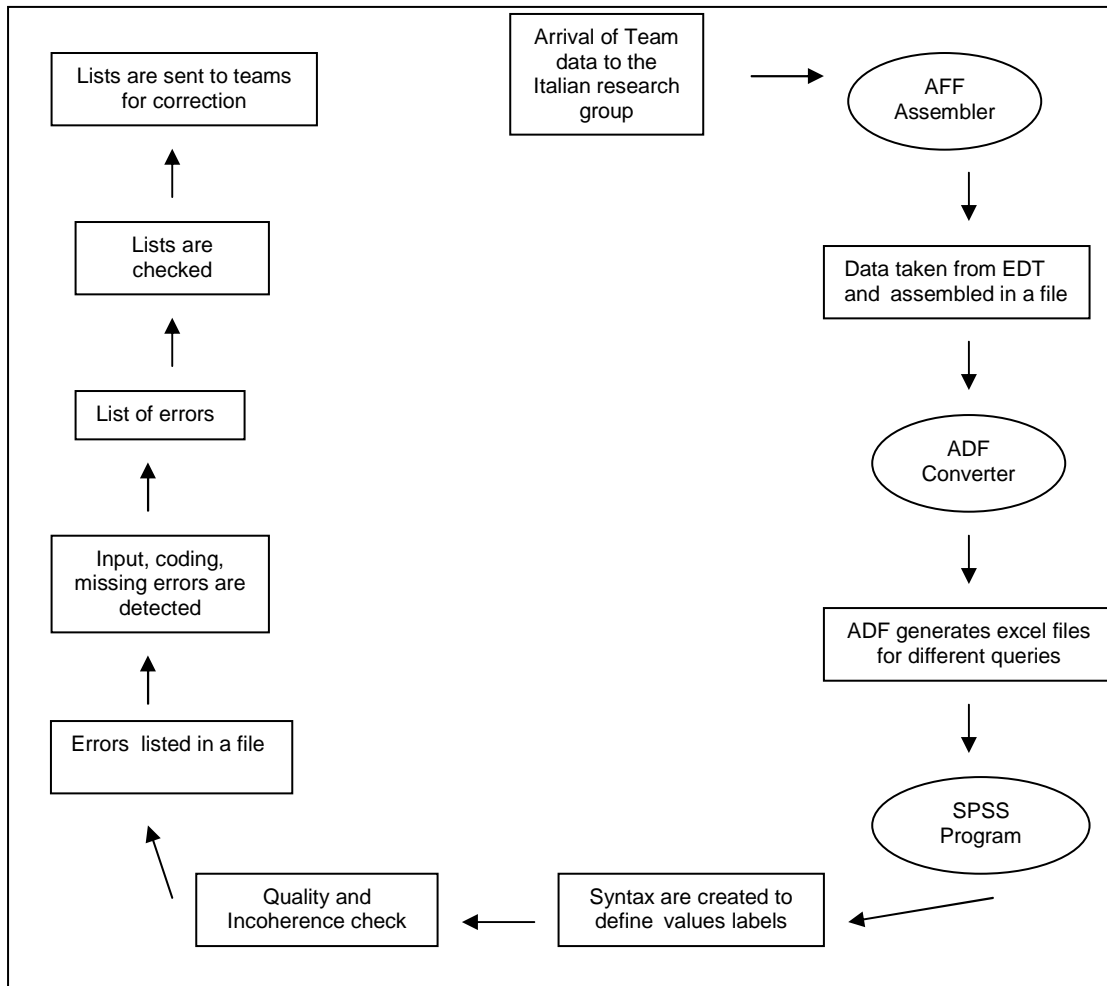


Figure 4. Internal quality control flowchart

Following completion of this first phase of quality control, the University of Pavia then focused upon a quality control review of the aggregate MAIDS database. This activity began in October 2002, shortly after all teams had submitted corrected accident data to the University.

The procedure followed for the database quality control review was to study frequency tables generated for all test variables. Each table was reviewed three times in order to identify all potential incoherencies. A summary list of these incoherencies were listed in an Excel file, and corrected directly in the EDT files kept by the University of Pavia. Figure 5 illustrates the internal quality control procedures used for the aggregate database.

Special attention was given to the evaluation of any incorrect injury codes within the aggregate database. All injuries codes were checked jointly by the medical consultant to the Pavia team as well as the Italian data manager. Incorrect codes were recoded as necessary with the EDT files kept by the Italian research group.

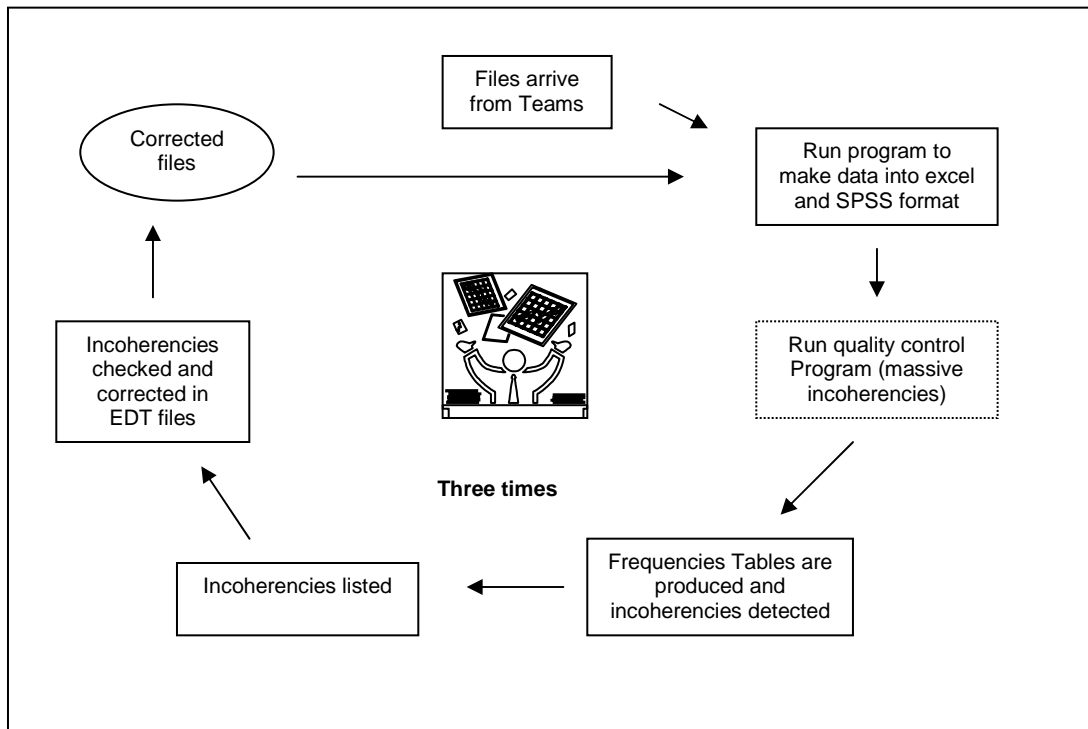


Figure 5. Database quality control review flowchart

3.8 External quality control – data coding and data entry

In order to maintain the highest level of data quality possible, the QCSC co-ordinated the random case review procedures with each of the MAIDS research groups. The purpose of the QCSC was to provide an external review body to those research projects using the common methodology. The review included an evaluation of the quality control plan, the data collection procedures and data analysis procedures for each research group. The QCSC included persons with expertise in in-depth motorcycle accident research and motorcycle technology.

The common methodology recommended that the QCSC monitor the research activities of all research organizations conducting motorcycle accident research using the common methodology. This activity was performed in order to maintain harmonisation within the different MAIDS teams and harmonisation with other research organisations and research groups who wish to use this common methodology was accomplished.

The common methodology recommended that every thirtieth case collected by a team be reviewed by the QCSC (i.e., 3% of all cases). The MAIDS management group exceeded this recommendation by requiring all research groups to submit 10 percent of all collected MAIDS cases to the QCSC for review and comment. Cases were randomly selected by the QCSC in order to eliminate any potential bias by the research group. The research group was asked to make an exact duplicate of the case and forward it to the QCSC for review.

For each QCSC review case, the complete dossier was reviewed and the QCSC made its own assessment regarding the events of the accident and the factors which contributed to the accident. Each coding response was reviewed by the

QCSC based upon the collected evidence and analysis provided by the participating MAIDS teams. Specific case related comments and harmonisation or coding convention comments were provided by the QCSC to each research team. Specific coding errors were classified as either case specific (i.e., they occurred only in that case) or general (i.e., they may occur in other cases). A comment file was prepared for each QCSC review case and the research group was encouraged to write a response to each QCSC review comment. The QCSC then responded to each research group response in order to maximize the quality of the data collected by each research group.

With the case review, the ASCII flat file data entry was reviewed to confirm that the appropriate response code was entered into the EDT software. Any difference between the data that appeared in the EDT software and the response coded on the data summary sheet was reported to the research group for immediate correction.

As a result of both the internal and the external quality control procedures, the quality of the data collected by the MAIDS research groups was maximized. These procedures increased the likelihood that when each team submitted their data to the University of Pavia, a reliable aggregate database could be formed using the data from the five MAIDS research groups.

4.0 Results

This section describes the general characteristics of the cases that have been included in the MAIDS database.

4.1 General accident characteristics

A total of 921 accidents have been included in the MAIDS database with 923 control cases (see Table 6). The number of cases collected by each team fulfilled the minimum sampling requirements of the common methodology (Part 2: Minimum sampling requirements).

Table 6. Total number of cases collected

Research Team	Cases	Controls	Total
University of Pavia (Italy)	200	200	400
TNO (Netherlands)	200	200	400
REGES (Spain)	121	123	244
ARU-MUH (Germany)	250	250	500
CEESAR (France)	150	150	300
Total	921	923	1844

There were 103 cases (11.2%) within the MAIDS database that involved a fatality of the rider or passenger. Table 7 illustrates the involvement of fatalities within the MAIDS database. The number of fatal cases collected by the German and French

research teams may be the result of a sampling bias, possibly due to a bias in the local police notifications, or bias by the team sampling procedures. Further consideration of possible sampling bias and related factors including any deviations from the original sampling criteria and project methodology are planned to be described in the MAIDS final report.

Table 7. Number of fatal riders or passengers

Research Team	Fatal	Not fatal	Total
University of Pavia (Italy)	11	201	212
TNO (Netherlands)	15	209	224
REGES (Spain)	12	123	135
ARU-MUH (Germany)	49	214	263
CEESAR (France)	16	148	164
Total	103	895	998

Table 8 illustrates that the majority of the accidents involved male riders (798 cases, 86.6%). Nearly one-half of the riders were under the age of 25 years (see Table 9).

Table 8. Rider sex

	Frequency	Percent
Male	798	86.6
Female	123	13.4
Total	921	100.0

Table 9. Rider age

	Frequency	Percent
Up to 15	29	3.1
16-17	126	13.7
18-21	142	15.4
22-25	132	14.3
26-40	331	35.9
41-55	134	14.5
> 55	25	2.7
Unknown	2	0.2
Total	921	100.0

Table 10 shows that the majority of the accidents collected during this study involved a collision with another vehicle (778 cases, 84%). One hundred and forty-three of the cases (16%) involved only the motorcycle and motorcycle rider (e.g. a "solo" accident). Over 70% of these accidents (667 cases) occurred on national or provincial roads within the different sampling areas (see Table 11). Over half of the investigated cases (500 cases) occurred at an intersection (see Table 12).

Table 10. Number of other vehicles involved in the accident

Number of other vehicles	Frequency	Percent
None (single vehicle accident)	143	15.5
One	738	80.1
Two	36	3.9
Three	4	0.4
Total	921	100.0

Table 11. Roadway type

	Frequency	Percent
Highway	39	4.2
National road, provincial road	667	72.4
City road	142	15.4
Others	72	7.8
Unknown	1	0.1
Total	921	100.0

Table 12. Intersection type

	Frequency	Percent
Intersection	500	54.3
Non-intersection	358	38.9
Other	63	6.8
Total	921	100.0

Table 13 illustrates that nearly three-quarters of the collected accidents (672 cases, 73%) took place during daylight hours, and 19% of the accidents (173 cases) took place at night in areas where there was street lighting. Only 34 cases were reported (3.7%) in which the crash took place at night in an area without street lighting.

Table 13. Illumination at time of accident

	Frequency	Percent
Daylight	672	73.0
Dusk/dawn	76	8.3
Night without streetlighting	34	3.7
Night with streetlighting	139	15.1
Total	921	100.0

Table 14 shows that the roadways were dry in 90% of the accidents (828 cases), and rain was present in 73 cases or 8% of all accidents.

Table 14. Weather conditions at time of accident

	Frequency	Percent
No precipitation	828	89.9
Rain	73	7.9
Ice rain/snow	2	0.2
Other	2	0.2
Unknown	16	1.7
Total	921	100.0

The majority of accidents (666 cases, 72%) within the MAIDS database took place in an urban area. Approximately 25% of the remaining accidents took place in a rural area (see Table 15).

Table 15. Accident scene, type of area

Type of area	Frequency	Percent
Urban	666	72.3
Rural	229	24.9
Other	26	2.8
Total	921	100.0

Table 16 illustrates the time of day in which the accidents occurred. The data shows that over 400 cases (44%) took place during the hours between 08:00 and 16:00. Another 391 cases (43%) took place between the hours of 04:00 to 08:00 and from 16:00 to 20:00. Table 17 shows that the majority of the accidents took place on a working day (724 cases, 79%).

Table 16. Time of day accident occurred

Time of day	Frequency	Percent
04:00 to 08:00 and 16:00 to 20:00	391	42.5
08:00 to 16:00	402	43.6
16:00 to 20:00	128	13.9
	921	100.0

Table 17. Day of week accident occurred

	Frequency	Percent
Working day	724	78.6
Saturday	76	8.3
Sunday	121	13.1
Total	921	100.0

Table 18 indicates that the accidents were more frequent through the spring and summer months (569 cases, 62%, April through September), and less frequent during the winter months (352 cases, 38%, October to March).

Table 18. Month in which accident occurred

	Frequency	Percent
January	68	7.4
February	59	6.4
March	94	10.2
April	75	8.1
May	117	12.7
June	108	11.7
July	96	10.4
August	73	7.9
September	100	10.9
October	62	6.7
November	35	3.8
December	34	3.7
Total	921	100.0

4.2 Vehicle characteristics

Table 19 shows the distribution of L1 and L3 vehicles within the MAIDS database. The data shows that 45% of all accidents (414 cases) involved a L1 vehicle while 52% of all accidents investigated (476 cases) involved an L3 vehicle.

Table 19. Motorcycle legal category

	Frequency	Percent
L1 – vehicle ¹⁾	414	45.0
L3 – vehicle ²⁾	476	51.7
Mofa	31	3.3
Total	921	100.0

Table 20 illustrates the distribution of the different motorcycle styles that were involved in crashes investigated by the MAIDS research groups. Forty-four percent of all cases involved a scooter or stepthrough style of motorcycle (404 cases, 44%). The next most frequent styles were conventional motorcycles (156 cases, 16.9%) and sport motorcycles (137 cases, 14.9%).

¹⁾ A two wheeled vehicle with an engine cylinder capacity in the case of a thermic engine not exceeding 50 cm³ and whatever the means of propulsion a maximum design speed not exceeding 50 km/h.

²⁾ A two wheeled vehicle with an engine cylinder capacity in the case of a thermic engine exceeding 50 cm³ or whatever the means of propulsion a maximum design speed exceeding 50 km/h.

Table 20. Motorcycle style

	Frequency	Percent
Step through	50	5.4
Scooter	354	38.4
Conventional	156	16.9
Chopper	36	3.9
Enduro/offroad	43	4.7
Sport touring	76	8.3
Sport	137	14.9
Cruiser	38	4.1
Other	26	2.8
Unknown	5	0.5
Total	921	100.0

Table 21 illustrates that a large percentage of the motorcycles involved in accidents that were collected during this study had an engine displacement which was less than or equal to 50 cc (387 cases, 42.0%). The next largest group of accidents included motorcycles that have engine displacements between 501 and 750 cc (206 cases, 22.4%).

Table 21. Engine displacement

	Frequency	Percent
Up to and including 50 cc	387	42.0
51 to 125 cc	89	9.7
126 to 250 cc	37	4.0
251 to 500 cc	61	6.6
501 to 750 cc	206	22.4
751 to 1000 cc	81	8.8
1001 or more	60	6.5
Total	921	100.0

5.0 References

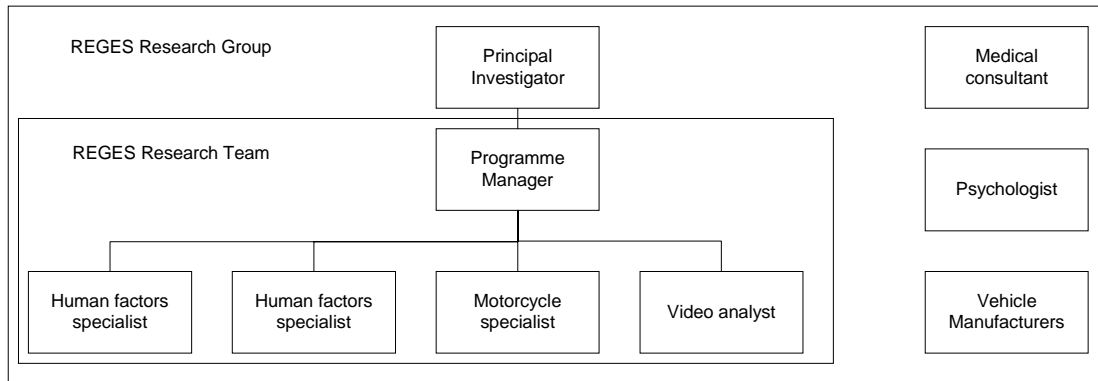
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2. Anonymous, Motorcycles: common international methodology for on-scene, in-depth accident investigation , Technical Expert Group of the Co-ordinating Group for Motorcycle Accident Investigations; Road Transport Research Programme, of the Directorate for Science Technology and Industry, of the Organization for Economic Cooperation and Development, OECD/DSTI/RTR/RS9/TEG, Paris, June 2001.
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Appendix A

Participating Research Group Descriptions

A.1: Research Group: REGES
Location: Barcelona, Spain

Research group structure



Sample area

The area of study is the Metropolitan Area of Barcelona.



Main features of the sample area

Total area:	100 km ²
Population:	2 million
Number of powered vehicles:	1 million
Four-wheeled:	750.000
Two-wheeled:	250.000
Road network length:	1.250 km
Local police:	Guàrdia Urbana de Barcelona
Number of Hospitals:	7

The external agencies that co-operate with the research group were:

- Guàrdia Urbana de Barcelona (Local police of Barcelona)
- Trauma Center of Vall d'Hebró
- Hospital Clínic of Barcelona

These external agencies cover the whole area of study:

- o Guàrdia Urbana of Barcelona is the unique police agency that covers all the accidents which occur inside the Metropolitan Area of Barcelona.
- o There are 7 hospitals where people involved in an accident in the area of study could be transferred, but 60% of the people injured are transferred to one of the two hospitals that cooperate with the REGES research team, these are the Trauma Center of Vall d'Hebró and Hospital Clínic of Barcelona.

A total of approximately 3300 motorcycle/moped accidents per year (9 accidents per day) occur in the area of the study.

The cooperation with the local police of Barcelona provided almost 500 accident notifications in which:

- o a two-wheeled vehicle was involved,
- o there were injuries involved,
- o injuries were treated in hospitals that had cooperative agreements with the research team.

The sampling period of the study was one year, from the 5th September of 1999 until the 15th September of 2000.

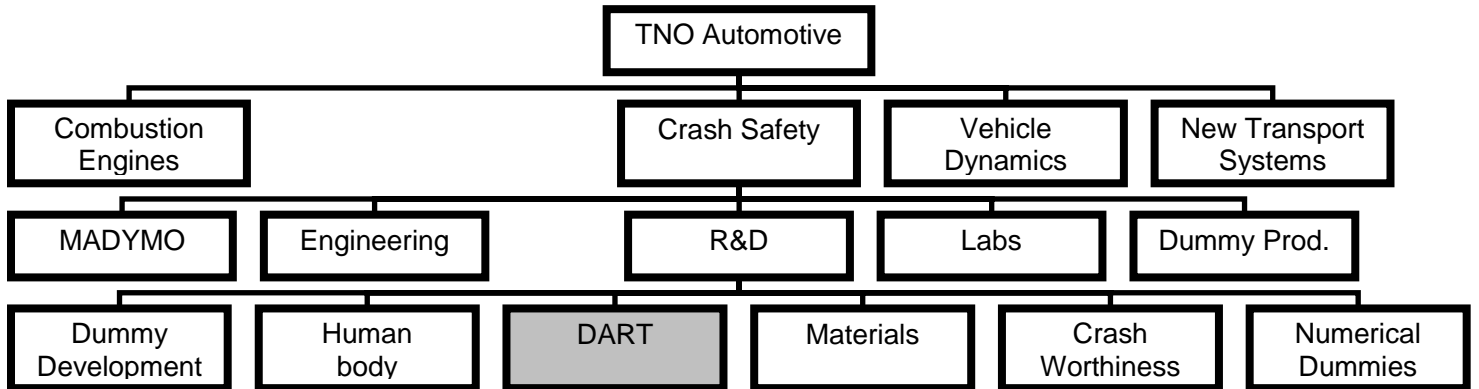
Approximately 150 investigations were started, and 121 investigations were completed using the procedures described in the common methodology. A total of 123 controls were collected using the petrol station concurrent exposure methodology.

A.2: Research Organization: TNO

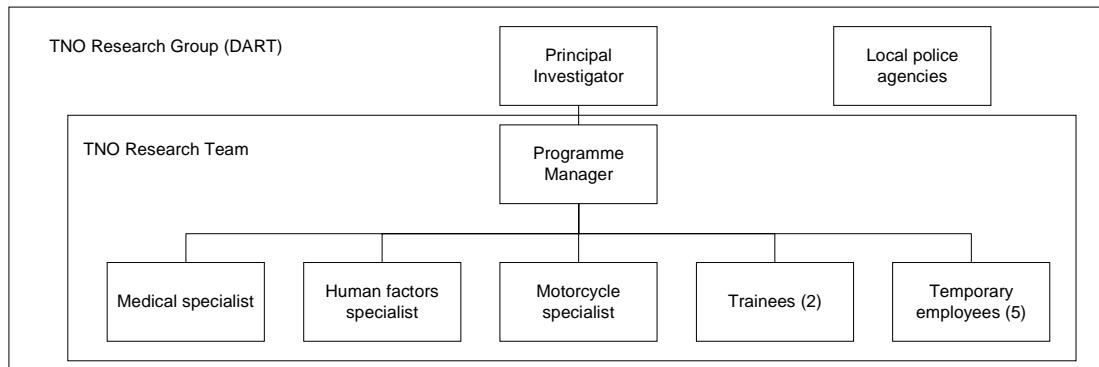
Research Group: Dutch Accident Research Team (DART)

Location: Rotterdam, Delft and The Hague, The Netherlands

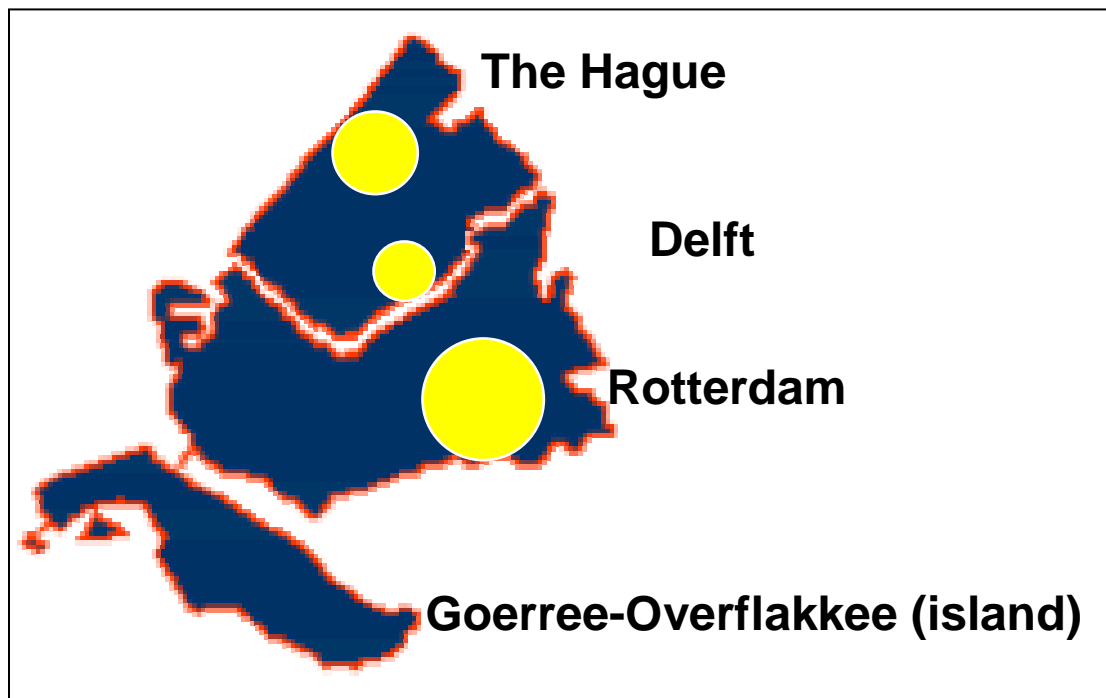
Research group structure within the research organization



Research group structure



Sample area



Main features of the sample area

Total area:	200 km ²
Population:	1.7 million
Number of powered vehicles:	
Four wheeled:	1.35 million passenger cars ³ 2 million commercial vehicles ¹
Two wheeled:	75,000 motorcycles ¹ 533,000 scooters and mofas ⁴
Road network length:	115,617 km (see note 2)
Local police:	27 regional offices in Rotterdam-Rijnmond and 24 regional offices in Haaglanden
Number of Hospitals:	15 Hospitals and one ambulance unit (Haaglanden)

³ Data is provided for the province Zuid-Holland, which is larger than accident sampling region

⁴ Data reported is for Holland region

The external agencies that co-operate with the research group are:

- o Police Accident Reconstruction Team – Rotterdam
- o Police Accident Reconstruction Team – The Hague
- o Local Police – The Hague
- o Hospitals – The Hague/ Rotterdam
- o Vehicle towing services – The Hague/ Rotterdam

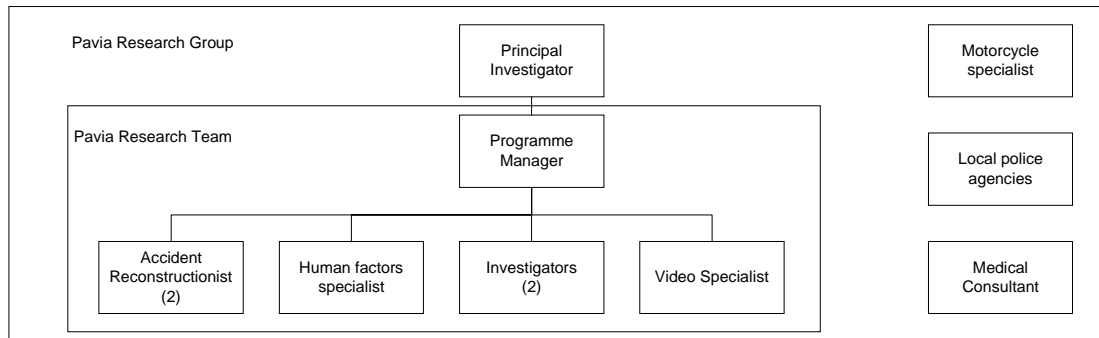
A total of 2888 motorcycle/moped accidents occurred in the sample area between 1996 to 1998.

During the data collection, the cooperation with the local police agencies provided over 750 accident notifications in which:

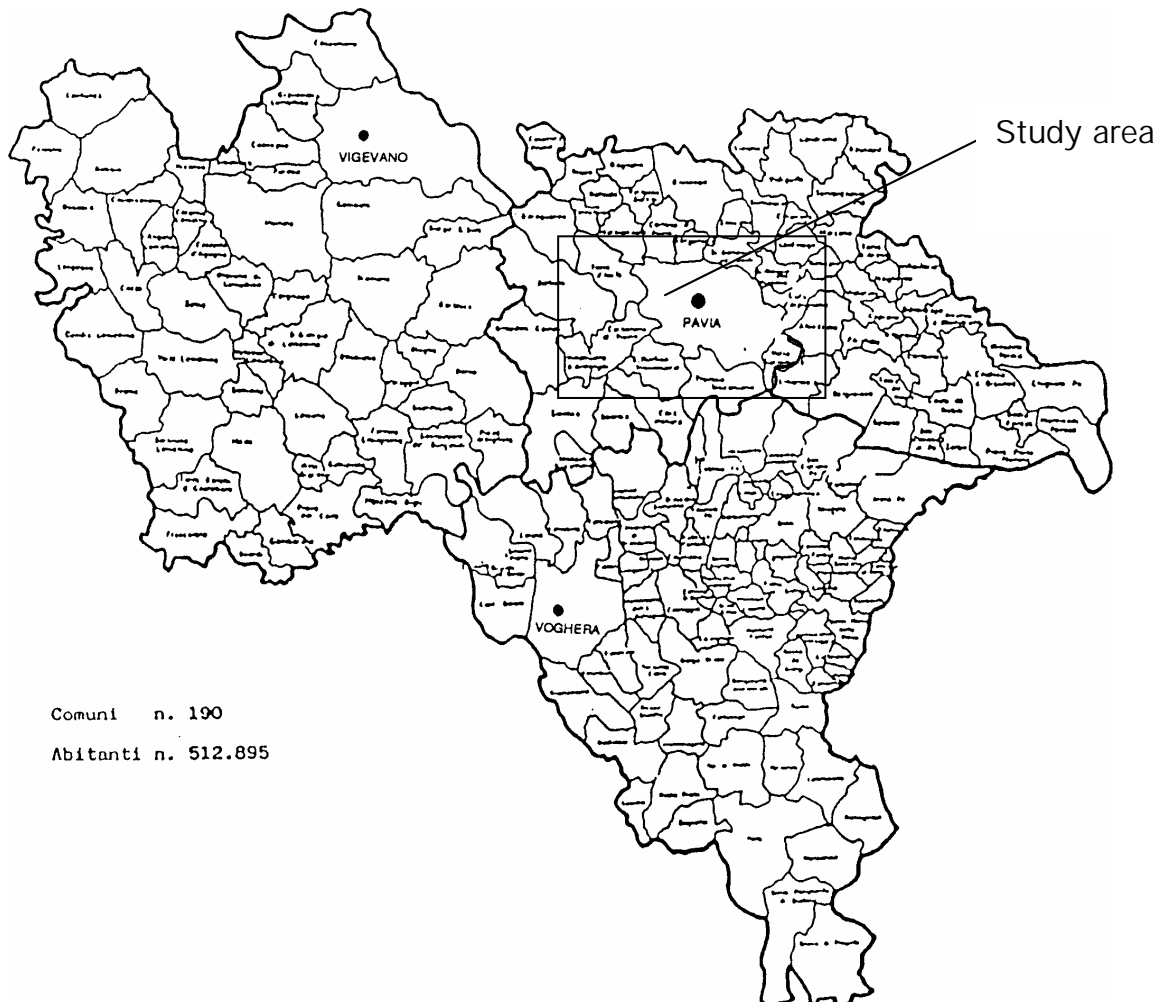
- o A two-wheeled vehicle was involved,
- o There were injuries involved,
- o Injuries were treated in hospitals that had cooperative agreements with the research team; or,
- o Injuries were treated by the ambulance crew that had cooperative agreements with the research team.

A.3: Research Organization: University of Pavia
Research Group: Pavia Accident Research Team
Location: Pavia, Italy

Research group structure



Sample area



Main features of the sample area

Total area:	190 km ²
Population:	512,895
Number of Hospitals:	University of Pavia Medical Centre – the largest trauma centre in Northern Italy

The external agencies that co-operate with the research group are:

- o Community of Pavia
- o Polizia Urbana
- o Polstrada Vigevano, Voghera, Strabella, Milano Ovest and Pavia
- o Carabinieri di Pavia
- o University of Pavia Medical Center

During the study period, the cooperation with the local police agencies provided over 500 accident notifications in which:

- o A two-wheeled vehicle was involved,
- o There were injuries involved,
- o Injuries were treated in hospitals that had cooperative agreements with the research team.

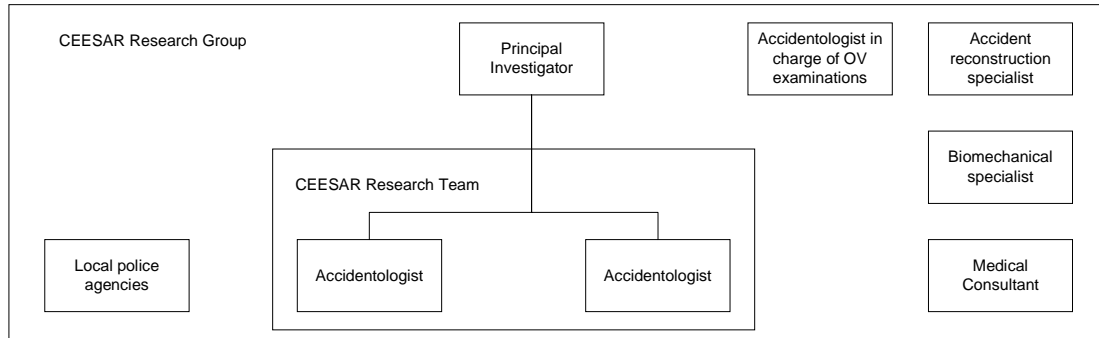
A.4: Research Organization: European Center for Safety Studies and Risk Analysis (CEESAR)

Research Group: CEESAR MAIDS Team

Location: Nanterre, France

Sampling area: 30 counties within the department of Essonne

Research group structure



Sample area

Note: Sampling counties appear in white.

Main features of the sample area

Total area:	1820 km ²
Population:	1.15 million
Number of powered two wheelers:	
Motorcycle under 125 cc:	364,000
Motorcycle over 125 cc:	548,000
Moped:	741,000
Scooter:	640,000

The external agencies that co-operate with the research group are:

Police Nationale (Ministry of Interior)

Gendarmerie Nationale (Ministry of Defence)

Honda, France (Training on motorcycle mechanical factors)

Michelin, France (Training on tyre evaluation and performance factors)

UTAC, France (Training on helmet homologation)

A total of approximately 200 motorcycle/moped accidents per year occur in the sample area.

The cooperation with the local police agencies provided over 200 accident notifications during the study period.

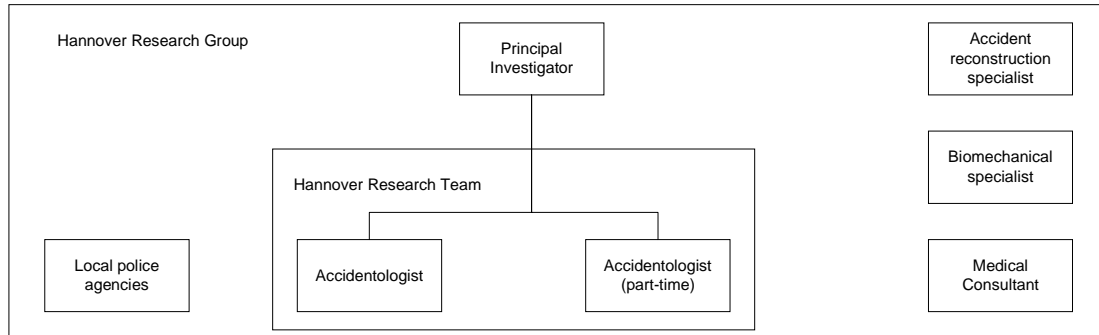
A.4: Research Organization: Medical University Hannover

Research Group: Accident Research Unit – Medical University Hannover

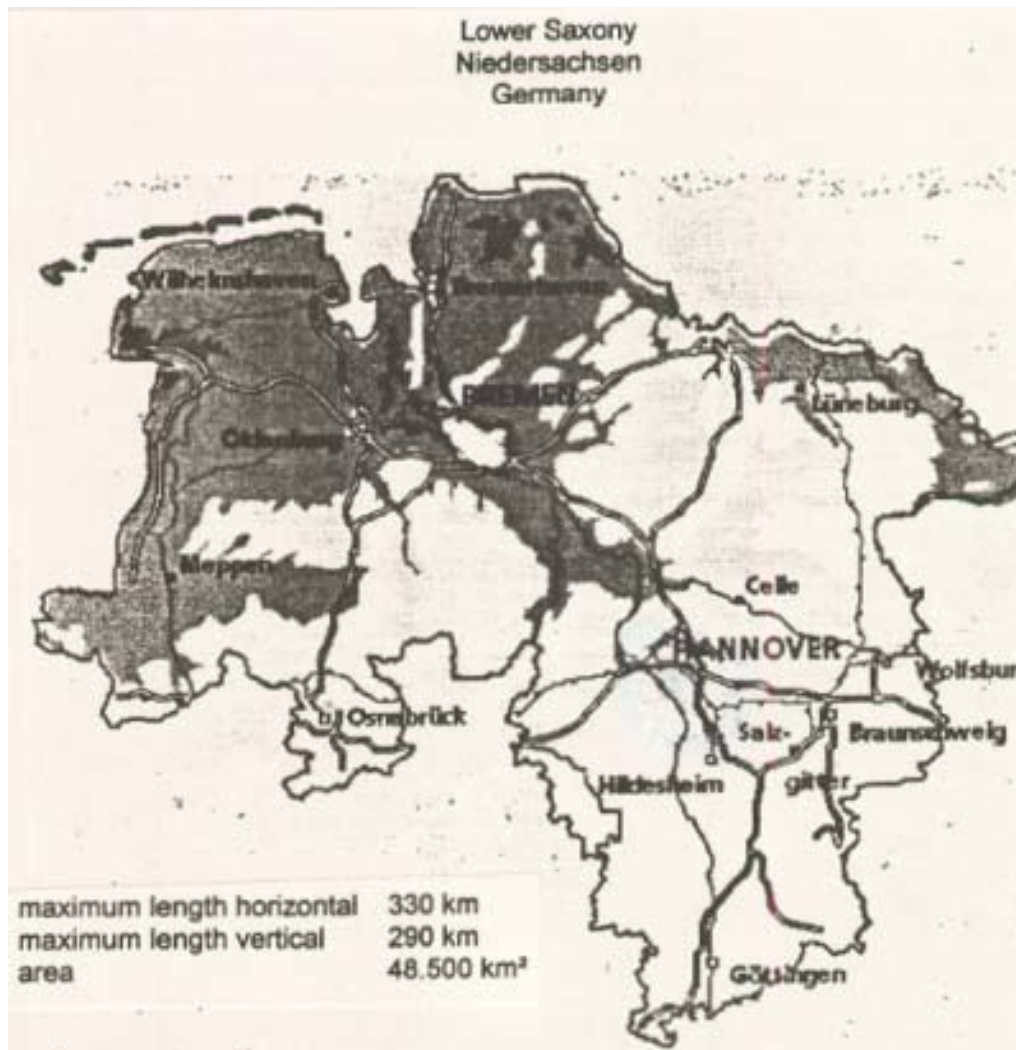
Location: Hannover, Germany

Sample area: Lower Saxony

Structure of research group



Sample area



Main features of the sample area

Total area:	48,500 km ²
Population:	7.9 million
Road network length:	1,189 km motorway network 4,836 km federal roads network
Local police:	Lower Saxony Police and other local police agencies
Number of Hospitals:	211

A total of approximately 220 motorcycle/moped accidents per year occur in the sample area.

The cooperation with the local police agencies provided over 300 accident notifications over the two year study period.

Appendix B

MAIDS Data Summary Sheets

Annex A

Data summary sheets for Basic Common Methodology: On-scene and follow-up data collection

The Data summary sheets for the Basic Common Methodology, on-scene and follow-up data collection are contained in Annex A.

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**A.1 ADMINISTRATION DATA LOG
DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: _____; _____; _____
 Input by: _____; _____; _____

NOTIFICATION

Agency A.1.1 _____

Accident location A.1.2 _____

Accident preliminary description A.1.3 _____

Notification time A.1.4 ____ __:____ __
 (24 hr clock)

Date of notification A.1.5 ____ __ __ / ____ __ / ____ __
 (year/month/date)

Jurisdiction A.1.6 _____

Responding rescue services A.1.7 _____
 A.1.8 _____
 A.1.9 _____

TEAM ON-SCENE RESPONSE

Team members A.1.10.1 _____
 A.1.10.2 _____
 A.1.10.3 _____
 A.1.10.4 _____

Team transportation A.1.11 _____

Team departure time A.1.12 ____ __:____ __
 (24 hr clock)

Scene arrival time A.1.13 ____ __:____ __
 (24 hr clock)

ACCIDENT SCENE RECORD

Sampling qualification decision A.1.14 ____
 1-no
 2-yes
 8-other

Law enforcement jurisdiction A.1.15 _____

Coordination contact A.1.15.1 _____

Rescue services A.1.16.1 _____
 A.1.16.2 _____
 A.1.16.3 _____

A.1 ADMINISTRATION DATA LOG
DATA SUMMARY SHEET

AIN _____/_____/_____
Investigator: ____; ____; ____; ____
Input by: ____; ____; ____; ____

ACCIDENT SCENE RECORD (continued)

Medical treatment services location contact A.1.17 _____

Environmental factors assigned to A.1.18.1 _____

Environmental factors data encoding assigned to A.1.18.2 _____

Vehicle factors assigned to A.1.19.1 _____

Vehicle factors data encoding assigned to A.1.19.2 _____

Human factors assigned to A.1.20.1 _____

Human factors data encoding assigned to A.1.20.2 _____

FOLLOW-UP RESPONSE

Team assignments A.1.21.1 _____
A.1.21.2 _____
A.1.21.3 _____

Case qualification decision A.1.22 ____
(according to Part 2, Figure 1)
1-no
2-yes
9-unknown

Schedule team conference A.1.23 ____ ____ ____ / ____ ____ / ____ ____
(year/month/date)

Concurrent exposure data collection date A.1.24 ____ ____ ____ / ____ ____ / ____ ____
(year/month/date)

CED factors assigned to A.1.24.1 _____

CED data encoding assigned to A.1.24.2 _____

**A.2 ACCIDENT TYPOLOGY, CLASSIFICATION
DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: _____; _____; _____; _____
 Input by: _____; _____; _____; _____

<p>Time of day accident occurred (24-hour clock)</p>	<p>A.2.1 ____ __:____ __ (From Accident scene investigation worksheet)</p>
<p>Day of week accident occurred 1-Monday 2-Tuesday 3-Wednesday 4-Thursday</p>	<p>A.2.2 ____ (From Accident scene investigation worksheet) 5-Friday 6-Saturday 7-Sunday</p>
<p>Date accident occurred (year/month/day)</p>	<p>A.2.3 ____ ____ ____ / ____ ____ / ____ ____ (From Accident scene investigation worksheet)</p>
<p>Motorcycle involved in collision with 1-other motor vehicle 2-other motor vehicle (OV), parked 3-roadway 4-off road environment, fixed object 5-bicycle 6-pedestrian 7-animal 8-other (*describe, 80 characters) 9-unknown</p>	<p>A.2.4 ____ (From Vehicle information and accident description worksheet) * description: _____ _____ _____</p>
<p>How many OVs were involved in the accident? 0-not applicable 1-one 2-two 3-three 8-other (*describe, 80 characters) 9-unknown</p>	<p>A.2.5 ____ (From Vehicle information and accident description worksheet) * description: _____ _____ _____</p>
<p>How many pedestrians were involved in the accident? 0-not applicable 1-one 2-two 3-three 8-other (*describe, 80 characters) 9-unknown</p>	<p>A.2.6 ____ (From Vehicle information and accident description worksheet) * description: _____ _____ _____</p>
<p>Number of passengers on the motorcycle 0-none 1-one 2-two 3-three 4-four 5-five 6-six 9-unknown</p>	<p>A.2.7 ____ (From TAR, witness interview)</p>

**A.2 ACCIDENT TYPOLOGY, CLASSIFICATION
DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: _____; _____; _____; _____
 Input by: _____; _____; _____; _____

Are there any fatal injuries involved? A.2.8 ____
 0-not applicable (From Injury worksheets)
 1-no
 2-yes
 9-unknown

Accident configuration A.2.9 ____ ____ (From Accident scene investigation worksheet)

- 01-head-on collision of MC and OV
- 02-OV into MC impact at intersection; both vehicles proceeding straight ahead, paths perpendicular
- 03-MC into OV impact at intersection; both vehicles proceeding straight ahead, paths perpendicular
- 04-OV turning left in front of MC, MC proceeding in either direction perpendicular to OV path
- 05-OV turning right in front of MC, MC proceeding in either direction perpendicular to OV path
- 06-MC and OV travelling in opposite directions, OV turns in front of MC, crossing MC path, OV impacting MC
- 07-MC and OV travelling in opposite directions, OV turns in front of MC, crossing MC path, MC impacting OV
- 08-MC turning left in front of OV, OV proceeding in either direction perpendicular to MC path
- 09-MC turning right in front of OV, OV proceeding in either direction perpendicular to MC path
- 10-MC overtaking OV while OV turning left
- 11-MC overtaking OV while OV turning right
- 12-OV impacting rear of MC
- 13-MC impacting rear of OV
- 14-sideswipe, OV and MC travelling in opposite directions
- 15-sideswipe, OV and MC travelling in same directions
- 16-OV making U-turn or Y-turn ahead of MV
- 17-other MC/OV impacts
- 18-MC falling on roadway, no OV involvement
- 19-MC running off roadway, no OV involvement
- 20-MC falling on roadway in collision avoidance with OV
- 21-MC running off roadway in collision avoidance with OV
- 22-other MC accidents with no OV or other involvement
- 23-MC impacting pedestrian or animal
- 24-MC impacting environmental object
- 98-other (*describe, 80 characters) * description: _____
- 99-unknown

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

	Same side of street	Other side of street		
TRAFFICWAY DEFINITION AND CONDITION				
Type of area	A.3.1.1 ____	A.3.2.1 ____		
11-urban industrial	*description: _____	*description: _____		
12-commercial, business, shopping	_____	_____		
13-housing apartments	_____	_____		
14-housing, residential	(From scene photographs)			
15-urban school				
16-urban park				
21-rural developed, agriculture, farming, ranching, etc.				
22-undeveloped, wilderness				
23-rural school				
24-rural park				
98-other (*describe, 80 characters)				
99-unknown				
 Illumination	A.3.1.2 ____			
(see Coding Manual for definitions)	(From scene photographs)			
1-daylight, bright				
2-daylight, not bright				
3-dusk, sundown				
4-night, lighted				
5-night, not lighted				
6-dawn, sunup				
9-unknown				
 Intersection type	A.3.1.3 ____			
(See Coding Manual for definitions)	*description: _____			
0-non-intersection	_____			
1-T-intersection	_____			
2-cross intersection	(From scene photographs)			
3-angle intersection				
4-alley, driveway				
5-offset intersection				
6-round about or traffic circle (*describe, 80 characters)				
7-over or under cross-over, with feeders or transitions				
8-other (*describe, 80 characters)				
9-unknown				
 Other vehicle number	A.4.3.1 ____			
0-no OV	(from Vehicle information and accident description worksheet)			
	Lane adjacent to motorcycle	Lane adjacent to other vehicle		
	Right side Left side	Right side Left side		
Direction of traffic flow	A.3.1.4.1 ____	A.3.1.4.2 ____	A.3.2.4.1 ____	A.3.2.4.2 ____
0-not applicable, no OV	(From scene diagram)			
1-no adjacent lane (<i>input "00" in A.3.1.5.1 & .2/A.3.2.5.1 & .2, and go to A.3.1.6.1 & .2/A.3.2.6.1 & .2</i>)				
2-same direction				
3-opposite direction				
4-both directions				
	Lane adjacent to motorcycle	Lane adjacent to other vehicle		
	Right side Left side	Right side Left side		
Lane dividers	A.3.1.5.1 ____	A.3.1.5.2 ____	A.3.2.5.1 ____	A.3.2.5.2 ____
00-not applicable	*description: _____	*description: _____	*description: _____	*description: _____
01-none	_____	_____	_____	_____
02-painted delineation (*describe, 80 characters)	_____	_____	_____	_____
03-raised delineation (*describe, 80 characters)	_____	_____	_____	_____
04-guardrail or barrier (*describe, 80	(From scene diagram, scene photographs)			

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

TRAFFICWAY DEFINITION AND CONDITION (continued)

- characters)*
- 05-fence (*describe, 80 characters)*
- 06-kerb (*describe, 80 characters)*
- 07-shoulder (*describe, 80 characters)*
- 08-posts or columns (*describe, 80 characters)*
- 09-cable and posts (*describe, 80 characters)*
- 10-embankment (*describe, 80 characters)*
- 98-other (*describe, 80 characters)*
- 99-unknown*

Roadside environment

	A.3.1.6.1 ____	A.3.1.6.2 ____	A.3.2.6.1 ____	A.3.2.6.2 ____
00 not applicable, no OV	*description:____	*description:____	*description:____	*description:____
01-level ground, no remarkable features	_____	_____	_____	_____
02-grass, ground cover	_____	_____	_____	_____
03-shrubbery	_____	_____	_____	_____
04-dirt, soft soil, sand	_____	_____	_____	_____
05-gravel preparation	(From scene diagram, scene photographs)			
06-sidewalk	_____	_____	_____	_____
07-paved or topped surface	_____	_____	_____	_____
08-trees, posts	_____	_____	_____	_____
98-other (*describe, 80 characters)	_____	_____	_____	_____
99-unknown	_____	_____	_____	_____

Roadside obstacles

	A.3.1.7.1 ____	A.3.1.7.2 ____	A.3.2.7.1 ____	A.3.2.7.2 ____
00-not applicable, no OV	*description:____	*description:____	*description:____	*description:____
01-none	_____	_____	_____	_____
02-buildings, structures	_____	_____	_____	_____
03-ditch or low lying depression	_____	_____	_____	_____
04-trees	_____	_____	_____	_____
05-posts, fencing (*describe, 80 characters)	(From scene diagram, if a factor)			
06-embankment	_____	_____	_____	_____
07-parked vehicles	_____	_____	_____	_____
08-guardrail or barrier (*describe, 80 characters)	_____	_____	_____	_____
98-other (*describe, 80 characters)	_____	_____	_____	_____
99-unknown	_____	_____	_____	_____

	Motorcycle	Other vehicle
TRAFFICWAY VEHICLE WAS TRAVELLING		
Description	A.3.1.8 ____	A.3.2.8 ____
(see Coding Manual for definitions)	*description:_____	*description:_____
00-not applicable, no OV	_____	_____
01-motorway mainline	_____	_____
02-motorway entrance ramp	(From scene photographs, scene diagram, and police Traffic accident report (TAR))	
03-motorway exit ramp		
04-motorway transition (motorway to motorway)		
05-motorway frontage road		
06-major arterial, non-motorway	16-overpass entrance ramp	
07-minor arterial road or local street	17-overpass exit ramp	
08-non-arterial, sub-arterial (See Coding Manual for definitions)	18-underpass	
09-temporary trafficway	19-underpass entrance ramp	
10-construction detour	20-underpass exit ramp	
11-parking lot, parking area	21-dedicated bicycle/moped path separated from ordinary vehicular traffic roadway	
12-alley	22-dedicated bicycle/moped path not separated from ordinary vehicular roadway	
13-driveway	98-other (*describe, 80 characters)	
14-round about or traffic circle (*describe, 80 characters)	99-unknown	
15-overpass		

Posted speed limit

A.3.1.9 ____

A.3.2.9 ____

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

TRAFFICWAY VEHICLE WAS TRAVELLING (Continued)

000-not applicable, no OV

001-no speed limit (*input "0" in A.3.1.9.1; go to A.3.1.10*)

999-unknown

Speed limit units

- 0-not applicable
- 1-kilometres per hour
- 2-miles per hour

A.3.1.9.1 _____
(From scene photographs, TAR)

A.3.2.9.1 _____

Number of through lanes

- 0-not applicable
- 1 to 8-number of lanes
- 9-unknown

A.3.1.10 _____
(From scene photographs, scene diagram)

A.3.2.10 _____

Lane travelled

- 00-not applicable, no OV
- 01 through 09 (See coding manual for lane numbering procedure)
- 10-right turn only
- 11 left turn only
- 12-vehicle travelling opposite intended traffic, any lane

A.3.1.11 _____
(From scene photographs, scene diagram)

A.3.2.11 _____

- 98-other
- 99-unknown

Lane width

- (see coding manual for measurement procedure)
- 0,0-not applicable
- 9,9-unknown

A.3.1.12 _____, _____ m
(From scene diagram, TAR)

A.3.2.12 _____, _____ m

Kerb to kerb roadway width

- 00,0-not applicable
- 99,9-unknown

A.3.1.13 _____, _____ m
(From scene diagram, TAR)
(See coding manual for measurement procedure)

A.3.2.13 _____, _____ m

ROADWAY SURFACE

Type surface

- 0-not applicable
- 1-concrete
- 2-asphalt
- 3-brick
- 4-stone
- 5-gravel
- 6-dirt
- 7-metallic
- 8-other (*describe, 80 characters)
- 9-unknown

A.3.1.14 _____
*description: _____

(From scene photographs)

A.3.2.14 _____
*description: _____

Condition and defects

- 00-not applicable, no OV
- 01-none
- 02-surface cracking
- 03-spalling, i.e., breaking up, splintering
- 04-holes
- 05-ruts
- 06-bump
- 07-ripples, ridges
- 08-pavement edge
- 09-overbanding (*describe, 80 characters)

A.3.1.15 _____
*description: _____

A.3.2.15 _____
*description: _____

(From scene photographs, Accident scene investigation worksheet)

- 10-bitumen repair
- 11-tram/train rails
- 12-painted roadway markings
- 98-other (*describe, 80 characters)

99-unknown

Contamination/obstacles

- (input all that apply; input "01" in remaining responses)
- 00-not applicable, no OV
- 01-none
- 02-water

A.3.1.16.1 _____
A.3.1.16.2 _____
A.3.1.16.3 _____
A.3.1.16.4 _____
*description: _____

A.3.2.16.1 _____
A.3.2.16.2 _____
A.3.2.16.3 _____
A.3.2.16.4 _____
*description: _____

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

ROADWAY SURFACE (continued)

- 03-oil, petroleum derivatives _____
- 04-sand, soil, dirt (From scene photographs, scene diagram) _____
- 05-gravel _____
- 06-mud 10-loads dropped from another vehicle _____
- 07-snow 11-temporary sign board _____
- 08-ice 98-other (*describe, 80 characters) _____
- 09-parked vehicles 99-unknown _____

ROADWAY ALIGNMENT

Vertical

- 0-not applicable, no OV A.3.1.17 ____ A.3.2.17 ____
*description:_____ *description:_____
- 1-level _____
- 2-slope of hill, upgrade _____
- 3-crest of hill, loft (From Accident scene investigation worksheet) _____
- 4-slope of hill, downgrade _____
- 5-bottom of hill _____
- 6-dip or low lying depression _____
- 7-banked curve _____
- 8-other (*describe, 80 characters) _____
- 9-unknown _____

Horizontal

- 0-not applicable, no OV A.3.1.18 ____ A.3.2.18 ____
*description:_____ *description:_____
- 1-straight _____
- 2-curve right _____
- 3-curve left (From Accident scene investigation worksheet) _____
- 4-corner right _____
- 5-corner left _____
- 6-jog right: turn to right, then left, resuming approximate original direction _____
- 7-jog left: turn to left, then right, resuming approximate original direction _____
- 8-other (*describe, 80 characters) _____
- 9-unknown _____

Auxiliary turn only, no separate signal

- 0-not applicable, no OV A.3.1.19 ____ A.3.2.19 ____
*description:_____ *description:_____
- 1-none _____
- 2-across traffic turn lane, no separate signal _____
- signal (From scene photographs, scene diagram) _____
- 3-across traffic turn lane, separate signal _____
- 4-away from traffic turn lane, no separate signal _____
- 5-away from traffic turn lane, separate signal _____
- 8-other (*describe, 80 characters) _____
- 9-unknown _____

TRAFFIC CONTROLS ON PATH OF TRAVEL

Type

- 00-not applicable A.3.1.20 ____ A.3.2.20 ____
*description:_____ *description:_____
- 01-none (input "0" in A.3.1.21/A.3.2.21 - _____
A.3.1.23/A.3.2.23 and go to A.3.1.24/
A.3.2.24) _____
- (From scene photographs, scene diagram) _____
- 02-yield sign (See Coding manual for Trafficway type) _____
- 03-stop sign _____
- 04-three-way, four-way, all-way stop _____
- 05-traffic control signal 09-pedestrian crossing _____
- 06-traffic officer 10-traffic calming/speed bumps _____
- 07-construction personnel 11-traffic advisory signage (*describe, 80 characters) _____
- 08-gate, toll gate 98-other (*describe, 80 characters) _____
- 99-unknown _____

Functioning properly

- 0-not applicable A.3.1.21 ____ A.3.2.21 ____
*description:_____ *description:_____
- 1-no, non-operational _____
- 2-yes _____

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____;____;____;____

Input by:____;____;____;____

TRAFFIC CONTROLS ON PATH OF TRAVEL (continued)

3-operational, but malfunctioning (From TAR, witness interviews)
*8-other (*describe, 80 characters)*
9-unknown

Visible to vehicle operator

0-not applicable

1-no

2-yes

*8-other (*describe, 80 characters)*

9-unknown

A.3.1.22 ____

*description:_____

(From witness interviews)

A.3.2.22 ____

*description:_____

Violated by vehicle operator

0-not applicable

1-no

2-yes

*8-other (*describe, 80 characters)*

9-unknown

A.3.1.23 ____

*description:_____

(From TAR, witness interviews, vehicle inspection, possibly)

(See Coding manual for definitions)

A.3.2.23 ____

*description:_____

Traffic density at time of accident

(see Coding Manual for definitions)

0-not applicable, no OV

1-no other traffic

2-light traffic

3-moderate traffic

4-heavy traffic, traffic moving

5-heavy traffic, congested roadway

*8-other (*describe, 80 characters)*

9-unknown

A.3.1.24 ____

*description:_____

A.3.1.24.1

As reported by:_____

(From witness interviews, TAR, possibly)

A.3.2.24 ____

*description:_____

A.3.2.24.1

As reported by:_____

ACCIDENT CIRCUMSTANCES

Visibility limitation due to

00-not applicable

01-none, visibility not significantly limited

02-dust

03-smoke

04-smog

05-fog

06-precipitation

07-glare

*08-windscreen, visor condition (*describe, 80 characters)*

09-misaligned/obscured roadside curved mirror

*98-other (*describe, 80 characters)*

99-unknown

A.3.1.25 ____

*description:_____

(From Accident scene investigation worksheet, witness interviews)

A.3.2.25 ____

*description:_____

Animal involvement

00-no animal involvement (input "0" in

A.3.1.27 and go to A.3.1.28)

01-small dog, less than 10 kg

02-big dog

03-cat

04-bird

05-cow

06-horse

07-deer

08-sheep

09-squirrel

*98-other (*describe, 80 characters)*

99-unknown

A.3.1.26 ____

*description:_____

(From scene diagram, vehicle inspections, TAR, witness interviews)

Was the animal struck?

0-not applicable

A.3.1.27 ____

(From scene diagram, vehicle inspections, TAR, witness interviews)

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

ACCIDENT CIRCUMSTANCES (continued)

- 1-no, animal not struck
- 2-yes, animal involved in precipitating event
- 3-yes, animal struck by motorcycle, or involved with motorcyclist
- 9-unknown

Pedestrian involvement A.3.1.28 ____

0-no pedestrian involvement (*input "0" in (From scene diagram, vehicle inspections, TAR, witness interviews) A.3.1.29.1, .2, and .3; go to A.3.1.30)*

- 1-yes, pedestrian involved in precipitating event
- 2-yes, pedestrian involved in collision with motorcycle or motorcyclist
- 9-unknown

ACCIDENT CIRCUMSTANCES)

Location of pedestrian at impact A.3.1.29.1 ____ (*pedestrian number 1*)

(*input all that apply, and input "0" in A.3.1.29.2 ____ (pedestrian number 2)*

A.3.1.29.3 if there is no other input) A.3.1.29.3 ____ (pedestrian number 3)

0-not applicable *description: _____

1-in crosswalk _____

2-jaywalking _____

3-darting from roadside (From scene diagram, TAR, witness interviews)

4-passenger entering or leaving automobile

5-passenger entering or leaving public transportation

6-darting from roadside near school

7-entering or leaving transportation near school

8-other (*describe, 80 characters)

9-unknown

Stationary view obstructions along the operator's line of sight at time of precipitating event

00-not applicable A.3.1.30 ____ A.3.2.30 ____
*description: _____ *description: _____

01-none _____

02-buildings _____

03-signs _____

04-vegetation, trees, bushes, walls, (From scene photographs, TAR, witness interviews)
vegetation covered fences

05-hill _____

06-blind curve _____

07-stationary or parked vehicles 98-other (*describe, 80 characters)

08-barricades 99-unknown

Mobile view obstructions along the operator's line-of-sight at time of precipitating event

00-not applicable A.3.1.31 ____ A.3.2.31 ____
*description: _____ *description: _____

01-none _____

02-vehicles: automobiles _____

03-vehicles: light trucks and vans (From scene photographs, TAR, witness interviews)

04-trucks and busses _____

05-vehicles: special purpose equipment, construction, cranes

06-farm and/or agricultural equipment

07-people, pedestrians

08-animals

98-other (*describe, 80 characters)

99-unknown

**A.3 ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

WEATHER AT TIME OF ACCIDENT

Ambient temperature

(code plus (+) or minus (-); e.g., + 15, -08)
999-unknown

A.3.1.32 ___ ___ ___ deg C

(From Accident scene investigation worksheet)

Weather description

(see Coding Manual for descriptions)

0-clear

1-cloudy, partly cloudy

2-overcast

3-drizzle, light rain

4-moderate or heavy rain

5-snow

6-sleet, freezing rain

7-hail

8-other (*describe, 80 characters)

9-unknown

A.3.1.33 ___

*description: _____

(From Accident scene investigation worksheet)

Wind description

0-none, calm

1-light

2-moderate

3-strong

4-light with gusts

5-moderate with gusts

6-strong with gusts

7-variable

8-other (*describe, 80 characters)

9-unknown

A.3.1.34 ___

*description: _____

(From Accident scene investigation worksheet)

Wind direction with respect to motorcycle path

(see Coding Manual for definition)

0-no wind

1-left crosswind

2-headwind

3-right crosswind

4-tailwind

8-other (*describe, 80 characters)

9-unknown

A.3.1.35 ___

*description: _____

(From Accident scene investigation worksheet)

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

SPECIFICATIONS

Manufacturer A.4.1.1.1 _____ *description: _____

- A01-AJS
 - A02-ATK
 - A03-Aprilia
 - A04-Ariel
 - B01-BMW
 - B02-BSA
 - B03-Batavus
 - B04-Benelli
 - B05-Beta
 - B06-Bimota
 - B07-Bridgestone
 - B08-Buell
 - B09-Bultaco
 - C01-CZ
 - C02-Cagiva
 - C03-CanAm
 - C04-Carabela
 - C05-Cat-HPE
 - C06-Columbia
 - C07-Cushman
 - D01-DKW
 - D02-Dalesman
 - D03-Ducati
 - E01-Eagle
 - E02-Excelsior
 - E03-Extra
 - F01-Fantic
 - F02-Foxi
 - G01-GasGas
 - G02-Garelli
 - G03-Gemini
 - G04-Gilera
- (From Vehicle information and accident description worksheet)
(See Coding Manual for additional manufacturers)
- G05-Greeves
 - H01-Harley-Davidson
 - H02-Hercules
 - H03-Hodaka
 - H04-Honda
 - H05-Husqvarna
 - I01-Indian
 - I02-Italjet
 - J01-Jawa
 - K01-KTM
 - K02-Kawasaki
 - L01-Laverda
 - M01-MBI
 - M02-MVAgusta
 - M03-MZ
 - M04-Maico
 - M05-Matchless
 - M06-Montesa
 - M07-Motobecane
 - M08-Moto Guzzi
 - M09-Moto Morini
 - M10-Moto Parilla
 - M11-Moto Villa
 - M12-Munch
 - N01-NSU
 - N02-Norton
 - O01-Odyssey
 - O02-Ossa
 - P01-Piaggio
 - P02-Puch (Steyr-Daimler-Puch)
 - R01-Rickman
 - R02-Riverside
 - R03-Rokon
 - R04-Royal Enfield
 - R05-Rupp
 - S01-Sachs
 - S02-Sarari
 - S03-Scorpion
 - S04-Sears-Allstate
 - S05-Simples
 - S06-Solex
 - S07-Soni
 - S08-Sunbeam
 - S09-Suvega
 - S10-Suzuki
 - T01-Tomos
 - T02-Triumph
 - U01-Ural
 - V01-Vespa
 - V02-Vincent
 - Y01-Yamaha
 - Y02-Yankee
 - Z01-Zundapp
 - 998-other (*describe, 80 characters)
 - 999-unknown

Model A.4.1.1.2 _____ (From Vehicle information and accident description worksheet)
(not coded)

Year A.4.1.1.3 _____ (From Vehicle information and accident description worksheet)

Motorcycle legal category A.4.1.1.4 _____ *description: _____
(see Coding Manual for descriptions and photographs)

- 01-L1 vehicle
- 02-L3 vehicle
- 03-Mofa
- 98-Other (specify)
- 99-Unknown

Is the motorcycle equipped with pedals? A.4.1.1.4.1 _____
1-no
2-yes
9-unknown

Motorcycle style A.4.1.1.4.2 _____ *description: _____
(see Coding Manual for descriptions and photographs)

- 00-Conventional street L1 or L3 vehicle
(tank between knees), without modifications
- 01-Conventional street L1 or L3 vehicle
(tank between knees), with modifications
- 02-Dual purpose, on-road off-road motorcycle

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

SPECIFICATIONS (continued)

- 03-Sport, race replica
- 04-Cruiser
- 05-Chopper, modified chopper
- 06-Touring
- 07-Scooter
- 08-Step-through
- 09-Sport touring
- 11-Motorcycle plus side car, left
- 12-Motorcycle plus side car, right
- 13-Off-road motorcycle, motocross, enduro, trials
- 98- other (*describe, 80 characters)
- 99-unknown

Vehicle gross mass A.4.1.1.5 _____ kg
(as specified by the manufacturer) (From Vehicle information and accident description worksheet)
9999-unknown

Vehicle identification number, if permissible A.4.1.1.6 _____
(input "9" in all spaces for unknown; do not include last 3 digits of VIN)
(From vehicle photographs)

Licence plate number, reference only A.4.1.1.7 _____
(Not coded) (From vehicle photographs)

Odometer reading A.4.1.1.8 _____ km
999 999-unknown (From Motorcycle inspection worksheet, vehicle photographs)

Odometer units A.4.1.1.8.1 _____
0-not applicable (From Motorcycle inspection worksheet, vehicle photographs)
1-kilometres
2-miles *description: _____
*8-other(*describe, 80 characters)* _____
9-unknown _____

Registered owner category A.4.1.1.9 _____ *description: _____
0-no registration available _____
1-motorcycle rider _____
2-motorcycle passenger (From Traffic accident report, TAR)
3-operated with consent of owner
7-stolen
8-other (*describe, 80 characters)
9-unknown

Predominating MC colour A.4.1.1.10 _____ *description: _____
00-no dominating colour, multi-coloured _____
01-white _____
02-yellow (From Vehicle information and accident description worksheet, vehicle photographs)
03-black
04-red
05-blue 10-purple
06-green 11-gold
07-silver, grey 12-chrome, metallic
08-orange 98-other (*describe, 80 characters)
09-brown, tan 99-unknown

Motor displacement A.4.1.1.11 _____ cc
(From Vehicle information and accident description worksheet, via "model")

Number of cylinders A.4.1.1.12 _____
(From Vehicle information and accident description worksheet, via "model")

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

MECHANICAL PROBLEMS

Symptom of problem A.4.1.1.13 _____ *description:_____

00-none (*input "00" in A.4.1.1.14; go to A.4.1.1.15*) _____

01-stopped in traffic _____

02-front wheel lockup (From Motorcycle inspection worksheet, TAR, witness interviews)

03-rear wheel lockup _____

04-power loss _____

05-speed control problem 11-front axle fixing loose

06-loss of control 12-rear axle fixing loose

07-uncontrolled acceleration or deceleration 13-loss of lighting

08-motor stalled 14-loss of electrical, other than lighting

09-front axle loose 98-other (*describe, 80 characters)

10-rear axle loose 99-unknown

Source of problem A.4.1.1.14 _____ *description:_____

00-not applicable _____

01-fuel starvation _____

02-electrical or ignition failure (From Motorcycle inspection worksheet, TAR, witness interviews)

03-mechanical failure of motor components

04-lubrication

05-cooling system

06-stuck or binding throttle 12-missing axle security

07-siezed motor 13-axle bearings

08-transmission 14-front fork pinch bolts

09-clutch 15-axle adjust screws and set nuts

10-lighting system 98-other (*describe, 80 characters)

11-fuse, circuit breaker 99-unknown

Front Rear

TYRES

Size A.4.1.1.15 _____ A.4.1.2.15 _____

(response should be right justified) _____

999999999-unknown (From Motorcycle inspection worksheet)

Manufacturer A.4.1.1.16 _____ A.4.1.2.16 _____

A1-Avon *description:_____ *description:_____

B1-Bridgestone _____

C1-Cheng Shin _____

C2-Continental (From Motorcycle inspection worksheet, motorcycle photographs)

D1-Dico

D2-Dunlop I2-ITP O1-Ohtsu

F1-Firestone K1-Kazan P1-Pirelli

G1-Goodyear K2-Kenda S1-Skat Trak

H1-Hutchinson M1-Metzeler 98-other (*describe, 80 characters)

I1-IRC M2-Michelin 99-unknown

Rim size A.4.1.1.17 _____, _____x_____ in A.4.1.2.17 _____, _____x_____ in

9,99x9,9-unknown (From Motorcycle inspection worksheet, motorcycle photographs)

(Example = Rim size = 2,25 x 17)

Rim manufacturer Front A.4.1.1.18 _____ Rear A.4.1.2.18 _____

00-original equipment *description:_____ *description:_____

D1-Daido (DID) _____

D2-Douglas _____

E1-Enkai (From Motorcycle inspection worksheet, motorcycle photographs)

E2-Excel

S1-Sun

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

TYRES (continued)

T1-Talon Hubs 98-other (*describe, 80 characters)
U1-Union 99-unknown

Tread type

(see Coding Manual for definitions)

A.4.1.1.19 _____

*description: _____

A.4.1.2.19 _____

*description: _____

0-no tread pattern, slick

1-straight rib tread pattern

2-block pattern, trials type

3-knobby pattern, motocross type

4-all weather, cross or dog-bone pattern

5-all weather, diagonal or diamond pattern

6-all weather, angle groove

7-racing design, minimum groove design

8-other (*describe, 80 characters)

9-unknown

(From Motorcycle inspection worksheet, motorcycle photographs)

Measured tread depth

(see Coding Manual for measurement methods)

99-unknown

A.4.1.1.20 _____ mm

(From Motorcycle inspection worksheet)

A.4.1.2.20 _____ mm

Inflation pressure

999-unknown

(1 psi = 6.8948 kPa)

A.4.1.1.21 _____ kPa

(From Motorcycle inspection worksheet)

A.4.1.2.21 _____ kPa

Braking evidence on tyre

(see Coding Manual for evaluation methods)

0-none

1-evidence of moderate braking

2-evidence of heavy braking without wheel lock up

3-evidence of heavy locked wheel braking, one skid patch

4-evidence of heavy locked wheel braking, multiple skid patches

8-other (*describe, 80 characters)

9-unknown

A.4.1.1.22 _____

*description: _____

A.4.1.2.22 _____

*description: _____

(From Motorcycle inspection worksheet, vehicle photographs)

Front

Rear

SUSPENSION

Type

(see Coding Manual for definitions)

A.4.1.1.23 _____

*description: _____

A.4.1.2.23 _____

*description: _____

(From motorcycle photographs, Vehicle information and accident description worksheet, via "model")

Front

00-none, rigid wheel mount (*Input "0" in in A.4.1.1.24; go to A.4.1.1.25*)

11-telescoping tube, conventional lower fork legs

12-telescoping tube, inverted fork legs

13-springer

14-girder

15-leading link, single or double sided

16-articulated multiple link

17-trailing link, single or double sided

18-telelever (BMW, only)

98-other (*describe, 80 characters)

99-unknown

Rear

00-none, rigid wheel mount (*Input "0" in A.4.1.2.24; go to A.4.1.2.25*)

11-conventional fork swing arm, double exterior tubular shocks

12-conventional fork swing arm, mono-shock

13-conventional fork swing arm, linkage articulated mono-shock

14-one-sided swing arm, single exterior tubular shock

15-one-sided swing arm, mono-shock

16-one-sided swing arm, linkage articulated mono-shock

98-other (*describe, 80 characters)

99-unknown

Condition

A.4.1.1.24 _____

A.4.1.2.24 _____

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

(see Coding Manual for response definitions and evaluation methods)

0-not applicable

1-no unusual condition; acceptable condition

2-excessive wear in joints, sliders, pivot bolts; excessive mobility

3-seals or dampers leaking; deteriorated damping

4-loose or missing fasteners, inadequate clamping; excessive flexibility

5-suspension elements damaged prior to accident events

8-other (*describe, 80 characters)

9-unknown

*description: _____

(From Motorcycle inspection worksheet)

*description: _____

Lever or pedal 1

Lever or pedal 2

BRAKE SYSTEM

Control configuration

Rider control type

A.4.1.1.25 _____

A.4.1.2.25 _____

0-none, not present (input "0" in A.4.1.1.25/A.4.1.2.25 through A.4.1.1.34/A.4.1.2.34; go to A.4.1.1.35/A.4.1.2.35)

(From Motorcycle inspection worksheet)

1-hand

2-foot

9-unknown

Rider control side

A.4.1.1.26 _____

A.4.1.2.26 _____

0-not applicable

*description: _____

*description: _____

1-left

2-right

8-other (*describe, 80 characters)

(From Motorcycle inspection worksheet)

9-unknown

Control configuration (continued)

Actuation at lever or pedal

A.4.1.1.27 _____

A.4.1.2.27 _____

0-not applicable

*description: _____

*description: _____

1-hydraulic

2-mechanical

3-electric

(From Motorcycle inspection worksheet)

8-other (*describe, 80 characters)

9-unknown

Brake control system type

A.4.1.1.28 _____

A.4.1.2.28 _____

0-not applicable

(From Motorcycle inspection worksheet)

1-independent front brake

(input "0" into A.4.1.1.29/A.4.1.2.29 and A.4.1.1.30/A.4.1.2.30; go to A.4.1.1.31/A.4.1.2.31)

2-independent rear brake

(input "0" into A.4.1.1.29/A.4.1.2.29 and A.4.1.1.30/A.4.1.2.30; go to A.4.1.1.31/A.4.1.2.31)

3-combined front and rear brakes, CBS

9-unknown

Connection to front brake includes

A.4.1.1.29 _____

A.4.1.2.29 _____

(From Motorcycle inspection worksheet)

0-not applicable

1-no proportioning valve

2-fixed proportioning valve

3-variable proportioning valve

9-unknown

Connection to rear brake includes

A.4.1.1.30 _____

A.4.1.2.30 _____

(From Motorcycle inspection worksheet)

0-not applicable

1-no proportioning valve

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

	Lever or pedal 1	Lever or pedal 2
BRAKE SYSTEM (continued)		
2-fixed proportioning valve		
3-variable proportioning valve		
9-unknown		
	Front	Rear
Brake configuration		
ABS	A.4.1.1.31 _____	A.4.1.2.31 _____
0-not applicable	(From Motorcycle inspection worksheet)	
1-no (input "0" into A.4.1.1.32/A.4.1.2.32; go to A.4.1.1.33/A.4.1.2.33)		
2-yes		
9-unknown		
ABS type	A.4.1.1.32 _____	A.4.1.2.32 _____
0-not applicable	*description: _____	*description: _____
1-electro hydraulic	_____	_____
2-hydro mechanical	_____	_____
3-all hydraulic, fluidic	(From Motorcycle inspection worksheet)	
4-all mechanical		
5-pneumatic hydraulic		
6-electro mechanical		
8-other (*describe, 80 characters)		
9-unknown		
Brake mechanism	A.4.1.1.33 _____	A.4.1.2.33 _____
(see Coding Manual for descriptions)	*description: _____	*description: _____
00-not applicable	_____	_____
01-none, not present (input "0" in A.4.1.1.34/A.4.1.2.34; go to A.4.1.1.35/A.4.1.2.35)	(From Motorcycle inspection worksheet)	
02-caliper/shoe to wheel rim		
03-drum, single leading shoe		
04-drum, double leading shoe		
05-single disc, single piston		
06-single disc, multi piston		
07-double disc, single piston		
08-double disc, multi piston		
98-other (*describe, 80 characters)		
99-unknown		
Brake mechanism actuation	A.4.1.1.34 _____	A.4.1.2.34 _____
0-not applicable	*description: _____	*description: _____
1-hydraulic	_____	_____
2-mechanical	_____	_____
3-electric	(From Motorcycle inspection worksheet)	
4-electric regenerative		
8-other (*describe, 80 characters)		
9-unknown		
Were brakes operational before accident?		
0-not applicable	A.4.1.1.35 _____	A.4.1.2.35 _____
1-no	(From Motorcycle inspection worksheet)	
2-yes		
9-unknown		
Do the brakes appear to be defective?		
0-not applicable	A.4.1.1.36 _____	A.4.1.2.36 _____
1-no	(From Motorcycle inspection worksheet)	

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

	Front	Rear
BRAKE SYSTEM (continued)		
Brake configuration (continued)		
2-yes		
9-unknown		
Condition, wear (see Coding Manual for definitions)	A.4.1.1.37 ____ *description: _____	A.4.1.2.37 ____ *description: _____
0-not applicable	_____	_____
1-no significant wear	(From Motorcycle inspection worksheet)	
2-minimum wear to friction surfaces		
3-moderate wear to friction surfaces		
4-severe wear to friction surfaces, replacement and repair overdue		
5-severe deterioration due to wear of friction surfaces		
6-severe deterioration of operating system		
7-brake components damaged prior to accident events		
8-other (*describe, 80 characters)		
9-unknown		
Adjustment	A.4.1.1.38 ____	A.4.1.2.38 ____
0-not applicable	*description: _____	*description: _____
1-no maladjustment	_____	_____
2-improper adjustment, significant control action required for braking action	_____	_____
3-severe adjustment problem	(From Motorcycle inspection worksheet)	
4-inoperable due to sabotage		
8-other (*describe, 80 characters)		
9-unknown		
FRAME		
Type/configuration	A.4.1.1.39 ____	*description: _____
00-step-through, formed sheet metal		_____
01-step-through, tubular frame		_____
02-conventional tube cradle type with single down tube		(From vehicle photographs)
03-conventional tube cradle type with double down tubes		
04-backbone type, motor-transmission mounted independently		
05-backbone type, motor-transmission integral with frame		
06-perimeter frame, tube type		
07-perimeter frame, extrusion element type		
08-monocoque, shell only structure		
98-other (*describe, 80 characters)		
99-unknown		
Material	A.4.1.1.40 ____	*description: _____
1-steel		_____
2-aluminum alloy		_____
3-carbon fibre composite	(From Motorcycle inspection worksheet)	
4-other composite		
8-other (*describe, 80 characters)		
9-unknown		
Reduction in wheelbase	A.4.1.1.41 ____ mm	
	(From Motorcycle inspection worksheet)	
Did front wheel displace against either the motor or the frame?	A.4.1.1.42 ____	(From vehicle photographs)
0-not applicable	2-yes	
1-no	9-unknown	

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

FRAME (continued)

Steering stem adjustment A.4.1.1.43 ____ *description: _____
 (see Coding Manual for evaluation method) _____
 0-secure, properly tightened _____
 1-overly tightened, control interference (From Motorcycle inspection worksheet)
 2-loose, contributes to control difficulty
 3-very loose, control interference
 8-other (*describe, 80 characters)
 9-unknown

Steering damper installed A.4.1.1.44 ____ *description: _____
 (see Coding Manual for definitions and photographs) _____
 0-none installed or not applicable _____
 1-centre steering pivot adjustable friction discs (From Motorcycle inspection worksheet)
 2-tubular friction damper
 3-hydraulic tubular damper, one side
 4-hydraulic tubular damper, both sides
 8-other (*describe, 80 characters)
 9-unknown

Is rear swing arm loose? A.4.1.1.45 ____ (From Motorcycle inspection worksheet)
 0-not applicable, no rear swing arm (input "0" in A.4.1.1.46; go to A.4.1.1.47)
 1-no (input "0" in A.4.1.1.46; go to A.4.1.1.47)
 2-yes

Rear swing arm pivot bearing condition A.4.1.1.46 ____ *description: _____
 (see Coding Manual for evaluation procedures) _____
 0-not applicable _____
 1-pivot bolt loose; bearings in good condition (From Motorcycle inspection worksheet)
 2-bearings loose or worn; deteriorated distinct
 swing arm mobility
 3-severely loose or worn, badly deteriorated; severe mobility of swing arm
 8-other (*describe, 80 characters)
 9-unknown

MISCELLANEOUS COMPONENTS

Rider foot pegs, footrest type A.4.1.1.47 ____ *description: _____
 0-none _____
 1-rigid metal pegs, no covers _____
 2-rigid metal pegs, rubber covers (From vehicle photographs)
 3-metal folding pegs, no covers
 4-metal folding pegs, rubber covers
 5-rigid metal footrests, pegs, or footboards
 6-folding metal footrests, pegs, or footboards
 7-accessory highway pegs, only
 8-other (*describe, 80 characters)
 9-unknown

Passenger foot pegs, footrest type A.4.1.1.48 ____ *description: _____
 0-none _____
 1-rigid metal pegs, no covers _____
 2-rigid metal pegs, rubber covers (From vehicle photographs)
 3-metal folding pegs, no covers
 4-metal folding pegs, rubber covers
 5-rigid metal footrests, pegs, or footboards
 6-folding metal footrests, pegs, or footboards
 7-makeshift pegs attached temporarily to frame tubes, etc.
 8-other (*describe, 80 characters)
 9-unknown

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

MISCELLANEOUS COMPONENTS (continued)

Side stand type A.4.1.1.49 ____ *description: _____
 0-none _____
 1-original equipment, right side, metal end or pad _____
 2-original equipment, right side, rubber catch pad (From vehicle photographs and Table A.4.1)
 3-original equipment, left side, metal end or pad _____
 4-original equipment, left side, rubber catch pad _____
 5-accessory, installed right side _____
 6-accessory, installed left side _____
 8-other (*describe, 80 characters) _____
 9-unknown _____

Centre stand type A.4.1.1.50 ____ *description: _____
 0-none _____
 1-original equipment, installed _____
 2-original equipment, removed (From vehicle photographs and Table A.4.1)
 3-ride-off stand installed _____
 8-other (*describe, 80 characters) _____
 9-unknown _____

Headlamp assembly type A.4.1.1.51 ____ *description: _____
 0-none _____
 1-single headlamp _____
 2-double headlamp (From vehicle photographs)
 3-single with auxiliary lights _____
 4-double with auxiliary lights _____
 8-other (*describe, 80 characters) _____
 9-unknown _____

HANDLEBAR

Type A.4.1.1.52 ____ *description: _____
 (see Coding Manual for definitions) _____
 0-original equipment _____
 1-clip-on (From vehicle photographs)
 2-clubman or racer _____
 3-high sweep or tiller type touring _____
 4-high rise _____
 5-motocross, off-road _____
 8-other (*describe, 80 characters) _____
 9-unknown _____

Mounting A.4.1.1.53 ____ *description: _____
 (see Coding Manual for definitions) _____
 0-original equipment, solid _____
 1-original equipment, rubber bushing (From vehicle photographs, top view)
 2-setbacks _____
 3-dog bones _____
 4-risers _____
 8-other (*describe, 80 characters) _____
 9-unknown _____

HANDLEBAR (continued)

Construction A.4.1.1.54 ____ ____ *description: _____
 01-steel tube _____
 02-aluminum alloy tube _____
 03-titanium alloy tube (From Motorcycle inspection worksheet)
 04-cast steel _____
 05-forged steel _____
 06-cast aluminum alloy _____
 07-forged aluminum alloy _____
 08-composite _____

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

HANDLEBAR (continued)
09-cast steel with steel tube
98-other (*describe, 80 characters)
99-unknown

Width A.4.1.1.55.1 _____, _____ cm (From Motorcycle inspection worksheet)
Rise A.4.1.1.55.2 _____, _____ cm
Sweep A.4.1.1.55.3 _____, _____ cm
(see Coding Manual for measurement methods)

SEAT
Type A.4.1.1.56 _____ *description: _____
0-conventional straddle seat, one level _____
1-straddle type, two level, raised passenger _____
2-bucket, single seat (From vehicle photographs)
3-bucket, double seat, one level
4-bucket, double seat, raised passenger
5-single racer seat, tail fairing behind
6-single straddle seat, pillion pad behind
7-single pad, semi-bench type
8-other (*describe, 80 characters)
9-unknown

Fastening A.4.1.1.57 _____ *description: _____
0-not attached _____
1-one side hinged, other side latched _____
2-tank tongue, both sides tab and screw attachment (From Motorcycle inspection worksheet)
3-tank tongue with double claw latch
4-forward hinge, button rest on frame, no latch
5-forward hinge, button rest with latch
6-multiple tab and screw attachment
8-other (*describe, 80 characters)
9-unknown

FUEL TANK
Type A.4.1.1.58 _____ *description: _____
1-saddle _____
2-under seat _____
3-submerged in-frame (From vehicle photographs)
8-other (*describe, 80 characters)
9-unknown

Material A.4.1.1.59 _____ *description: _____
1-steel _____
2-aluminum alloy _____
3-fibreglass composite (From Motorcycle inspection worksheet)
4-other composite
5-injection molded plastic
6-injection molded plastic covered by metal
8-other (*describe, 80 characters)
9-unknown

Cap type A.4.1.1.60 _____
00-no tank cap, cap missing, fuel filler open or stuffed with cloth, rag, rubber ball, etc. (input "0" in A.4.1.1.61; go to A.4.1.1.62) (From Motorcycle inspection worksheet and photographs)
01-external screw type, no cover
02-external screw type, covered 08-smooth with tank top surface, covered
03-internal screw type, no ratchet, no cover 09-smooth with tank top surface, no cover
04-internal screw type, ratchet, no cover 10-Monza, flip-up
05-internal screw type, ratchet, covered, or recessed 11-Press fit cap
06-exposed bayonet type, no cover, no guard 98-other (*describe, 80 characters)

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

FUEL TANK (continued)

07-covered, guarded, or recessed bayonet type

99-unknown

Cap retention A.4.1.1.61 _____

0-not applicable

1-retained securely, no venting or fuel loss from cap

2-not retained, ejected completely from tank body

3-opened but remained attached to tank

4-displaced sufficiently to allow fuel loss

8-other (*describe, 80 characters)

9-unknown

*description: _____

(From Motorcycle inspection worksheet and scene photographs)

Tank retention A.4.1.1.62 _____

0-completely retained in motorcycle

1-partially separated, displaced from mounting

2-completely separated from mounting position

9-unknown

(From vehicle and scene photographs)

Tank deformation A.4.1.1.63 _____

(see Coding Manual for definitions)

0-none (input "0" in A.4.1.1.64; go to A.4.1.1.65)

1-mild denting

3-severe damage

2-moderate denting

9-unknown

(From vehicle photographs)

Deformation source A.4.1.1.64 _____

0-not applicable

1-contact from motorcyclist's body

2-collision contact from other motorcycle components

3-collision contact with other vehicle

4-collision contact with roadway surface

5-collision contact with other objects in environment

8-other (*describe, 80 characters)

9-unknown

*description: _____

_____ (From synthesis)

Was there a fuel tank failure? A.4.1.1.65 _____

0-no (input "0" in A.4.1.1.66.1 - A.4.1.1.66.4; go to A.4.1.1.67)

1-yes

(From Motorcycle inspection worksheet, vehicle photographs)

9-unknown

Tank damage/failure type A.4.1.1.66.1 _____

(input all that apply; input A.4.1.1.66.2 _____

"0" in remaining responses) A.4.1.1.66.3 _____

0-not applicable A.4.1.1.66.4 _____

1-denting or crushing from blunt impact

2-laceration or puncture from edge or sharp object

3-metal tank welds separated

4-metal tank weld defect

5-metal tank corrosion weakness

6-plastic tank material embrittlement

7-plastic tank mold defect

8-other (*describe, 80 characters)

9-unknown

*description: _____

(From Motorcycle inspection worksheet and vehicle photographs)

Was there a fuel spill or leak? A.4.1.1.67 _____

0-no (input "00" in A.4.1.1.68.1 - A.4.1.1.68.5; go to A.4.1.1.69)

1-minor leaks, little or no fire hazard

(From Motorcycle inspection worksheet and vehicle and scene photographs)

2-moderate leak or spill, some fire hazard

3-large quantity of fuel lost with severe fire hazard

9-unknown

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

FUEL TANK (continued)

Source of fuel spills or leaks

(indicate all that apply; input "00" in remaining responses)

00-not applicable

01-primary fuel tank

02-auxiliary fuel tank

03-fuel lines and fittings

04-fuel filter

05-exhaust

06-carburetor

07-fuel injection system

08-fuel cap

09-fuel tank vent

98-other (*describe, 80 characters)

99-unknown

A.4.1.1.68.1 _____

A.4.1.1.68.2 _____

A.4.1.1.68.3 _____

A.4.1.1.68.4 _____

A.4.1.1.68.5 _____

*description: _____

(From Motorcycle inspection worksheet, vehicle and

scene photographs)

Did a fire occur?

A.4.1.1.69 _____

1-no (input "0" in A.4.1.1.70 - A.4.1.1.73; go to A.4.1.1.74)

(From scene photographs)

2-yes

9-unknown

When did the fire occur?

A.4.1.1.70 _____

(From Accident scene investigation worksheet and synthesis)

0-not applicable

1-pre-crash (input "00" in A.4.1.1.71; go to A.4.1.1.72)

2-during crash (input "00" in A.4.1.1.71; go to A.4.1.1.72)

3-post-crash

9-unknown (input "00" in A.4.1.1.71; go to A.4.1.1.72)

The fire occurred how long after the crash?

A.4.1.1.71 _____ min

00-not applicable

(From TAR, synthesis, witness interview worksheets)

99-unknown

Fuel source for fire

A.4.1.1.72 _____

*description: _____

00-not applicable

01-other vehicle or environment

02-primary fuel tank

(From Motorcycle inspection worksheets)

03-auxiliary fuel tank

04-fuel lines and fittings

05-fuel filter

09-fuel cap

06-exhaust

10-fuel tank vent

07-carburetor

98-other, on motorcycle (*describe, 80 characters)

08-fuel injection system

99-unknown

Ignition source for fire

A.4.1.1.73 _____

*description: _____

00-not applicable

01-other vehicle or environment

02-sliding motorcycle caused friction sparks

(From synthesis, using the scene, vehicle, TAR, witness information)

03-ignition system, high tension sparks

04-violation of electrical system other than lights/lamps

05-lights/lamps

06-exhaust system

07-motorcyclist smoking materials

08-cargo, parcels

09-traffic hazard flares

98-other, on motorcycle (*describe, 80 characters)

99-unknown

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____;____;____;____

Input by:____;____;____;____

DRIVE LINE

Type A.4.1.1.74 ____ *description:_____

1-sprockets, exposed chain _____

2-sprockets, enclosed chain _____

3-belt (From vehicle photographs and model awareness)

4-shaft

8-other (*describe, 80 characters)

9-unknown

Drive chain, belt, or shaft condition A.4.1.1.75 ____ *description:_____

0-no unusual condition, acceptable adjustment (*input "0" in A.4.1.1.76; go to A.4.1.1.77*) _____

1-excessively loose adjustment, excessive wear (From Motorcycle inspection worksheet) _____

(*input "0" in A.4.1.1.76; go to A.4.1.1.77*)

2-drive chain or belt adjustment too tight (*input "0" in A.4.1.1.76; go to A.4.1.1.77*)

3-chain or belt broken

4-chain or belt derailed

8-other (*describe, 80 characters, *input "0" in A.4.1.1.76; go to A.4.1.1.77*)

9-unknown (*input "0" in A.4.1.1.76; go to A.4.1.1.77*)

When did the damage occur? A.4.1.1.76 ____ (From Motorcycle inspection and Accident scene investigation worksheets)

0-not applicable

1-pre-crash

2-during crash

3-post-crash 9-unknown

Drive sprocket condition A.4.1.1.77 ____ *description:_____

(see Coding Manual for definitions and evaluation methods)

0-no sprockets or no unusual condition, acceptable condition _____

1-front sprocket teeth worn but serviceable _____

2-front sprocket teeth badly worn, hinders power application (From Motorcycle inspection worksheet)

3-rear sprocket teeth worn but serviceable _____

4-rear sprocket teeth badly worn, hinders power application _____

5-severe sprocket wear, related to chain or belt derailing, drive line failure _____

8-other (*describe, 80 characters)

9-unknown

THROTTLE CONTROL

Does throttle control work? A.4.1.1.78 ____

0-not applicable (From Motorcycle inspection worksheet)

1-no

2-yes (*input "00" in A.4.1.1.79 - A.4.1.1.82; go to A.4.1.1.83*)

9-unknown

Drum condition A.4.1.1.79 ____ *description:_____

00-drum not damaged _____

01-not applicable; thumb throttle or squeeze throttle type _____

02-grip interference; binds in rotation (From Motorcycle inspection worksheet)

03-base adjustment improper; binds in rotation

04-drum damaged prior to accident events; binds in rotation

05-cable draw interference; binds in rotation 08-improper tightening of throttle base; rotation causes base rotation

06-needs lubrication; binds in rotation

07-has foreign matter in throttle base; binds in rotation 98-other (*describe, 80 characters)

99-unknown

Cables condition A.4.1.1.80 ____ *description:_____

0-cables not damaged _____

1-bind due to bent sheath _____

2-bind due to corrosion, lack of lubrication (From Motorcycle inspection worksheet)

3-bind due to frayed wires

4-end collets loose

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

THROTTLE CONTROL (continued)

- 5-incorrect size causes malfunction
- 6-improper routing; steering causes throttle action
- 8-other (*describe, 80 characters)
- 9-unknown

Throttle plate/slides condition A.4.1.1.81 ____ *description: _____

- 0-throttle plate/slides not damaged _____
- 1-not applicable _____
- 2-carburettor damage prior to accident _____

(From Motorcycle inspection worksheet)

- events causes binding, throttle sticking
- 3-throttle plate damage prior to accident causes throttle sticking
- 4-foreign object in induction system causes throttle malfunction
- 5-missing air cleaner allows induction system contamination, sticking throttle
- 6-improper reassembly of carburettor after maintenance allows sticking slide or throttle plate
- 8-other (*describe, 80 characters)
- 9-unknown

Return springs condition A.4.1.1.82 ____ *description: _____

- 0-return springs not damaged _____
- 1-not applicable _____
- 2-external return springs missing, sticking throttle _____

(From Motorcycle inspection worksheet)

- 3-carburettor internal slide springs missing or damaged
- 4-external throttle plate springs altered, weaker springs; sticking throttle
- 8-other (*describe, 80 characters)
- 9-unknown

EXHAUST SYSTEM

Condition A.4.1.1.83 ____ *description: _____

- 0-good condition _____
- 1-worn or damaged _____
- 2-worn or damaged; excessive _____

(From Motorcycle inspection worksheet)

- 3-performance equipment; noise level approximately same as original equipment
- 4-high performance equipment; excessive noise
- 8-other (*describe, 80 characters)
- 9-unknown

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____ / _____ / _____

Investigator: _____; _____; _____

Input by: _____; _____; _____

**For each blank cell, respond
(unless noted otherwise):**
0-not applicable
1-no
2-yes
9-unknown

		A.4.1.3	A.4.1.4	A.4.1.5	A.4.1.6	A.4.1.7	A.4.1.8	A.4.1.9
		Equipped?	Original equipment?	Aftermarket?	Operational?	In use at time of accident?	Modified?	Damage in accident?
1	Front crash bars				-----	-----		
2	Rear crash bars				-----	-----		
3	Engine guard				-----	-----		
4	Windscreen				-----			
5	Fairing				-----			
	3-aftermarket, handlebar or steering mounted 4-aftermarket, frame mounted							
6	Headlamp(s)							
7	Headlamp nacelle				-----	-----		
8	Auxiliary headlamp							
9	Front position lamp							
10	Front reflectors					-----		
	3-original equipment, yellow 5-original equipment, white 6-aftermarket, yellow 7-aftermarket, red 8-aftermarket, silver							
11	Front turn signals							
12	Speedometer							
13	Tachometer							
14	Handlebars				-----	-----		
15	Throttle							
16	Clutch lever							
17	Brake lever							
18	Right side rear view mirrors, posts					-----		
19	Left side rear view mirrors, posts					-----		
20	Front suspension					-----		
21	Front tyre/wheel	-----				-----		
22	Front fender					-----		
23	Front brakes							
24	Seat					-----		
25	Sissy bar/passenger back rest					-----		
26	Side reflectors					-----		
	3-original equipment, yellow 4-original equipment, red 5-original equipment, silver 6-aftermarket, yellow 7-aftermarket, red 8-aftermarket, silver							
27	Frame				-----	-----		
28	Grab rails/ hand holds				-----	-----		
29	Fuel tank				-----	-----		
30	Auxiliary fuel tank				-----	-----		
31	Motor crankcase, cylinders	-----			-----	-----		
32	Radiator							
33	Water hose							
34	Motor power enhancement							
35	Transmission case	-----	-----	-----	-----	-----		
36	Oil tank				-----	-----		
37	Battery, battery box				-----	-----		

**A.4.1 MOTORCYCLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

**For each blank cell, respond
(unless noted otherwise):**

0-not applicable

1-no

2-yes

9-unknown

		A.4.1.3	A.4.1.4	A.4.1.5	A.4.1.6	A.4.1.7	A.4.1.8	A.4.1.9
		Equipped?	Original equipment?	Aftermarket?	Operational?	In use at time of accident?	Modified?	Damage in accident?
38	Rear brake pedal							
39	Shift lever							
40	Foot pegs, footrests							
41	Highway pegs/footrests							
42	Side stand							
43	Side stand interlock							
44	Centre stand							
45	Muffler/exhaust system					-----		
46	Tank bag				-----			
47	Luggage/cargo rack				-----			
48	Parcel rack				-----			
49	Panniers, saddle bags				-----			
50	Rear position lamps							
51	Stop lamp							
52	Rear reflectors					-----		
	3-original equipment, yellow 4-original equipment, red 6-aftermarket, yellow 7-aftermarket, red 8-aftermarket, silver							
53	Rear turn signals							
54	Rear suspension					-----		
55	Rear tyre, wheel	-----				-----		
56	Rear fender							
57	Rear brakes							
58	Tools, tool box				-----	-----		
59	Side covers				-----	-----		
60	Trailer							

**A.4.2 MOTORCYCLE DYNAMICS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

PRE-CRASH MOTION, JUST PRIOR TO PRECIPITATING EVENT

<p>Description 00-stopped in traffic, speed is zero 01-moving in a straight line, constant speed 02-moving in a straight line, throttle off 03-moving in a straight line, braking 04-moving in a straight line, accelerating 05-turning right, constant speed 06-turning right, throttle off 07-turning right, braking 08-turning right, accelerating 09-turning left, constant speed 10-turning left, throttle off 11-turning left, braking 12-turning left, accelerating 13-stopped at roadside, or parked 14-backing up, in a straight line 15-backing up, steering left 16-backing up, steering right 17-making U-turn right 18-making U-turn left 19-making Y-turn right 20-making Y-turn left 21-changing lanes to left 22-changing lanes to right 23-merging to left 24-merging to right 25-entering traffic from right shoulder, median, or parked</p>	<p>A.4.2.1 ___ ___ *description: _____ _____ _____ (From Accident scene investigation worksheet, TAR, Vehicle information and accident description worksheet, witness interviews) 26-entering traffic from left shoulder, median, or parked 27-leaving traffic, turn out to right 28-leaving traffic, turn out to left 29-passing manoeuvre, passing on right 30-passing manoeuvre, passing on left 31-crossing opposing lanes of traffic 32-travelling wrong way, against opposing traffic 33-stripe-riding, filtering forward between lanes, longitudinal motion, only 34-filtering between lanes, lateral motion, only 35-filtering forward between lanes, both longitudinal and lateral motion 36-collision avoidance manoeuvre to avoid a different collision 37-negotiating a bend, constant speed 38-negotiating a bend, throttle off 39-negotiating a bend, braking 40-negotiating a bend, accelerating 98-other (*describe, 80 characters) 99-unknown</p>
--	---

<p>Travelling speed (whole numbers, only) 999-unknown</p>	<p>A.4.2.2.a ___ ___ km/h (From rider/witness interviews, TAR)</p>
--	---

<p>Travelling speed confidence interval (whole numbers, only) 99-unknown</p>	<p>A.4.2.2.b ± ___ km/h (From rider/witness interviews, TAR)</p>
---	---

<p>Line-of-sight to other vehicle (clock face direction, relative to motorcycle centre line, see Coding Manual) 00-not applicable, no OV</p>	<p>A.4.2.3 ___ ___ (From scene diagram, Vehicle information and accident description worksheet)</p>
---	---

PRE-CRASH MOTION, AFTER PRECIPITATING EVENT

<p>Description 00-stopped in traffic, speed is zero 01-moving in a straight line, constant speed 02-moving in a straight line, throttle off 03-moving in a straight line, braking 04-moving in a straight line, accelerating 05-turning right, constant speed 06-turning right, throttle off 07-turning right, braking 08-turning right, accelerating 09-turning left, constant speed 10-turning left, throttle off 11-turning left, braking 12-turning left, accelerating 13-stopped at roadside, or parked 14-backing up, in a straight line 15-backing up, steering left</p>	<p>A.4.2.4 ___ ___ *description: _____ _____ _____ (From Accident scene investigation worksheet, TAR, Vehicle information and accident description worksheet, witness interviews) 26-entering traffic from left shoulder, median, or parked 27-leaving traffic, turn out to right 28-leaving traffic, turn out to left 29-passing manoeuvre, passing on right 30-passing manoeuvre, passing on left 31-crossing opposing lanes of traffic 32-travelling wrong way, against opposing traffic 33-stripe-riding, filtering forward between lanes, longitudinal motion, only</p>
--	--

**A.4.2 MOTORCYCLE DYNAMICS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

PRE-CRASH MOTION, AFTER PRECIPITATING EVENT (continued)

- | | |
|--|--|
| 16-backing up, steering right | 34-filtering between lanes, lateral motion, only |
| 17-making U-turn right | 35-filtering forward between lanes, both longitudinal and lateral motion |
| 18-making U-turn left | 36-collision avoidance manoeuvre to avoid a different collision |
| 19-making Y-turn right | 37-Negotiating a bend, constant speed |
| 20-making Y-turn left | 38-Negotiating a bend, throttle off |
| 21-changing lanes to left | 39-Negotiating a bend, braking |
| 22-changing lanes to right | 40-Negotiating a bend, accelerating |
| 23-merging to left | 98-other (*describe, 80 characters) |
| 24-merging to right | 99-unknown |
| 25-entering traffic from right shoulder, median, or parked | |

Collision avoidance action

(indicate all that apply; input '0' in remaining responses)

0-none

1-braking

2-swerve

3-accelerating

4-counter-steering

5-cornering

8-other (*describe, 80 characters)

9-unknown

A.4.2.5.1 ____ (Responses should be placed in sequence of collision avoidance action)
 A.4.2.5.2 ____
 A.4.2.5.3 ____
 A.4.2.5.4 ____

*description:_____

(From Accident scene investigation and Motorcycle inspection worksheets, TAR, witness interviews)

A.4.2.6 ____ *description:_____

(From scene diagram, scene photographs)
(Please see Coding manual for assistance)

6-light skid marks from both front and rear, no wheel lockup evidence

8-other (*describe, 80 characters)

9-unknown

Braking skid marks on roadway

0-not applicable

1-none

2-skid marks from rear tyre, only

3-skid marks from front tyre, only

4-skid marks from both front and rear tyres, front and rear equivalent and overlaying

5-long skid mark from rear tyre, short terminal skid mark from front tyre

Front tyre A.4.2.7.1 ____ , ____ m

Rear tyre A.4.2.7.2 ____ , ____ m

(From scene diagram, scene photographs)
(Please see Coding manual for assistance)

Length of skid marks on roadway

00,0-not applicable

Braking skid mark evidence on roadway

0-not applicable

1-none

2-dry roadway braking skid marks confirmed from accident motorcycle

3-wet roadway braking skid marks confirmed from accident motorcycle

4-deep water on roadway, aquaplaning most likely, no braking skid marks remaining

5-wet reverted rubber skidding in evidence, white steam-cleaned skid paths shown on roadway confirmed from accident motorcycle

6-braking skid marks evidence most likely present but degraded by traffic after accident, no confirmation at scene examination

7-snow/ice on roadway, braking skid marks confirmed from accident motorcycle

8-other (*describe, 80 characters)

9-unknown

A.4.2.8 ____ *description:_____

(From scene diagram, scene photographs, Motorcycle inspection worksheet. Please see Coding Manual.)

Braking tyre striation evidence

00-not applicable

01-none, front or rear tyre

02-rear tyre, only

03-front tyre, only

04-both front and rear tyres

05-prolonged skid patch on rear tyre, only

A.4.2.9 ____ *description:_____

(From Motorcycle inspection worksheet, vehicle photographs. Please see Coding manual for assistance.)

**A.4.2 MOTORCYCLE DYNAMICS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

PRE-CRASH MOTION, AFTER PRECIPITATING EVENT (continued)

- 06-prolonged skid patch on rear tyre, plus braking striations on front tyre
- 07-prolonged skid patch on rear tyre, plus slide-out striations on front tyre
- 08-prolonged skid patch on rear tyre, plus slide-out striations on both front and rear tyres
- 98-other (*describe, 80 characters)
- 99-unknown

Swerve

- 0-not applicable
- 1-swerve to right, correct decision
- 2-swerve to right, incorrect decision
- 3-swerve to left, correct decision

A.4.2.10 ____
 (From scene diagram, scene photographs)
 (Please see Coding manual for assistance)
 4-swerve to left, incorrect decision
 9-unknown

Acceleration evidence on rear tyre

- 0-not applicable
- 1-none
- 2-moderate slip striations and tread block edge erosion
- 3-severe slip striations and tread block edge erosion
- 4-extreme slip striations, tread block edge erosion and tread rubber reversion
- 8-other (*describe, 80 characters)

A.4.2.11 ____ *description:_____

 (From scene diagram, scene photographs. Please see Coding manual for assistance.)
 9-unknown

Counter-steering

- 0-not applicable
- 1-counter-steering proper, produced desired swerve
- 2-counter-steering improper, produced undesired direction change
- 8-other (*describe 80 characters)
- 9-unknown

A.4.2.12 ____ (From Vehicle information and accident description worksheet, synthesis. Please see Coding manual.)

Cornering skid mark evidence on roadway

- 0-not applicable
- 1-none
- 2-dry roadway braking skid marks confirmed from accident motorcycle
- 3-wet roadway braking skid marks confirmed from accident motorcycle
- 4-deep water on roadway, aquaplaning most likely, no braking skid marks remaining
- 5-wet reverted rubber skidding in evidence, white steam-cleaned skid paths shown on roadway confirmed from accident motorcycle
- 6-braking skid marks evidence most likely present but degraded by traffic after accident, no confirmation at scene examination
- 7-snow/ice on roadway, braking skid marks confirmed from accident motorcycle
- 8-other (*describe, 80 characters)
- 9-unknown

A.4.2.13 ____ *description:_____

 (From scene diagram, scene photographs, Motorcycle inspection worksheet. Please see Coding manual.)

Cornering tyre striation evidence

- 0-not applicable
- 1-none
- 2-right cornering tyre striations, rear tyre
- 3-right cornering tyre striations, front tyre
- 4-right cornering striations, both front and rear tyres
- 5-left cornering tyre striations, rear tyre
- 6-left cornering tyre striations, front tyre

A.4.2.14 ____ (From scene diagram, photographs)
 (Please see Coding Manual for assistance)
 7-left cornering tyre striations, both front and rear tyres
 8-other (*describe 80 characters)
 9-unknown

Pre-crash scrape marks on motorcycle

- (see Coding manual for definitions and evaluation methods)
- 00-none
- 01-motorcycle down on right side, sliding high side first

A.4.2.15 ____ *description:_____

 (From Motorcycle inspection worksheet,

**A.4.2 MOTORCYCLE DYNAMICS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

PRE-CRASH MOTION, AFTER PRECIPITATING EVENT (continued)

- 02-motorcycle down on right side, sliding low side first (vehicle photographs)
- 03-motorcycle down on right side, sliding front end first
- 04-motorcycle down on right side, sliding rear end first
- 05-motorcycle down on left side, sliding high side first
- 06-motorcycle down on left side, sliding low side first
- 07-motorcycle down on left side, sliding front end first
- 08-motorcycle down on left side, sliding rear end first
- 09-motorcycle tumbling, side over side
- 10-motorcycle tumbling, end over end
- 11-scrape marks with unknown motorcycle dynamics
- 98-other (*describe, 80 characters)
- 99-unknown

Pre-crash accident scene scrape marks A.4.2.16 ___ *description: _____
 0-none _____
 1-made by motorcycle _____
 2-made by other vehicle (From scene diagram, scene photographs)
 3-made by motorcycle and other vehicle
 8-other (*describe, 80 characters)
 9-unknown

CRASH MOTION, AT IMPACT

Motorcycle first collision contact code A.4.2.17 ___ (From vehicle and scene photographs, scene diagram, TAR)
 LF-left front 98-other (*describe, 80 characters)
 CF-centre front TF-top front 99-unknown
 RF-right front TC-top centre
 LC-left centre TR-top rear
 RC-right centre UF-undercarriage front
 LR-left rear UC-undercarriage centre
 CR-centre rear UR-undercarriage rear
 RR-right rear NC-no direct contact to motorcycle

Motorcycle impact speed A.4.2.18 ___ km/h ± ___ km/h
 (whole numbers only) (From accident reconstruction)
 999-unknown

Roll attitude angle A.4.2.19 +/- ___ deg ± ___ deg
 (see Coding Manual for method) (From accident reconstruction)
 (indicate "+," right side down, or "-," left side down)
 999-unknown

Sideslip angle A.4.2.20 +/- ___ deg ± ___ deg
 (see Coding Manual for method) (From accident reconstruction)
 (indicate "+," clockwise relative to the motorcycle centre line, or "-," counterclockwise relative to the motorcycle centre line)
 999-unknown

Relative heading angle A.4.2.21 +/- ___ deg
 (see Coding Manual for method) (From accident reconstruction)
 (angle of other vehicle x axis relative to motorcycle x axis, regardless of relative positions of other vehicle and motorcycle)
 999-unknown

Relative heading angle A.4.2.21a ± ___ deg
 (see Coding Manual for method) (From accident reconstruction)
 (angle of other vehicle x axis relative to motorcycle x axis, regardless of relative positions of other vehicle and motorcycle)
 99-unknown

Calculated time from precipitating event to impact A.4.2.22 ___ sec ± ___ sec

**A.4.2 MOTORCYCLE DYNAMICS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

CRASH MOTION, AT IMPACT (continued)
(see Coding Manual for method)
99,9-unknown

(From accident reconstruction)

POST-CRASH MOTION

Motorcycle motion code

A.4.2.23 ____

*description:_____

00-stopped at point of impact (POI); point of rest (POR) and
POI coincide

01-stopped within 2 m of POI

(From scene diagram, scene photographs. Confirm with
Motorcycle inspection worksheet, TAR, witness
interviews)

02-rolled on wheels from POI to POR

03-rolled on wheels from POI, then
impacted other object at POR

04-vehicle rollover from POI to POR

13-engaged, entangled, or entrapped with
other vehicle (other than run over); POR
same as other vehicle POR

05-skidded, slid from POI to POR

06-skidded, slid from POI, then impacted
other object at POR

15-vehicles did not separate; PORs are
essentially same for motorcycles and
other vehicles

07-vaulted above ride height from POI, then
rolled to POR

08-vaulted above ride height from POI, then
slid to POR

16-spun or yawed, sliding from POI to POR

09-vaulted above ride height from POI, then
impacted other object at POR

17-hit and run, rider departed scene of
accident, with motorcycle, immediately
after collision

10-run over at POI

18-rider/passenger departed scene

11-run over, dragged from POI to POR

immediately after collision but
motorcycle still at scene

12-caught by or landed on other vehicle;
carried to POR, different from other
vehicle POR

98-other (*describe, 80 characters)

99-unknown

POST-CRASH MOTION (continued)

Distance from POI to motorcycle POR

A.4.2.24 ____ m

99,8-if 99,8 m or greater

(From scene diagram, scene photographs)

99,9-unknown

Post-crash scrape marks on motorcycle

A.4.2.25 ____

*description:_____

(see Coding Manual for definitions and evaluation methods)

00-none

01-motorcycle down on right side, sliding high side first

(From Motorcycle inspection worksheet,
vehicle photographs)

02-motorcycle down on right side, sliding low side first

03-motorcycle down on right side, sliding front end first

09-motorcycle tumbling, side over side

04-motorcycle down on right side, sliding rear end first

10-motorcycle tumbling, end over end

05-motorcycle down on left side, sliding high side first

11-scrape marks with unknown

06-motorcycle down on left side, sliding low side first

motorcycle dynamics

07-motorcycle down on left side, sliding front end first

98-other (*describe, 80 characters)

08-motorcycle down on left side, sliding rear end first

99-unknown

Rider motion code

A.4.2.26 ____

*description:_____

01-stopped at POI; POR and POI coincide

02-stopped within 2 m of POI

03-tumbled and rolled from POI to POR

(From scene diagram, Injury worksheets, TAR, witness
interviews)

04-tumbled and rolled from POI, then

impacted other object at POR

05-skidded, slid from POI to POR

13-engaged, entangled, or entrapped with
other vehicle (other than run over); POR
same as other
vehicle POR

06-skidded, slid from POI, then impacted
other object at POR

07-vaulted above ride height from POI, then
rolled to POR

14-did not separate from motorcycle, rode
from POI to POR; POR same as
motorcycle POR

08-vaulted above ride height from POI, then
slid to POR

09-vaulted above ride height from POI, then
impacted other object at POR

15-hit and run, departed scene of accident
immediately after collision

10-run over at POI

16-rider departed scene immediately after

11-run over, dragged from POI to POR

collision, but motorcycle still at scene

12-caught by or landed on other vehicle;

98-other (*describe, 80 characters)

**A.4.2 MOTORCYCLE DYNAMICS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

POST-CRASH MOTION (continued)

carried to POR, different from other vehicle POR

99-unknown

Distance from POI to rider POR

(see Coding Manual for POI definitions)
99,8-if 99,8 m or greater

A.4.2.27 ___ ___, ___ m

(From scene diagram, TAR, accident reconstruction)

99,9-unknown

Passenger motion code

01-stopped at POI; POR and POI coincide

02-stopped within 2 m of POI

03-tumbled and rolled from POI to POR

04-tumbled and rolled from POI, then

impacted other object at POR

05-skidded, slid from POI to POR

06-skidded, slid from POI, then impacted other object at POR

07-vaulted above ride height from POI, then rolled to POR

08-vaulted above ride height from POI, then slid to POR

09-vaulted above ride height from POI, then impacted other object at POR

10-run over at POI

11-run over, dragged from POI to POR

12-caught by or landed on other vehicle; carried to POR, different from other vehicle POR

A.4.2.28 ___ ___

*description: _____

(From scene diagram, Injury worksheets, TAR, witness interviews)

13-engaged, entangled, or entrapped with other vehicle (other than run over); POR same as other vehicle POR

14-did not separate from motorcycle, rode from POI to POR; POR same as motorcycle POR

15-hit and run, departed scene of accident immediately after collision

16-rider departed scene immediately after collision, but motorcycle still at scene

98-other (*describe, 80 characters)

99-unknown

Distance from POI to passenger POR

00,0-not applicable, no passenger

A.4.2.29 ___ ___, ___ m

(From scene diagram, TAR, accident reconstruction)

Post-crash accident scene scrape marks

0-none

1-made by motorcycle

2-made by other vehicle

3-made by motorcycle and other vehicle

8-other (*describe, 80 characters)

A.4.2.30 ___

*description: _____

(From scene diagram, scene photographs)

9-unknown

**A.4.3 OTHER VEHICLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

Other vehicle number A.4.3.1 ____
 0-no other vehicle (Assigned; from Vehicle information and accident description worksheet)

Vehicle type/size/classification A.4.3.2 ____ ____
 (see Coding manual for definitions) *description:_____

00-no other vehicle _____
 B1-bicycles _____

L1- moped, mofas (From Vehicle information and accident description worksheet)
 L3-motorcycles _____

A1-passenger car with a maximum mass less than 800 kg (M1)

A2-passenger car with a maximum mass greater than 800 kg and less than 2 t (M1)

A3-passenger car with a maximum mass greater than 2 t (M1)

T1-mini light trucks with a maximum mass of less than or equal to 1.5 t

T2-light trucks with a maximum mass greater than 1.5 t and less than or equal to 3.5 t

T3-trucks and heavy goods vehicles with a maximum mass greater than 3.5 t (N2, N3)

S1-sport utility vehicles (SUVs) with a maximum mass less than or equal to 5 t

B2-minibuses, buses and vans with a maximum mass less than 5 t (M2)

B3-buses with a maximum mass greater than 5 t (M3)

98-other (*describe, 80 characters)

99-unknown

Manufacturer, other than motorcycle A.4.3.3 ____ ____
 00-not applicable *description:_____

A1-AMC _____
 A2-Acura (From Vehicle information and accident description worksheet)

A3-Alfa Romeo H1-Honda

A4-Audi H2-Hino P6-Porsche

A5-Austin, Austin-Healey H3-Hispano P7-Proton

A6-Auto Union H4-Hyundai R1-Renault

B1-BMC I1-Imperial R2-Rolls Royce

B2-BMW I2-International, Transtar R3-Rover, Land Rover

B3-Bentley I3-Isuzu S1-Saab

B4-Borgward J1-Jaguar S2-Scania-Varis

B5-Bricklin J2-Jensen, Jensen-Healey S3-Skoda

B6-Buick K1-Kenworth S4-Simca

C1-Cadillac K2-Kia S5-Studebaker

C2-Chevrolet L1-Lamborghini S6-Stutz

C3-Chrysler L2-Lincoln S7-Subaru

C4-Citroen L3-Lotus S8-Suzuki

C5-Crown M1-MG T1-Toyota

D1-DKW (Auto Union) M2-Maserati T2-Tribant

D2-Daewoo M3-Mazda T3-Triumph

D3-DAF M4-Mercedes Benz U1-Ural

D4-Daihatsu M5-Mercury V1-Vauxhall

D5-Datsun M6-Mitsubishi V2-VAZ

D6-Dodge M7-Morgan V3-Volvo

E1-Elf N1-Nissan V4-Volkswagen

F1-Ferrari O1-Oldsmobile W1-White (Freightliner)

F2-Fiat O2-Opel Y1-Yugo

F3-Ford P1-PacCar Z1-Zagato

**A.4.3 OTHER VEHICLE MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

G1-GAZ	P2-Pantera	Z2-Zil
G2-Geo	P3-Peugeot	Z3-Zlinn
G3-GMC	P4-Plymouth	98-other (*describe, 80 characters)
G4-Gogomobil	P5-Pontiac	99-unknown
Motorcycle manufacturer	A.4.3.4 _____	*description:_____
000-not applicable	_____	_____
A01-AJS	(From Vehicle information and accident description worksheet)	
A02-ATK	(Please see the Coding Manual for additional manufacturers)	
A03-Aprilia	G03-Gemini	O01-Odyssey
A04-Ariel	G04-Gilera	O02-Ossa
B01-BMW	G05-Greeves	P01-Piaggio
B02-BSA	H01-Harley-Davidson	P02-Puch (Steyr-Daimler-Puch)
B03-Batavus	H02-Hercules	R01-Rickman
B04-Benelli	H03-Hodaka	R02-Riverside
B05-Beta	H04-Honda	R03-Rokon
B06-Bimota	H05-Husqvarna	R04-Royal Enfield
B07-Bridgestone	I01-Indian	R05-Rupp
B08-Buell	I02-Italjet	S01-Sachs
B09-Bultaco	J01-Jawa	S02-Sarari
C01-CZ	K01-KTM	S03-Scorpion
C02-Cagiva	K02-Kawasaki	S04-Sears-Allstate
C03-CanAm	L01-Laverda	S05-Simples
C04-Carabela	M01-MBI	S06-Solex
C05-Cat-HPE	M02-MVAgusta	S07-Soni
C06-Columbia	M03-MZ	S08-Sunbeam
C07-Cushman	M04-Maico	S09-Suvega
D01-DKW	M05-Matchless	S10-Suzuki
D02-Dalesman	M06-Montesa	T01-Tomos
D03-Ducati	M07-Motobecane	T02-Triumph
E01-Eagle	M08-Moto Guzzi	U01-Ural
E02-Excelsior	M09-Moto Morini	V01-Vespa
E03-Extra	M10-Moto Parilla	V02-Vincent
F01-Fantic	M11-Moto Villa	Y01-Yamaha
F02-Foxi	M12-Munch	Y02-Yankee
G01-GasGas	N01-NSU	Z01-Zundapp
G02-Garelli	N02-Norton	998-other (*describe, 80 characters)
		999-unknown
Model (all OVs)	A.4.3.5 _____	
	(From Vehicle information and accident description worksheet)	
Year (all OVs)	A.4.3.6 _____	
0000-not applicable, no OV	(From Vehicle information and accident description worksheet)	
Vehicle kerb mass (all OVs) (as specified by the manufacturer)	A.4.3.7 _____	
00000-not applicable, no OV	(From Vehicle information and accident description worksheet)	
99999-unknown		
ABS (all OVs)	A.4.3.8 _____	
0-not applicable, no OV	(From Vehicle information and accident description and Motorcycle inspection worksheets)	
1-not equipped		

A.4.3 OTHER VEHICLE MECHANICAL FACTORS
DATA SUMMARY SHEET

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

- 2-equipped, rear only
- 3-equipped, front and rear
- 9-unknown

Mechanical problems

- 00 not applicable, no OV
- 01-none
- 02-tyre or wheel failure
- 03-brake failure
- 04-steering failure
- 05-power transmission failure
- 06-electrical failure
- 07-suspension failure
- 08-vehicle structural failure, other than suspension, tyre, or wheel
- 09-maintenance related mechanical problem
- 98-other (*describe, 80 characters)
- 99-unknown

A.4.3.9 ___

*description: _____

(From Other vehicle inspection worksheet, driver/witness interviews)

**A.4.4 OTHER VEHICLE DYNAMICS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

PRE-CRASH MOTION, JUST PRIOR TO PRECIPITATING EVENT

- | | | |
|--|-----------------|---|
| Description | A.4.4.1 ___ ___ | *description: _____ |
| 00-not applicable, no OV | | _____ |
| 01-stopped in traffic, speed is zero | | _____ |
| 02-moving in a straight line, constant speed | | (From scene diagram, TAR, witness interviews) |
| 03-moving in a straight line, throttle off | | |
| 04-moving in a straight line, braking | | |
| 05-moving in a straight line, accelerating | | |
| 06-turning right, constant speed | | |
| 07-turning right, throttle off | | |
| 08-turning right, braking | | |
| 09-turning right, accelerating | | |
| 10-turning left, constant speed | | |
| 11-turning left, throttle off | | |
| 12-turning left, braking | | |
| 13-turning left, accelerating | | |
| 14-stopped at roadside, or parked | | |
| 15-backing up, in a straight line | | |
| 16-backing up, steering left | | |
| 17-backing up, steering right | | |
| 18-making U-turn right | | |
| 19-making U-turn left | | |
| 20-making Y-turn right | | |
| 21-making Y-turn left | | |
| 22-changing lanes to left | | |
| 23-changing lanes to right | | |
| 24-merging to left | | |
| 25-merging to right | | |
| 26-entering traffic from right shoulder, median, or parked | | |
| 27-entering traffic from left shoulder, median, or parked | | |
| 28-leaving traffic, turn out to right | | |
| 29-leaving traffic, turn out to left | | |
| 30-passing maneuver, passing on right | | |
| 31-passing maneuver, passing on left | | |
| 32-crossing opposing lanes of traffic | | |
| 33-travelling wrong way, against opposing traffic | | |
| 98-other (*describe, 80 characters) | | |
| 99-unknown | | |

- | | |
|---------------------------|-------------------------------------|
| Travelling speed | A.4.4.2 ___ ___ km/h ± ___ ___ km/h |
| (whole numbers, only) | (From driver/witness interviews) |
| 000-not applicable, no OV | |
| 999-unknown | |

- | | | |
|--|-----------------|----------------------|
| Line-of-sight to motorcycle | A.4.4.3 ___ ___ | (From scene diagram) |
| (clock face direction, relative to other vehicle centre line, see Coding Manual) | | |

- | | | |
|--|-----------------|---|
| 00-not applicable, no OV | | |
| PRE-CRASH MOTION, AFTER PRECIPITATING EVENT | | |
| Description | A.4.4.4 ___ ___ | *description: _____ |
| 00-not applicable, no OV | | _____ |
| 01-stopped in traffic, speed is zero | | _____ |
| 02-moving in a straight line, constant speed | | (From scene diagram, TAR, witness interviews) |
| 03-moving in a straight line, throttle off | | |
| 04-moving in a straight line, braking | | |
| 05-moving in a straight line, accelerating | | |
| 06-turning right, constant speed | | |
| 07-turning right, throttle off | | |
| 08-turning right, braking | | |
| 09-turning right, accelerating | | |
| 10-turning left, constant speed | | |
| 11-turning left, throttle off | | |

**A.4.4 OTHER VEHICLE DYNAMICS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

- 12-turning left, braking
- 13-turning left, accelerating
- 14-stopped at roadside, or parked
- 15-backing up, in a straight line
- 16-backing up, steering left
- 17-backing up, steering right
- 18-making U-turn right
- 19-making U-turn left
- 20-making Y-turn right
- 21-making Y-turn left
- 22-changing lanes to left
- 23-changing lanes to right
- 24-merging to left
- 25-merging to right
- 26-entering traffic from right shoulder, median, or parked
- 27-entering traffic from left shoulder, median, or parked
- 28-leaving traffic, turn out to right
- 29-leaving traffic, turn out to left
- 30-passing manoeuvre, passing on right
- 31-passing manoeuvre, passing on left
- 32-crossing opposing lanes of traffic
- 33-travelling wrong way, against opposing traffic
- 98-other (*describe, 80 characters)
- 99-unknown

Collision avoidance action

- 0-not applicable, no OV
- (indicate all that apply; input "1" in remaining responses)
- 1-none
- 2-braking
- 3-swerve
- 4-accelerating
- 5-counter-steering
- 6-cornering
- 8-other (*describe, 80 characters)
- 9-unknown

- A.4.4.5.1 _____
- A.4.4.5.2 _____
- A.4.4.5.3 _____
- A.4.4.5.4 _____

*description: _____

(From Accident scene investigation worksheet, TAR, Other vehicle inspection worksheet)

PRE-CRASH MOTION, AFTER PRECIPITATING EVENT (continued)

Braking skid marks on roadway

0-not applicable, no OV

1-none

2-skid marks from rear tyres, only

3-skid marks from front tyres, only

4-skid marks from both front and rear tyres, front and rear equivalent and overlaying

5-long skid marks from rear tyres, short terminal skid marks from front tyres

6-light skid marks from both front and rear tyres, no wheel lockup evidence.

*8-other (*describe, 80 characters)*

9-unknown

A.4.4.6 _____ *description: _____

(From scene photographs, scene diagram)

Length of skid marks

00,0-not applicable

Front tyres A.4.4.7.1 _____, _____ m

Rear tyres A.4.4.7.2 _____, _____ m

(From scene photographs, scene diagram)

Braking skid mark evidence on roadway

0-not applicable, no OV

1-none

2-dry roadway braking skid marks

confirmed from other vehicle

3-wet roadway braking skid marks confirmed from other vehicle

4-deep water on roadway, dynamic hydroplaning most likely, no braking skid marks remaining

5-wet reverted rubber skidding in evidence, white steam-cleaned skid paths shown on roadway

A.4.4.8 _____ *description: _____

(From scene photographs, scene diagram, Other vehicle inspection worksheet)

**A.4.4 OTHER VEHICLE DYNAMICS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

confirmed from other vehicle
6-braking skid marks evidence most likely present but degraded by traffic after accident, no confirmation at scene examination
7-snow/ice on roadway, braking skid marks confirmed from other vehicle
*8-other (*describe, 80 characters)*
9-unknown

Braking tyre striation evidence

A.4.4.9 ____ *description:_____

00-not applicable

01-none, front or rear tyre

02-rear tyre, only

03-front tyre, only

04-both front and rear tyres

05-prolonged skid patch on rear tyre, only

06-prolonged skid patch on rear tyre, plus braking striations on front tyre

07-prolonged skid patch on rear tyre, plus slide-out striations on front tyre

08-prolonged skid patch on rear tyre, plus slide-out striations on both front and rear tyres

*98-other (*describe, 80 characters)*

99-unknown

(From Other vehicle inspection worksheet, vehicle photographs)

Swerve

A.4.4.10 ____

0-not applicable, no OV

1-swerve to right, correct decision

2-swerve to right, incorrect decision

3-swerve to left, correct decision

4-swerve to left, incorrect decision

9-unknown

(From scene diagram, scene photographs, TAR, witness interviews)

PRE-CRASH MOTION, AFTER PRECIPITATING EVENT (continued)

Acceleration evidence on tyre(s)

A.4.4.11 ____ *description:_____

0-not applicable, no OV

1-none

2-moderate slip striations and tread block edge erosion

3-severe slip striations and tread block edger erosion

4-extreme slip striations, tread block edge erosion and tread rubber reversion

*8-other (*describe, 80 characters)*

9-unknown

(From Other vehicle inspection worksheet, vehicle photographs)

Cornering skid mark evidence on roadway

A.4.4.12 ____ *description:_____

0-not applicable, no OV

1-none

2-dry roadway cornering skid marks confirmed from other vehicle

3-wet roadway cornering skid marks confirmed from other vehicle

4-deep water on roadway, aquaplaning most likely, no cornering skid marks remaining

5-wet reverted rubber skidding in evidence, white steam-cleaned cornering skid paths shown on roadway confirmed from other vehicle

6-cornering skid marks evidence most likely present but degraded by traffic after accident, no confirmation at scene examination

7-snow/ice on roadway, cornering skid marks confirmed from other vehicle

*8-other (*describe, 80 characters)*

9-unknown

(From Accident scene investigation, Vehicle information and accident description, and Other vehicle inspection worksheets; synthesis)

Cornering tyre striation evidence

A.4.4.13 ____

0-not applicable

1-none

2-right cornering tyre striations, rear tyre

3-right cornering tyre striations, front tyre

4-right cornering striations, both front and

(From Other vehicle inspection worksheet)

6-left cornering tyre striations, front tyre

7-left cornering tyre striations, both front and rear tyres

**A.4.4 OTHER VEHICLE DYNAMICS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

rear tyres
5-left cornering tyre striations, rear tyre

8-other (*describe 80 characters)
9-unknown

CRASH MOTION AT IMPACT

Other vehicle first collision contact code

0000-not applicable, no OV
OVNC-OV present, no contact
9998-other (*describe, 80 characters)
(see attached contact codes)

A.4.4.14 _____

*description:_____

(From Other vehicle inspection worksheet, vehicle photographs)

Impact speed

(whole numbers only)
000-not applicable, no OV
999-unknown

A.4.4.15 _____ km/h ± _____ km/h

(From TAR, accident reconstruction)

POST-CRASH MOTION

Other vehicle motion code

00-not applicable, no OV
01-none, stopped at point of impact (POI);
point of rest (POR) and POI coincide
02-stopped within 2 m of POI
03-rolled on wheels from POI to POR
04-rolled on wheels from POI, then impacted other object at POR
05-vehicle rollover from POI to POR
06-skidded, slid from POI to POR
07-skidded, slid from POI, then impacted other object at POR
16-vehicles did not separate; PORs are essentially same for motorcycle and other vehicle
17-spun or yawed, sliding from POI to POR
18-hit and run, driver departed scene of accident with other vehicle, immediately after collision
19-driver departed scene immediately after collision but other vehicle still at scene
98-other (*describe, 80 characters)
99-unknown

A.4.4.16 _____

*description:_____

(From scene diagram, Other vehicle inspection worksheet, TAR, witness interviews, synthesis)

Distance from POI to other vehicle POR

00,0-not applicable, no OV
99,8-if 99,8 m or greater
99,9-unknown

A.4.4.17 _____,____ m

(From scene diagram)

A.4.4 OTHER VEHICLE DYNAMICS DATA SUMMARY SHEET

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

OTHER VEHICLE FIRST COLLISION CONTACT CODES

(Code the appropriate vehicle component, plus "L," "R," or "C" for left, right, or centre of OV longitudinal centre line respectively, i.e., "front bumper, left of centre line" is coded as "F01L")

F: VEHICLE FRONT

F01-bumper
 F02-push bar, bull bar
 F03-grille
 F04-front corner, headlamp nacelle
 F05-front edge or side of bonnet (hood)
 F06-top of bonnet (hood), front
 F07-front side of upper A-pillar
 F08-front cowl
 F09-windshield lower molding
 F10-windshield surface
 F11-windshield header
 F12-front roof top
 F13-external rear view mirror
 F14-accessory lights, light bar
 F15-underride bar
 F98-other front (*describe, 80 characters)
 F99-unknown front

S: VEHICLE SIDE

S01-side of front bumper
 S02-side corner, headlamp nacelle
 S03-front mudguard (fender)
 S04-front mudguard (fender) wheel house
 S05-front tyres
 S06-side of bonnet (hood), edge
 S07-rocker panel, sill beam, steps
 S08-lower A-pillar
 S09-upper A-pillar
 S10-front door, front
 S11-front door, rear
 S12-front door belt line
 S13-front door side glass
 S14-front door handle
 S15-front roof rail, including drip channel molding
 S16-rear roof rail, including drip channel molding
 S17-lower B-pillar
 S18-upper B-pillar
 S19-rear door, front
 S20-rear door, rear
 S21-rear door belt line
 S22-rear door side glass (window)
 S23-rear door handle
 S24-back light (window) side frame
 S25-centre panel (van, bus)
 S26-lower C-pillar
 S27-upper C-pillar
 S28-rear mudguard (fender) wheel house
 S29-rear tyres
 S30-rear mudguard (fender), rear bed side panel, rear panel
 S31-side of boot (trunk) lid, edge
 S32-lower rear corner
 S33-upper rear corner
 S34-side of rear bumper
 S35-side mount fuel tank
 S36-battery box, tool box, fire extinguishers
 S37-frame rail
 S38-semi-trailer spare tyre, chain racks
 S39-trailer landing gear, struts
 S40-semi-trailer tie down hook points, strap anchors, ratchet locks
 S41-accessory lights, light bar
 S42-underride bar
 S43-external rear view mirror
 S44-front wheel
 S45-rear wheel
 S98-other side (*describe, 80 characters)
 S99-unknown side

T: VEHICLE TOP SURFACES

T01-top of bonnet (hood), front
 T02-top of bonnet, centre
 T03-top of bonnet, rear
 T04-front cowl
 T05-roof top, front
 T06-sun roof, moon roof
 T07-roof top, centre
 T08-roof top, rear
 T09-rollbar
 T10-boot lid, front
 T11-boot lid, centre
 T12-boot lid, rear
 T13-custom work/tool box
 T14-top rail of tailgate
 T15-top rail of truck bed
 T16-floor of truck bed
 T17-accessory lights, light bar
 T18-accessory equipment, air horns, etc.
 T98-other top (*describe, 80 characters)
 T99-unknown top

A.4.4 OTHER VEHICLE DYNAMICS DATA SUMMARY SHEET

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

R: VEHICLE REAR

R01-bumper
 R02-step bumper
 R03-push bar, bull bar
 R04-power lift gate
 R05-trailer hitch
 R06-rear lamp, sub-boot (sub-trunk) panel
 R07-top rail of tailgate
 R08-tailgate
 R09-rear door panel, top
 R10-rear door panel, centre
 R11-rear door panel, bottom
 R12-rear door handles, hardware
 R13-rear corner, truck bed
 R14-lower rear corner, attached truck cab
 R15-upper rear corner, attached truck cab
 R16-lower rear corner, van
 R17-upper rear corner, van
 R18-B-pillar, rear (truck only)
 R19-truck upper rear corner of cab
 R20-back light (window) header
 R21-back light glass
 R22-back light lower molding
 R23-lower C-pillar
 R24-upper C-pillar
 R25-rear door frame header
 R26-rear door or window, frame sill
 R27-rear door side frame posts, hinges
 R28-spare tyre/spare tyre housing
 R29-accessory lights, light bar
 R30-underride bar
 R98-other rear (*describe, 80 characters)
 R99-unknown rear

U: VEHICLE UNDERCARRIAGE (run over or snag)

U01-front of undercarriage
 U02-rear of undercarriage
 U03-side of undercarriage
 U04-spare tyre/spare tyre mount
 U98-other undercarriage (*describe, 80 characters)
 U99-unknown undercarriage

MC: MOTORCYCLE/MOPED

MCLF-left front
 MCCF-centre front
 MCRF-right front
 MCLC-left centre
 MCLR-left rear
 MCCR-centre rear
 MCRR-right rear
 MCRC-right centre
 MCTR-top rear
 MCTC-top centre
 MCTF-top front
 MCUR-undercarriage rear
 MCUC-undercarriage centre
 MCUF-undercarriage front
 MC98-other motorcycle/moped location (*describe, 80 characters)
 MC99-unknown motorcycle, moped location

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN _____/_____/_____
Investigator: _____; _____; _____
Input by: _____; _____; _____

	Motorcycle rider	Motorcycle passenger	Other vehicle driver
Motorcycle passenger number		A.5.1.2.1 ____ (Assigned, from Witness (passenger) interview worksheet)	
Other vehicle number			A.4.3.1 ____ (Assigned, see A.4.3 Other vehicle mechanical factors DSS)

BACKGROUND INFORMATION

Date of birth (DoB) (year/month/day) 0000/00/00-not applicable 9999/99/99-unknown	A.5.1.1.2 ____/____/____ (From TAR, driver's licence)	A.5.1.2.2 ____/____/____	A.5.1.3.2 ____/____/____
---	---	-----------------------------	-----------------------------

Age 00-not applicable 99-unknown	A.5.1.1.3 ____ years (From TAR, driver's licence, calculate from DoB)	A.5.1.2.3 ____ years	A.5.1.3.3 ____ years
---	--	----------------------	----------------------

Region/country of driver's licence qualification 0-not applicable 1-none 2-European Union 3-Japan 4-Canada 5-United States 6-Thailand 8-other (*describe, 80 characters) 9-unknown	A.5.1.1.4 ____ *description:_____ _____ (From driver's licence)	A.5.1.2.4 ____ *description:_____ _____ _____	A.5.1.3.4 ____ *description:_____ _____ _____
--	--	--	--

Driver's licence qualification (indicate all that apply; input "00" in remaining responses) 00-not applicable (continued on next page)	A.5.1.1.5.1 ____ A.5.1.1.5.2 ____ A.5.1.1.5.3 ____ A.5.1.1.5.4 ____	A.5.1.2.5.1 ____ A.5.1.2.5.2 ____ A.5.1.2.5.3 ____ A.5.1.2.5.4 ____	A.5.1.3.5.1 ____ A.5.1.3.5.2 ____ A.5.1.3.5.3 ____ A.5.1.3.5.4 ____
--	--	--	--

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN _____/_____/_____
Investigator:____; ____; ____; ____
Input by:____; ____; ____; ____

BACKGROUND INFORMATION (continued)

01-no licence held	*description:_____	*description:_____	*description:_____
02-learner's permit, only	_____	_____	_____
03-motorcycle licence	_____	_____	_____
04-automobile licence	(From driver's licence)		

Driver's licence qualification (continued)

05-commercial licence	09-no licence required
06-motorcycle driver and competition licence	98-other (*describe, 80 characters)
07-licence to transport people	99-unknown
08-heavy truck licence	

Driver's licence date of issue

(for each response in A.5.1.1.6.1/ A.5.1.2.6.1/A.5.1.3.6.1, input the date of issue, in the same order as A.5.1.1.5)	A.5.1.1.6.1 ____ _/____ _/____ _	A.5.1.2.6.1 ____ _/____ _/____ _	A.5.1.3.6.1 ____ _/____ _/____ _
	A.5.1.1.6.2 ____ _/____ _/____ _	A.5.1.2.6.2 ____ _/____ _/____ _	A.5.1.3.6.2 ____ _/____ _/____ _
	A.5.1.1.6.3 ____ _/____ _/____ _	A.5.1.2.6.3 ____ _/____ _/____ _	A.5.1.3.6.3 ____ _/____ _/____ _
	A.5.1.1.6.4 ____ _/____ _/____ _	A.5.1.2.6.4 ____ _/____ _/____ _	A.5.1.3.6.4 ____ _/____ _/____ _
0000/00/00-not applicable	(From driver's licence)		
9999/99/99-unknown			

**Does the licence held qualify the driver
for driving the accident vehicle?**

0-not applicable	A.5.1.1.7 ____	A.5.1.3.7 ____
1-no	(From comparison with regulations)	
2-yes		
9-unknown		

Citizenship

0-not applicable	A.5.1.1.8 ____	A.5.1.2.8 ____	A.5.1.3.8 ____
1-not resident	(From driver's licence, driver/passenger interview)		
2-resident			
9-unknown			

Height

000-not applicable	A.5.1.1.9 ____ _ cm	A.5.1.2.9 ____ _ cm	A.5.1.3.9 ____ _ cm
	(From driver's licence, driver/passenger interview)		

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

BACKGROUND INFORMATION (continued)

999-unknown

Weight A.5.1.1.10 ___ ___ kg A.5.1.2.10 ___ ___ kg A.5.1.3.10 ___ ___ kg
000-not applicable (From driver's licence, driver/passenger interview)

999-unknown

Gender A.5.1.1.11 ___ A.5.1.2.11 ___ A.5.1.3.11 ___
0-not applicable (From driver's licence, driver/passenger interview)

1-male
2-female
9-unknown

Educational status (where permissible) A.5.1.1.12 ___ A.5.1.2.12 ___ A.5.1.3.12 ___
0-not applicable (From driver/passenger interview)

1-no formal schooling
2-formal education, prior to college/university
3-partial college/university training
4-specialty technical school graduate
5-college/university graduate
6-graduate school, advanced degree, professional degree
7-not permissible to ask
9-unknown

Duration of formal education A.5.1.1.12.1 ___ ___ years A.5.1.2.12.1 ___ ___ years A.5.1.3.12.1 ___ ___ years
00-not applicable (From driver/passenger interview)
99-unknown

Occupational code (where permissible) A.5.1.1.13 ___ ___ A.5.1.2.13 ___ ___ A.5.1.3.13 ___ ___
00-not applicable *description: _____
01-unemployed, more than one month _____
02-legislators, senior officials, and managers _____
03-professionals (From driver/passenger interview) _____
04-technicians and associate professionals (See Coding manual for definitions) _____

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

BACKGROUND INFORMATION (continued)

- 05-clerical, office worker
- 06-service workers and shop and market sales workers
- 07-skilled agricultural and fishery workers
- 08-craft and related trades workers
- 09-transport equipment operative, driver
- 10-plant and machine operators and assemblers
- 11-elementary occupations
- 12-housewife, homemaker
- 13-military, active duty
- 14-military, reserve duty
- 15-student, full time
- 16-retired, civilian
- 17-retired, government service or military
- 98-other (*describe, 80 characters)
- 99-unknown

Eye correction at time of accident

- 0-not applicable
- 1-not required
- 2-required, but not worn
- 3-required, glasses worn
- 4-required, contacts worn
- 5-required, prescription goggles worn
- 8-other (*describe, 80 characters)
- 9-unknown

A.5.1.1.14 ___ *description: _____ _____ _____	A.5.1.2.14 ___ *description: _____ _____ _____	A.5.1.3.14 ___ *description: _____ _____ _____
(From driver/passenger interview, driver's licence, TAR)		

RIDING/DRIVING EXPERIENCE

All vehicle experience

- 00-not applicable
- 99-unknown

A.5.1.1.15 ___ ___ years (From driver/passenger interview)	A.5.1.2.15 ___ ___ years	A.5.1.3.15 ___ ___ years
---	--------------------------	--------------------------

On any street motorcycle

- 00-not applicable
- 98-98 months or more
- 99-unknown

A.5.1.1.16 ___ ___ months (From driver/passenger interview)	A.5.1.2.16 ___ ___ months	A.5.1.3.16 ___ ___ months
--	---------------------------	---------------------------

On accident motorcycle

- 00-not applicable
- 98-98 months or more
- 99-unknown

A.5.1.1.17 ___ ___ months (From driver/passenger interview)	A.5.1.2.17 ___ ___ months
--	---------------------------

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

RIDING/DRIVING EXPERIENCE (continued)

In accident vehicle

- 00-not applicable
- 98-98 months or more
- 99-unknown

A.5.1.3.17 ___ months
(From driver interview)

Number of days per year that motorcycles are ridden

- 000-not applicable
- 999-unknown

A.5.1.1.18 ___ days
(From driver/passenger interview)

A.5.1.2.18 ___ days

A.5.1.3.18 ___ days

Distance motorcycle is ridden per year

- 00000-not applicable or none
- 99999-unknown

A.5.1.1.19 ___ km
(From driver/passenger interview)

A.5.1.2.19 ___ km

A.5.1.3.19 ___ km

Motorcycle training

- 0-not applicable
- 1-no training
- 2-self taught
- 3-taught by friends or family
- 4-special voluntary motorcycle training for road riding
- 5-special compulsory motorcycle training for road riding
- 6-professional training for competition licence
- 7-no training needed
- 8-other (*describe, 80 characters)
- 9-unknown

A.5.1.1.20 ___
*description: _____

A.5.1.2.20 ___
*description: _____

(From driver/passenger interview, local regulations)

Driver training

- 0-not applicable
- 1-no training
- 2-self taught
- 3-taught by friends or family

A.5.1.3.20 ___
*description: _____

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN_____/_____/_____
Investigator:____; ____; ____; ____
Input by:____; ____; ____; ____

RIDING/DRIVING EXPERIENCE (continued)

- 4-special voluntary vehicle training for road riding
- 5-special compulsory vehicle training for road riding
- 6-professional training for competition licence
- 7-no training needed
- 8-other (*describe, 80 characters)
- 9-unknown

Motorcycle percent use estimate

(indicate % of total riding/driving time for each of the three categories)

do not use	A.5.1.1.21.1 ____ %	A.5.1.2.21.1 ____ %	A.5.1.3.21.1 ____ %
recreation	A.5.1.1.21.2 ____ %	A.5.1.2.21.2 ____ %	A.5.1.3.21.2 ____ %
basic transportation	A.5.1.1.21.3 ____ %	A.5.1.2.21.3 ____ %	A.5.1.3.21.3 ____ %
000-not applicable	100%	100%	100%
999-unknown	(From driver/passenger interview. See Coding manual for additional information.)		

Experience riding with passengers on motorcycle

A.5.1.1.22 ____
(From driver interview)

(see Coding Manual for definitions)

- 0-not applicable, no passenger
- 1-never before carried passengers
- 2-very little experience
- 3-moderate experience
- 4-extensive experience
- 9-unknown

Experience riding as a passenger on motorcycles

A.5.1.2.22 ____
(From passenger interview)

(see Coding Manual for definitions)

- 0-not applicable, no passenger
- 1-never before rode as passenger
- 2-very little experience
- 3-moderate experience
- 4-extensive experience
- 9-unknown

Experience riding with similar cargo/ luggage A.5.1.1.23 ____

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

RIDING/DRIVING EXPERIENCE (continued)

(From driver interview)

- 0-not applicable, no cargo/luggage
- 1-no previous experience
- 2-seldom carries similar cargo/luggage
- 3-frequently carries similar cargo/luggage
- 4-always carries similar cargo/luggage
- 9-unknown

**All moving traffic violation convictions
in the previous 5 years**

A.5.1.1.24 ___ A.5.1.2.24 ___
(From driver/passenger interview, government driving record)

A.5.1.3.24 ___

(code the total number of moving traffic convictions)

- 0-none, not applicable
- 9-unknown

**Any motorcycle moving traffic accident
experience during the previous 5 years**

A.5.1.1.25 ___ A.5.1.2.25 ___
(From driver/passenger interview, government driving record)

A.5.1.3.25 ___

(code the total number of previous motorcycle moving traffic accidents)

- 0-none, not applicable
- 9-unknown

**Any other vehicle moving traffic accident
experience during the previous 5 years**

A.5.1.1.26 ___ A.5.1.2.26 ___
(From driver/passenger interview, government driving record)

A.5.1.3.26 ___

(code the total number of previous moving traffic accidents in vehicles other than motorcycles)

- 0-none, not applicable
- 9-unknown

TRIP

Origin
(see Coding Manual for definition of "trip")

A.5.1.1.27 ___
*description: _____

A.5.1.3.27 ___
*description: _____

- 0-not applicable
- 1-home

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___
Input by: ___; ___; ___

TRIP (continued)
2-work, business (From driver interview)
3-recreation
4-school, university
5-errand, shopping
6-friends, relatives
7-bar, pub, restaurant, café
8-other (*describe, 80 characters)
9-unknown

Destination A.5.1.1.28 ___
0-not applicable *description: _____
1-home _____
2-work, business _____
3-recreation (From driver interview)
4-school, university
5-errand, shopping
6-friends, relatives
7-bar, pub, restaurant, café
8-other (*describe, 80 characters)
9-unknown

A.5.1.3.28 ___
*description: _____

Trip length A.5.1.1.29 ___ ___ km
000-not applicable (From driver interview, calculation)
998-998 km or greater
999-unknown

A.5.1.3.29 ___ ___ km

Frequency of this road use, in/on any vehicle A.5.1.1.30 ___
0-not applicable (From driver interview)
1-never used this roadway before
2-daily use, i.e., once per day
3-weekly use, i.e., once per week

A.5.1.3.30 ___

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN____/____/_____
Investigator:____; ____; ____; ____
Input by:____; ____; ____; ____

TRIP (continued)

- 4-monthly use, i.e., once per month
- 5-quarterly, i.e., once per quarter
- 6-annually, i.e., once per year
- 7-less than annually
- 9-unknown

Length of time since departure, this trip

- 0,0-none, not applicable
- 9,8-9,8 hours or greater
- 9,9-unknown

A.5.1.1.31 ____ hours
(From driver interview. See Coding Manual for coding information.)

A.5.1.3.31 ____ hours

IMPAIRMENT

Alcohol/drug type of use

- 0-not applicable
- 1-none (*input "0" in A.5.1.1.33/A.5.1.2.33/A.5.1.3.33 to A.5.1.1.37/A.5.1.2.37/A.5.1.3.37; go to A.5.1.1.38.1/A.5.1.2.38.1/A.5.1.3.38.1*)
- 2-alcohol use, only
- 3-drug use, only
- 4-combined alcohol and drug use
- 9-unknown

A.5.1.1.32 ____
(From TAR, driver/passenger/witness interview)

A.5.1.2.32 ____

A.5.1.3.32 ____

Alcohol/drug impairment

- 0-not applicable
- 1-no impairment
- 2-not significantly impaired
- 3-significantly impaired

A.5.1.1.33 ____
(Subjective analysis of interviewer, witness interview/observations)

A.5.1.2.33 ____

A.5.1.3.33 ____

Blood alcohol concentration (BAC)

- (see Coding Manual for calculation description)
- 000-not applicable

A.5.1.1.34 ____ mg/100ml
(From TAR, medical records)
999-unknown

A.5.1.2.34 ____ mg/100 ml

A.5.1.3.34 ____ mg/100 ml

Source of BAC information

- 0-not applicable
- 1-breath testing

A.5.1.1.35 ____
*description:_____

A.5.1.2.35 ____
*description:_____

A.5.1.3.35 ____
*description:_____

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

IMPAIRMENT (continued)

2-blood testing _____
3-urine testing (From TAR, medical records) _____
8-other (*describe, 80 characters) 9-unknown _____

Time span from accident to BAC collection

00-not applicable A.5.1.1.36 __, __ hours A.5.1.2.36 __, __ hours A.5.1.3.36 __, __ hours
99-unknown

Type of drugs other than alcohol

0-not applicable A.5.1.1.37 __ A.5.1.2.37 __ A.5.1.3.37 __
*description: _____ *description: _____ *description: _____
1-stimulant _____
2-depressant _____
8-other (*describe, 80 characters) (From driver/passenger interview, medical records)
9-unknown

Source of drugs other than alcohol

0-not applicable A.5.1.1.38 __ A.5.1.2.38 __ A.5.1.3.38 __
1-prescription (From driver/passenger interview, medical records)
2-non-prescription
9-unknown

Physiological impairment, permanent condition

(indicate all that apply; input "01" in remaining responses)

00-not applicable A.5.1.1.39.1 __ __ A.5.1.2.39.1 __ __ A.5.1.3.39.1 __ __
01-none A.5.1.1.39.2 __ __ A.5.1.2.39.2 __ __ A.5.1.3.39.2 __ __
02-vision A.5.1.1.39.3 __ __ A.5.1.2.39.3 __ __ A.5.1.3.39.3 __ __
03-hearing *description: _____ *description: _____ *description: _____
04-respiratory, cardiovascular _____
05-paraplegia (From driver/passenger/witness interview, medical records, interviewer observation)

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___
Input by: ___; ___; ___

IMPAIRMENT (continued)

- 06-amputee
- 07-neurological, epilepsy, stroke
- 08-endocrine system, diabetes, digestive system
- 09-infirmity, arthritis, senility
- 98-other (*describe, 80 characters)
- 99-unknown

Physiological impairment, transient condition

(indicate all that apply; input "01" in remaining responses)

- 00-no applicable
- 01-none
- 02-fatigue
- 03-hunger
- 04-thirst
- 05-elimination urgency
- 06-muscle spasm, cramp, itch
- 07-headache, minor malaise, fever
- 08-siesta syndrome
- 98-other (*describe, 80 characters)
- 99-unknown

A.5.1.1.40.1 ___ ___
A.5.1.1.40.2 ___ ___
A.5.1.1.40.3 ___ ___

*description: _____

A.5.1.2.40.1 ___ ___
A.5.1.2.40.2 ___ ___
A.5.1.2.40.3 ___ ___

*description: _____

A.5.1.3.40.1 ___ ___
A.5.1.3.40.2 ___ ___
A.5.1.3.40.3 ___ ___

*description: _____

(From driver/passenger/witness interview, interviewer observation)

Stress experienced that day

(indicate all that apply; input "01" in remaining responses)

- 00-not applicable
- 01-none observed or noted
- 02-conflict with friends, relatives, divorce, separation
- 03-work related problems

A.5.1.1.41.1 ___ ___
A.5.1.1.41.2 ___ ___
A.5.1.1.41.3 ___ ___

*description: _____

A.5.1.2.41.1 ___ ___
A.5.1.2.41.2 ___ ___
A.5.1.2.41.3 ___ ___

*description: _____

A.5.1.3.41.1 ___ ___
A.5.1.3.41.2 ___ ___
A.5.1.3.41.3 ___ ___

*description: _____

(From driver/passenger/witness interview)

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___
Input by: ___; ___; ___

IMPAIRMENT (continued)

- 04-financial distress
- 05-school problems
- 06-legal, police problems
- 07-reward stress
- 08-traffic conflict, road rage
- 09-death of family, friend
- 98-other (*describe, 80 characters)
- 99-unknown

SITUATION

Rider riding position on motorcycle at time of collision

A.5.1.1.42 ___

*description: _____

- 00-not applicable
- 01-not on motorcycle, separated before collision

(From driver/passenger/witness interview, Injury worksheet, vehicle point of rest in scene diagram)

- 02-normal seating position
- 03-standing on footrests, foot pegs
- 04-seated, head down
- 05-shoulder check, left
- 06-shoulder check, right
- 07-dismounting, jumping to side
- 08-dismounting, jumping upward
- 09-dragging feet, foot down
- 10-abnormal seating position
- 98-other (*describe, 80 characters)
- 99-unknown

Passenger location on motorcycle at time of collision

A.5.1.2.42 ___

*description: _____

- 0-not applicable, no passengers
- 1-immediately behind motorcycle rider
- 2-immediately in front of motorcycle rider
- 3-behind passenger in location number 1

(From driver/passenger/witness interview, Injury worksheet, vehicle point of rest in scene diagram)

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

SITUATION (continued)

- 4-in front of passenger in location number 2
- 5-behind passenger in location number 3
- 6-in front of passenger in location number 4
- 8-other (*describe, 80 characters)
- 9-unknown

**Passenger riding position on motorcycle
at time of collision**

(list all that apply, input "0" in remaining responses)

- 0-not applicable
- 1-normal, straddle seated behind rider
- 2-riding with both legs on the left side of the motorcycle
- 3-riding with both legs on the right side of the motorcycle
- 4-straddle seated on pillion behind rider
- 5-straddle seated on tank ahead of rider
- 6-in sidecar
- 7-straddle seated, behind rider, facing rear
- 8-other (*describe, 80 characters)
- 9-unknown

A.5.1.2.43.1 ___
 A.5.1.2.43.2 ___
 A.5.1.2.43.3 ___
 *description: _____

(From TAR, witness interview)

Attention to driving/passenger tasks

- 00-not applicable
- 01-attention to driving/passenger tasks not a factor
- 02-inattentive mode, daydreaming, no attention to driving/passenger tasks
- 03-attention diverted to surrounding traffic
- 04-attention diverted to motorcycle normal operation
- 05-attention diverted to motorcycle operating problem (*describe, 80 characters)
- 06-attention diverted to non-traffic item (*describe, 80 characters)
- 07-attention diverted to passenger activities (rider, only)

A.5.1.1.44 ___ ___
 *description: _____

A.5.1.2.44 ___ ___
 *description: _____

A.5.1.3.44 ___ ___
 *description: _____

A.5.1 HUMAN FACTORS, GENERAL INFORMATION
DATA SUMMARY SHEET

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

SITUATION (continued)

- 08-attention diverted to use of mobile phone
- 09-attention diverted to radio, tape, VCR, CD, PC, etc.
- 98-other (*describe, 80 characters)
- 99-unknown

Recommended countermeasures, in rider's/driver's/passenger's judgment

A.5.1.1.45 ___ (From driver/passenger/witness interview) A.5.1.2.45 ___

A.5.1.3.45 ___

- 00-not applicable
- 01-none
- 02-improved motorcycle licensing procedures
- 03-improved licensing procedures for other drivers
- 04-improved motorcycle rider training courses
- 05-improved driver training courses, including awareness training observing and detecting motorcycles in traffic
- 06-more rigorous traffic law enforcement
- 07-more rigorous drunk driving law enforcement
- 08-more effective personal protective equipment
- 09-mandatory helmet use law enforcement
- 98-other (*describe, 80 characters)
- 9-unknown

Number of occupants in other vehicle

A.5.1.3.46 ___
(From TAR, witness interview)

- 0-none, not applicable
- 1-one
- 2-two
- 3-three
- 4-four
- 5-five
- 6-six
- 7-seven
- 8-eight or more
- 9-unknown

**A.5.2.1 INJURY ANALYSIS
DATA SUMMARY SHEET
MOTORCYCLE RIDER**

AIN _____/_____/_____
Investigator: _____; _____; _____
Input by: _____; _____; _____

Trauma status

(see Coding Manual for time period definitions)

- 00-not applicable
- 01-no injury, no trauma
- 02-first aid at scene only
- 03-treated at hospital, clinic, and released
- 04-hospitalised for less than 24 hours
- 05-hospitalised, *for how many days?
- 06-disabled, institutionalised
- 07-fatal, dead on scene
- 08-fatal, dead upon arrival at hospital
- 09-fatal, *death within how many days?
- 99-unknown

A.5.2.1.1 ____
(From Injury worksheets)

*A.5.2.1.1.1 ____ days

Injuries

(Code full AIS, plus side and aspect for each contact and inertial injury, in descending order of severity. Indicate all that apply. Input "0" in all remaining spaces. Response numbers are identified by recording the column number, followed by the row number. For example, the third pelvis injury is response number A.5.2.1.7.3)
(From Injury worksheet)

	A.5.2.1.2. Head	A.5.2.1.3. Neck (except spine)	A.5.2.1.4. Thorax
1			
2			
3			
4			
5			
6			
7			
8			
9			

	A.5.2.1.5. Upper extremities	A.5.2.1.6. Abdomen	A.5.2.1.7. Pelvis
1			
2			
3			
4			
5			
6			
7			
8			
9			

	A.5.2.1.8. Spine	A.5.2.1.9. Lower extremities	A.5.2.1.10. Whole body
1			
2			
3			
4			
5			
6			
7			
8			
9			

**A.5.2.1 INJURY ANALYSIS
DATA SUMMARY SHEET
MOTORCYCLE RIDER**

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

Injury information sources	A.5.2.1.11.1 ___	*description: _____
(indicate all that apply; input "0"	A.5.2.1.11.2 ___	_____
in remaining responses)	A.5.2.1.11.3 ___	_____
1-treating physician or other	A.5.2.1.11.4 ___	
hospital personnel, and medical	(From Injury worksheet)	
records		
2-rescue ambulance, paramedics		
3-coroner, autopsy record		
4-victim, by interview and examination		
8-other (*describe, 80 characters)		
9-unknown		

**A.5.2.2 INJURY ANALYSIS
MOTORCYCLE PASSENGER
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

Motorcycle passenger number

A.5.1.2.1 ____
(Assigned, see A.5.1, Human factors DSS)

Trauma status

(see Coding Manual for time period definitions)

A.5.2.2.1 ____ ____
(From Injury worksheet)

- 00-not applicable, no passenger
- 01-no injury, no trauma
- 02-first aid at scene only
- 03-treated at hospital, clinic, and released
- 04-hospitalised for less than 24 hours
- 05-hospitalised, *for how many days?
- 06-disabled, institutionalised
- 07-fatal, dead on scene
- 08-fatal, dead upon arrival at hospital
- 09-fatal, *death within how many days?
- 99-unknown

*A.5.2.2.1.1 ____ ____ days

Injuries

(Code full AIS, plus side and aspect for each contact and inertial injury, in descending order of severity. Indicate All that apply. Input "0" in all remaining spaces. Response numbers are identified by recording the column number, followed by the row number. For example, the third pelvis injury is response number A.5.2.2.7.3)
(From Injury worksheet)

	A.5.2.2.2. Head	A.5.2.2.3. Neck (except spine)	A.5.2.2.4. Thorax
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____
8	_____	_____	_____
9	_____	_____	_____

	A.5.2.2.5. Upper extremities	A.5.2.2.6. Abdomen	A.5.2.2.7. Pelvis
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____
8	_____	_____	_____
9	_____	_____	_____

	A.5.2.2.8. Spine	A.5.2.2.9. Lower extremities	A.5.2.2.10. Whole body
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____

**A.5.2.2 INJURY ANALYSIS
MOTORCYCLE PASSENGER
DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: _____; _____; _____; _____
 Input by: _____; _____; _____; _____

	A.5.2.2.8. Spine	A.5.2.2.9. Lower extremities	A.5.2.2.10 Whole body
7	_____	_____	_____
8	_____	_____	_____
9	_____	_____	_____

Injury information sources

(indicate all that apply; input "0" in remaining responses)

- 1-treating physician or other hospital personnel, and medical records
- 2-rescue ambulance, paramedics
- 3-coroner, autopsy record
- 4-victim, by interview and examination
- 8-other (*describe, 80 characters)
- 9-unknown

A.5.2.2.11.1 ___ *description: _____
 A.5.2.2.11.2 ___ _____
 A.5.2.2.11.3 ___ _____
 A.5.2.2.11.4 ___ _____
 (From Injury worksheet)

**A.5.2.3 INJURY ANALYSIS
OV PASSENGER AND PEDESTRIAN
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: ____; ____; ____; ____
Input by: ____; ____; ____; ____

OTHER VEHICLE PASSENGER INJURIES

Other vehicle number A.4.3.1 ____ (Assigned, see A.4.3, Other vehicle mechanical factors DSS)

Driver maximum AIS A.5.2.3.1 _____
000000000-not applicable (From Injury worksheet)
999999999-no OV driver

Passenger number A.5.2.3.2.1 ____ A.5.2.3.2.5 ____ (Assigned, from Injury worksheet
(Input the passenger number A.5.2.3.2.2 ____ A.5.2.3.2.6 ____ or Witness interview worksheet)
assigned to each passenger, A.5.2.3.2.3 ____ A.5.2.3.2.7 ____
input "0" for any response A.5.2.3.2.4 ____ A.5.2.3.2.8 ____
that does not apply)

Passenger maximum AIS A.5.2.3.3.1 ____/
(for each passenger whose A.5.2.3.3.2 ____/
number was assigned, input the A.5.2.3.3.3 ____/
passenger number followed by A.5.2.3.3.4 ____/
the maximum AIS. Input "0" A.5.2.3.3.5 ____/
for any response that does A.5.2.3.3.6 ____/
not apply) A.5.2.3.3.7 ____/
A.5.2.3.3.8 ____/

(From Injury worksheet)

PEDESTRIAN INJURIES

Pedestrian number A.5.2.3.4.1 ____ A.5.2.3.4.5 ____ (Assigned, from Injury worksheet
(Input the pedestrian number A.5.2.3.4.2 ____ A.5.2.3.4.6 ____ or Witness interview worksheet)
assigned to each pedestrian, A.5.2.3.4.3 ____ A.5.2.3.4.7 ____
input "0" for any response A.5.2.3.4.4 ____ A.5.2.3.4.8 ____
that does not apply)

Pedestrian maximum AIS A.5.2.3.5.1 ____/
_/999999999-unknown A.5.2.3.5.2 ____/
_/000000000-not applicable, A.5.2.3.5.3 ____/
no pedestrian A.5.2.3.5.4 ____/
(for each pedestrian whose A.5.2.3.5.5 ____/
number was assigned, input the A.5.2.3.5.6 ____/
pedestrian number followed by A.5.2.3.5.7 ____/
the maximum AIS. Input "0" A.5.2.3.5.8 ____/
for any response that does
not apply)

(From Injury worksheet)

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

	Motorcycle rider	Motorcycle passenger
Motorcycle passenger number		A.5.1.2.1 ____ (Assigned, see A.5.1, Human factors DSS)
PROTECTIVE CLOTHING/GEAR		
Upper torso and upper extremities coverage material	A.5.3.1.1 ____ *description: _____ _____ _____ (From photographs, medical records, witness interviews)	A.5.3.2.1 ____ *description: _____ _____ _____ (From photographs, medical records, witness interviews)
0-not applicable		
1-none (<i>input "0" in A.5.3.1.2/A.5.3.2.2; go to A.5.3.1.3/A.5.3.2.3</i>)		
2-light cloth garment, i.e., thin cotton		
3-medium cloth garment, i.e., denim, nylon		
4-heavy cloth garment, i.e., Kevlar or imitation leather		
5-leather garment		
8-other (*describe, 80 characters)		
9-unknown		
Are upper torso and upper extremities clothing motorcycle oriented?	A.5.3.1.2 ____ (From photographs, medical records, witness interviews)	A.5.3.2.2 ____ (From photographs, medical records, witness interviews)
0-not applicable		
1-no		
2-yes		
9-unknown		
Lower torso and lower extremities coverage material	A.5.3.1.3 ____ *description: _____ _____ _____ (From photographs, medical records, witness interviews)	A.5.3.2.3 ____ *description: _____ _____ _____ (From photographs, medical records, witness interviews)
0-not applicable		
1-light cloth garment, i.e., thin cotton		
2-medium cloth garment, i.e., denim, nylon		
3-heavy cloth garment, i.e., Kevlar or imitation leather		
4-leather garment		
8-other (*describe, 80 characters)		
9-unknown		
Are lower torso and lower extremities clothing motorcycle oriented?	A.5.3.1.4 ____ (From photographs, medical records, witness interviews)	A.5.3.2.4 ____ (From photographs, medical records, witness interviews)
0-not applicable		
1-no		
2-yes		
9-unknown		
Footwear material/type	A.5.3.1.5 ____ *description: _____ _____ _____ (From photographs, medical records, witness interviews)	A.5.3.2.5 ____ *description: _____ _____ _____ (From photographs, medical records, witness interviews)
0-not applicable		
1-none, barefoot (<i>input "0" in a.5.3.1.6/A.5.3.2.6; go to A.5.3.1.7/A.5.3.2.7</i>)		
2-light sandal		
3-medium street shoe, loafer		
4-athletic, training shoe		
5-heavy shoe or boot		
6-reinforced work boot or motorcycle boot		
8-other (*describe, 80 characters)		
9-unknown		
Is footwear motorcycle oriented?	A.5.3.1.6 ____ (From photographs, medical records, witness interviews)	A.5.3.2.6 ____ (From photographs, medical records, witness interviews)
0-not applicable		
1-no		
2-yes		
9-unknown		

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

PROTECTIVE CLOTHING/GEAR (continued)

Glove material

A.5.3.1.7	_____	A.5.3.2.7	_____
0-not applicable	*description: _____	*description: _____	_____
1-none (<i>input "0" in a.5.3.1.8/A.5.3.2.8; go to A.5.3.1.9/A.5.3.2.9</i>)	_____	_____	_____
2-light cloth, i.e., thin cotton	(From photographs, medical records, witness interviews)		
3-medium cloth, i.e., denim, light leather or nylon			
4-heavy cloth, Kevlar, or imitation leather			
5-reinforced, heavy leather, or Kevlar			
8-other (*describe, 80 characters)			
9-unknown			

Are gloves motorcycle oriented?

A.5.3.1.8	_____	A.5.3.2.8	_____
0-not applicable	(From photographs, medical records, witness interviews)		
1-no			
2-yes			
9-unknown			

Eye coverage in use, separate from helmet

A.5.3.1.9	_____	A.5.3.2.9	_____
00-not applicable	*description: _____	*description: _____	_____
01-none (<i>input "0" in A.5.3.1.10/A.5.3.2.10; go to A.5.3.1.11/A.5.3.2.11</i>)	_____	_____	_____
02-non-prescription clear glasses	(From photographs, rider/passenger interviews)		
03-prescription clear glasses			
04-non-prescription sunglasses			
05-prescription sunglasses			
06-goggles, rubber or plastic framed			
07-goggles, metal framed			
08-industrial safety glasses			
98-other (*describe, 80 characters)			
99-unknown			

Colour of eye coverage lens

A.5.3.1.10	_____	A.5.3.2.10	_____
0-not applicable	*description: _____	*description: _____	_____
1-clear	_____	_____	_____
2-green	(From photographs, rider/passenger interviews)		
3-grey, smoke			
4-amber, yellow			
5-blue			
6-reflective (any colour)			
8-other (*describe, 80 characters)			
9-unknown			

HELMET

Wearing helmet on head?

A.5.3.1.11	_____	A.5.3.2.11	_____
0-not applicable (<i>input "0" in remaining responses; go to the end</i>)			
1-no (<i>input "0" in remaining responses; go to the end</i>)			
2-yes	(From photographs, medical records, witness interviews)		
9-unknown			

Was helmet properly adjusted on head?

A.5.3.1.12	_____	A.5.3.2.12	_____
0-not applicable	(From photographs, medical records, witness interviews)		
1-no			
2-yes			
9-unknown			

Was helmet securely fastened?

A.5.3.1.13	_____	A.5.3.2.13	_____
0-not applicable	(From photographs, medical records, witness interviews)		
1-no			

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____
Input by: _____; _____; _____

HELMET (continued)

2-yes
9-unknown

Type of helmet

(see Coding Manual for definitions)

0-not applicable

1-not motorcycle helmet

2-half/police motor vehicle, motorcycle helmet

3-open face motor vehicle, motorcycle helmet

4-full face motor vehicle, motorcycle helmet

8-other (*describe, 80 characters)

9-unknown

A.5.3.1.14 ____

*description: _____

(From photographs)

A.5.3.2.14 ____

*description: _____

Type of coverage

(see Coding Manual for definitions)

00-not applicable

01-partial coverage

02-full coverage

03-full facial, integral chin bar but no face shield

04-full facial, removable chin bar

05-full facial, retractable chin bar

06-full facial coverage, integral chin bar and face shield

98-other (*describe, 80 characters)

99-unknown

A.5.3.1.15 ____

*description: _____

(From photographs)

A.5.3.2.15 ____

*description: _____

Predominating colour

00-not applicable

01-no dominant colour, variable

02-white

03-yellow

04-black

05-red

06-blue

07-green

08-silver, grey

A.5.3.1.16 ____

*description: _____

(From photographs)

09-orange

10-brown, tan

11-purple

12-gold

A.5.3.2.16 ____

*description: _____

13-chrome, metallic

98-other (*describe, 80

characters)

99-unknown

Colour of face shield, if present

0-not applicable

1-clear

2-green

3-grey, smoke

4-amber, yellow

5-blue

6-reflective (any colour)

A.5.3.1.17 ____

*description: _____

(From photographs)

8-other (*describe, 80 characters)

9-unknown

A.5.3.2.17 ____

*description: _____

Helmet owned by wearer?

0-not applicable

1-no

2-yes

9-unknown

A.5.3.1.18 ____

(From rider/passenger interview)

A.5.3.2.18 ____

Helmet fit

0-not applicable

1-acceptable fit

2-too large, too loose

3-too small, too tight

8-other (*describe, 80 characters)

9-unknown

A.5.3.1.19 ____

*description: _____

(From rider/passenger interview, photographs)

A.5.3.2.19 ____

*description: _____

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

HELMET (continued)

Claimed frequency of helmet use on head

000-not applicable
999-unknown

A.5.3.1.20 _____ %
(From rider/passenger interview)

A.5.3.2.20 _____ %

Conditions under which helmet is usually worn

(code all that apply; input "0" for remaining responses)

0-not applicable
1-never uses helmet
2-long trips
3-highway traffic
4-in adverse weather
5-never in hot weather
6-always
8-other (*describe, 80 characters)
9-unknown

A.5.3.1.21.1 _____
A.5.3.1.21.2 _____
A.5.3.1.21.3 _____
A.5.3.1.21.4 _____

A.5.3.2.21.1 _____
A.5.3.2.21.2 _____
A.5.3.2.21.3 _____
A.5.3.2.21.4 _____

*description: _____

*description: _____

(From rider/passenger interview)

HELMET EXAMINATION

Manufacturer

000-not applicable, no helmet worn

A01-AEON
A02-AGV
A03-Air
A04-American Safety, Buco
A05-American Sports
A06-Answer
A07-ARAI
A08-Astro
A09-AXO
B01-Bell Helmets
B02-BIEFFE
B03-BMW
B04-Boeri
B05-Busch
C01-CKX
C02-CTS
C03-CTX
C04-Carrera
C05-Cosmo
C06-Cougar
C07-Crown (HJC)
C08-Crown (Safety Engineering)
C09-Cyber
D01-Dart
D02-Daytona
D03-Delta
D04-Difi
D05-Domino
D06-Driver
E01-Electro,Electrofilm
E02-Elf
F01-Falcon
F02-Fulmer, Arthur Fulmer
F03-Florida Safety Products
G01-GPA
G02-Grant, Royal Industries
G03-Griffin

A.5.3.1.22 _____

*description: _____

A.5.3.2.22 _____

*description: _____

(From Helmet inspection worksheet, photographs)
(For additional manufacturers, please see the Coding Manual)
H01-HJC (Hong Jin Crown) P02-Pacific
H02-Helmtec P03-Porsche Design (Kiwi)
I01-Impact P04-Porsche Design (Rohmer)
I02-Integral P05-Premier
I03-Index R01-Racer
J01-Jeb's R02-Rohmer
J02-Jefferson S01-Sabra
K01-KBC S02-Safetech
K02-KBI S03-Schuberth
K03-KIWI S04-Shingai
K04-KRW S05-SHOEI
K05- Krauter S06-Simpson
L01-Lance S07-Soaring
L02-Land S08-Sterling
L03-Land Tool S09-SafetyMet
L04-Lazer T01-THH
L05-Lear-Siegler T02-Top Tek
L06-LEM T03-Traveler
L07-Levior T04-Turbo
M01-Marushin U01-Uvex
M02-Max V01-Vanson
M03-Maxon V02-Vector Sports
M04-MDS V03-Vega
M05-Mercury MSR V04-Vetter
M06-Monarch MZR V05-Victory
M07-MPA W01-Wonder
M08-MSR X01-Xtra
M09-M2R Y01-Yoder
N01-NAVA Y02-Yo
N02-National Y03-Yes
N03-NJL Z01-Zero
N04-Nolan 998-other (*describe, 80
N05-Norcon characters)
P01-Pacer 999-unknown

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

HELMET EXAMINATION (continued)

Date of manufacture A.5.3.1.23 _____ A.5.3.2.23 _____
(year/month/day) _____/_____/_____
0000/00/00-not applicable (From Helmet inspection worksheet, helmet label photographs)
9999/99/99-unknown

Model A.5.3.1.24 _____ A.5.3.2.24 _____
(From Helmet inspection worksheet, photographs)

HELMET EXAMINATION (continued)

Conformity to which qualification A.5.3.1.25.1 _____ A.5.3.2.25.1 _____
(code all that apply; input "00" in A.5.3.1.25.2 _____ A.5.3.2.25.2 _____
remaining responses) A.5.3.1.25.3 _____ A.5.3.2.25.3 _____
00-not applicable A.5.3.1.25.4 _____ A.5.3.2.25.4 _____
01-no standards labelled *description: _____ *description: _____
02-ISO _____
03-ECE-22-02 _____

04-ECE-22-03 _____
05-ECE-22-04 _____
(From Helmet inspection worksheet, helmet label photographs)

- [06-E04(EU)] 18-DGM (Italy)
- 07-BS6658A 19-NF (France)
- 08-BS6658B 20-ASA (Australia)
- 09-JIS-A 21-CEN
- 10-JIS-B 22-FIM
- 11-JIS-C 23-SEI
- 12-FMVSS 218 24-M6.1 (Malay)
- 13-SNELL M85 25-NZS (1214, 1215)
- 14-SNELL M90 26-SSA #9 (Singapore)
- 15-ANSI Z90.1 98-other (*describe, 80 characters)
- 16-CSA D230 99-unknown
- 17-TUV

Labelled size, in cm A.5.3.1.26 _____ cm A.5.3.2.26 _____ cm
(use code if exact size is unavailable) (From Helmet inspection worksheet, helmet label photographs)

- 00-not applicable
- 01-extra small
- 02-small
- 03-medium
- 04-large
- 05-extra large
- 06-extra, extra large
- 99-unknown

Helmet mass A.5.3.1.27 _____ g A.5.3.2.27 _____ g
(including all appliances attached and worn at the time of the accident; code 9999 if unknown)
0000-not applicable (From on-scene inspection, using hand-held scale, Helmet
9999-unknown inspection worksheet)

Condition prior to accident A.5.3.1.28 _____ A.5.3.2.28 _____
0-not applicable *description: _____ *description: _____
1-no significant prior damage _____
2-minor damage, possibly from handling _____
and use, but not prior structural damage (From Helmet inspection worksheet, rider/passenger interview)
3-moderate damage to exterior finish and comfort pads, possibly from handling and use, but no prior
structural damage
4-significant prior damage to shell and liner, but not in area of accident impact
5-significant prior damage to shell and liner located in area of most severe accident impact
6-significant prior damage to shell and liner located in area of second most severe accident impact
8-other (*describe, 80 characters)
9-unknown

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

HELMET RETENTION SYSTEM

Type	A.5.3.1.29 ____	A.5.3.2.29 ____
0-not applicable	*description: _____	*description: _____
1-no retention system	_____	_____
2-double D-rings	_____	_____
3-slide bar	(From Helmet inspection worksheet, photographs)	
4-quick fasten/release or barb sides fitting	(See Coding Manual for illustrations of retention system types)	
5-quick fasten/release, D-blade type fitting (like auto seatbelt)		
6-lever clamp latch		
8-other (*describe, 80 characters)		
9-unknown		

Was helmet retained in place on head during accident?	A.5.3.1.30 ____	A.5.3.2.30 ____
0-not applicable	*description: _____	*description: _____
1-yes, helmet retained in place to completion of accident events	_____	_____
2-yes, helmet moved on head but was retained	(From medical records, Helmet inspection worksheet, photographs)	
3-no, helmet ejected from head during pre-crash time period		
4-no, helmet ejected from head during crash		
5-no, helmet ejected from head after collision		
8-other (*describe, 80 characters)		
9-unknown		

Was there a retention system failure?	A.5.3.1.31 ____	A.5.3.2.31 ____
0-not applicable	(From Helmet inspection worksheet, photographs)	
1-no		
2-yes		
9-unknown		

Type of failure	A.5.3.1.32 ____	A.5.3.2.32 ____
0-not applicable	*description: _____	*description: _____
1-chin strap pulled through D-rings, slide bar, or clamp latch	_____	_____
2-quick release let go	(From Helmet inspection worksheet, photographs)	
3-hanger fitting failed		
4-shell rivets failed		
5-webbing tensile failure		
6-stitching failure in webbing		
7-webbing laceration		
8-other (*describe, 80 characters)		
9-unknown		

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: ____; ____; ____; ____
 Input by: ____; ____; ____; ____

HELMET EXTERNAL DAMAGE MARKS

(List damage marks, in descending order of severity. Assign a number for each damage mark. Identify the damage type from the list and record it. Indicate as many locations as apply for each mark, up to three, using Figure 1, below. Input "0" in all remaining spaces. Attach additional pages, as necessary.)

Type of damage to shell, motorcycle rider

00-not applicable, no helmet

01-no significant damage

02-freckles, small indentations, pock marks

03-abrasion

04-fracture through

05-crack, split, not through fracture

06-delamination, gross

07-microdelamination

08-puncture

09-rubber transfer

10-paint transfer

98-other (*describe, 80 characters)

99-unknown

	A.5.3.1.33.	A.5.3.1.34.	A.5.3.1.35.1.	A.5.3.1.35.2.	A.5.3.1.35.3.
	Mark	Type	Location codes		
	number	damage			
1	___	___	___	___	___
2	___	___	___	___	___
3	___	___	___	___	___
4	___	___	___	___	___
5	___	___	___	___	___

*description: _____

(From Helmet inspection worksheet)

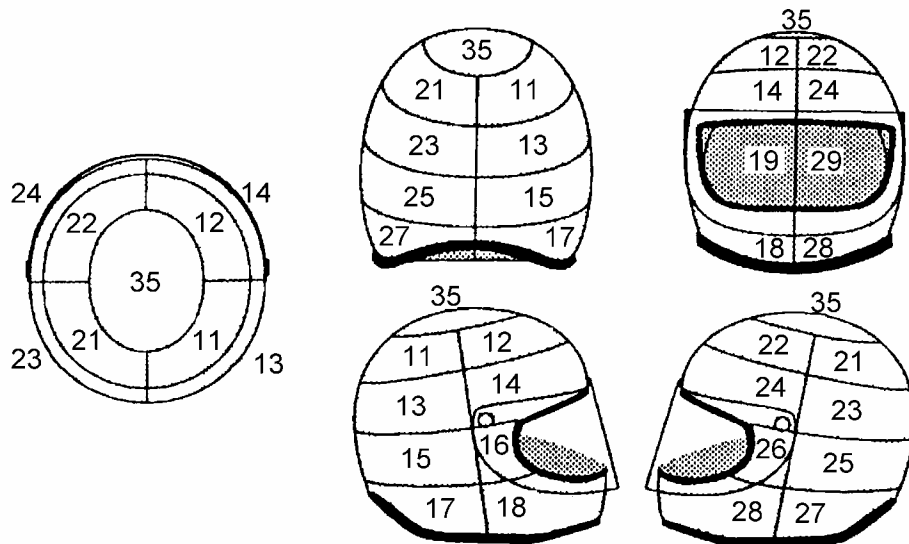


Figure 1 - Location code

**A.5.3 HUMAN FACTORS,
PERSONAL PROTECTIVE EQUIPMENT
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: ____; ____; ____; ____
Input by: ____; ____; ____; ____

HELMET EXTERNAL DAMAGE MARKS (continued)

(List damage marks, in descending order of severity. Assign a number for each damage mark. Identify the damage type from the list and record it. Indicate as many locations as apply for each mark, up to three, using Figure 1, below. Input "0" in all remaining spaces. Attach additional pages, as necessary.)

Type of damage to shell, motorcycle passenger

Motorcycle passenger number

A.5.1.2.1 ____ (Assigned, see A.5.1, Human factors DSS)

- 00-not applicable, no helmet, or no passenger
- 01-no significant damage
- 02-freckles, small indentations, pock marks
- 03-abrasion
- 04-fracture through
- 05-crack, split, not through fracture
- 06-delamination, gross
- 07-microdelamination
- 08-puncture
- 09-rubber transfer
- 10-paint transfer
- 98-other (*describe, 80 characters)
- 99-unknown

	A.5.3.2.33.	A.5.3.2.34.	A.5.3.2.35.1.	A.5.3.2.35.2.	A.5.3.2.35.3.
	Mark number	Type damage	Location codes		
1	___	___	___	___	___
2	___	___	___	___	___
3	___	___	___	___	___
4	___	___	___	___	___
5	___	___	___	___	___

*description: _____

(From Helmet inspection worksheet)

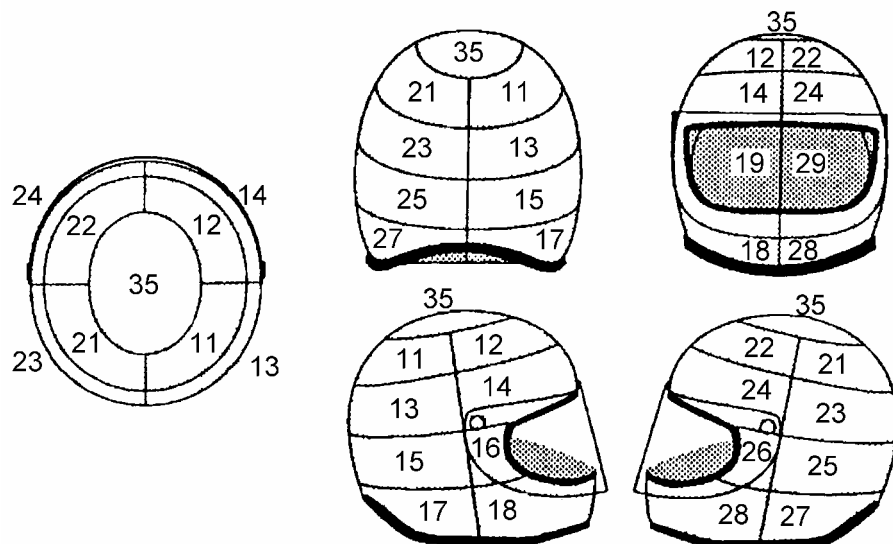


Figure 1 - Location code

**A.6.1 CONTRIBUTING ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

Other vehicle number A.4.3.1 ___
(Assigned, see A.4.3, Other vehicle mechanical factors DSS)

Roadway design defect A.6.1.1.1 ___ A.6.1.2.1 ___
(see Coding Manual for definition) (From Synthesis of scene photographs, scene diagram,
0-not applicable, no OV, or no roadway design and accident description)
defect present
1-roadway design defect present but not a
contributing factor
2-roadway design defect was the precipitating event 4-roadway design defect was a contributing
3-roadway design defect was the primary factor
contributing factor 9-unknown

Roadway maintenance defect A.6.1.1.2 ___ A.6.1.2.2 ___
(see Coding Manual for definition) (From Synthesis of scene photographs, scene diagram,
0-not applicable, no OV, or no roadway and accident description)
maintenance defect
1-roadway maintenance defect present but not a
contributing factor
2-roadway maintenance defect was the 4-roadway maintenance defect was the primary
precipitating event contributing factor
3-roadway maintenance defect was the primary
contributing factor 9-unknown

Traffic controls defect or malfunction A.6.1.1.3 ___ A.6.1.2.3 ___
(From Synthesis of scene photographs, scene diagram,
0-not applicable, no OV, or no traffic controls, or and accident description)
traffic controls operating properly
1-traffic controls defect or malfunction present,
but not a contributing factor
2-traffic controls defect or malfunction was the 4-traffic controls defect or malfunction was a
precipitating event contributing factor
3-traffic controls defect or malfunction was the
primary contributing factor 9-unknown

Traffic hazard, including A.6.1.1.4 ___ A.6.1.2.4 ___
construction and maintenance (From Synthesis of scene photographs, scene diagram,
operations and accident description)
0-not applicable, no OV, or no temporary
traffic obstruction
1-temporary traffic obstruction present but not a
contributing factor
2-temporary traffic obstruction was the 4-temporary traffic obstruction was a
precipitating event contributing factor
3-temporary traffic obstruction was the primary
contributing factor 9-unknown

Weather related problem A.6.1.1.5 ___ A.6.1.2.5 ___
(From Synthesis of scene photographs, scene diagram,
0-not applicable, no OV and accident description)
1-weather made no contribution to accident
2-weather related problem was the precipitating event
3-weather related problem was the primary contributing 4-weather related problem was a contributing factor
factor 9-unknown

**A.6.1 CONTRIBUTING ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

	Motorcycle rider	Other vehicle driver
Visual background of other vehicle along motorcycle rider's line-of-sight at time of precipitating event	A.6.1.1.6 ___ (From synthesis)	
0-not applicable, view obstructed by foreground, no OV		
1-visual background of OV made no contribution to conspicuity of OV		
2-visual background had a positive effect on vehicle conspicuity, OV was more noticeable		
3-visual background had a negative effect on vehicle conspicuity, OV was less noticeable		
9-unknown		
Visual background of motorcycle along OV driver's line-of-sight at time of precipitating event		A.6.1.2.6 ___
0-not applicable no OV, or not applicable view obstructed by foreground		
1-visual background of motorcycle made no contribution to conspicuity of motorcycle		
2-visual background of motorcycle had positive effect on vehicle conspicuity, made motorcycle more noticeable		
3-visual background of motorcycle had negative effect on vehicle conspicuity, made motorcycle less noticeable		
9-unknown		
Did insects affect the rider?	A.6.1.1.7 ___	
0-not applicable, no insects present		
1-insects were present but had no effect on rider		
2-small insects affected rider vision and attention, no eye protection		
3-insect contamination of eye protection, face shield or windscreen		
4-rider or passenger suffered insect bite or sting		
5-insect affected operation of motorcycle		
8-other (*describe, 80 characters)		
9-unknown		

(From witness interviews)

**A.6.2 CONTRIBUTING VEHICLE FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

MOTORCYCLE FACTORS

Tyre size

- 1-original equipment
- 2-not original equipment, but specified size
- 3-proper rim size, oversize section
- 4-proper rim size, undersize section
- 5-improper rim size, too large
- 6-improper rim size, too small
- 8-other (*describe, 80 characters)
- 9-unknown

A.6.2.1.1 ____

*description: _____

A.6.2.2.1 ____

*description: _____

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

Tyre inflation pressure

- 1-tyre deflated during accident events
- 2-tyre inflation within 15% of recommended pressure
- 3-tyre inflation between 16% and 39 % of recommended pressure
- 4-tyre grossly underinflated, greater than 40% below recommended pressure
- 5-tyre grossly overinflated, greater than 40% above recommended pressure
- 8-other (*describe, 80 characters)
- 9-unknown

A.6.2.1.2 ____

*description: _____

A.6.2.2.2 ____

*description: _____

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

Accident causation related to tyre or wheel condition

- 01-no wheel or tyre condition related to accident causation
- 02-tyre mechanical failure caused loss of control
- 03-tyre puncture flat caused loss of control
- 04-tyre beads unseated and caused loss of control
- 05-gross underinflation contributed to loss of tyre traction and caused loss of control
- 06-gross overinflation caused loss of traction and caused loss of control
- 07-gross error of inflation contributed to stability problem and caused loss of control
- 08-wheel mechanical failure caused loss of control, including valve failure
- 98-other (*describe, 80 characters)
- 99-unknown

A.6.2.1.3 ____

*description: _____

A.6.2.2.3 ____

*description: _____

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

Accident causation related to suspension condition

- 0-not applicable, rigid suspension
- 1-suspension condition made no contribution to accident causation
- 2-deteriorated suspension caused control distress, limited collision avoidance
- 3-deteriorated suspension caused unstable dynamics, loss of control
- 8-other (*describe, 80 characters)
- 9-unknown

A.6.2.1.4 ____

*description: _____

A.6.2.2.4 ____

*description: _____

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

Accident causation related to frame condition

- 1-frame condition made no contribution to accident causation
- 2-cracked or broken frame caused loss of control

A.6.2.1.5 ____

*description: _____

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

**A.6.2 CONTRIBUTING VEHICLE FACTORS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

MOTORCYCLE FACTORS (continued)

- 3-loose motor-transmission mounting bolts or screws caused loss of control
- 4-deteriorated steering head bearings/steering stem caused loss of control
- 5-deteriorated rear swing arm bearings caused loss of control
- 6-general frame deterioration caused uncontrolled dynamic response
- 8-other (*describe, 80 characters)
- 9-unknown

Accident causation related to cornering clearance

A.6.2.1.6 ___

*description: _____

01-cornering clearance made no contribution to accident causation

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

- 02-exhaust system grounded out first
- 03-foot pegs, foot rests grounded out first
- 04-side stand not retracted, grounded out first
- 05-side stand retracted but grounded out first
- 06-centre stand grounded out first
- 07-accessory or cargo limited ground clearance
- 08-passenger weight or extremities limited ground clearance
- 98-other (*describe, 80 characters)
- 99-unknown

Accident or injury causation related to seat

A.6.2.1.7 ___

*description: _____

- 1 seat made no contribution to accident causation
- 2-seat came loose, distracted rider and contributed to accident causation
- 3-seat came loose caused rider loss of control and contributed to accident causation
- 4-seat cover material slippery, caused rider displacement and loss of control
- 5-seat cover treated with slippery preservative, which contributed to accident causation
- 6-seat cover and cushion severely deteriorated, which contributed to accident causation
- 8-other seat condition that contributed to accident causation (*describe, 80 characters)
- 9-unknown

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

Accident causation related to drive chain, belt, or shaft condition

A.6.2.1.8 ___

(From Motorcycle inspection worksheet, Accident scene investigation worksheet, and witness interviews)

- 1-drive chain, belt or shaft condition made no contribution to accident causation
- 2-chain or belt broken or derailed, drive failure related to accident causation

9-unknown

Accident or injury causation related exhaust system condition

A.6.2.1.9 ___

*description: _____

- 0-not applicable, no exhaust system
- 1-exhaust system made no contribution to accident or injury causation
- 2-hot exhaust system caused contact burns
- 3-exhaust system components involved in contact impact injury
- 4-hot exhaust system components were fire ignition source
- 5-exhaust system noise prevented motorcyclist from hearing critical traffic sounds

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

**A.6.2 CONTRIBUTING VEHICLE FACTORS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

MOTORCYCLE FACTORS (continued)

6-exhaust system noise cause motorcyclist fatigue and inattention (as claimed by rider)

7-exhaust system noise alerted other vehicle driver of motorcycle presence, but could not avoid collision

8-other (*description, 80 characters)

9-unknown

Motorcycle vehicle failure, accident cause related defect

A.6.2.1.10 ___

*description: _____

00-not applicable

01-tyre or wheel failure

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

02-brake failure

03-steering failure

04-power transmission failure

05-electrical failure

06-suspension failure

07-vehicle structural failure, other than suspension, tyre, or wheel

98-other (*describe, 80 characters)

99-unknown

Was pre-crash fire cause of accident?

A.6.2.1.11 ___

0-not applicable, no pre-crash fire

(From Motorcycle inspection worksheet, Accident scene investigation worksheet, and witness interviews)

1-pre-crash fire was present and it was not the cause of the accident

2-yes, pre-crash fire was present and it was the cause of the accident

9-unknown

Did cargo/luggage contribute to accident causation?

A.6.2.1.12 ___

*description: _____

00-not applicable, no cargo or luggage present

01-cargo/luggage was present, but made no contribution to accident causation

(From Motorcycle inspection and Vehicle information worksheets, Injury worksheets, and witness interviews)

02-cargo/luggage came loose, caused rider loss of control and contributed to accident causation

03-cargo/luggage interfered with controls, caused loss of control and contributed to accident causation

04-cargo/luggage interfered with controls, prevented successful collision avoidance action

05-cargo/luggage entrapped in rear suspension or wheel and contributed to accident causation

06-cargo/luggage entrapped in front suspension or wheel and contributed to accident causation

07-cargo/luggage against motor and exhaust system, heat damage or fire caused rider distraction and contributed to accident causation

08-cargo/luggage container began to spill contents, distracted rider and contributed to accident causation

98-other cargo/luggage condition that contributed to accident causation (*describe, 80 characters)

99-unknown

OTHER VEHICLE FACTORS

Other vehicle number

A.4.3.1 ___

(Assigned, see A.4.3, Other vehicle mechanical factors DSS)

Other vehicle failure, accident cause related defect

A.6.2.1.13 ___

(From Other vehicle driver witness interview)

00-not applicable, no OV, or OV present but had no apparent defects or failure

01-other vehicle failure present but made no contribution to accident causation

02-other vehicle tyre or wheel failure contributed to accident causation

03-other vehicle brake failure contributed to accident causation

**A.6.2 CONTRIBUTING VEHICLE FACTORS
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

OTHER VEHICLE FACTORS (continued)

04-other vehicle steering failure contributed to accident causation

05-other vehicle power transmission failure contributed to accident causation

06-electrical failure contributed to accident causation

07-other vehicle suspension failure contributed to accident causation

08-other vehicle structural failure, other than suspension, tyre, or wheel contributed to accident causation

98-other OV failure that contributed to accident causation (*describe, 80 characters)

99-unknown

**A.6.2 CONTRIBUTING MOTORCYCLE FACTORS,
CRASH PERFORMANCE
DATA SUMMARY SHEET**

AIN _____ / _____ / _____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

(Response numbers are identified by recording the column number, followed by the row number) For each blank cell, respond (unless noted otherwise): 0-not applicable 1-no 2-yes 9-unknown		A.6.2.3.
		Injury Involvement
1	Front crash bars	
2	Rear crash bars	
3	Engine guard	
4	Windscreen	
5	Fairing	
6	Headlamps	
7	Headlamp nacelle	
8	Auxiliary headlamp	
9	Front reflectors	
10	Front turn signals	
11	Speedometer	
12	Tachometer	
13	Handlebars	
14	Throttle	
15	Clutch lever	
16	Brake lever	
17	Right side rear view mirrors, posts	
18	Left side rear view mirrors, posts	
19	Front suspension	
20	Front tyre/wheel	
21	Front fender	
22	Front brakes	
23	Seat	
24	Sissy bar/passenger back rest	
25	Side reflectors	
26	Frame	
27	Grab rails/ hand holds	
28	Fuel tank	
29	Auxiliary fuel tank	
30	Motor crankcase, cylinders	
31	Motor power enhancement	
32	Transmission case	
33	Oil tank	
34	Battery, battery box	
35	Rear brake pedal	
36	Shift lever	
37	Foot pegs, footrests	
38	Highway pegs/footrests	
39	Side stand	
40	Side stand interlock	
41	Centre stand	
42	Muffler/exhaust system	

**A.6.2 CONTRIBUTING MOTORCYCLE FACTORS,
CRASH PERFORMANCE
DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: ____; ____; ____; ____
 Input by: ____; ____; ____; ____

(Response numbers are identified by recording the column number, followed by the row number) For each blank cell, respond (unless noted otherwise): 0-not applicable 1-no 2-yes 9-unknown		A.6.2.3.
		Injury Involvement
43	Tank bag	
44	Luggage/cargo rack	
45	Parcel rack	
46	Panniers, saddle bags	
47	Rear position lamps	
48	Stop lamp	
49	Rear reflectors	
50	Rear turn signals	
51	Rear suspension	
52	Rear tyre/wheel	
53	Rear fender	
54	Rear brakes	
55	Tools, tool box	
56	Side covers	
57	Trailer	

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

	Motorcycle rider	Motorcycle passenger
MOTORCYCLISTS		
Motorcycle passenger number		A.5.1.2.1 ___ (Assigned, see A.5.1, Human factors DSS)
Rider unsafe acts in this accident (see Coding manual for examples of unsafe acts)	A.6.3.1.1 ___ (From synthesis)	
0-not applicable, no unsafe acts		Description of unsafe act (not coded): _____
1-major unsafe act; likely to cause accident		_____
2-moderate unsafe act; likely to cause traffic conflict		
3-minor unsafe act; possible to cause traffic conflict, indicator of unsafe condition		
9-unknown		
Did passenger contribute to accident causation?		A.6.3.2.1 ___
0-not applicable, no passenger		*description: _____
1-passenger present but did not contribute to accident causation		_____
2-yes, passenger lost hold and caused rider loss of control		_____
3-yes, passenger fell from motorcycle and contributed to accident causation		(From synthesis)
4-yes, passenger interfered with motorcycle balance, caused rider loss of control		
5-yes, passenger interfered with motorcycle controls and contributed to accident causation		
6-yes, passenger lower extremities entrapped in rear suspension or wheel and contributed to accident causation		
7-passenger action distracted motorcycle rider and contributed to accident causation		
8-other passenger action that contributed to accident causation (*describe, 80 characters)		
9-unknown		
Effect of rider/passenger interaction on injury causation	A.6.3.1.2 ___ (From synthesis)	A.6.3.2.2 ___
0-not applicable, no passenger		
1-passenger present but no interaction between rider and passenger		
2-rider/passenger interaction increased rider injuries		
3-rider/passenger interaction decreased rider injuries		
4-rider/passenger interaction increased passenger injuries		
5-rider/passenger interaction decreased passenger injuries		
6-rider/passenger interaction had no effect on either rider or passenger injuries		
9-unknown		

	Motorcycle rider	Motorcycle passenger
OTHER VEHICLE DRIVER		
Other vehicle number	A.4.3.1 ___ (Assigned, see A.4.3, Other vehicle mechanical factors DSS)	
Did other vehicle passengers contribute to accident causation?	A.6.3.3.1 ___ *description: _____	
0-not applicable, no OV or no passengers		_____
1-passengers present but they made no contribution to accident causation		_____
2-yes, passenger activities distracted driver and contributed to accident causation	(From synthesis of accident dynamics, injury data, and witness interviews)	
3-yes, passenger interfered with vehicle control and contributed to accident causation		
8-other vehicle passenger action that contributed to accident causation (*describe, 80 characters)		
9-unknown		

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

	Motorcycle rider	Other vehicle driver
HUMAN PERFORMANCE CONTRIBUTING FACTORS (From synthesis)		
Attention failure, including distractions and stress	A.6.3.1.3 ____	A.6.3.3.3 ____
0-not applicable, no OV or no attention failure		
1-attention failure present but did not contribute to accident causation		
2-attention failure contributed to accident causation		
9-unknown if OV present, or if attention was a factor in accident causation		
Lane choice	A.6.3.1.4 ____	A.6.3.3.4 ____
0-not applicable, no OV or no lane choice available		
1-lane choice made no contribution to accident causation		
2-lane choice contributed to accident causation		
9-unknown if OV was present or unknown if lane choice was a contributing factor in causation		
Traffic scan	A.6.3.1.5 ____	A.6.3.3.5 ____
0-not applicable, no OV or no traffic present to scan		
1-traffic scan made no contribution to accident causation		
2-traffic scanning error contributed to accident cause		
9-unknown if OV was present, or unknown if traffic scan was proper, or unknown if traffic scan contributed to accident causation		
Visual obstructions neglected	A.6.3.1.6 ____	A.6.3.3.6 ____
0-not applicable, no OV or no view obstructions		
1-view obstructions were present but did not contribute to accident causation		
2-view obstructions present and contributed to accident causation		
9-unknown if OV or view obstructions were present, or unknown if view obstruction contributed to crash		
Hazard detection failure	A.6.3.1.7 ____	A.6.3.3.7 ____
0-not applicable, no OV or no temporary traffic obstruction		
1-temporary traffic obstruction present but did not contribute to accident causation		
2-temporary traffic obstruction present and contributed to accident causation		
9-unknown if OV or temporary traffic obstruction present, or unknown if obstruction contributed to accident causation		
Faulty traffic strategy	A.6.3.1.8 ____	A.6.3.3.8 ____
0-not applicable, no OV or no other traffic present		
1-traffic strategy made no contribution to accident causation		
2-traffic strategy contributed to accident causation		
9-unknown if OV was present, or unknown if strategy was faulty, or unknown if faulty strategy contributed to accident causation		
Speed compared to surrounding traffic	A.6.3.1.9 ____	A.6.3.3.9 ____
0-no OV or no unusual speed or no surrounding traffic		
1-speed was unusual or unexpected but made no contribution to accident causation		
2-unusual or unexpected speed difference caused or contributed to accident causation		
9-unknown if OV present, or unknown if speed was appropriate, or unknown if improper speed contributed to accident causation		
Safe position with respect to other traffic	A.6.3.1.10 ____	A.6.3.3.10 ____
0-not applicable no OV or no other traffic		
1-position relative to other traffic made no contribution to accident causation		

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

	Motorcycle rider	Other vehicle driver
--	------------------	----------------------

HUMAN PERFORMANCE CONTRIBUTING FACTORS (From synthesis) (continued)

2-position relative to other traffic contributed to accident causation

9-unknown if OV was present, or position relative to other traffic not known, or unknown if relative position contributed to accident causation

CONTROL FAILURE, LOSS OF CONTROL

Loss of control mode

(see Coding Manual for definitions)

00-no loss of control

01-capsize, or fall over

02-braking slide-out, low side

03-braking slide-out, high side

04-cornering slide out, low side

05-cornering slide out, high side

06-ran wide on turn, ran off road, under cornering

07-lost wheelie

08-low speed wobble

09-high speed wobble

10-weave, no pitch

11-pitch weave, low speed

12-pitch weave, high speed cornering

A.6.3.1.11 _____

*description: _____

(From synthesis of vehicle inspection, scene diagram, injury worksheet, photographs, and witness interviews)

13-end-over, endo, reverse wheelie

14-continuation, no control actions

98-other (*describe, 80 characters)

99-unknown

Control unfamiliarity

A.6.3.1.12 _____

A.6.3.3.12 _____

0-not applicable, no OV or no evidence of control unfamiliarity

1-control unfamiliarity present, but not a contributing factor

2-yes, evidence of control unfamiliarity as a contributing factor

9-unknown

Skills deficiency

A.6.3.1.13 _____

A.6.3.3.13 _____

0-not applicable, no OV or no evidence of skills deficiency

1-skills deficiency present, but not a contributing factor

2-skills deficiency present as a contributing factor

9-unknown

Vehicle unfamiliarity

A.6.3.1.14 _____

A.6.3.3.14 _____

0-not applicable, no OV or no evidence of vehicle unfamiliarity

1-vehicle unfamiliarity present, but not a contributing factor

2-vehicle unfamiliarity present as a contributing factor

9-unknown

Motorcycle control operations just before precipitating event

A.6.3.1.15 _____

*description: _____

00-not applicable

01-none (input "0" in A.6.3.1.16; go to A.6.3.1.17)

02-accelerating, upshifting

03-decelerating, downshifting

04-decelerating, braking

05-throttle change

06-mirror adjustment

(From synthesis of accident dynamics, witness interviews, and Injury worksheets)

09-steering, turning

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

	Motorcycle driver	Other vehicle driver
CONTROL FAILURE, LOSS OF CONTROL (continued)		
07-operating headlamps or turn signals	98-other (*describe, 80 characters)	
08-operating fuel valve or choke	99-unknown	
Did control operations interfere with driving tasks?	A.6.3.1.16 ____ *description: _____	
0-not applicable	_____	
1-no	_____	
2-yes, directed attention away from traffic conflict		(From synthesis of accident dynamics, witness interviews, and Injury worksheets)
3-yes, directed attention away from temporary traffic obstruction		
4-yes, directed attention away from traffic controls		
8-other (*describe, 80 characters)		9-unknown
Did motorcycle rider have hand/fingers repositioned on front brake before precipitating event?	A.6.3.1.17 ____ (From synthesis of Injury worksheets, photographs, and witness interviews)	
0-not applicable, front brake not present or operational		
1-no, hand/fingers were not positioned on front brake before precipitating event		
2-yes, hand/fingers were positioned on front brake before precipitating event		
9-unknown where hand/fingers were positioned before precipitating event		
COLLISION AVOIDANCE		
Collision avoidance, evasive manoeuvre taken or attempted by motorcycle rider	A.6.3.1.18.1 ____ ____ A.6.3.1.18.2 ____ ____ A.6.3.1.18.3 ____ ____ *description: _____	
(input all that apply; input "00" in remaining responses)		
00-not applicable	_____	
01-no evasive action, continuation	_____	
02-use of horn	(From accident reconstruction)	
03-flashing headlamp high beams		
04-rear braking		
05-front braking		
06-lane change		
07-swerve around temporary traffic obstruction		
08-accelerate	12-jump or bail out	
09-release braking	13-braking, unknown which wheel(s)	
10-lay-down, low side and slide	98-other (*describe, 80 characters)	
11-drag feet	99-unknown	
Collision avoidance failure, evasive action taken or attempted by OV driver		A.6.3.3.18.1 ____ ____ A.6.3.3.18.2 ____ ____ A.6.3.3.18.3 ____ ____ *description: _____
(input all that apply; input "00" in remaining responses)		
00-not applicable or no OV	_____	
01-no evasive action, continuation	_____	
02-braking	(From synthesis of scene diagram, vehicle dynamics, injury worksheets, and witness interviews)	
03-steering		
04-braking and steering		
05-accelerating		

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

	Motorcycle rider	Other vehicle driver
COLLISION AVOIDANCE (continued)		
06-steering and accelerating		
07-release braking		
08-honk horn or flash high beams		
98-other (*describe, 80 characters)		
99-unknown		
If continuation, no action due to:	A.6.3.1.19.1 ____	A.6.3.3.19.1 ____
(input all that apply; input "0" in remaining responses)	A.6.3.1.19.2 ____	A.6.3.3.19.2 ____
	A.6.3.1.19.3 ____	A.6.3.3.19.3 ____
00-not applicable, no OV	*description: _____	*description: _____
01-no continuation, evasive action was taken	_____	_____
02-strategic detection failure	_____	_____
03-impairment detection failure	(From synthesis of scene diagram, vehicle dynamics, injury worksheets, and witness interviews)	
04-strategic decision failure		
05-impairment decision failure		
06-strategic reaction failure	98-other (*describe, 80 characters)	
07-impairment reaction failure	99-unknown	
Was the evasive action the proper choice for the situation?	A.6.3.1.20 ____	A.6.3.3.20 ____
0-not applicable, no OV or no evasive action	(From synthesis of scene diagram, vehicle dynamics, injury worksheets, and witness interviews)	
1-no, evasive action was not the proper choice for the situation		
2-yes, evasive action was the proper choice for the situation	9-unknown	
Was the action properly executed?	A.6.3.1.21 ____	A.6.3.3.21 ____
0-not applicable, no OV or no evasive action taken		
1-no, evasive action was not properly executed		
2-yes, evasive action was properly executed		
9-unknown if evasive action was taken or if evasive action was properly executed		
Failed collision avoidance due to	A.6.3.1.22 ____	A.6.3.3.22 ____
0-not applicable, no OV or no evasive action taken	*description: _____	*description: _____
1-decision failure, wrong choice of evasive action	_____	_____
2-reaction failure, poor execution of evasive action	_____	_____
3-inadequate time available to complete avoidance action		
4-loss of control in attempting collision avoidance	(From synthesis of scene diagram, vehicle dynamics, injury worksheets, and witness interviews)	
8-other (*describe, 80 characters)		
9-unknown if there was a collision avoidance or unknown cause for failed collision avoidance		
EXPERIENCE DEFICIENCY		
Language distress; sign comprehension	A.6.3.1.23 ____	A.6.3.3.23 ____
0-not applicable, no OV or no language distress, sign comprehension problem present		
1-language problems, sign comprehension problems present but did not contribute to accident causation		
2-language problems or sign comprehension was contributing cause factors		
9-unknown		

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

	Motorcycle rider	Other vehicle driver
EXPERIENCE DEFICIENCY (continued)		
Traffic knowledge, strategy	A.6.3.1.24 ____	A.6.3.3.24 ____
0-not applicable, no OV or no evidence of deficiency in traffic knowledge or strategy		
1-traffic knowledge, strategy deficiency present but did not contribute to accident causation		
2-traffic knowledge and/or strategy contributed to accident causation		
9-unknown		
Vehicle control skills	A.6.3.1.25 ____	A.6.3.3.25 ____
0-not applicable, no OV or no evidence of vehicle control skill deficiency		
1-vehicle control skill deficiency present but did not contribute to accident causation		
2-inadequate vehicle control skills contributed to accident causation		
9-unknown		

	Motorcycle rider	Other vehicle driver
CAUSATION EVALUATION (From synthesis)		
Personality evaluation		
Aggressive attitude	A.6.3.1.26 ____	A.6.3.3.26 ____
0-not applicable, no OV or no aggressive attitude observed		
1-aggressive attitude present but not a cause or contributing factor		
2-yes, aggressive attitude contributed to accident causation		
9-unknown		
Situation incompatibility	A.6.3.1.27 ____	A.6.3.3.27 ____
0-not applicable, no OV or no situation incompatibility present		
1-situation incompatibility present but did not contribute to accident causation		
2-situation incompatibility contributed to accident causation		
9-unknown		
Compensation failure	A.6.3.1.28 ____	A.6.3.3.28 ____
0-not applicable, no OV or no compensation failure		
1-compensation failure present but not a contributing factor in accident causation		
2-compensation failure did contribute to accident causation		
9-unknown		
Risk taking tendency evaluation		
Unsafe act this accident	A.6.3.1.29 ____	A.6.3.3.29 ____
0-not applicable, no OV or no unsafe act		
1-unsafe act occurred but did not contribute to accident causation		
2-yes, unsafe act contributed to accident causation		
9-unknown		
Alcohol/drug involvement	A.6.3.1.30 ____	A.6.3.3.30 ____
0-not applicable, no OV or no alcohol/drug involvement		
1-alcohol/drug involvement present but did not contribute to accident causation		
2-yes, alcohol/drug involvement contributed to accident causation		
9-unknown		
Violations record	A.6.3.1.31 ____	A.6.3.3.31 ____
0-not applicable, no OV or no violations on record		
1-unrelated violations on record		

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

	Motorcycle rider	Other vehicle driver
CAUSATION EVALUATION (From synthesis) (continued)		
<i>2-record of violations for actions similar to those in accident</i>		
<i>9-unknown</i>		
Previous accidents	A.6.3.1.32 ___	A.6.3.3.32 ___
<i>0-not applicable, no OV or no previous accidents</i>		
<i>1-previous accidents present but are unrelated to this accident</i>		
<i>2-record of previous accidents similar to this accident</i>		
<i>9-unknown</i>		

	Motorcycle rider	Motorcycle passenger
PERSONAL PROTECTIVE EQUIPMENT		
Did upper extremities and upper torso coverage reduce or prevent injury?	A.6.3.1.33 ___	A.6.3.2.33 ___
<i>0-not applicable, no passenger</i>	_____	_____
<i>1-equipment not present and injury occurred</i>	_____	_____
<i>2-no, equipment present, but had no effect on injury prevention</i>	(From synthesis of photographs, medical reports, witness interviews)	
<i>3-yes, equipment present and reduced injury</i>		
<i>4-yes, equipment present and prevented injury</i>		
<i>5-no injury producing contact in region, equipment may or may not be present</i>		8-other (*describe, 80 characters) 9-unknown
Did lower extremities and lower torso coverage reduce or prevent injury?	A.6.3.1.34 ___	A.6.3.2.34 ___
<i>0-not applicable, no passenger</i>	_____	_____
<i>1-equipment not present and injury occurred</i>	_____	_____
<i>2-no, equipment present, but had no effect on injury prevention</i>	(From synthesis of photographs, medical reports, witness interviews)	
<i>3-yes, equipment present and reduced injury</i>		
<i>4-yes, equipment present and prevented injury</i>		
<i>5-no injury producing contact in region, equipment may or may not be present</i>		8-other (*describe, 80 characters) 9-unknown
Did footwear reduce or prevent injury?	A.6.3.1.35 ___	A.6.3.2.35 ___
<i>0-not applicable, no passenger</i>	_____	_____
<i>1-equipment not present and injury occurred</i>	_____	_____
<i>2-no, equipment present, but had no effect on injury prevention</i>	(From synthesis of photographs, medical reports, witness interviews)	
<i>3-yes, equipment present and reduced injury</i>		
<i>4-yes, equipment present and prevented injury</i>		
<i>5-no injury producing contact in region, equipment may or may not be present</i>		8-other (*describe, 80 characters) 9-unknown
Did gloves reduce or prevent injury?	A.6.3.1.36 ___	A.6.3.2.36 ___
<i>0-not applicable, no passenger</i>	_____	_____
<i>1-equipment not present and injury occurred</i>	_____	_____
<i>2-no, equipment present, but had no effect on injury prevention</i>	(From synthesis of photographs, medical reports, witness interviews)	
<i>3-yes, equipment present and reduced injury</i>		

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

	Motorcycle rider	Motorcycle passenger
PERSONAL PROTECTIVE EQUIPMENT (continued)		
4-yes, equipment present and prevented injury		8-other (*describe, 80 characters)
5-no injury producing contact in region, equipment may or may not be present		9-unknown
Did eye coverage reduce or prevent injury?	A.6.3.1.37 ___	A.6.3.2.37 ___
0-not applicable, no passenger	*description: _____	*description: _____
1-equipment not present and injury occurred	_____	_____
2-no, equipment present, but had no effect on injury prevention	(From synthesis of photographs, medical reports, witness interviews)	
3-yes, equipment present and reduced injury		
4-yes, equipment present and prevented injury		
5-no injury producing contact in region, equipment may or may not be present		8-other (*describe, 80 characters)
		9-unknown
Eye or face protection relation to pre-crash events	A.6.3.1.38 ___	
0-not applicable, none worn	*description: _____	
1-protection worn but had no effect on pre-crash events		
2-no detrimental effect on vision or attention, no failures to detect temporary traffic obstruction or traffic challenge		
3-eye and face protection was deteriorated, reduced critical vision of temporary traffic obstruction or traffic challenge		
4-absence of proper eye and face protection caused detection failure of temporary traffic obstruction or traffic challenge		
5-no injury producing contact in region, equipment may or may not be present		
8-other (*describe, 80 characters)		
9-unknown		
Did helmet reduce or prevent injury?	A.6.3.1.39 ___	A.6.3.2.39 ___
0-not applicable, no passenger	*description: _____	*description: _____
1-no helmet present, injury to head occurred	_____	_____
2-helmet worn, but no effect on head injury	_____	_____
3-yes, equipment present and reduced injury	(From synthesis)	
4-yes, equipment present and prevented injury		
5-no injury producing contact in region, equipment may or may not be present		8-other (*describe, 80 characters)
		9-unknown
Did helmet have an effect on pre-crash events	A.6.3.1.40 ___	
0-not applicable, no helmet	(From helmet inspection and witness interview)	
1-no (<i>input "01" in A.6.3.1.41; go to A.6.3.1.42</i>)		
2-yes (<i>respond to questions A.6.3.1.41.1 through A.6.3.1.41.3</i>)		
9-unknown		
<i>What was the effect of the helmet?</i> <i>(input all that apply; input "00" in remaining responses)</i>	A.6.3.1.41.1 ___	
00-not applicable	A.6.3.1.41.2 ___	
01-no effect	A.6.3.1.41.3 ___	
02-helmet reduced attention to traffic and driving tasks	*description: _____	

	(From helmet inspection and witness interview)	

**A.6.3 CONTRIBUTING HUMAN FACTORS,
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

	Motorcycle rider	Motorcycle passenger
PERSONAL PROTECTIVE EQUIPMENT (continued)		
<i>03-discomfort from helmet use interfered with driving tasks</i>		
<i>04-fatigue from helmet use interfered with driving tasks</i>		
<i>05-helmet prevented hearing critical traffic sounds</i>		
<i>06-helmet limited peripheral vision</i>		<i>98-other (*describe, 80 characters)</i>
<i>07-interfered with detection of traffic hazard</i>		<i>99-unknown</i>
If helmet ejected during accident, what was the cause?	A.6.3.1.42 ____	A.6.3.2.42 ____
00-not applicable, no helmet or passenger	*description: _____	*description: _____
01-helmet not ejected	_____	_____
02-ejected due to loose fastening		(From logic analysis, performed according to [5.1.1 of Part 4] of this Common Methodology)
03-ejected due to too large helmet, poor fit		
04-ejected due to retention system failure		
05-ejection due to helmet shell failure		08-ejection due to roll-off, defective helmet design
06-ejection due to helmet impact damage		98-other (*describe, 80 characters)
07-ejection due to facial injury (i.e., jaw bone)		99-unknown
EFFECT OF APPAREL ON ACCIDENT CAUSATION		
Conspicuity contribution		
0-no apparel worn or no OV involvement	A.6.3.1.43 ____	
1-no apparent contribution of upper or lower torso garment	*description: _____	
2-bright colour upper and lower torso garment enhanced conspicuity		(From synthesis of photographs, medical reports, line-of-sight analysis)
3-bright upper torso garment enhanced conspicuity		
4-dull or dark upper and lower torso garment decreased conspicuity		
5-dull or dark upper torso garment decreased conspicuity		
8-other (*describe, 80 characters)		
9-unknown		
Comfort, fatigue, attention		
(see Coding Manual for response clarifications)	A.6.3.1.44 ____	
0-no apparel worn	*description: _____	
1-apparel made no apparent contribution to comfort, fatigue or attention		
2-apparel protected rider from adverse weather, reduced fatigue and preserved attention		
3-apparel uncomfortable, contributed to fatigue and inattention		
4-apparel very uncomfortable, distracted rider from driving tasks		(From witness interviews)
8-other (*describe, 80 characters)		
9-unknown		
Control interference		
0-no apparel worn	A.6.3.1.45 ____	
1-apparel did not interfere with motorcycle controls	*description: _____	
2-apparel interfered with motorcycle control, caused distraction from traffic	_____	(From synthesis)
3-apparel interfered with control, caused loss of control and accident		
8-other (*describe, 80 characters)		
9-unknown		

**A.6.4 CONTRIBUTING OVERALL FACTORS,
DATA SUMMARY SHEET**

AIN ___ ___ / ___ ___ / ___ ___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

Primary accident contributing factor

A.6.4.1.1 ___ ___

00-not applicable

*description: _____

01-motorcycle rider perception failure

02-motorcycle rider comprehension failure

03-motorcycle rider decision failure

(From synthesis of scene diagram, vehicle dynamics,
witness interviews and photographs)

04-motorcycle rider reaction failure

05-other vehicle driver perception failure

06-other vehicle driver comprehension failure

07-other vehicle driver decision failure

08-other vehicle driver reaction failure

09-motorcycle failure, including mechanical failure and defect

10-pre-existing motorcycle maintenance related problem

11-other vehicle failure, including mechanical failure and defect

12-pre-existing other vehicle maintenance related problem

13-roadway design defect

14-roadway maintenance defect

15-traffic control problem, temporary traffic obstruction

16-view obstruction, mobile or stationary

17-roadside environment factor, including animal and pedestrian involvement

18-adverse weather

19-another vehicle, not involved in the collision, but made some manoeuvre which might have been
a primary contributing factor or contributing factor

20-other vehicle post-crash motions from immediate prior collision

21-other vehicle avoiding a different collision

22-motorcycle avoiding a different collision

23-motorcycle rider failure, unknown type

24-other vehicle driver failure, unknown type

98-other (*describe, 80 characters)

99-unknown

**A.6.4 CONTRIBUTING OVERALL FACTORS,
DATA SUMMARY SHEET**

AIN ___/___/___

Investigator: ___; ___; ___; ___

Input by: ___; ___; ___; ___

Accident contributing factors

A.6.4.2.1 ___

(input contributing factor code in first two spaces, input confidence level

A.6.4.2.2 ___

level of contributing factor in third space according to the following codes:

A.6.4.2.3 ___

A - Definite contributing factor (95% confidence level)

A.6.4.2.4 ___

B - Probable contributing factor (80% confidence level)

C - Possible contributing factor (less than 80% confidence level)

*description: _____

000-not applicable

01-motorcycle rider perception failure

02-motorcycle rider comprehension failure

03-motorcycle rider decision failure

04-motorcycle rider reaction failure

05-other vehicle driver perception failure

06-other vehicle driver comprehension failure

07-other vehicle driver decision failure

08-other vehicle driver reaction failure

09-motorcycle failure, including mechanical failure and defect

10-pre-existing motorcycle maintenance related problem

11-other vehicle failure, including mechanical failure and defect

12-pre-existing other vehicle maintenance related problem

13-roadway design defect

14-roadway maintenance defect

15-traffic control problem, temporary traffic obstruction

16-view obstruction, mobile or stationary

17-roadside environment factor, including animal and pedestrian involvement

18-adverse weather

19-another vehicle, not involved in the collision, but made some manoeuvre which might have been
a primary contributing factor or contributing factor

20-other vehicle post-crash motions from immediate prior collision

21-other vehicle avoiding a different collision

22-motorcycle avoiding a different collision

23-motorcycle rider failure, unknown type

24-other vehicle driver failure, unknown type

25-motorcycle rider physical or physiological failure (heart attack, seizure, etc.)

26-motorcycle rider drug and/or alcohol involvement

27-motorcycle rider experience or exposure to similar situations

28-motorcycle rider conflicting behaviours or pre-occupation

29-motorcycle rider unsafe acts or risk taking behaviour

30-other vehicle driver physical or physiological failure (heart attack, seizure, etc.)

31-other vehicle driver drug and/or alcohol involvement

32-other vehicle driver experience or exposure to similar situations

33-other vehicle driver conflicting behaviours or pre-occupation

34-other vehicle driver unsafe acts or risk taking behaviour

998-other (*describe, 80 characters)

999-unknown

**A.6.5 COLLISION CONTACT CODE
DATA SUMMARY SHEET**

AIN _____/_____/_____

Investigator:____; ____; ____; ____

Input by:____; ____; ____; ____

Motorcyclist A.6.5.1 ____
1-rider
2-passenger

Motorcycle passenger number A.5.1.2.1 ____
(input "0" if the rider) (Assigned, see A.5.1, Human factors DSS)

Instructions:

Referring to the injuries listed in DSS A.5.2, enter the collision contact code for each injury. Collision contact codes are listed in the Coding Manual. Injury collision data is from the Injury worksheets. Input all that apply. Input "0000" for all remaining responses.
(Response numbers are identified by recording the column number, followed by the row number)

A.6.5.2.1.				A.6.5.2.2.			
Body Region: Head							
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____	
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____	
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____	
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____	
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____	
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____	
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____	
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____	
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____	

A.6.5.3.1.				A.6.5.3.2.			
Body Region: Neck (except spine)							
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____	
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____	
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____	
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____	
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____	
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____	
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____	
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____	
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____	

**A.6.5 COLLISION CONTACT CODE
DATA SUMMARY SHEET**

AIN _____ / _____ / _____

Investigator: _____; _____; _____

Input by: _____; _____; _____

A.6.5.4.1.

A.6.5.4.2.

Body Region: Thorax						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

A.6.5.5.1.

A.6.5.5.2.

Body Region: Upper extremities						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

A.6.5.6.1.

A.6.5.6.2.

Body Region: Abdomen						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

**A.6.5 COLLISION CONTACT CODE
DATA SUMMARY SHEET**

AIN _____ / _____ / _____

Investigator: _____; _____; _____; _____

Input by: _____; _____; _____; _____

A.6.5.7.1.

A.6.5.7.2.

Body Region: Pelvis						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

A.6.5.8.1.

A.6.5.8.2.

Body Region: Spine						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

A.6.5.9.1.

A.6.5.9.2.

Body Region: Lower extremities						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

A.6.5 COLLISION CONTACT CODE
DATA SUMMARY SHEET

AIN _____/_____/_____

Investigator: _____; _____; _____

Input by: _____; _____; _____

A.6.5.10.1.

A.6.5.10.2.

Body Region: Whole body						
1	Injury 1	Collision contact code 1	_____	1	Collision contact code 2	_____
2	Injury 2	Collision contact code 1	_____	2	Collision contact code 2	_____
3	Injury 3	Collision contact code 1	_____	3	Collision contact code 2	_____
4	Injury 4	Collision contact code 1	_____	4	Collision contact code 2	_____
5	Injury 5	Collision contact code 1	_____	5	Collision contact code 2	_____
6	Injury 6	Collision contact code 1	_____	6	Collision contact code 2	_____
7	Injury 7	Collision contact code 1	_____	7	Collision contact code 2	_____
8	Injury 8	Collision contact code 1	_____	8	Collision contact code 2	_____
9	Injury 9	Collision contact code 1	_____	9	Collision contact code 2	_____

**B.2 CED METHODS
DATA SUMMARY SHEET,
METHODS 1, 2, AND 3**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

Data collected using which methods

(See Part 2, 4.3.3 for full method descriptions)
(input all that apply; input "0" in remaining responses)

- 1-full stop interview at location
- 2-identification and telephone follow-up
- 3-remote observation at location: photography, and/or video
- 4-no CED collected; input "0" in all remaining CED DSS responses

B.2.1.1 ____
B.2.1.2 ____
B.2.1.3 ____

How many motorcycles were interviewed using Methods 1 and 2?

B.2.2 ____ ____ ____

How many motorcycles were interviewed using B.6, Optional Petrol Station Human Factors CED?

B.2.3 ____ ____ ____

**B.3 CED
ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET,
METHODS 1, 2, AND 3**

AIN _____/_____/_____
Investigator: _____; _____; _____; _____
Input by: _____; _____; _____; _____

	Motorcycle trafficway	Other vehicle or pedestrian trafficway
--	--------------------------	---

TRAFFICWAY VEHICLE WAS TRAVELLING, PRE-CRASH

Other vehicle number

A.4.3.1 _____

(Assigned; from DSS A.4.3 Other vehicle mechanical factors)

(Record the count of each type of vehicle and the count of any pedestrians that passed along the motorcycle pre-crash path. If an OV or pedestrian is involved in the accident, record the type of vehicle and the count of any pedestrians that passed along the pre-crash path of the vehicle or the pedestrian path, as recorded on the Accident scene concurrent exposure data worksheet.)

999-unknown or not counted

Bicycles	B.3.1.1 _____	B.3.2.1 _____
Mopeds/mofas (L1)	B.3.1.2 _____	B.3.2.2 _____
Motorcycles (L3)	B.3.1.3 _____	B.3.2.3 _____
Passenger car with a maximum mass less than or equal to 800 kg (M1)	B.3.1.4 _____	B.3.2.4 _____
Passenger car with a maximum mass greater than 800 kg and less than 2 t (M1)	B.3.1.5 _____	B.3.2.5 _____
Passenger car with a maximum mass greater than 2 t (M1)	B.3.1.6 _____	B.3.2.6 _____
Mini Light trucks with a maximum mass of less than or equal to 1.5 t	B.3.1.7 _____	B.3.2.7 _____
Light trucks with a maximum mass greater than 1.5 t and less than or equal to 3.5 t	B.3.1.8 _____	B.3.2.8 _____
Trucks and heavy goods vehicles with a maximum mass greater than 3.5 t	B.3.1.9 _____	B.3.2.9 _____
Sport utility vehicles (SUVs) with a maximum mass less than or equal to 5 t	B.3.1.10 _____	B.3.2.10 _____
Minibuses, buses and vans with a maximum mass less than 5 t	B.3.1.11 _____	B.3.2.11 _____
Buses with a maximum mass greater than 5 t	B.3.1.12 _____	B.3.2.12 _____
Pedestrians	B.3.1.13 _____	B.3.2.13 _____
Other (*describe, 80 characters)	B.3.1.14 _____	B.3.2.14 _____
	*description: _____	*description: _____
	_____	_____
	_____	_____

**B.3 CED
ENVIRONMENTAL FACTORS
DATA SUMMARY SHEET,
METHODS 1, 2, AND 3**

AIN ___/___/___
Investigator: ___; ___; ___; ___
Input by: ___; ___; ___; ___

WEATHER

Ambient temperature

(code plus (+) or minus (-); e.g., + 15, -08)

B.3.1.15 ___ ___ ___ deg C

(From Accident scene concurrent exposure data worksheet)

Weather description

(see Coding Manual for definitions)

0-clear

1-cloudy, partly cloudy

2-overcast

3-drizzle, light rain

4-moderate or heavy rain

5-snow

6-sleet, freezing rain

7-hail

8-other (*describe, 80 characters)

9-unknown

B.3.1.16 ___ *description: _____

(From Accident scene concurrent exposure data worksheet,
scene photographs)

Wind description

0-none, calm

1-light

2-moderate

3-strong

4-light with gusts

5-moderate with gusts

6-strong with gusts

7-variable

8-other (*describe, 80 characters)

9-unknown

B.3.1.17 ___ *description: _____

(From Accident scene concurrent exposure data worksheet)

Wind direction with respect to motorcycle path

(see Coding Manual for definitions)

0-no wind

1-left crosswind

2-headwind

3-right crosswind

4-tailwind

8-other (*describe, 80 characters)

9-unknown

B.3.1.18 ___ *description: _____

(From Accident scene concurrent exposure data worksheet)

**C.4.1.3 MOPED/MOFA MODULE
 ADDITIONAL ENVIRONMENTAL FACTORS
 DATA SUMMARY SHEET**

AIN _____/_____/_____
 Investigator: _____; _____; _____; _____
 Input by: _____; _____; _____; _____

NOTE: Use as a supplement to the Basic Data summary sheets.

Other vehicle number A.4.3.1 ____ (Assigned; from Vehicle information and accident description worksheet)

	Moped/mofa	Other vehicle
--	------------	---------------

TRAFFICWAY IN WHICH VEHICLE WAS TRAVELLING

	Moped/mofa	Other vehicle
In a lane which is	C.4.1.3.1.1 ____	C.4.1.3.2.1 ____
0-not applicable	*description: _____	*description: _____
1-dedicated to mopeds	_____	_____
2-open to mopeds	_____	_____
3-marked: "one way except for bicycles and mopeds"		
8-other (*describe, 80 characters)		
9-unknown		

Applicable speed limit for mopeds/mofas at accident scene C.4.1.3.1.2 ____ _
 999-unknown

Moped/mofa speed limit units C.4.1.3.1.2.1 ____
 0-not applicable
 1-kilometres per hour
 2-miles per hour

Applicable maximum legal design speed for mopeds/mofas C.4.1.3.1.3 ____ _
 000-not applicable
 999-unknown

Moped/mofa design speed units C.4.1.3.1.3.1 ____
 0-not applicable
 1-kilometres per hour
 2-miles per hour

**C.4.1.4.1 MOPED/MOFA MODULE
ADDITIONAL MECHANICAL FACTORS
DATA SUMMARY SHEET**

AIN _____/_____/_____
Investigator: _____; _____; _____
Input by: _____; _____; _____

Has the engine/driveline been visibly tampered with? C.4.1.4.1.1 ____

- 1-no (input "0" in C.4.1.4.1.2, and go to table, below)
- 2-yes
- 9-unknown

Engine tampered with by fitting a tuning kit (i.e., a commercially available combination of performance enhancing items)? C.4.1.4.1.2 ____

- 0-not applicable
- 1-no
- 2-yes
- 9-unknown

For each blank cell, respond (unless noted otherwise):

- 0-not applicable
- 1-no
- 2-yes

		C.4.1.4.1.3	C.4.1.4.1.4	C.4.1.4.1.5	C.4.1.4.1.6	C.4.1.4.1.7	C.4.1.4.1.8	C.4.1.4.1.9	C.4.1.4.1.10
		Original equipment?	Aftermarket?	Visibly modified?	Dismantled by investigator?	Enlarged?	Tuned?	Removed?	Type-approved?
01	Engine								
02	Driveline								
03	Intake filter								
04	Carburetor							-----	
05	Exhaust system								
06	Cylinder							-----	
07	Ignition system					-----		-----	
08	Transmission ratio		-----			-----		-----	
09	Left pedal					-----	-----		
10	Right pedal					-----	-----		

**C.4.1.6.1 MOPED/MOFA MODULE
 ADDITIONAL CONTRIBUTING FACTORS
 ACCIDENT CAUSATION EVALUATION**

AIN _____/_____/_____
 Investigator: _____; _____; _____; _____
 Input by: _____; _____; _____; _____

Data collected using which method? D.4.1.6.1.1 ____
 (See Part 2, 4.3.3 for full method descriptions) D.4.1.6.1.2 ____
 (Input all that apply; input "0" in remaining responses) D.4.1.6.1.3 ____
 1-full stop interview at location
 2-identification and telephone follow-up
 3-remote observation at location: photography, and/or video

Moped/Mofa number D.4.1.6.1.4 ____ (Assigned
 000-not applicable at CED site; from Motorcycle
 mechanical factors concurrent
 exposure data worksheet.)

Was moped/mofa travelling slowly relative to traffic? D.4.1.6.1.5 ____
 1-no (input "0" in D.4.1.6.1.6)
 2-yes
 9-unknown

If moped/mofa was travelling slower than the D.4.1.6.1.6 ____
surrounding traffic, why? *description: _____
 0-not applicable _____
 1-inadequate power _____
 2-maximum legal design speed of moped
 3-applicable moped speed limit at accident scene
 8-other (*describe, 80 characters)
 9-unknown

Appendix C

University of Pavia report

Comparison of CED methods
Video Module vs Petrol Station Module
Italy: A. Marinoni, M. Sillo, R. Pezzuto, M. Comelli, E. Torre
Spain: J. Pedragosa, D. Camì, E. Higuera

Special thanks to Mr. Pogliani for the graphic edition

Introduction

In order to be able to identify risk factors in motorcycle accidents studies, a control group is needed, i.e. to collect data on the vehicle sample travelling in the same area where accidents occurred.

In literature few different types of control groups are presented:

- 1) Photography or video recording of traffic, plus follow-up of motorcycles via licence plate number, plus signs indicating voluntary or police assisted stopping of motorcycle for questionnaire interview.
- 2) Photography or video recording traffic, plus follow up of motorcycle via licence plate number
- 3) Only photography or video recording of traffic
- 4) Manual or video recording of traffic, plus collection of additional vehicle and human factor information at petrol station within the sampling region.
- 5) No exposure sampling if, during the study sampling period, the circumstances at the accident site have changed so that flow of traffic at the time of the accident does not reoccur.

Objectives

The aim of this report is to compare the two methods used in MAIDS research: Video Module and Petrol Station Module.

Methodology

This study is developed on MAIDS data and on video recordings gathered for accidents cases of the database coming from two research centres, Pavia and Barcelona.

1) Petrol Station Module

Petrol Station concurrent exposure sampling plan: establish a complete list of all petrol stations within the sampling region. Contact each petrol station manager to describe the study and obtain an estimate of the typical number of motorcycle riders who use the petrol station during one day during the peak motorcycle riding season. Obtain the cooperation and consent of the petrol station manager to use the station as a site for data collection.

Stratify the petrol stations by location (i.e. urban versus rural) or by typical number motorcycle riders who use the petrol station. Ensure by appropriate means that the stratification method generates a list of petrol stations which are representative of the population who are riding in the sample region during the time of the accident data collection.

NOTE 1. It is recommended that the number of petrol stations sampled shall be at least one petrol station for 100,000 persons residing within the sample region.

Randomly select a petrol station from the list of the petrol stations selected to participate in the concurrent exposure data collection. Randomly select a week of the year. Record any deviations from an equal probability selection process (i.e. all weeks have an equal chance of being selected). Randomly select a day of the week. Record

any deviation from an equal probability selection process (i.e. all days have an equal chance of being selected). Randomly select an hour among the known hours of operation of the petrol station. Record any deviation from an equal probability selection process (i.e. all hours of operation have an equal chance of being selected).

NOTE2. It is recommended that the hour selected for the start of the petrol station concurrent exposure data collection shall be at least two hours prior to the closing of the petrol station.

Repeat the petrol station sampling schedule until a sufficient number of sampling periods have been selected to meet the requirements needed.

2) Video module

The video module was developed during the case collecting period. The sampling of video method finds the requirements described, and was done as soon as possible after the day of the accident, and

- at the same roadway location
- on the same day of the week
- at the same time of the day, from 30 min before to 30 min after the estimated time of the accident.

One or two weeks after an accident occurred, the research team records, with the support of a video camera, the accident scene for one hour in order to count the traffic travelling through the accident site, and analyse the main features of the motorcycles, and motorcyclists doing the same manoeuvre, or following the same path as the motorcycle involved in accident. In Spain, due to the great number of motorcycles circulating in the same streets of the area, it was decided to collect information of a maximum of 50 motorcycles in those cases.

Spanish data collection

Petrol station Module was developed in Spain from January 2001 to June 2001 and in Italy from December 2000 to February 2002. At the beginning of the research program, the principal investigator prepared a petrol station sampling plan. This plan included names and addresses of the petrol stations selected as well as the assigned days of the week and hours in which the research team should collect petrol station concurrent exposure data. The principle investigator contacted the Petrol Station Guild in order to assure the co-operation of the petrol station managers and to assure that the controls planned were representative of the population riding in the sample area.

The number of controls in petrol station to be done was approximately the same as the number of accidents collected in the study.

Italian video data collection

Description

MAIDS project included 200 Italian cases, but only 196 video recordings were done, since four of them involved two motorcycles, and so considered as two different accidents. In order to have the same kind of vehicle flow, all videos were recorded on accident scene one or two weeks after the event, at the time it happened, in same traffic, and atmospheric conditions.

Two types of video recording were analysed:

- 181 1 hour videos, starting 30 minutes before and ending 30 minutes after the time of accident, in the above mentioned conditions, and with the video camera mounted on a tripod. In this position the video camera could film vehicles for a longer period of time, and in all the directions travelled from the ones involved in the accident;
- 15 20 minutes videos, starting 10 minutes before and ending 10 minutes after the time of accident, in the same conditions. Among them some videos were done with a mobile camera, so that all the environmental components and perception problems, which may influence the accident causation, could be revealed. These videos are relative to the following accidents: 86, 102, 106, 107, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119.

The video camera used for the survey is a Sony Video 8XR Handycam CCD-TR425E. In order to watch and analyse the videos, the camera was mostly connected to a television, while only for very few cases videos were transformed in VHS format and read with a video recorder. This last procedure could be considered the most useful and rapid one, since there is more manageability in the video recorder remote controller; the possibility to forward the tape more quickly, having the image on screen in cases of no traffic, make the video reading easier. Though VHS videos could be considered better, more time is needed to transfer the 8mm video into this format.

Worksheets were used in different ways to analyse the travelling motorcycles:

In the 157 worksheets each column correspond to a travelling motorcycle, so that data on the single motorcycle can be obtained in a disaggregated way; for the remaining 39 cases the counting of each variable was done according to an aggregated way. These accidents are the following: 1-2, 3, 12, 21, 22, 33, 34, 35, 41, 44, 47, 50, 51, 53, 54, 58, 63, 74, 78, 81, 86, 90, 96, 102, 106, 107, 109, 110, 111, 113, 114, 117, 119, 123, 124, 130, 150, 151, 182.

6108 two wheels vehicles were analysed among mopeds and motorcycles travelling in the same path as those involved in the accidents. It was counted also the number of vehicles which could have travelled in the same accident path, if the same conditions were present, e.g. in a moving queue of vehicles not only the motorcycles overtaking on the right or left were taken into consideration, but also the ones which could have done this manoeuvre.

General problems during the data collection

The most relevant problem in collecting data was the difficulty in gaining same data when the vehicles were in motion, even with the support of the slow-motion function or stopping the image. Due to the high travelling speed, in some cases it was difficult to detect the type of gloves and shoes for both rider and passenger. During night videos the number of missing data increased remarkably, even though artificial lighting was present, or the motorcycle was illuminated by cars headlamps.

The presence of a passenger sometimes may have interfered with the collection of some data regarding rider, e.g. type of helmet or the upper torso garment when the motorcycle is observed from the rear side.

Video variables analysed:

Type of motorcycle. This variable was divided in the following categorisations: *MPSC* (moped scooter), *MPNS* (moped no scooter), *MCSC* (motorcycle scooter), *MCNS* (motorcycle no scooter). In some cases scooters' displacement was not observable either because some models differentiate themselves from little details or the licence plate was not readable from the video. Where the displacement was difficult to collect, the researchers categorised the vehicle according to the sound it produced.

Motorcycle model. Videos were analysed by people with different expertise in judging types of motorcycles (Claudio Stoppini and Mattia Sillo). The most remarkable difficulty in gaining this information was in detecting the models of moped no scooters, due to a lack of experience by the researchers in noticing the small differences of the components. There may be also some incoherencies in the number of MBK and Yamaha scooters, since the two manufacturers, being founded in one, produce very similar vehicles.

Motorcycle colour. Shading offs were also taken into consideration and coded as the major colour group, e.g. it was coded as blue also all different tunings of light blue. Under the category *Multicoloured* all motorcycle having no predominant colour were coded, even though the side exposed to the video camera showed only one tone.

Luggage. This information was coded in the following categories:

- *No Cargo*, when the rider carried no luggage on his motorcycle.
- *On Cargo/parcel rack*, when the luggage was carried either in the front or in the back of the motorcycle, especially on mopeds.
- *In front of rider*, where the cargo was placed between the rider's legs in case of scooters, or on tank in case of motorcycles.
- *On handlebar*, when the cargo was ether carried on it or attached.
- *On back*, when the luggage was carried on the back of the rider.
- *On passenger*, when it was carried by the passenger.
- *NN Cargo box*, in cases when there was a cargo box and so not known if the cargo was present inside or not.
- *Other*, when the luggage carried cannot be classified in the above listed categories and so for example placed in side bags, specially for mopeds, or handbags in case of female riders.

It has to be noted that, as there is the possibility of carrying more that one luggage, its number may be bigger than the motorcycles' one.

Gender. This data was collectable in most cases, especially when there was no helmet on head; in some other cases, the gender was guessed taking consideration of the body morphology or the type of garments.

Helmet present. In order to analyse correctly this variable, the compulsory helmet wearing law, put in force in 31/03/2000, has to be taken into consideration: this obliges all riders of any age riding motorcycles of any displacement to use a head protection. Videos have been recorded also before this law.

Type of helmet. The most relevant difficulty in collecting this information was to distinguish the so called "partial helmet" from the "half police one", as the difference between the two types are very small, especially at high travelling speed.

Headlamp on. In some cases it was impossible to detect the operational of headlamps, either because the motorcycle was visible only from rear, or the sun rays created some reflexes, this especially for mopeds where the lamp is rather small.

Upper torso garment. This information was coded according the following categories:

- As *Light* it was considered any garment which covered partially the upper torso, e.g. t-shirts, since due to the high speed and quality image it was impossible to distinguish the material.
- *Medium* garment was considered shirts with long sleeves or light jackets.
- *Heavy* included all other types of garments with the exception of leather ones, since they were coded in the respective category.

Lower torso garment. The coded categories were the following:

- *Light* garment included mainly shorts or skirts.
- *Medium* garment contained any kind of trousers apart from the ones made of leather or riding special material.

Shoes. The collection of shoes information was rather difficult to gain, since in some cases the videos recorded the motorcycle from the front, hiding the inferior part of rider's body. It was nearly impossible to distinguish heavy shoes from the reinforced shoes category.

Gloves. It was difficult to identify the type of gloves used by riders. The *present* and *not present* categories were missing, so if they were worn but the type of material was uncertain, it has been coded as unknown.

Comparison between variables

Variables and analysis method

The comparison were made considering different aspects:

- a) *variables available with both methods:*
 - type and number of common variables
 - type and number of variables available with only one of the two methods

- b) *For the common variables:*
 - quality
 - informative ability
 - concordances and discordances

1. Variables collected with the two methods

The number and the type of variables is conditioned by the method of data collection.

- 1) Video recording (analysed by vehicles experts who are able to classify the travelling vehicles types).

The variables gathered from this kind of analysis are the following:

Number of passengers	(A.2.5)
Motorcycle type	(A.4.1.1.4.2)
Predominating motorcycle colour	(A.4.1.1.10)
Headlamp function	(A.4.1.7.6)
Motorcycle manufacture	(A.4.1.1.1)
Cargo/Luggage on motorcycle	(A.5.1.1.23)
Gender	(A.5.1.1.11)
Upper torso garment	(A.5.3.1.1)
Upper torso garment oriented	(A.5.3.1.2)
Lower torso garment	(A.5.3.1.3)
Lower torso garment oriented	(A.5.3.1.4)
Footwear	(A.5.3.1.5)
Footwear Motorcycle oriented	(A.5.3.1.6)
Gloves	(A.5.3.1.7)
Gloves motorcycle oriented	(A.5.3.1.8)
Helmet worn on head	(A.5.3.1.11)

2. Variables collected with PS module

At Petrol stations of all the DSS variables are collected, except of course those connected to the accident: the gathered information are the one of the video module plus the ones listed below.

Mechanical factors

Mc year (A.4.1.1.3)
Odometer reading (A.4.1.1.8)

Registered owner category (A.4.1.1.9)
Motorcycle displacement (A.4.1.1.11)
Number of cylinders (A.4.1.1.12)
Tyre size and manufacture (A.4.1.1.15/ A.4.1.1.16, A.4.1.2.15/ A.4.1.2.16)
Rim size and manufacture (A.4.1.1.17/A.4.1.1.18, A.4.1.1.17/A.4.1.1.18)
Tread type (A.4.1.1.19)
Measure tread depth (A.4.1.1.20)
Inflation pressure (A.4.1.1.21)
Suspension type and condition (A.4.1.1.23/A.4.1.1.24, A.4.1.2.23/A.4.1.2.24)
Brake system control, configuration, type, mechanism and conditions (A.4.1.1.25-
A.1.1.38/ A.4.1.2.25-A.1.2.38)
Frame configuration, material, steering stem adjustment, conditions (A.4.1.1.39-
A.4.1.1.46)
Rider and passenger footrest type (A.4.1.1.47/A.4.1.1.48)
Side stand type (A.4.1.1.49)
Central stand type (A.4.1.1.50)
Headlamp assembly type (A.4.1.1.51)
Handlebar type, mounting, construction, width, rise, sweep (A.4.1.1.52-A.4.1.1.55.3)
Seat type, fastening (A.4.1.1.56/A.4.1.1.57)
Fuel tank type, material, cap type, tank retention (A.4.1.1.58-A.4.1.1.62)
Drive line type and condition (A.4.1.1.74- A.4.1.1.77)
Throttle control condition (A.4.1.1.78 – A.4.1.1.82)
Exhaust system condition (A.4.1.1.83)
All mechanical factors in components table – See Attachment I

Human factors

Date of birth (A.5.1.1.2)
Age (A.5.1.1.3)
Region/country of driver's licence qualification (A.5.1.1.4)
Driver's licence qualification (A.5.1.1.5)
Driver's licence date of issue (A.5.1.1.6)
Does the licence held qualify the driver for driving the vehicle? (A.5.1.1.7)
Citizenship (A.5.1.1.8)
Height (A.5.1.1.9)
Weight (A.5.1.1.10)
Educational status (A.5.1.1.12)
Duration of formal education (A.5.1.1.12.1)
Occupational code (A.5.1.1.13)
Eye correction (A.5.1.1.14)
All vehicle experience (A.5.1.1.15)
On any street motorcycle experience (A.5.1.1.16)
On ridden motorcycle (A.5.1.1.17)
Number of days per year that motorcycle are ridden (A.5.1.1.18)
Distance motorcycle is ridden per year (A.5.1.1.19)
Motorcycle training (A.5.1.1.20)
Motorcycle percent use estimate (A.5.1.1.21)
Experience riding with passengers on Mc (A.5.1.1.22)
Experience riding with similar cargo/luggage (A.5.1.1.23)
All moving traffic violation convictions in the previous 5 years (A.5.1.1.24)

Any motorcycle moving traffic accident experience in the previous 5 years? (A.5.1.1.25)
Any other vehicle moving traffic accident experience during the previous 5 years? (A.5.1.1.26)
Trip origin (A.5.1.1.27)
Trip destination (A.5.1.1.28)
Trip length (A.5.1.1.29)
Frequency of this road use (A.5.1.1.30)
Length of time since departure (A.5.1.1.31)
Alcohol/drug type of use (A.5.1.1.32)
Physiological impairment, permanent condition (A.5.1.1.39)
Physiological impairment, transient condition (A.5.1.1.40)
Stress experienced that day (A.5.1.1.41)

Personal Protective equipment

Eye coverage in use, separate from helmet (A.5.3.1.9)
Colour of eye coverage lens (A.5.3.1.10)

Helmet

Was helmet properly adjusted on head? (A.5.3.1.12)
Was helmet securely fastened? (A.5.3.1.13)
Type of helmet (A.5.3.1.14)
Type of coverage (A.5.3.1.15)
Predominating colour (A.5.3.1.16)
Colour of face shield (A.5.3.1.17)
Helmet owned by wearer? (A.5.3.1.18)
Helmet fit (A.5.3.1.19)
Claimed frequency of helmet use on head (A.5.3.1.20)
Condition under which helmet is usually worn (A.5.3.1.21)
Helmet manufacturer (A.5.3.1.22)
Date of manufacture (A.5.3.1.23)
Model (A.5.3.1.24)
Conformity to which qualification (A.5.3.1.25)
Labelled size (A.5.3.1.26)
Helmet mass (A.5.3.1.27)
Helmet Condition (A.5.3.1.28)
Retention system type (A.5.3.1.29)

Additional mechanical factors- moped/mofa module

Has the engine/driveline been visibly tampered? (C.4.1.4.1.1)
Engine tampered with tuning kit (C.4.1.4.1.2)
All mechanical factors in components table – See Attachment II

Additional human factors – moped/mofa module

If rider completed special moped training, how much time since completion? (C.4.1.5.1)

If rider did not complete special moped training, what was the reason? (C.4.1.5.2)

In this way, the video recording allows the collection of a subset of the variables offered by the Ps module.

Methods of statistical analysis

Besides the common uni and bivariate descriptive analysis, the comparison between responders and non responders was made with chi square methods (Pearson).

In order to investigate the possible differences between the concurrent exposure samples obtained using the petrol station, and the video methods, the problem of a too high difference of the sample numerousness had to be faced. Some variables were collected in both samples. Their values were grouped in quite broad categories, to exclude from the analysis the fine tuning discrepancies, which could be a pure artefact of the different coding habits of the interviewers. The substantial frequency of each category, moreover allows to safely apply the multinomial logistic regression model to compare the two samples. The advantage of this model over the chi square test is its ability to estimate the amount of the discrepancies and not just their statistical significance. It allows to obtain separate conditional odds ratios of being in a determined category (with respect with a reference one) for the petrol station method vs. the video method. [A conditional odds ratio is a usual odds ratio, which is computed using only the units in two categories of the response variable: the category examined and a predetermined reference category]. The confidence intervals for each odds ratio are given as well, allowing to estimate the maximum discrepancies between the two methods compatible with the empirical evidence collected. The multinomial logistic regression model allows to take into account more than one explanatory variable, just as the usual binary logistic regression, however, in this analysis we used only one explanatory variable, namely the sampling method. A technical description of the multinomial logistic regression model can be found in: Walters S.J.; Campbell M.J.; Lall R.: "Design and analysis of trials with quality of life as an outcome: a practical guide". *Journal of Biopharmaceutical Statistics*; 11; 3 (2001) 155-176.

Results

Non responders analysis

Results of statistical analysis

Cases presented in the report

The sample is composed by 320 controls collected at Petrol stations (197 in Italy and 123 in Spain) and 256 video recording (100 in Spain and 156 in Italy) done in the same area where the accidents occurred according the methodology explained above. The sampling is inferior to the final one, since on the first cases the analysis of no responders was not considered.

A) Refusals

A) In case of video recording, of course refusals don't occur: anyway in case of accidents happened during night hours, in the dark, videos are not so good quality recorded, and so they can not be used to collect certain data available, instead, during day light. Their usage is limited to the vehicle counting.

B) In case of Petrol station interviews few refusals had occurred.

In Tab.1 refusals are summarised: 38,4% of the contacted motorcycle riders refused to cooperate, with a higher rate in Spain (44% vs 33,3 %)

The most common reasons for no cooperation had been (Tab.2) "be in a hurry" (69,1 %), and "not interested in the study" (30,3%).

Different are the reasons in the two countries: in Italy, where the refusal rate is lower, the nearly totality (92,65%) were due to lack of time, while in Spain 51% riders said that they were not interested in the study. This underlines the necessity of a better motivation for the studied area population towards the research.

Refusals characteristics

Few characteristics of the refusals in the two countries were compared and analysed so that any possible bias in selection could be detected.

Gender

Tab.3 summarises the type of refusals according to gender: excluding the cases where the interviewer was not able to identify the gender of the rider, the distribution is quiet homogeneous, although a slight excess number of refusing females, especially in Italy, could be noticed. Though this rate is not statistically significant.

Age

In Tab.4 the age among refusals is described: as expected, the adult group (30-59) is over represented in both countries with significant difference.

Vehicle characteristics

Tab.5 shows the distribution of PTW types among the responder and no responder subjects: according to same specific characteristics no difference among groups is noticed whether in the total or within the single country.

Tab.6 presents the frequency of motor displacement among responding and refusing subjects: even in this case the distributions homogeneity guarantees the no selectivity of the sample.

Day of week and time of day

Tab.7 underlines that the distributions of the refusals according to day of week is quiet homogeneous and no significant differences can be noticed neither on the total or in the single country.

Different kind of data can be obtained considering time of day (Tab.8): if data are analysed by grouping the working hours (8-16) from the afternoon and evening hours (after 16) a better cooperation is shown after work (80,4% vs. 43,4%).

In conclusion, it can be affirmed that there are no great differences among the responder and no responder subjects with the exception of some obvious evidences such as the lower will to cooperation due to “in a hurry” situations during the morning hours for the subjects who were in working age.

In this cases it seemed to be useful to suggest an appointment at home using, in this way, the petrol station as a recruitment place, and not for interview, and at the same time try to motivate adequately the cooperation.

Tab. 1 Non responders (PS Module)

	ITALY	SPAIN	TOTAL
NR	81	97	178
Total	243	220	463
%	33,33%	44,09%	38,4%

$$\chi^2 = 5,61 (P < 0,05)$$

Tab. 2 Reason for refusing

Reason	ITALY %	SPAIN %	TOTAL %
To be in a hurry	75 (92,6)	48 (49,5)	123 (69,1)
Not interested	5 (6,2)	49 (51,0)	54 (30,3)
Tired	1 (1,2)	/	1 (0,6)
Totale	81	97	178

$$\chi^2 = 38,41 (P < 0,01)$$

Tab. 3 Characteristics of non responders: Sex

	ITALY		SPAIN		TOTAL	
	R	NR	R	NR	R	NR
M	85,8	72,6	80,0	79,0	83,2	75,23
F	14,2	27,4	20,0	21,0	16,8	24,77
T	162	62	123	47	285	109
$\chi^2(P)$	5,34	(P<0,05)	0,018	(ns)	3,21	(ns)

Tab. 4 Characteristics of non responders: Age

	ITALY		SPAIN		TOTAL	
	R	NR	R	NR	R	NR
<20	35,2	7,4	19,0	8	27,6	7,6
20-29	23,4	29,6	45,0	38,0	32,8	32,8
30-59	30,9	56,8	35,0	52,0	32,9	54,9
>60	10,5	6,2	1,0	2,0	6,2	4,7
Totale	162	81	123	50	285	131
$\chi^2(P)$	27,18	(P<0,001)	5,83	(ns)	28,69	(P<0,01)

Tab. 5 Characteristics of non responders: Type of PTW

	ITALY		SPAIN		TOTAL	
	R	NR	R	NR	R	NR
MPSC	56,2	56,8	33,0	44,0	27,6	7,6
MPNS	8,8	8,6	15,0	2,0	32,8	32,8
MCSC	19,8	16,0	30,0	38,0	32,9	54,9
MCNS	15,4	18,5	21,0	16,0	6,2	4,7
Totale	162	81	123	88	285	169
$\chi^2(P)$	0,71	(ns)	12,16	(P<0,01)	5,24	(ns)

Tab. 6 Characteristics of non responders: Engine displacement

	ITALY		SPAIN		TOTAL	
	R	NR	R	NR	R	NR
<50 cc	64,8	66,7	49,0	49,0	57,9	57,6
51-125 cc	8,0	11,1	25,0	35,0	15,4	23,0
126-250 cc	11,7	3,7	8,0	7,0	10,2	5,5
251-500 cc	1,9	4,9	3,0	2,0	2,5	3,6
501-750 cc	11,1	9,9	11,0	6,0	10,9	7,9
751-1000 cc	1,9	2,5	2,0	/	2,1	1,2
1001-1500 cc	0,6	1,2	2,0	1,0	1,1	1,2
Totale	162	81	123	84	285	165
$\chi^2(P)$	6,65	(ns)	5,02	(ns)	8,02	(ns)

Tab. 7 Characteristics of non responders: Day of week

	ITALY		SPAIN		TOTAL	
	R	NR	R	NR	R	NR
Monday	20,9	16,0	8	6	15,4	7,6
Tuesday	19,7	27,2	17	30	18,6	32,8
Wednesday	18,5	11,1	24	16	21,0	54,9
Thursday	19,1	23,5	11	15	15,8	4,7
Friday	13,6	19,8	26	15	18,9	17,4
Saturday	8,0	2,5	13	16	10,18	10,11
Totale	162	81	123	97	285	178
χ^2 (P)	8,36	(ns)	9,78	(ns)	10,53	(ns)

Tab. 8 Characteristics of non responders: Time of day

	ITALY		SPAIN		TOTAL	
	R	NR	R	NR	R	NR
8-10	/	2,5	9	49	3,9	6,2
10-12	24,1	40,7	24	35	23,9	31,5
12-14	8,0	9,9	26	7	15,8	22,5
14-16	24,7	25,9	15	2	20,7	25,8
16-18	37,7	18,5	19	6	29,5	11,2
18-20	4,3	2,5	2	/	3,5	2,8
20-22	0,6	0	5	1	2,5	0
22-24	0,6	0	/	/	0,4	0
Totale	162	81	127	97	285	178
χ^2 (P)	17,13	(P<0,01)	16,43	(P<0,01)	28,93	(P<0,01)

Comparison between methods

B) Comparison Video-Ps

The comparative study is made on 323 controls at Petrol Station and 296 video recordings: a total of 9018 two wheel vehicles recorded (Tab.9 and Tab. 10).

l°) Data quality control

Tab.11 and Tab.12 show the comparison between the two methodologies in the two countries concerning missing data: it seems clear that also for the common variables the percentage of missing data is higher in the video recording, especially for the data concerning garment and gender of the rider and the colour of the motorcycle.

The “headlamp function” information was analysed, because the PS survey was done in Spain before the decision of collecting this data was taken.

Comparison among variables:

a) Type of vehicles

The first variable to be analysed with the two methods has been the PTW engine. Tab.13 presents the distribution of motorcycle according motor displacement: a concordance of the results among the two methods can be noticed, i.e. although numerically very different, the vehicle engine distribution is the same whether for under 50cc or over 50cc.

The distribution remains the same between the two methods even if we separate the data according to type of area (Tab.14): respecting the specific differences of the travelling park, in Pavia both at Petrol Station than in videos the <50cc vehicles (66% and 67,5%) predominate, while in Barcelona there is a slight prevalence of >50cc displacements.

b) Vehicle type

Tab.15a shows the vehicle distribution according type: the most represented are moped scooter (47,1%) and motorcycle scooter (21,9%), then motorcycle no scooter and moped no scooter. The difference between methods is not significant.

Tab.15b shows the distribution of mc type in Spain: mope scooter are the most representative (35,6%) followed by motorcycle scooter (31,15%), motorcycle no scooter (23%), and moped no scooter (10,4%).

Tab.15c shows the mc type frequency in Italy: 50,9 % were moped scooters, 18,8% were moped no scooters, 15,2% motorcycle no scooters, and 15% moped no scooter. The distribution is homogeneous in both methods in both areas: the multinominal regression underlines a concordance of results.

Tab.16a indicates the Mc manufacture frequency in the two countries. Tab.16b presents the Mc manufacture distribution in Spain: the tendency is quiet homogeneous, although the poor number of Ps controls doesn't allow to analyse desegregations with a higher number of modalities.

Tab16c shows the number Mc manufactures in Italy: the distribution is almost uniform among all categories represented, though a higher frequency of Piaggio in video and Yamaha at petrol station can be noticed. The larger variety of manufactures in Italy rather than in Spain is remarkable.

Tab.17a/b/c show the distribution according motorcycle colour. In order to make a comparison, data were aggregated (Tab.18a/b/c) so that a better variables standardisation was guaranteed; the colour identification is rather uncertain in the video recordings.

The comparison doesn't show significant differences for total analysis, while divided by area, it is evident in Spain a slight tendency of medium colours (31,7%) in Ps and dark colours in videos: this means that video recordings probably make the distinction between medium and dark colours more difficult, as colours are often made false by the film. No differences in Italy.

Tab.19a presents the distribution according cargo characteristics. The comparison shows a larger frequency of vehicles with cargo in PS (25,8%) rather than in videos

(15,8%). Disaggregated by area, it shows that in Italy (Tab.19c) the frequency of cargo is rather homogeneous in both methods, while in Spain (Tab.19b) riders carry more often cargo at Petrol station rather than in videos.

Distribution according gender (Tab.20a/b/c) underlines a specific majority of males (84,2%) without differences among the two methods.

As helmet concerns, 11,2% of the subjects didn't wear it when data were collected: the difference between the two methods is relevant, i.e. the motorcycle riders without helmet are nearly absent at petrol stations (Tab.21a/b/c): the interviewer shall detect this information at arrival and not gaining it by asking directly to the rider!

Tab.22a and Tab.23a show the distribution of upper and lower torso garment. The comparison between the two methods underlines an excess of medium in Petrol Stations rather than in videos, proportional to the heavy garment (Tab. 22a and Tab.23b). By disaggregating according areas, it can be noticed that in Spain (Tab.22b and Tab.23b) all modalities are differently distributed among the two methods, i.e. in videos are more frequent the heavy rather than medium and light categories; this is even more evident for the lower torso garment. By analysing (Tab.24a and Tab.25a) if the rider's garment was motorcycle oriented or not, at Petrol station the oriented are more represented particularly in Italy: it is necessary to remark that the wearing of a light or heavy garment is related to weather and season and that Spanish survey at Petrol Station was developed mainly during the warmer months.

There is no difference among the two methods as the type of shoes (Tab.26a, Tab.27a) concerns, while significant are the comparing results for gloves: in Spain (Tab.28b) there are a higher frequency of riders who don't wear any hand protection at petrol stations, while in Italy (Tab.28c) riders with no gloves are more remarkable in videos. Even in this case there can be a bias connected to the interview modality, but also to the difficulties in detecting the presence and the type of gloves in the video recording.

Tab.29a shows the distribution of Mc oriented gloves: in Spain (Tab.29b) there are no relevant differences, while in Italy (Tab.29c) oriented gloves are more represented at petrol stations rather than in videos.

Conclusions

The comparison between the two methods (Video and Petrol station) was made on the Spanish and Italian data.

- 1) The numerosness of vehicles and drivers is definitely very different in the two methods, considering the same number of correspondent cases and the same economic investment. Video module guarantees a larger representativeness of the travelling park in the studied area, and so allows a more detailed analysis of typologies and manufactures of the vehicles.

Video > Petrol Station

- 2) Collected variables

- a) The typology of the collected variables is much larger in the Petrol station module: with this method all variables collectable with the video module (about 20) concerning the type of vehicle and some characteristics of the rider (garment, passenger, cargo etc) can be gained, but also all the other variables present in the DSS (with the exception of course of the ones connected to the accident)
- b) Quality and completeness of data. Other than qualitative, other kind of differences were noticed between the two methods as the completeness of the common variables concerns, especially in sites with an higher traffic density or in not suitable lighting condition.

Petrol Station > Video

- 3) Refusals

In video module of course there are no refusals, although in some situations the videos are not possible (at night, during dark hours etc.) or even if there have been recorded, only the information about the traffic density can be collected.

At Petrol Stations, 38,4% of the subjects did not cooperate, mostly for "in a hurry" reasons. Since non responders were more frequent during the working hours among women and subjects in working age, it can be deduced that refusals can be decreased with the actuation of strategies to increase the interest and the motivation.

Video • Petrol Station

- 4) Vehicle Typology

The concordance between the two methods is very good as the PTW engine and the vehicle type concerns, as far as grouped distributions are considered.

Video recording surely gives a more representative distribution of Mc manufacture, since the bigger numerosness guarantees a larger variety of brands.

As colour, cargo/luggage and gender concerns, the two methods are quiet concordant, made exception of some situations (medium or dark colour and cargo

carried by occupants) that, in our opinion, could be connected to bias due to video reading.

Riders garment

Considering the different seasons in which the data collecting can be done with the two methods, the best way to analyse these data is to see if garment was Mc oriented or not: in this sense we have a very good concordance. (Tab. 30)

In conclusion:

- PS module guarantees a representative sampling of vehicles travelling in the area, for this reason it can be considered a good method, at least as well as the video method, concerning vehicle typologies, displacement, and characteristics of great interest. This method is also sufficiently useful to underline differences among areas.
- Other than video, Petrol station module allows the collection of human and mechanical factors, fundamental for the analysis of accident risk factors.
- The common information are more reliable and complete.
- A better standardisation of the interview method is needed, which guarantees that the collection of some variables (helmet, headlamp, gloves) can be directly observed by the interviewer and not asked to the rider during the interview.
- Video recording can be useful to gather some more information about the travelling park in the area: for a study such MAIDS 8-10 video recordings could be enough, done in different places and at different times of the research period.
- Video recordings done on accident scene can be also useful during the accident dynamic reconstruction showing sometimes some behaviours which can be repeated.

Tab. 9 Video and PS Module

Module	ITALY	SPAIN	TOTAL
Video	196 (66,2%)	100 (33,8%)	296
PS	200 (61,9%)	123 (38,1%)	323

Tab. 10 Mc riders and vehicles collected by two methods

Module	ITALY	SPAIN	TOTAL
Video	5923 (68,2%)	2772 (31,8%)	8695
PS	200(61,9%)	123 (38,1%)	323
Total	6123 (68,0%)	2895 (32,0%)	9018

Tab. 13 Comparison between video and PS module IT+SP: Engine

Engine	VIDEO	PS	TOTAL
< 50	4803(61,0%)	195(60,3%)	4998 (61,0%)
> 50	3072 (39,0%)	128 (39,7%)	3200 (39,0%)
Total	7875*	323	8198

- 973 unknown engine

MULTINOMIAL REGRESSION

Parameter Estimates

ENGINE		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
<50	Intercept	.447	.023	374.220	1	.000			
	PS vs Video	-2.594E-02	.116	.050	1	.823	.974	.776	1.223

(outcome engine = >50cc is the comparison group)

Tab. 14 Comparison between video and PS module: Engine and Area

Engine	ITALY		SPAIN	
	<u>Video</u>	<u>PS</u>	<u>Video</u>	<u>PS</u>
< 50	3910 (66,0%)	135 (67,5%)	893 (45,0%)	60 (48,0%)
> 50	2013 (34,0%)	65 (32,5%)	1059 (55,0%)	63 (52,0%)
	5923	200	1952	123

$$\chi^2 \text{ IT-SP} = 264.018 \quad \text{Prob} > \chi^2 = 0.0000$$

$$\chi^2 \text{ IT} = 0.191 \quad \text{Prob} > \chi^2 = 0.662$$

$$\chi^2 \text{ SP} = 0.428 \quad \text{Prob} > \chi^2 = 0.513$$

LOGISTIC REGRESSION

Variables in the Equation

<u>ENGINE</u>		B	S.E.	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower	Upper
<50	PS vs Video	-.089	.119	.564	1	.452	1.093	.866	1.379
	IT vs SP	.832	.052	258.068	1	.000	2.297	2.075	2.542
	Constant	-.079	.045	14.271	1	.000	.845		

(outcome engine = >50cc is the comparison group)

Tab. 11 SPAIN: Comparison between video and PS module : missing data (%)

Category label	Video	PS		Totale
Mc manufacturer	(24,7%)	0	(0%)	684 (23,6%)
Mc type	(29,6%)	0	(0%)	820 (28,3%)
Predominating Mc colour	(10,2%)	0	(0%)	284 (9,8%)
Headlamp function	(3,0%)	121	(98%)	204 (0,7%)
Number of passenger	(0,9%)	0	(0%)	24 (0,8%)
Cargo/luggage on Mc	(5,5%)	9	(7%)	161 (5,6%)
Gender	(29,3%)	0	(0%)	892 (28,1%)
Upper torso garment	(22,2%)	0	(0%)	676 (21,3%)
Upper torso garment Mc oriented	(22,0%)	0	(0%)	670 (21,1%)
Lower torso garment	(39,4%)	0	(0%)	1200 (37,9%)
Lower torso garment Mc oriented	(39,5%)	0	(0%)	1203 (37,9%)
Footwear	(57,6%)	0	(0%)	1754 (55,3%)
Footwear Mc oriented	(57,8%)	0	(0%)	1760 (55,5%)
Gloves	(52,1%)	0	(0%)	1588 (50,1%)
Gloves Mc oriented	(57,9%)	0	(0%)	1765 (55,7%)
Helmet worn on head	(1,5%)	0	(0%)	45 (1,4%)
Totali	13600	130		13730

Tab. 12 ITALY: Comparison between video and PS module : missing data (%)

Category label	Video	PS		Totale
Mc manufacturer	(29,1%)	0	(0%)	1767 (28,2%)
Mc type	(2,5%)	0	(0%)	153 (2,4%)
Predominating Mc colour	(15,1%)	0	(0%)	919 (14,6%)
Headlamp function	(19,5%)	17	(8,5%)	1205 (19,2%)
Number of passenger	(0,2%)	0	(0%)	13 (0,2%)
Cargo/luggage on Mc	(3,0%)	0	(0%)	180 (2,9%)
Gender	(15,5%)	0	(0%)	995 (15,0%)
Upper torso garment	(6,0%)	1	(0,5%)	388 (5,9%)
Upper torso garment Mc oriented	(6,2%)	0	(0%)	398 (6,0%)
Lower torso garment	(12,8%)	0	(0%)	823 (12,4%)
Lower torso garment Mc oriented	(13,0%)	0	(0%)	832 (12,6%)
Footwear	(75,1%)	0	(0%)	4814 (72,8%)
Footwear Mc oriented	(75,2%)	0	(0%)	4821 (72,9%)
Gloves	(31,1%)	0	(0%)	1996 (30,2%)
Gloves Mc oriented	(89,9%)	0	(0%)	2002 (82,3%)
Helmet worn on head	(0,7%)	0	(0%)	42 (0,6%)
Totale	20142	18		20160

Tab. 15a Comparison between methods: Mc Type IT+SP

Mc type	Video	P.S.	TOTAL
MPSC	3703 (47,0%)	156 (48,3%)	3859 (47,1%)
MPNS	1100 (14,0%)	39 (12,1%)	1139 (13,9%)
MCSC	1726 (22,0%)	73 (22,6%)	1799 (21,9%)
MCNS	1346 (17,0%)	55 (17,0%)	1401 (17,1%)
Totale	7875	323	8198

MULTINOMIAL REGRESSION

Parameter Estimates

Mc type		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
MPSC	Intercept	1.012	.032	1011.020	1	.000			
	PS vs Video	3.052E-02	.160	.036	1	.849	1.031	.753	1.411
MPNS	Intercept	-.202	.041	24.657	1	.000			
	PS vs Video	-.142	.213	.443	1	.506	.868	.571	1.318
MCSC	Intercept	.249	.036	46.764	1	.000			
	PS vs Video	3.446E-02	.182	.036	1	.850	1.035	.724	1.479

(outcome Mc type = Moto no scooter "MCNS" is the comparison group)

Tab. 15b SPAIN: Comparison between methods: Mc Type

Mc type	Video	P.S.	TOTAL
MPSC	696 (35,7%)	42 (34,1%)	738 (35,6%)
MPNS	197 (10,1%)	18 (14,6%)	215 (10,4%)
MCSC	608 (31,1%)	37 (30,1%)	645 (31,1%)
MCNS	451 (23,1%)	26 (21,1%)	477 (23,0%)
Totale	1952	123	2075

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Mc type								Lower Bound	Upper Bound
MPSC	Intercept	.434	.060	51.519	1	.000			
	PS vs Video	4.569E-02	.257	.032	1	.859	1.047	.633	1.731
MPNS	Intercept	-.828	.085	94.060	1	.000			
	PS vs Video	.461	.318	2.094	1	.148	1.585	.849	2.958
MCSC	Intercept	.299	.062	23.103	1	.000			
	PS vs Video	5.411E-02	.263	.042	1	.837	1.056	.630	1.769

(outcome Mc type = Moto no scooter "MCNS" is the comparison group)

Tab. 15c ITALY: Comparison between methods: Mc Type

Mc type	Video	P.S.	TOTAL
MPSC	3007 (50,8%)	114 (57%)	3121 (50,9%)
MPNS	903 (15,2%)	21 (10,5%)	924 (15,0%)
MCSC	1118 (18,8%)	36 (18%)	1154 (18,8%)
MCNS	895 (15,2%)	29 (14,5%)	924 (15,2%)
Totale	5923	200	6123

MULTINOMIAL REGRESSION

Parameter Estimates

Mc type		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
MPSC	Intercept	1.212	.038	1012.942	1	.000			
	PS vs Video	.157	.211	.552	1	.458	1.170	.773	1.771
MPNS	Intercept	8.899E-03	.047	.036	1	.850			
	PS vs Video	-.332	.290	1.305	1	.253	.718	.406	1.268
MCSC	Intercept	.222	.045	24.602	1	.000			
	PS vs Video	-6.250E-03	.254	.001	1	.980	.994	.605	1.633

(outcome Mc type = Moto no scooter "MCNS" is the comparison group)

Tab. 16a IT+SP: Comparison between methods: Mc manufacturer

Mc manufacturer	CED Method		Total
	P.S.	Video	
APRILIA	5,6%	12,0%	11,7%
BMW	0,3%	1,2%	1,1%
BETA	1,8%	0,5%	0,5%
CAGIVA	0,3%	0,1%	0,1%
DUCATI	0%	1,1%	1,0%
GARELLI	0%	0,7%	0,7%
GILERA	2,2%	2,2%	2,2%
HARLEY DAVIDSON	0 (0%)	0,9%	0,9%
HONDA	14,5%	15,5%	15,5%
KAWASAKY	3,4%	1,1%	1,2%
MALAGUTI	4,6%	4,4%	4,4%
MBK	0%	4,9%	4,7%
PIAGGIO	23,8%	35,3%	34,8%
PEUGEOT	3,7%	1,7%	1,8%
SUZUKY	5,5%	3,2%	3,3%
YAMAHA	15,4%	7,1%	7,5%
OTHER	18,5%	7,9%	8,4%
Total	323	6397	6720

Tab. 16b SPAIN: Comparison between methods: Mc manufacturer

Mc manufacturer	CED Method		Total
	P.S.	Video	
APRILIA	4,1%	5,4%	5,3%
HONDA	29,3%	38,8%	38,3%
KAWASAKY	6,5%	1,9%	2,2%
OTHER	19,5%	16,7%	16,8%
PIAGGIO	17,9%	17,5%	17,5%
SUZUKY	4,9%	3,9%	3,9%
YAMAHA	17,9%	15,8%	15,9%
Total	123	2088	2211

Tab. 16c ITALY: Comparison between methods: Mc manufacturer

Mc manufacturer	CED Method		Total
	P.S.	Video	
APRILIA	13 (6,5%)	653 (15,1%)	666 (14,8%)
BMW	1 (0,5%)	75 (1,8%)	76 (1,7%)
BETA	6 (3,0%)	30 (0,7%)	36 (0,8%)
CAGIVA	1 (0,5%)	7 (0,2%)	8 (0,2%)
DUCATI	0 (0%)	70 (1,6%)	70 (1,6%)
GARELLI	0 (0%)	47 (1,1%)	47 (1,0%)
GILERA	7 (3,5%)	139 (3,2%)	146 (3,3%)
HARLEY DAVIDSON	0 (0%)	61 (1,4%)	61 (1,4%)
HONDA	11 (5,5%)	184 (4,3%)	195 (4,3%)
KAWASAKI	3 (1,5%)	30 (0,7%)	33 (0,8%)
MALAGUTI	15 (7,5%)	283 (6,6%)	298 (6,6%)
MBK	0 (0%)	317 (7,3%)	317 (7,0%)
PIAGGIO	55 (27,5%)	1893 (43,8%)	1948 (43,1%)
PEUGEOT	12 (6,0%)	108 (2,5%)	120 (2,7%)
SUZUKY	12 (6,0%)	124 (2,9%)	136 (3,0%)
YAMAHA	28 (14,0%)	128 (3,0%)	156 (3,5%)
OTHER	36 (18,0%)	160 (3,7%)	196 (4,3%)
Total	200	4309	4509

Tab. 17a IT+SP: Comparison between methods: Mc colour

Colour	P.S.	Video	Totale
White	20 (6,2%)	887 (11,6%)	907 (11,4%)
Yellow	6 (1,8%)	264 (3,4%)	270 (3,4%)
Multicoloured	22 (6,2%)	254 (3,3%)	276 (3,4%)
Silver-grey	55 (17,0%)	997 (13,1%)	1052 (13,2%)
Orange	3 (0,9%)	60 (0,8%)	63 (0,8%)
Gold	/	82 (1,1%)	82 (1,0%)
<u>Light (%)</u>	106 (32,8%)	2544 (33,2%)	2650 (33,2%)
Green	21 (6,2%)	320 (4,2%)	341 (4,3%)
Red	47 (14,5%)	1191 (15,5%)	1238 (15,5%)
Purple	6 (1,8%)	80 (1,0%)	86 (1,1%)
Chrome metallic	/	69 (0,9%)	69 (0,9%)
<u>Medium (%)</u>	74 (22,9%)	1660 (21,7%)	1734 (21,7%)
Black	73 (22,9%)	2374 (31,1%)	2447 (30,7%)
Blue	69 (21,3%)	981 (12,8%)	1050 (13,2%)
Brown	1 (0,3%)	86 (1,1%)	87 (1,1%)
<u>Dark (%)</u>	143 (44,3%)	3441 (45,0%)	3584 (45,0%)
Total	323	7645	7968

Tab. 17b SPAIN: Comparison between methods: Mc colour

Colour	P.S.	Video	Totale
White	9 (7,3%)	267 (10,7%)	276 (10,6%)
Yellow	1 (0,8%)	49 (1,9%)	50 (1,9%)
Multicoloured	2 (1,6%)	197 (7,9%)	199 (7,6%)
Silver-grey	19 (15,4%)	145 (5,8%)	164 (6,3%)
Orange	/	12 (0,5%)	12 (0,5%)
Gold	/	3 (0,1%)	3 (0,1%)
<u>Light (%)</u>	31 (25,2%)	673 (27,0%)	704 (26,9%)
Green	8 (6,5%)	124 (5,0%)	132 (5,1%)
Red	29 (23,6%)	380 (15,3%)	409 (15,7%)
Purple	2 (1,6%)	16 (0,6%)	18 (0,7%)
Chrome metallic	/	69 (2,7%)	69 (2,6%)
<u>Medium (%)</u>	39 (31,7)	589 (23,6%)	628 (24,0%)
Black	28 (22,8%)	931 (37,4%)	959 (36,7%)
Blue	24 (19,5%)	286 (11,5%)	310 (11,9%)
Brown	1 (0,8%)	13 (0,5%)	14 (0,5%)
<u>Dark (%)</u>	53 (43,1)	1230 (49,4%)	1283 (49,1%)
Total	123	2492	2615

(other is in multicoloured)

Tab. 17c ITALY: Comparison between methods: Mc colour

Colour	P.S.	Video	Totale
White	11 (5,5%)	620 (12,0%)	631 (11,8%)
Yellow	5 (2,5%)	219 (4,2%)	224 (4,2%)
Multicoloured	20 (10,0%)	57 (1,1%)	77 (1,4%)
Silver-grey	36 (18,0%)	852 (16,5%)	888 (16,6%)
Orange	3 (1,5%)	48 (0,9%)	51 (1,0%)
Gold	/	79 (1,5%)	79 (1,5%)
<u>Light (%)</u>	75 (37,5%)	1875 (36,4%)	1950 (36,4%)
Green	13 (6,5%)	196 (3,8%)	209 (3,9%)
Red	18 (22,5%)	811 (15,7%)	829 (15,5%)
Purple	4 (2,0%)	64 (1,2%)	68 (1,3%)
<u>Medium (%)</u>	35 (17,5%)	1071 (20,7%)	1106 (20,6%)
Black	45 (22,5%)	1443 (28,0%)	1488 (27,8%)
Blue	45 (22,5%)	695 (13,5%)	740 (13,8%)
Brown	/	73 (1,4%)	73 (1,4%)
<u>Dark (%)</u>	90 (45 %)	2211 (42,8%)	2301 (43,0%)
Total	200	5157	5357

Tab. 18a IT+SP: Comparison between methods: Mc colour

Mc Colour	P.S. (%)	Video (%)	Totale
Light	106 (32,8)	2548 (33,3)	2654 (33,3)
Medium	74 (22,9)	1660 (21,7)	1734 (21,7)
Dark	143 (44,3)	3441 (45,0)	3584 (45,0)
Totale	323	7649	7972

MULTINOMIAL REGRESSION

Parameter Estimates

Mc Colour		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
LIGHT	Intercept	-.300	.026	132.155	1	.000			
	Ps vs Video	1.048E-03	.131	.000	1	.994	1.001	.775	1.294
Medium	Intercept	-.729	.030	595.013	1	.000			
	Ps vs Video	7.016E-02	.146	.230	1	.631	1.073	.805	1.429

(outcome Mc colour = **dark** is the comparison group)

Tab. 18b SPAIN: Comparison between methods: Mc colour

Mc Colour	P.S. (%)	Video (%)	Totale
Light	31 (25,2)	673 (27,0)	704 (26,9)
Medium	39 (31,7)	589 (23,6)	628 (24,0)
Dark	53 (43,1)	1230 (49,4)	1283 (49,1)
Totale	123	2492	2615

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Mc Colour								Lower Bound	Upper Bound
LIGHT	Intercept	-.603	.048	158.180	1	.000			
	Ps vs Video	6.672E-02	.231	.083	1	.773	1.069	.680	1.682
MEDIUM	Intercept	-.736	.050	215.948	1	.000			
	Ps vs Video	.430	.217	3.925	1	.048	1.537	1.005	2.350

(outcome mc colour = **dark** is the comparison group)

Tab. 18c ITALY: Comparison between methods: Mc colour

Mc Colour	P.S. (%)	Video (%)	Totale
Light	75 (37,5)	1875 (36,4)	1950 (36,4)
Medium	35 (17,5)	1071 (20,7)	1106 (20,6)
Dark	90 (45,0)	2211 (42,8)	2301 (43,0)
Totale	200	5157	5357

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
MC COLOUR								Lower Bound	Upper Bound
Light	Intercept	-.165	.031	27.567	1	.000			
	Ps vs Video	-1.749E-02	.159	.012	1	.913	.983	.719	1.343
Medium	Intercept	-.725	.037	379.087	1	.000			
	Ps vs Video	-.220	.203	1.174	1	.279	.803	.540	1.194

(outcome mc colour = **dark** is the comparison group)

Tab. 19a IT+SP: Comparison between methods: Cargo/Luggage

Cargo/Luggage	P.S.	Video	Total
No cargo	233 (74,2%)	7169 (84,2%)	7402 (83,8%)
Si cargo	81 (25,8%)	1347 (15,8%)	1428 (16,2%)
<u>Total</u>	314	8516	8830

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
CARGO									
si	Intercept	-1.672	.030	3169.597	1	.000			
	PS vs Video	.615	.132	21.610	1	.000	1.850	1.427	2.398

(outcome cargo = no is the comparison group)

Tab. 19b SPAIN: Comparison between methods: Cargo/Luggage

Cargo/Luggage	P.S.	Video	Total
No cargo	65 (57,0%)	1970 (75,2%)	2035 (74,5%)
Cargo	49 (43%)	650 (24,8%)	699 (25,5%)
<u>Total</u>	114	2620	2734

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
CARGO								Lower Bound	Upper Bound
si	Intercept	-1.109	.045	600.894	1	.000			
	PS vs Video	.826	.195	18.042	1	.000	2.285	1.560	3.345

(outcome cargo = no is the comparison group)

Tab. 19c ITALY: Comparison between methods: Cargo/Luggage

Cargo/Luggage	P.S.	Video	Total
No cargo	168 (84,0%)	5199 (88,2%)	5367 (88,0%)
Si cargo	32 (16,0%)	697 (11,8%)	729 (12,0%)
<u>Total</u>	200	5896	6096

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
CARGO								Lower Bound	Upper Bound
si	Intercept	-2.009	.040	2481.667	1	.000			
	PS vs Video	.351	.197	3.177	1	.075	1.421	.966	2.091

(outcome cargo = no is the comparison group)

Tab. 20a IT+SP: Comparison between methods: Gender

Gender	P.S.	Video	Total
Male	268 (81,7%)	6382 (84,3%)	6650 (84,2%)
Female	60 (17,3%)	1185 (15,7%)	1248 (15,8%)
<u>Total</u>	328	7567	7895

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
GENDER									
female	Intercept	-1.684	.032	2833.354	1	.000			
	PS vs Video	.187	.146	1.636	1	.201	1.206	.905	1.606

(outcome gender = male is the comparison group)

Tab. 20b SPAIN: Comparison between methods: Gender

Gender	P.S.	Video	Total
Male	98 (79,0%)	1758(81,6%)	1856 (81,5%)
Female	26 (21,0%)	396 (18,4%)	422 (18,5%)
<u>Total</u>	124	2154	2278

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
<u>Gender</u>								Lower Bound	Upper Bound
female	Intercept	-1.491	.056	718.030	1	.000			
	PS vs Video	.164	.228	.517	1	.472	1.178	.754	1.840

(outcome gender = **male** is the comparison group)

Tab. 20c ITALY: Comparison between methods: Gender

Gender	P.S.	Video	Total
Male	170 (83,3%)	4624 (85,4%)	4794 (85,3%)
Female	34 (16,7%)	789 (14,6%)	823 (14,7%)
<u>Total</u>	204	5413	5617

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
GENDER									
female	Intercept	-1.768	.039	2107.384	1	.000			
	PS vs Video	.159	.192	.686	1	.408	1.172	.805	1.707

(outcome gender= male is the comparison group)

Tab. 21a IT+SP: Comparison between methods: Helmet on head

Helmet on head	P.S.	Video	Total
No	1 (0,3%)	1082 (11,5%)	1083 (11,2%)
Yes	327 (99,7%)	8285 (88,5%)	8612 (88,8%)
<u>Total</u>	328	9367	9695

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Helmet on head								Lower Bound	Upper Bound
no	Intercept	-2.036	.032	3965.695	1	.000			
	PS vs Video	-3.754	1.002	14.037	1	.000	2.342E-02	3.285E-03	.167

(outcome Helmet on head = yes is the comparison group)

Tab. 21b SPAIN: Comparison between methods: Helmet on head

Helmet on head	P.S.	Video	Total
No	1 (0,8%)	213 (7,1%)	214 (6,8%)
Yes	123 (99,2%)	2788 (92,9%)	2911 (93,2%)
<u>Total</u>	124	3001	3125

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Helmet on head								Lower Bound	Upper Bound
no	Intercept	-2.572	.071	1308.810	1	.000			
	PS vs Video	-2.240	1.007	4.954	1	.026	.106	1.480E-02	.765

(outcome Helmet on head = yes is the comparison group)

Tab. 21c ITALY: Comparison between methods: Helmet on head

Helmet on head	P.S.	Video	Total
No	0 (0%)	869 (13,6%)	869 (13,2%)
Yes	204 (100%)	5497 (86,4%)	5701 (86,8%)
<u>Total</u>	204	6366	6570

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Helmet on head									
no	Intercept	-1.845	.037	2553.231	1	.000			
	PS vs Video	-22.264	.000	.	1	.	2.143E-10	2.143E-10	2.143E-10

(outcome Helmet on head = yes is the comparison group)

Tab. 22a IT+SP: Comparison between methods: Upper torso garment

Upper torso garment	P.S.	Video	Total
None	1 (0,3%)	10 (0,1%)	11 (0,1%)
Light	111 (34,0%)	2769 (33,0%)	2880 (33,0%)
Medium	162 (49,5%)	3584 (42,8%)	3746 (43,0%)
heavy	53 (16,2%)	2028(24,1%)	2081 (23,9%)
<u>Total</u>	327	8391	8718

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Upper torso garment									
	None	Intercept	-5.312	.317	280.812	1	.000		
		PS vs Video	1.342	1.058	1.609	1	.205	3.826	.481 30.434
Light		Intercept	.311	.029	113.543	1	.000		
		PS vs Video	.428	.170	6.370	1	.012	1.534	1.100 2.138
Medium		Intercept	.569	.028	419.950	1	.000		
		PS vs Video	.548	.161	11.629	1	.001	1.730	1.262 2.370

(outcome Upper torso garment = heavy is the comparison group)

Tab. 22b SPAIN: Comparison between methods: Upper torso garment

Upper torso garment	P.S.	Video	Total
None	0 (0%)	9 (0,4%)	9 (0,4%)
Light	40 (32,3%)	473 (20,0%)	513 (20,6%)
Medium	63 (50,8%)	1028 (43,4%)	1091 (43,7%)
heavy	21 (16,9%)	860(36,3%)	881 (35,3%)
<u>Total</u>	124	2370	2494

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Upper torso garment	None	Intercept	-4.560	.335	185.180	1	.000		
		PS vs Video	-17.377	.000	.	1	.	2.839E-08	2.839E-08
Light		Intercept	-.598	.057	109.067	1	.000		
		PS vs Video	1.242	.275	20.331	1	.000	3.463	2.018
Medium		Intercept	.178	.046	14.910	1	.000		
		PS vs Video	.920	.256	12.902	1	.000	2.510	1.519

(outcome Upper torso garment = **heavy** is the comparison group)

Tab. 22c ITALY: Comparison between methods: Upper torso garment

Upper torso garment	P.S.	Video	Total
None	1 (0,5%)	1 (0,0%)	2 (0,03%)
Light	71 (35,0%)	2296 (38,1%)	2367 (38,0%)
Medium	99 (48,8%)	2556 (42,5%)	2655 (42,6%)
heavy	32 (15,8%)	1168 (19,4%)	1200 (19,4%)
<u>Total</u>	203	6021	6224

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Upper torso garment									
	None	Intercept	-7.063	1.000	49.844	1	.000		
		PS vs Video	3.597	1.426	6.368	1	.012	36.500	2.233 596.619
Light		Intercept	.676	.036	353.647	1	.000		
		PS vs Video	.121	.216	.314	1	.575	1.129	.739 1.723
Medium		Intercept	.783	.035	491.682	1	.000		
		PS vs Video	.346	.206	2.814	1	.093	1.414	.943 2.119

(outcome Upper torso garment = **heavy** is the comparison group)

Tab. 23a IT+SP: Comparison between methods: Lower torso garment

Lower torso garment	P.S.	Video	Total
Light	45 (13,7%)	837 (11,3%)	882 (11,4%)
Medium	278 (84,8%)	6120 (82,3%)	6398 (82,4%)
heavy	5 (1,5%)	474 (6,4%)	479 (6,2%)
<u>Total</u>	328	7431	7759

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Lower torso garment								Lower Bound	Upper Bound
Light	Intercept	.569	.057	97.845	1	.000			
	PS vs Video	1.629	.475	11.761	1	.001	5.097	2.009	12.928
Medium	Intercept	2.558	.048	2878.852	1	.000			
	PS vs Video	1.460	.454	10.355	1	.001	4.306	1.770	10.479

(outcome Lower torso garment = **heavy** is the comparison group)

Tab. 23b SPAIN: Comparison between methods: Lower torso garment

Lower torso garment	P.S.	Video	Total
Light	16 (12,9%)	208 (11,3%)	224 (11,4%)
Medium	106 (85,5%)	1185 (64,2%)	1291 (65,5%)
heavy	2 (1,6%)	453 (24,5%)	4555 (23,1%)
<u>Total</u>	124	1846	1970

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Lower torso garment								Lower Bound	Upper Bound
Light	Intercept	-.778	.084	86.360	1	.000			
	PS vs Video	2.858	.755	14.340	1	.000	17.423	3.970	76.471
Medium	Intercept	.962	.055	303.038	1	.000			
	PS vs Video	3.009	.716	17.663	1	.000	20.261	4.981	82.417

(outcome Lower torso garment = **heavy** is the comparison group)

Tab. 23c ITALY: Comparison between methods: Lower torso garment

Lower torso garment	P.S.	Video	Total
Light	29 (14,2%)	629 (11,2%)	658 (11,4%)
Medium	172 (84,3%)	4935 (88,4%)	5107 (88,2%)
heavy	3 (1,5%)	21 (0,4%)	24 (0,4%)
<u>Total</u>	204	5585	5789

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Lower torso garment	Light	Intercept	3.400	.222	234.863	1	.000		
		PS vs Video	-1.131	.646	3.067	1	.080	.323	9.103E-02
Medium		Intercept	5.460	.219	623.296	1	.000		
		PS vs Video	-1.411	.622	5.143	1	.023	.244	7.208E-02

(outcome Lower torso garment = **heavy** is the comparison group)

Tab. 24a IT+SP: Comparison between methods: Torso garment Mc oriented

Torso garment mc oriented	P.S.	Video	Total
No	291 (89,0%)	8037 (96,0%)	8328 (95,7%)
Yes	36 (11,0%)	336 (4,0%)	372 (4,3%)
<u>Total</u>	327	8373	8700

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Torso garment Mc oriented									
si	Intercept	-3.175	.056	3250.555	1	.000			
	PS vs Video	1.085	.185	34.300	1	.000	2.959	2.058	4.254

(outcome Torso garment MC oriented = **no** is the comparison group)

Tab. 24b SPAIN: Comparison between methods: Torso garment Mc oriented

Torso garment mc oriented	P.S.	Video	Total
No	108 (87,1%)	2086 (88,1%)	2194 (87,8%)
Yes	16 (12,9%)	281 (11,9%)	297 (11,9%)
<u>Total</u>	124	2367	2491

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Torso garment Mc oriented									
si	Intercept	-2.005	.064	995.174	1	.000			
	PS vs Video	9.511E-02	.275	.119	1	.730	1.100	.641	1.886

(outcome Torso garment MC oriented = **no** is the comparison group)

Tab. 24c ITALY: Comparison between methods: Torso garment Mc oriented

Torso garment mc oriented	P.S.	Video	Total
No	183 (90,1%)	5951 (99,1%)	6134 (98,8%)
Yes	20 (9,9%)	55 (0,9%)	75 (1,2%)
<u>Total</u>	203	6006	6209

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Torso garment Mc oriented	si								
	Intercept	-4.684	.135	1195.632	1	.000			
	PS vs Video	2.470	.272	82.667	1	.000	11.825	6.943	20.140

(outcome Torso garment MC oriented = **no** is the comparison group)

**Tab. 25a IT+SP: Comparison between methods: Lower torso garment
Mc oriented**

Lower torso garment Mc oriented	P.S.	Video	Total
No	322 (98,2%)	7376 (99,4%)	7698 (99,4%)
Yes	6 (1,8%)	43 (0,6%)	49 (0,6)
<u>Total</u>	328	7419	7747

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Lower torso garment Mc oriented								Lower Bound	Upper Bound
SI	Intercept	-5.145	.153	1131.563	1	.000			
	PS vs Video	1.162	.440	6.990	1	.008	3.196	1.351	7.564

(outcome Lower torso garment MC oriented = **no** is the comparison group)

**Tab. 25b SPAIN: Comparison between methods: Lower torso garment
Mc oriented**

Lower torso garment Mc oriented	P.S.	Video	Total
No	122 (98,4%)	1816 (98,5%)	1938 (98,5%)
Yes	2 (1,6%)	27 (1,5%)	29 (1,5%)
<u>Total</u>	124	1843	1967

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Lower torso garment Mc oriented									
si	Intercept	-4.209	.194	471.216	1	.000			
	PS vs Video	9.768E-02	.739	.017	1	.895	1.103	.259	4.691

(outcome Lower torso garment MC oriented = **no** is the comparison group)

**Tab. 25c ITALY: Comparison between methods: Lower torso garment
Mc oriented**

Lower torso garment Mc oriented	P.S.	Video	Total
No	200 (98,0%)	5560 (99,7%)	5760 (99,6%)
Yes	4 (2,0%)	16 (0,3%)	20 (0,4%)
<u>Total</u>	204	5576	5780

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Lower torso garment Mc oriented									
si	Intercept	-5.851	.250	546.132	1	.000			
	PS vs Video	1.939	.564	11.832	1	.001	6.950	2.303	20.977

(outcome Lower torso garment MC oriented = **no** is the comparison group)

Tab. 26a IT+SP: Comparison between methods: Footwear

Footwear	P.S.	Video	Total
Light	21 (6,4%)	163 (5,8%)	184 (5,8%)
Medium	289 (88,1%)	2505 (87,4%)	2794 (87,5%)
heavy	18 (5,5%)	198 (6,9%)	216 (6,7%)
<u>Total</u>	328	2866	3194

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
FOOTWEAR								Lower Bound	Upper Bound
Light	Intercept	-.195	.106	3.383	1	.066			
	PS vs Video	.349	.338	1.063	1	.303	1.417	.730	2.750
Medium	Intercept	2.538	.074	1181.772	1	.000			
	PS vs Video	.238	.254	.881	1	.348	1.269	.772	2.087

(outcome Footwear = **heavy** is the comparison group)

Tab. 26b SPAIN: Comparison between methods: Footwear

Footwear	P.S.	Video	Total
Light	7 (5,7%)	87 (6,8%)	94 (6,7%)
Medium	105 (84,7%)	1029 (80,9%)	1134 (81,3%)
heavy	12 (9,6%)	156 (12,3%)	168 (12,0%)
<u>Total</u>	124	1272	1396

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
FOOTWEAR									
Light	Intercept	-.584	.134	19.045	1	.000			
	PS vs Video	4.495E-02	.494	.008	1	.928	1.046	.397	2.755
Medium	Intercept	1.886	.086	482.091	1	.000			
	PS vs Video	.283	.317	.797	1	.372	1.327	.713	2.467

(outcome Footwear = **heavy** is the comparison group)

Tab. 26c ITALY: Comparison between methods: Footwear

Footwear	P.S.	Video	Total
Light	14 (6,9%)	76 (4,8%)	90 (5,0%)
Medium	184 (90,2%)	1476 (92,6%)	1660 (92,3%)
heavy	6 (2,9%)	42 (2,6%)	48 (2,7%)
<u>Total</u>	204	1594	1798

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
FOOTWEAR								Lower Bound	Upper Bound
Light	Intercept	.593	.192	9.514	1	.002			
	PS vs Video	.254	.524	.235	1	.628	1.289	.461	3.604
Medium	Intercept	3.559	.156	517.396	1	.000			
	PS vs Video	-.136	.443	.094	1	.759	.873	.366	2.081

(outcome Footwear = heavy is the comparison group)

Tab. 27a IT+SP: Comparison between methods: Footwear Mc oriented

Footwear Mc oriented	P.S.	Video	Total
No	318 (96,9%)	2819 (98,1%)	3137 (98,0%)
Yes	10 (3,1%)	54 (1,9%)	64 (2,0%)
<u>Total</u>	328	2873	3201

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Footwear Mc oriented									
si	Intercept	-3.955	.137	828.858	1	.000			
	PS vs Video	.496	.349	2.014	1	.156	1.642	.828	3.255

(outcome Footwear Mc oriented = **no** is the comparison group)

Tab. 27b SPAIN: Comparison between methods: Footwear Mc oriented

Footwear Mc oriented	P.S.	Video	Total
No	119 (96,0%)	1241 (96,5%)	1360 (96,5%)
Yes	5 (4,0%)	45 (3,5%)	50 (3,5%)
<u>Total</u>	124	1286	1410

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Footwear Mc oriented								Lower Bound	Upper Bound
si	Intercept	-3.317	.152	477.790	1	.000			
	PS vs Video	.147	.481	.094	1	.759	1.159	.451	2.975

(outcome Footwear Mc oriented = **no** is the comparison group)

Tab. 27c ITALY: Comparison between methods: Footwear Mc oriented

Footwear Mc oriented	P.S.	Video	Total
No	199 (97,5%)	1578 (99,4%)	1777 (99,2%)
Yes	5 (2,5%)	9 (0,6%)	14 (0,8%)
<u>Total</u>	204	1587	1791

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Footwear Mc oriented								Lower Bound	Upper Bound
si	Intercept	-5.167	.334	238.890	1	.000			
	PS vs Video	1.483	.563	6.941	1	.008	4.405	1.462	13.276

(outcome Footwear Mc oriented = **no** is the comparison group)

Tab. 28a IT+SP: Comparison between methods: Gloves

Gloves	P.S.	Video	Total
None	216 (65,9%)	4535 (77,3%)	4751 (76,7%)
Light	17 (5,2%)	282(4,8%)	299 (4,8%)
Medium	51 (15,5%)	535 (9,1%)	586 (9,4%)
heavy	44 (13,4%)	518 (8,8%)	562 (9,1%)
<u>Total</u>	328	5864	6198

MULTINOMIAL REGRESSION

Parameter Estimates

Gloves		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
None	Intercept	2.170	.046	2188.362	1	.000			
	PS vs Video	-.579	.172	11.342	1	.001	.561	.400	.785
Light	Intercept	-.608	.074	67.514	1	.000			
	PS vs Video	-.343	.295	1.351	1	.245	.710	.398	1.265
Medium	Intercept	3.229E-02	.062	.274	1	.600			
	PS vs Video	.115	.215	.288	1	.591	1.122	.737	1.710

(outcome Gloves = heavy is the comparison group)

Tab. 28b SPAIN: Comparison between methods: Gloves

Gloves	P.S.	Video	Total
None	65 (52,4%)	355 (24,3%)	420 (26,5%)
Light	5 (4,0%)	256 (17,6%)	261 (16,5%)
Medium	34 (27,4%)	434 (29,8%)	468 (29,6%)
heavy	20 (16,2%)	413 (28,3%)	433 (27,4%)
<u>Total</u>	124	1458	1582

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
GLOVES									
None	Intercept	-.151	.072	4.372	1	.037			
	PS vs Video	1.330	.266	25.047	1	.000	3.781	2.246	6.365
Light	Intercept	-.478	.080	36.150	1	.000			
	PS vs Video	-.908	.506	3.217	1	.073	.403	.150	1.088
Medium	Intercept	4.960E-02	.069	.521	1	.471			
	PS vs Video	.481	.290	2.750	1	.097	1.618	.916	2.856

(outcome Gloves = heavy is the comparison group)

Tab. 28c ITALY: Comparison between methods: Gloves

Gloves	P.S.	Video	Total
None	151 (74,0%)	4180 (94,7%)	4331 (93,8%)
Light	12 (6,0%)	26 (0,6%)	38 (0,8%)
Medium	17 (8,0%)	101 (2,3%)	118 (2,6%)
heavy	24 (12,0%)	105 (2,4%)	129 (2,8%)
<u>Total</u>	204	4412	4616

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
GLOVES								Lower Bound	Upper Bound
None	Intercept	3.684	.099	1390.206	1	.000			
	PS vs Video	-1.845	.241	58.630	1	.000	.158	9.856E-02	.253
Light	Intercept	-1.396	.219	40.605	1	.000			
	PS vs Video	.703	.416	2.855	1	.091	2.019	.894	4.563
Medium	Intercept	-3.884E-02	.139	.078	1	.780			
	PS vs Video	-.306	.346	.781	1	.377	.736	.374	1.452

(outcome Gloves = **heavy** is the comparison group)

Tab. 29a IT+SP: Comparison between methods: Gloves Mc oriented

Gloves Mc oriented	P.S.	Video	Total
No	67 (59,8%)	800 (69,4%)	867 (68,6%)
Yes	45 (40,2%)	352 (30,6%)	397 (31,4%)
<u>Total</u>	112	1152	1264

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Gloves Mc oriented								Lower Bound	Upper Bound
si	Intercept	-.821	.064	164.758	1	.000			
	PS vs Video	.423	.203	4.338	1	.037	1.526	1.025	2.273

(outcome Gloves Mc oriented = no is the comparison group)

Tab. 29b SPAIN: Comparison between methods: Gloves Mc oriented

Gloves Mc oriented	P.S.	Video	Total
No	34 (57,6%)	595 (64,2%)	629 (63,8%)
Yes	25 (42,4%)	331 (35,8%)	356 (36,2%)
<u>Total</u>	59	926	985

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Gloves Mc oriented								Lower Bound	Upper Bound
si	Intercept	-.586	.069	73.145	1	.000			
	PS vs Video	.279	.272	1.050	1	.306	1.322	.775	2.254

(outcome Gloves Mc oriented = no is the comparison group)

Tab. 29c ITALY: Comparison between methods: Gloves Mc oriented

Gloves Mc oriented	P.S.	Video	Total
No	33 (62,3%)	205 (90,7%)	238 (85,6%)
Yes	20 (37,7%)	21 (9,3%)	41 (14,4%)
<u>Total</u>	53	226	279

MULTINOMIAL REGRESSION

Parameter Estimates

		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
Gloves Mc oriented								Lower Bound	Upper Bound
si	Intercept	-2.278	.229	98.891	1	.000			
	PS vs Video	1.778	.364	23.797	1	.000	5.916	2.896	12.085

(outcome Gloves Mc oriented = no is the comparison group)

Appendix D

Common methodology database structure

Motorcycles: Common international methodology for in-depth accident investigations

Part 10: Database requirements

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Foreword

This Common Methodology consists of the following parts, under the general title *Motorcycles: Common international methodology for in-depth accident investigations*:

- *Part 1: Definitions*
- *Part 2: Sampling requirements*
- *Part 3: Accident data collection: on-scene, follow-up, and concurrent exposure data activities*
- *Part 4: Data assembly, accident reconstruction, and contributing factor analysis*
- *Part 5: Personnel selection and special training requirements*
- *Part 6: Quality control requirements*
- *Part 7: Liaison and cooperative agreement requirements*
- *Part 8: Equipment and facility requirements*
- *Part 9: Study implementation and schedule*
- *Part 10: Database requirements*
- *Part 11: Minimum statistical analysis*
- *Part 12: Reporting and publication*

Annex A is an integral part of this part of this Common Methodology. Annexes B and C are for information only.

Introduction

This Common Methodology has been prepared on the basis of Methods used in part in-depth motorcycle accident research. Its purpose is to define specific procedures for in-depth investigation of motorcycle accidents in various nations, to be compared, and to define a minimum and common set of definitions and procedures.

It is intended that the minimum requirements contained in this Common Methodology should be used in all motorcycle accident in-depth investigation intended for international publication, dissemination, discussion, or data exchange. Recommendations for methods which exceed the minimum set, and which are applicable to other specific types of studies (e.g., licensing studies, protective equipment studies, traffic studies, etc.) are also given, for those purposes. It is recommended that comprehensive accident investigations use all elements of this Common Methodology. In addition, researchers may wish to extend elements of the Common Methodology in order to research issues which are of particular interest to them. In all such cases, which go beyond the basic research, if reference is made to this Common Methodology, a clear explanation of how the procedures used differ from the basic methods should be provided.

In order to apply this Common Methodology properly, it is strongly recommended that all eleven parts be used together, particularly if the results are to be published.

Motorcycles: Common international methodology for in-depth accident investigations

Part 10: Database requirements

1 Scope

This Common Methodology specifies the minimum requirements and further recommendations for conducting an in-depth investigation of motorcycle accidents.

This Common Methodology is applicable to motorcycle accident investigations which are intended to identify accident causation factors and injury causation factors, and which involve

- all L1 mopeds and L3 motorcycles, as defined in UN/ECE/TRANS/WP.29/R.821, and with side cars treated as an accessory;

NOTE: Individual sample regions may exclude specific vehicle types, if desired.

- on-scene in-depth multidisciplinary accident investigations, with follow-ups; and
- accidents of all severities excluding non-injury cases.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this Common Methodology. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of this Common Methodology are encouraged to investigate the possibility of applying the most recent editions of the normative document indicated below. For updated references, the latest edition of the normative document referred to applies.

- American Standard Code for Information Exchange (ASCII), American National Standards Institute;
- UN/ECE/TRANS/WP.29/R.821

3 Definitions

For the purposes of this part of the Common Methodology, the definitions given in Part 1 apply, of which the following are of particular relevance to this part of the Common Methodology.

- accident identification number (AIN).
- data summary sheet.
- variable

In addition, for the purposes of this part of the Common Methodology, the following definitions are used.

- **ASCII flat file (AFF):** an electronic data file comprising data records separated by an ASCII Carriage Return/Line Feed (ASCII codes 13 and 10) sequence.
- **Assigned counter value:** a numeric value as assigned on the data summary sheets that is uniquely associated with specific responses to repeated questions.

- **Data record:** a character string comprising 8-bit printable characters and spaces (e.g. ASCII codes 32 to 126).
- **Data set:** a set of coded variables corresponding to one motorcycle accident.
- **Database configuration file (DBC):** the data file that contains information on how to code the AFF that is used by the EDT.
- **Electronic data template (EDT):** the electronic database template computer software program which is used to assist the creation and maintenance of an AFF in accordance with this Common Methodology.
- **Hard copy data file:** A completed set of data for a motorcycle accident which includes all applicable documents listed in part 4, clause 4.7.2 of this Common Methodology.
- **Record level:** a 4 character code that is used to identify the highest level of a data record.
- **Record sub level:** a character code that is used in combination with a record level to further identify a data record.
- **Supplemental text response:** a data summary sheet text response that is coded into the database.

4 Requirements

The ICC may implement, maintain, and distribute an EDT in accordance with this part of the Common Methodology.

The detailed requirements for the creation of the database, which are described hereafter, are implemented in the EDT.

4.1 General requirements

The coded data shall be stored and exchanged using electronic media having an ASCII flat file structure comprised of data records. Each data record shall not exceed 255 characters per record, and shall be terminated by an ASCII "Carriage Return/Line Feed" (CR/LF) sequence.

For each accident there shall be a minimum of 40 data records for the basic module, plus additional data records as required for optional and/or specialized modules, in the order indicated in table 1.

The coded data for each database variable and for each accident data set shall be located in a specific data record and column position(s), as specified in tables A.1 and A.2 in annex A.

The first 12 characters of each data record shall contain the accident identification number and record identifier as follows:

- columns 1 to 8: 8 character accident identification number, excluding the "/" separation characters
- columns 9 to 12: 4 character record level identifier

In addition, certain record levels shall contain sublevel identifiers and assigned counter values as specified in table A.1 in annex A.

The record identifiers and number of records for each accident and corresponding concurrent exposure cases are listed in table 1.

For one sample area and one sample period, all accident data records and all corresponding concurrent exposure data records should be accumulated in one data file.

4.1.1 Supplemental text response

Supplemental text responses shall be stored on a separate supplemental text record, immediately following the main data record for the relevant question. The format of this supplemental text record shall be as follows:

- columns 1 to 8: 8 character accident identification number.
- columns 9 to 12: 4 character record level identifier. The last character of which shall always be a 9 to indicate that this is a supplemental text record;
- columns 13 to 39: relevant text response question identifier code.
- columns 40 to 42: assigned counter value, or "000" if the question is not associated with an assigned counter value.
- columns 43 to 122: text response for the relevant question number.

The first three characters of the text record level identifier shall be the same as the first three characters of the relevant question, and the fourth character shall be a "9." For example, if the answer to question A.3.1.26 was "98 – other", then the record level for the supplemental text would be "A319" because the coded question A.3.1.26 appears on record level A311 as indicated in table A.2.

The text response question identifier code shall identify the first character of the relevant question. The first character of the relevant question identifier shall be the same as the first character of the record level identifier. The remaining sub levels of the question identifier shall be coded in nine 3 character blocks. For example, the identifier code for question A.3.1.26 is "00300102600000000000000000000000."

Example – for AIN US1/01/001, the answer to question A.3.1.26 "Animal involvement," is a moose. This is coded as "90 –other" with supplemental text. The characters "98" shall then be entered on a record level "A311" in character positions 67 to 68, and "Moose" shall be entered on record level "A319" in character positions 43 to 122. The resulting records shall be as follows:

Table 1. Accident dataset records

Sequence number	Record level identifier	Number of records per accident dataset	Description	
1	A111	1	-	Common Methodology and database identification
2	A112	1	A.1	Administration data
3	A113	1		
4	A211	1	A.2	Accident typology, classification
5	A311	1	A.3.1	Environmental factors
6	A321	1	A.3.2	Environmental factors, other side of street
7	A322	A.2.5		Environmental factors, other vehicle
8	A411	1	A.4.1	Motorcycle mechanical factors
9	A412	1		
10	A413	1		
11	A421	1	A.4.2	Motorcycle dynamics
12	A431	A.2.5	A.4.3	Other vehicle mechanical factors
13	A441	A.2.5	A.4.4	Other vehicle dynamics
14	A511	1	A.5.1.1	Human factors, general information, motorcycle rider
15	A512	A.2.7	A.5.1.2	Human factors, general information, motorcycle passenger
16	A513	A.2.5	A.5.1.3	Human factors, general information, other vehicle driver
17	A521	1	A.5.2.1	Injury analysis, motorcycle rider, general information
18	A522	9		Injury analysis, motorcycle rider, injuries
19	A523	A.2.7	A.5.2.2	Injury analysis, motorcycle passenger, general information
20	A524	9 x A.2.7		Injury analysis, motorcycle passenger, injuries
21	A525	A.2.5	A.5.2.3	Injury analysis, other vehicle passenger injuries
22	A526	1		Injury analysis, pedestrian injuries
23	A531	1	A.5.3.1	Human factors, personal protective equipment, motorcycle rider
24	A532	A.2.5	A.5.3.2	Human factors, personal protective equipment, motorcycle passenger
25	A611	1	A.6.1.1	Contributing environmental factors, motorcycle rider
26	A612	A.2.5	A.6.1.2	Contributing environmental factors, other vehicle driver
27	A621	1	A.6.2	Contributing vehicle factors, motorcycle factors
28	A622	A.2.5		Contributing vehicle factors, other vehicle factors
29	A631	1	A.6.3.1	Contributing human factors, motorcycle rider
30	A632	A.2.7	A.6.3.2	Contributing human factors, motorcycle passenger
31	A633	A.2.5	A.6.3.3	Contributing human factors, other vehicle driver
32	A641	1	A.6.4	Contributing overall factors
33	A651	(A.2.7+ 1)	A.6.5	Collision contact codes, motorcyclist type
34	A652	9 x (A.2.7+ 1)		Collision contact codes, body region
-	A##9	as required		Supplemental text for records A##1 to A##8

Note: "##" denotes the second and third numeric characters of any record level identifier

Table 2. Concurrent exposure dataset records

Sequence number	Record level identifier	Number of records per concurrent exposure dataset	Description	
35	B311	1	B.3.1	CED Environmental factors
36	B321	A.2.5	B.3.2	CED Environmental factors, other vehicle
37	B411	B.3.1.4	B.4.1.1	CED Motorcycle mechanical factors - Methods 1 and 2
38	B431	1	B.4.1.3	CED Motorcycle mechanical factors - Method 3 only
39	B432	1		
40	B511	B.3.1.4	B.5.1.1.1	CED Human factors, general information - Methods 1 and 2
41	B512	B.3.1.4	B.5.1.1.2	CED Human factors, general information - Methods 1 and 2, motorcycle passengers
42	B513	1	B.5.1.3	CED Human factors, general information - Method 3 only
43	B531	B.3.1.4	B.5.3.1.1	CED Personal protective equipment - Methods 1 and 2, motorcycle riders
44	B532	B.3.1.4	B.5.3.1.2	CED Personal protective equipment - Methods 1 and 2, motorcycle passengers
45	B533	1	B.5.3.3.1	CED Personal protective equipment - Method 3 only, motorcycle riders, clothing
46	B534	1		CED Personal protective equipment - Method 3 only, motorcycle riders, helmet
47	B535	1	B.5.3.3.2	CED Personal protective equipment - Method 3 only, motorcycle passengers, clothing
48	B536	1		CED Personal protective equipment - Method 3 only, motorcycle passengers, helmet
-	B##9	as required		Supplemental text for records B##1 to B##8

Note: "##" denotes the second and third numeric characters of any record level identifier

Table 3. Moped module dataset records

Sequence number	Record level identifier	Number of records per concurrent exposure dataset	Description	
49	C411	1	C.4.1	Moped/mofa module
50	C412	A.2.5		
-	C##9	as required		Supplemental text for records C##1 to C##8

5 Methods

For each accident, code the variables listed in annex A with the responses from the data summary sheets found in part 3 annexes A to D. Store the coded data in an ASCII flat file according to the record and position assignments indicated in table A.1 to table A.6 of annex A. The records shall be stored in the order indicated by tables 1 to 3.

Table A.1. Accident dataset record sublevel and counter values

Record level identifier	Sublevel				Counter				
	Column position(s)	Start value	Stop value	Description	Assigned value	Column position	Start value	Stop value	Description
A111	-	-	-			-	-	-	
A112	-	-	-			-	-	-	
A113	-	-	-			-	-	-	
A211	-	-	-			-	-	-	
A311	-	-	-			-	-	-	
A321	-	-	-			-	-	-	
A322	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A411	-	-	-			-	-	-	
A412	-	-	-			-	-	-	
A413	-	-	-			-	-	-	
A421	-	-	-			-	-	-	
A431	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A441	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A511	13	1	1	Motorcyclist number		-	-	-	
A512	-	-	-		A.5.1.2.1+1	13	2	A.2.7+1	Motorcyclist number
A513	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A521	13	1	1	Motorcyclist number		-	-	-	
A522	13-14	11	19	Motorcyclist/Body region		-	-	-	
A523	-	-	-		A.5.1.2.1+1	13	2	A.2.7+1	Motorcyclist number
A524	14	1	9	Body region number	A.5.1.2.1+1	13	2	A.2.7+1	Motorcyclist number
A525	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A526	-	-	-			-	-	-	
A531	-	-	-			-	-	-	
A532	-	-	-		A.5.1.2.1	13	1	A.2.7	Other vehicle number
A611	-	-	-			-	-	-	
A612	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A621	-	-	-			-	-	-	
A622	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A631	-	-	-			-	-	-	
A632	-	-	-		A.5.1.2.1+1	13	2	A.2.7+1	Motorcyclist number
A633	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
A641	-	-	-			-	-	-	
A651	-	-	-		A.5.1.2.1+1	13	1	A.2.7+1	Motorcyclist number
A652	14	1	9	Body region number	A.5.1.2.1+1	13	1	A.2.7+1	Motorcyclist number
A##9	-	-	-			-	-	-	
B211	-	-	-			-	-	-	
B311	-	-	-			-	-	-	
B321	-	-	-		A.4.3.1	13	1	A.2.5	Other vehicle number
B411	-	-	-		B.4.1.1.1	13-15	1	B.2.2	Motorcycle number
B431	-	-	-			-	-	-	
B432	-	-	-			-	-	-	
B511	-	-	-		B.4.1.1.1	13-15	1	B.2.2	Motorcycle number
B512	-	-	-		B.4.1.1.1	13-15	1	B.2.2	Motorcycle number
B513	-	-	-			-	-	-	
B531	-	-	-		B.4.1.1.1	13-15	1	B.2.2	Motorcycle number
B532	-	-	-		B.4.1.1.1	13-15	1	B.2.2	Motorcycle number
B533	-	-	-			-	-	-	
B534	-	-	-			-	-	-	
B535	-	-	-			-	-	-	
B536	-	-	-			-	-	-	
B611	-	-	-		B.6.1.1	13-15	1	B.2.3	Motorcycle number
B##9	-	-	-			-	-	-	
C311	-	-	-			-	-	-	

Table A.1. Accident dataset record sublevel and counter values

Record level identifier	Sublevel				Counter				
	Column position(s)	Start value	Stop value	Description	Assigned value	Column position	Start value	Stop value	Description
C312	-	-	-			-	-	-	
C411	-	-	-			-	-	-	
C412	-	-	-		A.4.3.1	13	1	A.2.5	
C421	-	-	-			-	-	-	
C511	-	-	-			-	-	-	
C521	-	-	-			-	-	-	
C531	-	-	-			-	-	-	
C##9	-	-	-			-	-	-	
D211	-	-	-			-	-	-	
D311	-	-	-		A.4.3.1	13	1	A.2.5	
D411	-	-	-		D.4.1.4.1.2	13-15	1	D.2.2	
D412	-	-	-		D.4.1.5.3	13-15	1	D.2.2	
D413	-	-	-		D.4.1.6.1.4	13-15	1	D.2.2	
D421	-	-	-		D.4.2.1.3	13-15	1	D.2.2	
D511	-	-	-		D.5.1.1.1	13-15	1	D.2.2	
D521	-	-	-		D.5.2.1.1	13-15	1	D.2.2	
D531	-	-	-		D.5.3.1.1	13-15	1	D.2.2	
D##9	-	-	-			-	-	-	

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
-	Accident identification number	-		8	1	8	A/N	- *
-	Record level identifier	-		4	9	12	A/N	- *
-	Text response question identifier	A##9		27	13	39	N	O *
-	Text response counter index (see note 1)	A##9		3	40	42	N	O *
-	Text response	A##9		80	43	122	A/N	- *
-	ASCII flat file revision identifier	A111		3	13	15	N	DI *
-	Database configuration file revision identifier code	A111		3	16	18	N	DI *
-	Database configuration file build date	A111		8	19	26	N	Date *
-	Number of DSS modules	A111		2	27	28	N	DI *
-	Question and answer language code	A111		2	29	30	A/N	- *
-	Data Summary Sheet revision identifier	A111		3	31	33	N	DI *
-	Data entry program revision identifier	A111		3	34	36	N	DI *
-	Data entry program build date	A111		8	37	44	N	Date *
-	Text response language code	A111		2	45	46	A/N	- *
-	Text response character set code	A111		3	47	49	N	DI *
-	Investigator #1	A111	#1	3	50	52	A/N	- *
-	Investigator #2	A111	#2	3	53	55	A/N	- *
-	Investigator #3	A111	#3	3	56	58	A/N	- *
-	Investigator #4	A111	#4	3	59	61	A/N	- *
-	Input by #1	A111		3	62	64	A/N	- *
-	Input by #2	A111		3	65	67	A/N	- *
-	Input by #3	A111		3	68	70	A/N	- *
-	Input by #4	A111		3	71	73	A/N	- *
A.1.3	Accident preliminary description	A112		160	13	172	N	N/A *
A.1.4	Notification time	A113		4	13	16	N	Time *
A.1.5	Date of notification	A113		8	17	24	N	Date *
A.1.12	Team departure time	A113		4	25	28	N	Time *
A.1.13	Team arrival time	A113		4	29	32	N	Time *
A.1.14	Sampling qualification decision	A113		1	33	33	N	D2 *
A.1.22	Case qualification decision	A113		1	34	34	N	D2 *
A.1.24	Concurrent exposure data collection date	A113		8	35	42	N	Date *
A.2.1	Time of day accident occurred (24 hour clock)	A211		4	13	16	N	Time *
A.2.2	Day of week accident occurred	A211		1	17	17	N	D *
A.2.3	Date accident occurred	A211		8	18	25	N	Date *
A.2.4	Motorcycle involved in collision with	A211		1	26	26	N	D *
A.2.5	How many OV's were involved in the accident? How many pedestrians were involved in the	A211		1	27	27	N	DI *
A.2.6	accident?	A211		1	28	28	N	DI *
A.2.7	Number of passengers on the motorcycle	A211		1	29	29	N	DI *
A.2.8	Are there any fatal injuries involved?	A211		1	30	30	N	D2 *
A.2.9	Accident configuration	A211		2	31	32	N	D *
A.3.1.1	Type of Area	A311		2	13	14	N	D *
A.3.1.2	Illumination	A311		1	15	15	N	D *
A.3.1.3	Intersection type	A311		1	16	16	N	D *
A.3.1.4.1	Direction of traffic flow	A311		1	17	17	N	D *
A.3.1.4.2	Direction of traffic flow	A311		1	18	18	N	D *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.3.1.5.1	Lane dividers	A311		2	19	20	N	D
A.3.1.5.2	Lane dividers	A311		2	21	22	N	D
A.3.1.6.1	Roadside environment	A311		2	23	24	N	D
A.3.1.6.2	Roadside environment	A311		2	25	26	N	D
A.3.1.7.1	Roadside obstacles	A311		2	27	28	N	D
A.3.1.7.2	Roadside obstacles	A311		2	29	30	N	D
A.3.1.8	Description	A311		2	31	32	N	D
A.3.1.9	Posted speed limit	A311		3	33	35	N	DI
A.3.1.9.1	Speed limit units	A311		1	36	36	N	D
A.3.1.10	Number of through lanes	A311		1	37	37	N	DI
A.3.1.11	Lane travelled	A311		2	38	39	N	DI
A.3.1.12	Lane width	A311		2	40	41	N	C
A.3.1.13	Kerb to kerb roadway width	A311		3	42	44	N	C
A.3.1.14	Type surface	A311		1	45	45	N	D
A.3.1.15	Condition and defects	A311		2	46	47	N	D
A.3.1.16.1	Contamination/obstacles	A311		2	48	49	N	D
A.3.1.16.2	Contamination/obstacles	A311		2	50	51	N	D
A.3.1.16.3	Contamination/obstacles	A311		2	52	53	N	D
A.3.1.16.4	Contamination/obstacles	A311		2	54	55	N	D
A.3.1.17	Vertical	A311		1	56	56	N	D
A.3.1.18	Horizontal	A311		1	57	57	N	D
A.3.1.19	Auxiliary turn only, no separate signal	A311		1	58	58	N	D
A.3.1.20	Type	A311		2	59	60	N	D
A.3.1.21	Functioning properly	A311		1	61	61	N	D
A.3.1.22	Visible to vehicle operator	A311		1	62	62	N	D2
A.3.1.23	Violated by vehicle operator	A311		1	63	63	N	D2
A.3.1.24	Traffic density at time of accident	A311		1	64	64	N	D
A.3.1.24.1	Traffic density at time of accident	A311		25	65	89	A/N	-
A.3.1.25	Visibility limitation due to	A311		2	90	91	N	D
A.3.1.26	Animal involvement	A311		2	92	93	N	D
A.3.1.27	Was the animal struck?	A311		1	94	94	N	D
A.3.1.28	Pedestrian involvement	A311		1	95	95	N	D
A.3.1.29.1	Location of pedestrian at impact	A311		1	96	96	N	D
A.3.1.29.2	Location of pedestrian at impact	A311		1	97	97	N	D
A.3.1.29.3	Location of pedestrian at impact	A311		1	98	98	N	D
A.3.1.30	Stationary view obstructions along the operator's line of sight at time of precipitating event	A311		2	99	100	N	D
A.3.1.31	Mobile view obstructions along the operator's line-of-sight at time of precipitating event	A311		2	101	102	N	D
A.3.1.32	Ambient temperature	A311		3	103	105	N	C *
A.3.1.33	Weather description	A311		1	106	106	N	D *
A.3.1.34	Wind description	A311		1	107	107	N	D *
A.3.1.35	Wind direction with respect to motorcycle	A311		1	108	108	N	D
A.3.2.1	Type of Area	A321		2	13	14	N	D
A.3.2.4.1	Direction of traffic flow	A322		1	14	14	N	D
A.3.2.4.2	Direction of traffic flow	A322		1	15	15	N	D
A.3.2.5.1	Lane dividers	A322		2	16	17	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.3.2.5.2	Lane dividers	A322		2	18	19	N	D
A.3.2.6.1	Roadside environment	A322		2	20	21	N	D
A.3.2.6.2	Roadside environment	A322		2	22	23	N	D
A.3.2.7.1	Roadside obstacles	A322		2	24	25	N	D
A.3.2.7.2	Roadside obstacles	A322		2	26	27	N	D
A.3.2.8	Description	A322		2	28	29	N	D
A.3.2.9	Posted speed limit	A322		3	30	32	N	DI
A.3.2.9.1	Speed limit units	A322		1	33	33	N	D
A.3.2.10	Number of through lanes	A322		1	34	34	N	DI
A.3.2.11	Lane travelled	A322		2	35	36	N	DI
A.3.2.12	Lane width	A322		2	37	38	N	C
A.3.2.13	Kerb to kerb roadway width	A322		3	39	41	N	C
A.3.2.14	Type surface	A322		1	42	42	N	D
A.3.2.15	Condition and defects	A322		2	43	44	N	D
A.3.2.16.1	Contamination/obstacles	A322		2	45	46	N	D
A.3.2.16.2	Contamination/obstacles	A322		2	47	48	N	D
A.3.2.16.3	Contamination/obstacles	A322		2	49	50	N	D
A.3.2.16.4	Contamination/obstacles	A322		2	51	52	N	D
A.3.2.17	Vertical	A322		1	53	53	N	D
A.3.2.18	Horizontal	A322		1	54	54	N	D
A.3.2.19	Auxiliary turn only, no separate signal	A322		1	55	55	N	D
A.3.2.20	Type	A322		2	56	57	N	D
A.3.2.21	Functioning properly	A322		1	58	58	N	D
A.3.2.22	Visible to vehicle operator	A322		1	59	59	N	D2
A.3.2.23	Violated by vehicle operator	A322		1	60	60	N	D2
A.3.2.24	Traffic density at time of accident	A322		1	61	61	N	D
A.3.2.24.1	Traffic density at time of accident	A322		25	62	86	A/N	-
A.3.2.25	Visibility limitation due to	A322		2	87	88	N	D
A.3.2.30	Stationary view obstructions along the operator's line of sight at time of precipitating event	A322		2	89	90	N	D
A.3.2.31	Mobile view obstructions along the operator's line-of-sight at time of precipitating event	A322		2	91	92	N	D
A.4.1.1.1	Manufacturer	A411		3	13	15	A/N	D *
A.4.1.1.2	Model	-		-	Not	coded	-	*
A.4.1.1.3	Year	A411		4	16	19	N	DI *
A.4.1.1.4	Motorcycle legal category	A411		2	20	21	N	D *
A.4.1.1.4.1	Is the motorcycle equipped with pedals?	A411		1	22	22	N	D *
A.4.1.1.4.2	Motorcycle style	A411		2	23	24	N	D *
A.4.1.1.5	Vehicle gross mass	A411		4	25	28	N	C *
A.4.1.1.6	Vehicle identification number, if permissible	A411		14	29	42	A/N	-
A.4.1.1.7	Licence plate number, reference only	-		-	Not	coded	-	*
A.4.1.1.8	Odometer reading	A411		6	43	48	N	C *
A.4.1.1.8.1	Odometer units	A411		1	49	49	N	D *
A.4.1.1.9	Registered owner category	A411		1	50	50	N	D *
A.4.1.1.10	Predominating MC colour	A411		2	51	52	N	D *
A.4.1.1.11	Motor displacement	A411		4	53	56	N	C *
A.4.1.1.12	Number of cylinders	A411		1	57	57	N	DI *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.4.1.1.13	Symptom of problem	A411		2	58	59	N	D	*
A.4.1.1.14	Source of problem	A411		2	60	61	N	D	*
A.4.1.1.15	Size	A411		10	62	71	A/N	-	*
A.4.1.1.16	Manufacturer	A411		2	72	73	A/N	D	*
A.4.1.1.17	Rim size	A411		5	74	78	A/N	-	*
A.4.1.1.18	Rim manufacturer	A411		2	96	97	A/N	D	*
A.4.1.1.19	Tread type	A411		1	98	98	N	D	*
A.4.1.1.20	Measured tread depth	A411		2	99	100	N	C	*
A.4.1.1.21	Inflation pressure	A411		3	101	103	N	C	*
A.4.1.1.22	Braking evidence on tyre	A411		1	104	104	N	D	*
A.4.1.1.23	Type	A411		2	114	115	A/N	-	*
A.4.1.1.24	Condition	A411		1	116	116	N	D	*
A.4.1.1.25	Rider control type	A411		1	120	120	N	D	*
A.4.1.1.26	Rider control side	A411		1	121	121	N	D	*
A.4.1.1.27	Actuation at lever or pedal	A411		1	124	124	N	D	*
A.4.1.1.28	Brake control system type	A411		1	125	125	N	D	*
A.4.1.1.29	Connection to front brake includes	A411		1	126	126	N	D	*
A.4.1.1.30	Connection to rear brake includes	A411		1	127	127	N	D	*
A.4.1.1.31	ABS	A411		1	132	132	N	D2	*
A.4.1.1.32	ABS type	A411		1	133	133	N	D	*
A.4.1.1.33	Brake mechanism	A411		2	136	137	N	D	*
A.4.1.1.34	Brake mechanism actuation	A411		1	138	138	N	D	*
A.4.1.1.35	Were brakes operational before accident?	A411		1	139	139	N	D2	*
A.4.1.1.36	Do brakes appear to be defective?	A411		1	140	140	N	D	*
A.4.1.1.37	Condition, wear	A411		1	141	141	N	D	*
A.4.1.1.38	Adjustment	A411		1	148	148	N	D	*
A.4.1.1.39	Type/configuration	A411		2	150	151	N	D	*
A.4.1.1.40	Material	A411		1	152	152	N	D	*
A.4.1.1.41	Reduction in wheelbase	A411		3	153	155	N	C	*
A.4.1.1.42	Did front wheel displace against either the motor or the frame?	A411		1	156	156	N	D2	*
A.4.1.1.43	Steering stem adjustment	A411		1	157	157	N	D	*
A.4.1.1.44	Steering damper installed	A411		1	158	158	N	D	*
A.4.1.1.45	Is rear swing arm loose?	A411		1	159	159	N	D2	*
A.4.1.1.46	Rear swing arm pivot bearing condition	A411		1	160	160	N	D	*
A.4.1.1.47	Rider foot pegs, footrest type	A411		1	161	161	N	D	*
A.4.1.1.48	Passenger foot pegs, footrest type	A411		1	162	162	N	D	*
A.4.1.1.49	Side stand type	A411		1	163	163	N	D	*
A.4.1.1.50	Centre stand type	A411		1	164	164	N	D	*
A.4.1.1.51	Headlamp assembly type	A411		1	165	165	N	D	*
A.4.1.1.52	Type	A411		1	166	166	N	D	*
A.4.1.1.53	Mounting	A411		1	167	167	N	D	*
A.4.1.1.54	Construction	A411		2	168	169	N	D	*
A.4.1.1.55.1	Width	A411		3	170	172	N	C	*
A.4.1.1.55.2	Rise	A411		3	173	175	N	C	*
A.4.1.1.55.3	Sweep	A411		3	176	178	N	C	*
A.4.1.1.56	Type	A411		1	179	179	N	D	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.4.1.1.57	Fastening	A411		1	180	180	N	D	*
A.4.1.1.58	Type	A411		1	181	181	N	D	*
A.4.1.1.59	Material	A411		1	182	182	N	D	*
A.4.1.1.60	Cap type	A411		2	183	184	N	D	*
A.4.1.1.61	Cap retention	A411		1	185	185	N	D	
A.4.1.1.62	Tank retention	A411		1	186	186	N	D	
A.4.1.1.63	Tank deformation	A411		1	187	187	N	D	
A.4.1.1.64	Deformation source	A411		1	188	188	N	D	
A.4.1.1.65	Was there a fuel tank failure?	A411		1	189	189	N	D2	
A.4.1.1.66.1	Tank damage/failure type	A411		1	190	190	N	D	
A.4.1.1.66.2	Tank damage/failure type	A411		1	191	191	N	D	
A.4.1.1.66.3	Tank damage/failure type	A411		1	192	192	N	D	
A.4.1.1.66.4	Tank damage/failure type	A411		1	193	193	N	D	
A.4.1.1.67	Was there a fuel spill or leak?	A411		1	194	194	N	D	
A.4.1.1.68.1	Source of fuel spills or leaks	A411		2	195	196	N	D	
A.4.1.1.68.2	Source of fuel spills or leaks	A411		2	197	198	N	D	
A.4.1.1.68.3	Source of fuel spills or leaks	A411		2	199	200	N	D	
A.4.1.1.68.4	Source of fuel spills or leaks	A411		2	201	202	N	D	
A.4.1.1.68.5	Source of fuel spills or leaks	A411		2	203	204	N	D	
A.4.1.1.69	Did a fire occur?	A411		1	205	205	N	D2	
A.4.1.1.70	When did the fire occur?	A411		1	206	206	N	D	
A.4.1.1.71	The fire occurred how long after the crash?	A411		2	207	208	N	C	
A.4.1.1.72	Fuel source for fire	A411		2	209	210	N	D	
A.4.1.1.73	Ignition source for fire	A411		2	211	212	N	D	
A.4.1.1.74	Type	A411		1	213	213	N	D	*
A.4.1.1.75	Drive chain, belt, or shaft condition	A411		1	214	214	N	D	*
A.4.1.1.76	When did the damage occur?	A411		1	215	215	N	D	
A.4.1.1.77	Drive sprocket condition	A411		1	216	216	N	D	*
A.4.1.1.78	Does throttle control work?	A411		1	217	217	N	D2	*
A.4.1.1.79	Drum condition	A411		2	218	219	N	D	*
A.4.1.1.80	Cables condition	A411		1	220	220	N	D	*
A.4.1.1.81	Throttle plate/slides condition	A411		1	221	221	N	D	*
A.4.1.1.82	Return springs condition	A411		1	222	222	N	D	*
A.4.1.1.83	Condition	A411		1	223	223	N	D	*
A.4.1.2.15	Size	A411		10	79	88	A/N	-	*
A.4.1.2.16	Manufacturer	A411		2	89	90	A/N	D	*
A.4.1.2.17	Rim size	A411		5	91	95	A/N	-	*
A.4.1.2.18	Rim manufacturer	A411		2	105	106	A/N	D	*
A.4.1.2.19	Tread type	A411		1	107	107	N	D	*
A.4.1.2.20	Measured tread depth	A411		2	108	109	N	C	*
A.4.1.2.21	Inflation pressure	A411		3	110	112	N	C	*
A.4.1.2.22	Braking evidence on tyre	A411		1	113	113	N	D	
A.4.1.2.23	Type	A411		2	117	118	A/N	-	*
A.4.1.2.24	Condition	A411		1	119	119	N	D	*
A.4.1.2.25	Rider control type	A411		1	122	122	N	D	*
A.4.1.2.26	Rider control side	A411		1	123	123	N	D	*
A.4.1.2.27	Actuation at lever or pedal	A411		1	128	128	N	D	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.4.1.2.28	Brake control system type	A411		1	129	129	N	D	*
A.4.1.2.29	Connection to front brake includes	A411		1	130	130	N	D	*
A.4.1.2.30	Connection to rear brake includes	A411		1	131	131	N	D	*
A.4.1.2.31	ABS	A411		1	134	134	N	D2	*
A.4.1.2.32	ABS type	A411		1	135	135	N	D	*
A.4.1.2.33	Brake mechanism	A411		2	142	143	N	D	*
A.4.1.2.34	Brake mechanism actuation	A411		1	144	144	N	D	*
A.4.1.2.35	Were brakes operational before accident?	A411		1	145	145	N	D2	*
A.4.1.2.36	Do brakes appear to be defective?	A411		1	146	146	N	D	*
A.4.1.2.37	Condition, wear	A411		1	147	147	N	D	*
A.4.1.2.38	Adjustment	A411		1	149	149	N	D	*
A.4.1.3.1	Front crash bars Equipped?	A412		1	13	13	N	D2	*
A.4.1.3.2	Rear crash bars Equipped?	A412		1	20	20	N	D2	*
A.4.1.3.3	Engine guard Equipped?	A412		1	27	27	N	D2	*
A.4.1.3.4	Windscreen Equipped?	A412		1	34	34	N	D2	*
A.4.1.3.5	Fairing Equipped?	A412		1	41	41	N	D2	*
A.4.1.3.6	Headlamp(s) Equipped?	A412		1	48	48	N	D2	*
A.4.1.3.7	Headlamp nacelle Equipped?	A412		1	55	55	N	D2	*
A.4.1.3.8	Auxiliary headlamp Equipped?	A412		1	62	62	N	D2	*
A.4.1.3.9	Front position lamp Equipped?	A412		1	69	69	N	D2	*
A.4.1.3.10	Front reflectors Equipped?	A412		1	76	76	N	D2	*
A.4.1.3.11	Front turn signals Equipped?	A412		1	83	83	N	D2	*
A.4.1.3.12	Speedometer Equipped?	A412		1	90	90	N	D2	*
A.4.1.3.13	Tachometer Equipped?	A412		1	97	97	N	D2	*
A.4.1.3.14	Handlebars Equipped?	A412		1	104	104	N	D2	*
A.4.1.3.15	Throttle Equipped?	A412		1	111	111	N	D2	*
A.4.1.3.16	Clutch lever Equipped?	A412		1	118	118	N	D2	*
A.4.1.3.17	Brake lever Equipped?	A412		1	125	125	N	D2	*
A.4.1.3.18	Right side rear view mirrors, posts Equipped?	A412		1	132	132	N	D2	*
A.4.1.3.19	Left side rear view mirrors, posts Equipped?	A412		1	139	139	N	D2	*
A.4.1.3.20	Front suspension Equipped?	A412		1	146	146	N	D2	*
A.4.1.3.22	Front fender Equipped?	A412		1	160	160	N	D2	*
A.4.1.3.23	Front brakes Equipped?	A412		1	167	167	N	D2	*
A.4.1.3.24	Seat Equipped?	A412		1	174	174	N	D2	*
A.4.1.3.25	Sissy bar/passenger back rest Equipped?	A412		1	181	181	N	D2	*
A.4.1.3.26	Side reflectors Equipped?	A412		1	188	188	N	D2	*
A.4.1.3.27	Frame Equipped?	A412		1	195	195	N	D2	*
A.4.1.3.28	Grab rails/hand holds Equipped?	A412		1	202	202	N	D2	*
A.4.1.3.29	Fuel tank Equipped?	A412		1	209	209	N	D2	*
A.4.1.3.30	Auxiliary fuel tank Equipped?	A412		1	216	216	N	D2	*
A.4.1.3.32	Radiator Equipped?	A413		1	20	20	N	D2	*
A.4.1.3.33	Water hose Equipped?	A413		1	27	27	N	D2	*
A.4.1.3.34	Motor power enhancement Equipped?	A413		1	34	34	N	D2	*
A.4.1.3.36	Oil tank Equipped?	A413		1	48	48	N	D2	*
A.4.1.3.37	Battery, battery box Equipped?	A413		1	55	55	N	D2	*
A.4.1.3.38	Rear brake pedal Equipped?	A413		1	62	62	N	D2	*
A.4.1.3.39	Shift lever Equipped?	A413		1	69	69	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.3.40	Foot pegs, footrests Equipped?	A413		1	76	76	N	D2 *
A.4.1.3.41	Highway pegs/footrests Equipped?	A413		1	83	83	N	D2 *
A.4.1.3.42	Side stand Equipped?	A413		1	90	90	N	D2 *
A.4.1.3.43	Side stand interlock Equipped?	A413		1	97	97	N	D2 *
A.4.1.3.44	Centre stand Equipped?	A413		1	104	104	N	D2 *
A.4.1.3.45	Muffler/exhaust Equipped?	A413		1	111	111	N	D2 *
A.4.1.3.46	Tank bag Equipped?	A413		1	118	118	N	D2 *
A.4.1.3.47	Luggage/cargo rack Equipped?	A413		1	125	125	N	D2 *
A.4.1.3.48	Parcel rack Equipped?	A413		1	132	132	N	D2 *
A.4.1.3.49	Panniers, saddle bags Equipped?	A413		1	139	139	N	D2 *
A.4.1.3.50	Rear position lamps Equipped?	A413		1	146	146	N	D2 *
A.4.1.3.51	Stop lamp Equipped?	A413		1	153	153	N	D2 *
A.4.1.3.52	Rear reflectors Equipped?	A413		1	160	160	N	D2 *
A.4.1.3.53	Rear turn signals Equipped?	A413		1	167	167	N	D2 *
A.4.1.3.54	Rear suspension Equipped?	A413		1	174	174	N	D2 *
A.4.1.3.56	Rear fender Equipped?	A413		1	188	188	N	D2 *
A.4.1.3.57	Rear brakes Equipped?	A413		1	195	195	N	D2 *
A.4.1.3.58	Tools, tool box Equipped?	A413		1	202	202	N	D2 *
A.4.1.3.59	Side covers Equipped?	A413		1	209	209	N	D2 *
A.4.1.3.60	Trailer Equipped?	A413		1	216	216	N	D2 *
A.4.1.4.1	Front crash bars Original equipment?	A412		1	14	14	N	D2 *
A.4.1.4.2	Rear crash bars Original equipment?	A412		1	21	21	N	D2 *
A.4.1.4.3	Engine guard Original equipment?	A412		1	28	28	N	D2 *
A.4.1.4.4	Windscreen Original equipment?	A412		1	35	35	N	D2 *
A.4.1.4.5	Fairing Original equipment?	A412		1	42	42	N	D2 *
A.4.1.4.6	Headlamp(s) Original equipment?	A412		1	49	49	N	D2 *
A.4.1.4.7	Headlamp nacelle Original equipment?	A412		1	56	56	N	D2 *
A.4.1.4.8	Auxiliary headlamp Original equipment?	A412		1	63	63	N	D2 *
A.4.1.4.9	Front position lamp Original equipment?	A412		1	70	70	N	D2 *
A.4.1.4.10	Front reflectors Original equipment?	A412		1	77	77	N	D2 *
A.4.1.4.11	Front turn signals Original equipment?	A412		1	84	84	N	D2 *
A.4.1.4.12	Speedometer Original equipment?	A412		1	91	91	N	D2 *
A.4.1.4.13	Tachometer Original equipment?	A412		1	98	98	N	D2 *
A.4.1.4.14	Handlebars Original equipment?	A412		1	105	105	N	D2 *
A.4.1.4.15	Throttle Original equipment?	A412		1	112	112	N	D2 *
A.4.1.4.16	Clutch lever Original equipment?	A412		1	119	119	N	D2 *
A.4.1.4.17	Brake lever Original equipment?	A412		1	126	126	N	D2 *
A.4.1.4.18	Right side rear view mirrors, posts Original equipment?	A412		1	133	133	N	D2 *
A.4.1.4.19	Left side rear view mirrors, posts Original equipment?	A412		1	140	140	N	D2 *
A.4.1.4.20	Front suspension Original equipment?	A412		1	147	147	N	D2 *
A.4.1.4.21	Front tyre, wheel Original equipment?	A412		1	154	154	N	D2 *
A.4.1.4.22	Front fender Original equipment?	A412		1	161	161	N	D2 *
A.4.1.4.23	Front brakes Original equipment?	A412		1	168	168	N	D2 *
A.4.1.4.24	Seat Original equipment?	A412		1	175	175	N	D2 *
A.4.1.4.25	Sissy bar/passenger back rest Original equipment?	A412		1	182	182	N	D2 *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.4.26	Side reflectors Original equipment?	A412		1	189	189	N	D2 *
A.4.1.4.27	Frame Original equipment?	A412		1	196	196	N	D2 *
A.4.1.4.28	Grab rails/hand holds Original equipment?	A412		1	203	203	N	D2 *
A.4.1.4.29	Fuel tank Original equipment?	A412		1	210	210	N	D2 *
A.4.1.4.30	Auxiliary fuel tank Original equipment?	A412		1	217	217	N	D2 *
A.4.1.4.31	Motor crankcase, cylinders Original equipment?	A413		1	14	14	N	D2 *
A.4.1.4.32	Radiator Original equipment?	A413		1	21	21	N	D2 *
A.4.1.4.33	Water hose Original equipment?	A413		1	28	28	N	D2 *
A.4.1.4.34	Motor power enhancement Original equipment?	A413		1	35	35	N	D2 *
A.4.1.4.36	Oil tank Original equipment?	A413		1	49	49	N	D2 *
A.4.1.4.37	Battery, battery box Original equipment?	A413		1	56	56	N	D2 *
A.4.1.4.38	Rear brake pedal Original equipment?	A413		1	63	63	N	D2 *
A.4.1.4.39	Shift lever Original equipment?	A413		1	70	70	N	D2 *
A.4.1.4.40	Foot pegs, footrests Original equipment?	A413		1	77	77	N	D2 *
A.4.1.4.41	Highway pegs/footrests Original equipment?	A413		1	84	84	N	D2 *
A.4.1.4.42	Side stand Original equipment?	A413		1	91	91	N	D2 *
A.4.1.4.43	Side stand interlock Original equipment?	A413		1	98	98	N	D2 *
A.4.1.4.44	Centre stand Original equipment?	A413		1	105	105	N	D2 *
A.4.1.4.45	Muffler/exhaust Original equipment?	A413		1	112	112	N	D2 *
A.4.1.4.46	Tank bag Original equipment?	A413		1	119	119	N	D2 *
A.4.1.4.47	Luggage/cargo rack Original equipment?	A413		1	126	126	N	D2 *
A.4.1.4.48	Parcel rack Original equipment?	A413		1	133	133	N	D2 *
A.4.1.4.49	Panniers, saddle bags Original equipment?	A413		1	140	140	N	D2 *
A.4.1.4.50	Rear position lamps Original equipment?	A413		1	147	147	N	D2 *
A.4.1.4.51	Stop lamp Original equipment?	A413		1	154	154	N	D2 *
A.4.1.4.52	Rear reflectors Original equipment?	A413		1	161	161	N	D2 *
A.4.1.4.53	Rear turn signals Original equipment?	A413		1	168	168	N	D2 *
A.4.1.4.54	Rear suspension Original equipment?	A413		1	175	175	N	D2 *
A.4.1.4.55	Rear tyre, wheel Original equipment?	A413		1	182	182	N	D2 *
A.4.1.4.56	Rear fender Original equipment?	A413		1	189	189	N	D2 *
A.4.1.4.57	Rear brakes Original equipment?	A413		1	196	196	N	D2 *
A.4.1.4.58	Tools, tool box Original equipment?	A413		1	203	203	N	D2 *
A.4.1.4.59	Side covers Original equipment?	A413		1	210	210	N	D2 *
A.4.1.4.60	Trailer Original equipment?	A413		1	217	217	N	D2 *
A.4.1.5.1	Front crash bars Aftermarket?	A412		1	15	15	N	D2 *
A.4.1.5.2	Rear crash bars Aftermarket?	A412		1	22	22	N	D2 *
A.4.1.5.3	Engine guard Aftermarket?	A412		1	29	29	N	D2 *
A.4.1.5.4	Windscreen Aftermarket?	A412		1	36	36	N	D2 *
A.4.1.5.5	Fairing Aftermarket?	A412		1	43	43	N	D2 *
A.4.1.5.6	Headlamp(s) Aftermarket?	A412		1	50	50	N	D2 *
A.4.1.5.7	Headlamp nacelle Aftermarket?	A412		1	57	57	N	D2 *
A.4.1.5.8	Auxiliary headlamp Aftermarket?	A412		1	64	64	N	D2 *
A.4.1.5.9	Front position lamp Aftermarket?	A412		1	71	71	N	D2 *
A.4.1.5.10	Front reflectors Aftermarket?	A412		1	78	78	N	D2 *
A.4.1.5.11	Front turn signals Aftermarket?	A412		1	85	85	N	D2 *
A.4.1.5.12	Speedometer Aftermarket?	A412		1	92	92	N	D2 *
A.4.1.5.13	Tachometer Aftermarket?	A412		1	99	99	N	D2 *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.4.1.5.14	Handlebars Aftermarket?	A412		1	106	106	N	D2	*
A.4.1.5.15	Throttle Aftermarket?	A412		1	113	113	N	D2	*
A.4.1.5.16	Clutch lever Aftermarket?	A412		1	120	120	N	D2	*
A.4.1.5.17	Brake lever Aftermarket?	A412		1	127	127	N	D2	*
A.4.1.5.18	Right side rear view mirrors, posts Aftermarket?	A412		1	134	134	N	D2	*
A.4.1.5.19	Left side rear view mirrors, posts Aftermarket?	A412		1	141	141	N	D2	*
A.4.1.5.20	Front suspension Aftermarket?	A412		1	148	148	N	D2	*
A.4.1.5.21	Front tyre, wheel Aftermarket?	A412		1	155	155	N	D2	*
A.4.1.5.22	Front fender Aftermarket?	A412		1	162	162	N	D2	*
A.4.1.5.23	Front brakes Aftermarket?	A412		1	169	169	N	D2	*
A.4.1.5.24	Seat Aftermarket?	A412		1	176	176	N	D2	*
A.4.1.5.25	Sissy bar/passenger back rest Aftermarket?	A412		1	183	183	N	D2	*
A.4.1.5.26	Side reflectors Aftermarket?	A412		1	190	190	N	D2	*
A.4.1.5.27	Frame Aftermarket?	A412		1	197	197	N	D2	*
A.4.1.5.28	Grab rails/hand holds Aftermarket?	A412		1	204	204	N	D2	*
A.4.1.5.29	Fuel tank Aftermarket?	A412		1	211	211	N	D2	*
A.4.1.5.30	Auxiliary fuel tank Aftermarket?	A412		1	218	218	N	D2	*
A.4.1.5.31	Motor crankcase, cylinders Aftermarket?	A413		1	15	15	N	D2	*
A.4.1.5.32	Radiator Aftermarket?	A413		1	22	22	N	D2	*
A.4.1.5.33	Water hose Aftermarket?	A413		1	29	29	N	D2	*
A.4.1.5.34	Motor power enhancement Aftermarket?	A413		1	36	36	N	D2	*
A.4.1.5.36	Oil tank Aftermarket?	A413		1	50	50	N	D2	*
A.4.1.5.37	Battery, battery box Aftermarket?	A413		1	57	57	N	D2	*
A.4.1.5.38	Rear brake pedal Aftermarket?	A413		1	64	64	N	D2	*
A.4.1.5.39	Shift lever Aftermarket?	A413		1	71	71	N	D2	*
A.4.1.5.40	Foot pegs, footrests Aftermarket?	A413		1	78	78	N	D2	*
A.4.1.5.41	Highway pegs/footrests Aftermarket?	A413		1	85	85	N	D2	*
A.4.1.5.42	Side stand Aftermarket?	A413		1	92	92	N	D2	*
A.4.1.5.43	Side stand interlock Aftermarket?	A413		1	99	99	N	D2	*
A.4.1.5.44	Centre stand Aftermarket?	A413		1	106	106	N	D2	*
A.4.1.5.45	Muffler/exhaust Aftermarket?	A413		1	113	113	N	D2	*
A.4.1.5.46	Tank bag Aftermarket?	A413		1	120	120	N	D2	*
A.4.1.5.47	Luggage/cargo rack Aftermarket?	A413		1	127	127	N	D2	*
A.4.1.5.48	Parcel rack Aftermarket?	A413		1	134	134	N	D2	*
A.4.1.5.49	Panniers, saddle bags Aftermarket?	A413		1	141	141	N	D2	*
A.4.1.5.50	Rear position lamps Aftermarket?	A413		1	148	148	N	D2	*
A.4.1.5.51	Stop lamp Aftermarket?	A413		1	155	155	N	D2	*
A.4.1.5.52	Rear reflectors Aftermarket?	A413		1	162	162	N	D2	*
A.4.1.5.53	Rear turn signals Aftermarket?	A413		1	169	169	N	D2	*
A.4.1.5.54	Rear suspension Aftermarket?	A413		1	176	176	N	D2	*
A.4.1.5.55	Rear tyre, wheel Aftermarket?	A413		1	183	183	N	D2	*
A.4.1.5.56	Rear fender Aftermarket?	A413		1	190	190	N	D2	*
A.4.1.5.57	Rear brakes Aftermarket?	A413		1	197	197	N	D2	*
A.4.1.5.58	Tools, tool box Aftermarket?	A413		1	204	204	N	D2	*
A.4.1.5.59	Side covers Aftermarket?	A413		1	211	211	N	D2	*
A.4.1.5.60	Trailer Aftermarket?	A413		1	218	218	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.4.1.6.6	Headlamp(s) Operational?	A412		1	51	51	N	D2	*
A.4.1.6.8	Auxiliary headlamp Operational?	A412		1	65	65	N	D2	*
A.4.1.6.9	Front position lamp Operational?	A412		1	72	72	N	D2	*
A.4.1.6.10	Front reflectors Operational?	A412		1	79	79	N	D2	*
A.4.1.6.11	Front turn signals Operational?	A412		1	86	86	N	D2	*
A.4.1.6.12	Speedometer Operational?	A412		1	93	93	N	D2	*
A.4.1.6.13	Tachometer Operational?	A412		1	100	100	N	D2	*
A.4.1.6.15	Throttle Operational?	A412		1	114	114	N	D2	*
A.4.1.6.16	Clutch lever Operational?	A412		1	121	121	N	D2	*
A.4.1.6.17	Brake lever Operational?	A412		1	128	128	N	D2	*
A.4.1.6.18	Right side rear view mirrors, posts Operational?	A412		1	135	135	N	D2	*
A.4.1.6.19	Left side rear view mirrors, posts Operational?	A412		1	142	142	N	D2	*
A.4.1.6.20	Front suspension Operational?	A412		1	149	149	N	D2	*
A.4.1.6.21	Front tyre, wheel Operational?	A412		1	156	156	N	D2	*
A.4.1.6.22	Front fender Operational?	A412		1	163	163	N	D2	*
A.4.1.6.23	Front brakes Operational?	A412		1	170	170	N	D2	*
A.4.1.6.24	Seat Operational?	A412		1	177	177	N	D2	*
A.4.1.6.25	Sissy bar/passenger back rest Operational?	A412		1	184	184	N	D2	*
A.4.1.6.26	Side reflectors Operational?	A412		1	191	191	N	D2	*
A.4.1.6.32	Radiator Operational?	A413		1	23	23	N	D2	*
A.4.1.6.33	Water hose Operational?	A413		1	30	30	N	D2	*
A.4.1.6.34	Motor power enhancement Operational?	A413		1	37	37	N	D2	*
A.4.1.6.38	Rear brake pedal Operational?	A413		1	65	65	N	D2	*
A.4.1.6.39	Shift lever Operational?	A413		1	72	72	N	D2	*
A.4.1.6.40	Foot pegs, footrests Operational?	A413		1	79	79	N	D2	*
A.4.1.6.41	Highway pegs/footrests Operational?	A413		1	86	86	N	D2	*
A.4.1.6.42	Side stand Operational?	A413		1	93	93	N	D2	*
A.4.1.6.43	Side stand interlock Operational?	A413		1	100	100	N	D2	*
A.4.1.6.44	Centre stand Operational?	A413		1	107	107	N	D2	*
A.4.1.6.45	Muffler/exhaust Operational?	A413		1	114	114	N	D2	*
A.4.1.6.50	Rear position lamps Operational?	A413		1	149	149	N	D2	*
A.4.1.6.51	Stop lamp Operational?	A413		1	156	156	N	D2	*
A.4.1.6.52	Rear reflectors Operational?	A413		1	163	163	N	D2	*
A.4.1.6.53	Rear turn signals Operational?	A413		1	170	170	N	D2	*
A.4.1.6.54	Rear suspension Operational?	A413		1	177	177	N	D2	*
A.4.1.6.55	Rear tyre, wheel Operational?	A413		1	184	184	N	D2	*
A.4.1.6.56	Rear fender Operational?	A413		1	191	191	N	D2	*
A.4.1.6.57	Rear brakes Operational?	A413		1	198	198	N	D2	*
A.4.1.6.60	Trailer Operational?	A413		1	219	219	N	D2	*
A.4.1.7.4	Windscreen In use at time of accident?	A412		1	38	38	N	D2	*
A.4.1.7.5	Fairing In use at time of accident?	A412		1	45	45	N	D2	*
A.4.1.7.6	Headlamp(s) In use at time of accident?	A412		1	52	52	N	D2	*
A.4.1.7.8	Auxiliary headlamp In use at time of accident?	A412		1	66	66	N	D2	*
A.4.1.7.9	Front position lamp In use at time of accident?	A412		1	73	73	N	D2	*
A.4.1.7.11	Front turn signals In use at time of accident?	A412		1	87	87	N	D2	*
A.4.1.7.12	Speedometer In use at time of accident?	A412		1	94	94	N	D2	*
A.4.1.7.13	Tachometer In use at time of accident?	A412		1	101	101	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.4.1.7.15	Throttle In use at time of accident?	A412		1	115	115	N	D2	*
A.4.1.7.16	Clutch lever In use at time of accident?	A412		1	122	122	N	D2	*
A.4.1.7.17	Brake lever In use at time of accident?	A412		1	129	129	N	D2	*
A.4.1.7.23	Front brakes In use at time of accident?	A412		1	171	171	N	D2	*
A.4.1.7.28	Grab rails/hand holds In use at time of accident?	A412		1	206	206	N	D2	*
A.4.1.7.32	Radiator In use at time of accident?	A413		1	24	24	N	D2	*
A.4.1.7.33	Water hose In use at time of accident?	A413		1	31	31	N	D2	*
A.4.1.7.34	Motor power enhancement In use at time of accident?	A413		1	38	38	N	D2	*
A.4.1.7.38	Rear brake pedal In use at time of accident?	A413		1	66	66	N	D2	*
A.4.1.7.39	Shift lever In use at time of accident?	A413		1	73	73	N	D2	*
A.4.1.7.40	Foot pegs, footrests In use at time of accident?	A413		1	80	80	N	D2	*
A.4.1.7.41	Highway pegs/footrests In use at time of accident?	A413		1	87	87	N	D2	*
A.4.1.7.42	Side stand In use at time of accident?	A413		1	94	94	N	D2	*
A.4.1.7.43	Side stand interlock In use at time of accident?	A413		1	101	101	N	D2	*
A.4.1.7.44	Centre stand In use at time of accident?	A413		1	108	108	N	D2	*
A.4.1.7.46	Tank bag In use at time of accident?	A413		1	122	122	N	D2	*
A.4.1.7.47	Luggage/cargo rack In use at time of accident?	A413		1	129	129	N	D2	*
A.4.1.7.48	Parcel rack In use at time of accident?	A413		1	136	136	N	D2	*
A.4.1.7.49	Panniers, saddle bags In use at time of accident?	A413		1	143	143	N	D2	*
A.4.1.7.50	Rear position lamps In use at time of accident?	A413		1	150	150	N	D2	*
A.4.1.7.51	Stop lamp In use at time of accident?	A413		1	157	157	N	D2	*
A.4.1.7.53	Rear turn signals In use at time of accident?	A413		1	171	171	N	D2	*
A.4.1.7.56	Rear fender In use at time of accident?	A413		1	192	192	N	D2	*
A.4.1.7.57	Rear brakes In use at time of accident?	A413		1	199	199	N	D2	*
A.4.1.7.60	Trailer In use at time of accident?	A413		1	220	220	N	D2	*
A.4.1.8.1	Front crash bars Modified?	A412		1	18	18	N	D2	*
A.4.1.8.2	Rear crash bars Modified?	A412		1	25	25	N	D2	*
A.4.1.8.3	Engine guard Modified?	A412		1	32	32	N	D2	*
A.4.1.8.4	Windscreen Modified?	A412		1	39	39	N	D2	*
A.4.1.8.5	Fairing Modified?	A412		1	46	46	N	D2	*
A.4.1.8.6	Headlamp(s) Modified?	A412		1	53	53	N	D2	*
A.4.1.8.7	Headlamp nacelle Modified?	A412		1	60	60	N	D2	*
A.4.1.8.8	Auxiliary headlamp Modified?	A412		1	67	67	N	D2	*
A.4.1.8.9	Front position lamp Modified?	A412		1	74	74	N	D2	*
A.4.1.8.10	Front reflectors Modified?	A412		1	81	81	N	D2	*
A.4.1.8.11	Front turn signals Modified?	A412		1	88	88	N	D2	*
A.4.1.8.12	Speedometer Modified?	A412		1	95	95	N	D2	*
A.4.1.8.13	Tachometer Modified?	A412		1	102	102	N	D2	*
A.4.1.8.14	Handlebars Modified?	A412		1	109	109	N	D2	*
A.4.1.8.15	Throttle Modified?	A412		1	116	116	N	D2	*
A.4.1.8.16	Clutch lever Modified?	A412		1	123	123	N	D2	*
A.4.1.8.17	Brake lever Modified?	A412		1	130	130	N	D2	*
A.4.1.8.18	Right side rear view mirrors, posts Modified?	A412		1	137	137	N	D2	*
A.4.1.8.19	Left side rear view mirrors, posts Modified?	A412		1	144	144	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.8.20	Front suspension Modified?	A412		1	151	151	N	D2 *
A.4.1.8.21	Front tyre/wheel Modified?	A412		1	158	158	N	D2 *
A.4.1.8.22	Front fender Modified?	A412		1	165	165	N	D2 *
A.4.1.8.23	Front brakes Modified?	A412		1	172	172	N	D2 *
A.4.1.8.24	Seat Modified?	A412		1	179	179	N	D2 *
A.4.1.8.25	Sissy bar/passenger back rest Modified?	A412		1	186	186	N	D2 *
A.4.1.8.26	Side reflectors Modified?	A412		1	193	193	N	D2 *
A.4.1.8.27	Frame Modified?	A412		1	200	200	N	D2 *
A.4.1.8.28	Grab rails/hand holds Modified?	A412		1	207	207	N	D2 *
A.4.1.8.29	Fuel tank Modified?	A412		1	214	214	N	D2 *
A.4.1.8.30	Auxiliary fuel tank Modified?	A412		1	221	221	N	D2 *
A.4.1.8.31	Motor crankcase, cylinders Modified?	A413		1	18	18	N	D2 *
A.4.1.8.32	Radiator Modified?	A413		1	25	25	N	D2 *
A.4.1.8.33	Water hose Modified?	A413		1	32	32	N	D2 *
A.4.1.8.34	Motor power enhancement Modified?	A413		1	39	39	N	D2 *
A.4.1.8.35	Transmission case Modified?	A413		1	46	46	N	D2 *
A.4.1.8.36	Oil tank Modified?	A413		1	53	53	N	D2 *
A.4.1.8.37	Battery, battery box Modified?	A413		1	60	60	N	D2 *
A.4.1.8.38	Rear brake pedal Modified?	A413		1	67	67	N	D2 *
A.4.1.8.39	Shift lever Modified?	A413		1	74	74	N	D2 *
A.4.1.8.40	Foot pegs, footrests Modified?	A413		1	81	81	N	D2 *
A.4.1.8.41	Highway pegs/footrests Modified?	A413		1	88	88	N	D2 *
A.4.1.8.42	Side stand Modified?	A413		1	95	95	N	D2 *
A.4.1.8.43	Side stand interlock Modified?	A413		1	102	102	N	D2 *
A.4.1.8.44	Centre stand Modified?	A413		1	109	109	N	D2 *
A.4.1.8.45	Muffler/exhaust Modified?	A413		1	116	116	N	D2 *
A.4.1.8.46	Tank bag Modified?	A413		1	123	123	N	D2 *
A.4.1.8.47	Luggage/cargo rack Modified?	A413		1	130	130	N	D2 *
A.4.1.8.48	Parcel rack Modified?	A413		1	137	137	N	D2 *
A.4.1.8.49	Panniers, saddle bags Modified?	A413		1	144	144	N	D2 *
A.4.1.8.50	Rear position lamps Modified?	A413		1	151	151	N	D2 *
A.4.1.8.51	Stop lamp Modified?	A413		1	158	158	N	D2 *
A.4.1.8.52	Rear reflectors Modified?	A413		1	165	165	N	D2 *
A.4.1.8.53	Rear turn signals Modified?	A413		1	172	172	N	D2 *
A.4.1.8.54	Rear suspension Modified?	A413		1	179	179	N	D2 *
A.4.1.8.55	Rear tyre, wheel Modified?	A413		1	186	186	N	D2 *
A.4.1.8.56	Rear fender Modified?	A413		1	193	193	N	D2 *
A.4.1.8.57	Rear brakes Modified?	A413		1	200	200	N	D2 *
A.4.1.8.58	Tools, tool box Modified?	A413		1	207	207	N	D2 *
A.4.1.8.59	Side covers Modified?	A413		1	214	214	N	D2 *
A.4.1.8.60	Trailer Modified?	A413		1	221	221	N	D2 *
A.4.1.9.1	Front crash bars Damage in accident?	A412		1	19	19	N	D2
A.4.1.9.2	Rear crash bars Damage in accident?	A412		1	26	26	N	D2
A.4.1.9.3	Engine guard Damage in accident?	A412		1	33	33	N	D2
A.4.1.9.4	Windscreen Damage in accident?	A412		1	40	40	N	D2
A.4.1.9.5	Fairing Damage in accident?	A412		1	47	47	N	D2
A.4.1.9.6	Headlamp(s) Damage in accident?	A412		1	54	54	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.9.7	Headlamp nacelle Damage in accident?	A412		1	61	61	N	D2
A.4.1.9.8	Auxiliary headlamp Damage in accident?	A412		1	68	68	N	D2
A.4.1.9.9	Front position lamp Damage in accident?	A412		1	75	75	N	D2
A.4.1.9.10	Front reflectors Damage in accident?	A412		1	82	82	N	D2
A.4.1.9.11	Front turn signals Damage in accident?	A412		1	89	89	N	D2
A.4.1.9.12	Speedometer Damage in accident?	A412		1	96	96	N	D2
A.4.1.9.13	Tachometer Damage in accident?	A412		1	103	103	N	D2
A.4.1.9.14	Handlebars Damage in accident?	A412		1	110	110	N	D2
A.4.1.9.15	Throttle Damage in accident?	A412		1	117	117	N	D2
A.4.1.9.16	Clutch lever Damage in accident?	A412		1	124	124	N	D2
A.4.1.9.17	Brake lever Damage in accident?	A412		1	131	131	N	D2
A.4.1.9.18	Right side rear view mirrors, posts Damage in accident?	A412		1	138	138	N	D2
A.4.1.9.19	Left side rear view mirrors, posts Damage in accident?	A412		1	145	145	N	D2
A.4.1.9.20	Front suspension Damage in accident?	A412		1	152	152	N	D2
A.4.1.9.21	Front tyre/wheel Damage in accident?	A412		1	159	159	N	D2
A.4.1.9.22	Front fender Damage in accident?	A412		1	166	166	N	D2
A.4.1.9.23	Front brakes Damage in accident?	A412		1	173	173	N	D2
A.4.1.9.24	Seat Damage in accident?	A412		1	180	180	N	D2
A.4.1.9.25	Sissy bar/passenger back rest Damage in accident?	A412		1	187	187	N	D2
A.4.1.9.26	Side reflectors Damage in accident?	A412		1	194	194	N	D2
A.4.1.9.27	Frame Damage in accident?	A412		1	201	201	N	D2
A.4.1.9.28	Grab rails/hand holds Damage in accident?	A412		1	208	208	N	D2
A.4.1.9.29	Fuel tank Damage in accident?	A412		1	215	215	N	D2
A.4.1.9.30	Auxiliary fuel tank Damage in accident?	A412		1	222	222	N	D2
A.4.1.9.31	Motor crankcase, cylinders Damage in accident?	A413		1	19	19	N	D2
A.4.1.9.32	Radiator Damage in accident?	A413		1	26	26	N	D2
A.4.1.9.33	Water hose Damage in accident?	A413		1	33	33	N	D2
A.4.1.9.34	Motor power enhancement Damage in accident?	A413		1	40	40	N	D2
A.4.1.9.35	Transmission case Damage in accident?	A413		1	47	47	N	D2
A.4.1.9.36	Oil tank Damage in accident?	A413		1	54	54	N	D2
A.4.1.9.37	Battery, battery box Damage in accident?	A413		1	61	61	N	D2
A.4.1.9.38	Rear brake pedal Damage in accident?	A413		1	68	68	N	D2
A.4.1.9.39	Shift lever Damage in accident?	A413		1	75	75	N	D2
A.4.1.9.40	Foot pegs, footrests Damage in accident?	A413		1	82	82	N	D2
A.4.1.9.41	Highway pegs/footrests Damage in accident?	A413		1	89	89	N	D2
A.4.1.9.42	Side stand Damage in accident?	A413		1	96	96	N	D2
A.4.1.9.43	Side stand interlock Damage in accident?	A413		1	103	103	N	D2
A.4.1.9.44	Centre stand Damage in accident?	A413		1	110	110	N	D2
A.4.1.9.45	Muffler/exhaust Damage in accident?	A413		1	117	117	N	D2
A.4.1.9.46	Tank bag Damage in accident?	A413		1	124	124	N	D2
A.4.1.9.47	Luggage/cargo rack Damage in accident?	A413		1	131	131	N	D2
A.4.1.9.48	Parcel rack Damage in accident?	A413		1	138	138	N	D2
A.4.1.9.49	Panniers, saddle bags Damage in accident?	A413		1	145	145	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.9.50	Rear position lamps Damage in accident?	A413		1	152	152	N	D2
A.4.1.9.51	Stop lamp Damage in accident?	A413		1	159	159	N	D2
A.4.1.9.52	Rear reflectors Damage in accident?	A413		1	166	166	N	D2
A.4.1.9.53	Rear turn signals Damage in accident?	A413		1	173	173	N	D2
A.4.1.9.54	Rear suspension Damage in accident?	A413		1	180	180	N	D2
A.4.1.9.55	Rear tyre, wheel Damage in accident?	A413		1	187	187	N	D2
A.4.1.9.56	Rear fender Damage in accident?	A413		1	194	194	N	D2
A.4.1.9.57	Rear brakes Damage in accident?	A413		1	201	201	N	D2
A.4.1.9.58	Tools, tool box Damage in accident?	A413		1	208	208	N	D2
A.4.1.9.59	Side covers Damage in accident?	A413		1	215	215	N	D2
A.4.1.9.60	Trailer Damage in accident?	A413		1	222	222	N	D2
A.4.2.18(a)	Motorcycle impact speed	A421		3	48	50	N	C
A.4.2.19(a)	Roll attitude angle	A421		3	53	55	N	C
A.4.2.20(a)	Sideslip angle	A421		3	58	60	N	C
A.4.2.21(a)	Relative heading angle	A421		3	63	65	N	C
A.4.2.22(a)	Calculated time from precipitating event to impact	A421		3	68	70	N	C
A.4.2.18(b)	Motorcycle impact speed uncertainty ±	A421		2	51	52	N	C
A.4.2.19(b)	Roll attitude angle uncertainty ±	A421		2	56	57	N	C
A.4.2.20(b)	Sideslip angle uncertainty ±	A421		2	61	62	N	C
A.4.2.21(b)	Relative heading angle uncertainty ±	A421		2	66	67	N	C
A.4.2.22(b)	Calculated time from precipitating event to impact uncertainty ±	A421		2	71	72	N	C
A.4.2.1	Description	A421		2	13	14	N	D
A.4.2.2.a	Travelling speed	A421		3	15	17	N	C
A.4.2.2.b	Travelling speed confidence interval	A421		2	18	19	N	C
A.4.2.3	Line-of-sight to other vehicle	A421		2	20	21	N	O
A.4.2.4	Description	A421		2	22	23	N	D
A.4.2.5.1	Collision avoidance action	A421		1	24	24	N	D
A.4.2.5.2	Collision avoidance action	A421		1	25	25	N	D
A.4.2.5.3	Collision avoidance action	A421		1	26	26	N	D
A.4.2.5.4	Collision avoidance action	A421		1	27	27	N	D
A.4.2.6	Braking skid marks on roadway	A421		1	28	28	N	D
A.4.2.7.1	Length of skid marks on roadway	A421		3	29	31	N	C
A.4.2.7.2	Length of skid marks on roadway	A421		3	32	34	N	C
A.4.2.8	Braking skid mark evidence on roadway	A421		1	35	35	N	D
A.4.2.9	Braking tyre striation evidence	A421		2	36	37	N	D
A.4.2.10	Swerve	A421		1	38	38	N	D
A.4.2.11	Acceleration evidence on rear tyre	A421		1	39	39	N	D
A.4.2.12	Counter-steering	A421		1	40	40	N	D
A.4.2.13	Cornering skid mark evidence on roadway	A421		1	41	41	N	D
A.4.2.14	Cornering tyre striation evidence	A421		1	42	42	N	D
A.4.2.15	Pre-crash scrape marks on motorcycle	A421		2	43	44	N	D
A.4.2.16	Pre-crash accident scene scrape marks	A421		1	45	45	N	D
A.4.2.17	Motorcycle first collision contact code	A421		2	46	47	A/N	D
A.4.2.23	Motorcycle motion code	A421		2	73	74	N	D
A.4.2.24	Distance from POI at motorcycle POR	A421		3	75	77	N	C

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.2.25	Post-crash scrape marks on motorcycle	A421		2	78	79	N	D
A.4.2.26	Rider motion code	A421		2	80	81	N	D
A.4.2.27	Distance from POI to rider POR	A421		3	82	84	N	C
A.4.2.28	Passenger motion code	A421		2	85	86	N	D
A.4.2.29	Distance from POI to passenger POR	A421		3	87	89	N	C
A.4.2.30	Post-crash accident scene scrape marks	A421		1	90	90	N	D
A.4.3.1	Other vehicle number	-		1	See	note 2	N	DI
A.4.3.2	Vehicle type/size/classification	A431		2	14	15	A/N	D
A.4.3.3	Manufacturer, other than motorcycle	A431		2	16	17	A/N	D
A.4.3.4	Motorcycle manufacturer	A431		3	18	20	A/N	D
A.4.3.5	Model (all OVs)	A431		10	21	30	A/N	-
A.4.3.6	Year (all OVs)	A431		4	31	34	N	DI
A.4.3.7	Vehicle kerb mass (all Ovs)	A431		5	35	39	N	C
A.4.3.8	ABS (all OVs)	A431		1	40	40	N	D
A.4.3.9	Mechanical problems	A431		2	41	42	N	D
A.4.4.1	Description	A441		2	14	15	N	D
A.4.4.2.a	Travelling speed	A441		3	16	18	N	C
A.4.4.2.b	Travelling speed confidence interval	A441		2	19	20	N	C
A.4.4.3	Line-of-sight to motorcycle	A441		2	21	22	N	O
A.4.4.4	Description	A441		2	23	24	N	D
A.4.4.5.1	Collision avoidance action	A441		1	25	25	N	D
A.4.4.5.2	Collision avoidance action	A441		1	26	26	N	D
A.4.4.5.3	Collision avoidance action	A441		1	27	27	N	D
A.4.4.5.4	Collision avoidance action	A441		1	28	28	N	D
A.4.4.6	Braking skid marks on roadway	A441		1	29	29	N	D
A.4.4.7.1	Length of skid marks	A441		3	30	32	N	C
A.4.4.7.2	Length of skid marks	A441		3	33	35	N	C
A.4.4.8	Braking skid mark evidence on roadway	A441		1	36	36	N	D
A.4.4.9	Braking tyre striation evidence	A441		2	37	38	N	D
A.4.4.10	Swerve	A441		1	39	39	N	D
A.4.4.11	Acceleration evidence on tyre(s)	A441		1	40	40	N	D
A.4.4.12	Cornering skid mark evidence on roadway	A441		1	41	41	N	D
A.4.4.13	Cornering tyre striation evidence	A441		1	42	42	N	D
A.4.4.14	Other vehicle first collision contact code	A441		4	43	46	A/N	-
A.4.4.15.a	Impact speed	A441		3	47	49	N	C
A.4.4.15.b	Impact speed confidence interval	A441		2	50	51	N	C
A.4.4.16	Other vehicle motion code	A441		2	52	53	N	D2
A.4.4.17	Distance from POI to other vehicle POR	A441		3	54	56	N	C
A.5.1.1.2	Date of birth (DoB)	A511	1	8	14	21	N	Date *
A.5.1.1.3	Age	A511	1	2	22	23	N	C *
A.5.1.1.4	Region/country of driver's license qualification	A511	1	1	24	24	N	D *
A.5.1.1.5.1	Driver's license qualification	A511	1	2	25	26	N	D *
A.5.1.1.5.2	Driver's license qualification	A511	1	2	27	28	N	D *
A.5.1.1.5.3	Driver's license qualification	A511	1	2	29	30	N	D *
A.5.1.1.5.4	Driver's license qualification	A511	1	2	31	32	N	D *
A.5.1.1.6.1	Driver's license date of issue	A511	1	8	33	40	N	Date *
A.5.1.1.6.2	Driver's license date of issue	A511	1	8	41	48	N	Date *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.1.6.3	Driver's license date of issue	A511	1	8	49	56	N	Date *
A.5.1.1.6.4	Driver's license date of issue	A511	1	8	57	64	N	Date *
A.5.1.1.7	Does the license held qualify the driver for driving the accident vehicle?	A511	1	1	65	65	N	D2 *
A.5.1.1.8	Citizenship	A511	1	1	66	66	N	D *
A.5.1.1.9	Height	A511	1	3	67	69	N	C *
A.5.1.1.10	Weight	A511	1	3	70	72	N	C *
A.5.1.1.11	Gender	A511	1	1	73	73	N	D2 *
A.5.1.1.12	Educational status (where permissible)	A511	1	1	74	74	N	D *
A.5.1.1.12.1	Duration of formal education	A511	1	2	75	76	N	C *
A.5.1.1.13	Occupational code (where permissible)	A511	1	2	77	78	N	D *
A.5.1.1.14	Eye correction at time of accident	A511	1	1	79	79	N	D *
A.5.1.1.15	All vehicle experience	A511	1	2	80	81	N	C *
A.5.1.1.16	On any street motorcycle	A511	1	2	82	83	N	C *
A.5.1.1.17	On accident motorcycle	A511	1	2	84	85	N	C *
A.5.1.1.18	Number of days per year that motorcycles are ridden	A511	1	3	86	88	N	C *
A.5.1.1.19	Distance motorcycle is ridden per year	A511	1	5	89	93	N	C *
A.5.1.1.20	Motorcycle training	A511	1	1	94	94	N	D *
A.5.1.1.21.1	Motorcycle percent use estimate	A511	1	3	95	97	N	C *
A.5.1.1.21.2	Motorcycle percent use estimate	A511	1	3	98	100	N	C *
A.5.1.1.21.3	Motorcycle percent use estimate	A511	1	3	101	103	N	C *
A.5.1.1.22	Experience riding with passengers on motorcycle	A511	1	1	104	104	N	D *
A.5.1.1.23	Experience riding with similar cargo/luggage	A511	1	1	105	105	N	D *
A.5.1.1.24	All moving traffic violation convictions in the previous 5 years	A511	1	1	106	106	N	DI *
A.5.1.1.25	Any motorcycle moving traffic accident experience during the previous 5 years	A511	1	1	107	107	N	DI *
A.5.1.1.26	Any other vehicle moving traffic accident experience during the previous 5 years	A511	1	1	108	108	N	DI *
A.5.1.1.27	Origin	A511	1	1	109	109	N	D *
A.5.1.1.28	Destination	A511	1	1	110	110	N	D *
A.5.1.1.29	Trip length	A511	1	3	111	113	N	C *
A.5.1.1.30	Frequency of this road use, in/on any vehicle	A511	1	1	114	114	N	D *
A.5.1.1.31	Length of time since departure, this trip	A511	1	2	115	116	N	C *
A.5.1.1.32	Alcohol/drug type of use	A511	1	1	117	117	N	D *
A.5.1.1.33	Alcohol/drug impairment	A511	1	1	118	118	N	D *
A.5.1.1.34	Blood alcohol concentration (BAC)	A511	1	3	119	121	N	C
A.5.1.1.35	Source of BAC information	A511	1	1	122	122	N	D
A.5.1.1.36	Time span from accident to BAC collection	A511	1	2	123	124	N	C
A.5.1.1.37	Type of drugs other than alcohol	A511	1	1	125	125	N	D
A.5.1.1.38	Source of drugs other than alcohol	A511	1	1	126	126	N	D2 *
A.5.1.1.39.1	Physiological impairment, permanent condition	A511	1	2	127	128	N	D *
A.5.1.1.39.2	Physiological impairment, permanent condition	A511	1	2	129	130	N	D *
A.5.1.1.39.3	Physiological impairment, permanent condition	A511	1	2	131	132	N	D *
A.5.1.1.40.1	Physiological impairment, transient condition	A511	1	2	133	134	N	D *
A.5.1.1.40.2	Physiological impairment, transient condition	A511	1	2	135	136	N	D *
A.5.1.1.40.3	Physiological impairment, transient condition	A511	1	2	137	138	N	D *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.5.1.1.41.1	Stress experienced that day	A511	1	2	139	140	N	D	*
A.5.1.1.41.2	Stress experienced that day	A511	1	2	141	142	N	D	*
A.5.1.1.41.3	Stress experienced that day	A511	1	2	143	144	N	D	*
A.5.1.1.42	Rider riding position on motorcycle at time of collision	A511	1	2	145	146	N	D	
A.5.1.1.44	Attention to driving/passenger tasks	A511	1	2	150	151	N	D	
A.5.1.1.45	Recommended countermeasures, in rider's/driver's/passenger's judgment	A511	1	2	152	153	N	D	
A.5.1.2.1	Motorcycle passenger number	-		1	See	note 2	N	DI	*
A.5.1.2.2	Date of birth (DoB)	A512		8	14	21	N	Date	*
A.5.1.2.3	Age	A512		2	22	23	N	C	*
A.5.1.2.4	Region/country of driver's license qualification	A512		1	24	24	N	D	*
A.5.1.2.5.1	Driver's license qualification	A512		2	25	26	N	D	*
A.5.1.2.5.2	Driver's license qualification	A512		2	27	28	N	D	*
A.5.1.2.5.3	Driver's license qualification	A512		2	29	30	N	D	*
A.5.1.2.5.4	Driver's license qualification	A512		2	31	32	N	D	*
A.5.1.2.6.1	Driver's license date of issue	A512		8	33	40	N	Date	*
A.5.1.2.6.2	Driver's license date of issue	A512		8	41	48	N	Date	*
A.5.1.2.6.3	Driver's license date of issue	A512		8	49	56	N	Date	*
A.5.1.2.6.4	Driver's license date of issue	A512		8	57	64	N	Date	*
A.5.1.2.8	Citizenship	A512		1	66	66	N	D	*
A.5.1.2.9	Height	A512		3	67	69	N	C	*
A.5.1.2.10	Weight	A512		3	70	72	N	C	*
A.5.1.2.11	Gender	A512		1	73	73	N	D2	*
A.5.1.2.12	Educational status (where permissible)	A512		1	74	74	N	D	*
A.5.1.2.12.1	Duration of formal education	A512		2	75	76	N	C	*
A.5.1.2.13	Occupational code (where permissible)	A512		2	77	78	N	D	*
A.5.1.2.14	Eye correction at time of accident	A512		1	79	79	N	D	*
A.5.1.2.15	All vehicle experience	A512		2	80	81	N	C	*
A.5.1.2.16	On any street motorcycle	A512		2	82	83	N	C	*
A.5.1.2.17	On accident motorcycle	A512		2	84	85	N	C	*
A.5.1.2.18	Number of days per year that motorcycles are ridden	A512		3	86	88	N	C	*
A.5.1.2.19	Distance motorcycle is ridden per year	A512		5	89	93	N	C	*
A.5.1.2.20	Motorcycle training	A512		1	94	94	N	D	*
A.5.1.2.21.1	Motorcycle percent use estimate	A512		3	95	97	N	C	*
A.5.1.2.21.2	Motorcycle percent use estimate	A512		3	98	100	N	C	*
A.5.1.2.21.3	Motorcycle percent use estimate	A512		3	101	103	N	C	*
A.5.1.2.22	Experience riding as a passenger on motorcycles	A512		1	104	104	N	D	*
A.5.1.2.24	All moving traffic violation convictions in the previous 5 years	A512		1	106	106	N	DI	*
A.5.1.2.25	Any motorcycle moving traffic accident experience during the previous 5 years	A512		1	107	107	N	DI	*
A.5.1.2.26	Any other vehicle moving traffic accident experience during the previous 5 years	A512		1	108	108	N	DI	*
A.5.1.2.32	Alcohol/drug type of use	A512		1	117	117	N	D	*
A.5.1.2.33	Alcohol/drug impairment	A512		1	118	118	N	D	*
A.5.1.2.34	Blood alcohol concentration (BAC)	A512		3	119	121	N	C	

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.2.35	Source of BAC information	A512		1	122	122	N	D
A.5.1.2.36	Time span from accident to BAC collection	A512		2	123	124	N	C
A.5.1.2.37	Type of drugs other than alcohol	A512		1	125	125	N	D
A.5.1.2.38	Source of drugs other than alcohol	A512		1	126	126	N	D2 *
A.5.1.2.39.1	Physiological impairment, permanent condition	A512		2	127	128	N	D *
A.5.1.2.39.2	Physiological impairment, permanent condition	A512		2	129	130	N	D *
A.5.1.2.39.3	Physiological impairment, permanent condition	A512		2	131	132	N	D *
A.5.1.2.40.1	Physiological impairment, transient condition	A512		2	133	134	N	D *
A.5.1.2.40.2	Physiological impairment, transient condition	A512		2	135	136	N	D *
A.5.1.2.40.3	Physiological impairment, transient condition	A512		2	137	138	N	D *
A.5.1.2.41.1	Stress experienced that day	A512		2	139	140	N	D *
A.5.1.2.41.2	Stress experienced that day	A512		2	141	142	N	D *
A.5.1.2.41.3	Stress experienced that day	A512		2	143	144	N	D *
A.5.1.2.42	Passenger location on motorcycle at time of collision	A512		1	145	145	N	D
A.5.1.2.43.1	Passenger riding position on motorcycle at time of collision	A512		1	147	147	N	D
A.5.1.2.43.2	Passenger riding position on motorcycle at time of collision	A512		1	148	148	N	D
A.5.1.2.43.3	Passenger riding position on motorcycle at time of collision	A512		1	149	149	N	D
A.5.1.2.44	Attention to driving/passenger tasks	A512		2	150	151	N	D
A.5.1.2.45	Recommended countermeasures, in rider's/driver's/passenger's judgment	A512		2	152	153	N	D
A.5.1.3.2	Date of birth (DoB)	A513		8	14	21	N	Date
A.5.1.3.3	Age	A513		2	22	23	N	C
A.5.1.3.4	Region/country of driver's license qualification	A513		1	24	24	N	D
A.5.1.3.5.1	Driver's license qualification	A513		2	25	26	N	D
A.5.1.3.5.2	Driver's license qualification	A513		2	27	28	N	D
A.5.1.3.5.3	Driver's license qualification	A513		2	29	30	N	D
A.5.1.3.5.4	Driver's license qualification	A513		2	31	32	N	D
A.5.1.3.6.1	Driver's license date of issue	A513		8	33	40	N	Date
A.5.1.3.6.2	Driver's license date of issue	A513		8	41	48	N	Date
A.5.1.3.6.3	Driver's license date of issue	A513		8	49	56	N	Date
A.5.1.3.6.4	Driver's license date of issue	A513		8	57	64	N	Date
A.5.1.3.7	Does the license held qualify the driver for driving the accident vehicle?	A513		1	65	65	N	D2
A.5.1.3.8	Citizenship	A513		1	66	66	N	D
A.5.1.3.9	Height	A513		3	67	69	N	C
A.5.1.3.10	Weight	A513		3	70	72	N	C
A.5.1.3.11	Gender	A513		1	73	73	N	D2
A.5.1.3.12	Educational status (where permissible)	A513		1	74	74	N	D
A.5.1.3.12.1	Duration of formal education	A513		2	75	76	N	C
A.5.1.3.13	Occupational code (where permissible)	A513		2	77	78	N	D
A.5.1.3.14	Eye correction at time of accident	A513		1	79	79	N	D
A.5.1.3.15	All vehicle experience	A513		2	80	81	N	C
A.5.1.3.16	On any street motorcycle	A513		2	82	83	N	C
A.5.1.3.17	In accident vehicle	A513		2	84	85	N	C

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.3.18	Number of days per year that motorcycles are ridden	A513		3	86	88	N	C
A.5.1.3.19	Distance motorcycle is ridden per year	A513		5	89	93	N	C
A.5.1.3.20	Driver training	A513		1	94	94	N	D
A.5.1.3.21.1	Motorcycle percent use estimate	A513		3	95	97	N	C
A.5.1.3.21.2	Motorcycle percent use estimate	A513		3	98	100	N	C
A.5.1.3.21.3	Motorcycle percent use estimate	A513		3	101	103	N	C
A.5.1.3.24	All moving traffic violation convictions in the previous 5 years	A513		1	106	106	N	DI
A.5.1.3.25	Any motorcycle moving traffic accident experience during the previous 5 years	A513		1	107	107	N	DI
A.5.1.3.26	Any other vehicle moving traffic accident experience during the previous 5 years	A513		1	108	108	N	DI
A.5.1.3.27	Origin	A513		1	109	109	N	D
A.5.1.3.28	Destination	A513		1	110	110	N	D
A.5.1.3.29	Trip length	A513		3	111	113	N	C
A.5.1.3.30	Frequency of this road use, in/on any vehicle	A513		1	114	114	N	D
A.5.1.3.31	Length of time since departure, this trip	A513		2	115	116	N	C
A.5.1.3.32	Alcohol/drug type of use	A513		1	117	117	N	D
A.5.1.3.33	Alcohol/drug impairment	A513		1	118	118	N	D
A.5.1.3.34	Blood alcohol concentration (BAC)	A513		3	119	121	N	C
A.5.1.3.35	Source of BAC information	A513		1	122	122	N	D
A.5.1.3.36	Time span from accident to BAC collection	A513		2	123	124	N	C
A.5.1.3.37	Type of drugs other than alcohol	A513		1	125	125	N	D
A.5.1.3.38	Source of drugs other than alcohol	A513		1	126	126	N	D2
A.5.1.3.39.1	Physiological impairment, permanent condition	A513		2	127	128	N	D
A.5.1.3.39.2	Physiological impairment, permanent condition	A513		2	129	130	N	D
A.5.1.3.39.3	Physiological impairment, permanent condition	A513		2	131	132	N	D
A.5.1.3.40.1	Physiological impairment, transient condition	A513		2	133	134	N	D
A.5.1.3.40.2	Physiological impairment, transient condition	A513		2	135	136	N	D
A.5.1.3.40.3	Physiological impairment, transient condition	A513		2	137	138	N	D
A.5.1.3.41.1	Stress experienced that day	A513		2	139	140	N	D
A.5.1.3.41.2	Stress experienced that day	A513		2	141	142	N	D
A.5.1.3.41.3	Stress experienced that day	A513		2	143	144	N	D
A.5.1.3.44	Attention to driving/passenger tasks	A513		2	150	151	N	D
A.5.1.3.45	Recommended countermeasures, in rider's/driver's/passenger's judgment	A513		2	152	153	N	D
A.5.1.3.46	Number of occupants in other vehicle	A513		1	154	154	N	D
A.5.2.1.1	Trauma status	A521	1	2	14	15	N	D
A.5.2.1.1.1	Trauma status, number of days	A521	1	2	16	17	N	C
A.5.2.1.2.1	Injuries	A522	11	9	15	23	A/N	-
A.5.2.1.2.2	Injuries	A522	11	9	24	32	A/N	-
A.5.2.1.2.3	Injuries	A522	11	9	33	41	A/N	-
A.5.2.1.2.4	Injuries	A522	11	9	42	50	A/N	-
A.5.2.1.2.5	Injuries	A522	11	9	51	59	A/N	-
A.5.2.1.2.6	Injuries	A522	11	9	60	68	A/N	-
A.5.2.1.2.7	Injuries	A522	11	9	69	77	A/N	-
A.5.2.1.2.8	Injuries	A522	11	9	78	86	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.1.2.9	Injuries	A522	11	9	87	95	A/N	-
A.5.2.1.3.1	Injuries	A522	12	9	15	23	A/N	-
A.5.2.1.3.2	Injuries	A522	12	9	24	32	A/N	-
A.5.2.1.3.3	Injuries	A522	12	9	33	41	A/N	-
A.5.2.1.3.4	Injuries	A522	12	9	42	50	A/N	-
A.5.2.1.3.5	Injuries	A522	12	9	51	59	A/N	-
A.5.2.1.3.6	Injuries	A522	12	9	60	68	A/N	-
A.5.2.1.3.7	Injuries	A522	12	9	69	77	A/N	-
A.5.2.1.3.8	Injuries	A522	12	9	78	86	A/N	-
A.5.2.1.3.9	Injuries	A522	12	9	87	95	A/N	-
A.5.2.1.4.1	Injuries	A522	13	9	15	23	A/N	-
A.5.2.1.4.2	Injuries	A522	13	9	24	32	A/N	-
A.5.2.1.4.3	Injuries	A522	13	9	33	41	A/N	-
A.5.2.1.4.4	Injuries	A522	13	9	42	50	A/N	-
A.5.2.1.4.5	Injuries	A522	13	9	51	59	A/N	-
A.5.2.1.4.6	Injuries	A522	13	9	60	68	A/N	-
A.5.2.1.4.7	Injuries	A522	13	9	69	77	A/N	-
A.5.2.1.4.8	Injuries	A522	13	9	78	86	A/N	-
A.5.2.1.4.9	Injuries	A522	13	9	87	95	A/N	-
A.5.2.1.5.1	Injuries	A522	14	9	15	23	A/N	-
A.5.2.1.5.2	Injuries	A522	14	9	24	32	A/N	-
A.5.2.1.5.3	Injuries	A522	14	9	33	41	A/N	-
A.5.2.1.5.4	Injuries	A522	14	9	42	50	A/N	-
A.5.2.1.5.5	Injuries	A522	14	9	51	59	A/N	-
A.5.2.1.5.6	Injuries	A522	14	9	60	68	A/N	-
A.5.2.1.5.7	Injuries	A522	14	9	69	77	A/N	-
A.5.2.1.5.8	Injuries	A522	14	9	78	86	A/N	-
A.5.2.1.5.9	Injuries	A522	14	9	87	95	A/N	-
A.5.2.1.6.1	Injuries	A522	15	9	15	23	A/N	-
A.5.2.1.6.2	Injuries	A522	15	9	24	32	A/N	-
A.5.2.1.6.3	Injuries	A522	15	9	33	41	A/N	-
A.5.2.1.6.4	Injuries	A522	15	9	42	50	A/N	-
A.5.2.1.6.5	Injuries	A522	15	9	51	59	A/N	-
A.5.2.1.6.6	Injuries	A522	15	9	60	68	A/N	-
A.5.2.1.6.7	Injuries	A522	15	9	69	77	A/N	-
A.5.2.1.6.8	Injuries	A522	15	9	78	86	A/N	-
A.5.2.1.6.9	Injuries	A522	15	9	87	95	A/N	-
A.5.2.1.7.1	Injuries	A522	16	9	15	23	A/N	-
A.5.2.1.7.2	Injuries	A522	16	9	24	32	A/N	-
A.5.2.1.7.3	Injuries	A522	16	9	33	41	A/N	-
A.5.2.1.7.4	Injuries	A522	16	9	42	50	A/N	-
A.5.2.1.7.5	Injuries	A522	16	9	51	59	A/N	-
A.5.2.1.7.6	Injuries	A522	16	9	60	68	A/N	-
A.5.2.1.7.7	Injuries	A522	16	9	69	77	A/N	-
A.5.2.1.7.8	Injuries	A522	16	9	78	86	A/N	-
A.5.2.1.7.9	Injuries	A522	16	9	87	95	A/N	-
A.5.2.1.8.1	Injuries	A522	17	9	15	23	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.1.8.2	Injuries	A522	17	9	24	32	A/N	-
A.5.2.1.8.3	Injuries	A522	17	9	33	41	A/N	-
A.5.2.1.8.4	Injuries	A522	17	9	42	50	A/N	-
A.5.2.1.8.5	Injuries	A522	17	9	51	59	A/N	-
A.5.2.1.8.6	Injuries	A522	17	9	60	68	A/N	-
A.5.2.1.8.7	Injuries	A522	17	9	69	77	A/N	-
A.5.2.1.8.8	Injuries	A522	17	9	78	86	A/N	-
A.5.2.1.8.9	Injuries	A522	17	9	87	95	A/N	-
A.5.2.1.9.1	Injuries	A522	18	9	15	23	A/N	-
A.5.2.1.9.2	Injuries	A522	18	9	24	32	A/N	-
A.5.2.1.9.3	Injuries	A522	18	9	33	41	A/N	-
A.5.2.1.9.4	Injuries	A522	18	9	42	50	A/N	-
A.5.2.1.9.5	Injuries	A522	18	9	51	59	A/N	-
A.5.2.1.9.6	Injuries	A522	18	9	60	68	A/N	-
A.5.2.1.9.7	Injuries	A522	18	9	69	77	A/N	-
A.5.2.1.9.8	Injuries	A522	18	9	78	86	A/N	-
A.5.2.1.9.9	Injuries	A522	18	9	87	95	A/N	-
A.5.2.1.10.1	Injuries	A522	19	9	15	23	A/N	-
A.5.2.1.10.2	Injuries	A522	19	9	24	32	A/N	-
A.5.2.1.10.3	Injuries	A522	19	9	33	41	A/N	-
A.5.2.1.10.4	Injuries	A522	19	9	42	50	A/N	-
A.5.2.1.10.5	Injuries	A522	19	9	51	59	A/N	-
A.5.2.1.10.6	Injuries	A522	19	9	60	68	A/N	-
A.5.2.1.10.7	Injuries	A522	19	9	69	77	A/N	-
A.5.2.1.10.8	Injuries	A522	19	9	78	86	A/N	-
A.5.2.1.10.9	Injuries	A522	19	9	87	95	A/N	-
A.5.2.1.11.1	Injury information source	A521	1	1	18	18	N	D
A.5.2.1.11.2	Injury information source	A521	1	1	19	19	N	D
A.5.2.1.11.3	Injury information source	A521	1	1	20	20	N	D
A.5.2.1.11.4	Injury information source	A521	1	1	21	21	N	D
A.5.2.2.1	Trauma status	A523		2	14	15	N	D
A.5.2.2.1.1	Trauma status, number of days	A523		2	16	17	N	C
A.5.2.2.2.1	Injuries	A524	1	9	15	23	A/N	-
A.5.2.2.2.2	Injuries	A524	1	9	24	32	A/N	-
A.5.2.2.2.3	Injuries	A524	1	9	33	41	A/N	-
A.5.2.2.2.4	Injuries	A524	1	9	42	50	A/N	-
A.5.2.2.2.5	Injuries	A524	1	9	51	59	A/N	-
A.5.2.2.2.6	Injuries	A524	1	9	60	68	A/N	-
A.5.2.2.2.7	Injuries	A524	1	9	69	77	A/N	-
A.5.2.2.2.8	Injuries	A524	1	9	78	86	A/N	-
A.5.2.2.2.9	Injuries	A524	1	9	87	95	A/N	-
A.5.2.2.3.1	Injuries	A524	2	9	15	23	A/N	-
A.5.2.2.3.2	Injuries	A524	2	9	24	32	A/N	-
A.5.2.2.3.3	Injuries	A524	2	9	33	41	A/N	-
A.5.2.2.3.4	Injuries	A524	2	9	42	50	A/N	-
A.5.2.2.3.5	Injuries	A524	2	9	51	59	A/N	-
A.5.2.2.3.6	Injuries	A524	2	9	60	68	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.2.3.7	Injuries	A524	2	9	69	77	A/N	-
A.5.2.2.3.8	Injuries	A524	2	9	78	86	A/N	-
A.5.2.2.3.9	Injuries	A524	2	9	87	95	A/N	-
A.5.2.2.4.1	Injuries	A524	3	9	15	23	A/N	-
A.5.2.2.4.2	Injuries	A524	3	9	24	32	A/N	-
A.5.2.2.4.3	Injuries	A524	3	9	33	41	A/N	-
A.5.2.2.4.4	Injuries	A524	3	9	42	50	A/N	-
A.5.2.2.4.5	Injuries	A524	3	9	51	59	A/N	-
A.5.2.2.4.6	Injuries	A524	3	9	60	68	A/N	-
A.5.2.2.4.7	Injuries	A524	3	9	69	77	A/N	-
A.5.2.2.4.8	Injuries	A524	3	9	78	86	A/N	-
A.5.2.2.4.9	Injuries	A524	3	9	87	95	A/N	-
A.5.2.2.5.1	Injuries	A524	4	9	15	23	A/N	-
A.5.2.2.5.2	Injuries	A524	4	9	24	32	A/N	-
A.5.2.2.5.3	Injuries	A524	4	9	33	41	A/N	-
A.5.2.2.5.4	Injuries	A524	4	9	42	50	A/N	-
A.5.2.2.5.5	Injuries	A524	4	9	51	59	A/N	-
A.5.2.2.5.6	Injuries	A524	4	9	60	68	A/N	-
A.5.2.2.5.7	Injuries	A524	4	9	69	77	A/N	-
A.5.2.2.5.8	Injuries	A524	4	9	78	86	A/N	-
A.5.2.2.5.9	Injuries	A524	4	9	87	95	A/N	-
A.5.2.2.6.1	Injuries	A524	5	9	15	23	A/N	-
A.5.2.2.6.2	Injuries	A524	5	9	24	32	A/N	-
A.5.2.2.6.3	Injuries	A524	5	9	33	41	A/N	-
A.5.2.2.6.4	Injuries	A524	5	9	42	50	A/N	-
A.5.2.2.6.5	Injuries	A524	5	9	51	59	A/N	-
A.5.2.2.6.6	Injuries	A524	5	9	60	68	A/N	-
A.5.2.2.6.7	Injuries	A524	5	9	69	77	A/N	-
A.5.2.2.6.8	Injuries	A524	5	9	78	86	A/N	-
A.5.2.2.6.9	Injuries	A524	5	9	87	95	A/N	-
A.5.2.2.7.1	Injuries	A524	6	9	15	23	A/N	-
A.5.2.2.7.2	Injuries	A524	6	9	24	32	A/N	-
A.5.2.2.7.3	Injuries	A524	6	9	33	41	A/N	-
A.5.2.2.7.4	Injuries	A524	6	9	42	50	A/N	-
A.5.2.2.7.5	Injuries	A524	6	9	51	59	A/N	-
A.5.2.2.7.6	Injuries	A524	6	9	60	68	A/N	-
A.5.2.2.7.7	Injuries	A524	6	9	69	77	A/N	-
A.5.2.2.7.8	Injuries	A524	6	9	78	86	A/N	-
A.5.2.2.7.9	Injuries	A524	6	9	87	95	A/N	-
A.5.2.2.8.1	Injuries	A524	7	9	15	23	A/N	-
A.5.2.2.8.2	Injuries	A524	7	9	24	32	A/N	-
A.5.2.2.8.3	Injuries	A524	7	9	33	41	A/N	-
A.5.2.2.8.4	Injuries	A524	7	9	42	50	A/N	-
A.5.2.2.8.5	Injuries	A524	7	9	51	59	A/N	-
A.5.2.2.8.6	Injuries	A524	7	9	60	68	A/N	-
A.5.2.2.8.7	Injuries	A524	7	9	69	77	A/N	-
A.5.2.2.8.8	Injuries	A524	7	9	78	86	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.2.8.9	Injuries	A524	7	9	87	95	A/N	-
A.5.2.2.9.1	Injuries	A524	8	9	15	23	A/N	-
A.5.2.2.9.2	Injuries	A524	8	9	24	32	A/N	-
A.5.2.2.9.3	Injuries	A524	8	9	33	41	A/N	-
A.5.2.2.9.4	Injuries	A524	8	9	42	50	A/N	-
A.5.2.2.9.5	Injuries	A524	8	9	51	59	A/N	-
A.5.2.2.9.6	Injuries	A524	8	9	60	68	A/N	-
A.5.2.2.9.7	Injuries	A524	8	9	69	77	A/N	-
A.5.2.2.9.8	Injuries	A524	8	9	78	86	A/N	-
A.5.2.2.9.9	Injuries	A524	8	9	87	95	A/N	-
A.5.2.2.10.1	Injuries	A524	9	9	15	23	A/N	-
A.5.2.2.10.2	Injuries	A524	9	9	24	32	A/N	-
A.5.2.2.10.3	Injuries	A524	9	9	33	41	A/N	-
A.5.2.2.10.4	Injuries	A524	9	9	42	50	A/N	-
A.5.2.2.10.5	Injuries	A524	9	9	51	59	A/N	-
A.5.2.2.10.6	Injuries	A524	9	9	60	68	A/N	-
A.5.2.2.10.7	Injuries	A524	9	9	69	77	A/N	-
A.5.2.2.10.8	Injuries	A524	9	9	78	86	A/N	-
A.5.2.2.10.9	Injuries	A524	9	9	87	95	A/N	-
A.5.2.2.11.1	Injury information source 1	A523		1	18	18	N	D
A.5.2.2.11.2	Injury information source 2	A523		1	19	19	N	D
A.5.2.2.11.3	Injury information source 3	A523		1	20	20	N	D
A.5.2.2.11.4	Injury information source 4	A523		1	21	21	N	D
A.5.2.3.1	Driver maximum AIS	A525		9	14	22	A/N	-
A.5.2.3.2.1	Passenger number	A525		1	23	23	N	D
A.5.2.3.2.2	Passenger number	A525		1	24	24	N	D
A.5.2.3.2.3	Passenger number	A525		1	25	25	N	D
A.5.2.3.2.4	Passenger number	A525		1	26	26	N	D
A.5.2.3.2.5	Passenger number	A525		1	27	27	N	D
A.5.2.3.2.6	Passenger number	A525		1	28	28	N	D
A.5.2.3.2.7	Passenger number	A525		1	29	29	N	D
A.5.2.3.2.8	Passenger number	A525		1	30	30	N	D
A.5.2.3.3.1	Passenger maximum AIS	A525		10	31	40	A/N	-
A.5.2.3.3.2	Passenger maximum AIS	A525		10	41	50	A/N	-
A.5.2.3.3.3	Passenger maximum AIS	A525		10	51	60	A/N	-
A.5.2.3.3.4	Passenger maximum AIS	A525		10	61	70	A/N	-
A.5.2.3.3.5	Passenger maximum AIS	A525		10	71	80	A/N	-
A.5.2.3.3.6	Passenger maximum AIS	A525		10	81	90	A/N	-
A.5.2.3.3.7	Passenger maximum AIS	A525		10	91	100	A/N	-
A.5.2.3.3.8	Passenger maximum AIS	A525		10	101	110	A/N	-
A.5.2.3.4.1	Pedestrian number	A526		1	13	13	N	D
A.5.2.3.4.2	Pedestrian number	A526		1	14	14	N	D
A.5.2.3.4.3	Pedestrian number	A526		1	15	15	N	D
A.5.2.3.4.4	Pedestrian number	A526		1	16	16	N	D
A.5.2.3.4.5	Pedestrian number	A526		1	17	17	N	D
A.5.2.3.4.6	Pedestrian number	A526		1	18	18	N	D
A.5.2.3.4.7	Pedestrian number	A526		1	19	19	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.3.4.8	Pedestrian number	A526		1	20	20	N	D
A.5.2.3.5.1	Pedestrian maximum AIS	A526		10	21	30	A/N	-
A.5.2.3.5.2	Pedestrian maximum AIS	A526		10	31	40	A/N	-
A.5.2.3.5.3	Pedestrian maximum AIS	A526		10	41	50	A/N	-
A.5.2.3.5.4	Pedestrian maximum AIS	A526		10	51	60	A/N	-
A.5.2.3.5.5	Pedestrian maximum AIS	A526		10	61	70	A/N	-
A.5.2.3.5.6	Pedestrian maximum AIS	A526		10	71	80	A/N	-
A.5.2.3.5.7	Pedestrian maximum AIS	A526		10	81	90	A/N	-
A.5.2.3.5.8	Pedestrian maximum AIS	A526		10	91	100	A/N	-
A.5.3.1.1	Upper torso and upper extremities coverage material	A531		1	14	14	N	D *
A.5.3.1.2	Are upper torso and upper extremities clothing motorcycle oriented?	A531		1	15	15	N	D2 *
A.5.3.1.3	Lower torso and lower extremities coverage material	A531		1	16	16	N	D *
A.5.3.1.4	Are lower torso and lower extremities clothing motorcycle oriented?	A531		1	17	17	N	D2 *
A.5.3.1.5	Footwear material/type	A531		1	18	18	N	D *
A.5.3.1.6	Is footwear motorcycle oriented?	A531		1	19	19	N	D *
A.5.3.1.7	Glove material	A531		1	20	20	N	D2 *
A.5.3.1.8	Are gloves motorcycle oriented?	A531		1	21	21	N	D *
A.5.3.1.9	Eye coverage in use, separate from helmet	A531		2	22	23	N	D *
A.5.3.1.10	Colour of eye coverage lens	A531		1	24	24	N	D2 *
A.5.3.1.11	Wearing helmet on head?	A531		1	25	25	N	D2 *
A.5.3.1.12	Was helmet properly adjusted on head?	A531		1	26	26	N	D2 *
A.5.3.1.13	Was helmet securely fastened?	A531		1	27	27	N	D2 *
A.5.3.1.14	Type of helmet	A531		1	28	28	N	D *
A.5.3.1.15	Type of coverage	A531		2	29	30	N	D *
A.5.3.1.16	Predominating colour	A531		2	31	32	N	D *
A.5.3.1.17	Colour of face shield, if present	A531		1	33	33	N	D *
A.5.3.1.18	Helmet owned by wearer?	A531		1	34	34	N	D2 *
A.5.3.1.19	Helmet fit	A531		1	35	35	N	D *
A.5.3.1.20	Claimed frequency of helmet use on head	A531		3	36	38	N	C *
A.5.3.1.21.1	Conditions under which helmet is usually worn	A531		1	39	39	N	D *
A.5.3.1.21.2	Conditions under which helmet is usually worn	A531		1	40	40	N	D *
A.5.3.1.21.3	Conditions under which helmet is usually worn	A531		1	41	41	N	D *
A.5.3.1.21.4	Conditions under which helmet is usually worn	A531		1	42	42	N	D *
A.5.3.1.22	Manufacturer	A531		3	43	45	A/N	D *
A.5.3.1.23	Date of manufacture	A531		8	46	53	N	Date *
A.5.3.1.24	Model	A531		10	54	63	A/N	- *
A.5.3.1.25.1	Conformity to which qualification	A531		2	64	65	N	D *
A.5.3.1.25.2	Conformity to which qualification	A531		2	66	67	N	D *
A.5.3.1.25.3	Conformity to which qualification	A531		2	68	69	N	D *
A.5.3.1.25.4	Conformity to which qualification	A531		2	70	71	N	D *
A.5.3.1.26	Labelled size, in cm	A531		2	72	73	N	O *
A.5.3.1.27	Helmet mass	A531		4	74	77	N	C *
A.5.3.1.28	Condition prior to accident	A531		1	78	78	N	D *
A.5.3.1.29	Type	A531		1	79	79	N	D *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.3.1.30	Was helmet retained in place on head during accident?	A531		1	80	80	N	D
A.5.3.1.31	Was there a retention system failure?	A531		1	81	81	N	D2
A.5.3.1.32	Type of failure	A531		1	82	82	N	D
A.5.3.1.33.1	Type of damage to shell, motorcycle rider	A531		1	83	83	N	D
A.5.3.1.33.2	Type of damage to shell, motorcycle rider	A531		1	84	84	N	D
A.5.3.1.33.3	Type of damage to shell, motorcycle rider	A531		1	85	85	N	D
A.5.3.1.33.4	Type of damage to shell, motorcycle rider	A531		1	86	86	N	D
A.5.3.1.33.5	Type of damage to shell, motorcycle rider	A531		1	87	87	N	D
A.5.3.1.34.1	Type of damage to shell, motorcycle rider	A531		2	88	89	N	D
A.5.3.1.34.2	Type of damage to shell, motorcycle rider	A531		2	90	91	N	D
A.5.3.1.34.3	Type of damage to shell, motorcycle rider	A531		2	92	93	N	D
A.5.3.1.34.4	Type of damage to shell, motorcycle rider	A531		2	94	95	N	D
A.5.3.1.34.5	Type of damage to shell, motorcycle rider	A531		2	96	97	N	D
A.5.3.1.35.1.1	Type of damage to shell, motorcycle rider	A531		2	98	99	N	D
A.5.3.1.35.1.2	Type of damage to shell, motorcycle rider	A531		2	100	101	N	D
A.5.3.1.35.1.3	Type of damage to shell, motorcycle rider	A531		2	102	103	N	D
A.5.3.1.35.1.4	Type of damage to shell, motorcycle rider	A531		2	104	105	N	D
A.5.3.1.35.1.5	Type of damage to shell, motorcycle rider	A531		2	106	107	N	D
A.5.3.1.35.2.1	Type of damage to shell, motorcycle rider	A531		2	108	109	N	D
A.5.3.1.35.2.2	Type of damage to shell, motorcycle rider	A531		2	110	111	N	D
A.5.3.1.35.2.3	Type of damage to shell, motorcycle rider	A531		2	112	113	N	D
A.5.3.1.35.2.4	Type of damage to shell, motorcycle rider	A531		2	114	115	N	D
A.5.3.1.35.2.5	Type of damage to shell, motorcycle rider	A531		2	116	117	N	D
A.5.3.1.35.3.1	Type of damage to shell, motorcycle rider	A531		2	118	119	N	D
A.5.3.1.35.3.2	Type of damage to shell, motorcycle rider	A531		2	120	121	N	D
A.5.3.1.35.3.3	Type of damage to shell, motorcycle rider	A531		2	122	123	N	D
A.5.3.1.35.3.4	Type of damage to shell, motorcycle rider	A531		2	124	125	N	D
A.5.3.1.35.3.5	Type of damage to shell, motorcycle rider	A531		2	126	127	N	D
A.5.3.2.1	Upper torso and upper extremities coverage material	A532		1	14	14	N	D *
A.5.3.2.2	Are upper torso and upper extremities clothing motorcycle oriented?	A532		1	15	15	N	D2 *
A.5.3.2.3	Lower torso and lower extremities coverage material	A532		1	16	16	N	D *
A.5.3.2.4	Are lower torso and lower extremities clothing motorcycle oriented?	A532		1	17	17	N	D2 *
A.5.3.2.5	Footwear material/type	A532		1	18	18	N	D *
A.5.3.2.6	Is footwear motorcycle oriented?	A532		1	19	19	N	D *
A.5.3.2.7	Glove material	A532		1	20	20	N	D2 *
A.5.3.2.8	Are gloves motorcycle oriented?	A532		1	21	21	N	D *
A.5.3.2.9	Eye coverage in use, separate from helmet	A532		2	22	23	N	D *
A.5.3.2.10	Colour of eye coverage lens	A532		1	24	24	N	D2 *
A.5.3.2.11	Wearing helmet on head?	A532		1	25	25	N	D2 *
A.5.3.2.12	Was helmet properly adjusted on head?	A532		1	26	26	N	D2 *
A.5.3.2.13	Was helmet securely fastened?	A532		1	27	27	N	D2 *
A.5.3.2.14	Type of helmet	A532		1	28	28	N	D *
A.5.3.2.15	Type of coverage	A532		2	29	30	N	D *

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
A.5.3.2.16	Predominating colour	A532		2	31	32	N	D	*
A.5.3.2.17	Colour of face shield, if present	A532		1	33	33	N	D	*
A.5.3.2.18	Helmet owned by wearer?	A532		1	34	34	N	D2	*
A.5.3.2.19	Helmet fit	A532		1	35	35	N	D	*
A.5.3.2.20	Claimed frequency of helmet use on head	A532		3	36	38	N	C	*
A.5.3.2.21.1	Conditions under which helmet is usually worn	A532		1	39	39	N	D	*
A.5.3.2.21.2	Conditions under which helmet is usually worn	A532		1	40	40	N	D	*
A.5.3.2.21.3	Conditions under which helmet is usually worn	A532		1	41	41	N	D	*
A.5.3.2.21.4	Conditions under which helmet is usually worn	A532		1	42	42	N	D	*
A.5.3.2.22	Manufacturer	A532		3	43	45	A/N	D	*
A.5.3.2.23	Date of manufacture	A532		8	46	53	N	Date	*
A.5.3.2.24	Model	A532		10	54	63	A/N	-	*
A.5.3.2.25.1	Conformity to which qualification	A532		2	64	65	N	D	*
A.5.3.2.25.2	Conformity to which qualification	A532		2	66	67	N	D	*
A.5.3.2.25.3	Conformity to which qualification	A532		2	68	69	N	D	*
A.5.3.2.25.4	Conformity to which qualification	A532		2	70	71	N	D	*
A.5.3.2.26	Labelled size, in cm	A532		2	72	73	N	O	*
A.5.3.2.27	Helmet mass	A532		4	74	77	N	C	*
A.5.3.2.28	Condition prior to accident	A532		1	78	78	N	D	*
A.5.3.2.29	Type	A532		1	79	79	N	D	*
A.5.3.2.30	Was helmet retained in place on head during accident?	A532		1	80	80	N	D	
A.5.3.2.31	Was there a retention system failure?	A532		1	81	81	N	D2	
A.5.3.2.32	Type of failure	A532		1	82	82	N	D	
A.5.3.2.33.1	Type of damage to shell, motorcycle passenger	A532		1	83	83	N	D	
A.5.3.2.33.2	Type of damage to shell, motorcycle passenger	A532		1	84	84	N	D	
A.5.3.2.33.3	Type of damage to shell, motorcycle passenger	A532		1	85	85	N	D	
A.5.3.2.33.4	Type of damage to shell, motorcycle passenger	A532		1	86	86	N	D	
A.5.3.2.33.5	Type of damage to shell, motorcycle passenger	A532		1	87	87	N	D	
A.5.3.2.34.1	Type of damage to shell, motorcycle passenger	A532		2	88	89	N	D	
A.5.3.2.34.2	Type of damage to shell, motorcycle passenger	A532		2	90	91	N	D	
A.5.3.2.34.3	Type of damage to shell, motorcycle passenger	A532		2	92	93	N	D	
A.5.3.2.34.4	Type of damage to shell, motorcycle passenger	A532		2	94	95	N	D	
A.5.3.2.34.5	Type of damage to shell, motorcycle passenger	A532		2	96	97	N	D	
A.5.3.2.35.1.1	Type of damage to shell, motorcycle passenger	A532		2	98	99	N	D	
A.5.3.2.35.1.2	Type of damage to shell, motorcycle passenger	A532		2	100	101	N	D	
A.5.3.2.35.1.3	Type of damage to shell, motorcycle passenger	A532		2	102	103	N	D	
A.5.3.2.35.1.4	Type of damage to shell, motorcycle passenger	A532		2	104	105	N	D	
A.5.3.2.35.1.5	Type of damage to shell, motorcycle passenger	A532		2	106	107	N	D	
A.5.3.2.35.2.1	Type of damage to shell, motorcycle passenger	A532		2	108	109	N	D	
A.5.3.2.35.2.2	Type of damage to shell, motorcycle passenger	A532		2	110	111	N	D	
A.5.3.2.35.2.3	Type of damage to shell, motorcycle passenger	A532		2	112	113	N	D	
A.5.3.2.35.2.4	Type of damage to shell, motorcycle passenger	A532		2	114	115	N	D	
A.5.3.2.35.2.5	Type of damage to shell, motorcycle passenger	A532		2	116	117	N	D	
A.5.3.2.35.3.1	Type of damage to shell, motorcycle passenger	A532		2	118	119	N	D	
A.5.3.2.35.3.2	Type of damage to shell, motorcycle passenger	A532		2	120	121	N	D	
A.5.3.2.35.3.3	Type of damage to shell, motorcycle passenger	A532		2	122	123	N	D	

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.3.2.35.3.4	Type of damage to shell, motorcycle passenger	A532		2	124	125	N	D
A.5.3.2.35.3.5	Type of damage to shell, motorcycle passenger	A532		2	126	127	N	D
A.6.1.1.1	Roadway design defect	A611		1	14	14	N	D
A.6.1.1.2	Roadway maintenance defect	A611		1	15	15	N	D
A.6.1.1.3	Traffic controls defect or malfunction	A611		1	16	16	N	D
A.6.1.1.4	Traffic hazard, including construction and maintenance operations	A611		1	17	17	N	D
A.6.1.1.5	Weather related problem	A611		1	18	18	N	D
A.6.1.1.6	Visual background of other vehicle along motorcycle rider's line-of-sight at time of precipitating event	A611		1	19	19	N	D
A.6.1.1.7	Did insects affect the rider?	A611		1	20	20	N	D
A.6.1.2.1	Roadway design defect	A612		1	14	14	N	D
A.6.1.2.2	Roadway maintenance defect	A612		1	15	15	N	D
A.6.1.2.3	Traffic controls defect or malfunction	A612		1	16	16	N	D
A.6.1.2.4	Traffic hazard, including construction and maintenance operations	A612		1	17	17	N	D
A.6.1.2.5	Weather related problem	A612		1	18	18	N	D
A.6.1.2.6	Visual background of motorcycle along OV driver's line-of-sight at time of precipitating event	A612		1	19	19	N	D
A.6.2.1.1	Tyre size	A621		1	13	13	N	D
A.6.2.1.2	Tyre inflation pressure	A621		1	14	14	N	D
A.6.2.1.3	Accident causation related to tyre or wheel condition	A621		2	15	16	N	D
A.6.2.1.4	Accident causation related to suspension condition	A621		1	17	17	N	D
A.6.2.1.5	Accident causation related to frame condition	A621		1	23	23	N	D
A.6.2.1.6	Accident causation related to cornering clearance	A621		2	24	25	N	D
A.6.2.1.7	Accident or injury causation related to seat	A621		1	26	26	N	D
A.6.2.1.8	Accident causation related to drive chain, belt, or shaft condition	A621		1	27	27	N	D
A.6.2.1.9	Accident or injury causation related to exhaust system condition	A621		1	28	28	N	D
A.6.2.1.10	Motorcycle vehicle failure, accident cause related defect	A621		2	29	30	N	D
A.6.2.1.11	Was pre-crash fire cause of accident	A621		1	31	31	N	D2
A.6.2.1.12	Did cargo/luggage contribute to accident causation?	A621		2	32	33	N	D
A.6.2.1.13	Other vehicle failure, accident cause related defect	A622		2	14	15	N	D
A.6.2.2.1	Tyre size	A621		1	18	18	N	D
A.6.2.2.2	Tyre inflation pressure	A621		1	19	19	N	D
A.6.2.2.3	Accident causation related to tyre or wheel condition	A621		2	20	21	N	D
A.6.2.2.4	Accident causation related to suspension condition	A621		1	22	22	N	D
A.6.2.3.1	Injury involvement	A621		1	34	34	N	D2
A.6.2.3.2	Injury involvement	A621		1	35	35	N	D2
A.6.2.3.3	Injury involvement	A621		1	36	36	N	D2
A.6.2.3.4	Injury involvement	A621		1	37	37	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.2.3.5	Injury involvement	A621		1	38	38	N	D2
A.6.2.3.6	Injury involvement	A621		1	39	39	N	D2
A.6.2.3.7	Injury involvement	A621		1	40	40	N	D2
A.6.2.3.8	Injury involvement	A621		1	41	41	N	D2
A.6.2.3.9	Injury involvement	A621		1	42	42	N	D2
A.6.2.3.10	Injury involvement	A621		1	43	43	N	D2
A.6.2.3.11	Injury involvement	A621		1	44	44	N	D2
A.6.2.3.12	Injury involvement	A621		1	45	45	N	D2
A.6.2.3.13	Injury involvement	A621		1	46	46	N	D2
A.6.2.3.14	Injury involvement	A621		1	47	47	N	D2
A.6.2.3.15	Injury involvement	A621		1	48	48	N	D2
A.6.2.3.16	Injury involvement	A621		1	49	49	N	D2
A.6.2.3.17	Injury involvement	A621		1	50	50	N	D2
A.6.2.3.18	Injury involvement	A621		1	51	51	N	D2
A.6.2.3.19	Injury involvement	A621		1	52	52	N	D2
A.6.2.3.20	Injury involvement	A621		1	53	53	N	D2
A.6.2.3.21	Injury involvement	A621		1	54	54	N	D2
A.6.2.3.22	Injury involvement	A621		1	55	55	N	D2
A.6.2.3.23	Injury involvement	A621		1	56	56	N	D2
A.6.2.3.24	Injury involvement	A621		1	57	57	N	D2
A.6.2.3.25	Injury involvement	A621		1	58	58	N	D2
A.6.2.3.26	Injury involvement	A621		1	59	59	N	D2
A.6.2.3.27	Injury involvement	A621		1	60	60	N	D2
A.6.2.3.28	Injury involvement	A621		1	61	61	N	D2
A.6.2.3.29	Injury involvement	A621		1	62	62	N	D2
A.6.2.3.30	Injury involvement	A621		1	63	63	N	D2
A.6.2.3.31	Injury involvement	A621		1	64	64	N	D2
A.6.2.3.32	Injury involvement	A621		1	65	65	N	D2
A.6.2.3.33	Injury involvement	A621		1	66	66	N	D2
A.6.2.3.34	Injury involvement	A621		1	67	67	N	D2
A.6.2.3.35	Injury involvement	A621		1	68	68	N	D2
A.6.2.3.36	Injury involvement	A621		1	69	69	N	D2
A.6.2.3.37	Injury involvement	A621		1	70	70	N	D2
A.6.2.3.38	Injury involvement	A621		1	71	71	N	D2
A.6.2.3.39	Injury involvement	A621		1	72	72	N	D2
A.6.2.3.40	Injury involvement	A621		1	73	73	N	D2
A.6.2.3.41	Injury involvement	A621		1	74	74	N	D2
A.6.2.3.42	Injury involvement	A621		1	75	75	N	D2
A.6.2.3.43	Injury involvement	A621		1	76	76	N	D2
A.6.2.3.44	Injury involvement	A621		1	77	77	N	D2
A.6.2.3.45	Injury involvement	A621		1	78	78	N	D2
A.6.2.3.46	Injury involvement	A621		1	79	79	N	D2
A.6.2.3.47	Injury involvement	A621		1	80	80	N	D2
A.6.2.3.48	Injury involvement	A621		1	81	81	N	D2
A.6.2.3.49	Injury involvement	A621		1	82	82	N	D2
A.6.2.3.50	Injury involvement	A621		1	83	83	N	D2
A.6.2.3.51	Injury involvement	A621		1	84	84	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.2.3.52	Injury involvement	A621		1	85	85	N	D2
A.6.2.3.53	Injury involvement	A621		1	86	86	N	D2
A.6.2.3.54	Injury involvement	A621		1	87	87	N	D2
A.6.2.3.55	Injury involvement	A621		1	88	88	N	D2
A.6.2.3.56	Injury involvement	A621		1	89	89	N	D2
A.6.2.3.57	Injury involvement	A621		1	90	90	N	D2
A.6.3.1.1	Rider unsafe acts in this accident	A631		1	14	14	N	D
A.6.3.1.2	Effect of rider/passenger interaction on injury causation	A631		1	15	15	N	D
A.6.3.1.3	Attention failure, including distractions and stress	A631		1	16	16	N	D2
A.6.3.1.4	Lane choice	A631		1	17	17	N	D2
A.6.3.1.5	Traffic scan	A631		1	18	18	N	D2
A.6.3.1.6	Visual obstructions neglected	A631		1	19	19	N	D2
A.6.3.1.7	Hazard detection failure	A631		1	20	20	N	D2
A.6.3.1.8	Faulty traffic strategy	A631		1	21	21	N	D2
A.6.3.1.9	Speed compared to surrounding traffic	A631		1	22	22	N	D2
A.6.3.1.10	Safe position with respect to other traffic	A631		1	23	23	N	D2
A.6.3.1.11	Loss of control mode	A631		2	24	25	N	D
A.6.3.1.12	Control unfamiliarity	A631		1	26	26	N	D2
A.6.3.1.13	Skills deficiency	A631		1	27	27	N	D2
A.6.3.1.14	Vehicle unfamiliarity	A631		1	28	28	N	D2
A.6.3.1.15	Motorcycle control operations just before precipitating factor	A631		2	29	30	N	D
A.6.3.1.16	Did control operations interfere with driving tasks?	A631		1	31	31	N	D
A.6.3.1.17	Did motorcycle rider have hand/fingers prepositioned on front brake before precipitating event?	A631		1	32	32	N	D2
A.6.3.1.18.1	Collision avoidance, evasive maneuver taken or attempted by motorcycle rider	A631		2	33	34	N	D
A.6.3.1.18.2	Collision avoidance, evasive maneuver taken or attempted by motorcycle rider	A631		2	35	36	N	D
A.6.3.1.18.3	Collision avoidance, evasive maneuver taken or attempted by motorcycle rider	A631		2	37	38	N	D
A.6.3.1.19.1	If continuation, no action due to:	A631		2	39	40	N	D
A.6.3.1.19.2	If continuation, no action due to:	A631		2	41	42	N	D
A.6.3.1.19.3	If continuation, no action due to:	A631		2	43	44	N	D
A.6.3.1.20	Was the evasive action the proper choice for the situation?	A631		1	45	45	N	D2
A.6.3.1.21	Was the action properly executed?	A631		1	46	46	N	D2
A.6.3.1.22	Failed collision avoidance due to	A631		1	47	47	N	D
A.6.3.1.23	Language distress; sign comprehension	A631		1	48	48	N	D2
A.6.3.1.24	Traffic knowledge, strategy	A631		1	49	49	N	D2
A.6.3.1.25	Vehicle control skills	A631		1	50	50	N	D2
A.6.3.1.26	Personality evaluation	A631		1	51	51	N	D2
A.6.3.1.27	Personality evaluation	A631		1	52	52	N	D2
A.6.3.1.28	Personality evaluation	A631		1	53	53	N	D2
A.6.3.1.29	Risk taking tendency evaluation	A631		1	54	54	N	D2
A.6.3.1.30	Risk taking tendency evaluation	A631		1	55	55	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.3.1.31	Risk taking tendency evaluation	A631		1	56	56	N	D2
A.6.3.1.32	Risk taking tendency evaluation	A631		1	57	57	N	D2
A.6.3.1.33	Did upper extremities and upper torso coverage reduce or prevent injury?	A631		1	58	58	N	D
A.6.3.1.34	Did lower extremities and lower torso coverage reduce or prevent injury?	A631		1	59	59	N	D
A.6.3.1.35	Did footwear reduce or prevent injury?	A631		1	60	60	N	D
A.6.3.1.36	Did gloves reduce or prevent injury?	A631		1	61	61	N	D
A.6.3.1.37	Did eye coverage reduce or prevent injury?	A631		1	62	62	N	D
A.6.3.1.38	Eye or face protection relation to pre-crash events	A631		1	63	63	N	D
A.6.3.1.39	Did helmet reduce or prevent injury?	A631		1	64	64	N	D
A.6.3.1.40	Did helmet have an effect on pre-crash events	A631		1	65	65	N	D2
A.6.3.1.41.1	What was the effect of the helmet?	A631		2	66	67	N	D
A.6.3.1.41.2	What was the effect of the helmet?	A631		2	68	69	N	D
A.6.3.1.41.3	What was the effect of the helmet?	A631		2	70	71	N	D
A.6.3.1.42	If helmet ejected during accident, what was the cause?	A631		2	72	73	N	D
A.6.3.1.43	Conspicuity contribution	A631		1	74	74	N	D
A.6.3.1.44	Comfort, fatigue, attention	A631		1	75	75	N	D
A.6.3.1.45	Control interference	A631		1	76	76	N	D
A.6.3.2.1	Did passenger contribute to accident causation?	A632		1	14	14	N	D
A.6.3.2.2	Effect of rider/passenger interaction on injury causation	A632		1	15	15	N	D
A.6.3.2.33	Did upper extremities and upper torso coverage reduce or prevent injury?	A632		1	58	58	N	D
A.6.3.2.34	Did lower extremities and lower torso coverage reduce or prevent injury?	A632		1	59	59	N	D
A.6.3.2.35	Did footwear reduce or prevent injury?	A632		1	60	60	N	D
A.6.3.2.36	Did gloves reduce or prevent injury?	A632		1	61	61	N	D
A.6.3.2.37	Did eye coverage reduce or prevent injury?	A632		1	62	62	N	D
A.6.3.2.39	Did helmet reduce or prevent injury?	A632		1	64	64	N	D
A.6.3.2.42	If helmet ejected during accident, what was the cause?	A632		2	72	73	N	D
A.6.3.3.1	Did other vehicle passengers contribute to accident causation?	A633		1	14	14	N	D
A.6.3.3.3	Attention failure, including distractions and stress	A633		1	16	16	N	D2
A.6.3.3.4	Lane choice	A633		1	17	17	N	D2
A.6.3.3.5	Traffic scan	A633		1	18	18	N	D2
A.6.3.3.6	Visual obstructions neglected	A633		1	19	19	N	D2
A.6.3.3.7	Hazard detection failure	A633		1	20	20	N	D2
A.6.3.3.8	Faulty traffic strategy	A633		1	21	21	N	D2
A.6.3.3.9	Speed compared to surrounding traffic	A633		1	22	22	N	D2
A.6.3.3.10	Safe position with respect to other traffic	A633		1	23	23	N	D2
A.6.3.3.12	Control unfamiliarity	A633		1	26	26	N	D2
A.6.3.3.13	Skills deficiency	A633		1	27	27	N	D2
A.6.3.3.14	Vehicle unfamiliarity	A633		1	28	28	N	D2
A.6.3.3.18.1	Collision avoidance, evasive maneuver taken or attempted by OV driver	A633		2	33	34	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.3.3.18.2	Collision avoidance, evasive maneuver taken or attempted by OV driver	A633		2	35	36	N	D
A.6.3.3.18.3	Collision avoidance, evasive maneuver taken or attempted by OV driver	A633		2	37	38	N	D
A.6.3.3.19.1	If continuation, no action due to:	A633		2	39	40	N	D
A.6.3.3.19.2	If continuation, no action due to:	A633		2	41	42	N	D
A.6.3.3.19.3	If continuation, no action due to:	A633		2	43	44	N	D
A.6.3.3.20	Was the evasive action the proper choice for the situation?	A633		1	45	45	N	D2
A.6.3.3.21	Was the action properly executed?	A633		1	46	46	N	D2
A.6.3.3.22	Failed collision avoidance due to	A633		1	47	47	N	D
A.6.3.3.23	Language distress; sign comprehension	A633		1	48	48	N	D2
A.6.3.3.24	Traffic knowledge, strategy	A633		1	49	49	N	D2
A.6.3.3.25	Vehicle control skills	A633		1	50	50	N	D2
A.6.3.3.26	Personality evaluation	A633		1	51	51	N	D2
A.6.3.3.27	Personality evaluation	A633		1	52	52	N	D2
A.6.3.3.28	Personality evaluation	A633		1	53	53	N	D2
A.6.3.3.29	Risk taking tendency evaluation	A633		1	54	54	N	D2
A.6.3.3.30	Risk taking tendency evaluation	A633		1	55	55	N	D2
A.6.3.3.31	Risk taking tendency evaluation	A633		1	56	56	N	D2
A.6.3.3.32	Risk taking tendency evaluation	A633		1	57	57	N	D2
A.6.4.1.1	Primary accident contributing factor	A641		2	13	14	N	D
A.6.4.2.1.a	Accident contributing factor #1	A641		2	15	16	N	D
A.6.4.2.1.b	Accident contributing factor #1	A641		1	17	17	A/N	D
A.6.4.2.2.a	Accident contributing factor #2	A641		2	18	19	N	D
A.6.4.2.2.b	Accident contributing factor #2	A641		1	20	20	A/N	D
A.6.4.2.3.a	Accident contributing factor #3	A641		2	21	22	N	D
A.6.4.2.3.b	Accident contributing factor #3	A641		1	23	23	A/N	D
A.6.4.2.4.a	Accident contributing factor #4	A641		2	24	25	N	D
A.6.4.2.4.b	Accident contributing factor #4	A641		1	26	26	A/N	D
A.6.5.1	Motorcyclist	A651		1	14	14	N	D2
A.6.5.2.1.1	Body Region: Head	A652	1	4	15	18	A/N	-
A.6.5.2.1.2	Body Region: Head	A652	1	4	19	22	A/N	-
A.6.5.2.1.3	Body Region: Head	A652	1	4	23	26	A/N	-
A.6.5.2.1.4	Body Region: Head	A652	1	4	27	30	A/N	-
A.6.5.2.1.5	Body Region: Head	A652	1	4	31	34	A/N	-
A.6.5.2.1.6	Body Region: Head	A652	1	4	35	38	A/N	-
A.6.5.2.1.7	Body Region: Head	A652	1	4	39	42	A/N	-
A.6.5.2.1.8	Body Region: Head	A652	1	4	43	46	A/N	-
A.6.5.2.1.9	Body Region: Head	A652	1	4	47	50	A/N	-
A.6.5.2.2.1	Body Region: Head	A652	1	4	51	54	A/N	-
A.6.5.2.2.2	Body Region: Head	A652	1	4	55	58	A/N	-
A.6.5.2.2.3	Body Region: Head	A652	1	4	59	62	A/N	-
A.6.5.2.2.4	Body Region: Head	A652	1	4	63	66	A/N	-
A.6.5.2.2.5	Body Region: Head	A652	1	4	67	70	A/N	-
A.6.5.2.2.6	Body Region: Head	A652	1	4	71	74	A/N	-
A.6.5.2.2.7	Body Region: Head	A652	1	4	75	78	A/N	-
A.6.5.2.2.8	Body Region: Head	A652	1	4	79	82	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.2.2.9	Body Region: Head	A652	1	4	83	86	A/N	-
A.6.5.3.1.1	Body region: Neck (except spine)	A652	2	4	15	18	A/N	-
A.6.5.3.1.2	Body region: Neck (except spine)	A652	2	4	19	22	A/N	-
A.6.5.3.1.3	Body region: Neck (except spine)	A652	2	4	23	26	A/N	-
A.6.5.3.1.4	Body region: Neck (except spine)	A652	2	4	27	30	A/N	-
A.6.5.3.1.5	Body region: Neck (except spine)	A652	2	4	31	34	A/N	-
A.6.5.3.1.6	Body region: Neck (except spine)	A652	2	4	35	38	A/N	-
A.6.5.3.1.7	Body region: Neck (except spine)	A652	2	4	39	42	A/N	-
A.6.5.3.1.8	Body region: Neck (except spine)	A652	2	4	43	46	A/N	-
A.6.5.3.1.9	Body region: Neck (except spine)	A652	2	4	47	50	A/N	-
A.6.5.3.2.1	Body region: Neck (except spine)	A652	2	4	51	54	A/N	-
A.6.5.3.2.2	Body region: Neck (except spine)	A652	2	4	55	58	A/N	-
A.6.5.3.2.3	Body region: Neck (except spine)	A652	2	4	59	62	A/N	-
A.6.5.3.2.4	Body region: Neck (except spine)	A652	2	4	63	66	A/N	-
A.6.5.3.2.5	Body region: Neck (except spine)	A652	2	4	67	70	A/N	-
A.6.5.3.2.6	Body region: Neck (except spine)	A652	2	4	71	74	A/N	-
A.6.5.3.2.7	Body region: Neck (except spine)	A652	2	4	75	78	A/N	-
A.6.5.3.2.8	Body region: Neck (except spine)	A652	2	4	79	82	A/N	-
A.6.5.3.2.9	Body region: Neck (except spine)	A652	2	4	83	86	A/N	-
A.6.5.4.1.1	Body Region: Thorax	A652	3	4	15	18	A/N	-
A.6.5.4.1.2	Body Region: Thorax	A652	3	4	19	22	A/N	-
A.6.5.4.1.3	Body Region: Thorax	A652	3	4	23	26	A/N	-
A.6.5.4.1.4	Body Region: Thorax	A652	3	4	27	30	A/N	-
A.6.5.4.1.5	Body Region: Thorax	A652	3	4	31	34	A/N	-
A.6.5.4.1.6	Body Region: Thorax	A652	3	4	35	38	A/N	-
A.6.5.4.1.7	Body Region: Thorax	A652	3	4	39	42	A/N	-
A.6.5.4.1.8	Body Region: Thorax	A652	3	4	43	46	A/N	-
A.6.5.4.1.9	Body Region: Thorax	A652	3	4	47	50	A/N	-
A.6.5.4.2.1	Body Region: Thorax	A652	3	4	51	54	A/N	-
A.6.5.4.2.2	Body Region: Thorax	A652	3	4	55	58	A/N	-
A.6.5.4.2.3	Body Region: Thorax	A652	3	4	59	62	A/N	-
A.6.5.4.2.4	Body Region: Thorax	A652	3	4	63	66	A/N	-
A.6.5.4.2.5	Body Region: Thorax	A652	3	4	67	70	A/N	-
A.6.5.4.2.6	Body Region: Thorax	A652	3	4	71	74	A/N	-
A.6.5.4.2.7	Body Region: Thorax	A652	3	4	75	78	A/N	-
A.6.5.4.2.8	Body Region: Thorax	A652	3	4	79	82	A/N	-
A.6.5.4.2.9	Body Region: Thorax	A652	3	4	83	86	A/N	-
A.6.5.5.1.1	Body Region: Upper extremities	A652	4	4	15	18	A/N	-
A.6.5.5.1.2	Body Region: Upper extremities	A652	4	4	19	22	A/N	-
A.6.5.5.1.3	Body Region: Upper extremities	A652	4	4	23	26	A/N	-
A.6.5.5.1.4	Body Region: Upper extremities	A652	4	4	27	30	A/N	-
A.6.5.5.1.5	Body Region: Upper extremities	A652	4	4	31	34	A/N	-
A.6.5.5.1.6	Body Region: Upper extremities	A652	4	4	35	38	A/N	-
A.6.5.5.1.7	Body Region: Upper extremities	A652	4	4	39	42	A/N	-
A.6.5.5.1.8	Body Region: Upper extremities	A652	4	4	43	46	A/N	-
A.6.5.5.1.9	Body Region: Upper extremities	A652	4	4	47	50	A/N	-
A.6.5.5.2.1	Body Region: Upper extremities	A652	4	4	51	54	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.5.2.2	Body Region: Upper extremities	A652	4	4	55	58	A/N	-
A.6.5.5.2.3	Body Region: Upper extremities	A652	4	4	59	62	A/N	-
A.6.5.5.2.4	Body Region: Upper extremities	A652	4	4	63	66	A/N	-
A.6.5.5.2.5	Body Region: Upper extremities	A652	4	4	67	70	A/N	-
A.6.5.5.2.6	Body Region: Upper extremities	A652	4	4	71	74	A/N	-
A.6.5.5.2.7	Body Region: Upper extremities	A652	4	4	75	78	A/N	-
A.6.5.5.2.8	Body Region: Upper extremities	A652	4	4	79	82	A/N	-
A.6.5.5.2.9	Body Region: Upper extremities	A652	4	4	83	86	A/N	-
A.6.5.6.1.1	Body Region: Abdomen	A652	5	4	15	18	A/N	-
A.6.5.6.1.2	Body Region: Abdomen	A652	5	4	19	22	A/N	-
A.6.5.6.1.3	Body Region: Abdomen	A652	5	4	23	26	A/N	-
A.6.5.6.1.4	Body Region: Abdomen	A652	5	4	27	30	A/N	-
A.6.5.6.1.5	Body Region: Abdomen	A652	5	4	31	34	A/N	-
A.6.5.6.1.6	Body Region: Abdomen	A652	5	4	35	38	A/N	-
A.6.5.6.1.7	Body Region: Abdomen	A652	5	4	39	42	A/N	-
A.6.5.6.1.8	Body Region: Abdomen	A652	5	4	43	46	A/N	-
A.6.5.6.1.9	Body Region: Abdomen	A652	5	4	47	50	A/N	-
A.6.5.6.2.1	Body Region: Abdomen	A652	5	4	51	54	A/N	-
A.6.5.6.2.2	Body Region: Abdomen	A652	5	4	55	58	A/N	-
A.6.5.6.2.3	Body Region: Abdomen	A652	5	4	59	62	A/N	-
A.6.5.6.2.4	Body Region: Abdomen	A652	5	4	63	66	A/N	-
A.6.5.6.2.5	Body Region: Abdomen	A652	5	4	67	70	A/N	-
A.6.5.6.2.6	Body Region: Abdomen	A652	5	4	71	74	A/N	-
A.6.5.6.2.7	Body Region: Abdomen	A652	5	4	75	78	A/N	-
A.6.5.6.2.8	Body Region: Abdomen	A652	5	4	79	82	A/N	-
A.6.5.6.2.9	Body Region: Abdomen	A652	5	4	83	86	A/N	-
A.6.5.7.1.1	Body Region: Pelvis	A652	6	4	15	18	A/N	-
A.6.5.7.1.2	Body Region: Pelvis	A652	6	4	19	22	A/N	-
A.6.5.7.1.3	Body Region: Pelvis	A652	6	4	23	26	A/N	-
A.6.5.7.1.4	Body Region: Pelvis	A652	6	4	27	30	A/N	-
A.6.5.7.1.5	Body Region: Pelvis	A652	6	4	31	34	A/N	-
A.6.5.7.1.6	Body Region: Pelvis	A652	6	4	35	38	A/N	-
A.6.5.7.1.7	Body Region: Pelvis	A652	6	4	39	42	A/N	-
A.6.5.7.1.8	Body Region: Pelvis	A652	6	4	43	46	A/N	-
A.6.5.7.1.9	Body Region: Pelvis	A652	6	4	47	50	A/N	-
A.6.5.7.2.1	Body Region: Pelvis	A652	6	4	51	54	A/N	-
A.6.5.7.2.2	Body Region: Pelvis	A652	6	4	55	58	A/N	-
A.6.5.7.2.3	Body Region: Pelvis	A652	6	4	59	62	A/N	-
A.6.5.7.2.4	Body Region: Pelvis	A652	6	4	63	66	A/N	-
A.6.5.7.2.5	Body Region: Pelvis	A652	6	4	67	70	A/N	-
A.6.5.7.2.6	Body Region: Pelvis	A652	6	4	71	74	A/N	-
A.6.5.7.2.7	Body Region: Pelvis	A652	6	4	75	78	A/N	-
A.6.5.7.2.8	Body Region: Pelvis	A652	6	4	79	82	A/N	-
A.6.5.7.2.9	Body Region: Pelvis	A652	6	4	83	86	A/N	-
A.6.5.8.1.1	Body Region: Spine	A652	7	4	15	18	A/N	-
A.6.5.8.1.2	Body Region: Spine	A652	7	4	19	22	A/N	-
A.6.5.8.1.3	Body Region: Spine	A652	7	4	23	26	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.8.1.4	Body Region: Spine	A652	7	4	27	30	A/N	-
A.6.5.8.1.5	Body Region: Spine	A652	7	4	31	34	A/N	-
A.6.5.8.1.6	Body Region: Spine	A652	7	4	35	38	A/N	-
A.6.5.8.1.7	Body Region: Spine	A652	7	4	39	42	A/N	-
A.6.5.8.1.8	Body Region: Spine	A652	7	4	43	46	A/N	-
A.6.5.8.1.9	Body Region: Spine	A652	7	4	47	50	A/N	-
A.6.5.8.2.1	Body Region: Spine	A652	7	4	51	54	A/N	-
A.6.5.8.2.2	Body Region: Spine	A652	7	4	55	58	A/N	-
A.6.5.8.2.3	Body Region: Spine	A652	7	4	59	62	A/N	-
A.6.5.8.2.4	Body Region: Spine	A652	7	4	63	66	A/N	-
A.6.5.8.2.5	Body Region: Spine	A652	7	4	67	70	A/N	-
A.6.5.8.2.6	Body Region: Spine	A652	7	4	71	74	A/N	-
A.6.5.8.2.7	Body Region: Spine	A652	7	4	75	78	A/N	-
A.6.5.8.2.8	Body Region: Spine	A652	7	4	79	82	A/N	-
A.6.5.8.2.9	Body Region: Spine	A652	7	4	83	86	A/N	-
A.6.5.9.1.1	Body Region: Lower extremities	A652	8	4	15	18	A/N	-
A.6.5.9.1.2	Body Region: Lower extremities	A652	8	4	19	22	A/N	-
A.6.5.9.1.3	Body Region: Lower extremities	A652	8	4	23	26	A/N	-
A.6.5.9.1.4	Body Region: Lower extremities	A652	8	4	27	30	A/N	-
A.6.5.9.1.5	Body Region: Lower extremities	A652	8	4	31	34	A/N	-
A.6.5.9.1.6	Body Region: Lower extremities	A652	8	4	35	38	A/N	-
A.6.5.9.1.7	Body Region: Lower extremities	A652	8	4	39	42	A/N	-
A.6.5.9.1.8	Body Region: Lower extremities	A652	8	4	43	46	A/N	-
A.6.5.9.1.9	Body Region: Lower extremities	A652	8	4	47	50	A/N	-
A.6.5.9.2.1	Body Region: Lower extremities	A652	8	4	51	54	A/N	-
A.6.5.9.2.2	Body Region: Lower extremities	A652	8	4	55	58	A/N	-
A.6.5.9.2.3	Body Region: Lower extremities	A652	8	4	59	62	A/N	-
A.6.5.9.2.4	Body Region: Lower extremities	A652	8	4	63	66	A/N	-
A.6.5.9.2.5	Body Region: Lower extremities	A652	8	4	67	70	A/N	-
A.6.5.9.2.6	Body Region: Lower extremities	A652	8	4	71	74	A/N	-
A.6.5.9.2.7	Body Region: Lower extremities	A652	8	4	75	78	A/N	-
A.6.5.9.2.8	Body Region: Lower extremities	A652	8	4	79	82	A/N	-
A.6.5.9.2.9	Body Region: Lower extremities	A652	8	4	83	86	A/N	-
A.6.5.10.1.1	Body Region: Whole body	A652	9	4	15	18	A/N	-
A.6.5.10.1.2	Body Region: Whole body	A652	9	4	19	22	A/N	-
A.6.5.10.1.3	Body Region: Whole body	A652	9	4	23	26	A/N	-
A.6.5.10.1.4	Body Region: Whole body	A652	9	4	27	30	A/N	-
A.6.5.10.1.5	Body Region: Whole body	A652	9	4	31	34	A/N	-
A.6.5.10.1.6	Body Region: Whole body	A652	9	4	35	38	A/N	-
A.6.5.10.1.7	Body Region: Whole body	A652	9	4	39	42	A/N	-
A.6.5.10.1.8	Body Region: Whole body	A652	9	4	43	46	A/N	-
A.6.5.10.1.9	Body Region: Whole body	A652	9	4	47	50	A/N	-
A.6.5.10.2.1	Body Region: Whole body	A652	9	4	51	54	A/N	-
A.6.5.10.2.2	Body Region: Whole body	A652	9	4	55	58	A/N	-
A.6.5.10.2.3	Body Region: Whole body	A652	9	4	59	62	A/N	-
A.6.5.10.2.4	Body Region: Whole body	A652	9	4	63	66	A/N	-
A.6.5.10.2.5	Body Region: Whole body	A652	9	4	67	70	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.10.2.6	Body Region: Whole body	A652	9	4	71	74	A/N	-
A.6.5.10.2.7	Body Region: Whole body	A652	9	4	75	78	A/N	-
A.6.5.10.2.8	Body Region: Whole body	A652	9	4	79	82	A/N	-
A.6.5.10.2.9	Body Region: Whole body	A652	9	4	83	86	A/N	-

Notes:

1 Each text response is written to a unique record as follows:

The first 3 characters of the record level are the same as the record level of the question.

The last character of the record level is a "9" to designate that this is a text response record

The question identifier is coded in 3 character blocks. For example:

A.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"

2 Assigned counter value, see table A.1 for record locations.

* Indicates petrol station concurrent exposure question.

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
-	Accident identification number	-		8	1	8	A/N	-
-	Record level identifier	-		4	9	12	A/N	-
-	Text response question identifier	B##9		27	13	39	N	O
-	Text response counter index (see note 1)	B##9		3	40	42	N	O
-	Text response	B##9		80	43	122	A/N	-
B.2.1.1	Data collected using which method?	B211		1	13	13	N	D
B.2.1.2	Data collected using which method?	B211		1	14	14	N	D
B.2.1.3	Data collected using which method?	B211		1	15	15	N	D
B.2.2	How many motorcycles were interviewed using methods 1 and 2	B211		3	16	18	N	DI
B.2.3	How many motorcycles were interviewed using B.6, Optional Petrol Station Human Factors CED?	B211		3	19	21	N	DI
B.3.1.1	Bicycles	B311		4	13	16	N	DI
B.3.1.2	Mopeds/mofas (L1)	B311		4	17	20	N	DI
B.3.1.3	Motorcycles (L3)	B311		4	21	24	N	DI
B.3.1.4	Passenger car with a maximum mass less than or equal to 800 kg (M1)	B311		4	25	28	N	DI
B.3.1.5	Passenger car with a maximum mass greater than 800 kg and less than 2 t (M1)	B311		4	29	32	N	DI
B.3.1.6	Passenger car with a maximum mass greater than 2 t (M1)	B311		4	33	36	N	DI
B.3.1.7	Mini light trucks with a maximum mass of less than or equal to 1.5 t	B311		4	37	40	N	DI
B.3.1.8	Light trucks with a maximum mass greater than 1.5 t and less than or equal to 3.5 t	B311		4	41	44	N	DI
B.3.1.9	Trucks and heavy goods vehicles with a maximum mass greater than 3.5 t	B311		4	45	48	N	DI
B.3.1.10	Sport utility vehicles (SUVs) with a maximum mass less than or equal to 5 t	B311		4	49	52	N	DI
B.3.1.11	Minibuses, buses and vans with a maximum mass less than 5 t	B311		4	53	56	N	DI
B.3.1.12	Buses with a maximum mass greater than 5 t	B311		4	57	60	N	DI
B.3.1.13	Pedestrians	B311		4	61	64	N	DI
B.3.1.14	Other (*describe, 80 characters)	B311		4	65	68	N	DI
B.3.1.15	Ambient temperature	B311		3	69	71	N	C
B.3.1.16	Weather description	B311		1	72	72	N	D
B.3.1.17	Wind description	B311		1	73	73	N	D
B.3.1.18	Wind direction with respect to motorcycle path	B311		1	74	74	N	D
B.3.2.1	Bicycles	B321		4	16	19	N	DI
B.3.2.2	Mopeds/mofas (L1)	B321		4	20	23	N	DI
B.3.2.3	Motorcycles (L3)	B321		4	24	27	N	DI
B.3.2.4	Passenger car with a maximum mass less than or equal to 800 kg (M1)	B321		4	28	31	N	DI
B.3.2.5	Passenger car with a maximum mass greater than 800 kg and less than 2 t (M1)	B321		4	32	35	N	DI
B.3.2.6	Passenger car with a maximum mass greater than 2 t (M1)	B321		4	36	39	N	DI
B.3.2.7	Mini light trucks with a maximum mass of less than or equal to 1.5 t	B321		4	40	43	N	DI
B.3.2.8	Light trucks with a maximum mass greater than 1.5 t and less than or equal to 3.5 t	B321		4	44	47	N	DI
B.3.2.9	Trucks and heavy goods vehicles with a	B321		4	48	51	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.3.2.10	maximum mass greater than 3.5 t Sport utility vehicles (SUVs) with a maximum mass less than or equal to 5 t	B321		4	52	55	N	DI
B.3.2.11	Minibuses, buses and vans with a maximum mass less than 5 t	B321		4	56	59	N	DI
B.3.2.12	Buses with a maximum mass greater than 5 t	B321		4	60	63	N	DI
B.3.2.13	Pedestrians	B321		4	64	67	N	DI
B.3.2.14	Other (*describe, 80 characters)	B321		4	68	71	N	DI
B.4.1.1.1	Motorcycle number	-		3	See	note 2	N	DI
B.4.1.1.2	Manufacturer	B411		3	16	18	A/N	D
B.4.1.1.3	Model (not coded)	-		-	Not	coded		-
B.4.1.1.4	Year	B411		4	19	22	N	DI
B.4.1.1.5	Motorcycle legal category	B411		2	23	24	N	D
B.4.1.1.5.1	Is the motorcycle equipped with pedals?	B411		1	25	25	N	D
B.4.1.1.5.2	Motorcycle style	B411		2	26	27	N	D
B.4.1.1.6	Vehicle gross mass	B411		4	28	31	N	C
B.4.1.1.7	Vehicle identification number if permissible	B411		14	32	45	A/N	-
B.4.1.1.8	License plate number, reference only (not coded)	-		-	Not	coded		-
B.4.1.1.9	Odometer reading	B411		6	46	51	N	C
B.4.1.1.10	Predominating MC color	B411		2	52	53	N	D
B.4.1.1.11	Motor displacement	B411		4	54	57	N	C
B.4.1.1.12	Number of cylinders	B411		2	58	59	N	DI
B.4.1.1.13	Exhaust	B411		1	60	60	N	D2
B.4.1.1.14	Seat	B411		1	61	61	N	D2
B.4.1.1.15	Handlebars	B411		1	62	62	N	D2
B.4.1.1.16	Fairing, windscreen	B411		1	63	63	N	D2
B.4.1.1.17	Crash bars	B411		1	64	64	N	D2
B.4.1.1.18	Engine guards	B411		1	65	65	N	D2
B.4.1.1.19	Suspension	B411		1	66	66	N	D2
B.4.1.1.20	Frame	B411		1	67	67	N	D2
B.4.1.1.21	Tyres	B411		1	68	68	N	D2
B.4.1.1.22	Wheels	B411		1	69	69	N	D2
B.4.1.1.23	Other	B411		1	70	70	N	D2
B.4.1.1.24	Headlamp assembly type	B411		1	71	71	N	D
B.4.1.1.25	Headlamp function	B411		1	72	72	N	D
B.4.1.3.1.1	Motorcycle count	B431		3	13	15	A/N	-
B.4.1.3.1.2	Motorcycle count	B431		3	16	18	N	DI
B.4.1.3.2.1	Motorcycle count	B431		3	19	21	A/N	-
B.4.1.3.2.2	Motorcycle count	B431		3	22	24	N	DI
B.4.1.3.3.1	Motorcycle count	B432		3	13	15	A/N	-
B.4.1.3.3.2	Motorcycle count	B432		3	16	18	N	DI
B.4.1.3.4.1	Motorcycle count	B432		3	19	21	A/N	-
B.4.1.3.4.2	Motorcycle count	B432		3	22	24	N	DI
B.4.1.3.5.1	Motorcycle count	B432		3	25	27	A/N	-
B.4.1.3.5.2	Motorcycle count	B432		3	28	30	N	DI
B.4.1.3.6.1	Motorcycle count	B432		3	31	33	A/N	-
B.4.1.3.6.2	Motorcycle count	B432		3	34	36	N	DI
B.4.1.3.7.1	Motorcycle count	B432		3	37	39	A/N	-

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.4.1.3.7.2	Motorcycle count	B432		3	40	42	N	DI
B.4.1.3.8.1	Motorcycle count	B432		3	43	45	A/N	-
B.4.1.3.8.2	Motorcycle count	B432		3	46	48	N	DI
B.4.1.3.9.1	Motorcycle count	B432		3	49	51	A/N	-
B.4.1.3.9.2	Motorcycle count	B432		3	52	54	N	DI
B.4.1.3.10.1	Motorcycle count	B431		3	25	27	A/N	-
B.4.1.3.10.2	Motorcycle count	B431		3	28	30	N	DI
B.4.1.3.11.1	Motorcycle count	B431		3	31	33	A/N	-
B.4.1.3.11.2	Motorcycle count	B431		3	34	36	N	DI
B.4.1.3.12.1	Motorcycle count	B431		3	37	39	A/N	-
B.4.1.3.12.2	Motorcycle count	B431		3	40	42	N	DI
B.4.1.3.13.1	Motorcycle count	B431		3	43	45	A/N	-
B.4.1.3.13.2	Motorcycle count	B431		3	46	48	N	DI
B.4.1.3.14.1	Motorcycle count	B431		3	49	51	A/N	-
B.4.1.3.14.2	Motorcycle count	B431		3	52	54	N	DI
B.4.1.3.15.1	Motorcycle count	B431		3	55	57	A/N	-
B.4.1.3.15.2	Motorcycle count	B431		3	58	60	N	DI
B.4.1.3.16.1	Motorcycle count	B431		3	61	63	A/N	-
B.4.1.3.16.2	Motorcycle count	B431		3	64	66	N	DI
B.4.1.3.17.1	Motorcycle count	B431		3	67	69	A/N	-
B.4.1.3.17.2	Motorcycle count	B431		3	70	72	N	DI
B.4.1.3.18.1	Motorcycle count	B431		3	73	75	A/N	-
B.4.1.3.18.2	Motorcycle count	B431		3	76	78	N	DI
B.4.1.3.19.1	Motorcycle count	B431		3	79	81	A/N	-
B.4.1.3.19.2	Motorcycle count	B431		3	82	84	N	DI
B.4.1.3.20.1	Motorcycle count	B431		3	85	87	A/N	-
B.4.1.3.20.2	Motorcycle count	B431		3	88	90	N	DI
B.4.1.3.21.1	Motorcycle count	B431		3	91	93	A/N	-
B.4.1.3.21.2	Motorcycle count	B431		3	94	96	N	DI
B.4.1.3.22.1	Motorcycle count	B431		3	97	99	A/N	-
B.4.1.3.22.2	Motorcycle count	B431		3	100	102	N	DI
B.4.1.3.23	Motorcycle legal category	B432		3	55	57	N	DI
B.4.1.3.24	Motorcycle legal category	B432		3	58	60	N	DI
B.4.1.3.25	Motorcycle legal category	B432		3	61	63	N	DI
B.4.1.3.26	Motorcycle legal category	B432		3	64	66	N	DI
B.4.1.3.27	Motorcycle legal category	B432		3	67	69	N	DI
B.4.1.3.28	Motorcycle style	B432		3	70	72	N	DI
B.4.1.3.29	Motorcycle style	B432		3	73	75	N	DI
B.4.1.3.30	Motorcycle style	B432		3	76	78	N	DI
B.4.1.3.31	Motorcycle style	B432		3	79	81	N	DI
B.4.1.3.32	Motorcycle style	B432		3	82	84	N	DI
B.4.1.3.33	Motorcycle style	B432		3	85	87	N	DI
B.4.1.3.34	Motorcycle style	B432		3	88	90	N	DI
B.4.1.3.35	Motorcycle style	B432		3	91	93	N	DI
B.4.1.3.36	Motorcycle style	B432		3	94	96	N	DI
B.4.1.3.37	Motorcycle style	B432		3	97	99	N	DI
B.4.1.3.38	Motorcycle style	B432		3	100	102	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.4.1.3.39	Motorcycle style	B432		3	103	105	N	DI
B.4.1.3.40	Motorcycle style	B432		3	106	108	N	DI
B.4.1.3.41	Motorcycle style	B432		3	109	111	N	DI
B.4.1.3.42	Motorcycle style	B432		3	112	114	N	DI
B.4.1.3.43	Predominating MC color	B432		3	115	117	N	DI
B.4.1.3.44	Predominating MC color	B432		3	118	120	N	DI
B.4.1.3.45	Predominating MC color	B432		3	121	123	N	DI
B.4.1.3.46	Predominating MC color	B432		3	124	126	N	DI
B.4.1.3.47	Predominating MC color	B432		3	127	129	N	DI
B.4.1.3.48	Predominating MC color	B432		3	130	132	N	DI
B.4.1.3.49	Predominating MC color	B432		3	133	135	N	DI
B.4.1.3.50	Predominating MC color	B432		3	136	138	N	DI
B.4.1.3.51	Predominating MC color	B432		3	139	141	N	DI
B.4.1.3.52	Predominating MC color	B432		3	142	144	N	DI
B.4.1.3.53	Predominating MC color	B432		3	145	147	N	DI
B.4.1.3.54	Predominating MC color	B432		3	148	150	N	DI
B.4.1.3.55	Predominating MC color	B432		3	151	153	N	DI
B.4.1.3.56	Predominating MC color	B432		3	154	156	N	DI
B.4.1.3.57	Predominating MC color	B432		3	157	159	N	DI
B.4.1.3.58	Distribution of motor displacement	B432		3	160	162	N	DI
B.4.1.3.59	Distribution of motor displacement	B432		3	163	165	N	DI
B.4.1.3.60	Distribution of motor displacement	B432		3	166	168	N	DI
B.4.1.3.61	Distribution of motor displacement	B432		3	169	171	N	DI
B.4.1.3.62	Distribution of motor displacement	B432		3	172	174	N	DI
B.4.1.3.63	Distribution of motor displacement	B432		3	175	177	N	DI
B.4.1.3.64	Motorcycle modifications	B432		3	178	180	N	DI
B.4.1.3.65	Motorcycle modifications	B432		3	181	183	N	DI
B.4.1.3.66	Motorcycle modifications	B432		3	184	186	N	DI
B.4.1.3.67	Motorcycle modifications	B432		3	187	189	N	DI
B.4.1.3.68	Motorcycle modifications	B432		3	190	192	N	DI
B.4.1.3.69	Motorcycle modifications	B432		3	193	195	N	DI
B.4.1.3.70	Motorcycle modifications	B432		3	196	198	N	DI
B.4.1.3.71	Motorcycle modifications	B432		3	199	201	N	DI
B.4.1.3.72	Motorcycle modifications	B432		3	202	204	N	DI
B.4.1.3.73	Motorcycle modifications	B432		3	205	207	N	DI
B.4.1.3.74	Motorcycle modifications	B432		3	208	210	N	DI
B.4.1.3.75	Headlamp assembly type	B432		3	211	213	N	DI
B.4.1.3.76	Headlamp assembly type	B432		3	214	216	N	DI
B.4.1.3.77	Headlamp assembly type	B432		3	217	219	N	DI
B.4.1.3.78	Headlamp assembly type	B432		3	220	222	N	DI
B.4.1.3.79	Headlamp assembly type	B432		3	223	225	N	DI
B.4.1.3.80	Headlamp assembly type	B432		3	226	228	N	DI
B.4.1.3.81	Headlamp assembly type	B432		3	229	231	N	DI
B.4.1.3.82	Headlamp function	B432		3	232	234	N	DI
B.4.1.3.83	Headlamp function	B432		3	235	237	N	DI
B.4.1.3.84	Headlamp function	B432		3	238	240	N	DI
B.4.1.3.85	Headlamp function	B432		3	241	243	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.4.1.3.86	Headlamp function	B432		3	244	246	N	DI
B.5.1.1	Number of passengers on motorcycle	B511		1	16	16	N	D
B.5.1.1.1.1	Date of birth (year/month/day)	B511		8	18	25	N	Date
B.5.1.1.1.2	Age	B511		2	26	27	N	C
B.5.1.1.1.3.1	Driver's license qualification	B511		2	28	29	N	D
B.5.1.1.1.3.2	Driver's license qualification	B511		2	30	31	N	D
B.5.1.1.1.3.3	Driver's license qualification	B511		2	32	33	N	D
B.5.1.1.1.3.4	Driver's license qualification	B511		2	34	35	N	D
B.5.1.1.1.4	Citizenship	B511		1	36	36	N	D2
B.5.1.1.1.5	Height	B511		3	37	39	N	C
B.5.1.1.1.6	Weight	B511		3	40	42	N	C
B.5.1.1.1.7	Gender	B511		1	43	43	N	D2
B.5.1.1.1.8	Educational status (where permissible)	B511		1	44	44	N	D
B.5.1.1.1.8.1	Duration of formal education	B511		2	45	46	N	C
B.5.1.1.1.9	Occupational code (where permissible)	B511		2	47	48	N	D
B.5.1.1.1.10	Eye correction at time of accident	B511		1	49	49	N	D
B.5.1.1.1.11	All vehicle experience	B511		2	50	51	N	C
B.5.1.1.1.12	On any street motorcycle	B511		2	52	53	N	C
B.5.1.1.1.13	On interview motorcycle	B511		2	54	55	N	C
B.5.1.1.1.14	Number of days per year that motorcycles are ridden	B511		3	56	58	N	C
B.5.1.1.1.15	Distance motorcycle is ridden per year	B511		5	59	63	N	C
B.5.1.1.1.16	Motorcycle training	B511		1	64	64	N	D
B.5.1.1.1.17.1	Motorcycle percent use estimate	B511		3	65	67	N	C
B.5.1.1.1.17.2	Motorcycle percent use estimate	B511		3	68	70	N	C
B.5.1.1.1.17.3	Motorcycle percent use estimate	B511		3	71	73	N	C
B.5.1.1.1.18	Experience riding with passengers on motorcycle	B511		1	74	74	N	D
B.5.1.1.1.20	Cargo/luggage on motorcycle	B511		2	76	77	N	D
B.5.1.1.1.21	Experience riding with similar cargo/luggage	B511		1	78	78	N	D
B.5.1.1.1.22	All moving traffic violation convictions in the previous 5 years	B511		2	79	80	N	DI
B.5.1.1.1.23	Any motorcycle moving traffic accident experience during the previous 5 years	B511		2	81	82	N	DI
B.5.1.1.1.24	Any other vehicle moving traffic accident experience during the previous 5 years	B511		2	83	84	N	DI
B.5.1.1.1.25	Origin	B511		2	85	86	N	D
B.5.1.1.1.26	Destination	B511		2	87	88	N	D
B.5.1.1.1.27	Trip length	B511		3	89	91	N	C
B.5.1.1.1.28	Frequency of this road use, in/on any vehicle	B511		1	92	92	N	D
B.5.1.1.1.29	Length of time since departure, this trip	B511		2	93	94	N	C
B.5.1.1.1.30	Alcohol/drug type of use	B511		1	95	95	N	D
B.5.1.1.1.31	Alcohol/drug impairment	B511		1	96	96	N	D
B.5.1.1.1.32	Blood alcohol concentration (BAC)	B511		4	97	100	N	C
B.5.1.1.1.33	Type of drugs other than alcohol	B511		1	101	101	N	D
B.5.1.1.1.34	Source of drugs other than alcohol	B511		1	102	102	N	D
B.5.1.1.1.35.1	Physiological impairment, permanent condition	B511		2	103	104	N	D
B.5.1.1.1.35.2	Physiological impairment, permanent condition	B511		2	105	106	N	D
B.5.1.1.1.35.3	Physiological impairment, permanent condition	B511		2	107	108	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.1.1.1.36.1	Physiological impairment, transient condition	B511		2	109	110	N	D
B.5.1.1.1.36.2	Physiological impairment, transient condition	B511		2	111	112	N	D
B.5.1.1.1.36.3	Physiological impairment, transient condition	B511		2	113	114	N	D
B.5.1.1.1.37.1	Stress experienced that day	B511		2	115	116	N	D
B.5.1.1.1.37.2	Stress experienced that day	B511		2	117	118	N	D
B.5.1.1.1.37.3	Stress experienced that day	B511		2	119	120	N	D
B.5.1.1.2	Motorcycle passenger number	B512		1	16	16	N	D
B.5.1.1.2.1	Date of birth (year/month/day)	B512		8	17	24	N	Date
B.5.1.1.2.2	Age	B512		2	25	26	N	C
B.5.1.1.2.3.1	Driver's license qualification	B512		2	27	28	N	D
B.5.1.1.2.3.2	Driver's license qualification	B512		2	29	30	N	D
B.5.1.1.2.3.3	Driver's license qualification	B512		2	31	32	N	D
B.5.1.1.2.3.4	Driver's license qualification	B512		2	33	34	N	D
B.5.1.1.2.4	Citizenship	B512		1	35	35	N	D2
B.5.1.1.2.5	Height	B512		3	36	38	N	C
B.5.1.1.2.6	Weight	B512		3	39	41	N	C
B.5.1.1.2.7	Gender	B512		1	42	42	N	D2
B.5.1.1.2.8	Educational status (where permissible)	B512		1	43	43	N	D
B.5.1.1.2.8.1	Duration of formal education	B512		2	44	45	N	C
B.5.1.1.2.9	Occupational code (where permissible)	B512		2	46	47	N	D
B.5.1.1.2.10	Eye correction at time of accident	B512		1	48	48	N	D
B.5.1.1.2.11	All vehicle experience	B512		2	49	50	N	C
B.5.1.1.2.12	On any street motorcycle	B512		2	51	52	N	C
B.5.1.1.2.13	On interview motorcycle	B512		2	53	54	N	C
B.5.1.1.2.14	Number of days per year that motorcycles are ridden	B512		3	55	57	N	C
B.5.1.1.2.15	Distance motorcycle is ridden per year	B512		5	58	62	N	C
B.5.1.1.2.16	Motorcycle training	B512		1	63	63	N	D
B.5.1.1.2.17.1	Motorcycle percent use estimate	B512		3	64	66	N	C
B.5.1.1.2.17.2	Motorcycle percent use estimate	B512		3	67	69	N	C
B.5.1.1.2.17.3	Motorcycle percent use estimate	B512		3	70	72	N	C
B.5.1.1.2.19	Experience riding as a passenger on motorcycles	B512		1	74	74	N	D
B.5.1.1.2.22	All moving traffic violation convictions in the previous 5 years	B512		2	78	79	N	DI
B.5.1.1.2.23	Any motorcycle moving traffic accident experience during the previous 5 years	B512		2	80	81	N	DI
B.5.1.1.2.24	Any other vehicle moving traffic accident experience during the previous 5 years	B512		2	82	83	N	DI
B.5.1.1.2.30	Alcohol/drug type of use	B512		1	94	94	N	D
B.5.1.1.2.31	Alcohol/drug impairment	B512		1	95	95	N	D
B.5.1.1.2.33	Type of drugs other than alcohol	B512		1	99	99	N	D
B.5.1.1.2.34	Source of drugs other than alcohol	B512		1	100	100	N	D
B.5.1.1.2.35.1	Physiological impairment, permanent condition	B512		2	101	102	N	D
B.5.1.1.2.35.2	Physiological impairment, permanent condition	B512		2	103	104	N	D
B.5.1.1.2.35.3	Physiological impairment, permanent condition	B512		2	105	106	N	D
B.5.1.1.2.36.1	Physiological impairment, transient condition	B512		2	107	108	N	D
B.5.1.1.2.36.2	Physiological impairment, transient condition	B512		2	109	110	N	D
B.5.1.1.2.36.3	Physiological impairment, transient condition	B512		2	111	112	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.1.1.2.37.1	Stress experienced that day	B512		2	113	114	N	D
B.5.1.1.2.37.2	Stress experienced that day	B512		2	115	116	N	D
B.5.1.1.2.37.3	Stress experienced that day	B512		2	117	118	N	D
B.5.1.3.1.1	Gender	B513		3	13	15	N	DI
B.5.1.3.1.2	Gender	B513		3	16	18	N	DI
B.5.1.3.1.3	Gender	B513		3	19	21	N	DI
B.5.1.3.1.4	Cargo/luggage on motorcycle	B513		3	31	33	N	DI
B.5.1.3.1.5	Cargo/luggage on motorcycle	B513		3	34	36	N	DI
B.5.1.3.1.6	Cargo/luggage on motorcycle	B513		3	37	39	N	DI
B.5.1.3.1.7	Cargo/luggage on motorcycle	B513		3	40	42	N	DI
B.5.1.3.1.8	Cargo/luggage on motorcycle	B513		3	43	45	N	DI
B.5.1.3.1.9	Cargo/luggage on motorcycle	B513		3	46	48	N	DI
B.5.1.3.1.10	Cargo/luggage on motorcycle	B513		3	49	51	N	DI
B.5.1.3.1.11	Cargo/luggage on motorcycle	B513		3	52	54	N	DI
B.5.1.3.1.12	Cargo/luggage on motorcycle	B513		3	55	57	N	DI
B.5.1.3.1.13	Cargo/luggage on motorcycle	B513		3	58	60	N	DI
B.5.1.3.1.14	Number of passengers on motorcycle	B513		3	61	63	N	DI
B.5.1.3.1.15	Number of passengers on motorcycle	B513		3	64	66	N	DI
B.5.1.3.1.16	Number of passengers on motorcycle	B513		3	67	69	N	DI
B.5.1.3.1.17	Number of passengers on motorcycle	B513		3	70	72	N	DI
B.5.1.3.1.18	Number of passengers on motorcycle	B513		3	73	75	N	DI
B.5.1.3.1.19	Number of passengers on motorcycle	B513		3	76	78	N	DI
B.5.1.3.1.20	Number of passengers on motorcycle	B513		3	79	81	N	DI
B.5.1.3.1.21	Number of passengers on motorcycle	B513		3	82	84	N	DI
B.5.1.3.2.1	Gender	B513		3	22	24	N	DI
B.5.1.3.2.2	Gender	B513		3	25	27	N	DI
B.5.1.3.2.3	Gender	B513		3	28	30	N	DI
B.5.3.1.1.1	Upper torso and upper extremities coverage material	B531		1	16	16	N	D
B.5.3.1.1.2	Are upper torso and extremities clothing motorcycle oriented?	B531		1	17	17	N	D2
B.5.3.1.1.3	Lower torso and lower extremities coverage material	B531		1	18	18	N	D
B.5.3.1.1.4	Are lower torso and extremities clothing motorcycle oriented?	B531		1	19	19	N	D2
B.5.3.1.1.5	Footwear material/type	B531		1	20	20	N	D
B.5.3.1.1.6	Is footwear motorcycle oriented?	B531		1	21	21	N	D2
B.5.3.1.1.7	Glove material	B531		1	22	22	N	D
B.5.3.1.1.8	Are gloves motorcycle oriented?	B531		1	23	23	N	D2
B.5.3.1.1.9	Wearing helmet on head?	B531		1	24	24	N	D2
B.5.3.1.1.10	Was helmet properly adjusted on head?	B531		1	25	25	N	D2
B.5.3.1.1.11	Was helmet securely fastened?	B531		1	26	26	N	D2
B.5.3.1.1.12	Type of helmet	B531		1	27	27	N	D
B.5.3.1.1.13	Type of coverage	B531		2	28	29	N	D
B.5.3.1.1.14	Predominating colour	B531		2	30	31	N	D
B.5.3.1.1.15	Colour of face shield, if present	B531		1	32	32	N	D
B.5.3.1.1.16	Helmet owned by wearer?	B531		1	33	33	N	D2
B.5.3.1.1.17	Helmet fit	B531		1	34	34	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.1.1.18	Eye coverage in use, separate from helmet	B531		2	35	36	N	D
B.5.3.1.2.1	Upper torso and upper extremities coverage material	B532		1	16	16	N	D
B.5.3.1.2.2	Are upper torso and extremities clothing motorcycle oriented?	B532		1	17	17	N	D2
B.5.3.1.2.3	Lower torso and lower extremities coverage material	B532		1	18	18	N	D
B.5.3.1.2.4	Are lower torso and extremities clothing motorcycle oriented?	B532		1	19	19	N	D2
B.5.3.1.2.5	Footwear material/type	B532		1	20	20	N	D
B.5.3.1.2.6	Is footwear motorcycle oriented?	B532		1	21	21	N	D2
B.5.3.1.2.7	Glove material	B532		1	22	22	N	D
B.5.3.1.2.8	Are gloves motorcycle oriented?	B532		1	23	23	N	D2
B.5.3.1.2.9	Wearing helmet on head?	B532		1	24	24	N	D2
B.5.3.1.2.10	Was helmet properly adjusted on head?	B532		1	25	25	N	D2
B.5.3.1.2.11	Was helmet securely fastened?	B532		1	26	26	N	D2
B.5.3.1.2.12	Type of helmet	B532		1	27	27	N	D
B.5.3.1.2.13	Type of coverage	B532		2	28	29	N	D
B.5.3.1.2.14	Predominating colour	B532		2	30	31	N	D
B.5.3.1.2.15	Colour of face shield, if present	B532		1	32	32	N	D
B.5.3.1.2.16	Helmet owned by wearer?	B532		1	33	33	N	D2
B.5.3.1.2.17	Helmet fit	B532		1	34	34	N	D
B.5.3.1.2.18	Eye coverage in use, separate from helmet	B532		2	35	36	N	D
B.5.3.3.1.1	Upper torso and upper extremities coverage material	B533		3	13	15	N	DI
B.5.3.3.1.2	Upper torso and upper extremities coverage material	B533		3	16	18	N	DI
B.5.3.3.1.3	Upper torso and upper extremities coverage material	B533		3	19	21	N	DI
B.5.3.3.1.4	Upper torso and upper extremities coverage material	B533		3	22	24	N	DI
B.5.3.3.1.5	Upper torso and upper extremities coverage material	B533		3	25	27	N	DI
B.5.3.3.1.6	Upper torso and upper extremities coverage material	B533		3	28	30	N	DI
B.5.3.3.1.7	Upper torso and upper extremities coverage material	B533		3	31	33	N	DI
B.5.3.3.1.8	Upper torso and upper extremities coverage material	B533		3	34	36	N	DI
B.5.3.3.1.9	Are upper torso and extremities clothing motorcycle oriented?	B533		3	37	39	N	DI
B.5.3.3.1.10	Are upper torso and extremities clothing motorcycle oriented?	B533		3	40	42	N	DI
B.5.3.3.1.11	Are upper torso and extremities clothing motorcycle oriented?	B533		3	43	45	N	DI
B.5.3.3.1.12	Are upper torso and extremities clothing motorcycle oriented?	B533		3	46	48	N	DI
B.5.3.3.1.13	Lower torso and lower extremities coverage material	B533		3	49	51	N	DI
B.5.3.3.1.14	Lower torso and lower extremities coverage material	B533		3	52	54	N	DI
B.5.3.3.1.15	Lower torso and lower extremities coverage material	B533		3	55	57	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.1.16	Lower torso and lower extremities coverage material	B533		3	58	60	N	DI
B.5.3.3.1.17	Lower torso and lower extremities coverage material	B533		3	61	63	N	DI
B.5.3.3.1.18	Lower torso and lower extremities coverage material	B533		3	64	66	N	DI
B.5.3.3.1.19	Lower torso and lower extremities coverage material	B533		3	67	69	N	DI
B.5.3.3.1.20	Are lower torso and extremities clothing motorcycle oriented?	B533		3	70	72	N	DI
B.5.3.3.1.21	Are lower torso and extremities clothing motorcycle oriented?	B533		3	73	75	N	DI
B.5.3.3.1.22	Are lower torso and extremities clothing motorcycle oriented?	B533		3	76	78	N	DI
B.5.3.3.1.23	Are lower torso and extremities clothing motorcycle oriented?	B533		3	79	81	N	DI
B.5.3.3.1.24	Footwear material/type	B533		3	82	84	N	DI
B.5.3.3.1.25	Footwear material/type	B533		3	85	87	N	DI
B.5.3.3.1.26	Footwear material/type	B533		3	88	90	N	DI
B.5.3.3.1.27	Footwear material/type	B533		3	91	93	N	DI
B.5.3.3.1.28	Footwear material/type	B533		3	94	96	N	DI
B.5.3.3.1.29	Footwear material/type	B533		3	97	99	N	DI
B.5.3.3.1.30	Footwear material/type	B533		3	100	102	N	DI
B.5.3.3.1.31	Footwear material/type	B533		3	103	105	N	DI
B.5.3.3.1.32	Footwear material/type	B533		3	106	108	N	DI
B.5.3.3.1.33	Is footwear motorcycle oriented?	B533		3	109	111	N	DI
B.5.3.3.1.34	Is footwear motorcycle oriented?	B533		3	112	114	N	DI
B.5.3.3.1.35	Is footwear motorcycle oriented?	B533		3	115	117	N	DI
B.5.3.3.1.36	Is footwear motorcycle oriented?	B533		3	118	120	N	DI
B.5.3.3.1.37	Glove material	B533		3	121	123	N	DI
B.5.3.3.1.38	Glove material	B533		3	124	126	N	DI
B.5.3.3.1.39	Glove material	B533		3	127	129	N	DI
B.5.3.3.1.40	Glove material	B533		3	130	132	N	DI
B.5.3.3.1.41	Glove material	B533		3	133	135	N	DI
B.5.3.3.1.42	Glove material	B533		3	136	138	N	DI
B.5.3.3.1.43	Glove material	B533		3	139	141	N	DI
B.5.3.3.1.44	Glove material	B533		3	142	144	N	DI
B.5.3.3.1.45	Are gloves motorcycle oriented?	B533		3	145	147	N	DI
B.5.3.3.1.46	Are gloves motorcycle oriented?	B533		3	148	150	N	DI
B.5.3.3.1.47	Are gloves motorcycle oriented?	B533		3	151	153	N	DI
B.5.3.3.1.48	Are gloves motorcycle oriented?	B533		3	154	156	N	DI
B.5.3.3.1.49	Wearing helmet on head?	B534		3	13	15	N	DI
B.5.3.3.1.50	Wearing helmet on head?	B534		3	16	18	N	DI
B.5.3.3.1.51	Wearing helmet on head?	B534		3	19	21	N	DI
B.5.3.3.1.52	Wearing helmet on head?	B534		3	22	24	N	DI
B.5.3.3.1.53	Was helmet properly adjusted on head?	B534		3	25	27	N	DI
B.5.3.3.1.54	Was helmet properly adjusted on head?	B534		3	28	30	N	DI
B.5.3.3.1.55	Was helmet properly adjusted on head?	B534		3	31	33	N	DI
B.5.3.3.1.56	Was helmet properly adjusted on head?	B534		3	34	36	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.1.57	Was helmet securely fastened?	B534		3	37	39	N	DI
B.5.3.3.1.58	Was helmet securely fastened?	B534		3	40	42	N	DI
B.5.3.3.1.59	Was helmet securely fastened?	B534		3	43	45	N	DI
B.5.3.3.1.60	Was helmet securely fastened?	B534		3	46	48	N	DI
B.5.3.3.1.61	Type of helmet	B534		3	49	51	N	DI
B.5.3.3.1.62	Type of helmet	B534		3	52	54	N	DI
B.5.3.3.1.63	Type of helmet	B534		3	55	57	N	DI
B.5.3.3.1.64	Type of helmet	B534		3	58	60	N	DI
B.5.3.3.1.65	Type of helmet	B534		3	61	63	N	DI
B.5.3.3.1.66	Type of helmet	B534		3	64	66	N	DI
B.5.3.3.1.67	Type of helmet	B534		3	67	69	N	DI
B.5.3.3.1.68	Type of coverage	B534		3	70	72	N	DI
B.5.3.3.1.69	Type of coverage	B534		3	73	75	N	DI
B.5.3.3.1.70	Type of coverage	B534		3	76	78	N	DI
B.5.3.3.1.71	Type of coverage	B534		3	79	81	N	DI
B.5.3.3.1.72	Type of coverage	B534		3	82	84	N	DI
B.5.3.3.1.73	Type of coverage	B534		3	85	87	N	DI
B.5.3.3.1.74	Type of coverage	B534		3	88	90	N	DI
B.5.3.3.1.75	Type of coverage	B534		3	91	93	N	DI
B.5.3.3.1.76	Type of coverage	B534		3	94	96	N	DI
B.5.3.3.1.77	Predominating helmet colour	B534		3	97	99	N	DI
B.5.3.3.1.78	Predominating helmet colour	B534		3	100	102	N	DI
B.5.3.3.1.79	Predominating helmet colour	B534		3	103	105	N	DI
B.5.3.3.1.80	Predominating helmet colour	B534		3	106	108	N	DI
B.5.3.3.1.81	Predominating helmet colour	B534		3	109	111	N	DI
B.5.3.3.1.82	Predominating helmet colour	B534		3	112	114	N	DI
B.5.3.3.1.83	Predominating helmet colour	B534		3	115	117	N	DI
B.5.3.3.1.84	Predominating helmet colour	B534		3	118	120	N	DI
B.5.3.3.1.85	Predominating helmet colour	B534		3	121	123	N	DI
B.5.3.3.1.86	Predominating helmet colour	B534		3	124	126	N	DI
B.5.3.3.1.87	Predominating helmet colour	B534		3	127	129	N	DI
B.5.3.3.1.88	Predominating helmet colour	B534		3	130	132	N	DI
B.5.3.3.1.89	Predominating helmet colour	B534		3	133	135	N	DI
B.5.3.3.1.90	Predominating helmet colour	B534		3	136	138	N	DI
B.5.3.3.1.91	Predominating helmet colour	B534		3	139	141	N	DI
B.5.3.3.1.92	Predominating helmet colour	B534		3	142	144	N	DI
B.5.3.3.1.93	Colour of face shield, if present	B534		3	145	147	N	DI
B.5.3.3.1.94	Colour of face shield, if present	B534		3	148	150	N	DI
B.5.3.3.1.95	Colour of face shield, if present	B534		3	151	153	N	DI
B.5.3.3.1.96	Colour of face shield, if present	B534		3	154	156	N	DI
B.5.3.3.1.97	Colour of face shield, if present	B534		3	157	159	N	DI
B.5.3.3.1.98	Colour of face shield, if present	B534		3	160	162	N	DI
B.5.3.3.1.99	Colour of face shield, if present	B534		3	163	165	N	DI
B.5.3.3.1.100	Colour of face shield, if present	B534		3	166	168	N	DI
B.5.3.3.1.101	Colour of face shield, if present	B534		3	169	171	N	DI
B.5.3.3.1.102	Helmet fit	B534		3	172	174	N	DI
B.5.3.3.1.103	Helmet fit	B534		3	175	177	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.1.104	Helmet fit	B534		3	178	180	N	DI
B.5.3.3.1.105	Helmet fit	B534		3	181	183	N	DI
B.5.3.3.1.106	Helmet fit	B534		3	184	186	N	DI
B.5.3.3.1.107	Helmet fit	B534		3	187	189	N	DI
B.5.3.3.1.108	Eye coverage in use, separate from helmet	B534		3	190	192	N	DI
B.5.3.3.1.109	Eye coverage in use, separate from helmet	B534		3	193	195	N	DI
B.5.3.3.1.110	Eye coverage in use, separate from helmet	B534		3	196	198	N	DI
B.5.3.3.1.111	Eye coverage in use, separate from helmet	B534		3	199	201	N	DI
B.5.3.3.1.112	Eye coverage in use, separate from helmet	B534		3	202	204	N	DI
B.5.3.3.1.113	Eye coverage in use, separate from helmet	B534		3	205	207	N	DI
B.5.3.3.1.114	Eye coverage in use, separate from helmet	B534		3	208	210	N	DI
B.5.3.3.1.115	Eye coverage in use, separate from helmet	B534		3	211	213	N	DI
B.5.3.3.1.116	Eye coverage in use, separate from helmet	B534		3	214	216	N	DI
B.5.3.3.1.117	Eye coverage in use, separate from helmet	B534		3	217	219	N	DI
B.5.3.3.1.118	Eye coverage in use, separate from helmet	B534		3	220	222	N	DI
B.5.3.3.2.1	Upper torso and upper extremities coverage material	B535		3	13	15	N	DI
B.5.3.3.2.2	Upper torso and upper extremities coverage material	B535		3	16	18	N	DI
B.5.3.3.2.3	Upper torso and upper extremities coverage material	B535		3	19	21	N	DI
B.5.3.3.2.4	Upper torso and upper extremities coverage material	B535		3	22	24	N	DI
B.5.3.3.2.5	Upper torso and upper extremities coverage material	B535		3	25	27	N	DI
B.5.3.3.2.6	Upper torso and upper extremities coverage material	B535		3	28	30	N	DI
B.5.3.3.2.7	Upper torso and upper extremities coverage material	B535		3	31	33	N	DI
B.5.3.3.2.8	Upper torso and upper extremities coverage material	B535		3	34	36	N	DI
B.5.3.3.2.9	Are upper torso and extremities clothing motorcycle oriented?	B535		3	37	39	N	DI
B.5.3.3.2.10	Are upper torso and extremities clothing motorcycle oriented?	B535		3	40	42	N	DI
B.5.3.3.2.11	Are upper torso and extremities clothing motorcycle oriented?	B535		3	43	45	N	DI
B.5.3.3.2.12	Are upper torso and extremities clothing motorcycle oriented?	B535		3	46	48	N	DI
B.5.3.3.2.13	Lower torso and lower extremities coverage material	B535		3	49	51	N	DI
B.5.3.3.2.14	Lower torso and lower extremities coverage material	B535		3	52	54	N	DI
B.5.3.3.2.15	Lower torso and lower extremities coverage material	B535		3	55	57	N	DI
B.5.3.3.2.16	Lower torso and lower extremities coverage material	B535		3	58	60	N	DI
B.5.3.3.2.17	Lower torso and lower extremities coverage material	B535		3	61	63	N	DI
B.5.3.3.2.18	Lower torso and lower extremities coverage material	B535		3	64	66	N	DI
B.5.3.3.2.19	Lower torso and lower extremities coverage material	B535		3	67	69	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.2.20	Are lower torso and extremities clothing motorcycle oriented?	B535		3	70	72	N	DI
B.5.3.3.2.21	Are lower torso and extremities clothing motorcycle oriented?	B535		3	73	75	N	DI
B.5.3.3.2.22	Are lower torso and extremities clothing motorcycle oriented?	B535		3	76	78	N	DI
B.5.3.3.2.23	Are lower torso and extremities clothing motorcycle oriented?	B535		3	79	81	N	DI
B.5.3.3.2.24	Footwear material/type	B535		3	82	84	N	DI
B.5.3.3.2.25	Footwear material/type	B535		3	85	87	N	DI
B.5.3.3.2.26	Footwear material/type	B535		3	88	90	N	DI
B.5.3.3.2.27	Footwear material/type	B535		3	91	93	N	DI
B.5.3.3.2.28	Footwear material/type	B535		3	94	96	N	DI
B.5.3.3.2.29	Footwear material/type	B535		3	97	99	N	DI
B.5.3.3.2.30	Footwear material/type	B535		3	100	102	N	DI
B.5.3.3.2.31	Footwear material/type	B535		3	103	105	N	DI
B.5.3.3.2.32	Footwear material/type	B535		3	106	108	N	DI
B.5.3.3.2.33	Is footwear motorcycle oriented?	B535		3	109	111	N	DI
B.5.3.3.2.34	Is footwear motorcycle oriented?	B535		3	112	114	N	DI
B.5.3.3.2.35	Is footwear motorcycle oriented?	B535		3	115	117	N	DI
B.5.3.3.2.36	Is footwear motorcycle oriented?	B535		3	118	120	N	DI
B.5.3.3.2.37	Glove material	B535		3	121	123	N	DI
B.5.3.3.2.38	Glove material	B535		3	124	126	N	DI
B.5.3.3.2.39	Glove material	B535		3	127	129	N	DI
B.5.3.3.2.40	Glove material	B535		3	130	132	N	DI
B.5.3.3.2.41	Glove material	B535		3	133	135	N	DI
B.5.3.3.2.42	Glove material	B535		3	136	138	N	DI
B.5.3.3.2.43	Glove material	B535		3	139	141	N	DI
B.5.3.3.2.44	Glove material	B535		3	142	144	N	DI
B.5.3.3.2.45	Are gloves motorcycle oriented?	B535		3	145	147	N	DI
B.5.3.3.2.46	Are gloves motorcycle oriented?	B535		3	148	150	N	DI
B.5.3.3.2.47	Are gloves motorcycle oriented?	B535		3	151	153	N	DI
B.5.3.3.2.48	Are gloves motorcycle oriented?	B535		3	154	156	N	DI
B.5.3.3.2.49	Wearing helmet on head?	B536		3	13	15	N	DI
B.5.3.3.2.50	Wearing helmet on head?	B536		3	16	18	N	DI
B.5.3.3.2.51	Wearing helmet on head?	B536		3	19	21	N	DI
B.5.3.3.2.52	Wearing helmet on head?	B536		3	22	24	N	DI
B.5.3.3.2.53	Was helmet properly adjusted on head?	B536		3	25	27	N	DI
B.5.3.3.2.54	Was helmet properly adjusted on head?	B536		3	28	30	N	DI
B.5.3.3.2.55	Was helmet properly adjusted on head?	B536		3	31	33	N	DI
B.5.3.3.2.56	Was helmet properly adjusted on head?	B536		3	34	36	N	DI
B.5.3.3.2.57	Was helmet securely fastened?	B536		3	37	39	N	DI
B.5.3.3.2.58	Was helmet securely fastened?	B536		3	40	42	N	DI
B.5.3.3.2.59	Was helmet securely fastened?	B536		3	43	45	N	DI
B.5.3.3.2.60	Was helmet securely fastened?	B536		3	46	48	N	DI
B.5.3.3.2.61	Type of helmet	B536		3	49	51	N	DI
B.5.3.3.2.62	Type of helmet	B536		3	52	54	N	DI
B.5.3.3.2.63	Type of helmet	B536		3	55	57	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.2.64	Type of helmet	B536		3	58	60	N	DI
B.5.3.3.2.65	Type of helmet	B536		3	61	63	N	DI
B.5.3.3.2.66	Type of helmet	B536		3	64	66	N	DI
B.5.3.3.2.67	Type of helmet	B536		3	67	69	N	DI
B.5.3.3.2.68	Type of coverage	B536		3	70	72	N	DI
B.5.3.3.2.69	Type of coverage	B536		3	73	75	N	DI
B.5.3.3.2.70	Type of coverage	B536		3	76	78	N	DI
B.5.3.3.2.71	Type of coverage	B536		3	79	81	N	DI
B.5.3.3.2.72	Type of coverage	B536		3	82	84	N	DI
B.5.3.3.2.73	Type of coverage	B536		3	85	87	N	DI
B.5.3.3.2.74	Type of coverage	B536		3	88	90	N	DI
B.5.3.3.2.75	Type of coverage	B536		3	91	93	N	DI
B.5.3.3.2.76	Type of coverage	B536		3	94	96	N	DI
B.5.3.3.2.77	Predominating helmet colour	B536		3	97	99	N	DI
B.5.3.3.2.78	Predominating helmet colour	B536		3	100	102	N	DI
B.5.3.3.2.79	Predominating helmet colour	B536		3	103	105	N	DI
B.5.3.3.2.80	Predominating helmet colour	B536		3	106	108	N	DI
B.5.3.3.2.81	Predominating helmet colour	B536		3	109	111	N	DI
B.5.3.3.2.82	Predominating helmet colour	B536		3	112	114	N	DI
B.5.3.3.2.83	Predominating helmet colour	B536		3	115	117	N	DI
B.5.3.3.2.84	Predominating helmet colour	B536		3	118	120	N	DI
B.5.3.3.2.85	Predominating helmet colour	B536		3	121	123	N	DI
B.5.3.3.2.86	Predominating helmet colour	B536		3	124	126	N	DI
B.5.3.3.2.87	Predominating helmet colour	B536		3	127	129	N	DI
B.5.3.3.2.88	Predominating helmet colour	B536		3	130	132	N	DI
B.5.3.3.2.89	Predominating helmet colour	B536		3	133	135	N	DI
B.5.3.3.2.90	Predominating helmet colour	B536		3	136	138	N	DI
B.5.3.3.2.91	Predominating helmet colour	B536		3	139	141	N	DI
B.5.3.3.2.92	Predominating helmet colour	B536		3	142	144	N	DI
B.5.3.3.2.93	Colour of face shield, if present	B536		3	145	147	N	DI
B.5.3.3.2.94	Colour of face shield, if present	B536		3	148	150	N	DI
B.5.3.3.2.95	Colour of face shield, if present	B536		3	151	153	N	DI
B.5.3.3.2.96	Colour of face shield, if present	B536		3	154	156	N	DI
B.5.3.3.2.97	Colour of face shield, if present	B536		3	157	159	N	DI
B.5.3.3.2.98	Colour of face shield, if present	B536		3	160	162	N	DI
B.5.3.3.2.99	Colour of face shield, if present	B536		3	163	165	N	DI
B.5.3.3.2.100	Colour of face shield, if present	B536		3	166	168	N	DI
B.5.3.3.2.101	Colour of face shield, if present	B536		3	169	171	N	DI
B.5.3.3.2.102	Helmet fit	B536		3	172	174	N	DI
B.5.3.3.2.103	Helmet fit	B536		3	175	177	N	DI
B.5.3.3.2.104	Helmet fit	B536		3	178	180	N	DI
B.5.3.3.2.105	Helmet fit	B536		3	181	183	N	DI
B.5.3.3.2.106	Helmet fit	B536		3	184	186	N	DI
B.5.3.3.2.107	Helmet fit	B536		3	187	189	N	DI
B.5.3.3.2.108	Eye coverage in use, separate from helmet	B536		3	190	192	N	DI
B.5.3.3.2.109	Eye coverage in use, separate from helmet	B536		3	193	195	N	DI
B.5.3.3.2.110	Eye coverage in use, separate from helmet	B536		3	196	198	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.2.111	Eye coverage in use, separate from helmet	B536		3	199	201	N	DI
B.5.3.3.2.112	Eye coverage in use, separate from helmet	B536		3	202	204	N	DI
B.5.3.3.2.113	Eye coverage in use, separate from helmet	B536		3	205	207	N	DI
B.5.3.3.2.114	Eye coverage in use, separate from helmet	B536		3	208	210	N	DI
B.5.3.3.2.115	Eye coverage in use, separate from helmet	B536		3	211	213	N	DI
B.5.3.3.2.116	Eye coverage in use, separate from helmet	B536		3	214	216	N	DI
B.5.3.3.2.117	Eye coverage in use, separate from helmet	B536		3	217	219	N	DI
B.5.3.3.2.118	Eye coverage in use, separate from helmet	B536		3	220	222	N	DI
B.6.1.1	Motorcycle number	B611		3	16	18	N	DI
B.6.1.2	Number of passengers on the motorcycle	B611		1	19	19	N	DI
B.6.1.3	Date of interview	B611		8	20	27	N	Date
B.6.1.4	Motorcycle specifications	B611		2	28	29	N	D
B.6.1.4.1	Motorcycle specifications	B611		1	30	30	N	D2
B.6.1.4.2	Motorcycle specifications	B611		2	31	32	N	D
B.6.1.5	Background information	B611		8	33	40	N	Date
B.6.1.6	Background information	B611		2	41	42	N	DI
B.6.1.7	Background information	B611		2	43	44	N	D
B.6.1.8.1	Background information	B611		2	45	46	N	D
B.6.1.8.2	Background information	B611		2	47	48	N	D
B.6.1.8.3	Background information	B611		2	49	50	N	D
B.6.1.8.4	Background information	B611		2	51	52	N	D
B.6.1.9.1	Background information	B611		8	53	60	N	Date
B.6.1.9.2	Background information	B611		8	61	68	N	Date
B.6.1.9.3	Background information	B611		8	69	76	N	Date
B.6.1.9.4	Background information	B611		8	77	84	N	Date
B.6.1.10	Background information	B611		3	85	87	N	C
B.6.1.11	Background information	B611		3	88	90	N	C
B.6.1.12	Background information	B611		1	91	91	N	D2
B.6.1.13	Background information	B611		1	92	92	N	D
B.6.1.14	Background information	B611		2	93	94	N	D
B.6.1.15	Background information	B611		1	95	95	N	D
B.6.1.16	Riding/driving experience	B611		3	96	98	N	C
B.6.1.17	Riding/driving experience	B611		5	99	103	N	C
B.6.1.18	Riding/driving experience	B611		1	104	104	N	D
B.6.1.19.1	Riding/driving experience	B611		3	105	107	N	C
B.6.1.19.2	Riding/driving experience	B611		3	108	110	N	C
B.6.1.19.3	Riding/driving experience	B611		3	111	113	N	C
B.6.1.20	Riding/driving experience	B611		1	114	114	N	D
B.6.1.21	Riding/driving experience	B611		1	115	115	N	D
B.6.1.22	Riding/driving experience	B611		1	116	116	N	D
B.6.1.23	Riding/driving experience	B611		1	117	117	N	DI
B.6.1.24	Riding/driving experience	B611		1	118	118	N	DI
B.6.1.25	Riding/driving experience	B611		1	119	119	N	DI
B.6.1.26	Main purpose of this motorcycle trip	B611		2	120	121	N	D
B.6.1.27	Main purpose of this motorcycle trip	B611		2	122	123	N	D
B.6.1.28	Main purpose of this motorcycle trip	B611		4	124	127	N	C
B.6.1.29	Main purpose of this motorcycle trip	B611		1	128	128	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.6.1.30	Main purpose of this motorcycle trip	B611		2	129	130	N	C
B.6.1.31	Impairment	B611		1	131	131	N	D
B.6.1.32	Impairment	B611		1	132	132	N	D
B.6.1.33	Impairment	B611		1	133	133	N	D
B.6.1.34	Impairment	B611		1	134	134	N	D
B.6.1.35.1	Impairment	B611		2	135	136	N	D
B.6.1.35.2	Impairment	B611		2	137	138	N	D
B.6.1.35.3	Impairment	B611		2	139	140	N	D
B.6.1.36.1	Impairment	B611		2	141	142	N	D
B.6.1.36.2	Impairment	B611		2	143	144	N	D
B.6.1.36.3	Impairment	B611		2	145	146	N	D
B.6.1.37.1	Impairment	B611		2	147	148	N	D
B.6.1.37.2	Impairment	B611		2	149	150	N	D
B.6.1.37.3	Impairment	B611		2	151	152	N	D
B.6.1.38	Protective clothing/gear	B611		1	153	153	N	D
B.6.1.39	Protective clothing/gear	B611		1	154	154	N	D2
B.6.1.40	Protective clothing/gear	B611		1	155	155	N	D
B.6.1.41	Protective clothing/gear	B611		1	156	156	N	D2
B.6.1.42	Protective clothing/gear	B611		1	157	157	N	D
B.6.1.43	Protective clothing/gear	B611		1	158	158	N	D2
B.6.1.44	Protective clothing/gear	B611		1	159	159	N	D
B.6.1.45	Protective clothing/gear	B611		1	160	160	N	D2
B.6.1.46	Protective clothing/gear	B611		2	161	162	N	D
B.6.1.47	Protective clothing/gear	B611		1	163	163	N	D
B.6.1.48	Helmet	B611		1	164	164	N	D2
B.6.1.49	Helmet	B611		1	165	165	N	D2
B.6.1.50	Helmet	B611		1	166	166	N	D
B.6.1.51	Helmet	B611		2	167	168	N	D
B.6.1.52	Helmet	B611		1	169	169	N	D
B.6.1.53	Helmet	B611		1	170	170	N	D2

Notes:

- 1 Each text response is written to a unique record as follows:
 The first 3 characters of the record level are the same as the record level of the question.
 The last character of the record level is a "9" to designate that this is a text response record
 The question identifier is coded in 3 character blocks. For example:
 B.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"
- 2 Assigned counter value, see table A.1 for record locations

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		*
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
-	Accident identification number	-		8	1	8	A/N	-	*
-	Record level identifier	-		4	9	12	A/N	-	*
-	Text response question identifier	C##9		27	13	39	N	O	*
-	Text response counter index (see note 1)	C##9		3	40	42	N	O	*
-	Text response	C##9		80	43	122	A/N	-	*
C.3.1.1	Artificial illumination source	C311		2	13	14	N	D	
C.3.1.2	Vehicle position in lane at precipitating event	C311		2	15	16	N	D	
C.3.1.3	Surface texture	C311		1	17	17	N	D	
C.3.1.4	Irregularities	C311		2	23	24	N	D	
C.3.1.5	Contamination source	C311		1	25	25	N	D	
C.3.1.6	Measured roadway coefficient of friction	C311		3	26	28	N	C	
C.3.1.7	Traffic control signal face	C311		1	29	29	N	D	
C.3.1.8	Lane signal control positioning	C311		1	37	37	N	D	
C.3.1.9	Average daily traffic count	C311		2	38	39	N	D	
C.3.1.10	Airborne insect population	C311		1	40	40	N	D	
C.3.1.11	Was animal pursuing?	C311		1	41	41	N	D	
C.3.1.12	Recorded temperature last 30 days	C312		3	13	15	N	C	
C.3.1.13	Recorded temperature last 30 days	C312		3	16	18	N	C	
C.3.1.14	Recorded temperature last 30 days	C312		3	19	21	N	C	
C.3.1.15	Recorded precipitation last 30 days rainfall	C312		3	22	24	N	C	
C.3.1.16	Recorded precipitation last 30 days rainfall	C312		3	25	27	N	C	
C.3.2.1	Artificial illumination source	C311		2	18	19	N	D	
C.3.2.2	Vehicle position in lane at precipitating event	C311		2	20	21	N	D	
C.3.2.3	Surface texture	C311		1	22	22	N	D	
C.3.2.4	Irregularities	C311		2	30	31	N	D	
C.3.2.5	Contamination source	C311		1	32	32	N	D	
C.3.2.6	Measured roadway coefficient of friction	C311		3	33	35	N	C	
C.3.2.7	Traffic control signal face	C311		1	36	36	N	D	
C.3.2.8	Lane signal control positioning	C311		1	42	42	N	D	
C.3.2.9	Average daily traffic count	C311		2	43	44	N	D	
C.3.2.10	Airborne insect population	C311		1	45	45	N	D	
C.3.2.11	Was animal pursuing?	C311		1	46	46	N	D	
C.4.1.3.1.1	In a lane which is	C411		1	13	13	N	D	*
C.4.1.3.1.2	Applicable speed limit for mopeds/mofas at accident scene	C411		3	14	16	N	C	*
C.4.1.3.1.2.1	Moped/mofa speed limit units	C411		1	17	17	N	D	*
C.4.1.3.1.3	Applicable maximum legal design speed for mopeds/mofas	C411		3	18	20	N	C	*
C.4.1.3.1.3.1	Moped/mofa design speed units	C411		1	21	21	N	D	*
C.4.1.3.2.1	In a lane which is	C412		1	14	14	N	D	
C.4.1.4.1.1	Has the engine/driveline been visibly tampered with?	C411		1	22	22	N	D2	*
C.4.1.4.1.2	Engine tampered with by tuning kit (i.e., a commercially available combination of performance enhancing items)?	C411		1	23	23	N	D2	*
C.4.1.4.1.3.01	For each blank cell, respond (unless noted otherwise)	C411		1	24	24	N	D2	*
C.4.1.4.1.3.02	For each blank cell, respond (unless noted otherwise)	C411		1	25	25	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
C.4.1.4.1.3.03	For each blank cell, respond (unless noted otherwise)	C411		1	26	26	N	D2	*
C.4.1.4.1.3.04	For each blank cell, respond (unless noted otherwise)	C411		1	27	27	N	D2	*
C.4.1.4.1.3.05	For each blank cell, respond (unless noted otherwise)	C411		1	28	28	N	D2	*
C.4.1.4.1.3.06	For each blank cell, respond (unless noted otherwise)	C411		1	29	29	N	D2	*
C.4.1.4.1.3.07	For each blank cell, respond (unless noted otherwise)	C411		1	30	30	N	D2	*
C.4.1.4.1.3.08	For each blank cell, respond (unless noted otherwise)	C411		1	31	31	N	D2	*
C.4.1.4.1.3.09	For each blank cell, respond (unless noted otherwise)	C411		1	32	32	N	D2	*
C.4.1.4.1.3.10	For each blank cell, respond (unless noted otherwise)	C411		1	33	33	N	D2	*
C.4.1.4.1.4.01	For each blank cell, respond (unless noted otherwise)	C411		1	34	34	N	D2	*
C.4.1.4.1.4.02	For each blank cell, respond (unless noted otherwise)	C411		1	35	35	N	D2	*
C.4.1.4.1.4.03	For each blank cell, respond (unless noted otherwise)	C411		1	36	36	N	D2	*
C.4.1.4.1.4.04	For each blank cell, respond (unless noted otherwise)	C411		1	37	37	N	D2	*
C.4.1.4.1.4.05	For each blank cell, respond (unless noted otherwise)	C411		1	38	38	N	D2	*
C.4.1.4.1.4.06	For each blank cell, respond (unless noted otherwise)	C411		1	39	39	N	D2	*
C.4.1.4.1.4.07	For each blank cell, respond (unless noted otherwise)	C411		1	40	40	N	D2	*
C.4.1.4.1.4.09	For each blank cell, respond (unless noted otherwise)	C411		1	42	42	N	D2	*
C.4.1.4.1.4.10	For each blank cell, respond (unless noted otherwise)	C411		1	43	43	N	D2	*
C.4.1.4.1.5.01	For each blank cell, respond (unless noted otherwise)	C411		1	44	44	N	D2	*
C.4.1.4.1.5.02	For each blank cell, respond (unless noted otherwise)	C411		1	45	45	N	D2	*
C.4.1.4.1.5.03	For each blank cell, respond (unless noted otherwise)	C411		1	46	46	N	D2	*
C.4.1.4.1.5.04	For each blank cell, respond (unless noted otherwise)	C411		1	47	47	N	D2	*
C.4.1.4.1.5.05	For each blank cell, respond (unless noted otherwise)	C411		1	48	48	N	D2	*
C.4.1.4.1.5.06	For each blank cell, respond (unless noted otherwise)	C411		1	49	49	N	D2	*
C.4.1.4.1.5.07	For each blank cell, respond (unless noted otherwise)	C411		1	50	50	N	D2	*
C.4.1.4.1.5.08	For each blank cell, respond (unless noted otherwise)	C411		1	51	51	N	D2	*
C.4.1.4.1.5.09	For each blank cell, respond (unless noted otherwise)	C411		1	52	52	N	D2	*
C.4.1.4.1.5.10	For each blank cell, respond (unless noted otherwise)	C411		1	53	53	N	D2	*
C.4.1.4.1.6.01	For each blank cell, respond (unless noted otherwise)	C411		1	54	54	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		*
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
C.4.1.4.1.6.02	For each blank cell, respond (unless noted otherwise)	C411		1	55	55	N	D2	*
C.4.1.4.1.6.03	For each blank cell, respond (unless noted otherwise)	C411		1	56	56	N	D2	*
C.4.1.4.1.6.04	For each blank cell, respond (unless noted otherwise)	C411		1	57	57	N	D2	*
C.4.1.4.1.6.05	For each blank cell, respond (unless noted otherwise)	C411		1	58	58	N	D2	*
C.4.1.4.1.6.06	For each blank cell, respond (unless noted otherwise)	C411		1	59	59	N	D2	*
C.4.1.4.1.6.07	For each blank cell, respond (unless noted otherwise)	C411		1	60	60	N	D2	*
C.4.1.4.1.6.08	For each blank cell, respond (unless noted otherwise)	C411		1	61	61	N	D2	*
C.4.1.4.1.6.09	For each blank cell, respond (unless noted otherwise)	C411		1	62	62	N	D2	*
C.4.1.4.1.6.10	For each blank cell, respond (unless noted otherwise)	C411		1	63	63	N	D2	*
C.4.1.4.1.7.01	For each blank cell, respond (unless noted otherwise)	C411		1	64	64	N	D2	*
C.4.1.4.1.7.02	For each blank cell, respond (unless noted otherwise)	C411		1	65	65	N	D2	*
C.4.1.4.1.7.03	For each blank cell, respond (unless noted otherwise)	C411		1	66	66	N	D2	*
C.4.1.4.1.7.04	For each blank cell, respond (unless noted otherwise)	C411		1	67	67	N	D2	*
C.4.1.4.1.7.05	For each blank cell, respond (unless noted otherwise)	C411		1	68	68	N	D2	*
C.4.1.4.1.7.06	For each blank cell, respond (unless noted otherwise)	C411		1	69	69	N	D2	*
C.4.1.4.1.8.01	For each blank cell, respond (unless noted otherwise)	C411		1	74	74	N	D2	*
C.4.1.4.1.8.02	For each blank cell, respond (unless noted otherwise)	C411		1	75	75	N	D2	*
C.4.1.4.1.8.03	For each blank cell, respond (unless noted otherwise)	C411		1	76	76	N	D2	*
C.4.1.4.1.8.04	For each blank cell, respond (unless noted otherwise)	C411		1	77	77	N	D2	*
C.4.1.4.1.8.05	For each blank cell, respond (unless noted otherwise)	C411		1	78	78	N	D2	*
C.4.1.4.1.8.06	For each blank cell, respond (unless noted otherwise)	C411		1	79	79	N	D2	*
C.4.1.4.1.8.07	For each blank cell, respond (unless noted otherwise)	C411		1	80	80	N	D2	*
C.4.1.4.1.8.08	For each blank cell, respond (unless noted otherwise)	C411		1	81	81	N	D2	*
C.4.1.4.1.9.01	For each blank cell, respond (unless noted otherwise)	C411		1	82	82	N	D2	*
C.4.1.4.1.9.02	For each blank cell, respond (unless noted otherwise)	C411		1	85	85	N	D2	*
C.4.1.4.1.9.03	For each blank cell, respond (unless noted otherwise)	C411		1	86	86	N	D2	*
C.4.1.4.1.9.05	For each blank cell, respond (unless noted otherwise)	C411		1	88	88	N	D2	*
C.4.1.4.1.9.09	For each blank cell, respond (unless noted otherwise)	C411		1	92	92	N	D2	*

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data		
		Record		Field width	Column Position		Type	Sub type	
		Level identifier	Sub level		start	stop			
C.4.1.4.1.9.10	For each blank cell, respond (unless noted otherwise)	C411		1	93	93	N	D2	*
C.4.1.4.1.10.01	For each blank cell, respond (unless noted otherwise)	C411		1	94	94	N	D2	*
C.4.1.4.1.10.02	For each blank cell, respond (unless noted otherwise)	C411		1	95	95	N	D2	*
C.4.1.4.1.10.03	For each blank cell, respond (unless noted otherwise)	C411		1	96	96	N	D2	*
C.4.1.4.1.10.04	For each blank cell, respond (unless noted otherwise)	C411		1	97	97	N	D2	*
C.4.1.4.1.10.05	For each blank cell, respond (unless noted otherwise)	C411		1	98	98	N	D2	*
C.4.1.4.1.10.06	For each blank cell, respond (unless noted otherwise)	C411		1	99	99	N	D2	*
C.4.1.4.1.10.07	For each blank cell, respond (unless noted otherwise)	C411		1	100	100	N	D2	*
C.4.1.4.1.10.08	For each blank cell, respond (unless noted otherwise)	C411		1	101	101	N	D2	*
C.4.1.4.1.10.09	For each blank cell, respond (unless noted otherwise)	C411		1	102	102	N	D2	*
C.4.1.4.1.10.10	For each blank cell, respond (unless noted otherwise)	C411		1	103	103	N	D2	*
C.4.1.5.1	If rider completed special moped training, how much time since completion?	C411		1	104	104	N	D	*
C.4.1.5.2	If rider did not complete special moped training, what was the reason?	C411		1	105	105	N	D	*
C.4.1.6.1.1	Was moped/mofa travelling slowly relative to traffic?	C411		1	106	106	N	D2	
C.4.1.6.1.2	If moped/mofa was travelling slower than the surrounding traffic, why?	C411		1	107	107	N	D	
C.4.1.6.1.3	Were there any traffic segregation measures (with respect to other vehicles, pedestrians, mopeds, mofas, bicycles, etc.)?	C411		1	108	108	N	D2	
C.4.1.6.1.4	What were the traffic segregation measures?	C411		1	109	109	N	D	
C.4.1.6.1.5	Were the traffic segregation measures adequate?	C411		1	110	110	N	D2	
C.4.2.1.1	Motor type	C421		2	13	14	N	D	
C.4.2.1.2	Type	C421		1	15	15	N	D	
C.4.2.1.3	Number of spokes	C421		2	16	17	N	DI	
C.4.2.1.4	Alignment	C421		1	18	18	N	D	
C.4.2.1.5	Front fender type	C421		1	19	19	N	D	
C.4.2.1.6	Type	C421		1	25	25	N	D	
C.4.2.1.7	Cornering evidence on tyre	C421		1	26	26	N	D2	
C.4.2.1.9	Controls, actuators condition	C421		1	27	27	N	D	
C.4.2.1.10	Evidence of front brake use	C421		1	28	28	N	D	
C.4.2.1.11	Steering head bearing condition	C421		1	33	33	N	D	
C.4.2.1.12	Steering stops condition	C421		1	34	34	N	D	
C.4.2.1.13	Approximate level of fuel at impact	C421		1	35	35	N	D	
C.4.2.1.14	Selector position	C421		1	36	36	N	D	
C.4.2.1.15	Fuel shutoff type	C421		1	37	37	N	D	
C.4.2.1.16	Clutch type	C421		1	38	38	N	D	
C.4.2.1.17	Clutch control condition	C421		1	39	39	N	D	
C.4.2.1.18	Transmission gear number at precipitating event	C421		2	40	41	N	D	

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.4.2.1.19	Did motor continue to run after accident?	C421		1	42	42	N	D
C.4.2.1.20	Side stand ignition interconnect	C421		1	43	43	N	D
C.4.2.1.21	Manual ignition safety switch used	C421		1	44	44	N	D2
C.4.2.1.22	Automatic ignition safety switch (tilt switch) operated?	C421		1	45	45	N	D2
C.4.2.1.23	Sump protector plate (engine case)	C421		1	46	46	N	D2
C.4.2.1.24	Odometer	C421		1	47	47	N	D
C.4.2.1.25	Stop lamp on at time of accident?	C421		1	48	48	N	D2
C.4.2.1.26	License plate lamp	C421		1	49	49	N	D
C.4.2.1.27	License plate lamp on at time of accident?	C421		1	50	50	N	D2
C.4.2.1.28	Headlamp bulb type	C421		1	51	51	N	D
C.4.2.1.29.1	Headlamp bulb rated power	C421		3	52	54	N	C
C.4.2.1.29.2	Headlamp bulb rated power	C421		3	55	57	N	C
C.4.2.1.30	Headlamp control	C421		1	58	58	N	D
C.4.2.1.31	Headlamp use	C421		1	59	59	N	D
C.4.2.1.32	Turn signals installed	C421		1	60	60	N	D
C.4.2.1.33	Auto/manual turn signal cancel	C421		1	61	61	N	D
C.4.2.1.34.1	Path inclination to first impact surface	C421		3	62	64	N	C
C.4.2.1.34.2	Path inclination to first impact surface	C421		3	65	67	N	C
C.4.2.1.35	Front wheel rotating	C421		1	68	68	N	D
C.4.2.1.36	Steering angle	C421		2	69	70	N	C
C.4.2.1.37	Steer angle side	C421		1	71	71	N	D2
C.4.2.1.38	Pitch attitude angle	C421		3	72	74	N	C
C.4.2.1.39	Rear wheel rotating	C421		1	75	75	N	D
C.4.2.2.2	Type	C421		1	20	20	N	D
C.4.2.2.3	Number of spokes	C421		2	21	22	N	DI
C.4.2.2.4	Alignment	C421		1	23	23	N	D
C.4.2.2.5	Front fender type	C421		1	24	24	N	D
C.4.2.2.6	Type	C421		1	29	29	N	D
C.4.2.2.7	Cornering evidence on tyre	C421		1	30	30	N	D2
C.4.2.2.8	Acceleration evidence on rear tyre	C421		1	31	31	N	D
C.4.2.2.9	Controls, actuators condition	C421		1	32	32	N	D
C.5.1.1.1	Helmet belongs to:	C511		1	13	13	N	D
C.5.1.1.2	Type of helmet	C511		2	14	15	N	D
C.5.1.1.3	Lens or shield material, if used	C511		1	16	16	N	D
C.5.1.1.4.1	Eye coverage damage locations	C511		1	17	17	N	D
C.5.1.1.4.2	Eye coverage damage locations	C511		1	18	18	N	D
C.5.1.1.4.3	Eye coverage damage locations	C511		1	19	19	N	D
C.5.1.1.4.4	Eye coverage damage locations	C511		1	20	20	N	D
C.5.1.1.5.1	Type of damage to eye coverage	C511		1	21	21	N	D
C.5.1.1.5.2	Type of damage to eye coverage	C511		1	22	22	N	D
C.5.1.1.5.3	Type of damage to eye coverage	C511		1	23	23	N	D
C.5.1.1.5.4	Type of damage to eye coverage	C511		1	24	24	N	D
C.5.1.1.6	Helmet fit	C511		1	25	25	N	D
C.5.1.1.7	Contour match problem due to	C511		1	26	26	N	D
C.5.1.1.8	Retention system misuse	C511		1	27	27	N	D
C.5.1.1.9	Type of impact	C511		1	28	28	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.5.1.1.10	Impact location	C511		2	29	30	N	D
C.5.1.1.11.1	Clock face location	C511		2	31	32	N	D
C.5.1.1.11.2	Clock face location	C511		2	33	34	N	D
C.5.1.1.12	Number of distinct impacts at this location	C511		1	35	35	N	DI
C.5.1.1.13	Shell material	C511		2	36	37	N	D
C.5.1.1.14	Shell thickness	C511		2	38	39	N	C
C.5.1.1.15	Liner material	C511		2	40	41	N	D
C.5.1.1.16	Liner thickness	C511		2	42	43	N	C
C.5.1.1.17	Liner density	C511		3	44	46	N	C
C.5.1.1.18	Maximum liner crush	C511		2	47	48	N	C
C.5.1.1.19	Area of liner crush or signature	C511		4	49	52	N	C
C.5.1.1.20	Geometry of impacting surface	C511		2	53	54	N	D
C.5.1.1.21	Material of impacting surface	C511		2	55	56	N	D
C.5.1.1.22	Which headform used for replication test?	C511		2	86	87	N	D
C.5.1.1.23	Mass of replication drop apparatus	C511		3	88	90	N	C
C.5.1.1.24	Equivalent laboratory test anvil	C511		1	91	91	N	D
C.5.1.1.25	Impact velocity from accident reconstruction	C511		4	92	95	N	C
C.5.1.1.26	Impact velocity from laboratory replication	C511		4	96	99	N	C
C.5.1.1.27	Peak headform accelerations	C511		3	100	102	N	C
C.5.1.1.28	Dwell time at 200g	C511		2	103	104	N	C
C.5.1.1.29	Head Injury Criteria, HIC	C511		4	105	108	N	C
C.5.1.1.30	Gadd Severity Index, GSI	C511		4	109	112	N	C
C.5.1.1.31	Equivalent specific energy/equivalent drop height from accident reconstruction	C511		3	113	115	N	C
C.5.1.1.32	Equivalent specific energy/equivalent drop height from laboratory replication	C511		3	116	118	N	C
C.5.1.2.9	Type of impact	C511		1	57	57	N	D
C.5.1.2.10	Impact location	C511		2	58	59	N	D
C.5.1.2.11.1	Clock face location	C511		2	60	61	N	D
C.5.1.2.11.2	Clock face location	C511		2	62	63	N	D
C.5.1.2.12	Number of distinct impacts at this location	C511		1	64	64	N	DI
C.5.1.2.13	Shell material	C511		2	65	66	N	D
C.5.1.2.14	Shell thickness	C511		2	67	68	N	C
C.5.1.2.15	Liner material	C511		2	69	70	N	D
C.5.1.2.16	Liner thickness	C511		2	71	72	N	C
C.5.1.2.17	Liner density	C511		3	73	75	N	C
C.5.1.2.18	Maximum liner crush	C511		2	76	77	N	C
C.5.1.2.19	Area of liner crush or signature	C511		4	78	81	N	C
C.5.1.2.20	Geometry of impacting surface	C511		2	82	83	N	D
C.5.1.2.21	Material of impacting surface	C511		2	84	85	N	D
C.5.1.2.22	Which headform used for replication test?	C511		2	119	120	N	D
C.5.1.2.23	Mass of replication drop apparatus	C511		3	121	123	N	C
C.5.1.2.24	Equivalent laboratory test anvil	C511		1	124	124	N	D
C.5.1.2.25	Impact velocity from accident reconstruction	C511		4	125	128	N	C
C.5.1.2.26	Impact velocity from laboratory replication	C511		4	129	132	N	C
C.5.1.2.27	Peak headform accelerations	C511		3	133	135	N	C
C.5.1.2.28	Dwell time at 200g	C511		2	136	137	N	C

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.5.1.2.29	Head Injury Criteria, HIC	C511		4	138	141	N	C
C.5.1.2.30	Gadd Severity Index, GSI	C511		4	142	145	N	C
C.5.1.2.31	Equivalent specific energy/equivalent drop height from accident reconstruction	C511		3	146	148	N	C
C.5.1.2.32	Equivalent specific energy/equivalent drop height from laboratory replication	C511		3	149	151	N	C
C.5.2.1.1.1	Marital status	C521		1	13	13	N	D
C.5.2.1.1.2	Number of children	C521		1	14	14	N	DI
C.5.2.1.1.3	Hand preference	C521		1	15	15	N	D
C.5.2.1.1.4	On dirt bike, off-road, motorcross	C521		2	22	23	N	C
C.5.2.1.1.5	All criminal offense conviction in the previous 5 years	C521		1	24	24	N	DI
C.5.2.1.1.6	Claimed frequency of use	C521		1	31	31	N	D
C.5.2.1.1.7	Does rider ride with some fingers extended to cover the front brake lever?	C521		1	32	32	N	D
C.5.2.1.1.8	Reason for not using eye or face protection	C521		1	33	33	N	D
C.5.2.1.1.9	Owns a helmet?	C521		1	34	34	N	D2
C.5.2.1.1.10	Reason for no wearing a helmet	C521		2	35	36	N	D
C.5.2.1.2.1	Marital status	C521		1	16	16	N	D
C.5.2.1.2.2	Number of children	C521		1	17	17	N	DI
C.5.2.1.2.3	Hand preference	C521		1	18	18	N	D
C.5.2.1.2.4	On dirt bike, off-road, motorcross	C521		2	25	26	N	C
C.5.2.1.2.5	All criminal offense conviction in the previous 5 years	C521		1	27	27	N	DI
C.5.2.1.2.8	Reason for not using eye or face protection	C521		1	37	37	N	D
C.5.2.1.2.9	Owns a helmet?	C521		1	38	38	N	D2
C.5.2.1.2.10	Reason for no wearing a helmet	C521		2	39	40	N	D
C.5.2.1.3.1	Marital status	C521		1	19	19	N	D
C.5.2.1.3.2	Number of children	C521		1	20	20	N	DI
C.5.2.1.3.3	Hand preference	C521		1	21	21	N	D
C.5.2.1.3.4	On dirt bike, off-road, motorcross	C521		2	28	29	N	C
C.5.2.1.3.5	All criminal offense conviction in the previous 5 years	C521		1	30	30	N	DI
C.5.2.2.1.1	On-scene medical assistance	C522		2	See	note 2	N	D
C.5.2.2.1.2.1	Emergency medical treatment administered on-scene	C522		2	See	note 2	N	D
C.5.2.2.1.2.2	Emergency medical treatment administered on-scene	C522		2	See	note 2	N	D
C.5.2.2.1.2.3	Emergency medical treatment administered on-scene	C522		2	See	note 2	N	D
C.5.2.2.2.1	On-scene medical assistance	C522		2	See	note 2	N	D
C.5.2.2.2.2.1	Emergency medical treatment administered on-scene	C522		2	See	note 2	N	D
C.5.2.2.2.2.2	Emergency medical treatment administered on-scene	C522		2	See	note 2	N	D
C.5.2.2.2.2.3	Emergency medical treatment administered on-scene	C522		2	See	note 2	N	D
C.5.3.1.1.1	Upper torso and upper extremities coverage damage locations	C531		2	13	14	N	D
C.5.3.1.1.2	Upper torso and upper extremities coverage damage locations	C531		2	15	16	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.5.3.1.1.3	Upper torso and upper extremities coverage damage locations	C531		2	17	18	N	D
C.5.3.1.1.4	Upper torso and upper extremities coverage damage locations	C531		2	19	20	N	D
C.5.3.1.1.5	Upper torso and upper extremities coverage damage locations	C531		2	21	22	N	D
C.5.3.1.1.6	Upper torso and upper extremities coverage damage locations	C531		2	23	24	N	D
C.5.3.1.2.1	Type damage to upper torso and upper extremities coverage	C531		1	25	25	N	D
C.5.3.1.2.2	Type damage to upper torso and upper extremities coverage	C531		1	26	26	N	D
C.5.3.1.2.3	Type damage to upper torso and upper extremities coverage	C531		1	27	27	N	D
C.5.3.1.2.4	Type damage to upper torso and upper extremities coverage	C531		1	28	28	N	D
C.5.3.1.2.5	Type damage to upper torso and upper extremities coverage	C531		1	29	29	N	D
C.5.3.1.2.6	Type damage to upper torso and upper extremities coverage	C531		1	30	30	N	D
C.5.3.1.3.1	Lower torso and lower extremities coverage damage location	C531		2	31	32	N	D
C.5.3.1.3.2	Lower torso and lower extremities coverage damage location	C531		2	33	34	N	D
C.5.3.1.3.3	Lower torso and lower extremities coverage damage location	C531		2	35	36	N	D
C.5.3.1.3.4	Lower torso and lower extremities coverage damage location	C531		2	37	38	N	D
C.5.3.1.3.5	Lower torso and lower extremities coverage damage location	C531		2	39	40	N	D
C.5.3.1.3.6	Lower torso and lower extremities coverage damage location	C531		2	41	42	N	D
C.5.3.1.4.1	Type damage to lower torso and lower extremity coverage	C531		1	43	43	N	D
C.5.3.1.4.2	Type damage to lower torso and lower extremity coverage	C531		1	44	44	N	D
C.5.3.1.4.3	Type damage to lower torso and lower extremity coverage	C531		1	45	45	N	D
C.5.3.1.4.4	Type damage to lower torso and lower extremity coverage	C531		1	46	46	N	D
C.5.3.1.4.5	Type damage to lower torso and lower extremity coverage	C531		1	47	47	N	D
C.5.3.1.4.6	Type damage to lower torso and lower extremity coverage	C531		1	48	48	N	D
C.5.3.1.5.1	Footwear damage location	C531		2	49	50	N	D
C.5.3.1.5.2	Footwear damage location	C531		2	51	52	N	D
C.5.3.1.5.3	Footwear damage location	C531		2	53	54	N	D
C.5.3.1.5.4	Footwear damage location	C531		2	55	56	N	D
C.5.3.1.5.5	Footwear damage location	C531		2	57	58	N	D
C.5.3.1.5.6	Footwear damage location	C531		2	59	60	N	D
C.5.3.1.6.1	Type damage to footwear	C531		1	61	61	N	D
C.5.3.1.6.2	Type damage to footwear	C531		1	62	62	N	D
C.5.3.1.6.3	Type damage to footwear	C531		1	63	63	N	D
C.5.3.1.6.4	Type damage to footwear	C531		1	64	64	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.5.3.1.6.5	Type damage to footwear	C531		1	65	65	N	D
C.5.3.1.6.6	Type damage to footwear	C531		1	66	66	N	D
C.5.3.1.7.1	Glove damage locations	C531		2	67	68	N	D
C.5.3.1.7.2	Glove damage locations	C531		2	69	70	N	D
C.5.3.1.7.3	Glove damage locations	C531		2	71	72	N	D
C.5.3.1.7.4	Glove damage locations	C531		2	73	74	N	D
C.5.3.1.7.5	Glove damage locations	C531		2	75	76	N	D
C.5.3.1.7.6	Glove damage locations	C531		2	77	78	N	D
C.5.3.1.8.1	Type damage to gloves	C531		1	79	79	N	D
C.5.3.1.8.2	Type damage to gloves	C531		1	80	80	N	D
C.5.3.1.8.3	Type damage to gloves	C531		1	81	81	N	D
C.5.3.1.8.4	Type damage to gloves	C531		1	82	82	N	D
C.5.3.1.8.5	Type damage to gloves	C531		1	83	83	N	D
C.5.3.1.8.6	Type damage to gloves	C531		1	84	84	N	D
C.5.3.1.9.1	Eye coverage damage locations	C531		1	85	85	N	D
C.5.3.1.9.2	Eye coverage damage locations	C531		1	86	86	N	D
C.5.3.1.9.3	Eye coverage damage locations	C531		1	87	87	N	D
C.5.3.1.10.1	Type damage to eye and face protection	C531		1	88	88	N	D
C.5.3.1.10.2	Type damage to eye and face protection	C531		1	89	89	N	D
C.5.3.1.10.3	Type damage to eye and face protection	C531		1	90	90	N	D
C.5.3.1.11.1	Reflective items corn	C531		2	169	170	N	D
C.5.3.1.11.2	Reflective items corn	C531		2	171	172	N	D
C.5.3.1.11.3	Reflective items corn	C531		2	173	174	N	D
C.5.3.1.11.4	Reflective items corn	C531		2	175	176	N	D
C.5.3.1.12.1	Dedicated motorcycle clothing?	C531		1	177	177	N	D2
C.5.3.1.12.2	Dedicated motorcycle clothing?	C531		1	178	178	N	D2
C.5.3.1.12.3	Dedicated motorcycle clothing?	C531		1	179	179	N	D2
C.5.3.1.12.4	Dedicated motorcycle clothing?	C531		1	180	180	N	D2
C.5.3.1.13	Upper body clothing	C531		2	181	182	N	D
C.5.3.1.14	Lower body clothing	C531		2	183	184	N	D
C.5.3.1.15	Footwear damage location	C531		2	185	186	N	D
C.5.3.1.16	Gloves	C531		2	187	188	N	D
C.5.3.2.1.1	Upper torso and upper extremities coverage damage locations	C531		2	91	92	N	D
C.5.3.2.1.2	Upper torso and upper extremities coverage damage locations	C531		2	93	94	N	D
C.5.3.2.1.3	Upper torso and upper extremities coverage damage locations	C531		2	95	96	N	D
C.5.3.2.1.4	Upper torso and upper extremities coverage damage locations	C531		2	97	98	N	D
C.5.3.2.1.5	Upper torso and upper extremities coverage damage locations	C531		2	99	100	N	D
C.5.3.2.1.6	Upper torso and upper extremities coverage damage locations	C531		2	101	102	N	D
C.5.3.2.2.1	Type damage to upper torso and upper extremities coverage	C531		1	103	103	N	D
C.5.3.2.2.2	Type damage to upper torso and upper extremities coverage	C531		1	104	104	N	D
C.5.3.2.2.3	Type damage to upper torso and upper extremities coverage	C531		1	105	105	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.5.3.2.2.4	Type damage to upper torso and upper extremities coverage	C531		1	106	106	N	D
C.5.3.2.2.5	Type damage to upper torso and upper extremities coverage	C531		1	107	107	N	D
C.5.3.2.2.6	Type damage to upper torso and upper extremities coverage	C531		1	108	108	N	D
C.5.3.2.3.1	Lower torso and lower extremities coverage damage location	C531		2	109	110	N	D
C.5.3.2.3.2	Lower torso and lower extremities coverage damage location	C531		2	111	112	N	D
C.5.3.2.3.3	Lower torso and lower extremities coverage damage location	C531		2	113	114	N	D
C.5.3.2.3.4	Lower torso and lower extremities coverage damage location	C531		2	115	116	N	D
C.5.3.2.3.5	Lower torso and lower extremities coverage damage location	C531		2	117	118	N	D
C.5.3.2.3.6	Lower torso and lower extremities coverage damage location	C531		2	119	120	N	D
C.5.3.2.4.1	Type damage to lower torso and lower extremity coverage	C531		1	121	121	N	D
C.5.3.2.4.2	Type damage to lower torso and lower extremity coverage	C531		1	122	122	N	D
C.5.3.2.4.3	Type damage to lower torso and lower extremity coverage	C531		1	123	123	N	D
C.5.3.2.4.4	Type damage to lower torso and lower extremity coverage	C531		1	124	124	N	D
C.5.3.2.4.5	Type damage to lower torso and lower extremity coverage	C531		1	125	125	N	D
C.5.3.2.4.6	Type damage to lower torso and lower extremity coverage	C531		1	126	126	N	D
C.5.3.2.5.1	Footwear damage location	C531		2	127	128	N	D
C.5.3.2.5.2	Footwear damage location	C531		2	129	130	N	D
C.5.3.2.5.3	Footwear damage location	C531		2	131	132	N	D
C.5.3.2.5.4	Footwear damage location	C531		2	133	134	N	D
C.5.3.2.5.5	Footwear damage location	C531		2	135	136	N	D
C.5.3.2.5.6	Footwear damage location	C531		2	137	138	N	D
C.5.3.2.6.1	Type damage to footwear	C531		1	139	139	N	D
C.5.3.2.6.2	Type damage to footwear	C531		1	140	140	N	D
C.5.3.2.6.3	Type damage to footwear	C531		1	141	141	N	D
C.5.3.2.6.4	Type damage to footwear	C531		1	142	142	N	D
C.5.3.2.6.5	Type damage to footwear	C531		1	143	143	N	D
C.5.3.2.6.6	Type damage to footwear	C531		1	144	144	N	D
C.5.3.2.7.1	Glove damage locations	C531		2	145	146	N	D
C.5.3.2.7.2	Glove damage locations	C531		2	147	148	N	D
C.5.3.2.7.3	Glove damage locations	C531		2	149	150	N	D
C.5.3.2.7.4	Glove damage locations	C531		2	151	152	N	D
C.5.3.2.7.5	Glove damage locations	C531		2	153	154	N	D
C.5.3.2.7.6	Glove damage locations	C531		2	155	156	N	D
C.5.3.2.8.1	Type damage to gloves	C531		1	157	157	N	D
C.5.3.2.8.2	Type damage to gloves	C531		1	158	158	N	D
C.5.3.2.8.3	Type damage to gloves	C531		1	159	159	N	D
C.5.3.2.8.4	Type damage to gloves	C531		1	160	160	N	D

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.5.3.2.8.5	Type damage to gloves	C531		1	161	161	N	D
C.5.3.2.8.6	Type damage to gloves	C531		1	162	162	N	D
C.5.3.2.9.1	Eye coverage damage locations	C531		1	163	163	N	D
C.5.3.2.9.2	Eye coverage damage locations	C531		1	164	164	N	D
C.5.3.2.9.3	Eye coverage damage locations	C531		1	165	165	N	D
C.5.3.2.10.1	Type damage to eye and face protection	C531		1	166	166	N	D
C.5.3.2.10.2	Type damage to eye and face protection	C531		1	167	167	N	D
C.5.3.2.10.3	Type damage to eye and face protection	C531		1	168	168	N	D
C.5.3.2.11.1	Reflective items worn	C531		2	189	190	N	D
C.5.3.2.11.2	Reflective items worn	C531		2	191	192	N	D
C.5.3.2.11.3	Reflective items worn	C531		2	193	194	N	D
C.5.3.2.11.4	Reflective items worn	C531		2	195	196	N	D
C.5.3.2.12.1	Dedicated motorcycle clothing?	C531		1	197	197	N	D2
C.5.3.2.12.2	Dedicated motorcycle clothing?	C531		1	198	198	N	D2
C.5.3.2.12.3	Dedicated motorcycle clothing?	C531		1	199	199	N	D2
C.5.3.2.12.4	Dedicated motorcycle clothing?	C531		1	200	200	N	D2
C.5.3.2.13	Upper body clothing	C531		2	201	202	N	D
C.5.3.2.14	Lower body clothing	C531		2	203	204	N	D
C.5.3.2.15	Footwear damage location	C531		2	205	206	N	D
C.5.3.2.16	Gloves	C531		2	207	208	N	D

Notes:

- 1 Each text response is written to a unique record as follows:
 - The first 3 characters of the record level are the same as the record level of the question.
 - The last character of the record level is a "9" to designate that this is a text response record
 - The question identifier is coded in 3 character blocks. For example:
 - C.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"
- 2 Assigned counter value, see table A.1 for record locations
- * Indicates petrol station concurrent exposure question.

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
-	Accident identification number	-		8	1	8	A/N	-
-	Record level identifier	-		4	9	12	A/N	-
-	Text response question identifier	D##9		27	13	39	N	O
-	Text response counter index (see note 1)	D##9		3	40	42	N	O
-	Text response	D##9		80	43	122	A/N	-
D.2.1.1	Data collected using which methods?	D211		1	13	13	N	D
D.2.1.2	Data collected using which methods?	D211		1	14	14	N	D
D.2.1.3	Data collected using which methods?	D211		1	15	15	N	D
D.2.2	How many motorcycles were interviewed using Methods 1 and 2?	D211		3	16	18	N	DI
D.2.3	How many motorcycles were interviewed using B.6, Optional Petrol Station Human Factors CED?	D211		3	19	21	N	DI
D.3.1.2	Vehicle position in lane at precipitating event	D311		2	14	15	N	D
D.3.1.3	Vehicle position in lane at precipitating event	D311		2	16	17	N	D
D.3.1.4	Vehicle position in lane at precipitating event	D311		2	18	19	N	D
D.3.1.5	Vehicle position in lane at precipitating event	D311		2	20	21	N	D
D.3.1.6	Vehicle position in lane at precipitating event	D311		2	22	23	N	D
D.3.1.7	Vehicle position in lane at precipitating event	D311		2	24	25	N	D
D.3.1.8	Vehicle position in lane at precipitating event	D311		2	26	27	N	D
D.3.1.9	Vehicle position in lane at precipitating event	D311		2	28	29	N	D
D.3.1.10	Vehicle position in lane at precipitating event	D311		2	30	31	N	D
D.3.1.11	Vehicle position in lane at precipitating event	D311		2	32	33	N	D
D.3.1.12	Vehicle position in lane at precipitating event	D311		2	34	35	N	D
D.3.2.2	Vehicle position in lane at precipitating event	D311		2	36	37	N	D
D.3.2.3	Vehicle position in lane at precipitating event	D311		2	38	39	N	D
D.3.2.4	Vehicle position in lane at precipitating event	D311		2	40	41	N	D
D.3.2.5	Vehicle position in lane at precipitating event	D311		2	42	43	N	D
D.3.2.6	Vehicle position in lane at precipitating event	D311		2	44	45	N	D
D.3.2.7	Vehicle position in lane at precipitating event	D311		2	46	47	N	D
D.3.2.8	Vehicle position in lane at precipitating event	D311		2	48	49	N	D
D.3.2.9	Vehicle position in lane at precipitating event	D311		2	50	51	N	D
D.3.2.10	Vehicle position in lane at precipitating event	D311		2	52	53	N	D
D.3.2.11	Vehicle position in lane at precipitating event	D311		2	54	55	N	D
D.3.2.12	Vehicle position in lane at precipitating event	D311		2	56	57	N	D
D.4.1.4.1.1.1	Data collected using which method?	D411		1	16	16	N	D
D.4.1.4.1.1.2	Data collected using which method?	D411		1	17	17	N	D
D.4.1.4.1.2	Moped/mofa number	-		3	See	note 2	N	DI
D.4.1.4.1.3	Has the engine/driveline been visibly tampered with?	D411		1	18	18	N	D2
D.4.1.4.1.4	Engine tampered with by tuning kit (i.e., a commercially available combination of performance enhancing items)?	D411		1	19	19	N	D2
D.4.1.4.1.5.01	For each blank cell, respond (unless noted otherwise)	D411		1	20	20	N	D2
D.4.1.4.1.5.02	For each blank cell, respond (unless noted otherwise)	D411		1	28	28	N	D2
D.4.1.4.1.5.03	For each blank cell, respond (unless noted otherwise)	D411		1	36	36	N	D2
D.4.1.4.1.5.04	For each blank cell, respond (unless noted otherwise)	D411		1	44	44	N	D2
D.4.1.4.1.5.05	For each blank cell, respond (unless noted otherwise)	D411		1	51	51	N	D2
D.4.1.4.1.5.06	For each blank cell, respond (unless noted otherwise)	D411		1	59	59	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
D.4.1.4.1.5.07	For each blank cell, respond (unless noted otherwise)	D411		1	66	66	N	D2
D.4.1.4.1.5.08	For each blank cell, respond (unless noted otherwise)	D411		1	72	72	N	D2
D.4.1.4.1.5.09	For each blank cell, respond (unless noted otherwise)	D411		1	78	78	N	D2
D.4.1.4.1.5.10	For each blank cell, respond (unless noted otherwise)	D411		1	84	84	N	D2
D.4.1.4.1.6.01	For each blank cell, respond (unless noted otherwise)	D411		1	21	21	N	D2
D.4.1.4.1.6.02	For each blank cell, respond (unless noted otherwise)	D411		1	29	29	N	D2
D.4.1.4.1.6.03	For each blank cell, respond (unless noted otherwise)	D411		1	37	37	N	D2
D.4.1.4.1.6.04	For each blank cell, respond (unless noted otherwise)	D411		1	45	45	N	D2
D.4.1.4.1.6.05	For each blank cell, respond (unless noted otherwise)	D411		1	52	52	N	D2
D.4.1.4.1.6.06	For each blank cell, respond (unless noted otherwise)	D411		1	60	60	N	D2
D.4.1.4.1.6.07	For each blank cell, respond (unless noted otherwise)	D411		1	67	67	N	D2
D.4.1.4.1.6.08	For each blank cell, respond (unless noted otherwise)	D411		1	73	73	N	D2
D.4.1.4.1.6.09	For each blank cell, respond (unless noted otherwise)	D411		1	79	79	N	D2
D.4.1.4.1.6.10	For each blank cell, respond (unless noted otherwise)	D411		1	85	85	N	D2
D.4.1.4.1.7.01	For each blank cell, respond (unless noted otherwise)	D411		1	22	22	N	D2
D.4.1.4.1.7.02	For each blank cell, respond (unless noted otherwise)	D411		1	30	30	N	D2
D.4.1.4.1.7.03	For each blank cell, respond (unless noted otherwise)	D411		1	38	38	N	D2
D.4.1.4.1.7.04	For each blank cell, respond (unless noted otherwise)	D411		1	46	46	N	D2
D.4.1.4.1.7.05	For each blank cell, respond (unless noted otherwise)	D411		1	53	53	N	D2
D.4.1.4.1.7.06	For each blank cell, respond (unless noted otherwise)	D411		1	61	61	N	D2
D.4.1.4.1.7.07	For each blank cell, respond (unless noted otherwise)	D411		1	68	68	N	D2
D.4.1.4.1.7.08	For each blank cell, respond (unless noted otherwise)	D411		1	74	74	N	D2
D.4.1.4.1.7.09	For each blank cell, respond (unless noted otherwise)	D411		1	80	80	N	D2
D.4.1.4.1.7.10	For each blank cell, respond (unless noted otherwise)	D411		1	86	86	N	D2
D.4.1.4.1.8.01	For each blank cell, respond (unless noted otherwise)	D411		1	23	23	N	D2
D.4.1.4.1.8.02	For each blank cell, respond (unless noted otherwise)	D411		1	31	31	N	D2
D.4.1.4.1.8.03	For each blank cell, respond (unless noted otherwise)	D411		1	39	39	N	D2
D.4.1.4.1.8.04	For each blank cell, respond (unless noted otherwise)	D411		1	47	47	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
D.4.1.4.1.8.05	For each blank cell, respond (unless noted otherwise)	D411		1	54	54	N	D2
D.4.1.4.1.8.06	For each blank cell, respond (unless noted otherwise)	D411		1	62	62	N	D2
D.4.1.4.1.8.07	For each blank cell, respond (unless noted otherwise)	D411		1	69	69	N	D2
D.4.1.4.1.8.08	For each blank cell, respond (unless noted otherwise)	D411		1	75	75	N	D2
D.4.1.4.1.8.09	For each blank cell, respond (unless noted otherwise)	D411		1	81	81	N	D2
D.4.1.4.1.8.10	For each blank cell, respond (unless noted otherwise)	D411		1	87	87	N	D2
D.4.1.4.1.9.01	For each blank cell, respond (unless noted otherwise)	D411		1	24	24	N	D2
D.4.1.4.1.9.02	For each blank cell, respond (unless noted otherwise)	D411		1	32	32	N	D2
D.4.1.4.1.9.03	For each blank cell, respond (unless noted otherwise)	D411		1	40	40	N	D2
D.4.1.4.1.9.04	For each blank cell, respond (unless noted otherwise)	D411		1	48	48	N	D2
D.4.1.4.1.9.05	For each blank cell, respond (unless noted otherwise)	D411		1	55	55	N	D2
D.4.1.4.1.9.06	For each blank cell, respond (unless noted otherwise)	D411		1	63	63	N	D2
D.4.1.4.1.10.01	For each blank cell, respond (unless noted otherwise)	D411		1	25	25	N	D2
D.4.1.4.1.10.02	For each blank cell, respond (unless noted otherwise)	D411		1	33	33	N	D2
D.4.1.4.1.10.03	For each blank cell, respond (unless noted otherwise)	D411		1	41	41	N	D2
D.4.1.4.1.10.04	For each blank cell, respond (unless noted otherwise)	D411		1	49	49	N	D2
D.4.1.4.1.10.05	For each blank cell, respond (unless noted otherwise)	D411		1	56	56	N	D2
D.4.1.4.1.10.06	For each blank cell, respond (unless noted otherwise)	D411		1	64	64	N	D2
D.4.1.4.1.10.07	For each blank cell, respond (unless noted otherwise)	D411		1	70	70	N	D2
D.4.1.4.1.10.08	For each blank cell, respond (unless noted otherwise)	D411		1	76	76	N	D2
D.4.1.4.1.11.01	For each blank cell, respond (unless noted otherwise)	D411		1	26	26	N	D2
D.4.1.4.1.11.02	For each blank cell, respond (unless noted otherwise)	D411		1	34	34	N	D2
D.4.1.4.1.11.03	For each blank cell, respond (unless noted otherwise)	D411		1	42	42	N	D2
D.4.1.4.1.11.05	For each blank cell, respond (unless noted otherwise)	D411		1	57	57	N	D2
D.4.1.4.1.11.09	For each blank cell, respond (unless noted otherwise)	D411		1	82	82	N	D2
D.4.1.4.1.11.10	For each blank cell, respond (unless noted otherwise)	D411		1	88	88	N	D2
D.4.1.4.1.12.01	For each blank cell, respond (unless noted otherwise)	D411		1	27	27	N	D2
D.4.1.4.1.12.02	For each blank cell, respond (unless noted otherwise)	D411		1	35	35	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
D.4.1.4.1.12.03	For each blank cell, respond (unless noted otherwise)	D411		1	43	43	N	D2
D.4.1.4.1.12.04	For each blank cell, respond (unless noted otherwise)	D411		1	50	50	N	D2
D.4.1.4.1.12.05	For each blank cell, respond (unless noted otherwise)	D411		1	58	58	N	D2
D.4.1.4.1.12.06	For each blank cell, respond (unless noted otherwise)	D411		1	65	65	N	D2
D.4.1.4.1.12.07	For each blank cell, respond (unless noted otherwise)	D411		1	71	71	N	D2
D.4.1.4.1.12.08	For each blank cell, respond (unless noted otherwise)	D411		1	77	77	N	D2
D.4.1.4.1.12.09	For each blank cell, respond (unless noted otherwise)	D411		1	83	83	N	D2
D.4.1.4.1.12.10	For each blank cell, respond (unless noted otherwise)	D411		1	89	89	N	D2
D.4.1.5.1	Data collected using which method?	D412		1	16	16	N	D
D.4.1.5.2	Data collected using which method?	D412		1	17	17	N	D
D.4.1.5.3	Moped/Mofa number	-		3	See	note 2	N	DI
D.4.1.5.4	If rider completed special moped/mofa training, how much time since completion?	D412		1	18	18	N	D
D.4.1.5.5	If rider did not complete special moped/mofa training, what was the reason?	D412		1	19	19	N	D
D.4.1.6.1.1	Data collected using which method?	D413		1	16	16	N	D
D.4.1.6.1.2	Data collected using which method?	D413		1	17	17	N	D
D.4.1.6.1.3	Data collected using which method?	D413		1	18	18	N	D
D.4.1.6.1.4	Moped/Mofa number	-		3	See	note 2	N	DI
D.4.1.6.1.5	Was moped/mofa travelling slowly relative to traffic?	D413		1	19	19	N	D
D.4.1.6.1.6	If moped/mofa was travelling slower than the surrounding traffic, why?	D413		1	20	20	N	D
D.4.2.1.1	Data collected using which method?	D421		1	16	16	N	D
D.4.2.1.2	Data collected using which method?	D421		1	17	17	N	D
D.4.2.1.3	Motorcycle number	-		3	See	note 2	N	DI
D.4.2.1.4	Motor type	D421		2	18	19	N	D
D.4.2.1.5	Type	D421		1	20	20	N	D
D.4.2.1.6	Number of spokes	D421		2	21	22	N	DI
D.4.2.1.7	Alignment	D421		1	23	23	N	D
D.4.2.1.8	Front fender type	D421		1	28	28	N	D
D.4.2.1.9	Type	D421		1	30	30	N	D
D.4.2.1.10	Cornering evidence on tyre	D421		1	31	31	N	D
D.4.2.1.12	Controls, actuators condition	D421		1	35	35	N	D
D.4.2.1.13	Evidence of front brake use	D421		1	36	36	N	D
D.4.2.1.14	Steering head bearing condition	D421		1	38	38	N	D
D.4.2.1.15	Steering stops condition	D421		1	39	39	N	D
D.4.2.1.16	Approximate level of fuel at impact	D421		1	40	40	N	D
D.4.2.1.17	Selector position	D421		1	41	41	N	D
D.4.2.1.18	Fuel shutoff type	D421		1	42	42	N	D
D.4.2.1.19	Clutch type	D421		1	43	43	N	D
D.4.2.1.20	Clutch control condition	D421		1	44	44	N	D
D.4.2.1.21	Transmission gear number at precipitating event	D421		2	45	46	N	D
D.4.2.1.22	Side stand ignition interconnect	D421		1	47	47	N	D
D.4.2.1.23	Manual ignition safety switch used	D421		1	48	48	N	D
D.4.2.1.24	Automatic ignition safety switch (tilt switch)	D421		1	49	49	N	D2

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
	operated?							
D.4.2.1.25	Sump protector plate (engine case)	D421		1	50	50	N	D
D.4.2.1.26	Odometer	D421		1	51	51	N	D
D.4.2.1.27	Stop lamp on at time of accident?	D421		1	52	52	N	D2
D.4.2.1.28	License plate lamp	D421		1	53	53	N	D
D.4.2.1.29	License plate lamp on at time of accident?	D421		1	54	54	N	D2
D.4.2.1.30	Headlamp bulb type	D421		1	55	55	N	D
D.4.2.1.31.1	Headlamp bulb rated power	D421		3	56	58	N	DI
D.4.2.1.31.2	Headlamp bulb rated power	D421		3	59	61	N	DI
D.4.2.1.32	Headlamp control	D421		1	62	62	N	D
D.4.2.1.33	Headlamp use	D421		1	63	63	N	D
D.4.2.1.34	Turn signals installed	D421		1	64	64	N	D
D.4.2.1.35	Auto/manual turn signal cancel	D421		1	65	65	N	D
D.4.2.2.5	Type	D421		1	24	24	N	D
D.4.2.2.6	Number of spokes	D421		2	25	26	N	DI
D.4.2.2.7	Alignment	D421		1	27	27	N	D
D.4.2.2.8	Front fender type	D421		1	29	29	N	D
D.4.2.2.9	Type	D421		1	32	32	N	D
D.4.2.2.10	Cornering evidence on tyre	D421		1	33	33	N	D
D.4.2.2.11	Acceleration evidence on rear tyre	D421		1	34	34	N	D
D.4.2.2.12	Controls, actuators condition	D421		1	37	37	N	D
D.5.1.1.1	Motorcycle number	-		3	See	note 2	N	DI
D.5.1.1.2	Motorcycle passenger number	D511		1	16	16		-
D.5.1.1.3	Type of helmet	D511		2	17	18	N	D
D.5.1.1.4	Lens or shield material, if used	D511		1	19	19	N	D
D.5.1.1.5.1	Eye coverage damage locations	D511		1	20	20	N	D
D.5.1.1.5.2	Eye coverage damage locations	D511		1	21	21	N	D
D.5.1.1.5.3	Eye coverage damage locations	D511		1	22	22	N	D
D.5.1.1.5.4	Eye coverage damage locations	D511		1	23	23	N	D
D.5.1.1.6.1	Type of damage to eye coverage	D511		1	24	24	N	D
D.5.1.1.6.2	Type of damage to eye coverage	D511		1	25	25	N	D
D.5.1.1.6.3	Type of damage to eye coverage	D511		1	26	26	N	D
D.5.1.1.6.4	Type of damage to eye coverage	D511		1	27	27	N	D
D.5.1.1.7	Helmet fit	D511		1	28	28	N	D
D.5.1.1.8	Contour match problem due to	D511		1	29	29	N	D
D.5.1.1.9	Retention system misuse	D511		1	30	30	N	D
D.5.1.1.10	Shell material	D511		2	31	32	N	D
D.5.1.1.11	Shell thickness	D511		2	33	34	N	DI
D.5.1.1.12	Liner material	D511		2	35	36	N	D
D.5.1.1.13	Liner thickness	D511		2	37	38	N	DI
D.5.2.1.1	Motorcycle number	-		3	See	note 2	N	DI
D.5.2.1.1.4	Marital status	D521		1	18	18	N	D
D.5.2.1.1.5	Number of children	D521		1	19	19	N	D
D.5.2.1.1.6	Hand preference	D521		1	22	22	N	D
D.5.2.1.1.7	On dirt bike, off-road, motorcross	D521		2	24	25	N	DI
D.5.2.1.1.8	All criminal offense conviction in the previous 5 years	D521		1	26	26	N	DI
D.5.2.1.1.9	Claimed frequency of use	D521		1	30	30	N	D
D.5.2.1.1.10	Does rider ride with some fingers extended to cover the front brake lever	D521		1	31	31	N	D
D.5.2.1.1.11	Reason for not using eye or face protection	D521		1	32	32	N	D
D.5.2.1.1.12	Owns a helmet?	D521		1	33	33	N	D2
D.5.2.1.1.13	Reason for not wearing a helmet	D521		2	34	35	N	D
D.5.2.1.2	Number of passengers on motorcycle	D521		1	16	16	N	DI

Table A.2. Database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
D.5.2.1.2.4	Marital status	D521		1	20	20	N	D
D.5.2.1.2.5	Number of children	D521		1	21	21	N	D
D.5.2.1.2.6	Hand preference	D521		1	23	23	N	D
D.5.2.1.2.7	On dirt bike, off-road, motorcross	D521		2	27	28	N	DI
D.5.2.1.2.8	All criminal offense conviction in the previous 5 years	D521		1	29	29	N	DI
D.5.2.1.2.11	Reason for not using eye or face protection	D521		1	36	36	N	D
D.5.2.1.2.12	Owns a helmet?	D521		1	37	37	N	D2
D.5.2.1.2.13	Reason for not wearing a helmet	D521		2	38	39	N	D
D.5.2.1.3	Motorcycle passenger number	D521		1	17	17		-
D.5.3.1.1	Motorcycle number	-		3	See	note 2	N	DI
D.5.3.1.2	Number of pasengers on motorcycle	D531		1	16	16	N	DI
D.5.3.1.3	Motorcycle passenger number	D531		1	17	17		-
D.5.3.1.4.1	Reflective items worn	D531		2	18	19	N	D
D.5.3.1.4.2	Reflective items worn	D531		2	20	21	N	D
D.5.3.1.4.3	Reflective items worn	D531		2	22	23	N	D
D.5.3.1.4.4	Reflective items worn	D531		2	24	25	N	D
D.5.3.1.5.1	Dedicated motorcycle clothing?	D531		2	26	27	N	D
D.5.3.1.5.2	Dedicated motorcycle clothing?	D531		2	28	29	N	D
D.5.3.1.5.3	Dedicated motorcycle clothing?	D531		2	30	31	N	D
D.5.3.1.5.4	Dedicated motorcycle clothing?	D531		2	32	33	N	D
D.5.3.1.6.1	Clothing colour	D531		2	34	35	N	D
D.5.3.1.6.2	Clothing colour	D531		2	36	37	N	D
D.5.3.1.6.3	Clothing colour	D531		2	38	39	N	D
D.5.3.1.6.4	Clothing colour	D531		2	40	41	N	D
D.5.3.2.4.1	Reflective items worn	D531		2	42	43	N	D
D.5.3.2.4.2	Reflective items worn	D531		2	44	45	N	D
D.5.3.2.4.3	Reflective items worn	D531		2	46	47	N	D
D.5.3.2.4.4	Reflective items worn	D531		2	48	49	N	D
D.5.3.2.5.1	Dedicated motorcycle clothing?	D531		2	50	51	N	D
D.5.3.2.5.2	Dedicated motorcycle clothing?	D531		2	52	53	N	D
D.5.3.2.5.3	Dedicated motorcycle clothing?	D531		2	54	55	N	D
D.5.3.2.5.4	Dedicated motorcycle clothing?	D531		2	56	57	N	D
D.5.3.2.6.1	Clothing colour	D531		2	58	59	N	D
D.5.3.2.6.2	Clothing colour	D531		2	60	61	N	D
D.5.3.2.6.3	Clothing colour	D531		2	62	63	N	D
D.5.3.2.6.4	Clothing colour	D531		2	64	65	N	D

Notes:

- Each text response is written to a unique record as follows:
The first 3 characters of the record level are the same as the record level of the question.
The last character of the record level is a "9" to designate that this is a text response record
The question identifier is coded in 3 character blocks. For example:
D.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"
- Assigned counter value, see table A.1 for record locations

Table A.3. Moped module dataset record sublevel and counter values

Record level identifier	Sublevel				Counter				
	Column position(s)	Start value	Stop value	Description	Assigned value	Column position	Start value	Stop value	Description
C411	-	-	-			-	-	-	
C412	-	-	-		A.4.3.1	13	1	A.2.5	
C##9	-	-	-			-	-	-	

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
-	Accident identification number	-		8	1	8	A/N	-
-	Record level identifier	-		4	9	12	A/N	-
-	Text response question identifier	A##9		27	13	39	N	O
-	Text response counter index (see note 1)	A##9		3	40	42	N	O
-	Text response	A##9		80	43	122	A/N	-
-	ASCII flat file revision identifier	A111		3	13	15	N	DI
-	Database configuration file revision identifier code	A111		3	16	18	N	DI
-	Database configuration file build date	A111		8	19	26	N	O
-	Number of DSS modules	A111		2	27	28	N	DI
-	Question and answer language code	A111		2	29	30	A/N	-
-	Data Summary Sheet revision identifier	A111		3	31	33	N	DI
-	Data entry program revision identifier	A111		3	34	36	N	DI
-	Data entry program build date	A111		8	37	44	N	O
-	Text response language code	A111		2	45	46	A/N	-
-	Text response character set code	A111		3	47	49	N	DI
-	Investigator #1	A111		3	50	52	A/N	-
-	Investigator #2	A111		3	53	55	A/N	-
-	Investigator #3	A111		3	56	58	A/N	-
-	Investigator #4	A111		3	59	61	A/N	-
-	Input by #1	A111		3	62	64	A/N	-
-	Input by #2	A111		3	65	67	A/N	-
-	Input by #3	A111		3	68	70	A/N	-
-	Input by #4	A111		3	71	73	A/N	-
A.1.3	Accident preliminary description	A112		160	13	172	A/N	-
A.1.4	Notification time	A113		4	13	16	A/N	O
A.1.5	Date of notification	A113		8	17	24	A/N	O
A.1.12	Team departure time	A113		4	25	28	A/N	O
A.1.13	Team arrival time	A113		4	29	32	A/N	O
A.1.14	Sampling qualification decision	A113		1	33	33	N	D2
A.1.22	Case qualification decision	A113		1	34	34	N	D2
A.1.24	Concurrent exposure data collection date	A113		8	35	42	A/N	O
A.2.1	Time of day accident occurred (24 hour clock)	A211		4	13	16	N	N/A
A.2.2	Day of week accident occurred	A211		1	17	17	N	D
A.2.3	Date accident occurred	A211		8	18	25	N	N/A
A.2.4	Motorcycle involved in collision with	A211		1	26	26	N	D
A.2.5	How many OV's were involved in the accident?	A211		1	27	27	N	DI
A.2.6	How many pedestrians were involved in the accident?	A211		1	28	28	N	DI
A.2.7	Number of passengers on the motorcycle	A211		1	29	29	N	DI
A.2.8	Are there any fatal injuries involved?	A211		1	30	30	N	D2
A.2.9	Accident configuration	A211		2	31	32	N	D
A.3.1.1	Type of Area	A311		2	13	14	N	D
A.3.1.2	Illumination	A311		1	15	15	N	D
A.3.1.3	Intersection type	A311		1	16	16	N	D
A.3.1.4.1	Direction of traffic flow	A311		1	17	17	N	D
A.3.1.4.2	Direction of traffic flow	A311		1	18	18	N	D
A.3.1.5.1	Lane dividers	A311		2	19	20	N	D
A.3.1.5.2	Lane dividers	A311		2	21	22	N	D
A.3.1.6.1	Roadside environment	A311		2	23	24	N	D
A.3.1.6.2	Roadside environment	A311		2	25	26	N	D
A.3.1.7.1	Roadside obstacles	A311		2	27	28	N	D
A.3.1.7.2	Roadside obstacles	A311		2	29	30	N	D
A.3.1.8	Description	A311		2	31	32	N	D
A.3.1.9	Posted speed limit	A311		3	33	35	N	DI
A.3.1.9.1	Speed limit units	A311		1	36	36	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.3.1.10	Number of through lanes	A311		1	37	37	N	DI
A.3.1.11	Lane travelled	A311		2	38	39	N	DI
A.3.1.12	Lane width	A311		2	40	41	N	C
A.3.1.13	Kerb to kerb roadway width	A311		3	42	44	N	C
A.3.1.14	Type surface	A311		1	45	45	N	D
A.3.1.15	Condition and defects	A311		2	46	47	N	D
A.3.1.16.1	Contamination/obstacles	A311		2	48	49	N	D
A.3.1.16.2	Contamination/obstacles	A311		2	50	51	N	D
A.3.1.16.3	Contamination/obstacles	A311		2	52	53	N	D
A.3.1.16.4	Contamination/obstacles	A311		2	54	55	N	D
A.3.1.17	Vertical	A311		1	56	56	N	D
A.3.1.18	Horizontal	A311		1	57	57	N	D
A.3.1.19	Auxiliary turn only, no separate signal	A311		1	58	58	N	D
A.3.1.20	Type	A311		2	59	60	N	D
A.3.1.21	Functioning properly	A311		1	61	61	N	D
A.3.1.22	Visible to vehicle operator	A311		1	62	62	N	D2
A.3.1.23	Violated by vehicle operator	A311		1	63	63	N	D2
A.3.1.24	Traffic density at time of accident	A311		1	64	64	N	D
A.3.1.24.1	Traffic density at time of accident	A311		25	65	89	A/N	-
A.3.1.25	Visibility limitation due to	A311		2	90	91	N	D
A.3.1.26	Animal involvement	A311		2	92	93	N	D
A.3.1.27	Was the animal struck?	A311		1	94	94	N	D
A.3.1.28	Pedestrian involvement	A311		1	95	95	N	D
A.3.1.29.1	Location of pedestrian at impact	A311		1	96	96	N	D
A.3.1.29.2	Location of pedestrian at impact	A311		1	97	97	N	D
A.3.1.29.3	Location of pedestrian at impact	A311		1	98	98	N	D
A.3.1.30	Stationary view obstructions along the operator's line of sight at time of precipitating event	A311		2	99	100	N	D
A.3.1.31	Mobile view obstructions along the operator's line-of-sight at time of precipitating event	A311		2	101	102	N	D
A.3.1.32	Ambient temperature	A311		3	103	105	N	C
A.3.1.33	Weather description	A311		1	106	106	N	D
A.3.1.34	Wind description	A311		1	107	107	N	D
A.3.1.35	Wind direction with respect to motorcycle	A311		1	108	108	N	D
A.3.2.1	Type of Area	A321		2	13	14	N	D
A.3.2.4.1	Direction of traffic flow	A322		1	14	14	N	D
A.3.2.4.2	Direction of traffic flow	A322		1	15	15	N	D
A.3.2.5.1	Lane dividers	A322		2	16	17	N	D
A.3.2.5.2	Lane dividers	A322		2	18	19	N	D
A.3.2.6.1	Roadside environment	A322		2	20	21	N	D
A.3.2.6.2	Roadside environment	A322		2	22	23	N	D
A.3.2.7.1	Roadside obstacles	A322		2	24	25	N	D
A.3.2.7.2	Roadside obstacles	A322		2	26	27	N	D
A.3.2.8	Description	A322		2	28	29	N	D
A.3.2.9	Posted speed limit	A322		3	30	32	N	DI
A.3.2.9.1	Speed limit units	A322		1	33	33	N	D
A.3.2.10	Number of through lanes	A322		1	34	34	N	DI
A.3.2.11	Lane travelled	A322		2	35	36	N	DI
A.3.2.12	Lane width	A322		2	37	38	N	C
A.3.2.13	Kerb to kerb roadway width	A322		3	39	41	N	C
A.3.2.14	Type surface	A322		1	42	42	N	D
A.3.2.15	Condition and defects	A322		2	43	44	N	D
A.3.2.16.1	Contamination/obstacles	A322		2	45	46	N	D
A.3.2.16.2	Contamination/obstacles	A322		2	47	48	N	D
A.3.2.16.3	Contamination/obstacles	A322		2	49	50	N	D
A.3.2.16.4	Contamination/obstacles	A322		2	51	52	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.3.2.17	Vertical	A322		1	53	53	N	D
A.3.2.18	Horizontal	A322		1	54	54	N	D
A.3.2.19	Auxiliary turn only, no separate signal	A322		1	55	55	N	D
A.3.2.20	Type	A322		2	56	57	N	D
A.3.2.21	Functioning properly	A322		1	58	58	N	D
A.3.2.22	Visible to vehicle operator	A322		1	59	59	N	D2
A.3.2.23	Violated by vehicle operator	A322		1	60	60	N	D2
A.3.2.24	Traffic density at time of accident	A322		1	61	61	N	D
A.3.2.24.1	Traffic density at time of accident	A322		25	62	86	A/N	-
A.3.2.25	Visibility limitation due to	A322		2	87	88	N	D
A.3.2.30	Stationary view obstructions along the operator's line of sight at time of precipitating event	A322		2	89	90	N	D
A.3.2.31	Mobile view obstructions along the operator's line-of-sight at time of precipitating event	A322		2	91	92	N	D
A.4.1.1.1	Manufacturer	A411		3	13	15	A/N	D
A.4.1.1.2	Model	-		-	Not	coded		-
A.4.1.1.3	Year	A411		4	16	19	N	DI
A.4.1.1.4	Motorcycle type	A411		2	20	21	N	D
A.4.1.1.5	Vehicle gross mass	A411		4	22	25	N	C
A.4.1.1.6	Vehicle identification number, if permissible	A411		14	26	39	A/N	-
A.4.1.1.7	Licence plate number, reference only	-		-	Not	coded		-
A.4.1.1.8	Odometer reading	A411		6	40	45	N	C
A.4.1.1.8.1	Odometer units	A411		1	46	46	N	D
A.4.1.1.9	Registered owner category	A411		1	47	47	N	D
A.4.1.1.10	Predominating MC colour	A411		2	48	49	N	D
A.4.1.1.11	Motor displacement	A411		4	50	53	N	C
A.4.1.1.12	Number of cylinders	A411		1	54	54	N	DI
A.4.1.1.13	Symptom of problem	A411		2	55	56	N	D
A.4.1.1.14	Source of problem	A411		2	57	58	N	D
A.4.1.1.15	Size	A411		10	59	68	A/N	-
A.4.1.1.16	Manufacturer	A411		2	69	70	A/N	D
A.4.1.1.17	Rim size	A411		5	71	75	A/N	-
A.4.1.1.18	Rim manufacturer	A411		2	93	94	A/N	D
A.4.1.1.19	Tread type	A411		1	95	95	N	D
A.4.1.1.20	Measured tread depth	A411		2	96	97	N	C
A.4.1.1.21	Inflation pressure	A411		3	98	100	N	C
A.4.1.1.22	Braking evidence on tyre	A411		1	101	101	N	D
A.4.1.1.23	Type	A411		2	111	112	A/N	-
A.4.1.1.24	Condition	A411		1	113	113	N	D
A.4.1.1.25	Rider control type	A411		1	117	117	N	D
A.4.1.1.26	Rider control side	A411		1	118	118	N	D
A.4.1.1.27	Actuation at lever or pedal	A411		1	121	121	N	D
A.4.1.1.28	Brake control system type	A411		1	122	122	N	D
A.4.1.1.29	Connection to front brake includes	A411		1	123	123	N	D
A.4.1.1.30	Connection to rear brake includes	A411		1	124	124	N	D
A.4.1.1.31	ABS	A411		1	129	129	N	D2
A.4.1.1.32	ABS type	A411		1	130	130	N	D
A.4.1.1.33	Brake mechanism	A411		2	133	134	N	D
A.4.1.1.34	Brake mechanism actuation	A411		1	135	135	N	D
A.4.1.1.35	Were brakes operational before accident?	A411		1	136	136	N	D2
A.4.1.1.36	Do brakes appear to be defective?	A411		1	137	137	N	D
A.4.1.1.37	Condition, wear	A411		1	138	138	N	D
A.4.1.1.38	Adjustment	A411		1	145	145	N	D
A.4.1.1.39	Type/configuration	A411		2	147	148	N	D
A.4.1.1.40	Material	A411		1	149	149	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.1.41	Reduction in wheelbase	A411		3	150	152	N	C
A.4.1.1.42	Did front wheel displace against either the motor or the frame?	A411		1	153	153	N	D2
A.4.1.1.43	Steering stem adjustment	A411		1	154	154	N	D
A.4.1.1.44	Steering damper installed	A411		1	155	155	N	D
A.4.1.1.45	Is rear swing arm loose?	A411		1	156	156	N	D2
A.4.1.1.46	Rear swing arm pivot bearing condition	A411		1	157	157	N	D
A.4.1.1.47	Rider foot pegs, footrest type	A411		1	158	158	N	D
A.4.1.1.48	Passenger foot pegs, footrest type	A411		1	159	159	N	D
A.4.1.1.49	Side stand type	A411		1	160	160	N	D
A.4.1.1.50	Centre stand type	A411		1	161	161	N	D
A.4.1.1.51	Headlamp assembly type	A411		1	162	162	N	D
A.4.1.1.52	Type	A411		1	163	163	N	D
A.4.1.1.53	Mounting	A411		1	164	164	N	D
A.4.1.1.54	Construction	A411		2	165	166	N	D
A.4.1.1.55.1	Width	A411		3	167	169	N	C
A.4.1.1.55.2	Rise	A411		3	170	172	N	C
A.4.1.1.55.3	Sweep	A411		3	173	175	N	C
A.4.1.1.56	Type	A411		1	176	176	N	D
A.4.1.1.57	Fastening	A411		1	177	177	N	D
A.4.1.1.58	Type	A411		1	178	178	N	D
A.4.1.1.59	Material	A411		1	179	179	N	D
A.4.1.1.60	Cap type	A411		2	180	181	N	D
A.4.1.1.61	Cap retention	A411		1	182	182	N	D
A.4.1.1.62	Tank retention	A411		1	183	183	N	D
A.4.1.1.63	Tank deformation	A411		1	184	184	N	D
A.4.1.1.64	Deformation source	A411		1	185	185	N	D
A.4.1.1.65	Was there a fuel tank failure?	A411		1	186	186	N	D2
A.4.1.1.66.1	Tank damage/failure type	A411		1	187	187	N	D
A.4.1.1.66.2	Tank damage/failure type	A411		1	188	188	N	D
A.4.1.1.66.3	Tank damage/failure type	A411		1	189	189	N	D
A.4.1.1.66.4	Tank damage/failure type	A411		1	190	190	N	D
A.4.1.1.67	Was there a fuel spill or leak?	A411		1	191	191	N	D
A.4.1.1.68.1	Source of fuel spills or leaks	A411		2	192	193	N	D
A.4.1.1.68.2	Source of fuel spills or leaks	A411		2	194	195	N	D
A.4.1.1.68.3	Source of fuel spills or leaks	A411		2	196	197	N	D
A.4.1.1.68.4	Source of fuel spills or leaks	A411		2	198	199	N	D
A.4.1.1.68.5	Source of fuel spills or leaks	A411		2	200	201	N	D
A.4.1.1.69	Did a fire occur?	A411		1	202	202	N	D2
A.4.1.1.70	When did the fire occur?	A411		1	203	203	N	D
A.4.1.1.71	The fire occurred how long after the crash?	A411		2	204	205	N	C
A.4.1.1.72	Fuel source for fire	A411		2	206	207	N	D
A.4.1.1.73	Ignition source for fire	A411		2	208	209	N	D
A.4.1.1.74	Type	A411		1	210	210	N	D
A.4.1.1.75	Drive chain, belt, or shaft condition	A411		1	211	211	N	D
A.4.1.1.76	When did the damage occur?	A411		1	212	212	N	D
A.4.1.1.77	Drive sprocket condition	A411		1	213	213	N	D
A.4.1.1.78	Does throttle control work?	A411		1	214	214	N	D2
A.4.1.1.79	Drum condition	A411		2	215	216	N	D
A.4.1.1.80	Cables condition	A411		1	217	217	N	D
A.4.1.1.81	Throttle plate/slides condition	A411		1	218	218	N	D
A.4.1.1.82	Return springs condition	A411		1	219	219	N	D
A.4.1.1.83	Condition	A411		1	220	220	N	D
A.4.1.2.15	Size	A411		10	76	85	A/N	-
A.4.1.2.16	Manufacturer	A411		2	86	87	A/N	D
A.4.1.2.17	Rim size	A411		5	88	92	A/N	-
A.4.1.2.18	Rim manufacturer	A411		2	102	103	A/N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.2.19	Tread type	A411		1	104	104	N	D
A.4.1.2.20	Measured tread depth	A411		2	105	106	N	C
A.4.1.2.21	Inflation pressure	A411		3	107	109	N	C
A.4.1.2.22	Braking evidence on tyre	A411		1	110	110	N	D
A.4.1.2.23	Type	A411		2	114	115	A/N	-
A.4.1.2.24	Condition	A411		1	116	116	N	D
A.4.1.2.25	Rider control type	A411		1	119	119	N	D
A.4.1.2.26	Rider control side	A411		1	120	120	N	D
A.4.1.2.27	Actuation at lever or pedal	A411		1	125	125	N	D
A.4.1.2.28	Brake control system type	A411		1	126	126	N	D
A.4.1.2.29	Connection to front brake includes	A411		1	127	127	N	D
A.4.1.2.30	Connection to rear brake includes	A411		1	128	128	N	D
A.4.1.2.31	ABS	A411		1	131	131	N	D2
A.4.1.2.32	ABS type	A411		1	132	132	N	D
A.4.1.2.33	Brake mechanism	A411		2	139	140	N	D
A.4.1.2.34	Brake mechanism actuation	A411		1	141	141	N	D
A.4.1.2.35	Were brakes operational before accident?	A411		1	142	142	N	D2
A.4.1.2.36	Do brakes appear to be defective?	A411		1	143	143	N	D
A.4.1.2.37	Condition, wear	A411		1	144	144	N	D
A.4.1.2.38	Adjustment	A411		1	146	146	N	D
A.4.1.3.1	Front crash bars Equipped?	A412		1	13	13	N	D2
A.4.1.3.2	Rear crash bars Equipped?	A412		1	20	20	N	D2
A.4.1.3.3	Engine guard Equipped?	A412		1	27	27	N	D2
A.4.1.3.4	Windscreen Equipped?	A412		1	34	34	N	D2
A.4.1.3.5	Fairing Equipped?	A412		1	41	41	N	D2
A.4.1.3.6	Headlamp(s) Equipped?	A412		1	48	48	N	D2
A.4.1.3.7	Headlamp nacelle Equipped?	A412		1	55	55	N	D2
A.4.1.3.8	Auxiliary headlamp Equipped?	A412		1	62	62	N	D2
A.4.1.3.9	Front position lamp Equipped?	A412		1	69	69	N	D2
A.4.1.3.10	Front reflectors Equipped?	A412		1	76	76	N	D2
A.4.1.3.11	Front turn signals Equipped?	A412		1	83	83	N	D2
A.4.1.3.12	Speedometer Equipped?	A412		1	90	90	N	D2
A.4.1.3.13	Tachometer Equipped?	A412		1	97	97	N	D2
A.4.1.3.14	Handlebars Equipped?	A412		1	104	104	N	D2
A.4.1.3.15	Throttle Equipped?	A412		1	111	111	N	D2
A.4.1.3.16	Clutch lever Equipped?	A412		1	118	118	N	D2
A.4.1.3.17	Brake lever Equipped?	A412		1	125	125	N	D2
A.4.1.3.18	Right side rear view mirrors, posts Equipped?	A412		1	132	132	N	D2
A.4.1.3.19	Left side rear view mirrors, posts Equipped?	A412		1	139	139	N	D2
A.4.1.3.20	Front suspension Equipped?	A412		1	146	146	N	D2
A.4.1.3.22	Front fender Equipped?	A412		1	160	160	N	D2
A.4.1.3.23	Front brakes Equipped?	A412		1	167	167	N	D2
A.4.1.3.24	Seat Equipped?	A412		1	174	174	N	D2
A.4.1.3.25	Sissy bar/passenger back rest Equipped?	A412		1	181	181	N	D2
A.4.1.3.26	Side reflectors Equipped?	A412		1	188	188	N	D2
A.4.1.3.27	Frame Equipped?	A412		1	195	195	N	D2
A.4.1.3.28	Grab rails/hand holds Equipped?	A412		1	202	202	N	D2
A.4.1.3.29	Fuel tank Equipped?	A412		1	209	209	N	D2
A.4.1.3.30	Auxiliary fuel tank Equipped?	A412		1	216	216	N	D2
A.4.1.3.32	Radiator Equipped?	A413		1	20	20	N	D2
A.4.1.3.33	Water hose Equipped?	A413		1	27	27	N	D2
A.4.1.3.34	Motor power enhancement Equipped?	A413		1	34	34	N	D2
A.4.1.3.36	Oil tank Equipped?	A413		1	48	48	N	D2
A.4.1.3.37	Battery, battery box Equipped?	A413		1	55	55	N	D2
A.4.1.3.38	Rear brake pedal Equipped?	A413		1	62	62	N	D2
A.4.1.3.39	Shift lever Equipped?	A413		1	69	69	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.3.40	Foot pegs, footrests Equipped?	A413		1	76	76	N	D2
A.4.1.3.41	Highway pegs/footrests Equipped?	A413		1	83	83	N	D2
A.4.1.3.42	Side stand Equipped?	A413		1	90	90	N	D2
A.4.1.3.43	Side stand interlock Equipped?	A413		1	97	97	N	D2
A.4.1.3.44	Centre stand Equipped?	A413		1	104	104	N	D2
A.4.1.3.45	Muffler/exhaust Equipped?	A413		1	111	111	N	D2
A.4.1.3.46	Tank bag Equipped?	A413		1	118	118	N	D2
A.4.1.3.47	Luggage/cargo rack Equipped?	A413		1	125	125	N	D2
A.4.1.3.48	Parcel rack Equipped?	A413		1	132	132	N	D2
A.4.1.3.49	Panniers, saddle bags Equipped?	A413		1	139	139	N	D2
A.4.1.3.50	Rear position lamps Equipped?	A413		1	146	146	N	D2
A.4.1.3.51	Stop lamp Equipped?	A413		1	153	153	N	D2
A.4.1.3.52	Rear reflectors Equipped?	A413		1	160	160	N	D2
A.4.1.3.53	Rear turn signals Equipped?	A413		1	167	167	N	D2
A.4.1.3.54	Rear suspension Equipped?	A413		1	174	174	N	D2
A.4.1.3.56	Rear fender Equipped?	A413		1	188	188	N	D2
A.4.1.3.57	Rear brakes Equipped?	A413		1	195	195	N	D2
A.4.1.3.58	Tools, tool box Equipped?	A413		1	202	202	N	D2
A.4.1.3.59	Side covers Equipped?	A413		1	209	209	N	D2
A.4.1.3.60	Trailer Equipped?	A413		1	216	216	N	D2
A.4.1.4.1	Front crash bars Original equipment?	A412		1	14	14	N	D2
A.4.1.4.2	Rear crash bars Original equipment?	A412		1	21	21	N	D2
A.4.1.4.3	Engine guard Original equipment?	A412		1	28	28	N	D2
A.4.1.4.4	Windscreen Original equipment?	A412		1	35	35	N	D2
A.4.1.4.5	Fairing Original equipment?	A412		1	42	42	N	D2
A.4.1.4.6	Headlamp(s) Original equipment?	A412		1	49	49	N	D2
A.4.1.4.7	Headlamp nacelle Original equipment?	A412		1	56	56	N	D2
A.4.1.4.8	Auxiliary headlamp Original equipment?	A412		1	63	63	N	D2
A.4.1.4.9	Front position lamp Original equipment?	A412		1	70	70	N	D2
A.4.1.4.10	Front reflectors Original equipment?	A412		1	77	77	N	D2
A.4.1.4.11	Front turn signals Original equipment?	A412		1	84	84	N	D2
A.4.1.4.12	Speedometer Original equipment?	A412		1	91	91	N	D2
A.4.1.4.13	Tachometer Original equipment?	A412		1	98	98	N	D2
A.4.1.4.14	Handlebars Original equipment?	A412		1	105	105	N	D2
A.4.1.4.15	Throttle Original equipment?	A412		1	112	112	N	D2
A.4.1.4.16	Clutch lever Original equipment?	A412		1	119	119	N	D2
A.4.1.4.17	Brake lever Original equipment?	A412		1	126	126	N	D2
A.4.1.4.18	Right side rear view mirrors, posts Original equipment?	A412		1	133	133	N	D2
A.4.1.4.19	Left side rear view mirrors, posts Original equipment?	A412		1	140	140	N	D2
A.4.1.4.20	Front suspension Original equipment?	A412		1	147	147	N	D2
A.4.1.4.21	Front tyre, wheel Original equipment?	A412		1	154	154	N	D2
A.4.1.4.22	Front fender Original equipment?	A412		1	161	161	N	D2
A.4.1.4.23	Front brakes Original equipment?	A412		1	168	168	N	D2
A.4.1.4.24	Seat Original equipment?	A412		1	175	175	N	D2
A.4.1.4.25	Sissy bar/passenger back rest Original equipment?	A412		1	182	182	N	D2
A.4.1.4.26	Side reflectors Original equipment?	A412		1	189	189	N	D2
A.4.1.4.27	Frame Original equipment?	A412		1	196	196	N	D2
A.4.1.4.28	Grab rails/hand holds Original equipment?	A412		1	203	203	N	D2
A.4.1.4.29	Fuel tank Original equipment?	A412		1	210	210	N	D2
A.4.1.4.30	Auxiliary fuel tank Original equipment?	A412		1	217	217	N	D2
A.4.1.4.31	Motor crankcase, cylinders Original equipment?	A413		1	14	14	N	D2
A.4.1.4.32	Radiator Original equipment?	A413		1	21	21	N	D2
A.4.1.4.33	Water hose Original equipment?	A413		1	28	28	N	D2
A.4.1.4.34	Motor power enhancement Original	A413		1	35	35	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
	equipment?							
A.4.1.4.36	Oil tank Original equipment?	A413		1	49	49	N	D2
A.4.1.4.37	Battery, battery box Original equipment?	A413		1	56	56	N	D2
A.4.1.4.38	Rear brake pedal Original equipment?	A413		1	63	63	N	D2
A.4.1.4.39	Shift lever Original equipment?	A413		1	70	70	N	D2
A.4.1.4.40	Foot pegs, footrests Original equipment?	A413		1	77	77	N	D2
A.4.1.4.41	Highway pegs/footrests Original equipment?	A413		1	84	84	N	D2
A.4.1.4.42	Side stand Original equipment?	A413		1	91	91	N	D2
A.4.1.4.43	Side stand interlock Original equipment?	A413		1	98	98	N	D2
A.4.1.4.44	Centre stand Original equipment?	A413		1	105	105	N	D2
A.4.1.4.45	Muffler/exhaust Original equipment?	A413		1	112	112	N	D2
A.4.1.4.46	Tank bag Original equipment?	A413		1	119	119	N	D2
A.4.1.4.47	Luggage/cargo rack Original equipment?	A413		1	126	126	N	D2
A.4.1.4.48	Parcel rack Original equipment?	A413		1	133	133	N	D2
A.4.1.4.49	Panniers, saddle bags Original equipment?	A413		1	140	140	N	D2
A.4.1.4.50	Rear position lamps Original equipment?	A413		1	147	147	N	D2
A.4.1.4.51	Stop lamp Original equipment?	A413		1	154	154	N	D2
A.4.1.4.52	Rear reflectors Original equipment?	A413		1	161	161	N	D2
A.4.1.4.53	Rear turn signals Original equipment?	A413		1	168	168	N	D2
A.4.1.4.54	Rear suspension Original equipment?	A413		1	175	175	N	D2
A.4.1.4.55	Rear tyre, wheel Original equipment?	A413		1	182	182	N	D2
A.4.1.4.56	Rear fender Original equipment?	A413		1	189	189	N	D2
A.4.1.4.57	Rear brakes Original equipment?	A413		1	196	196	N	D2
A.4.1.4.58	Tools, tool box Original equipment?	A413		1	203	203	N	D2
A.4.1.4.59	Side covers Original equipment?	A413		1	210	210	N	D2
A.4.1.4.60	Trailer Original equipment?	A413		1	217	217	N	D2
A.4.1.5.1	Front crash bars Aftermarket?	A412		1	15	15	N	D2
A.4.1.5.2	Rear crash bars Aftermarket?	A412		1	22	22	N	D2
A.4.1.5.3	Engine guard Aftermarket?	A412		1	29	29	N	D2
A.4.1.5.4	Windscreen Aftermarket?	A412		1	36	36	N	D2
A.4.1.5.5	Fairing Aftermarket?	A412		1	43	43	N	D2
A.4.1.5.6	Headlamp(s) Aftermarket?	A412		1	50	50	N	D2
A.4.1.5.7	Headlamp nacelle Aftermarket?	A412		1	57	57	N	D2
A.4.1.5.8	Auxiliary headlamp Aftermarket?	A412		1	64	64	N	D2
A.4.1.5.9	Front position lamp Aftermarket?	A412		1	71	71	N	D2
A.4.1.5.10	Front reflectors Aftermarket?	A412		1	78	78	N	D2
A.4.1.5.11	Front turn signals Aftermarket?	A412		1	85	85	N	D2
A.4.1.5.12	Speedometer Aftermarket?	A412		1	92	92	N	D2
A.4.1.5.13	Tachometer Aftermarket?	A412		1	99	99	N	D2
A.4.1.5.14	Handlebars Aftermarket?	A412		1	106	106	N	D2
A.4.1.5.15	Throttle Aftermarket?	A412		1	113	113	N	D2
A.4.1.5.16	Clutch lever Aftermarket?	A412		1	120	120	N	D2
A.4.1.5.17	Brake lever Aftermarket?	A412		1	127	127	N	D2
A.4.1.5.18	Right side rear view mirrors, posts Aftermarket?	A412		1	134	134	N	D2
A.4.1.5.19	Left side rear view mirrors, posts Aftermarket?	A412		1	141	141	N	D2
A.4.1.5.20	Front suspension Aftermarket?	A412		1	148	148	N	D2
A.4.1.5.21	Front tyre, wheel Aftermarket?	A412		1	155	155	N	D2
A.4.1.5.22	Front fender Aftermarket?	A412		1	162	162	N	D2
A.4.1.5.23	Front brakes Aftermarket?	A412		1	169	169	N	D2
A.4.1.5.24	Seat Aftermarket?	A412		1	176	176	N	D2
A.4.1.5.25	Sissy bar/passenger back rest Aftermarket?	A412		1	183	183	N	D2
A.4.1.5.26	Side reflectors Aftermarket?	A412		1	190	190	N	D2
A.4.1.5.27	Frame Aftermarket?	A412		1	197	197	N	D2
A.4.1.5.28	Grab rails/hand holds Aftermarket?	A412		1	204	204	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.5.29	Fuel tank Aftermarket?	A412		1	211	211	N	D2
A.4.1.5.30	Auxiliary fuel tank Aftermarket?	A412		1	218	218	N	D2
A.4.1.5.31	Motor crankcase, cylinders Aftermarket?	A413		1	15	15	N	D2
A.4.1.5.32	Radiator Aftermarket?	A413		1	22	22	N	D2
A.4.1.5.33	Water hose Aftermarket?	A413		1	29	29	N	D2
A.4.1.5.34	Motor power enhancement Aftermarket?	A413		1	36	36	N	D2
A.4.1.5.36	Oil tank Aftermarket?	A413		1	50	50	N	D2
A.4.1.5.37	Battery, battery box Aftermarket?	A413		1	57	57	N	D2
A.4.1.5.38	Rear brake pedal Aftermarket?	A413		1	64	64	N	D2
A.4.1.5.39	Shift lever Aftermarket?	A413		1	71	71	N	D2
A.4.1.5.40	Foot pegs, footrests Aftermarket?	A413		1	78	78	N	D2
A.4.1.5.41	Highway pegs/footrests Aftermarket?	A413		1	85	85	N	D2
A.4.1.5.42	Side stand Aftermarket?	A413		1	92	92	N	D2
A.4.1.5.43	Side stand interlock Aftermarket?	A413		1	99	99	N	D2
A.4.1.5.44	Centre stand Aftermarket?	A413		1	106	106	N	D2
A.4.1.5.45	Muffler/exhaust Aftermarket?	A413		1	113	113	N	D2
A.4.1.5.46	Tank bag Aftermarket?	A413		1	120	120	N	D2
A.4.1.5.47	Luggage/cargo rack Aftermarket?	A413		1	127	127	N	D2
A.4.1.5.48	Parcel rack Aftermarket?	A413		1	134	134	N	D2
A.4.1.5.49	Panniers, saddle bags Aftermarket?	A413		1	141	141	N	D2
A.4.1.5.50	Rear position lamps Aftermarket?	A413		1	148	148	N	D2
A.4.1.5.51	Stop lamp Aftermarket?	A413		1	155	155	N	D2
A.4.1.5.52	Rear reflectors Aftermarket?	A413		1	162	162	N	D2
A.4.1.5.53	Rear turn signals Aftermarket?	A413		1	169	169	N	D2
A.4.1.5.54	Rear suspension Aftermarket?	A413		1	176	176	N	D2
A.4.1.5.55	Rear tyre, wheel Aftermarket?	A413		1	183	183	N	D2
A.4.1.5.56	Rear fender Aftermarket?	A413		1	190	190	N	D2
A.4.1.5.57	Rear brakes Aftermarket?	A413		1	197	197	N	D2
A.4.1.5.58	Tools, tool box Aftermarket?	A413		1	204	204	N	D2
A.4.1.5.59	Side covers Aftermarket?	A413		1	211	211	N	D2
A.4.1.5.60	Trailer Aftermarket?	A413		1	218	218	N	D2
A.4.1.6.6	Headlamp(s) Operational?	A412		1	51	51	N	D2
A.4.1.6.8	Auxiliary headlamp Operational?	A412		1	65	65	N	D2
A.4.1.6.9	Front position lamp Operational?	A412		1	72	72	N	D2
A.4.1.6.10	Front reflectors Operational?	A412		1	79	79	N	D2
A.4.1.6.11	Front turn signals Operational?	A412		1	86	86	N	D2
A.4.1.6.12	Speedometer Operational?	A412		1	93	93	N	D2
A.4.1.6.13	Tachometer Operational?	A412		1	100	100	N	D2
A.4.1.6.15	Throttle Operational?	A412		1	114	114	N	D2
A.4.1.6.16	Clutch lever Operational?	A412		1	121	121	N	D2
A.4.1.6.17	Brake lever Operational?	A412		1	128	128	N	D2
A.4.1.6.18	Right side rear view mirrors, posts Operational?	A412		1	135	135	N	D2
A.4.1.6.19	Left side rear view mirrors, posts Operational?	A412		1	142	142	N	D2
A.4.1.6.20	Front suspension Operational?	A412		1	149	149	N	D2
A.4.1.6.21	Front tyre, wheel Operational?	A412		1	156	156	N	D2
A.4.1.6.22	Front fender Operational?	A412		1	163	163	N	D2
A.4.1.6.23	Front brakes Operational?	A412		1	170	170	N	D2
A.4.1.6.24	Seat Operational?	A412		1	177	177	N	D2
A.4.1.6.25	Sissy bar/passenger back rest Operational?	A412		1	184	184	N	D2
A.4.1.6.26	Side reflectors Operational?	A412		1	191	191	N	D2
A.4.1.6.32	Radiator Operational?	A413		1	23	23	N	D2
A.4.1.6.33	Water hose Operational?	A413		1	30	30	N	D2
A.4.1.6.34	Motor power enhancement Operational?	A413		1	37	37	N	D2
A.4.1.6.38	Rear brake pedal Operational?	A413		1	65	65	N	D2
A.4.1.6.39	Shift lever Operational?	A413		1	72	72	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.6.40	Foot pegs, footrests Operational?	A413		1	79	79	N	D2
A.4.1.6.41	Highway pegs/footrests Operational?	A413		1	86	86	N	D2
A.4.1.6.42	Side stand Operational?	A413		1	93	93	N	D2
A.4.1.6.43	Side stand interlock Operational?	A413		1	100	100	N	D2
A.4.1.6.44	Centre stand Operational?	A413		1	107	107	N	D2
A.4.1.6.45	Muffler/exhaust Operational?	A413		1	114	114	N	D2
A.4.1.6.50	Rear position lamps Operational?	A413		1	149	149	N	D2
A.4.1.6.51	Stop lamp Operational?	A413		1	156	156	N	D2
A.4.1.6.52	Rear reflectors Operational?	A413		1	163	163	N	D2
A.4.1.6.53	Rear turn signals Operational?	A413		1	170	170	N	D2
A.4.1.6.54	Rear suspension Operational?	A413		1	177	177	N	D2
A.4.1.6.55	Rear tyre, wheel Operational?	A413		1	184	184	N	D2
A.4.1.6.56	Rear fender Operational?	A413		1	191	191	N	D2
A.4.1.6.57	Rear brakes Operational?	A413		1	198	198	N	D2
A.4.1.6.60	Trailer Operational?	A413		1	219	219	N	D2
A.4.1.7.4	Windscreen In use at time of accident?	A412		1	38	38	N	D2
A.4.1.7.5	Fairing In use at time of accident?	A412		1	45	45	N	D2
A.4.1.7.6	Headlamp(s) In use at time of accident?	A412		1	52	52	N	D2
A.4.1.7.8	Auxiliary headlamp In use at time of accident?	A412		1	66	66	N	D2
A.4.1.7.9	Front position lamp In use at time of accident?	A412		1	73	73	N	D2
A.4.1.7.11	Front turn signals In use at time of accident?	A412		1	87	87	N	D2
A.4.1.7.12	Speedometer In use at time of accident?	A412		1	94	94	N	D2
A.4.1.7.13	Tachometer In use at time of accident?	A412		1	101	101	N	D2
A.4.1.7.15	Throttle In use at time of accident?	A412		1	115	115	N	D2
A.4.1.7.16	Clutch lever In use at time of accident?	A412		1	122	122	N	D2
A.4.1.7.17	Brake lever In use at time of accident?	A412		1	129	129	N	D2
A.4.1.7.23	Front brakes In use at time of accident?	A412		1	171	171	N	D2
A.4.1.7.28	Grab rails/hand holds In use at time of accident?	A412		1	206	206	N	D2
A.4.1.7.32	Radiator In use at time of accident?	A413		1	24	24	N	D2
A.4.1.7.33	Water hose In use at time of accident?	A413		1	31	31	N	D2
A.4.1.7.34	Motor power enhancement In use at time of accident?	A413		1	38	38	N	D2
A.4.1.7.38	Rear brake pedal In use at time of accident?	A413		1	66	66	N	D2
A.4.1.7.39	Shift lever In use at time of accident?	A413		1	73	73	N	D2
A.4.1.7.40	Foot pegs, footrests In use at time of accident?	A413		1	80	80	N	D2
A.4.1.7.41	Highway pegs/footrests In use at time of accident?	A413		1	87	87	N	D2
A.4.1.7.42	Side stand In use at time of accident?	A413		1	94	94	N	D2
A.4.1.7.43	Side stand interlock In use at time of accident?	A413		1	101	101	N	D2
A.4.1.7.44	Centre stand In use at time of accident?	A413		1	108	108	N	D2
A.4.1.7.46	Tank bag In use at time of accident?	A413		1	122	122	N	D2
A.4.1.7.47	Luggage/cargo rack In use at time of accident?	A413		1	129	129	N	D2
A.4.1.7.48	Parcel rack In use at time of accident?	A413		1	136	136	N	D2
A.4.1.7.49	Panniers, saddle bags In use at time of accident?	A413		1	143	143	N	D2
A.4.1.7.50	Rear position lamps In use at time of accident?	A413		1	150	150	N	D2
A.4.1.7.51	Stop lamp In use at time of accident?	A413		1	157	157	N	D2
A.4.1.7.53	Rear turn signals In use at time of accident?	A413		1	171	171	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.7.56	Rear fender In use at time of accident?	A413		1	192	192	N	D2
A.4.1.7.57	Rear brakes In use at time of accident?	A413		1	199	199	N	D2
A.4.1.7.60	Trailer In use at time of accident?	A413		1	220	220	N	D2
A.4.1.8.1	Front crash bars Modified?	A412		1	18	18	N	D2
A.4.1.8.2	Rear crash bars Modified?	A412		1	25	25	N	D2
A.4.1.8.3	Engine guard Modified?	A412		1	32	32	N	D2
A.4.1.8.4	Windscreen Modified?	A412		1	39	39	N	D2
A.4.1.8.5	Fairing Modified?	A412		1	46	46	N	D2
A.4.1.8.6	Headlamp(s) Modified?	A412		1	53	53	N	D2
A.4.1.8.7	Headlamp nacelle Modified?	A412		1	60	60	N	D2
A.4.1.8.8	Auxiliary headlamp Modified?	A412		1	67	67	N	D2
A.4.1.8.9	Front position lamp Modified?	A412		1	74	74	N	D2
A.4.1.8.10	Front reflectors Modified?	A412		1	81	81	N	D2
A.4.1.8.11	Front turn signals Modified?	A412		1	88	88	N	D2
A.4.1.8.12	Speedometer Modified?	A412		1	95	95	N	D2
A.4.1.8.13	Tachometer Modified?	A412		1	102	102	N	D2
A.4.1.8.14	Handlebars Modified?	A412		1	109	109	N	D2
A.4.1.8.15	Throttle Modified?	A412		1	116	116	N	D2
A.4.1.8.16	Clutch lever Modified?	A412		1	123	123	N	D2
A.4.1.8.17	Brake lever Modified?	A412		1	130	130	N	D2
A.4.1.8.18	Right side rear view mirrors, posts Modified?	A412		1	137	137	N	D2
A.4.1.8.19	Left side rear view mirrors, posts Modified?	A412		1	144	144	N	D2
A.4.1.8.20	Front suspension Modified?	A412		1	151	151	N	D2
A.4.1.8.21	Front tyre/wheel Modified?	A412		1	158	158	N	D2
A.4.1.8.22	Front fender Modified	A412		1	165	165	N	D2
A.4.1.8.23	Front brakes Modified?	A412		1	172	172	N	D2
A.4.1.8.24	Seat Modified?	A412		1	179	179	N	D2
A.4.1.8.25	Sissy bar/passenger back rest Modified?	A412		1	186	186	N	D2
A.4.1.8.26	Side reflectors Modified?	A412		1	193	193	N	D2
A.4.1.8.27	Frame Modified?	A412		1	200	200	N	D2
A.4.1.8.28	Grab rails/hand holds Modified?	A412		1	207	207	N	D2
A.4.1.8.29	Fuel tank Modified?	A412		1	214	214	N	D2
A.4.1.8.30	Auxiliary fuel tank Modified?	A412		1	221	221	N	D2
A.4.1.8.31	Motor crankcase, cylinders Modified?	A413		1	18	18	N	D2
A.4.1.8.32	Radiator Modified?	A413		1	25	25	N	D2
A.4.1.8.33	Water hose Modified?	A413		1	32	32	N	D2
A.4.1.8.34	Motor power enhancement Modified?	A413		1	39	39	N	D2
A.4.1.8.35	Transmission case Modified?	A413		1	46	46	N	D2
A.4.1.8.36	Oil tank Modified?	A413		1	53	53	N	D2
A.4.1.8.37	Battery, battery box Modified?	A413		1	60	60	N	D2
A.4.1.8.38	Rear brake pedal Modified?	A413		1	67	67	N	D2
A.4.1.8.39	Shift lever Modified?	A413		1	74	74	N	D2
A.4.1.8.40	Foot pegs, footrests Modified?	A413		1	81	81	N	D2
A.4.1.8.41	Highway pegs/footrests Modified?	A413		1	88	88	N	D2
A.4.1.8.42	Side stand Modified?	A413		1	95	95	N	D2
A.4.1.8.43	Side stand interlock Modified?	A413		1	102	102	N	D2
A.4.1.8.44	Centre stand Modified?	A413		1	109	109	N	D2
A.4.1.8.45	Muffler/exhaust Modified?	A413		1	116	116	N	D2
A.4.1.8.46	Tank bag Modified?	A413		1	123	123	N	D2
A.4.1.8.47	Luggage/cargo rack Modified?	A413		1	130	130	N	D2
A.4.1.8.48	Parcel rack Modified?	A413		1	137	137	N	D2
A.4.1.8.49	Panniers, saddle bags Modified?	A413		1	144	144	N	D2
A.4.1.8.50	Rear position lamps Modified?	A413		1	151	151	N	D2
A.4.1.8.51	Stop lamp Modified?	A413		1	158	158	N	D2
A.4.1.8.52	Rear reflectors Modified?	A413		1	165	165	N	D2
A.4.1.8.53	Rear turn signals Modified?	A413		1	172	172	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.8.54	Rear suspension Modified?	A413		1	179	179	N	D2
A.4.1.8.55	Rear tyre, wheel Modified?	A413		1	186	186	N	D2
A.4.1.8.56	Rear fender Modified?	A413		1	193	193	N	D2
A.4.1.8.57	Rear brakes Modified?	A413		1	200	200	N	D2
A.4.1.8.58	Tools, tool box Modified?	A413		1	207	207	N	D2
A.4.1.8.59	Side covers Modified?	A413		1	214	214	N	D2
A.4.1.8.60	Trailer Modified?	A413		1	221	221	N	D2
A.4.1.9.1	Front crash bars Damage in accident?	A412		1	19	19	N	D2
A.4.1.9.2	Rear crash bars Damage in accident?	A412		1	26	26	N	D2
A.4.1.9.3	Engine guard Damage in accident?	A412		1	33	33	N	D2
A.4.1.9.4	Windscreen Damage in accident?	A412		1	40	40	N	D2
A.4.1.9.5	Fairing Damage in accident?	A412		1	47	47	N	D2
A.4.1.9.6	Headlamp(s) Damage in accident?	A412		1	54	54	N	D2
A.4.1.9.7	Headlamp nacelle Damage in accident?	A412		1	61	61	N	D2
A.4.1.9.8	Auxiliary headlamp Damage in accident?	A412		1	68	68	N	D2
A.4.1.9.9	Front position lamp Damage in accident?	A412		1	75	75	N	D2
A.4.1.9.10	Front reflectors Damage in accident?	A412		1	82	82	N	D2
A.4.1.9.11	Front turn signals Damage in accident?	A412		1	89	89	N	D2
A.4.1.9.12	Speedometer Damage in accident?	A412		1	96	96	N	D2
A.4.1.9.13	Tachometer Damage in accident?	A412		1	103	103	N	D2
A.4.1.9.14	Handlebars Damage in accident?	A412		1	110	110	N	D2
A.4.1.9.15	Throttle Damage in accident?	A412		1	117	117	N	D2
A.4.1.9.16	Clutch lever Damage in accident?	A412		1	124	124	N	D2
A.4.1.9.17	Brake lever Damage in accident?	A412		1	131	131	N	D2
A.4.1.9.18	Right side rear view mirrors, posts Damage in accident?	A412		1	138	138	N	D2
A.4.1.9.19	Left side rear view mirrors, posts Damage in accident?	A412		1	145	145	N	D2
A.4.1.9.20	Front suspension Damage in accident?	A412		1	152	152	N	D2
A.4.1.9.21	Front tyre/wheel Damage in accident?	A412		1	159	159	N	D2
A.4.1.9.22	Front fender Damage in accident?	A412		1	166	166	N	D2
A.4.1.9.23	Front brakes Damage in accident?	A412		1	173	173	N	D2
A.4.1.9.24	Seat Damage in accident?	A412		1	180	180	N	D2
A.4.1.9.25	Sissy bar/passenger back rest Damage in accident?	A412		1	187	187	N	D2
A.4.1.9.26	Side reflectors Damage in accident?	A412		1	194	194	N	D2
A.4.1.9.27	Frame Damage in accident?	A412		1	201	201	N	D2
A.4.1.9.28	Grab rails/hand holds Damage in accident?	A412		1	208	208	N	D2
A.4.1.9.29	Fuel tank Damage in accident?	A412		1	215	215	N	D2
A.4.1.9.30	Auxiliary fuel tank Damage in accident?	A412		1	222	222	N	D2
A.4.1.9.31	Motor crankcase, cylinders Damage in accident?	A413		1	19	19	N	D2
A.4.1.9.32	Radiator Damage in accident?	A413		1	26	26	N	D2
A.4.1.9.33	Water hose Damage in accident?	A413		1	33	33	N	D2
A.4.1.9.34	Motor power enhancement Damage in accident?	A413		1	40	40	N	D2
A.4.1.9.35	Transmission case Damage in accident?	A413		1	47	47	N	D2
A.4.1.9.36	Oil tank Damage in accident?	A413		1	54	54	N	D2
A.4.1.9.37	Battery, battery box Damage in accident?	A413		1	61	61	N	D2
A.4.1.9.38	Rear brake pedal Damage in accident?	A413		1	68	68	N	D2
A.4.1.9.39	Shift lever Damage in accident?	A413		1	75	75	N	D2
A.4.1.9.40	Foot pegs, footrests Damage in accident?	A413		1	82	82	N	D2
A.4.1.9.41	Highway pegs/footrests Damage in accident?	A413		1	89	89	N	D2
A.4.1.9.42	Side stand Damage in accident?	A413		1	96	96	N	D2
A.4.1.9.43	Side stand interlock Damage in accident?	A413		1	103	103	N	D2
A.4.1.9.44	Centre stand Damage in accident?	A413		1	110	110	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.1.9.45	Muffler/exhaust Damage in accident?	A413		1	117	117	N	D2
A.4.1.9.46	Tank bag Damage in accident?	A413		1	124	124	N	D2
A.4.1.9.47	Luggage/cargo rack Damage in accident?	A413		1	131	131	N	D2
A.4.1.9.48	Parcel rack Damage in accident?	A413		1	138	138	N	D2
A.4.1.9.49	Panniers, saddle bags Damage in accident?	A413		1	145	145	N	D2
A.4.1.9.50	Rear position lamps Damage in accident?	A413		1	152	152	N	D2
A.4.1.9.51	Stop lamp Damage in accident?	A413		1	159	159	N	D2
A.4.1.9.52	Rear reflectors Damage in accident?	A413		1	166	166	N	D2
A.4.1.9.53	Rear turn signals Damage in accident?	A413		1	173	173	N	D2
A.4.1.9.54	Rear suspension Damage in accident?	A413		1	180	180	N	D2
A.4.1.9.55	Rear tyre, wheel Damage in accident?	A413		1	187	187	N	D2
A.4.1.9.56	Rear fender Damage in accident?	A413		1	194	194	N	D2
A.4.1.9.57	Rear brakes Damage in accident?	A413		1	201	201	N	D2
A.4.1.9.58	Tools, tool box Damage in accident?	A413		1	208	208	N	D2
A.4.1.9.59	Side covers Damage in accident?	A413		1	215	215	N	D2
A.4.1.9.60	Trailer Damage in accident?	A413		1	222	222	N	D2
A.4.2.18(a)	Motorcycle impact speed	A421		3	46	48	N	C
A.4.2.19(a)	Roll attitude angle	A421		3	51	53	N	C
A.4.2.20(a)	Sideslip angle	A421		3	56	58	N	C
A.4.2.21(a)	Relative heading angle	A421		3	61	63	N	C
A.4.2.22(a)	Calculated time from precipitating event to impact	A421		3	66	68	N	C
A.4.2.18(b)	Motorcycle impact speed uncertainty ±	A421		2	49	50	N	C
A.4.2.19(b)	Roll attitude angle uncertainty ±	A421		2	54	55	N	C
A.4.2.20(b)	Sideslip angle uncertainty ±	A421		2	59	60	N	C
A.4.2.21(b)	Relative heading angle uncertainty ±	A421		2	64	65	N	C
A.4.2.22(b)	Calculated time from precipitating event to impact uncertainty ±	A421		2	69	70	N	C
A.4.2.1	Description	A421		2	13	14	N	D
A.4.2.2	Travelling speed	A421		3	15	17	N	C
A.4.2.3	Line-of-sight to other vehicle	A421		2	18	19	N	O
A.4.2.4	Description	A421		2	20	21	N	D
A.4.2.5.1	Collision avoidance action	A421		1	22	22	N	D
A.4.2.5.2	Collision avoidance action	A421		1	23	23	N	D
A.4.2.5.3	Collision avoidance action	A421		1	24	24	N	D
A.4.2.5.4	Collision avoidance action	A421		1	25	25	N	D
A.4.2.6	Braking skid marks on roadway	A421		1	26	26	N	D
A.4.2.7.1	Length of skid marks on roadway	A421		3	27	29	N	C
A.4.2.7.2	Length of skid marks on roadway	A421		3	30	32	N	C
A.4.2.8	Braking skid mark evidence on roadway	A421		1	33	33	N	D
A.4.2.9	Braking tyre striation evidence	A421		2	34	35	N	D
A.4.2.10	Swerve	A421		1	36	36	N	D
A.4.2.11	Acceleration evidence on rear tyre	A421		1	37	37	N	D
A.4.2.12	Counter-steering	A421		1	38	38	N	D
A.4.2.13	Cornering skid mark evidence on roadway	A421		1	39	39	N	D
A.4.2.14	Cornering tyre striation evidence	A421		1	40	40	N	D
A.4.2.15	Pre-crash scrape marks on motorcycle	A421		2	41	42	N	D
A.4.2.16	Pre-crash accident scene scrape marks	A421		1	43	43	N	D
A.4.2.17	Motorcycle first collision contact code	A421		2	44	45	A/N	D
A.4.2.23	Motorcycle motion code	A421		2	71	72	N	D
A.4.2.24	Distance from POI at motorcycle POR	A421		3	73	75	N	C
A.4.2.25	Post-crash scrape marks on motorcycle	A421		2	76	77	N	D
A.4.2.26	Rider motion code	A421		2	78	79	N	D
A.4.2.27	Distance from POI to rider POR	A421		3	80	82	N	C
A.4.2.28	Passenger motion code	A421		2	83	84	N	D
A.4.2.29	Distance from POI to passenger POR	A421		3	85	87	N	C
A.4.2.30	Post-crash accident scene scrape marks	A421		1	88	88	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.4.3.1	Other vehicle number	-		1	See	note 2	N	DI
A.4.3.2	Vehicle type/size/classification	A431		2	14	15	A/N	D
A.4.3.3	Manufacturer, other than motorcycle	A431		2	16	17	A/N	D
A.4.3.4	Motorcycle manufacturer	A431		3	18	20	A/N	D
A.4.3.5	Model (all OVs)	A431		10	21	30	A/N	-
A.4.3.6	Year (all OVs)	A431		4	31	34	N	DI
A.4.3.7	Vehicle kerb mass (all Ovs)	A431		5	35	39	N	C
A.4.3.8	ABS (all OVs)	A431		1	40	40	N	D
A.4.3.9	Mechanical problems	A431		2	41	42	N	D
A.4.4.1	Description	A441		2	14	15	N	D
A.4.4.2	Travelling speed	A441		3	16	18	N	C
A.4.4.3	Line-of-sight to motorcycle	A441		2	19	20	N	O
A.4.4.4	Description	A441		2	21	22	N	D
A.4.4.5.1	Collision avoidance action	A441		1	23	23	N	D
A.4.4.5.2	Collision avoidance action	A441		1	24	24	N	D
A.4.4.5.3	Collision avoidance action	A441		1	25	25	N	D
A.4.4.5.4	Collision avoidance action	A441		1	26	26	N	D
A.4.4.6	Braking skid marks on roadway	A441		1	27	27	N	D
A.4.4.7.1	Length of skid marks	A441		3	28	30	N	C
A.4.4.7.2	Length of skid marks	A441		3	31	33	N	C
A.4.4.8	Braking skid mark evidence on roadway	A441		1	34	34	N	D
A.4.4.9	Braking tyre striation evidence	A441		2	35	36	N	D
A.4.4.10	Swerve	A441		1	37	37	N	D
A.4.4.11	Acceleration evidence on tyre(s)	A441		1	38	38	N	D
A.4.4.12	Cornering skid mark evidence on roadway	A441		1	39	39	N	D
A.4.4.13	Cornering tyre striation evidence	A441		1	40	40	N	D
A.4.4.14	Other vehicle first collision contact code	A441		4	41	44	A/N	-
A.4.4.15	Impact speed	A441		3	45	47	N	C
A.4.4.16	Other vehicle motion code	A441		2	48	49	N	D2
A.4.4.17	Distance from POI to other vehicle POR	A441		3	50	52	N	C
A.5.1.1.2	Date of birth (DoB)	A511	1	8	14	21	N	O
A.5.1.1.3	Age	A511	1	2	22	23	N	C
A.5.1.1.4	Region/country of driver's license qualification	A511	1	1	24	24	N	D
A.5.1.1.5.1	Driver's license qualification	A511	1	2	25	26	N	D
A.5.1.1.5.2	Driver's license qualification	A511	1	2	27	28	N	D
A.5.1.1.5.3	Driver's license qualification	A511	1	2	29	30	N	D
A.5.1.1.5.4	Driver's license qualification	A511	1	2	31	32	N	D
A.5.1.1.6.1	Driver's license date of issue	A511	1	8	33	40	N	O
A.5.1.1.6.2	Driver's license date of issue	A511	1	8	41	48	N	O
A.5.1.1.6.3	Driver's license date of issue	A511	1	8	49	56	N	O
A.5.1.1.6.4	Driver's license date of issue	A511	1	8	57	64	N	O
A.5.1.1.7	Does the license held qualify the driver for driving the accident vehicle?	A511	1	1	65	65	N	D2
A.5.1.1.8	Citizenship	A511	1	1	66	66	N	D
A.5.1.1.9	Height	A511	1	3	67	69	N	C
A.5.1.1.10	Weight	A511	1	3	70	72	N	C
A.5.1.1.11	Gender	A511	1	1	73	73	N	D2
A.5.1.1.12	Educational status	A511	1	1	74	74	N	D
A.5.1.1.12.1	Duration of formal education	A511	1	2	75	76	N	C
A.5.1.1.13	Occupational code (where permissible)	A511	1	2	77	78	N	D
A.5.1.1.14	Eye correction at time of accident	A511	1	1	79	79	N	D
A.5.1.1.15	All vehicle experience	A511	1	2	80	81	N	C
A.5.1.1.16	On any street motorcycle	A511	1	2	82	83	N	C
A.5.1.1.17	On accident motorcycle	A511	1	2	84	85	N	C
A.5.1.1.18	Number of days per year that motorcycles are ridden	A511	1	3	86	88	N	C
A.5.1.1.19	Distance motorcycle is ridden per year	A511	1	5	89	93	N	C

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.1.20	Motorcycle training	A511	1	1	94	94	N	D
A.5.1.1.21.1	Motorcycle percent use estimate	A511	1	3	95	97	N	C
A.5.1.1.21.2	Motorcycle percent use estimate	A511	1	3	98	100	N	C
A.5.1.1.21.3	Motorcycle percent use estimate	A511	1	3	101	103	N	C
A.5.1.1.22	Experience riding with passengers on motorcycle	A511	1	1	104	104	N	D
A.5.1.1.23	Experience riding with similar cargo/luggage	A511	1	1	105	105	N	D
A.5.1.1.24	All moving traffic violation convictions in the previous 5 years	A511	1	1	106	106	N	DI
A.5.1.1.25	Any motorcycle moving traffic accident experience during the previous 5 years	A511	1	1	107	107	N	DI
A.5.1.1.26	Any other vehicle moving traffic accident experience during the previous 5 years	A511	1	1	108	108	N	DI
A.5.1.1.27	Origin	A511	1	1	109	109	N	D
A.5.1.1.28	Destination	A511	1	1	110	110	N	D
A.5.1.1.29	Trip length	A511	1	3	111	113	N	C
A.5.1.1.30	Frequency of this road use, in/on any vehicle	A511	1	1	114	114	N	D
A.5.1.1.31	Length of time since departure, this trip	A511	1	2	115	116	N	C
A.5.1.1.32	Alcohol/drug type of use	A511	1	1	117	117	N	D
A.5.1.1.33	Alcohol/drug impairment	A511	1	1	118	118	N	D
A.5.1.1.34	Blood alcohol concentration (BAC)	A511	1	3	119	121	N	C
A.5.1.1.35	Source of BAC information	A511	1	1	122	122	N	D
A.5.1.1.36	Time span from accident to BAC collection	A511	1	2	123	124	N	C
A.5.1.1.37	Type of drugs other than alcohol	A511	1	1	125	125	N	D
A.5.1.1.38	Source of drugs other than alcohol	A511	1	1	126	126	N	D2
A.5.1.1.39.1	Physiological impairment, permanent condition	A511	1	2	127	128	N	D
A.5.1.1.39.2	Physiological impairment, permanent condition	A511	1	2	129	130	N	D
A.5.1.1.39.3	Physiological impairment, permanent condition	A511	1	2	131	132	N	D
A.5.1.1.40.1	Physiological impairment, transient condition	A511	1	2	133	134	N	D
A.5.1.1.40.2	Physiological impairment, transient condition	A511	1	2	135	136	N	D
A.5.1.1.40.3	Physiological impairment, transient condition	A511	1	2	137	138	N	D
A.5.1.1.41.1	Stress experienced that day	A511	1	2	139	140	N	D
A.5.1.1.41.2	Stress experienced that day	A511	1	2	141	142	N	D
A.5.1.1.41.3	Stress experienced that day	A511	1	2	143	144	N	D
A.5.1.1.42	Rider riding position on motorcycle at time of collision	A511	1	2	145	146	N	D
A.5.1.1.44	Attention to driving/passenger tasks	A511	1	2	150	151	N	D
A.5.1.1.45	Recommended countermeasures, in rider's/driver's/passenger's judgment	A511	1	2	152	153	N	D
A.5.1.2.1	Motorcycle passenger number	-		1	See	note 2	N	DI
A.5.1.2.2	Date of birth (DoB)	A512		8	14	21	N	O
A.5.1.2.3	Age	A512		2	22	23	N	C
A.5.1.2.4	Region/country of driver's license qualification	A512		1	24	24	N	D
A.5.1.2.5.1	Driver's license qualification	A512		2	25	26	N	D
A.5.1.2.5.2	Driver's license qualification	A512		2	27	28	N	D
A.5.1.2.5.3	Driver's license qualification	A512		2	29	30	N	D
A.5.1.2.5.4	Driver's license qualification	A512		2	31	32	N	D
A.5.1.2.6.1	Driver's license date of issue	A512		8	33	40	N	O

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.2.6.2	Driver's license date of issue	A512		8	41	48	N	O
A.5.1.2.6.3	Driver's license date of issue	A512		8	49	56	N	O
A.5.1.2.6.4	Driver's license date of issue	A512		8	57	64	N	O
A.5.1.2.8	Citizenship	A512		1	66	66	N	D
A.5.1.2.9	Height	A512		3	67	69	N	C
A.5.1.2.10	Weight	A512		3	70	72	N	C
A.5.1.2.11	Gender	A512		1	73	73	N	D2
A.5.1.2.12	Educational status	A512		1	74	74	N	D
A.5.1.2.12.1	Duration of formal education	A512		2	75	76	N	C
A.5.1.2.13	Occupational code (where permissible)	A512		2	77	78	N	D
A.5.1.2.14	Eye correction at time of accident	A512		1	79	79	N	D
A.5.1.2.15	All vehicle experience	A512		2	80	81	N	C
A.5.1.2.16	On any street motorcycle	A512		2	82	83	N	C
A.5.1.2.17	On accident motorcycle	A512		2	84	85	N	C
A.5.1.2.18	Number of days per year that motorcycles are ridden	A512		3	86	88	N	C
A.5.1.2.19	Distance motorcycle is ridden per year	A512		5	89	93	N	C
A.5.1.2.20	Motorcycle training	A512		1	94	94	N	D
A.5.1.2.21.1	Motorcycle percent use estimate	A512		3	95	97	N	C
A.5.1.2.21.2	Motorcycle percent use estimate	A512		3	98	100	N	C
A.5.1.2.21.3	Motorcycle percent use estimate	A512		3	101	103	N	C
A.5.1.2.22	Experience riding as a passenger on motorcycles	A512		1	104	104	N	D
A.5.1.2.24	All moving traffic violation convictions in the previous 5 years	A512		1	106	106	N	DI
A.5.1.2.25	Any motorcycle moving traffic accident experience during the previous 5 years	A512		1	107	107	N	DI
A.5.1.2.26	Any other vehicle moving traffic accident experience during the previous 5 years	A512		1	108	108	N	DI
A.5.1.2.32	Alcohol/drug type of use	A512		1	117	117	N	D
A.5.1.2.33	Alcohol/drug impairment	A512		1	118	118	N	D
A.5.1.2.34	Blood alcohol concentration (BAC)	A512		3	119	121	N	C
A.5.1.2.35	Source of BAC information	A512		1	122	122	N	D
A.5.1.2.36	Time span from accident to BAC collection	A512		2	123	124	N	C
A.5.1.2.37	Type of drugs other than alcohol	A512		1	125	125	N	D
A.5.1.2.38	Source of drugs other than alcohol	A512		1	126	126	N	D2
A.5.1.2.39.1	Physiological impairment, permanent condition	A512		2	127	128	N	D
A.5.1.2.39.2	Physiological impairment, permanent condition	A512		2	129	130	N	D
A.5.1.2.39.3	Physiological impairment, permanent condition	A512		2	131	132	N	D
A.5.1.2.40.1	Physiological impairment, transient condition	A512		2	133	134	N	D
A.5.1.2.40.2	Physiological impairment, transient condition	A512		2	135	136	N	D
A.5.1.2.40.3	Physiological impairment, transient condition	A512		2	137	138	N	D
A.5.1.2.41.1	Stress experienced that day	A512		2	139	140	N	D
A.5.1.2.41.2	Stress experienced that day	A512		2	141	142	N	D
A.5.1.2.41.3	Stress experienced that day	A512		2	143	144	N	D
A.5.1.2.42	Passenger location on motorcycle at time of collision	A512		1	145	145	N	D
A.5.1.2.43.1	Passenger riding position on motorcycle at time of collision	A512		1	147	147	N	D
A.5.1.2.43.2	Passenger riding position on motorcycle at time of collision	A512		1	148	148	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.2.43.3	Passenger riding position on motorcycle at time of collision	A512		1	149	149	N	D
A.5.1.2.44	Attention to driving/passenger tasks	A512		2	150	151	N	D
A.5.1.2.45	Recommended countermeasures, in rider's/driver's/passenger's judgment	A512		2	152	153	N	D
A.5.1.3.2	Date of birth (DoB)	A513		8	14	21	N	O
A.5.1.3.3	Age	A513		2	22	23	N	C
A.5.1.3.4	Region/country of driver's license qualification	A513		1	24	24	N	D
A.5.1.3.5.1	Driver's license qualification	A513		2	25	26	N	D
A.5.1.3.5.2	Driver's license qualification	A513		2	27	28	N	D
A.5.1.3.5.3	Driver's license qualification	A513		2	29	30	N	D
A.5.1.3.5.4	Driver's license qualification	A513		2	31	32	N	D
A.5.1.3.6.1	Driver's license date of issue	A513		8	33	40	N	O
A.5.1.3.6.2	Driver's license date of issue	A513		8	41	48	N	O
A.5.1.3.6.3	Driver's license date of issue	A513		8	49	56	N	O
A.5.1.3.6.4	Driver's license date of issue	A513		8	57	64	N	O
A.5.1.3.7	Does the license held qualify the driver for driving the accident vehicle?	A513		1	65	65	N	D2
A.5.1.3.8	Citizenship	A513		1	66	66	N	D
A.5.1.3.9	Height	A513		3	67	69	N	C
A.5.1.3.10	Weight	A513		3	70	72	N	C
A.5.1.3.11	Gender	A513		1	73	73	N	D2
A.5.1.3.12	Educational status	A513		1	74	74	N	D
A.5.1.3.12.1	Duration of formal education	A513		2	75	76	N	C
A.5.1.3.13	Occupational code (where permissible)	A513		2	77	78	N	D
A.5.1.3.14	Eye correction at time of accident	A513		1	79	79	N	D
A.5.1.3.15	All vehicle experience	A513		2	80	81	N	C
A.5.1.3.16	On any street motorcycle	A513		2	82	83	N	C
A.5.1.3.17	In accident vehicle	A513		2	84	85	N	C
A.5.1.3.18	Number of days per year that motorcycles are ridden	A513		3	86	88	N	C
A.5.1.3.19	Distance motorcycle is ridden per year	A513		5	89	93	N	C
A.5.1.3.20	Driver training	A513		1	94	94	N	D
A.5.1.3.21.1	Motorcycle percent use estimate	A513		3	95	97	N	C
A.5.1.3.21.2	Motorcycle percent use estimate	A513		3	98	100	N	C
A.5.1.3.21.3	Motorcycle percent use estimate	A513		3	101	103	N	C
A.5.1.3.24	All moving traffic violation convictions in the previous 5 years	A513		1	106	106	N	DI
A.5.1.3.25	Any motorcycle moving traffic accident experience during the previous 5 years	A513		1	107	107	N	DI
A.5.1.3.26	Any other vehicle moving traffic accident experience during the previous 5 years	A513		1	108	108	N	DI
A.5.1.3.27	Origin	A513		1	109	109	N	D
A.5.1.3.28	Destination	A513		1	110	110	N	D
A.5.1.3.29	Trip length	A513		3	111	113	N	C
A.5.1.3.30	Frequency of this road use, in/on any vehicle	A513		1	114	114	N	D
A.5.1.3.31	Length of time since departure, this trip	A513		2	115	116	N	C
A.5.1.3.32	Alcohol/drug type of use	A513		1	117	117	N	D
A.5.1.3.33	Alcohol/drug impairment	A513		1	118	118	N	D
A.5.1.3.34	Blood alcohol concentration (BAC)	A513		3	119	121	N	C
A.5.1.3.35	Source of BAC information	A513		1	122	122	N	D
A.5.1.3.36	Time span from accident to BAC collection	A513		2	123	124	N	C
A.5.1.3.37	Type of drugs other than alcohol	A513		1	125	125	N	D
A.5.1.3.38	Source of drugs other than alcohol	A513		1	126	126	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.1.3.39.1	Physiological impairment, permanent condition	A513		2	127	128	N	D
A.5.1.3.39.2	Physiological impairment, permanent condition	A513		2	129	130	N	D
A.5.1.3.39.3	Physiological impairment, permanent condition	A513		2	131	132	N	D
A.5.1.3.40.1	Physiological impairment, transient condition	A513		2	133	134	N	D
A.5.1.3.40.2	Physiological impairment, transient condition	A513		2	135	136	N	D
A.5.1.3.40.3	Physiological impairment, transient condition	A513		2	137	138	N	D
A.5.1.3.41.1	Stress experienced that day	A513		2	139	140	N	D
A.5.1.3.41.2	Stress experienced that day	A513		2	141	142	N	D
A.5.1.3.41.3	Stress experienced that day	A513		2	143	144	N	D
A.5.1.3.44	Attention to driving/passenger tasks	A513		2	150	151	N	D
A.5.1.3.45	Recommended countermeasures, in rider's/driver's/passenger's judgment	A513		2	152	153	N	D
A.5.1.3.46	Number of occupants in other vehicle	A513		1	154	154	N	D
A.5.2.1.1	Trauma status	A521	1	1	14	14	N	D
A.5.2.1.1.1	Trauma status, number of days	A521	1	2	15	16	N	C
A.5.2.1.2.1	Injuries	A522	11	9	15	23	A/N	-
A.5.2.1.2.2	Injuries	A522	11	9	24	32	A/N	-
A.5.2.1.2.3	Injuries	A522	11	9	33	41	A/N	-
A.5.2.1.2.4	Injuries	A522	11	9	42	50	A/N	-
A.5.2.1.2.5	Injuries	A522	11	9	51	59	A/N	-
A.5.2.1.2.6	Injuries	A522	11	9	60	68	A/N	-
A.5.2.1.2.7	Injuries	A522	11	9	69	77	A/N	-
A.5.2.1.2.8	Injuries	A522	11	9	78	86	A/N	-
A.5.2.1.2.9	Injuries	A522	11	9	87	95	A/N	-
A.5.2.1.3.1	Injuries	A522	12	9	15	23	A/N	-
A.5.2.1.3.2	Injuries	A522	12	9	24	32	A/N	-
A.5.2.1.3.3	Injuries	A522	12	9	33	41	A/N	-
A.5.2.1.3.4	Injuries	A522	12	9	42	50	A/N	-
A.5.2.1.3.5	Injuries	A522	12	9	51	59	A/N	-
A.5.2.1.3.6	Injuries	A522	12	9	60	68	A/N	-
A.5.2.1.3.7	Injuries	A522	12	9	69	77	A/N	-
A.5.2.1.3.8	Injuries	A522	12	9	78	86	A/N	-
A.5.2.1.3.9	Injuries	A522	12	9	87	95	A/N	-
A.5.2.1.4.1	Injuries	A522	13	9	15	23	A/N	-
A.5.2.1.4.2	Injuries	A522	13	9	24	32	A/N	-
A.5.2.1.4.3	Injuries	A522	13	9	33	41	A/N	-
A.5.2.1.4.4	Injuries	A522	13	9	42	50	A/N	-
A.5.2.1.4.5	Injuries	A522	13	9	51	59	A/N	-
A.5.2.1.4.6	Injuries	A522	13	9	60	68	A/N	-
A.5.2.1.4.7	Injuries	A522	13	9	69	77	A/N	-
A.5.2.1.4.8	Injuries	A522	13	9	78	86	A/N	-
A.5.2.1.4.9	Injuries	A522	13	9	87	95	A/N	-
A.5.2.1.5.1	Injuries	A522	14	9	15	23	A/N	-
A.5.2.1.5.2	Injuries	A522	14	9	24	32	A/N	-
A.5.2.1.5.3	Injuries	A522	14	9	33	41	A/N	-
A.5.2.1.5.4	Injuries	A522	14	9	42	50	A/N	-
A.5.2.1.5.5	Injuries	A522	14	9	51	59	A/N	-
A.5.2.1.5.6	Injuries	A522	14	9	60	68	A/N	-
A.5.2.1.5.7	Injuries	A522	14	9	69	77	A/N	-
A.5.2.1.5.8	Injuries	A522	14	9	78	86	A/N	-
A.5.2.1.5.9	Injuries	A522	14	9	87	95	A/N	-
A.5.2.1.6.1	Injuries	A522	15	9	15	23	A/N	-

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.1.6.2	Injuries	A522	15	9	24	32	A/N	-
A.5.2.1.6.3	Injuries	A522	15	9	33	41	A/N	-
A.5.2.1.6.4	Injuries	A522	15	9	42	50	A/N	-
A.5.2.1.6.5	Injuries	A522	15	9	51	59	A/N	-
A.5.2.1.6.6	Injuries	A522	15	9	60	68	A/N	-
A.5.2.1.6.7	Injuries	A522	15	9	69	77	A/N	-
A.5.2.1.6.8	Injuries	A522	15	9	78	86	A/N	-
A.5.2.1.6.9	Injuries	A522	15	9	87	95	A/N	-
A.5.2.1.7.1	Injuries	A522	16	9	15	23	A/N	-
A.5.2.1.7.2	Injuries	A522	16	9	24	32	A/N	-
A.5.2.1.7.3	Injuries	A522	16	9	33	41	A/N	-
A.5.2.1.7.4	Injuries	A522	16	9	42	50	A/N	-
A.5.2.1.7.5	Injuries	A522	16	9	51	59	A/N	-
A.5.2.1.7.6	Injuries	A522	16	9	60	68	A/N	-
A.5.2.1.7.7	Injuries	A522	16	9	69	77	A/N	-
A.5.2.1.7.8	Injuries	A522	16	9	78	86	A/N	-
A.5.2.1.7.9	Injuries	A522	16	9	87	95	A/N	-
A.5.2.1.8.1	Injuries	A522	17	9	15	23	A/N	-
A.5.2.1.8.2	Injuries	A522	17	9	24	32	A/N	-
A.5.2.1.8.3	Injuries	A522	17	9	33	41	A/N	-
A.5.2.1.8.4	Injuries	A522	17	9	42	50	A/N	-
A.5.2.1.8.5	Injuries	A522	17	9	51	59	A/N	-
A.5.2.1.8.6	Injuries	A522	17	9	60	68	A/N	-
A.5.2.1.8.7	Injuries	A522	17	9	69	77	A/N	-
A.5.2.1.8.8	Injuries	A522	17	9	78	86	A/N	-
A.5.2.1.8.9	Injuries	A522	17	9	87	95	A/N	-
A.5.2.1.9.1	Injuries	A522	18	9	15	23	A/N	-
A.5.2.1.9.2	Injuries	A522	18	9	24	32	A/N	-
A.5.2.1.9.3	Injuries	A522	18	9	33	41	A/N	-
A.5.2.1.9.4	Injuries	A522	18	9	42	50	A/N	-
A.5.2.1.9.5	Injuries	A522	18	9	51	59	A/N	-
A.5.2.1.9.6	Injuries	A522	18	9	60	68	A/N	-
A.5.2.1.9.7	Injuries	A522	18	9	69	77	A/N	-
A.5.2.1.9.8	Injuries	A522	18	9	78	86	A/N	-
A.5.2.1.9.9	Injuries	A522	18	9	87	95	A/N	-
A.5.2.1.10.1	Injuries	A522	19	9	15	23	A/N	-
A.5.2.1.10.2	Injuries	A522	19	9	24	32	A/N	-
A.5.2.1.10.3	Injuries	A522	19	9	33	41	A/N	-
A.5.2.1.10.4	Injuries	A522	19	9	42	50	A/N	-
A.5.2.1.10.5	Injuries	A522	19	9	51	59	A/N	-
A.5.2.1.10.6	Injuries	A522	19	9	60	68	A/N	-
A.5.2.1.10.7	Injuries	A522	19	9	69	77	A/N	-
A.5.2.1.10.8	Injuries	A522	19	9	78	86	A/N	-
A.5.2.1.10.9	Injuries	A522	19	9	87	95	A/N	-
A.5.2.1.11.1	Injury information source 1	A521	1	1	17	17	N	D
A.5.2.1.11.2	Injury information source 2	A521	1	1	18	18	N	D
A.5.2.1.11.3	Injury information source 3	A521	1	1	19	19	N	D
A.5.2.1.11.4	Injury information source 4	A521	1	1	20	20	N	D
A.5.2.2.1	Trauma status	A523		2	14	15	N	D
A.5.2.2.1.1	Trauma status, number of days	A523		2	16	17	N	C
A.5.2.2.2.1	Injuries	A524	1	9	15	23	A/N	-
A.5.2.2.2.2	Injuries	A524	1	9	24	32	A/N	-
A.5.2.2.2.3	Injuries	A524	1	9	33	41	A/N	-
A.5.2.2.2.4	Injuries	A524	1	9	42	50	A/N	-
A.5.2.2.2.5	Injuries	A524	1	9	51	59	A/N	-
A.5.2.2.2.6	Injuries	A524	1	9	60	68	A/N	-
A.5.2.2.2.7	Injuries	A524	1	9	69	77	A/N	-
A.5.2.2.2.8	Injuries	A524	1	9	78	86	A/N	-

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.2.2.9	Injuries	A524	1	9	87	95	A/N	-
A.5.2.2.3.1	Injuries	A524	2	9	15	23	A/N	-
A.5.2.2.3.2	Injuries	A524	2	9	24	32	A/N	-
A.5.2.2.3.3	Injuries	A524	2	9	33	41	A/N	-
A.5.2.2.3.4	Injuries	A524	2	9	42	50	A/N	-
A.5.2.2.3.5	Injuries	A524	2	9	51	59	A/N	-
A.5.2.2.3.6	Injuries	A524	2	9	60	68	A/N	-
A.5.2.2.3.7	Injuries	A524	2	9	69	77	A/N	-
A.5.2.2.3.8	Injuries	A524	2	9	78	86	A/N	-
A.5.2.2.3.9	Injuries	A524	2	9	87	95	A/N	-
A.5.2.2.4.1	Injuries	A524	3	9	15	23	A/N	-
A.5.2.2.4.2	Injuries	A524	3	9	24	32	A/N	-
A.5.2.2.4.3	Injuries	A524	3	9	33	41	A/N	-
A.5.2.2.4.4	Injuries	A524	3	9	42	50	A/N	-
A.5.2.2.4.5	Injuries	A524	3	9	51	59	A/N	-
A.5.2.2.4.6	Injuries	A524	3	9	60	68	A/N	-
A.5.2.2.4.7	Injuries	A524	3	9	69	77	A/N	-
A.5.2.2.4.8	Injuries	A524	3	9	78	86	A/N	-
A.5.2.2.4.9	Injuries	A524	3	9	87	95	A/N	-
A.5.2.2.5.1	Injuries	A524	4	9	15	23	A/N	-
A.5.2.2.5.2	Injuries	A524	4	9	24	32	A/N	-
A.5.2.2.5.3	Injuries	A524	4	9	33	41	A/N	-
A.5.2.2.5.4	Injuries	A524	4	9	42	50	A/N	-
A.5.2.2.5.5	Injuries	A524	4	9	51	59	A/N	-
A.5.2.2.5.6	Injuries	A524	4	9	60	68	A/N	-
A.5.2.2.5.7	Injuries	A524	4	9	69	77	A/N	-
A.5.2.2.5.8	Injuries	A524	4	9	78	86	A/N	-
A.5.2.2.5.9	Injuries	A524	4	9	87	95	A/N	-
A.5.2.2.6.1	Injuries	A524	5	9	15	23	A/N	-
A.5.2.2.6.2	Injuries	A524	5	9	24	32	A/N	-
A.5.2.2.6.3	Injuries	A524	5	9	33	41	A/N	-
A.5.2.2.6.4	Injuries	A524	5	9	42	50	A/N	-
A.5.2.2.6.5	Injuries	A524	5	9	51	59	A/N	-
A.5.2.2.6.6	Injuries	A524	5	9	60	68	A/N	-
A.5.2.2.6.7	Injuries	A524	5	9	69	77	A/N	-
A.5.2.2.6.8	Injuries	A524	5	9	78	86	A/N	-
A.5.2.2.6.9	Injuries	A524	5	9	87	95	A/N	-
A.5.2.2.7.1	Injuries	A524	6	9	15	23	A/N	-
A.5.2.2.7.2	Injuries	A524	6	9	24	32	A/N	-
A.5.2.2.7.3	Injuries	A524	6	9	33	41	A/N	-
A.5.2.2.7.4	Injuries	A524	6	9	42	50	A/N	-
A.5.2.2.7.5	Injuries	A524	6	9	51	59	A/N	-
A.5.2.2.7.6	Injuries	A524	6	9	60	68	A/N	-
A.5.2.2.7.7	Injuries	A524	6	9	69	77	A/N	-
A.5.2.2.7.8	Injuries	A524	6	9	78	86	A/N	-
A.5.2.2.7.9	Injuries	A524	6	9	87	95	A/N	-
A.5.2.2.8.1	Injuries	A524	7	9	15	23	A/N	-
A.5.2.2.8.2	Injuries	A524	7	9	24	32	A/N	-
A.5.2.2.8.3	Injuries	A524	7	9	33	41	A/N	-
A.5.2.2.8.4	Injuries	A524	7	9	42	50	A/N	-
A.5.2.2.8.5	Injuries	A524	7	9	51	59	A/N	-
A.5.2.2.8.6	Injuries	A524	7	9	60	68	A/N	-
A.5.2.2.8.7	Injuries	A524	7	9	69	77	A/N	-
A.5.2.2.8.8	Injuries	A524	7	9	78	86	A/N	-
A.5.2.2.8.9	Injuries	A524	7	9	87	95	A/N	-
A.5.2.2.9.1	Injuries	A524	8	9	15	23	A/N	-
A.5.2.2.9.2	Injuries	A524	8	9	24	32	A/N	-
A.5.2.2.9.3	Injuries	A524	8	9	33	41	A/N	-

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.2.2.9.4	Injuries	A524	8	9	42	50	A/N	-
A.5.2.2.9.5	Injuries	A524	8	9	51	59	A/N	-
A.5.2.2.9.6	Injuries	A524	8	9	60	68	A/N	-
A.5.2.2.9.7	Injuries	A524	8	9	69	77	A/N	-
A.5.2.2.9.8	Injuries	A524	8	9	78	86	A/N	-
A.5.2.2.9.9	Injuries	A524	8	9	87	95	A/N	-
A.5.2.2.10.1	Injuries	A524	9	9	15	23	A/N	-
A.5.2.2.10.2	Injuries	A524	9	9	24	32	A/N	-
A.5.2.2.10.3	Injuries	A524	9	9	33	41	A/N	-
A.5.2.2.10.4	Injuries	A524	9	9	42	50	A/N	-
A.5.2.2.10.5	Injuries	A524	9	9	51	59	A/N	-
A.5.2.2.10.6	Injuries	A524	9	9	60	68	A/N	-
A.5.2.2.10.7	Injuries	A524	9	9	69	77	A/N	-
A.5.2.2.10.8	Injuries	A524	9	9	78	86	A/N	-
A.5.2.2.10.9	Injuries	A524	9	9	87	95	A/N	-
A.5.2.2.11.1	Injury information source 1	A523		1	18	18	N	D
A.5.2.2.11.2	Injury information source 2	A523		1	19	19	N	D
A.5.2.2.11.3	Injury information source 3	A523		1	20	20	N	D
A.5.2.2.11.4	Injury information source 4	A523		1	21	21	N	D
A.5.2.3.1	Driver maximum AIS	A525		9	14	22	A/N	-
A.5.2.3.2.1	Passenger number	A525		1	23	23	N	D
A.5.2.3.2.2	Passenger number	A525		1	24	24	N	D
A.5.2.3.2.3	Passenger number	A525		1	25	25	N	D
A.5.2.3.2.4	Passenger number	A525		1	26	26	N	D
A.5.2.3.2.5	Passenger number	A525		1	27	27	N	D
A.5.2.3.2.6	Passenger number	A525		1	28	28	N	D
A.5.2.3.2.7	Passenger number	A525		1	29	29	N	D
A.5.2.3.2.8	Passenger number	A525		1	30	30	N	D
A.5.2.3.3.1	Passenger maximum AIS	A525		10	31	40	A/N	-
A.5.2.3.3.2	Passenger maximum AIS	A525		10	41	50	A/N	-
A.5.2.3.3.3	Passenger maximum AIS	A525		10	51	60	A/N	-
A.5.2.3.3.4	Passenger maximum AIS	A525		10	61	70	A/N	-
A.5.2.3.3.5	Passenger maximum AIS	A525		10	71	80	A/N	-
A.5.2.3.3.6	Passenger maximum AIS	A525		10	81	90	A/N	-
A.5.2.3.3.7	Passenger maximum AIS	A525		10	91	100	A/N	-
A.5.2.3.3.8	Passenger maximum AIS	A525		10	101	110	A/N	-
A.5.2.3.4.1	Pedestrian number	A526		1	13	13	N	D
A.5.2.3.4.2	Pedestrian number	A526		1	14	14	N	D
A.5.2.3.4.3	Pedestrian number	A526		1	15	15	N	D
A.5.2.3.4.4	Pedestrian number	A526		1	16	16	N	D
A.5.2.3.4.5	Pedestrian number	A526		1	17	17	N	D
A.5.2.3.4.6	Pedestrian number	A526		1	18	18	N	D
A.5.2.3.4.7	Pedestrian number	A526		1	19	19	N	D
A.5.2.3.4.8	Pedestrian number	A526		1	20	20	N	D
A.5.2.3.5.1	Pedestrian maximum AIS	A526		10	21	30	A/N	-
A.5.2.3.5.2	Pedestrian maximum AIS	A526		10	31	40	A/N	-
A.5.2.3.5.3	Pedestrian maximum AIS	A526		10	41	50	A/N	-
A.5.2.3.5.4	Pedestrian maximum AIS	A526		10	51	60	A/N	-
A.5.2.3.5.5	Pedestrian maximum AIS	A526		10	61	70	A/N	-
A.5.2.3.5.6	Pedestrian maximum AIS	A526		10	71	80	A/N	-
A.5.2.3.5.7	Pedestrian maximum AIS	A526		10	81	90	A/N	-
A.5.2.3.5.8	Pedestrian maximum AIS	A526		10	91	100	A/N	-
A.5.3.1.1	Upper torso and upper extremities coverage material	A531		1	14	14	N	D
A.5.3.1.2	Are upper torso and upper extremities clothing motorcycle oriented?	A531		1	15	15	N	D2
A.5.3.1.3	Lower torso and lower extremities coverage material	A531		1	16	16	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.3.1.4	Are lower torso and lower extremities clothing motorcycle oriented?	A531		1	17	17	N	D2
A.5.3.1.5	Footwear material/type	A531		1	18	18	N	D
A.5.3.1.6	Is footwear motorcycle oriented?	A531		1	19	19	N	D
A.5.3.1.7	Glove material	A531		1	20	20	N	D2
A.5.3.1.8	Are gloves motorcycle oriented?	A531		1	21	21	N	D
A.5.3.1.9	Eye coverage in use, separate from helmet	A531		2	22	23	N	D
A.5.3.1.10	Colour of eye coverage lens	A531		1	24	24	N	D2
A.5.3.1.11	Wearing helmet on head?	A531		1	25	25	N	D2
A.5.3.1.12	Was helmet properly adjusted on head?	A531		1	26	26	N	D2
A.5.3.1.13	Was helmet securely fastened?	A531		1	27	27	N	D2
A.5.3.1.14	Type of helmet	A531		1	28	28	N	D
A.5.3.1.15	Type of coverage	A531		2	29	30	N	D
A.5.3.1.16	Predominating colour	A531		2	31	32	N	D
A.5.3.1.17	Colour of face shield, if present	A531		1	33	33	N	D
A.5.3.1.18	Helmet owned by wearer?	A531		1	34	34	N	D2
A.5.3.1.19	Helmet fit	A531		1	35	35	N	D
A.5.3.1.20	Claimed frequency of helmet use on head	A531		3	36	38	N	C
A.5.3.1.21.1	Conditions under which helmet is usually worn	A531		1	39	39	N	D
A.5.3.1.21.2	Conditions under which helmet is usually worn	A531		1	40	40	N	D
A.5.3.1.21.3	Conditions under which helmet is usually worn	A531		1	41	41	N	D
A.5.3.1.21.4	Conditions under which helmet is usually worn	A531		1	42	42	N	D
A.5.3.1.22	Manufacturer	A531		2	43	44	A/N	D
A.5.3.1.23	Date of manufacture	A531		8	45	52	N	O
A.5.3.1.24	Model	A531		10	53	62	A/N	-
A.5.3.1.25.1	Conformity to which qualification	A531		2	63	64	N	D
A.5.3.1.25.2	Conformity to which qualification	A531		2	65	66	N	D
A.5.3.1.25.3	Conformity to which qualification	A531		2	67	68	N	D
A.5.3.1.25.4	Conformity to which qualification	A531		2	69	70	N	D
A.5.3.1.26	Labelled size, in cm	A531		2	71	72	N	O
A.5.3.1.27	Helmet mass	A531		4	73	76	N	C
A.5.3.1.28	Condition prior to accident	A531		1	77	77	N	D
A.5.3.1.29	Type	A531		1	78	78	N	D
A.5.3.1.30	Was helmet retained in place on head during accident?	A531		1	79	79	N	D
A.5.3.1.31	Was there a retention system failure?	A531		1	80	80	N	D2
A.5.3.1.32	Type of failure	A531		1	81	81	N	D
A.5.3.1.33.1	Type of damage to shell, motorcycle rider	A531		1	82	82	N	D
A.5.3.1.33.2	Type of damage to shell, motorcycle rider	A531		1	83	83	N	D
A.5.3.1.33.3	Type of damage to shell, motorcycle rider	A531		1	84	84	N	D
A.5.3.1.33.4	Type of damage to shell, motorcycle rider	A531		1	85	85	N	D
A.5.3.1.33.5	Type of damage to shell, motorcycle rider	A531		1	86	86	N	D
A.5.3.1.34.1	Type of damage to shell, motorcycle rider	A531		2	87	88	N	D
A.5.3.1.34.2	Type of damage to shell, motorcycle rider	A531		2	89	90	N	D
A.5.3.1.34.3	Type of damage to shell, motorcycle rider	A531		2	91	92	N	D
A.5.3.1.34.4	Type of damage to shell, motorcycle rider	A531		2	93	94	N	D
A.5.3.1.34.5	Type of damage to shell, motorcycle rider	A531		2	95	96	N	D
A.5.3.1.35.1.1	Type of damage to shell, motorcycle rider	A531		2	97	98	N	D
A.5.3.1.35.1.2	Type of damage to shell, motorcycle rider	A531		2	99	100	N	D
A.5.3.1.35.1.3	Type of damage to shell, motorcycle rider	A531		2	101	102	N	D
A.5.3.1.35.1.4	Type of damage to shell, motorcycle rider	A531		2	103	104	N	D
A.5.3.1.35.1.5	Type of damage to shell, motorcycle rider	A531		2	105	106	N	D
A.5.3.1.35.2.1	Type of damage to shell, motorcycle rider	A531		2	107	108	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.3.1.35.2.2	Type of damage to shell, motorcycle rider	A531		2	109	110	N	D
A.5.3.1.35.2.3	Type of damage to shell, motorcycle rider	A531		2	111	112	N	D
A.5.3.1.35.2.4	Type of damage to shell, motorcycle rider	A531		2	113	114	N	D
A.5.3.1.35.2.5	Type of damage to shell, motorcycle rider	A531		2	115	116	N	D
A.5.3.1.35.3.1	Type of damage to shell, motorcycle rider	A531		2	117	118	N	D
A.5.3.1.35.3.2	Type of damage to shell, motorcycle rider	A531		2	119	120	N	D
A.5.3.1.35.3.3	Type of damage to shell, motorcycle rider	A531		2	121	122	N	D
A.5.3.1.35.3.4	Type of damage to shell, motorcycle rider	A531		2	123	124	N	D
A.5.3.1.35.3.5	Type of damage to shell, motorcycle rider	A531		2	125	126	N	D
A.5.3.2.1	Upper torso and upper extremities coverage material	A532		1	14	14	N	D
A.5.3.2.2	Are upper torso and upper extremities clothing motorcycle oriented?	A532		1	15	15	N	D2
A.5.3.2.3	Lower torso and lower extremities coverage material	A532		1	16	16	N	D
A.5.3.2.4	Are lower torso and lower extremities clothing motorcycle oriented?	A532		1	17	17	N	D2
A.5.3.2.5	Footwear material/type	A532		1	18	18	N	D
A.5.3.2.6	Is footwear motorcycle oriented?	A532		1	19	19	N	D
A.5.3.2.7	Glove material	A532		1	20	20	N	D2
A.5.3.2.8	Are gloves motorcycle oriented?	A532		1	21	21	N	D
A.5.3.2.9	Eye coverage in use, separate from helmet	A532		2	22	23	N	D
A.5.3.2.10	Colour of eye coverage lens	A532		1	24	24	N	D2
A.5.3.2.11	Wearing helmet on head?	A532		1	25	25	N	D2
A.5.3.2.12	Was helmet properly adjusted on head?	A532		1	26	26	N	D2
A.5.3.2.13	Was helmet securely fastened?	A532		1	27	27	N	D2
A.5.3.2.14	Type of helmet	A532		1	28	28	N	D
A.5.3.2.15	Type of coverage	A532		2	29	30	N	D
A.5.3.2.16	Predominating colour	A532		2	31	32	N	D
A.5.3.2.17	Colour of face shield, if present	A532		1	33	33	N	D
A.5.3.2.18	Helmet owned by wearer?	A532		1	34	34	N	D2
A.5.3.2.19	Helmet fit	A532		1	35	35	N	D
A.5.3.2.20	Claimed frequency of helmet use on head	A532		3	36	38	N	C
A.5.3.2.21.1	Conditions under which helmet is usually worn	A532		1	39	39	N	D
A.5.3.2.21.2	Conditions under which helmet is usually worn	A532		1	40	40	N	D
A.5.3.2.21.3	Conditions under which helmet is usually worn	A532		1	41	41	N	D
A.5.3.2.21.4	Conditions under which helmet is usually worn	A532		1	42	42	N	D
A.5.3.2.22	Manufacturer	A532		2	43	44	A/N	D
A.5.3.2.23	Date of manufacture	A532		8	45	52	N	O
A.5.3.2.24	Model	A532		10	53	62	A/N	-
A.5.3.2.25.1	Conformity to which qualification	A532		2	63	64	N	D
A.5.3.2.25.2	Conformity to which qualification	A532		2	65	66	N	D
A.5.3.2.25.3	Conformity to which qualification	A532		2	67	68	N	D
A.5.3.2.25.4	Conformity to which qualification	A532		2	69	70	N	D
A.5.3.2.26	Labelled size, in cm	A532		2	71	72	N	O
A.5.3.2.27	Helmet mass	A532		4	73	76	N	C
A.5.3.2.28	Condition prior to accident	A532		1	77	77	N	D
A.5.3.2.29	Type	A532		1	78	78	N	D
A.5.3.2.30	Was helmet retained in place on head during accident?	A532		1	79	79	N	D
A.5.3.2.31	Was there a retention system failure?	A532		1	80	80	N	D2
A.5.3.2.32	Type of failure	A532		1	81	81	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.5.3.2.33.1	Type of damage to shell, motorcycle passenger	A532		1	82	82	N	D
A.5.3.2.33.2	Type of damage to shell, motorcycle passenger	A532		1	83	83	N	D
A.5.3.2.33.3	Type of damage to shell, motorcycle passenger	A532		1	84	84	N	D
A.5.3.2.33.4	Type of damage to shell, motorcycle passenger	A532		1	85	85	N	D
A.5.3.2.33.5	Type of damage to shell, motorcycle passenger	A532		1	86	86	N	D
A.5.3.2.34.1	Type of damage to shell, motorcycle passenger	A532		2	87	88	N	D
A.5.3.2.34.2	Type of damage to shell, motorcycle passenger	A532		2	89	90	N	D
A.5.3.2.34.3	Type of damage to shell, motorcycle passenger	A532		2	91	92	N	D
A.5.3.2.34.4	Type of damage to shell, motorcycle passenger	A532		2	93	94	N	D
A.5.3.2.34.5	Type of damage to shell, motorcycle passenger	A532		2	95	96	N	D
A.5.3.2.35.1.1	Type of damage to shell, motorcycle passenger	A532		2	97	98	N	D
A.5.3.2.35.1.2	Type of damage to shell, motorcycle passenger	A532		2	99	100	N	D
A.5.3.2.35.1.3	Type of damage to shell, motorcycle passenger	A532		2	101	102	N	D
A.5.3.2.35.1.4	Type of damage to shell, motorcycle passenger	A532		2	103	104	N	D
A.5.3.2.35.1.5	Type of damage to shell, motorcycle passenger	A532		2	105	106	N	D
A.5.3.2.35.2.1	Type of damage to shell, motorcycle passenger	A532		2	107	108	N	D
A.5.3.2.35.2.2	Type of damage to shell, motorcycle passenger	A532		2	109	110	N	D
A.5.3.2.35.2.3	Type of damage to shell, motorcycle passenger	A532		2	111	112	N	D
A.5.3.2.35.2.4	Type of damage to shell, motorcycle passenger	A532		2	113	114	N	D
A.5.3.2.35.2.5	Type of damage to shell, motorcycle passenger	A532		2	115	116	N	D
A.5.3.2.35.3.1	Type of damage to shell, motorcycle passenger	A532		2	117	118	N	D
A.5.3.2.35.3.2	Type of damage to shell, motorcycle passenger	A532		2	119	120	N	D
A.5.3.2.35.3.3	Type of damage to shell, motorcycle passenger	A532		2	121	122	N	D
A.5.3.2.35.3.4	Type of damage to shell, motorcycle passenger	A532		2	123	124	N	D
A.5.3.2.35.3.5	Type of damage to shell, motorcycle passenger	A532		2	125	126	N	D
A.6.1.1.1	Roadway design defect	A611		1	14	14	N	D
A.6.1.1.2	Roadway maintenance defect	A611		1	15	15	N	D
A.6.1.1.3	Traffic controls defect or malfunction	A611		1	16	16	N	D
A.6.1.1.4	Traffic hazard, including construction and maintenance operations	A611		1	17	17	N	D
A.6.1.1.5	Weather related problem	A611		1	18	18	N	D
A.6.1.1.6	Visual background of other vehicle along motorcycle rider's line-of-sight at time of precipitating event	A611		1	19	19	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.1.1.7	Did insects affect the rider?	A611		1	20	20	N	D
A.6.1.2.1	Roadway design defect	A612		1	14	14	N	D
A.6.1.2.2	Roadway maintenance defect	A612		1	15	15	N	D
A.6.1.2.3	Traffic controls defect or malfunction	A612		1	16	16	N	D
A.6.1.2.4	Traffic hazard, including construction and maintenance operations	A612		1	17	17	N	D
A.6.1.2.5	Weather related problem	A612		1	18	18	N	D
A.6.1.2.6	Visual background of motorcycle along OV driver's line-of-sight at time of precipitating event	A612		1	19	19	N	D
A.6.2.1.1	Tyre size	A621		1	13	13	N	D
A.6.2.1.2	Tyre inflation pressure	A621		1	14	14	N	D
A.6.2.1.3	Accident causation related to tyre or wheel condition	A621		2	15	16	N	D
A.6.2.1.4	Accident causation related to suspension condition	A621		1	17	17	N	D
A.6.2.1.5	Accident causation related to frame condition	A621		1	23	23	N	D
A.6.2.1.6	Accident causation related to cornering clearance	A621		2	24	25	N	D
A.6.2.1.7	Accident or injury causation related to seat	A621		1	26	26	N	D
A.6.2.1.8	Accident causation related to drive chain, belt, or shaft condition	A621		1	27	27	N	D
A.6.2.1.9	Accident or injury causation related to exhaust system condition	A621		1	28	28	N	D
A.6.2.1.10	Motorcycle vehicle failure, accident cause related defect	A621		2	29	30	N	D
A.6.2.1.11	Was pre-crash fire cause of accident	A621		1	31	31	N	D2
A.6.2.1.12	Did cargo/luggage contribute to accident causation?	A621		2	32	33	N	D
A.6.2.1.13	Other vehicle failure, accident cause related defect	A622		2	14	15	N	D
A.6.2.2.1	Tyre size	A621		1	18	18	N	D
A.6.2.2.2	Tyre inflation pressure	A621		1	19	19	N	D
A.6.2.2.3	Accident causation related to tyre or wheel condition	A621		2	20	21	N	D
A.6.2.2.4	Accident causation related to suspension condition	A621		1	22	22	N	D
A.6.2.3.1	Injury involvement	A621		1	34	34	N	D2
A.6.2.3.2	Injury involvement	A621		1	35	35	N	D2
A.6.2.3.3	Injury involvement	A621		1	36	36	N	D2
A.6.2.3.4	Injury involvement	A621		1	37	37	N	D2
A.6.2.3.5	Injury involvement	A621		1	38	38	N	D2
A.6.2.3.6	Injury involvement	A621		1	39	39	N	D2
A.6.2.3.7	Injury involvement	A621		1	40	40	N	D2
A.6.2.3.8	Injury involvement	A621		1	41	41	N	D2
A.6.2.3.9	Injury involvement	A621		1	42	42	N	D2
A.6.2.3.10	Injury involvement	A621		1	43	43	N	D2
A.6.2.3.11	Injury involvement	A621		1	44	44	N	D2
A.6.2.3.12	Injury involvement	A621		1	45	45	N	D2
A.6.2.3.13	Injury involvement	A621		1	46	46	N	D2
A.6.2.3.14	Injury involvement	A621		1	47	47	N	D2
A.6.2.3.15	Injury involvement	A621		1	48	48	N	D2
A.6.2.3.16	Injury involvement	A621		1	49	49	N	D2
A.6.2.3.17	Injury involvement	A621		1	50	50	N	D2
A.6.2.3.18	Injury involvement	A621		1	51	51	N	D2
A.6.2.3.19	Injury involvement	A621		1	52	52	N	D2

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.2.3.20	Injury involvement	A621		1	53	53	N	D2
A.6.2.3.21	Injury involvement	A621		1	54	54	N	D2
A.6.2.3.22	Injury involvement	A621		1	55	55	N	D2
A.6.2.3.23	Injury involvement	A621		1	56	56	N	D2
A.6.2.3.24	Injury involvement	A621		1	57	57	N	D2
A.6.2.3.25	Injury involvement	A621		1	58	58	N	D2
A.6.2.3.26	Injury involvement	A621		1	59	59	N	D2
A.6.2.3.27	Injury involvement	A621		1	60	60	N	D2
A.6.2.3.28	Injury involvement	A621		1	61	61	N	D2
A.6.2.3.29	Injury involvement	A621		1	62	62	N	D2
A.6.2.3.30	Injury involvement	A621		1	63	63	N	D2
A.6.2.3.31	Injury involvement	A621		1	64	64	N	D2
A.6.2.3.32	Injury involvement	A621		1	65	65	N	D2
A.6.2.3.33	Injury involvement	A621		1	66	66	N	D2
A.6.2.3.34	Injury involvement	A621		1	67	67	N	D2
A.6.2.3.35	Injury involvement	A621		1	68	68	N	D2
A.6.2.3.36	Injury involvement	A621		1	69	69	N	D2
A.6.2.3.37	Injury involvement	A621		1	70	70	N	D2
A.6.2.3.38	Injury involvement	A621		1	71	71	N	D2
A.6.2.3.39	Injury involvement	A621		1	72	72	N	D2
A.6.2.3.40	Injury involvement	A621		1	73	73	N	D2
A.6.2.3.41	Injury involvement	A621		1	74	74	N	D2
A.6.2.3.42	Injury involvement	A621		1	75	75	N	D2
A.6.2.3.43	Injury involvement	A621		1	76	76	N	D2
A.6.2.3.44	Injury involvement	A621		1	77	77	N	D2
A.6.2.3.45	Injury involvement	A621		1	78	78	N	D2
A.6.2.3.46	Injury involvement	A621		1	79	79	N	D2
A.6.2.3.47	Injury involvement	A621		1	80	80	N	D2
A.6.2.3.48	Injury involvement	A621		1	81	81	N	D2
A.6.2.3.49	Injury involvement	A621		1	82	82	N	D2
A.6.2.3.50	Injury involvement	A621		1	83	83	N	D2
A.6.2.3.51	Injury involvement	A621		1	84	84	N	D2
A.6.2.3.52	Injury involvement	A621		1	85	85	N	D2
A.6.2.3.53	Injury involvement	A621		1	86	86	N	D2
A.6.2.3.54	Injury involvement	A621		1	87	87	N	D2
A.6.2.3.55	Injury involvement	A621		1	88	88	N	D2
A.6.2.3.56	Injury involvement	A621		1	89	89	N	D2
A.6.2.3.57	Injury involvement	A621		1	90	90	N	D2
A.6.3.1.1	Rider unsafe acts in this accident	A631		1	14	14	N	D
A.6.3.1.2	Effect of rider/passenger interaction on injury causation	A631		1	15	15	N	D
A.6.3.1.3	Attention failure, including distractions and stress	A631		1	16	16	N	D2
A.6.3.1.4	Lane choice	A631		1	17	17	N	D2
A.6.3.1.5	Traffic scan	A631		1	18	18	N	D2
A.6.3.1.6	Visual obstructions neglected	A631		1	19	19	N	D2
A.6.3.1.7	Hazard detection failure	A631		1	20	20	N	D2
A.6.3.1.8	Faulty traffic strategy	A631		1	21	21	N	D2
A.6.3.1.9	Speed compared to surrounding traffic	A631		1	22	22	N	D2
A.6.3.1.10	Safe position with respect to other traffic	A631		1	23	23	N	D2
A.6.3.1.11	Loss of control mode	A631		2	24	25	N	D
A.6.3.1.12	Control unfamiliarity	A631		1	26	26	N	D2
A.6.3.1.13	Skills deficiency	A631		1	27	27	N	D2
A.6.3.1.14	Vehicle unfamiliarity	A631		1	28	28	N	D2
A.6.3.1.15	Motorcycle control operations just before precipitating factor	A631		2	29	30	N	D
A.6.3.1.16	Did control operations interfere with driving tasks?	A631		1	31	31	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.3.1.17	Did motorcycle rider have hand/fingers prepositioned on front brake before precipitating event?	A631		1	32	32	N	D2
A.6.3.1.18.1	Collision avoidance, evasive maneuver taken or attempted by motorcycle rider	A631		2	33	34	N	D
A.6.3.1.18.2	Collision avoidance, evasive maneuver taken or attempted by motorcycle rider	A631		2	35	36	N	D
A.6.3.1.18.3	Collision avoidance, evasive maneuver taken or attempted by motorcycle rider	A631		2	37	38	N	D
A.6.3.1.19.1	If continuation, no action due to:	A631		2	39	40	N	D
A.6.3.1.19.2	If continuation, no action due to:	A631		2	41	42	N	D
A.6.3.1.19.3	If continuation, no action due to:	A631		2	43	44	N	D
A.6.3.1.20	Was the evasive action the proper choice for the situation?	A631		1	45	45	N	D2
A.6.3.1.21	Was the action properly executed?	A631		1	46	46	N	D2
A.6.3.1.22	Failed collision avoidance due to	A631		1	47	47	N	D
A.6.3.1.23	Language distress; sign comprehension	A631		1	48	48	N	D2
A.6.3.1.24	Traffic knowledge, strategy	A631		1	49	49	N	D2
A.6.3.1.25	Vehicle control skills	A631		1	50	50	N	D2
A.6.3.1.26	Personality evaluation	A631		1	51	51	N	D2
A.6.3.1.27	Personality evaluation	A631		1	52	52	N	D2
A.6.3.1.28	Personality evaluation	A631		1	53	53	N	D2
A.6.3.1.29	Risk taking tendency evaluation	A631		1	54	54	N	D2
A.6.3.1.30	Risk taking tendency evaluation	A631		1	55	55	N	D2
A.6.3.1.31	Risk taking tendency evaluation	A631		1	56	56	N	D2
A.6.3.1.32	Risk taking tendency evaluation	A631		1	57	57	N	D2
A.6.3.1.33	Did upper extremities and upper torso coverage reduce or prevent injury?	A631		1	58	58	N	D
A.6.3.1.34	Did lower extremities and lower torso coverage reduce or prevent injury?	A631		1	59	59	N	D
A.6.3.1.35	Did footwear reduce or prevent injury?	A631		1	60	60	N	D
A.6.3.1.36	Did gloves reduce or prevent injury?	A631		1	61	61	N	D
A.6.3.1.37	Did eye coverage reduce or prevent injury?	A631		1	62	62	N	D
A.6.3.1.38	Eye or face protection relation to pre-crash events	A631		1	63	63	N	D
A.6.3.1.39	Did helmet reduce or prevent injury?	A631		1	64	64	N	D
A.6.3.1.40	Did helmet have an effect on pre-crash events	A631		1	65	65	N	D2
A.6.3.1.41.1	What was the effect of the helmet?	A631		2	66	67	N	D
A.6.3.1.41.2	What was the effect of the helmet?	A631		2	68	69	N	D
A.6.3.1.41.3	What was the effect of the helmet?	A631		2	70	71	N	D
A.6.3.1.42	If helmet ejected during accident, what was the cause?	A631		2	72	73	N	D
A.6.3.1.43	Conspicuity contribution	A631		1	74	74	N	D
A.6.3.1.44	Comfort, fatigue, attention	A631		1	75	75	N	D
A.6.3.1.45	Control interference	A631		1	76	76	N	D
A.6.3.2.1	Did passenger contribute to accident causation?	A632		1	14	14	N	D
A.6.3.2.2	Effect of rider/passenger interaction on injury causation	A632		1	15	15	N	D
A.6.3.2.33	Did upper extremities and upper torso coverage reduce or prevent injury?	A632		1	58	58	N	D
A.6.3.2.34	Did lower extremities and lower torso coverage reduce or prevent injury?	A632		1	59	59	N	D
A.6.3.2.35	Did footwear reduce or prevent injury?	A632		1	60	60	N	D
A.6.3.2.36	Did gloves reduce or prevent injury?	A632		1	61	61	N	D

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.3.2.37	Did eye coverage reduce or prevent injury?	A632		1	62	62	N	D
A.6.3.2.39	Did helmet reduce or prevent injury?	A632		1	64	64	N	D
A.6.3.2.42	If helmet ejected during accident, what was the cause?	A632		2	72	73	N	D
A.6.3.3.1	Did other vehicle passengers contribute to accident causation?	A633		1	14	14	N	D
A.6.3.3.3	Attention failure, including distractions and stress	A633		1	16	16	N	D2
A.6.3.3.4	Lane choice	A633		1	17	17	N	D2
A.6.3.3.5	Traffic scan	A633		1	18	18	N	D2
A.6.3.3.6	Visual obstructions neglected	A633		1	19	19	N	D2
A.6.3.3.7	Hazard detection failure	A633		1	20	20	N	D2
A.6.3.3.8	Faulty traffic strategy	A633		1	21	21	N	D2
A.6.3.3.9	Speed compared to surrounding traffic	A633		1	22	22	N	D2
A.6.3.3.10	Safe position with respect to other traffic	A633		1	23	23	N	D2
A.6.3.3.12	Control unfamiliarity	A633		1	26	26	N	D2
A.6.3.3.13	Skills deficiency	A633		1	27	27	N	D2
A.6.3.3.14	Vehicle unfamiliarity	A633		1	28	28	N	D2
A.6.3.3.18.1	Collision avoidance, evasive maneuver taken or attempted by OV driver	A633		2	33	34	N	D
A.6.3.3.18.2	Collision avoidance, evasive maneuver taken or attempted by OV driver	A633		2	35	36	N	D
A.6.3.3.18.3	Collision avoidance, evasive maneuver taken or attempted by OV driver	A633		2	37	38	N	D
A.6.3.3.19.1	If continuation, no action due to:	A633		2	39	40	N	D
A.6.3.3.19.2	If continuation, no action due to:	A633		2	41	42	N	D
A.6.3.3.19.3	If continuation, no action due to:	A633		2	43	44	N	D
A.6.3.3.20	Was the evasive action the proper choice for the situation?	A633		1	45	45	N	D2
A.6.3.3.21	Was the action properly executed?	A633		1	46	46	N	D2
A.6.3.3.22	Failed collision avoidance due to	A633		1	47	47	N	D
A.6.3.3.23	Language distress; sign comprehension	A633		1	48	48	N	D2
A.6.3.3.24	Traffic knowledge, strategy	A633		1	49	49	N	D2
A.6.3.3.25	Vehicle control skills	A633		1	50	50	N	D2
A.6.3.3.26	Personality evaluation	A633		1	51	51	N	D2
A.6.3.3.27	Personality evaluation	A633		1	52	52	N	D2
A.6.3.3.28	Personality evaluation	A633		1	53	53	N	D2
A.6.3.3.29	Risk taking tendency evaluation	A633		1	54	54	N	D2
A.6.3.3.30	Risk taking tendency evaluation	A633		1	55	55	N	D2
A.6.3.3.31	Risk taking tendency evaluation	A633		1	56	56	N	D2
A.6.3.3.32	Risk taking tendency evaluation	A633		1	57	57	N	D2
A.6.4.1.1	Accident contributing factors	A641		2	13	14	N	D
A.6.4.1.2	Accident contributing factors	A641		2	15	16	N	D
A.6.4.1.3	Accident contributing factors	A641		2	17	18	N	D
A.6.4.2.1	Culpability apportionment this accident	A641		3	19	21	N	C
A.6.4.2.2	Culpability apportionment this accident	A641		3	22	24	N	C
A.6.4.2.3	Culpability apportionment this accident	A641		3	25	27	N	C
A.6.4.2.4	Culpability apportionment this accident	A641		3	28	30	N	C
A.6.4.2.5	Culpability apportionment this accident	A641		3	31	33	N	C
A.6.4.3.1	Culpability apportionment this accident	A641		1	34	34	N	C
A.6.4.3.2	Culpability apportionment this accident	A641		1	35	35	N	C
A.6.4.3.3	Culpability apportionment this accident	A641		1	36	36	N	C
A.6.4.3.4	Culpability apportionment this accident	A641		1	37	37	N	C
A.6.4.3.5	Culpability apportionment this accident	A641		1	38	38	N	C
A.6.5.1	Motorcyclist	A651		1	14	14	N	D2
A.6.5.2.1.1	Body Region: Head	A652	1	4	15	18	A/N	-
A.6.5.2.1.2	Body Region: Head	A652	1	4	19	22	A/N	-

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.2.1.3	Body Region: Head	A652	1	4	23	26	A/N	-
A.6.5.2.1.4	Body Region: Head	A652	1	4	27	30	A/N	-
A.6.5.2.1.5	Body Region: Head	A652	1	4	31	34	A/N	-
A.6.5.2.1.6	Body Region: Head	A652	1	4	35	38	A/N	-
A.6.5.2.1.7	Body Region: Head	A652	1	4	39	42	A/N	-
A.6.5.2.1.8	Body Region: Head	A652	1	4	43	46	A/N	-
A.6.5.2.1.9	Body Region: Head	A652	1	4	47	50	A/N	-
A.6.5.2.2.1	Body Region: Head	A652	1	4	51	54	A/N	-
A.6.5.2.2.2	Body Region: Head	A652	1	4	55	58	A/N	-
A.6.5.2.2.3	Body Region: Head	A652	1	4	59	62	A/N	-
A.6.5.2.2.4	Body Region: Head	A652	1	4	63	66	A/N	-
A.6.5.2.2.5	Body Region: Head	A652	1	4	67	70	A/N	-
A.6.5.2.2.6	Body Region: Head	A652	1	4	71	74	A/N	-
A.6.5.2.2.7	Body Region: Head	A652	1	4	75	78	A/N	-
A.6.5.2.2.8	Body Region: Head	A652	1	4	79	82	A/N	-
A.6.5.2.2.9	Body Region: Head	A652	1	4	83	86	A/N	-
A.6.5.3.1.1	Body region: Neck (except spine)	A652	2	4	15	18	A/N	-
A.6.5.3.1.2	Body region: Neck (except spine)	A652	2	4	19	22	A/N	-
A.6.5.3.1.3	Body region: Neck (except spine)	A652	2	4	23	26	A/N	-
A.6.5.3.1.4	Body region: Neck (except spine)	A652	2	4	27	30	A/N	-
A.6.5.3.1.5	Body region: Neck (except spine)	A652	2	4	31	34	A/N	-
A.6.5.3.1.6	Body region: Neck (except spine)	A652	2	4	35	38	A/N	-
A.6.5.3.1.7	Body region: Neck (except spine)	A652	2	4	39	42	A/N	-
A.6.5.3.1.8	Body region: Neck (except spine)	A652	2	4	43	46	A/N	-
A.6.5.3.1.9	Body region: Neck (except spine)	A652	2	4	47	50	A/N	-
A.6.5.3.2.1	Body region: Neck (except spine)	A652	2	4	51	54	A/N	-
A.6.5.3.2.2	Body region: Neck (except spine)	A652	2	4	55	58	A/N	-
A.6.5.3.2.3	Body region: Neck (except spine)	A652	2	4	59	62	A/N	-
A.6.5.3.2.4	Body region: Neck (except spine)	A652	2	4	63	66	A/N	-
A.6.5.3.2.5	Body region: Neck (except spine)	A652	2	4	67	70	A/N	-
A.6.5.3.2.6	Body region: Neck (except spine)	A652	2	4	71	74	A/N	-
A.6.5.3.2.7	Body region: Neck (except spine)	A652	2	4	75	78	A/N	-
A.6.5.3.2.8	Body region: Neck (except spine)	A652	2	4	79	82	A/N	-
A.6.5.3.2.9	Body region: Neck (except spine)	A652	2	4	83	86	A/N	-
A.6.5.4.1.1	Body Region: Thorax	A652	3	4	15	18	A/N	-
A.6.5.4.1.2	Body Region: Thorax	A652	3	4	19	22	A/N	-
A.6.5.4.1.3	Body Region: Thorax	A652	3	4	23	26	A/N	-
A.6.5.4.1.4	Body Region: Thorax	A652	3	4	27	30	A/N	-
A.6.5.4.1.5	Body Region: Thorax	A652	3	4	31	34	A/N	-
A.6.5.4.1.6	Body Region: Thorax	A652	3	4	35	38	A/N	-
A.6.5.4.1.7	Body Region: Thorax	A652	3	4	39	42	A/N	-
A.6.5.4.1.8	Body Region: Thorax	A652	3	4	43	46	A/N	-
A.6.5.4.1.9	Body Region: Thorax	A652	3	4	47	50	A/N	-
A.6.5.4.2.1	Body Region: Thorax	A652	3	4	51	54	A/N	-
A.6.5.4.2.2	Body Region: Thorax	A652	3	4	55	58	A/N	-
A.6.5.4.2.3	Body Region: Thorax	A652	3	4	59	62	A/N	-
A.6.5.4.2.4	Body Region: Thorax	A652	3	4	63	66	A/N	-
A.6.5.4.2.5	Body Region: Thorax	A652	3	4	67	70	A/N	-
A.6.5.4.2.6	Body Region: Thorax	A652	3	4	71	74	A/N	-
A.6.5.4.2.7	Body Region: Thorax	A652	3	4	75	78	A/N	-
A.6.5.4.2.8	Body Region: Thorax	A652	3	4	79	82	A/N	-
A.6.5.4.2.9	Body Region: Thorax	A652	3	4	83	86	A/N	-
A.6.5.5.1.1	Body Region: Upper extremities	A652	4	4	15	18	A/N	-
A.6.5.5.1.2	Body Region: Upper extremities	A652	4	4	19	22	A/N	-
A.6.5.5.1.3	Body Region: Upper extremities	A652	4	4	23	26	A/N	-
A.6.5.5.1.4	Body Region: Upper extremities	A652	4	4	27	30	A/N	-
A.6.5.5.1.5	Body Region: Upper extremities	A652	4	4	31	34	A/N	-
A.6.5.5.1.6	Body Region: Upper extremities	A652	4	4	35	38	A/N	-

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.5.1.7	Body Region: Upper extremities	A652	4	4	39	42	A/N	-
A.6.5.5.1.8	Body Region: Upper extremities	A652	4	4	43	46	A/N	-
A.6.5.5.1.9	Body Region: Upper extremities	A652	4	4	47	50	A/N	-
A.6.5.5.2.1	Body Region: Upper extremities	A652	4	4	51	54	A/N	-
A.6.5.5.2.2	Body Region: Upper extremities	A652	4	4	55	58	A/N	-
A.6.5.5.2.3	Body Region: Upper extremities	A652	4	4	59	62	A/N	-
A.6.5.5.2.4	Body Region: Upper extremities	A652	4	4	63	66	A/N	-
A.6.5.5.2.5	Body Region: Upper extremities	A652	4	4	67	70	A/N	-
A.6.5.5.2.6	Body Region: Upper extremities	A652	4	4	71	74	A/N	-
A.6.5.5.2.7	Body Region: Upper extremities	A652	4	4	75	78	A/N	-
A.6.5.5.2.8	Body Region: Upper extremities	A652	4	4	79	82	A/N	-
A.6.5.5.2.9	Body Region: Upper extremities	A652	4	4	83	86	A/N	-
A.6.5.6.1.1	Body Region: Abdomen	A652	5	4	15	18	A/N	-
A.6.5.6.1.2	Body Region: Abdomen	A652	5	4	19	22	A/N	-
A.6.5.6.1.3	Body Region: Abdomen	A652	5	4	23	26	A/N	-
A.6.5.6.1.4	Body Region: Abdomen	A652	5	4	27	30	A/N	-
A.6.5.6.1.5	Body Region: Abdomen	A652	5	4	31	34	A/N	-
A.6.5.6.1.6	Body Region: Abdomen	A652	5	4	35	38	A/N	-
A.6.5.6.1.7	Body Region: Abdomen	A652	5	4	39	42	A/N	-
A.6.5.6.1.8	Body Region: Abdomen	A652	5	4	43	46	A/N	-
A.6.5.6.1.9	Body Region: Abdomen	A652	5	4	47	50	A/N	-
A.6.5.6.2.1	Body Region: Abdomen	A652	5	4	51	54	A/N	-
A.6.5.6.2.2	Body Region: Abdomen	A652	5	4	55	58	A/N	-
A.6.5.6.2.3	Body Region: Abdomen	A652	5	4	59	62	A/N	-
A.6.5.6.2.4	Body Region: Abdomen	A652	5	4	63	66	A/N	-
A.6.5.6.2.5	Body Region: Abdomen	A652	5	4	67	70	A/N	-
A.6.5.6.2.6	Body Region: Abdomen	A652	5	4	71	74	A/N	-
A.6.5.6.2.7	Body Region: Abdomen	A652	5	4	75	78	A/N	-
A.6.5.6.2.8	Body Region: Abdomen	A652	5	4	79	82	A/N	-
A.6.5.6.2.9	Body Region: Abdomen	A652	5	4	83	86	A/N	-
A.6.5.7.1.1	Body Region: Pelvis	A652	6	4	15	18	A/N	-
A.6.5.7.1.2	Body Region: Pelvis	A652	6	4	19	22	A/N	-
A.6.5.7.1.3	Body Region: Pelvis	A652	6	4	23	26	A/N	-
A.6.5.7.1.4	Body Region: Pelvis	A652	6	4	27	30	A/N	-
A.6.5.7.1.5	Body Region: Pelvis	A652	6	4	31	34	A/N	-
A.6.5.7.1.6	Body Region: Pelvis	A652	6	4	35	38	A/N	-
A.6.5.7.1.7	Body Region: Pelvis	A652	6	4	39	42	A/N	-
A.6.5.7.1.8	Body Region: Pelvis	A652	6	4	43	46	A/N	-
A.6.5.7.1.9	Body Region: Pelvis	A652	6	4	47	50	A/N	-
A.6.5.7.2.1	Body Region: Pelvis	A652	6	4	51	54	A/N	-
A.6.5.7.2.2	Body Region: Pelvis	A652	6	4	55	58	A/N	-
A.6.5.7.2.3	Body Region: Pelvis	A652	6	4	59	62	A/N	-
A.6.5.7.2.4	Body Region: Pelvis	A652	6	4	63	66	A/N	-
A.6.5.7.2.5	Body Region: Pelvis	A652	6	4	67	70	A/N	-
A.6.5.7.2.6	Body Region: Pelvis	A652	6	4	71	74	A/N	-
A.6.5.7.2.7	Body Region: Pelvis	A652	6	4	75	78	A/N	-
A.6.5.7.2.8	Body Region: Pelvis	A652	6	4	79	82	A/N	-
A.6.5.7.2.9	Body Region: Pelvis	A652	6	4	83	86	A/N	-
A.6.5.8.1.1	Body Region: Spine	A652	7	4	15	18	A/N	-
A.6.5.8.1.2	Body Region: Spine	A652	7	4	19	22	A/N	-
A.6.5.8.1.3	Body Region: Spine	A652	7	4	23	26	A/N	-
A.6.5.8.1.4	Body Region: Spine	A652	7	4	27	30	A/N	-
A.6.5.8.1.5	Body Region: Spine	A652	7	4	31	34	A/N	-
A.6.5.8.1.6	Body Region: Spine	A652	7	4	35	38	A/N	-
A.6.5.8.1.7	Body Region: Spine	A652	7	4	39	42	A/N	-
A.6.5.8.1.8	Body Region: Spine	A652	7	4	43	46	A/N	-
A.6.5.8.1.9	Body Region: Spine	A652	7	4	47	50	A/N	-
A.6.5.8.2.1	Body Region: Spine	A652	7	4	51	54	A/N	-

Table A.4. Accident database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
A.6.5.8.2.2	Body Region: Spine	A652	7	4	55	58	A/N	-
A.6.5.8.2.3	Body Region: Spine	A652	7	4	59	62	A/N	-
A.6.5.8.2.4	Body Region: Spine	A652	7	4	63	66	A/N	-
A.6.5.8.2.5	Body Region: Spine	A652	7	4	67	70	A/N	-
A.6.5.8.2.6	Body Region: Spine	A652	7	4	71	74	A/N	-
A.6.5.8.2.7	Body Region: Spine	A652	7	4	75	78	A/N	-
A.6.5.8.2.8	Body Region: Spine	A652	7	4	79	82	A/N	-
A.6.5.8.2.9	Body Region: Spine	A652	7	4	83	86	A/N	-
A.6.5.9.1.1	Body Region: Lower extremities	A652	8	4	15	18	A/N	-
A.6.5.9.1.2	Body Region: Lower extremities	A652	8	4	19	22	A/N	-
A.6.5.9.1.3	Body Region: Lower extremities	A652	8	4	23	26	A/N	-
A.6.5.9.1.4	Body Region: Lower extremities	A652	8	4	27	30	A/N	-
A.6.5.9.1.5	Body Region: Lower extremities	A652	8	4	31	34	A/N	-
A.6.5.9.1.6	Body Region: Lower extremities	A652	8	4	35	38	A/N	-
A.6.5.9.1.7	Body Region: Lower extremities	A652	8	4	39	42	A/N	-
A.6.5.9.1.8	Body Region: Lower extremities	A652	8	4	43	46	A/N	-
A.6.5.9.1.9	Body Region: Lower extremities	A652	8	4	47	50	A/N	-
A.6.5.9.2.1	Body Region: Lower extremities	A652	8	4	51	54	A/N	-
A.6.5.9.2.2	Body Region: Lower extremities	A652	8	4	55	58	A/N	-
A.6.5.9.2.3	Body Region: Lower extremities	A652	8	4	59	62	A/N	-
A.6.5.9.2.4	Body Region: Lower extremities	A652	8	4	63	66	A/N	-
A.6.5.9.2.5	Body Region: Lower extremities	A652	8	4	67	70	A/N	-
A.6.5.9.2.6	Body Region: Lower extremities	A652	8	4	71	74	A/N	-
A.6.5.9.2.7	Body Region: Lower extremities	A652	8	4	75	78	A/N	-
A.6.5.9.2.8	Body Region: Lower extremities	A652	8	4	79	82	A/N	-
A.6.5.9.2.9	Body Region: Lower extremities	A652	8	4	83	86	A/N	-
A.6.5.10.1.1	Body Region: Whole body	A652	9	4	15	18	A/N	-
A.6.5.10.1.2	Body Region: Whole body	A652	9	4	19	22	A/N	-
A.6.5.10.1.3	Body Region: Whole body	A652	9	4	23	26	A/N	-
A.6.5.10.1.4	Body Region: Whole body	A652	9	4	27	30	A/N	-
A.6.5.10.1.5	Body Region: Whole body	A652	9	4	31	34	A/N	-
A.6.5.10.1.6	Body Region: Whole body	A652	9	4	35	38	A/N	-
A.6.5.10.1.7	Body Region: Whole body	A652	9	4	39	42	A/N	-
A.6.5.10.1.8	Body Region: Whole body	A652	9	4	43	46	A/N	-
A.6.5.10.1.9	Body Region: Whole body	A652	9	4	47	50	A/N	-
A.6.5.10.2.1	Body Region: Whole body	A652	9	4	51	54	A/N	-
A.6.5.10.2.2	Body Region: Whole body	A652	9	4	55	58	A/N	-
A.6.5.10.2.3	Body Region: Whole body	A652	9	4	59	62	A/N	-
A.6.5.10.2.4	Body Region: Whole body	A652	9	4	63	66	A/N	-
A.6.5.10.2.5	Body Region: Whole body	A652	9	4	67	70	A/N	-
A.6.5.10.2.6	Body Region: Whole body	A652	9	4	71	74	A/N	-
A.6.5.10.2.7	Body Region: Whole body	A652	9	4	75	78	A/N	-
A.6.5.10.2.8	Body Region: Whole body	A652	9	4	79	82	A/N	-
A.6.5.10.2.9	Body Region: Whole body	A652	9	4	83	86	A/N	-

Notes:

- 1 Each text response is written to a unique record as follows:
 The first 3 characters of the record level are the same as the record level of the question.
 The last character of the record level is a "9" to designate that this is a text response record
 The question identifier is coded in 3 character blocks. For example:
 A.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"
- 2 Assigned counter value, see tables A.1 for record locations

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
-	Accident identification number	-		8	1	8	A/N	-
-	Record level identifier	-		4	9	12	A/N	-
-	Text response question identifier	B##9		27	13	39	N	O
-	Text response counter index (see note 1)	B##9		3	40	42	N	O
-	Text response	B##9		80	43	122	A/N	-
B.3.1.1	Data collected using which method?	B311		1	13	13	N	D
B.3.1.2	Data collected using which method?	B311		1	14	14	N	D
B.3.1.3	Data collected using which method?	B311		1	15	15	N	D
B.3.1.4	Motorcycles	B311		4	16	19	N	DI
B.3.1.5	Mopeds/mofas	B311		4	20	23	N	DI
B.3.1.6	Saloon/sedan passenger cars	B311		4	24	27	N	DI
B.3.1.7	Intermediate automobiles	B311		4	28	31	N	DI
B.3.1.8	Compact size cars	B311		4	32	35	N	DI
B.3.1.9	Subcompact size cars	B311		4	36	39	N	DI
B.3.1.10	Mini light trucks	B311		4	40	43	N	DI
B.3.1.11	Full size light trucks	B311		4	44	47	N	DI
B.3.1.12	Sport utility vehicle	B311		4	48	51	N	DI
B.3.1.13	Commercial trucks	B311		4	52	55	N	DI
B.3.1.14	Trailer towing vehicle/truck	B311		4	56	59	N	DI
B.3.1.15	Full size van with less than 9 seats	B311		4	60	63	N	DI
B.3.1.16	Minivan	B311		4	64	67	N	DI
B.3.1.17	Bus	B311		4	68	71	N	DI
B.3.1.18	Articulated coach	B311		4	72	75	N	DI
B.3.1.19	Trolley bus	B311		4	76	79	N	DI
B.3.1.20	Special vehicle	B311		4	80	83	N	DI
B.3.1.21	Other	B311		4	84	87	N	DI
B.3.1.22	Ambient temperature	B311		3	88	90	N	C
B.3.1.23	Weather description	B311		1	91	91	N	D
B.3.1.24	Wind description	B311		1	92	92	N	D
B.3.1.25	Wind direction with respect to motorcycle path	B311		1	93	93	N	D
B.3.2.4	Motorcycles	B321		4	16	19	N	DI
B.3.2.5	Mopeds/mofas	B321		4	20	23	N	DI
B.3.2.6	Saloon/sedan passenger cars	B321		4	24	27	N	DI
B.3.2.7	Intermediate automobiles	B321		4	28	31	N	DI
B.3.2.8	Compact size cars	B321		4	32	35	N	DI
B.3.2.9	Subcompact size cars	B321		4	36	39	N	DI
B.3.2.10	Mini light trucks	B321		4	40	43	N	DI
B.3.2.11	Full size light trucks	B321		4	44	47	N	DI
B.3.2.12	Sport utility vehicle	B321		4	48	51	N	DI
B.3.2.13	Commercial trucks	B321		4	52	55	N	DI
B.3.2.14	Trailer towing vehicle/truck	B321		4	56	59	N	DI
B.3.2.15	Full size van with less than 9 seats	B321		4	60	63	N	DI
B.3.2.16	Minivan	B321		4	64	67	N	DI
B.3.2.17	Bus	B321		4	68	71	N	DI
B.3.2.18	Articulated coach	B321		4	72	75	N	DI
B.3.2.19	Trolley bus	B321		4	76	79	N	DI
B.3.2.20	Special vehicle	B321		4	80	83	N	DI
B.3.2.21	Other	B321		4	84	87	N	DI
B.4.1.1.1	Motorcycle number	-		3	See note 2		N	DI
B.4.1.1.2	Manufacturer	B411		3	16	18	A/N	D
B.4.1.1.3	Model (not coded)	-		-	Not coded			-
B.4.1.1.4	Year	B411		4	19	22	N	DI
B.4.1.1.5	Motorcycle type	B411		2	23	24	N	D

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.4.1.1.6	Vehicle gross mass	B411		4	25	28	N	C
B.4.1.1.7	Vehicle identification number if permissible	B411		14	29	42	A/N	-
B.4.1.1.8	License plate number, reference only (not coded)	-		-	Not	coded		-
B.4.1.1.9	Odometer reading	B411		6	43	48	N	C
B.4.1.1.10	Predominating MC color	B411		2	49	50	N	D
B.4.1.1.11	Motor displacement	B411		4	51	54	N	C
B.4.1.1.12	Number of cylinders	B411		2	55	56	N	DI
B.4.1.1.13	Exhaust	B411		1	57	57	N	D2
B.4.1.1.14	Seat	B411		1	58	58	N	D2
B.4.1.1.15	Handlebars	B411		1	59	59	N	D2
B.4.1.1.16	Fairing, windscreen	B411		1	60	60	N	D2
B.4.1.1.17	Crash bars	B411		1	61	61	N	D2
B.4.1.1.18	Engine guards	B411		1	62	62	N	D2
B.4.1.1.19	Suspension	B411		1	63	63	N	D2
B.4.1.1.20	Frame	B411		1	64	64	N	D2
B.4.1.1.21	Tyres	B411		1	65	65	N	D2
B.4.1.1.22	Wheels	B411		1	66	66	N	D2
B.4.1.1.23	Other	B411		1	67	67	N	D2
B.4.1.1.24	Headlamp assembly type	B411		1	68	68	N	D
B.4.1.1.25	Headlamp function	B411		1	69	69	N	D
B.4.1.3.1.1	Motorcycle count	B431		3	13	15	A/N	-
B.4.1.3.1.2	Motorcycle count	B431		3	16	18	N	DI
B.4.1.3.2.1	Motorcycle count	B431		3	19	21	A/N	-
B.4.1.3.2.2	Motorcycle count	B431		3	22	24	N	DI
B.4.1.3.3.1	Motorcycle count	B432		3	13	15	A/N	-
B.4.1.3.3.2	Motorcycle count	B432		3	16	18	N	DI
B.4.1.3.4.1	Motorcycle count	B432		3	19	21	A/N	-
B.4.1.3.4.2	Motorcycle count	B432		3	22	24	N	DI
B.4.1.3.5.1	Motorcycle count	B432		3	25	27	A/N	-
B.4.1.3.5.2	Motorcycle count	B432		3	28	30	N	DI
B.4.1.3.6.1	Motorcycle count	B432		3	31	33	A/N	-
B.4.1.3.6.2	Motorcycle count	B432		3	34	36	N	DI
B.4.1.3.7.1	Motorcycle count	B432		3	37	39	A/N	-
B.4.1.3.7.2	Motorcycle count	B432		3	40	42	N	DI
B.4.1.3.8.1	Motorcycle count	B432		3	43	45	A/N	-
B.4.1.3.8.2	Motorcycle count	B432		3	46	48	N	DI
B.4.1.3.9.1	Motorcycle count	B432		3	49	51	A/N	-
B.4.1.3.9.2	Motorcycle count	B432		3	52	54	N	DI
B.4.1.3.10.1	Motorcycle count	B431		3	25	27	A/N	-
B.4.1.3.10.2	Motorcycle count	B431		3	28	30	N	DI
B.4.1.3.11.1	Motorcycle count	B431		3	31	33	A/N	-
B.4.1.3.11.2	Motorcycle count	B431		3	34	36	N	DI
B.4.1.3.12.1	Motorcycle count	B431		3	37	39	A/N	-
B.4.1.3.12.2	Motorcycle count	B431		3	40	42	N	DI
B.4.1.3.13.1	Motorcycle count	B431		3	43	45	A/N	-
B.4.1.3.13.2	Motorcycle count	B431		3	46	48	N	DI
B.4.1.3.14.1	Motorcycle count	B431		3	49	51	A/N	-
B.4.1.3.14.2	Motorcycle count	B431		3	52	54	N	DI
B.4.1.3.15.1	Motorcycle count	B431		3	55	57	A/N	-
B.4.1.3.15.2	Motorcycle count	B431		3	58	60	N	DI
B.4.1.3.16.1	Motorcycle count	B431		3	61	63	A/N	-
B.4.1.3.16.2	Motorcycle count	B431		3	64	66	N	DI
B.4.1.3.17.1	Motorcycle count	B431		3	67	69	A/N	-

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.4.1.3.17.2	Motorcycle count	B431		3	70	72	N	DI
B.4.1.3.18.1	Motorcycle count	B431		3	73	75	A/N	-
B.4.1.3.18.2	Motorcycle count	B431		3	76	78	N	DI
B.4.1.3.19.1	Motorcycle count	B431		3	79	81	A/N	-
B.4.1.3.19.2	Motorcycle count	B431		3	82	84	N	DI
B.4.1.3.20.1	Motorcycle count	B431		3	85	87	A/N	-
B.4.1.3.20.2	Motorcycle count	B431		3	88	90	N	DI
B.4.1.3.21.1	Motorcycle count	B431		3	91	93	A/N	-
B.4.1.3.21.2	Motorcycle count	B431		3	94	96	N	DI
B.4.1.3.22.1	Motorcycle count	B431		3	97	99	A/N	-
B.4.1.3.22.2	Motorcycle count	B431		3	100	102	N	DI
B.4.1.3.23	Motorcycle type	B432		3	55	57	N	DI
B.4.1.3.24	Motorcycle type	B432		3	58	60	N	DI
B.4.1.3.25	Motorcycle type	B432		3	61	63	N	DI
B.4.1.3.26	Motorcycle type	B432		3	64	66	N	DI
B.4.1.3.27	Motorcycle type	B432		3	67	69	N	DI
B.4.1.3.28	Motorcycle type	B432		3	70	72	N	DI
B.4.1.3.29	Motorcycle type	B432		3	73	75	N	DI
B.4.1.3.30	Motorcycle type	B432		3	76	78	N	DI
B.4.1.3.31	Motorcycle type	B432		3	79	81	N	DI
B.4.1.3.32	Motorcycle type	B432		3	82	84	N	DI
B.4.1.3.33	Motorcycle type	B432		3	85	87	N	DI
B.4.1.3.34	Motorcycle type	B432		3	88	90	N	DI
B.4.1.3.35	Motorcycle type	B432		3	91	93	N	DI
B.4.1.3.36	Motorcycle type	B432		3	94	96	N	DI
B.4.1.3.37	Motorcycle type	B432		3	97	99	N	DI
B.4.1.3.38	Motorcycle type	B432		3	100	102	N	DI
B.4.1.3.39	Motorcycle type	B432		3	103	105	N	DI
B.4.1.3.40	Predominating MC color	B432		3	106	108	N	DI
B.4.1.3.41	Predominating MC color	B432		3	109	111	N	DI
B.4.1.3.42	Predominating MC color	B432		3	112	114	N	DI
B.4.1.3.43	Predominating MC color	B432		3	115	117	N	DI
B.4.1.3.44	Predominating MC color	B432		3	118	120	N	DI
B.4.1.3.45	Predominating MC color	B432		3	121	123	N	DI
B.4.1.3.46	Predominating MC color	B432		3	124	126	N	DI
B.4.1.3.47	Predominating MC color	B432		3	127	129	N	DI
B.4.1.3.48	Predominating MC color	B432		3	130	132	N	DI
B.4.1.3.49	Predominating MC color	B432		3	133	135	N	DI
B.4.1.3.50	Predominating MC color	B432		3	136	138	N	DI
B.4.1.3.51	Predominating MC color	B432		3	139	141	N	DI
B.4.1.3.52	Predominating MC color	B432		3	142	144	N	DI
B.4.1.3.53	Predominating MC color	B432		3	145	147	N	DI
B.4.1.3.54	Predominating MC color	B432		3	148	150	N	DI
B.4.1.3.55	Distribution of motor displacement	B432		3	151	153	N	DI
B.4.1.3.56	Distribution of motor displacement	B432		3	154	156	N	DI
B.4.1.3.57	Distribution of motor displacement	B432		3	157	159	N	DI
B.4.1.3.58	Distribution of motor displacement	B432		3	160	162	N	DI
B.4.1.3.59	Distribution of motor displacement	B432		3	163	165	N	DI
B.4.1.3.60	Distribution of motor displacement	B432		3	166	168	N	DI
B.4.1.3.61	Motorcycle modifications	B432		3	169	171	N	DI
B.4.1.3.62	Motorcycle modifications	B432		3	172	174	N	DI
B.4.1.3.63	Motorcycle modifications	B432		3	175	177	N	DI
B.4.1.3.64	Motorcycle modifications	B432		3	178	180	N	DI
B.4.1.3.65	Motorcycle modifications	B432		3	181	183	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.4.1.3.66	Motorcycle modifications	B432		3	184	186	N	DI
B.4.1.3.67	Motorcycle modifications	B432		3	187	189	N	DI
B.4.1.3.68	Motorcycle modifications	B432		3	190	192	N	DI
B.4.1.3.69	Motorcycle modifications	B432		3	193	195	N	DI
B.4.1.3.70	Motorcycle modifications	B432		3	196	198	N	DI
B.4.1.3.71	Motorcycle modifications	B432		3	199	201	N	DI
B.4.1.3.72	Headlamp assembly type	B432		3	202	204	N	DI
B.4.1.3.73	Headlamp assembly type	B432		3	205	207	N	DI
B.4.1.3.74	Headlamp assembly type	B432		3	208	210	N	DI
B.4.1.3.75	Headlamp assembly type	B432		3	211	213	N	DI
B.4.1.3.76	Headlamp assembly type	B432		3	214	216	N	DI
B.4.1.3.77	Headlamp assembly type	B432		3	217	219	N	DI
B.4.1.3.78	Headlamp assembly type	B432		3	220	222	N	DI
B.4.1.3.79	Headlamp function	B432		3	223	225	N	DI
B.4.1.3.80	Headlamp function	B432		3	226	228	N	DI
B.4.1.3.81	Headlamp function	B432		3	229	231	N	DI
B.4.1.3.82	Headlamp function	B432		3	232	234	N	DI
B.4.1.3.83	Headlamp function	B432		3	235	237	N	DI
B.5.1.1.1.1	Date of birth (year/month/day)	B511		8	17	24	N	O
B.5.1.1.1.2	Age	B511		2	25	26	N	C
B.5.1.1.1.3.1	Driver's license qualification	B511		2	27	28	N	D
B.5.1.1.1.3.2	Driver's license qualification	B511		2	29	30	N	D
B.5.1.1.1.3.3	Driver's license qualification	B511		2	31	32	N	D
B.5.1.1.1.3.4	Driver's license qualification	B511		2	33	34	N	D
B.5.1.1.1.4	Citizenship	B511		1	35	35	N	D2
B.5.1.1.1.5	Height	B511		3	36	38	N	C
B.5.1.1.1.6	Weight	B511		3	39	41	N	C
B.5.1.1.1.7	Gender	B511		1	42	42	N	D2
B.5.1.1.1.8	Educational status (where permissible)	B511		1	43	43	N	D
B.5.1.1.1.8.1	Duration of formal education	B511		2	44	45	N	C
B.5.1.1.1.9	Occupational code (where permissible)	B511		2	46	47	N	D
B.5.1.1.1.10	Eye correction at time of accident	B511		1	48	48	N	D
B.5.1.1.1.11	All vehicle experience	B511		2	49	50	N	C
B.5.1.1.1.12	On any street motorcycle	B511		2	51	52	N	C
B.5.1.1.1.13	On interview motorcycle	B511		2	53	54	N	C
B.5.1.1.1.14	Number of days per year that motorcycles are ridden	B511		3	55	57	N	C
B.5.1.1.1.15	Distance motorcycle is ridden per year	B511		5	58	62	N	C
B.5.1.1.1.16	Motorcycle training	B511		1	63	63	N	D
B.5.1.1.1.17.1	Motorcycle percent use estimate	B511		3	64	66	N	C
B.5.1.1.1.17.2	Motorcycle percent use estimate	B511		3	67	69	N	C
B.5.1.1.1.17.3	Motorcycle percent use estimate	B511		3	70	72	N	C
B.5.1.1.1.18	Experience riding with passengers on motorcycle	B511		1	73	73	N	D
B.5.1.1.1.20	Cargo/luggage on motorcycle	B511		2	75	76	N	D
B.5.1.1.1.21	Experience riding with similar cargo/luggage	B511		1	77	77	N	D
B.5.1.1.1.22	All moving traffic violation convictions in the previous 5 years	B511		2	78	79	N	DI
B.5.1.1.1.23	Any motorcycle moving traffic accident experience during the previous 5 years	B511		2	80	81	N	DI
B.5.1.1.1.24	Any other vehicle moving traffic accident experience during the previous 5 years	B511		2	82	83	N	DI
B.5.1.1.1.25	Origin	B511		2	84	85	N	D
B.5.1.1.1.26	Destination	B511		2	86	87	N	D

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.1.1.1.27	Trip length	B511		3	88	90	N	C
B.5.1.1.1.28	Frequency of this road use, in/on any vehicle	B511		1	91	91	N	D
B.5.1.1.1.29	Length of time since departure, this trip	B511		2	92	93	N	C
B.5.1.1.1.30	Alcohol/drug type of use	B511		1	94	94	N	D
B.5.1.1.1.31	Alcohol/drug impairment	B511		1	95	95	N	D
B.5.1.1.1.32	Blood alcohol concentration (BAC)	B511		3	96	98	N	C
B.5.1.1.1.33	Type of drugs other than alcohol	B511		1	99	99	N	D
B.5.1.1.1.34	Source of drugs other than alcohol	B511		1	100	100	N	D
B.5.1.1.1.35.1	Physiological impairment, permanent condition	B511		2	101	102	N	D
B.5.1.1.1.35.2	Physiological impairment, permanent condition	B511		2	103	104	N	D
B.5.1.1.1.35.3	Physiological impairment, permanent condition	B511		2	105	106	N	D
B.5.1.1.1.36.1	Physiological impairment, transient condition	B511		2	107	108	N	D
B.5.1.1.1.36.2	Physiological impairment, transient condition	B511		2	109	110	N	D
B.5.1.1.1.36.3	Physiological impairment, transient condition	B511		2	111	112	N	D
B.5.1.1.1.37.1	Stress experienced that day	B511		2	113	114	N	D
B.5.1.1.1.37.2	Stress experienced that day	B511		2	115	116	N	D
B.5.1.1.1.37.3	Stress experienced that day	B511		2	117	118	N	D
B.5.1.1.1.38	Number of passengers on motorcycle	B511		1	119	119	N	D
B.5.1.1.1.39	Attention to driving/passenger tasks	B511		2	120	121	N	D
B.5.1.1.2	Motorcycle passenger number	B512		1	16	16	N	D
B.5.1.1.2.1	Date of birth (year/month/day)	B512		8	17	24	N	O
B.5.1.1.2.2	Age	B512		2	25	26	N	C
B.5.1.1.2.3.1	Driver's license qualification	B512		2	27	28	N	D
B.5.1.1.2.3.2	Driver's license qualification	B512		2	29	30	N	D
B.5.1.1.2.3.3	Driver's license qualification	B512		2	31	32	N	D
B.5.1.1.2.3.4	Driver's license qualification	B512		2	33	34	N	D
B.5.1.1.2.4	Citizenship	B512		1	35	35	N	D2
B.5.1.1.2.5	Height	B512		3	36	38	N	C
B.5.1.1.2.6	Weight	B512		3	39	41	N	C
B.5.1.1.2.7	Gender	B512		1	42	42	N	D2
B.5.1.1.2.8	Educational status (where permissible)	B512		1	43	43	N	D
B.5.1.1.2.8.1	Duration of formal education	B512		2	44	45	N	C
B.5.1.1.2.9	Occupational code (where permissible)	B512		2	46	47	N	D
B.5.1.1.2.10	Eye correction at time of accident	B512		1	48	48	N	D
B.5.1.1.2.11	All vehicle experience	B512		2	49	50	N	C
B.5.1.1.2.12	On any street motorcycle	B512		2	51	52	N	C
B.5.1.1.2.13	On interview motorcycle	B512		2	53	54	N	C
B.5.1.1.2.14	Number of days per year that motorcycles are ridden	B512		3	55	57	N	C
B.5.1.1.2.15	Distance motorcycle is ridden per year	B512		5	58	62	N	C
B.5.1.1.2.16	Motorcycle training	B512		1	63	63	N	D
B.5.1.1.2.17.1	Motorcycle percent use estimate	B512		3	64	66	N	C
B.5.1.1.2.17.2	Motorcycle percent use estimate	B512		3	67	69	N	C
B.5.1.1.2.17.3	Motorcycle percent use estimate	B512		3	70	72	N	C
B.5.1.1.2.19	Experience riding as a passenger on motorcycles	B512		1	74	74	N	D
B.5.1.1.2.22	All moving traffic violation convictions in the previous 5 years	B512		2	78	79	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.1.1.2.23	Any motorcycle moving traffic accident experience during the previous 5 years	B512		2	80	81	N	DI
B.5.1.1.2.24	Any other vehicle moving traffic accident experience during the previous 5 years	B512		2	82	83	N	DI
B.5.1.1.2.30	Alcohol/drug type of use	B512		1	94	94	N	D
B.5.1.1.2.31	Alcohol/drug impairment	B512		1	95	95	N	D
B.5.1.1.2.33	Type of drugs other than alcohol	B512		1	99	99	N	D
B.5.1.1.2.34	Source of drugs other than alcohol	B512		1	100	100	N	D
B.5.1.1.2.35.1	Physiological impairment, permanent condition	B512		2	101	102	N	D
B.5.1.1.2.35.2	Physiological impairment, permanent condition	B512		2	103	104	N	D
B.5.1.1.2.35.3	Physiological impairment, permanent condition	B512		2	105	106	N	D
B.5.1.1.2.36.1	Physiological impairment, transient condition	B512		2	107	108	N	D
B.5.1.1.2.36.2	Physiological impairment, transient condition	B512		2	109	110	N	D
B.5.1.1.2.36.3	Physiological impairment, transient condition	B512		2	111	112	N	D
B.5.1.1.2.37.1	Stress experienced that day	B512		2	113	114	N	D
B.5.1.1.2.37.2	Stress experienced that day	B512		2	115	116	N	D
B.5.1.1.2.37.3	Stress experienced that day	B512		2	117	118	N	D
B.5.1.1.2.38	Number of passengers on motorcycle	B512		1	119	119	N	D
B.5.1.1.2.39	Attention to driving/passenger tasks	B512		2	120	121	N	D
B.5.1.3.1.1	Gender	B513		3	13	15	N	DI
B.5.1.3.1.2	Gender	B513		3	16	18	N	DI
B.5.1.3.1.3	Gender	B513		3	19	21	N	DI
B.5.1.3.1.4	Cargo/luggage on motorcycle	B513		3	31	33	N	DI
B.5.1.3.1.5	Cargo/luggage on motorcycle	B513		3	34	36	N	DI
B.5.1.3.1.6	Cargo/luggage on motorcycle	B513		3	37	39	N	DI
B.5.1.3.1.7	Cargo/luggage on motorcycle	B513		3	40	42	N	DI
B.5.1.3.1.8	Cargo/luggage on motorcycle	B513		3	43	45	N	DI
B.5.1.3.1.9	Cargo/luggage on motorcycle	B513		3	46	48	N	DI
B.5.1.3.1.10	Cargo/luggage on motorcycle	B513		3	49	51	N	DI
B.5.1.3.1.11	Cargo/luggage on motorcycle	B513		3	52	54	N	DI
B.5.1.3.1.12	Cargo/luggage on motorcycle	B513		3	55	57	N	DI
B.5.1.3.1.13	Cargo/luggage on motorcycle	B513		3	58	60	N	DI
B.5.1.3.1.14	Number of passengers on motorcycle	B513		3	61	63	N	DI
B.5.1.3.1.15	Number of passengers on motorcycle	B513		3	64	66	N	DI
B.5.1.3.1.16	Number of passengers on motorcycle	B513		3	67	69	N	DI
B.5.1.3.1.17	Number of passengers on motorcycle	B513		3	70	72	N	DI
B.5.1.3.1.18	Number of passengers on motorcycle	B513		3	73	75	N	DI
B.5.1.3.1.19	Number of passengers on motorcycle	B513		3	76	78	N	DI
B.5.1.3.1.20	Number of passengers on motorcycle	B513		3	79	81	N	DI
B.5.1.3.1.21	Number of passengers on motorcycle	B513		3	82	84	N	DI
B.5.1.3.2.1	Gender	B513		3	22	24	N	DI
B.5.1.3.2.2	Gender	B513		3	25	27	N	DI
B.5.1.3.2.3	Gender	B513		3	28	30	N	DI
B.5.3.1.1.1	Upper torso and upper extremities coverage material	B531		1	16	16	N	D
B.5.3.1.1.2	Are upper torso and extremities clothing motorcycle oriented?	B531		1	17	17	N	D2
B.5.3.1.1.3	Lower torso and lower extremities coverage material	B531		1	18	18	N	D

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.1.1.4	Are lower torso and extremities clothing motorcycle oriented?	B531		1	19	19	N	D2
B.5.3.1.1.5	Footwear material/type	B531		1	20	20	N	D
B.5.3.1.1.6	Is footwear motorcycle oriented?	B531		1	21	21	N	D2
B.5.3.1.1.7	Glove material	B531		1	22	22	N	D
B.5.3.1.1.8	Are gloves motorcycle oriented?	B531		1	23	23	N	D2
B.5.3.1.1.9	Wearing helmet on head?	B531		1	24	24	N	D2
B.5.3.1.1.10	Was helmet properly adjusted on head?	B531		1	25	25	N	D2
B.5.3.1.1.11	Was helmet securely fastened?	B531		1	26	26	N	D2
B.5.3.1.1.12	Type of helmet	B531		1	27	27	N	D
B.5.3.1.1.13	Type of coverage	B531		2	28	29	N	D
B.5.3.1.1.14	Predominating colour	B531		2	30	31	N	D
B.5.3.1.1.15	Colour of face shield, if present	B531		1	32	32	N	D
B.5.3.1.1.16	Helmet owned by wearer?	B531		1	33	33	N	D2
B.5.3.1.1.17	Helmet fit	B531		1	34	34	N	D
B.5.3.1.1.18	Eye coverage in use, separate from helmet	B531		2	35	36	N	D
B.5.3.1.2.1	Upper torso and upper extremities coverage material	B532		1	16	16	N	D
B.5.3.1.2.2	Are upper torso and extremities clothing motorcycle oriented?	B532		1	17	17	N	D2
B.5.3.1.2.3	Lower torso and lower extremities coverage material	B532		1	18	18	N	D
B.5.3.1.2.4	Are lower torso and extremities clothing motorcycle oriented?	B532		1	19	19	N	D2
B.5.3.1.2.5	Footwear material/type	B532		1	20	20	N	D
B.5.3.1.2.6	Is footwear motorcycle oriented?	B532		1	21	21	N	D2
B.5.3.1.2.7	Glove material	B532		1	22	22	N	D
B.5.3.1.2.8	Are gloves motorcycle oriented?	B532		1	23	23	N	D2
B.5.3.1.2.9	Wearing helmet on head?	B532		1	24	24	N	D2
B.5.3.1.2.10	Was helmet properly adjusted on head?	B532		1	25	25	N	D2
B.5.3.1.2.11	Was helmet securely fastened?	B532		1	26	26	N	D2
B.5.3.1.2.12	Type of helmet	B532		1	27	27	N	D
B.5.3.1.2.13	Type of coverage	B532		2	28	29	N	D
B.5.3.1.2.14	Predominating colour	B532		2	30	31	N	D
B.5.3.1.2.15	Colour of face shield, if present	B532		1	32	32	N	D
B.5.3.1.2.16	Helmet owned by wearer?	B532		1	33	33	N	D2
B.5.3.1.2.17	Helmet fit	B532		1	34	34	N	D
B.5.3.1.2.18	Eye coverage in use, separate from helmet	B532		2	35	36	N	D
B.5.3.3.1.1	Upper torso and upper extremities coverage material	B533		3	13	15	N	DI
B.5.3.3.1.2	Upper torso and upper extremities coverage material	B533		3	16	18	N	DI
B.5.3.3.1.3	Upper torso and upper extremities coverage material	B533		3	19	21	N	DI
B.5.3.3.1.4	Upper torso and upper extremities coverage material	B533		3	22	24	N	DI
B.5.3.3.1.5	Upper torso and upper extremities coverage material	B533		3	25	27	N	DI
B.5.3.3.1.6	Upper torso and upper extremities coverage material	B533		3	28	30	N	DI
B.5.3.3.1.7	Upper torso and upper extremities coverage material	B533		3	31	33	N	DI
B.5.3.3.1.8	Upper torso and upper extremities coverage material	B533		3	34	36	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.1.9	Are upper torso and extremities clothing motorcycle oriented?	B533		3	37	39	N	DI
B.5.3.3.1.10	Are upper torso and extremities clothing motorcycle oriented?	B533		3	40	42	N	DI
B.5.3.3.1.11	Are upper torso and extremities clothing motorcycle oriented?	B533		3	43	45	N	DI
B.5.3.3.1.12	Are upper torso and extremities clothing motorcycle oriented?	B533		3	46	48	N	DI
B.5.3.3.1.13	Lower torso and lower extremities coverage material	B533		3	49	51	N	DI
B.5.3.3.1.14	Lower torso and lower extremities coverage material	B533		3	52	54	N	DI
B.5.3.3.1.15	Lower torso and lower extremities coverage material	B533		3	55	57	N	DI
B.5.3.3.1.16	Lower torso and lower extremities coverage material	B533		3	58	60	N	DI
B.5.3.3.1.17	Lower torso and lower extremities coverage material	B533		3	61	63	N	DI
B.5.3.3.1.18	Lower torso and lower extremities coverage material	B533		3	64	66	N	DI
B.5.3.3.1.19	Lower torso and lower extremities coverage material	B533		3	67	69	N	DI
B.5.3.3.1.20	Are lower torso and extremities clothing motorcycle oriented?	B533		3	70	72	N	DI
B.5.3.3.1.21	Are lower torso and extremities clothing motorcycle oriented?	B533		3	73	75	N	DI
B.5.3.3.1.22	Are lower torso and extremities clothing motorcycle oriented?	B533		3	76	78	N	DI
B.5.3.3.1.23	Are lower torso and extremities clothing motorcycle oriented?	B533		3	79	81	N	DI
B.5.3.3.1.24	Footwear material/type	B533		3	82	84	N	DI
B.5.3.3.1.25	Footwear material/type	B533		3	85	87	N	DI
B.5.3.3.1.26	Footwear material/type	B533		3	88	90	N	DI
B.5.3.3.1.27	Footwear material/type	B533		3	91	93	N	DI
B.5.3.3.1.28	Footwear material/type	B533		3	94	96	N	DI
B.5.3.3.1.29	Footwear material/type	B533		3	97	99	N	DI
B.5.3.3.1.30	Footwear material/type	B533		3	100	102	N	DI
B.5.3.3.1.31	Footwear material/type	B533		3	103	105	N	DI
B.5.3.3.1.32	Footwear material/type	B533		3	106	108	N	DI
B.5.3.3.1.33	Is footwear motorcycle oriented?	B533		3	109	111	N	DI
B.5.3.3.1.34	Is footwear motorcycle oriented?	B533		3	112	114	N	DI
B.5.3.3.1.35	Is footwear motorcycle oriented?	B533		3	115	117	N	DI
B.5.3.3.1.36	Is footwear motorcycle oriented?	B533		3	118	120	N	DI
B.5.3.3.1.37	Glove material	B533		3	121	123	N	DI
B.5.3.3.1.38	Glove material	B533		3	124	126	N	DI
B.5.3.3.1.39	Glove material	B533		3	127	129	N	DI
B.5.3.3.1.40	Glove material	B533		3	130	132	N	DI
B.5.3.3.1.41	Glove material	B533		3	133	135	N	DI
B.5.3.3.1.42	Glove material	B533		3	136	138	N	DI
B.5.3.3.1.43	Glove material	B533		3	139	141	N	DI
B.5.3.3.1.44	Glove material	B533		3	142	144	N	DI
B.5.3.3.1.45	Are gloves motorcycle oriented?	B533		3	145	147	N	DI
B.5.3.3.1.46	Are gloves motorcycle oriented?	B533		3	148	150	N	DI
B.5.3.3.1.47	Are gloves motorcycle oriented?	B533		3	151	153	N	DI
B.5.3.3.1.48	Are gloves motorcycle oriented?	B533		3	154	156	N	DI
B.5.3.3.1.49	Wearing helmet on head?	B534		3	13	15	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.1.50	Wearing helmet on head?	B534		3	16	18	N	DI
B.5.3.3.1.51	Wearing helmet on head?	B534		3	19	21	N	DI
B.5.3.3.1.52	Wearing helmet on head?	B534		3	22	24	N	DI
B.5.3.3.1.53	Was helmet properly adjusted on head?	B534		3	25	27	N	DI
B.5.3.3.1.54	Was helmet properly adjusted on head?	B534		3	28	30	N	DI
B.5.3.3.1.55	Was helmet properly adjusted on head?	B534		3	31	33	N	DI
B.5.3.3.1.56	Was helmet properly adjusted on head?	B534		3	34	36	N	DI
B.5.3.3.1.57	Was helmet securely fastened?	B534		3	37	39	N	DI
B.5.3.3.1.58	Was helmet securely fastened?	B534		3	40	42	N	DI
B.5.3.3.1.59	Was helmet securely fastened?	B534		3	43	45	N	DI
B.5.3.3.1.60	Was helmet securely fastened?	B534		3	46	48	N	DI
B.5.3.3.1.61	Type of helmet	B534		3	49	51	N	DI
B.5.3.3.1.62	Type of helmet	B534		3	52	54	N	DI
B.5.3.3.1.63	Type of helmet	B534		3	55	57	N	DI
B.5.3.3.1.64	Type of helmet	B534		3	58	60	N	DI
B.5.3.3.1.65	Type of helmet	B534		3	61	63	N	DI
B.5.3.3.1.66	Type of helmet	B534		3	64	66	N	DI
B.5.3.3.1.67	Type of helmet	B534		3	67	69	N	DI
B.5.3.3.1.68	Type of coverage	B534		3	70	72	N	DI
B.5.3.3.1.69	Type of coverage	B534		3	73	75	N	DI
B.5.3.3.1.70	Type of coverage	B534		3	76	78	N	DI
B.5.3.3.1.71	Type of coverage	B534		3	79	81	N	DI
B.5.3.3.1.72	Type of coverage	B534		3	82	84	N	DI
B.5.3.3.1.73	Type of coverage	B534		3	85	87	N	DI
B.5.3.3.1.74	Type of coverage	B534		3	88	90	N	DI
B.5.3.3.1.75	Type of coverage	B534		3	91	93	N	DI
B.5.3.3.1.76	Type of coverage	B534		3	94	96	N	DI
B.5.3.3.1.77	Type of coverage	B534		3	97	99	N	DI
B.5.3.3.1.78	Type of coverage	B534		3	100	102	N	DI
B.5.3.3.1.79	Type of coverage	B534		3	103	105	N	DI
B.5.3.3.1.80	Predominating helmet colour	B534		3	106	108	N	DI
B.5.3.3.1.81	Predominating helmet colour	B534		3	109	111	N	DI
B.5.3.3.1.82	Predominating helmet colour	B534		3	112	114	N	DI
B.5.3.3.1.83	Predominating helmet colour	B534		3	115	117	N	DI
B.5.3.3.1.84	Predominating helmet colour	B534		3	118	120	N	DI
B.5.3.3.1.85	Predominating helmet colour	B534		3	121	123	N	DI
B.5.3.3.1.86	Predominating helmet colour	B534		3	124	126	N	DI
B.5.3.3.1.87	Predominating helmet colour	B534		3	127	129	N	DI
B.5.3.3.1.88	Predominating helmet colour	B534		3	130	132	N	DI
B.5.3.3.1.89	Predominating helmet colour	B534		3	133	135	N	DI
B.5.3.3.1.90	Predominating helmet colour	B534		3	136	138	N	DI
B.5.3.3.1.91	Predominating helmet colour	B534		3	139	141	N	DI
B.5.3.3.1.92	Predominating helmet colour	B534		3	142	144	N	DI
B.5.3.3.1.93	Predominating helmet colour	B534		3	145	147	N	DI
B.5.3.3.1.94	Predominating helmet colour	B534		3	148	150	N	DI
B.5.3.3.1.95	Predominating helmet colour	B534		3	151	153	N	DI
B.5.3.3.1.96	Colour of face shield, if present	B534		3	154	156	N	DI
B.5.3.3.1.97	Colour of face shield, if present	B534		3	157	159	N	DI
B.5.3.3.1.98	Colour of face shield, if present	B534		3	160	162	N	DI
B.5.3.3.1.99	Colour of face shield, if present	B534		3	163	165	N	DI
B.5.3.3.1.100	Colour of face shield, if present	B534		3	166	168	N	DI
B.5.3.3.1.101	Colour of face shield, if present	B534		3	169	171	N	DI
B.5.3.3.1.102	Colour of face shield, if present	B534		3	172	174	N	DI
B.5.3.3.1.103	Colour of face shield, if present	B534		3	175	177	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.1.104	Colour of face shield, if present	B534		3	178	180	N	DI
B.5.3.3.1.105	Helmet fit	B534		3	181	183	N	DI
B.5.3.3.1.106	Helmet fit	B534		3	184	186	N	DI
B.5.3.3.1.107	Helmet fit	B534		3	187	189	N	DI
B.5.3.3.1.108	Helmet fit	B534		3	190	192	N	DI
B.5.3.3.1.109	Helmet fit	B534		3	193	195	N	DI
B.5.3.3.1.110	Helmet fit	B534		3	196	198	N	DI
B.5.3.3.1.111	Eye coverage in use, separate from helmet	B534		3	199	201	N	DI
B.5.3.3.1.112	Eye coverage in use, separate from helmet	B534		3	202	204	N	DI
B.5.3.3.1.113	Eye coverage in use, separate from helmet	B534		3	205	207	N	DI
B.5.3.3.1.114	Eye coverage in use, separate from helmet	B534		3	208	210	N	DI
B.5.3.3.1.115	Eye coverage in use, separate from helmet	B534		3	211	213	N	DI
B.5.3.3.1.116	Eye coverage in use, separate from helmet	B534		3	214	216	N	DI
B.5.3.3.1.117	Eye coverage in use, separate from helmet	B534		3	217	219	N	DI
B.5.3.3.1.118	Eye coverage in use, separate from helmet	B534		3	220	222	N	DI
B.5.3.3.1.119	Eye coverage in use, separate from helmet	B534		3	223	225	N	DI
B.5.3.3.1.120	Eye coverage in use, separate from helmet	B534		3	226	228	N	DI
B.5.3.3.1.121	Eye coverage in use, separate from helmet	B534		3	229	231	N	DI
B.5.3.3.2.1	Upper torso and upper extremities coverage material	B535		3	13	15	N	DI
B.5.3.3.2.2	Upper torso and upper extremities coverage material	B535		3	16	18	N	DI
B.5.3.3.2.3	Upper torso and upper extremities coverage material	B535		3	19	21	N	DI
B.5.3.3.2.4	Upper torso and upper extremities coverage material	B535		3	22	24	N	DI
B.5.3.3.2.5	Upper torso and upper extremities coverage material	B535		3	25	27	N	DI
B.5.3.3.2.6	Upper torso and upper extremities coverage material	B535		3	28	30	N	DI
B.5.3.3.2.7	Upper torso and upper extremities coverage material	B535		3	31	33	N	DI
B.5.3.3.2.8	Upper torso and upper extremities coverage material	B535		3	34	36	N	DI
B.5.3.3.2.9	Are upper torso and extremities clothing motorcycle oriented?	B535		3	37	39	N	DI
B.5.3.3.2.10	Are upper torso and extremities clothing motorcycle oriented?	B535		3	40	42	N	DI
B.5.3.3.2.11	Are upper torso and extremities clothing motorcycle oriented?	B535		3	43	45	N	DI
B.5.3.3.2.12	Are upper torso and extremities clothing motorcycle oriented?	B535		3	46	48	N	DI
B.5.3.3.2.13	Lower torso and lower extremities coverage material	B535		3	49	51	N	DI
B.5.3.3.2.14	Lower torso and lower extremities coverage material	B535		3	52	54	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.2.15	Lower torso and lower extremities coverage material	B535		3	55	57	N	DI
B.5.3.3.2.16	Lower torso and lower extremities coverage material	B535		3	58	60	N	DI
B.5.3.3.2.17	Lower torso and lower extremities coverage material	B535		3	61	63	N	DI
B.5.3.3.2.18	Lower torso and lower extremities coverage material	B535		3	64	66	N	DI
B.5.3.3.2.19	Lower torso and lower extremities coverage material	B535		3	67	69	N	DI
B.5.3.3.2.20	Are lower torso and extremities clothing motorcycle oriented?	B535		3	70	72	N	DI
B.5.3.3.2.21	Are lower torso and extremities clothing motorcycle oriented?	B535		3	73	75	N	DI
B.5.3.3.2.22	Are lower torso and extremities clothing motorcycle oriented?	B535		3	76	78	N	DI
B.5.3.3.2.23	Are lower torso and extremities clothing motorcycle oriented?	B535		3	79	81	N	DI
B.5.3.3.2.24	Footwear material/type	B535		3	82	84	N	DI
B.5.3.3.2.25	Footwear material/type	B535		3	85	87	N	DI
B.5.3.3.2.26	Footwear material/type	B535		3	88	90	N	DI
B.5.3.3.2.27	Footwear material/type	B535		3	91	93	N	DI
B.5.3.3.2.28	Footwear material/type	B535		3	94	96	N	DI
B.5.3.3.2.29	Footwear material/type	B535		3	97	99	N	DI
B.5.3.3.2.30	Footwear material/type	B535		3	100	102	N	DI
B.5.3.3.2.31	Footwear material/type	B535		3	103	105	N	DI
B.5.3.3.2.32	Footwear material/type	B535		3	106	108	N	DI
B.5.3.3.2.33	Is footwear motorcycle oriented?	B535		3	109	111	N	DI
B.5.3.3.2.34	Is footwear motorcycle oriented?	B535		3	112	114	N	DI
B.5.3.3.2.35	Is footwear motorcycle oriented?	B535		3	115	117	N	DI
B.5.3.3.2.36	Is footwear motorcycle oriented?	B535		3	118	120	N	DI
B.5.3.3.2.37	Glove material	B535		3	121	123	N	DI
B.5.3.3.2.38	Glove material	B535		3	124	126	N	DI
B.5.3.3.2.39	Glove material	B535		3	127	129	N	DI
B.5.3.3.2.40	Glove material	B535		3	130	132	N	DI
B.5.3.3.2.41	Glove material	B535		3	133	135	N	DI
B.5.3.3.2.42	Glove material	B535		3	136	138	N	DI
B.5.3.3.2.43	Glove material	B535		3	139	141	N	DI
B.5.3.3.2.44	Glove material	B535		3	142	144	N	DI
B.5.3.3.2.45	Are gloves motorcycle oriented?	B535		3	145	147	N	DI
B.5.3.3.2.46	Are gloves motorcycle oriented?	B535		3	148	150	N	DI
B.5.3.3.2.47	Are gloves motorcycle oriented?	B535		3	151	153	N	DI
B.5.3.3.2.48	Are gloves motorcycle oriented?	B535		3	154	156	N	DI
B.5.3.3.2.49	Wearing helmet on head?	B536		3	13	15	N	DI
B.5.3.3.2.50	Wearing helmet on head?	B536		3	16	18	N	DI
B.5.3.3.2.51	Wearing helmet on head?	B536		3	19	21	N	DI
B.5.3.3.2.52	Wearing helmet on head?	B536		3	22	24	N	DI
B.5.3.3.2.53	Was helmet properly adjusted on head?	B536		3	25	27	N	DI
B.5.3.3.2.54	Was helmet properly adjusted on head?	B536		3	28	30	N	DI
B.5.3.3.2.55	Was helmet properly adjusted on head?	B536		3	31	33	N	DI
B.5.3.3.2.56	Was helmet properly adjusted on head?	B536		3	34	36	N	DI
B.5.3.3.2.57	Was helmet securely fastened?	B536		3	37	39	N	DI
B.5.3.3.2.58	Was helmet securely fastened?	B536		3	40	42	N	DI
B.5.3.3.2.59	Was helmet securely fastened?	B536		3	43	45	N	DI
B.5.3.3.2.60	Was helmet securely fastened?	B536		3	46	48	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.2.61	Type of helmet	B536		3	49	51	N	DI
B.5.3.3.2.62	Type of helmet	B536		3	52	54	N	DI
B.5.3.3.2.63	Type of helmet	B536		3	55	57	N	DI
B.5.3.3.2.64	Type of helmet	B536		3	58	60	N	DI
B.5.3.3.2.65	Type of helmet	B536		3	61	63	N	DI
B.5.3.3.2.66	Type of helmet	B536		3	64	66	N	DI
B.5.3.3.2.67	Type of helmet	B536		3	67	69	N	DI
B.5.3.3.2.68	Type of coverage	B536		3	70	72	N	DI
B.5.3.3.2.69	Type of coverage	B536		3	73	75	N	DI
B.5.3.3.2.70	Type of coverage	B536		3	76	78	N	DI
B.5.3.3.2.71	Type of coverage	B536		3	79	81	N	DI
B.5.3.3.2.72	Type of coverage	B536		3	82	84	N	DI
B.5.3.3.2.73	Type of coverage	B536		3	85	87	N	DI
B.5.3.3.2.74	Type of coverage	B536		3	88	90	N	DI
B.5.3.3.2.75	Type of coverage	B536		3	91	93	N	DI
B.5.3.3.2.76	Type of coverage	B536		3	94	96	N	DI
B.5.3.3.2.77	Type of coverage	B536		3	97	99	N	DI
B.5.3.3.2.78	Type of coverage	B536		3	100	102	N	DI
B.5.3.3.2.79	Type of coverage	B536		3	103	105	N	DI
B.5.3.3.2.80	Predominating helmet colour	B536		3	106	108	N	DI
B.5.3.3.2.81	Predominating helmet colour	B536		3	109	111	N	DI
B.5.3.3.2.82	Predominating helmet colour	B536		3	112	114	N	DI
B.5.3.3.2.83	Predominating helmet colour	B536		3	115	117	N	DI
B.5.3.3.2.84	Predominating helmet colour	B536		3	118	120	N	DI
B.5.3.3.2.85	Predominating helmet colour	B536		3	121	123	N	DI
B.5.3.3.2.86	Predominating helmet colour	B536		3	124	126	N	DI
B.5.3.3.2.87	Predominating helmet colour	B536		3	127	129	N	DI
B.5.3.3.2.88	Predominating helmet colour	B536		3	130	132	N	DI
B.5.3.3.2.89	Predominating helmet colour	B536		3	133	135	N	DI
B.5.3.3.2.90	Predominating helmet colour	B536		3	136	138	N	DI
B.5.3.3.2.91	Predominating helmet colour	B536		3	139	141	N	DI
B.5.3.3.2.92	Predominating helmet colour	B536		3	142	144	N	DI
B.5.3.3.2.93	Predominating helmet colour	B536		3	145	147	N	DI
B.5.3.3.2.94	Predominating helmet colour	B536		3	148	150	N	DI
B.5.3.3.2.95	Predominating helmet colour	B536		3	151	153	N	DI
B.5.3.3.2.96	Colour of face shield, if present	B536		3	154	156	N	DI
B.5.3.3.2.97	Colour of face shield, if present	B536		3	157	159	N	DI
B.5.3.3.2.98	Colour of face shield, if present	B536		3	160	162	N	DI
B.5.3.3.2.99	Colour of face shield, if present	B536		3	163	165	N	DI
B.5.3.3.2.100	Colour of face shield, if present	B536		3	166	168	N	DI
B.5.3.3.2.101	Colour of face shield, if present	B536		3	169	171	N	DI
B.5.3.3.2.102	Colour of face shield, if present	B536		3	172	174	N	DI
B.5.3.3.2.103	Colour of face shield, if present	B536		3	175	177	N	DI
B.5.3.3.2.104	Colour of face shield, if present	B536		3	178	180	N	DI
B.5.3.3.2.105	Helmet fit	B536		3	181	183	N	DI
B.5.3.3.2.106	Helmet fit	B536		3	184	186	N	DI
B.5.3.3.2.107	Helmet fit	B536		3	187	189	N	DI
B.5.3.3.2.108	Helmet fit	B536		3	190	192	N	DI
B.5.3.3.2.109	Helmet fit	B536		3	193	195	N	DI
B.5.3.3.2.110	Helmet fit	B536		3	196	198	N	DI
B.5.3.3.2.111	Eye coverage in use, separate from helmet	B536		3	199	201	N	DI
B.5.3.3.2.112	Eye coverage in use, separate from helmet	B536		3	202	204	N	DI

Table A.5. Concurrent exposure database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
B.5.3.3.2.113	Eye coverage in use, separate from helmet	B536		3	205	207	N	DI
B.5.3.3.2.114	Eye coverage in use, separate from helmet	B536		3	208	210	N	DI
B.5.3.3.2.115	Eye coverage in use, separate from helmet	B536		3	211	213	N	DI
B.5.3.3.2.116	Eye coverage in use, separate from helmet	B536		3	214	216	N	DI
B.5.3.3.2.117	Eye coverage in use, separate from helmet	B536		3	217	219	N	DI
B.5.3.3.2.118	Eye coverage in use, separate from helmet	B536		3	220	222	N	DI
B.5.3.3.2.119	Eye coverage in use, separate from helmet	B536		3	223	225	N	DI
B.5.3.3.2.120	Eye coverage in use, separate from helmet	B536		3	226	228	N	DI
B.5.3.3.2.121	Eye coverage in use, separate from helmet	B536		3	229	231	N	DI

Notes:

- 1 Each text response is written to a unique record as follows:
 The first 3 characters of the record level are the same as the record level of the question.
 The last character of the record level is a "9" to designate that this is a text response record
 The question identifier is coded in 3 character blocks. For example:
 B.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"
- 2 Assigned counter value, see table A.2 for record locations

Table A.6. Moped database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
-	Accident identification number	-		8	1	8	A/N	-
-	Record level identifier	-		4	9	12	A/N	-
-	Text response question identifier	C##9		27	13	39	N	O
-	Text response counter index (see note 1)	C##9		3	40	42	N	O
-	Text response	C##9		80	43	122	A/N	-
C.4.1.3.1.1	In a lane which is	C411		1	13	13	N	D
C.4.1.3.1.2	Applicable speed limit for mopeds/mofas at accident scene	C411		3	14	16	N	C
C.4.1.3.1.2.1	Moped/mofa speed limit units	C411		1	17	17	N	D
C.4.1.3.1.3	Applicable maximum legal design speed for mopeds/mofas	C411		3	18	20	N	C
C.4.1.3.1.3.1	Moped/mofa design speed units	C411		1	21	21	N	D
C.4.1.3.2.1	In a lane which is	C412		1	14	14	N	D
C.4.1.4.1.1	Has the engine/driveline been visibly tampered with?	C411		1	22	22	N	D2
C.4.1.4.1.2	Engine tampered with by fitting a tuning kit (i.e., a commercially available combination of performance enhancing items)?	C411		1	23	23	N	D2
C.4.1.4.1.3.01	For each blank cell, respond (unless noted otherwise)	C411		1	24	24	N	D2
C.4.1.4.1.3.02	For each blank cell, respond (unless noted otherwise)	C411		1	25	25	N	D2
C.4.1.4.1.3.03	For each blank cell, respond (unless noted otherwise)	C411		1	26	26	N	D2
C.4.1.4.1.3.04	For each blank cell, respond (unless noted otherwise)	C411		1	27	27	N	D2
C.4.1.4.1.3.05	For each blank cell, respond (unless noted otherwise)	C411		1	28	28	N	D2
C.4.1.4.1.3.06	For each blank cell, respond (unless noted otherwise)	C411		1	29	29	N	D2
C.4.1.4.1.3.07	For each blank cell, respond (unless noted otherwise)	C411		1	30	30	N	D2
C.4.1.4.1.3.08	For each blank cell, respond (unless noted otherwise)	C411		1	31	31	N	D2
C.4.1.4.1.3.09	For each blank cell, respond (unless noted otherwise)	C411		1	32	32	N	D2
C.4.1.4.1.3.10	For each blank cell, respond (unless noted otherwise)	C411		1	33	33	N	D2
C.4.1.4.1.4.01	For each blank cell, respond (unless noted otherwise)	C411		1	34	34	N	D2
C.4.1.4.1.4.02	For each blank cell, respond (unless noted otherwise)	C411		1	35	35	N	D2
C.4.1.4.1.4.03	For each blank cell, respond (unless noted otherwise)	C411		1	36	36	N	D2
C.4.1.4.1.4.04	For each blank cell, respond (unless noted otherwise)	C411		1	37	37	N	D2
C.4.1.4.1.4.05	For each blank cell, respond (unless noted otherwise)	C411		1	38	38	N	D2
C.4.1.4.1.4.06	For each blank cell, respond (unless noted otherwise)	C411		1	39	39	N	D2
C.4.1.4.1.4.07	For each blank cell, respond (unless noted otherwise)	C411		1	40	40	N	D2
C.4.1.4.1.4.09	For each blank cell, respond (unless noted otherwise)	C411		1	42	42	N	D2
C.4.1.4.1.4.10	For each blank cell, respond (unless noted otherwise)	C411		1	43	43	N	D2

Table A.6. Moped database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.4.1.4.1.5.01	For each blank cell, respond (unless noted otherwise)	C411		1	44	44	N	D2
C.4.1.4.1.5.02	For each blank cell, respond (unless noted otherwise)	C411		1	45	45	N	D2
C.4.1.4.1.5.03	For each blank cell, respond (unless noted otherwise)	C411		1	46	46	N	D2
C.4.1.4.1.5.04	For each blank cell, respond (unless noted otherwise)	C411		1	47	47	N	D2
C.4.1.4.1.5.05	For each blank cell, respond (unless noted otherwise)	C411		1	48	48	N	D2
C.4.1.4.1.5.06	For each blank cell, respond (unless noted otherwise)	C411		1	49	49	N	D2
C.4.1.4.1.5.07	For each blank cell, respond (unless noted otherwise)	C411		1	50	50	N	D2
C.4.1.4.1.5.08	For each blank cell, respond (unless noted otherwise)	C411		1	51	51	N	D2
C.4.1.4.1.5.09	For each blank cell, respond (unless noted otherwise)	C411		1	52	52	N	D2
C.4.1.4.1.5.10	For each blank cell, respond (unless noted otherwise)	C411		1	53	53	N	D2
C.4.1.4.1.6.01	For each blank cell, respond (unless noted otherwise)	C411		1	54	54	N	D2
C.4.1.4.1.6.02	For each blank cell, respond (unless noted otherwise)	C411		1	55	55	N	D2
C.4.1.4.1.6.03	For each blank cell, respond (unless noted otherwise)	C411		1	56	56	N	D2
C.4.1.4.1.6.04	For each blank cell, respond (unless noted otherwise)	C411		1	57	57	N	D2
C.4.1.4.1.6.05	For each blank cell, respond (unless noted otherwise)	C411		1	58	58	N	D2
C.4.1.4.1.6.06	For each blank cell, respond (unless noted otherwise)	C411		1	59	59	N	D2
C.4.1.4.1.6.07	For each blank cell, respond (unless noted otherwise)	C411		1	60	60	N	D2
C.4.1.4.1.6.08	For each blank cell, respond (unless noted otherwise)	C411		1	61	61	N	D2
C.4.1.4.1.6.09	For each blank cell, respond (unless noted otherwise)	C411		1	62	62	N	D2
C.4.1.4.1.6.10	For each blank cell, respond (unless noted otherwise)	C411		1	63	63	N	D2
C.4.1.4.1.7.01	For each blank cell, respond (unless noted otherwise)	C411		1	64	64	N	D2
C.4.1.4.1.7.02	For each blank cell, respond (unless noted otherwise)	C411		1	65	65	N	D2
C.4.1.4.1.7.03	For each blank cell, respond (unless noted otherwise)	C411		1	66	66	N	D2
C.4.1.4.1.7.04	For each blank cell, respond (unless noted otherwise)	C411		1	67	67	N	D2
C.4.1.4.1.7.05	For each blank cell, respond (unless noted otherwise)	C411		1	68	68	N	D2
C.4.1.4.1.7.06	For each blank cell, respond (unless noted otherwise)	C411		1	69	69	N	D2
C.4.1.4.1.8.01	For each blank cell, respond (unless noted otherwise)	C411		1	74	74	N	D2
C.4.1.4.1.8.02	For each blank cell, respond (unless noted otherwise)	C411		1	75	75	N	D2
C.4.1.4.1.8.03	For each blank cell, respond (unless noted otherwise)	C411		1	76	76	N	D2

Table A.6. Moped database variables and ASCII flat file record locations

Question identifier	Question text	ASCII Flat File					Data	
		Record		Field width	Column Position		Type	Sub type
		Level identifier	Sub level		start	stop		
C.4.1.4.1.8.04	For each blank cell, respond (unless noted otherwise)	C411		1	77	77	N	D2
C.4.1.4.1.8.05	For each blank cell, respond (unless noted otherwise)	C411		1	78	78	N	D2
C.4.1.4.1.8.06	For each blank cell, respond (unless noted otherwise)	C411		1	79	79	N	D2
C.4.1.4.1.8.07	For each blank cell, respond (unless noted otherwise)	C411		1	80	80	N	D2
C.4.1.4.1.8.08	For each blank cell, respond (unless noted otherwise)	C411		1	81	81	N	D2
C.4.1.4.1.9.01	For each blank cell, respond (unless noted otherwise)	C411		1	84	84	N	D2
C.4.1.4.1.9.02	For each blank cell, respond (unless noted otherwise)	C411		1	85	85	N	D2
C.4.1.4.1.9.03	For each blank cell, respond (unless noted otherwise)	C411		1	86	86	N	D2
C.4.1.4.1.9.05	For each blank cell, respond (unless noted otherwise)	C411		1	88	88	N	D2
C.4.1.4.1.9.09	For each blank cell, respond (unless noted otherwise)	C411		1	92	92	N	D2
C.4.1.4.1.9.10	For each blank cell, respond (unless noted otherwise)	C411		1	93	93	N	D2
C.4.1.4.1.10.01	For each blank cell, respond (unless noted otherwise)	C411		1	94	94	N	D2
C.4.1.4.1.10.02	For each blank cell, respond (unless noted otherwise)	C411		1	95	95	N	D2
C.4.1.4.1.10.03	For each blank cell, respond (unless noted otherwise)	C411		1	96	96	N	D2
C.4.1.4.1.10.04	For each blank cell, respond (unless noted otherwise)	C411		1	97	97	N	D2
C.4.1.4.1.10.05	For each blank cell, respond (unless noted otherwise)	C411		1	98	98	N	D2
C.4.1.4.1.10.06	For each blank cell, respond (unless noted otherwise)	C411		1	99	99	N	D2
C.4.1.4.1.10.07	For each blank cell, respond (unless noted otherwise)	C411		1	100	100	N	D2
C.4.1.4.1.10.08	For each blank cell, respond (unless noted otherwise)	C411		1	101	101	N	D2
C.4.1.4.1.10.09	For each blank cell, respond (unless noted otherwise)	C411		1	102	102	N	D2
C.4.1.4.1.10.10	For each blank cell, respond (unless noted otherwise)	C411		1	103	103	N	D2
C.4.1.5.1	If rider completed special moped training, how much time since completion?	C411		1	104	104	N	D
C.4.1.5.2	If rider did not complete special moped training, what was the reason?	C411		1	105	105	N	D
C.4.1.6.1.1	Was moped/mofa travelling slowly relative to traffic?	C411		1	106	106	N	D2
C.4.1.6.1.2	If moped/mofa was travelling slower than the surrounding traffic, why?	C411		1	107	107	N	D
C.4.1.6.1.3	Were there any traffic segregation measures (with respect to other vehicles, pedestrians, mopeds, mofas, bicycles, etc.)?	C411		1	108	108	N	D2
C.4.1.6.1.4	What were the traffic segregation measures?	C411		1	109	109	N	D
C.4.1.6.1.5	Were the traffic segregation measures adequate?	C411		1	110	110	N	D2

Notes:

- 1 Each text response is written to a unique record as follows:
 - The first 3 characters of the record level are the same as the record level of the question.
 - The last character of the record level is a "9" to designate that this is a text response record
 - The question identifier is coded in 3 character blocks. For example:
C.1.2.3.4.5.6.7.8.9 would be coded as "001002003004005006007008009"
- 2 Assigned counter value, see table A.3 for record locations

Annex A

(Normative)

Accident database format

This annex specifies the database format to be used. Tables A.1 to A.3 list the record sublevels and assigned counter values that shall be used to further specify the data records in the accident, concurrent exposure, and moped databases. Table A.4 lists the accident database variables and database format corresponding to the data summary sheets in annex A of part 3. Table A.5 lists the exposure database variables and database format corresponding to the data summary sheets in annex B of part 4. Table A.6 lists the moped module database variables and database format corresponding to the data summary sheets in Annex C of part 4.

The column heading of the tables A.1 to A.3 are defined as follows:

- Record identifier: is the 4 character code in columns 9-12 of the data record that identifies the data record. "all" indicates that the coded variable shall appear on all data records. "###9" indicates that the coded variable shall appear on all text response data records where "###" denotes 3 alpha numeric characters;
- Sub level column position: is the beginning and ending character position of the record sub level identifier on the data record, '-' indicates that there is no sub level identifier associated with the record level;
- Sub level start and stop values: specify the range of values for the sub level. There is one data record for each value;
- Sub level description: describes the sub level;
- Counter assigned value: is the assigned counter value that appears on the data record;
- Counter column position: is the beginning and ending character position of the assigned value on the data record. '-' indicates that there is no assigned counter value associated with the record level;
- Counter start and stop values: specify the range of values for the assigned counter value. There is one data record for each value;
- Counter description: describes the assigned counter value.

The column headings of the tables A.4 to A.6 are defined as follows:

- Question identifier: is the unique symbol used to identify each question in the data summary sheets;
- Text: is an excerpt of the data summary sheets question text, which is included in this table for reference purposes only;
- ASCII flat file record level and sub level identifier: specify the data record that the variable is stored on;
- ASCII flat file field width: specifies the maximum number of characters for the coded variable;
- ASCII flat file start and stop column position: specify the beginning and ending character positions of the coded variable on the data record; Alpha/numeric values shall be left justified, and numeric values shall be right justified.
- Data type: indicates whether the data is alpha/numeric, numeric, or not coded.
- Data sub type: indicates the type of data, according to part 11 of this Common Methodology.

The Data Types listed in column 7 of Tables A.4 to A.6 are as follows:

- A/N Alpha/Numeric data (a-z, A-Z, 0-9, +, -, " ", ",", ".", "/")
- N Numeric data (0-9, +, -, " ")
- (not coded, for reference only) Data is not coded

The data sub types listed in column 7 of Tables A.4 to A.6 are as follows:

- D Discrete variable
- D2 Discrete variable with 2 nominal outcomes (e.g. yes, no)
- DI Discrete integer variable (e.g., number of passengers)
- C Continuous variable (e.g. temperature)