(OTR) ONTARIO TRAUMA REGISTRY

2003 REPORT

MAJOR INJURY IN ONTARIO (INCLUDES 2001–2002 DATA)

Canadian Institute for Health Information
Institut canadien d'information sur la santé

Ontario Trauma Registry
2003 Report
Major Injury in Ontario
(includes 2001–2002 data)

Canadian Institute for Health Information
377 Dalhousie Street
Suite 200
Ottawa, Ontario
K1N 9N8

Telephone: (613) 241-7860
Fax: (613) 241-8120
www.cihi.ca

ISBN 1-55392-274-3 (PDF)

About the Canadian Institute for Health Information (CIHI)

The Canadian Institute for Health Information (CIHI) is an independent, pan-Canadian, not-for-profit organization working to improve the health of Canadians and the health care system by providing quality health information. Committed to safeguarding the privacy and confidentiality of personal health information, CIHI's mandate is to coordinate the development and maintenance of a common approach to health information for Canada. To this end, CIHI is responsible for providing accurate and timely information that is needed to establish sound health policies, manage the Canadian health system effectively and create public awareness of factors affecting good health.

The Institute's mandate is based upon collaborative planning with key stakeholder groups, including all provincial, territorial and federal governments, national health care agencies and service providers.

CIHI is governed by a Board of Directors whose 15 members strike a balance among the health stakeholders, sectors and regions of Canada.

The Institute's core functions are to:

- identify and promote national health indicators;
- coordinate and promote the development and maintenance of national health information standards;
- develop and manage health databases and registries;
- conduct analysis and special studies and participate in research;
- publish reports and disseminate health information; and
- coordinate and conduct education sessions and conferences.

Acknowledgements

This Ontario Trauma Registry (OTR) report is made possible by the contributions of the 11 participating hospitals, the Ontario Trauma Registry Advisory Committee (TRAC), Working Group members, and the Ontario Ministry of Health and Long-Term Care.

The OTR is funded by the Emergency Health Services Branch of the Ontario Ministry of Health and Long Term Care and managed by the Canadian Institute for Health Information (CIHI). The continued support from Ms. Yau Yip and Ms. Tess Palatino is greatly appreciated.

The OTR CDS Working Group members are thanked for contributing to ongoing data quality improvements:

- Maureen Brennan Barnes, Children's Hospital of Eastern Ontario, Ottawa
- Tanya Charyk Stewart, London Health Sciences Centre, London
- Mary Chipman, University of Toronto Department of Public Health Sciences, Toronto
- Yvonne St. Pierre, St. Joseph's Health Centre, Sudbury
- Dr. Ken Reid, Kingston General Hospital, Kingston
- Joanne Sinclair, Thunder Bay Regional Hospital, McKellar Campus, Thunder Bay
- Joyce Williamson, London Health Sciences Centre, London

This report was developed at CIHI under the direction of Nizar Ladak, Director, Health Services Information, by:

- Cassandra Linton, Senior Analyst
- Alison Locker, Senior Analyst
- Shalu Kapoor, Project Assistant
- Nicole de Guia, Consultant, Clinical Registries
- Greg Webster, Manager, Clinical Registries

CIHI staff are thanked for their contributions: CIHI Applications Development, Health Services developed the OTR CDS database system and programmed the figures and tables in this report; Production Systems and CIHI Applications Development, Health Services are thanked for their contributions to this report including data loading and supporting the tables and figures. CIHI Publications assisted with formatting and layout.

All questions regarding this report should be directed to:

Nicole de Guia
Consultant, Clinical Registries
Ontario Trauma Registry
Canadian Institute for Health Information
90 Eglinton Ave East, Suite 300
Toronto, Ontario
M4P 2Y3
Tel: (416) 481-2002 Ext. 3545
Fax: (416) 481-2950
E-mail: otr@cihi.ca

Executive Summary

The source of data for this report is the Ontario Trauma Registry Comprehensive Data Set. Trauma cases were selected based on an Injury Severity Score (ISS) > 12 and on External Cause of Injury (E Code) inclusion and exclusion criteria. Cases also met one of the following criteria:

- were admitted to a participating hospital; or
- were treated in the Emergency Department of a participating hospital (not admitted); or
- died in the Emergency Department of a participating hospital after treatment was initiated (not admitted).

Overall Trends

In fiscal year 2001–2002, there were 3,692 cases hospitalized with major trauma in 11 participating hospitals across 14 sites in Ontario. This represents an increase of 13% compared to 1997–1998, and an average annual increase of 3% from 1997–1998 to 2001–2002.

In 2001–2002, these major trauma cases accounted for 57,559 days in the participating hospitals. Most (71%, n = 2,636) of these cases were male patients, and the average age of all cases was 43 years. The average age has increased by 5% compared to 1997–1998.

Of the 3,692 cases, 14% (n = 515) died, either in-hospital (n = 431) or in the emergency department (DIE) (n = 84). The number of inhospital deaths has increased by 9% since 1997–1998, an average annual increase of 2%. The number of DIEs has decreased by 7% since 1997–1998, with an average annual decrease of 1.5%.

Trends by Cause

Motor vehicle collisions were responsible for nearly one-half of the hospitalizations (48%, n = 1,756), followed by unintentional falls (30%, n = 1,104). Injury purposefully inflicted by another person (i.e. homicide and assault) (8%, n = 284) and suicide and self-inflicted injury (excluding poisoning) (3%, n = 98) were the next most common causes of injury. When causes of injury were analyzed by age group, motor vehicle collisions and falls were the leading two causes in all age groups except among cases aged 20 to 34 years. Although motor vehicle collisions (excluding cyclists) were responsible for the majority (59%, n = 491) of cases in this age group, the second most common cause of injury was injury purposely inflicted by another person (16%, n = 133).

Among the 1,756 cases injured in motor vehicle collisions, 55% (n = 971) were drivers and 23% (n = 409) were passengers. Motor vehicle collisions accounted for 40% (n = 205) of major injury deaths.

Among the 1,104 cases injured in unintentional falls, the most common specified types of falls were falls on or from stairs/steps (24%, n = 264) and slipping, tripping, or stumbling (16%, n = 178). Falls were responsible for 34% (n = 175) of major injury in-hospital deaths.

Context of Injury

Ten percent (n = 354) of the major trauma cases were injured while involved in a sports or recreational-related activity. Six percent (n = 237) of admissions were documented to be (paid) work-related. Thirteen percent (n = 464) of the cases had a positive blood alcohol concentration, defined as that greater than or equal to 17.0 mmol/L.

Clinical Aspects of Injury

The most common injury types were superficial (69%, n = 2,553) and head injuries (69%, n = 2,494), followed by orthopedic (63%, n = 2,331) injuries. Ninety-two percent (n = 3,406) of cases were documented with blunt injury (includes lacerations), 5% (n = 188) had penetrating injuries and 3% (n = 98) were hospitalized due to burns.

For all cases, the average injury severity score (ISS) was 25. Since 1997–1998, the mean ISS has changed very little. In 2001–2002, the highest mean ISS occured among cases injured in fire and flames (ISS = 30, n = 63) and among cases with burn injuries (as opposed to blunt or penetrating) (ISS = 28).

The average length of stay (LOS) was 16 days. This represents a 5% decrease compared to 1997–1998, and an average annual decrease of 1% since that time. In 2001–2002, the longest average LOS was also among cases injured in fire and flames (LOS = 25 days) and among cases with burn injuries (LOS = 30 days).

Of the 3,177 cases discharged alive, 57% (n = 1,807) were discharged home either with or without support services, 18% (n = 571) were discharged to a rehabilitative facility, and 19% (n = 591) were transferred to another acute care facility.

Ontario Trauma Registry
2003 Report
Major Injury in Ontario
(includes 2001–2002 data)

Table of Contents

Ontario Trauma Registry
2003 Report
Major Injury in Ontario
(includes 2001–2002 data)

Table of Contents (cont'd)

1. Introduction

A. Purpose of Report

The purpose of this report is to provide a descriptive analysis of patients hospitalized with major trauma in the 11 lead trauma hospitals in Ontario. The data source for this report is the Ontario Trauma Registry Comprehensive Data Set. Trauma cases were selected based on an Injury Severity Score (ISS) > 12 and using External Cause of Injury (E Code) inclusion and exclusion criteria.

B. About the Ontario Trauma Registry (OTR)

i. Goal

The goal of the Ontario Trauma Registry is to facilitate the reduction of injury admissions and deaths in the province of Ontario by identifying, describing and quantifying trauma in order to:

1) permit planning and evaluation of prevention programs, legislative changes and cost expenditures; and

2) aid in resource allocation decisions and contribute to cost reductions.

ii. History

The OTR, funded by the Ontario Ministry of Health and Long-Term Care, was established in May 1992. A multidisciplinary advisory committee provides guidance to the OTR. The Trauma Registry Advisory Committee (TRAC) includes representatives from the Ministry of Health and Long-Term Care, Ministry of Labour, Ministry of Transportation, CIHI, epidemiologists, trauma care providers, the Office of the Chief Coroner and the Trauma Association of Canada. The current structure and implementation of the OTR are based on data elements, data collection procedures, report formats and management procedures determined by TRAC.

The primary users of the OTR include 11 participating hospitals, the members of TRAC and Area Emergency Health Services (EHS) Committees. The Area EHS Committees are part of regional planning networks composed of committees at the provincial, regional and local levels involving health care planners, providers and consumers in emergency health initiatives.

iii. Structure

For injury prevention programs to be effective, data are needed to clearly define the nature and scope of injury in the province. The use of the International Classification of Disease (ICD) External Cause of Injury (E Codes) coding system for all injury admissions facilitates the analysis of injury data in Ontario. The OTR consists of three major sources of data as listed below. Standard and ad hoc reports from these data sets detail demographic information, cause and nature of injury admissions and deaths provincially. This information is used by researchers and injury prevention specialists to develop and monitor injury prevention programs.

The Ontario Trauma Registry is composed of 3 datasets:

1. The **Minimal Data Set** (MDS) contains demographic, diagnostic and procedural information on all acute care hospitalizations due to injury in acute care hospitals in Ontario. These admissions are selected from the Discharge Abstract Database at CIHI and downloaded to the Registry's data processing system. Selection criteria for inclusion in the OTR MDS are based on specific External Cause of Injury Codes (E Codes) within the International Classification of Disease, 9th revision (ICD-9).

   Examples of E Codes that are included in the definition of trauma are motor vehicle collisions, including those involving pedestrians, motorcycles and bicycles, and falls, drownings and burns. E Codes that are excluded are poisonings, adverse effects and complications. Appendix B (Trauma Definition: E Code Inclusions and Exclusions) lists the E Codes that are included and excluded from the definition of trauma used for OTR MDS.

2. The **Death Data Set** from the Office of the Chief Coroner contains information on all deaths in the province due to injury. There are approximately 3,500 injury deaths annually in Ontario. Reporting on all injury deaths rather than in-hospital deaths (as reported in the OTR MDS) provides a more complete picture of trauma in the province. Information contained in the database at the Office of the Chief Coroner is indispensable to injury prevention programs because a significant percentage of injured persons die before admission to hospital.

   Trauma is defined in the Death Data Set using components of the Office of the Chief Coroner's classification system of death types, death factors, environments and involvements. The OTR has developed a system to map the classification system used by the Office of the Chief Coroner to External Cause of Injury Codes (E Codes) to allow standardized reporting across the data sets of the OTR and comparisons to other sources of data. Information in the Death Data Set includes demographics, cause of death and factors contributing to death such as alcohol use.

3. The **Comprehensive Data Set**, the data source for this report, is described in detail in the next chapter.

2. Methods

A. Data Source

The data source for this report is the ***Ontario Trauma Registry Comprehensive Data Set*** **(OTR CDS)**. The OTR CDS consists of detailed information on patients hospitalized with major trauma in 11 participating hospitals across 14 sites in the province. These lead/trauma hospitals have been funded by the Ministry of Health and Long-Term Care for hardware, software and dedicated trauma staff including a Medical Director, Trauma Coordinator, Data Analyst and Administrative Assistant. The definition of trauma in the Comprehensive Data Set is based on the Injury Severity Score (ISS), an international scoring system created to calculate the severity of injury, and an appropriate E Code (Appendix B). E Code inclusion criteria have been expanded for the Comprehensive Data Set to include other causes of injury where appropriate as determined by the Comprehensive Data Set Working Group. Appendix C describes these additional guidelines.

Specialized trauma software (COLLECTOR and TRI-CODE from Digital Innovations and Tri-Analytics, Inc.) is used to collect and analyze data on approximately 3,500 cases annually. This software has been customized for the province of Ontario with input from participating hospitals and the Trauma Registry Advisory Committee (TRAC). Detailed data are collected including demographics, pre-hospital and hospital care, and patient outcomes including a 6 month follow up interview. Data are electronically transmitted monthly to the OTR to create the Comprehensive Data Set.

B. Inclusion/Exclusion Criteria

i. Definition of Trauma

Trauma is defined in the Comprehensive Data Set as any case:

- with an ISS > 12 and an appropriate E Code (External Cause of Injury Code) (Appendix B) who meet one of the following criteria:
  - admitted to a participating hospital; or
  - treated in the Emergency Department of a participating hospital (not admitted); or
  - died in the Emergency Department of a participating hospital after treatment is initiated (not admitted).

Additional trauma definition guidelines, as established by the Comprehensive Data Set Working Group and the Trauma Registry Advisory Subcommittee (TRAC), are found in Appendices B and C.

ii. Participating Hospitals

The following 11 participating hospitals (across 14 sites) provide data for the OTR CDS:

- Children's Hospital of Eastern Ontario, Ottawa
- Hamilton Health Sciences Corporation, Hamilton
- Hospital for Sick Children, Toronto
- Hôtel-Dieu Grace Hospital, Windsor
- Kingston General Hospital, Kingston
- London Health Science Centre, London
- The Ottawa Hospital, Ottawa
- St. Joseph's Health Centre (formerly Sudbury General Hospital), Sudbury
- St. Michael's Hospital, Toronto
- Sunnybrook and Women's College Health Science Centre, Toronto
- Thunder Bay Regional Hospital, McKellar Campus, Thunder Bay

In this report, data from hospital sites are reported according to a letter of the alphabet ('A' to 'N') so that specific hospitals cannot be identified.

C. Data Elements

i. Data Dictionary

The OTR CDS Data Dictionary has been prepared by the Ontario Trauma Registry with input from participating hospital staff and members of the TRAC. The purpose of the document is to define each data element in the customized Ontario version of COLLECTOR. The Data Dictionary includes a list of commonly used abbreviations and their meanings, the field name, the field type and field length for each data element, and an explanation of what is required for the data element as well as a list of menu choices wherever appropriate.

The Data Dictionary is updated routinely to reflect recommendations made by the TRAC Subcommittee and the CDS Working Group, to clarify definitions based on questions from participating hospital staff and to reflect software changes. Data Dictionary appendices include the definition of trauma, Minimal Data Set trauma patient definition (External Cause of Injury List), list of participating hospitals, CIHI physician services, non operative procedures definitions and Motor Vehicle Collision Report information.

A complete list of Comprehensive Data Set data elements can be found in Appendix D.

ii. Working Group

The CDS Working Group discusses data collection and definition issues raised by participating hospitals. This group meets by teleconference throughout the year on an as-needed basis. Minutes from the meetings are distributed to all users and the Data Dictionary is updated to reflect recommendations made by the Working Group.

Current members of the CDS Working Group are:

- Maureen Brennan Barnes, Children's Hospital of Eastern Ontario, Ottawa
- Tanya Charyk Stewart, London Health Sciences Centre, London
- Mary Chipman, University of Toronto Public Health Sciences, Toronto
- Yvonne St. Pierre, St. Joseph's Health Centre, Sudbury
- Dr. Ken Reid, Kingston General Hospital, Kingston
- Joanne Sinclair, Thunder Bay Regional Hospital, McKellar Campus, Thunder Bay
- Joyce Williamson, London Health Sciences Centre, London

iii. Data Quality

There are over 90 detailed edit checks in the COLLECTOR software package to ensure data accuracy, consistency and completeness. These edits include range checks, cross checks, validity checks, date sequence edits and edits for blank fields.

CIHI has implemented a data quality framework to provide a means to systematically assess, improve and document data quality for all databases at CIHI. Data quality is defined as "fitness for use" from the user's perspective. Using the data quality framework, the Ontario Trauma Registry Comprehensive Data Set (OTR CDS) was assessed on the basis of five dimensions: accuracy, timeliness, comparability, usability and relevance. Each of these five dimensions is made up of related characteristics, which are operationalized using detailed criteria. A description of CIHI's Data Quality Framework is available on CIHI's web site (www.cihi.ca). To find an overview of the OTR CDS and guidance of how the OTR CDS may be used please refer to the *Data Quality Documentation: Ontario Trauma Registry Comprehensive Data Set (OTR CDS).*

D. Reporting Guidelines

This report:

- contains data from 11 participating hospitals across 14 sites transmitted to the Ontario Trauma Registry as of June 4, 2003.
- is created by fiscal year of admission as requested by participating hospitals and approved by the Trauma Registry Advisory Committee.
- contains totals which may not match exactly when comparing with previous reports, since hospitals may update data from previous years.
- reports on 5 year trends (1997–1998 to 2001–2002).
- does not include admissions due to suicide or homicide resulting from poisoning.
- generally reports cases rather than admissions; because patients may be transferred between participating hospitals, the same individual patient may be included more than once in the Comprehensive Data Set.
- includes in-hospital deaths and DIEs (Died in Emergency) that occur in participating hospitals; deaths that occur before active treatment is initiated (i.e. Dead on Arrival) are not included.
- reports by month of admission rather than month of discharge for injury prevention planning purposes, as reviewed and approved by the Trauma Registry Advisory Committee.

- reports data from hospital sites according to a letter of the alphabet ("A" to "N") so that specific hospitals cannot be identified.
- due to hospital restructuring, some of the lead trauma hospitals which submit data to the Ontario Trauma Registry have merged but continue to submit data by site. The data tables in Appendix F report on 14 individual sites.
- may report percentages that do not add to 100% because of rounding.
- reports External Cause of Injury (E Code) by the primary E Code documented; up to three E Codes (i.e. primary, secondary and tertiary) can be documented in the Comprehensive Data Set.
- calculates percentages using all records as denominators unless otherwise stated.
- tables produced by age and/or sex may not sum to the total because cases with unknown age and/or unknown sex are included in the total but not in the individual age or sex categories.
- injury data are collected using International Classification of Diseases, 9th revision, clinical modification (ICD-9-CM).

3. Overall Trend Analysis

A. 2001–2002 Highlights

In the 2001–2002 OTR CDS there were 3,692 injury cases with an Injury Severity Score (ISS) > 12 and an appropriate cause of injury treated in 11 participating hospitals (across 14 sites) in Ontario.

- 3,692 injury cases accounting for 57,559 hospital days
- mean length of stay (LOS) is 16 days (median = 9)
- mean Injury Severity Score (ISS) is 25 (median = 24)
- 515 deaths which includes 431 in-hospital deaths (admitted patients) and 84 deaths in the Emergency Department (DIEs)
- 2,636 (71%) are male
- 1,766 (48%) are direct admissions
- mean age for all cases is 43 years (median = 41)
- 1,504 (41%) of cases are less than 35 years of age
- 108 (3%) are out of province residents
- 1,392 (38%) of patients have ventilator days documented; the mean number of ventilator days is 6 days (median = 2)
- 169 (5%) have intracranial pressure (ICP) monitoring days documented; the mean number of ICP days is 7 days (median = 3)
- 464 (13%) have a blood alcohol concentration (BAC) greater than or equal to 17.0 mmol/L
- the most common injury type is superficial (69%) followed by head (68%) and orthopedic injuries (63%)
- 3,406 (92%) of cases have blunt injury
- 237 (6%) are work related
- 354 (10%) of injuries occur in a sports and recreational related activity
- 255 (7%) of cases have an incomplete Glasgow Coma Scale due to the administration of paralytic agents

B. Trend Analysis 1997–1998 to 2001–2002

Over the past 5 years, the number of cases in the Comprehensive Data Set has increased from 3,263 in 1997–1998 to 3,692 in 2001–2002 (Appendix F, Table 1). This represents a 13% increase compared to 1997–1998, and an average annual increase of 3% between 1997–1998 and 2001–2002.

Of the 3,692 cases, 515 (14%) died either inhospital or in the emergency department (DIE). The number of inhospital deaths has increased by 9.4% since 1997–1998, with an average annual increase of 2%. The percentage of the total caseload attributed to inhospital deaths has fluctuated between 11.5% and 12.5% over the past five years. The number of DIEs has decreased by 7% since 1997–1998, an average annual decrease of 1.5%. DIEs as a percentage of the total caseload has decreased slightly from 2.8% in 1997–1998 to 2.3% in 2001–2002.

The mean Injury Severity Score (ISS) has remained relatively constant at 24 from 1997–1998 to 2001–2002.

The mean LOS has decreased slightly from 17 days in 1997–1998 to 16 days in 2001–2002, a five year decrease of 5% and an average annual decrease of 1%.

C. Demographic Analysis

Figure 1 shows the injury cases by age group. Cases:

- less than 20 years of age account for:
  - 18% (n = 673) of all cases
  - 15% (n = 8,914) of participating hospital days
- between the ages of 20–34 years account for:
  - 23% (n = 831) of all cases
  - 20% (n = 11,747) of participating hospital days
- between the ages of 35–64 years account for:
  - 36% (n = 1,317) of all cases
  - 38% (n = 22,031) of participating hospital days
- aged 65 years of age and over account for:
  - 24% (n = 870) of all cases
  - 26% (n = 14,867) of participating hospital days

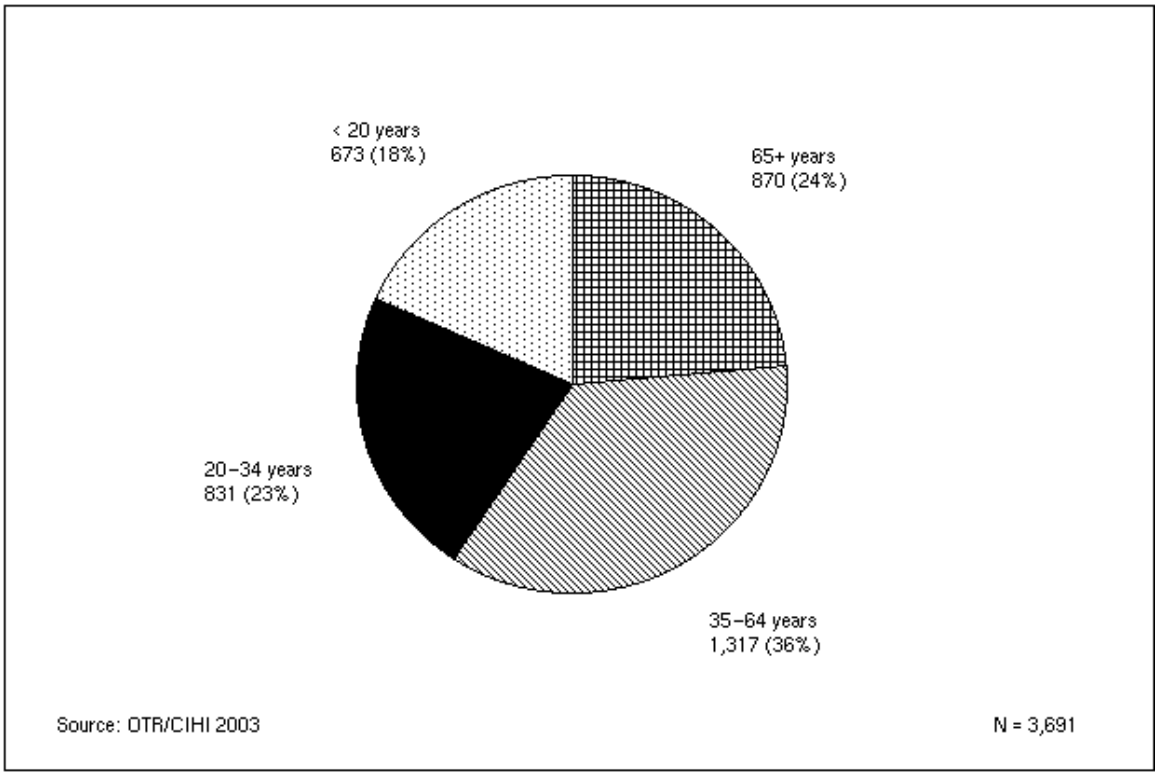


Figure 1. Injury Cases by Age Group, 2001–2002*

*Note: 1 case with unknown age

As seen in Figure 2, adult males account for the greatest (71%) number of cases.

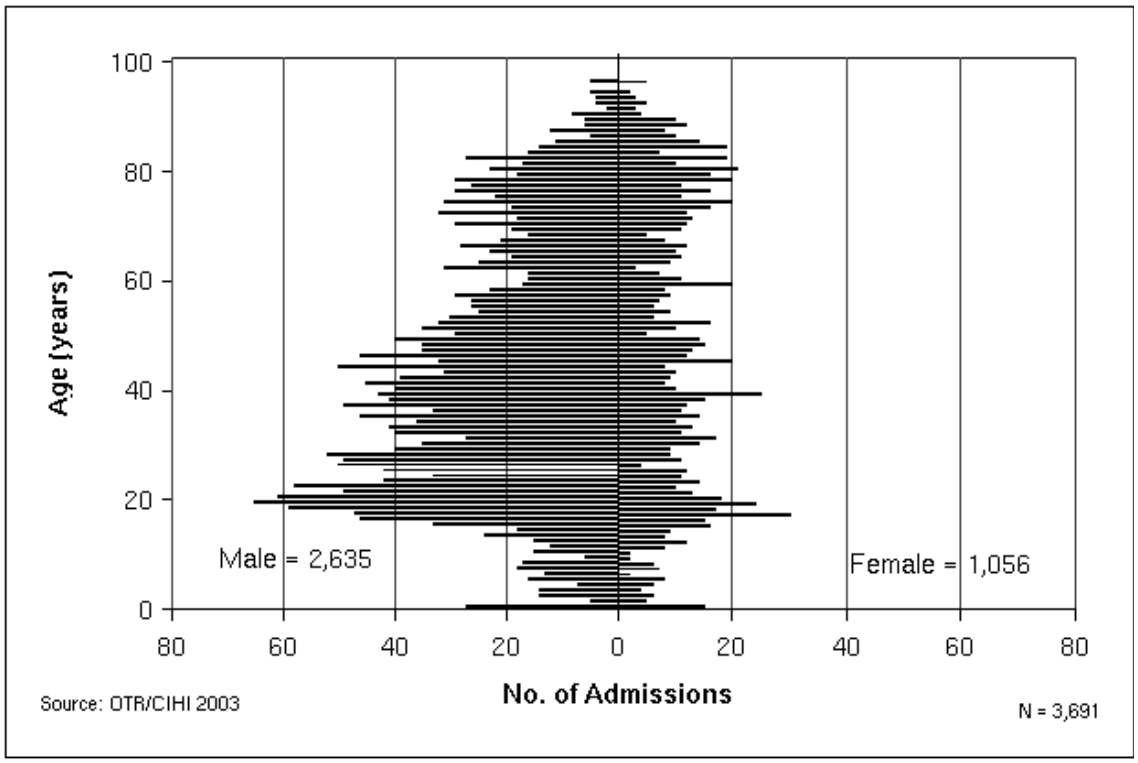


Figure 2. Injuries by Single Year of Age and Sex—All Cases, 2001–2002*

*Note: 1 case with unknown age

4. Analysis of Causes of Injury

A. Overall Causes

Figure 3 shows the causes of injury for the 3,692 cases in the 2001–2002 Comprehensive Data Set. Motor vehicle collisions were responsible for about half of the cases (48%, n = 1,756). Unintentional falls were the second most common cause of injury hospitalizations (30%, n = 1,104).

Tables 7 and 8 in Appendix F show highlights for the most common causes of injury.

For the most common causes of injury, the average (mean) age is (Appendix F, Table 7):

- 38 years for motor vehicle collisions (median = 34)
- 58 years for unintentional falls (median = 65)
- 30 years for injury purposely inflicted by another person (median = 28)
- 39 years for self inflicted injury (median = 37)

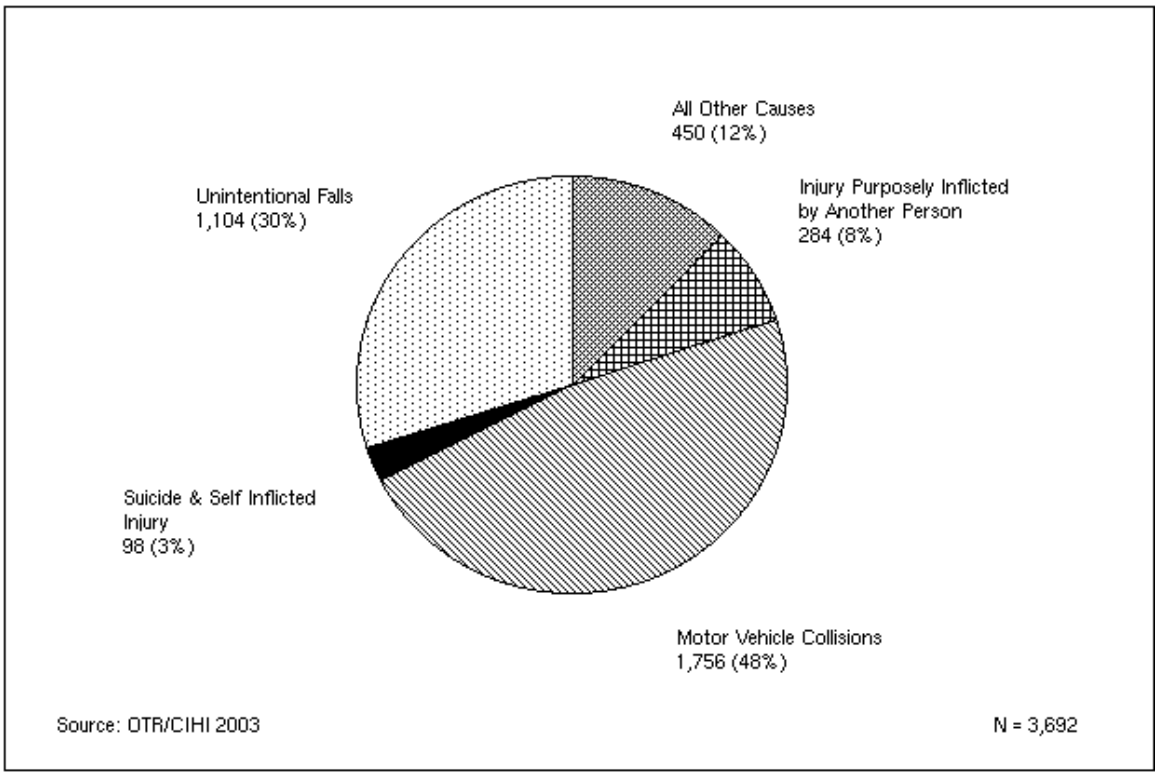


Figure 3. Causes of Injury—All Cases, 2001–2002

B. Causes by Age Group

i. Cases Under 20 Years of Age

Figure 4 shows the causes of injury among cases under the age of 20 years (n = 673). Motor vehicle collisions *excluding* those involving cyclists* comprised just over half of these cases (55%, n = 371), followed by unintentional falls (16%, n = 111). Injuries purposely inflicted by another person were responsible for 8% of cases (n = 53) and cycling incidents were responsible for 6% of the cases (n = 40).

*__Note__: Cyclists are reported separately from motor vehicle collisions in cases under age 35 because 62% (n = 62) of cycling incidents occurred among this age group.

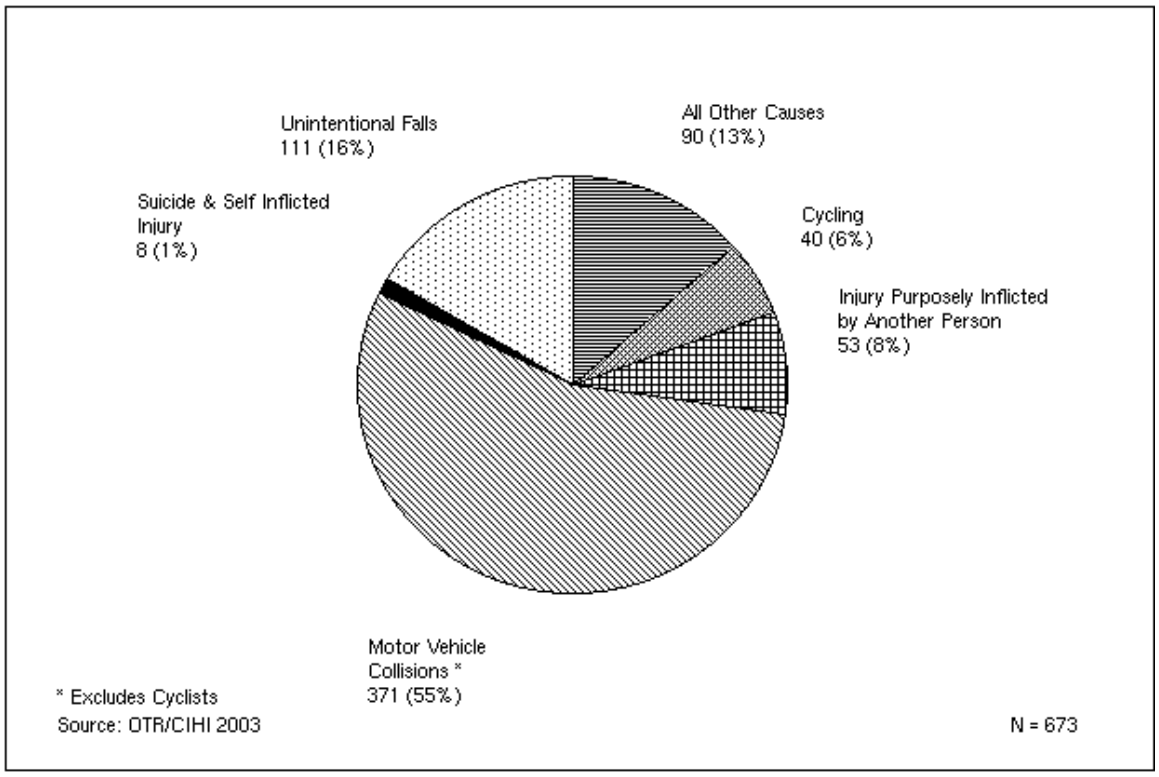


Figure 4. Causes of Injury—Cases Under 20 Years of Age, 2001–2002

ii. Cases Aged 20 to 34 Years

Figure 5 shows the causes of injury for cases aged 20 to 34 years (n = 831). Motor vehicle collisions *excluding* those involving cyclists* were responsible for 59% (n = 491) of the cases. The next most common causes of injury were injuries purposely inflicted by another person (16%, n = 133) and unintentional falls (9%, n = 77).

***Note**: Cyclists are reported separately from motor vehicle collisions in cases under age 35 because 62% (n = 62) of cycling incidents occurred among this age group.

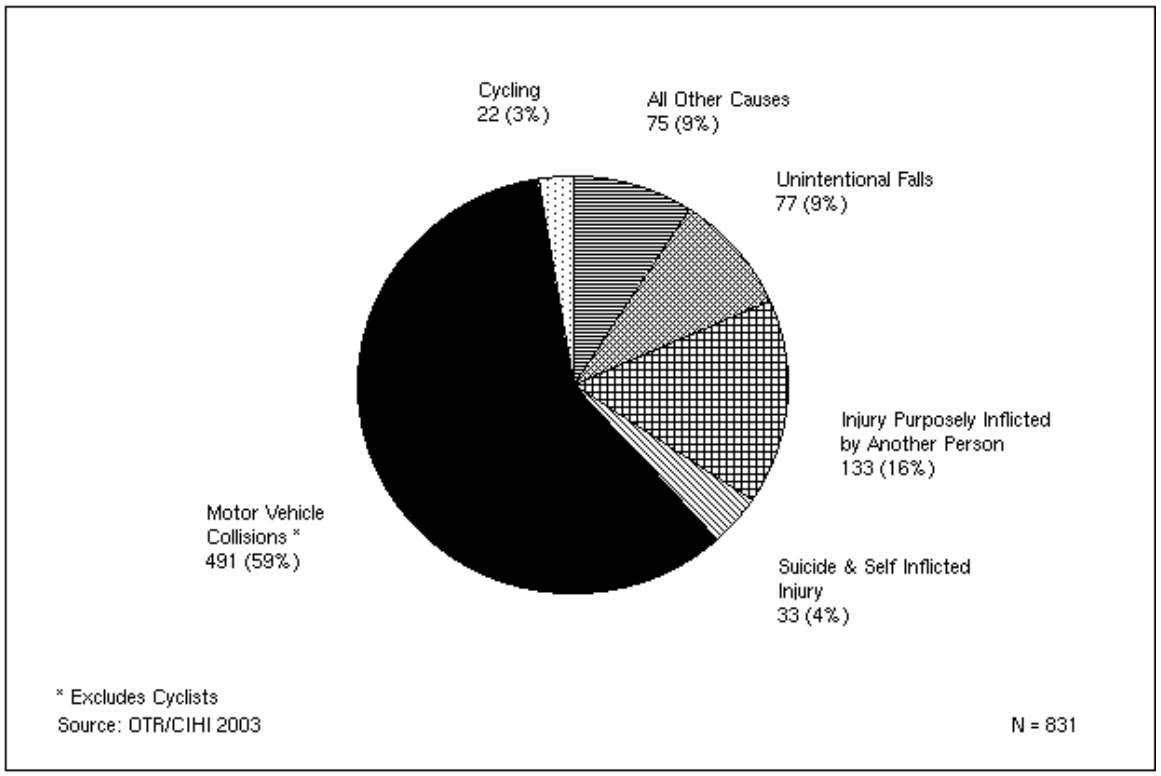


Figure 5. Causes of Injury—Cases Aged 20 to 34 Years, 2001–2002

iii. Cases Aged 35 to 64 Years

Figure 6 shows the causes of injury for cases between 35 and 64 years of age (n = 1,317). Motor vehicle collisions *including* those involving cyclists were responsible for almost half of the cases (46%, n = 612), followed by unintentional falls (27%, n = 361).

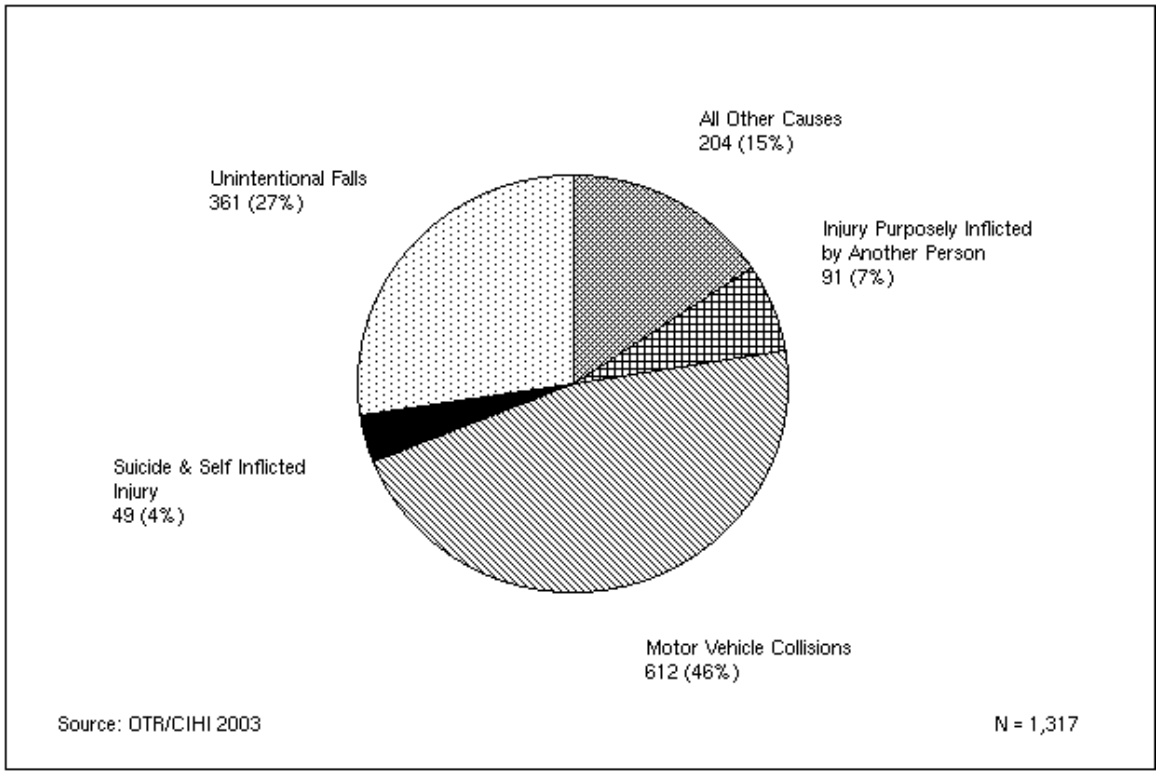


Figure 6. Causes of Injury—Cases Aged 35 to 64 Years, 2001–2002

iv. Cases Aged 65 Years and Over

Figure 7 shows the causes of injury for cases aged 65 years and over (n = 870). Unintentional falls were responsible for the majority of cases (64%, n = 555), followed by motor vehicle collisions *including* those involving cyclists (29%, n = 248). Together, these two causes of injury were responsible for 92% (n = 803) of the cases in this age group.

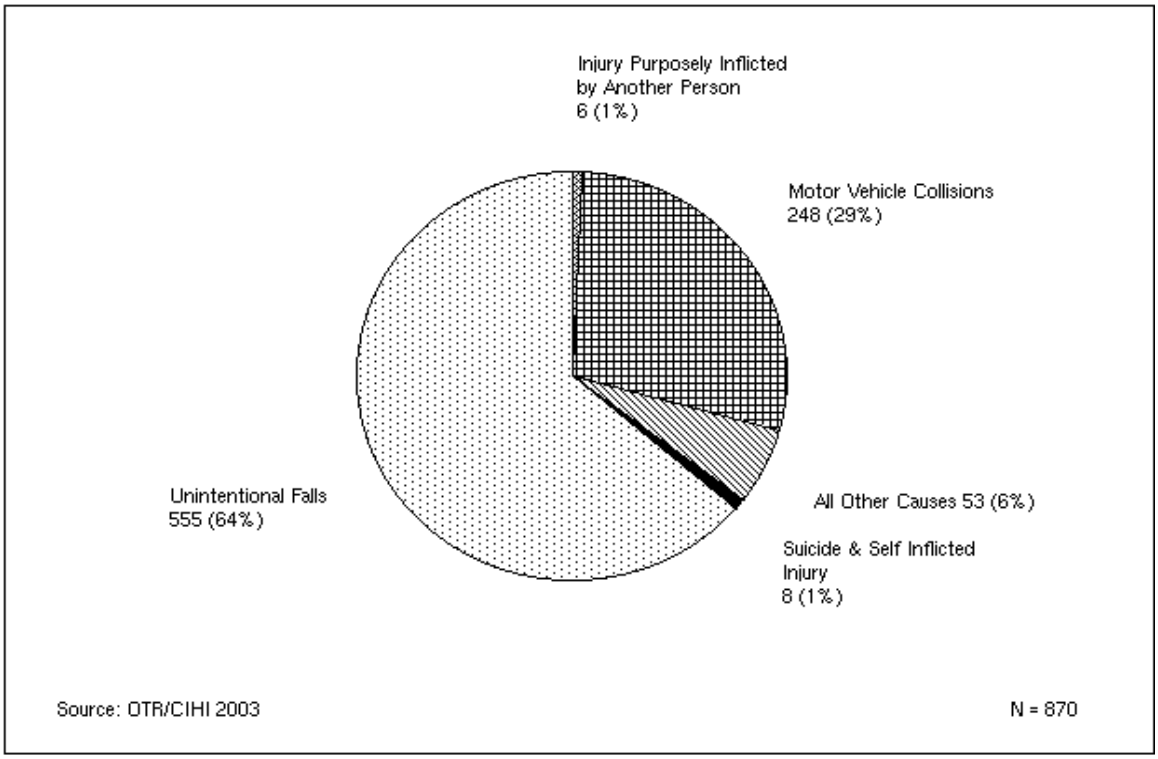


Figure 7. Causes of Injury—Cases Aged 65 Years and Over, 2001–2002

C. Motor Vehicle Collisions

i. Motor Vehicle Traffic and Non-traffic Incidents

A motor vehicle is defined within the International Classification of Diseases (ICD) coding system as any mechanically or electrically powered device, not operated on rails, upon which any person or property may be transported or drawn upon a highway. Automobiles, buses, construction machinery, farm and industrial machinery, fire engines, motorcycles, motorized bicycles, trolley buses not operating on rails, trucks and vans are all included in this category. A motor vehicle collision is a transport collision involving a motor vehicle and is defined for the purposes of this report as E810–E825. A motor vehicle traffic collision (E810–E819) occurs on a public highway. A motor vehicle non-traffic collision (E820–E825) occurs entirely in any place other than a public highway.

In the 2001–2002 Comprehensive Data Set, motor vehicle traffic and non-traffic incidents (E810–E825) account for:

- 1,756 cases (48% of all cases)
- 205 (40%) of injury deaths

Figure 8 shows the motor vehicle traffic and non-traffic injury cases by age group. Over half (51%, n = 896) of the cases are under 35 years of age.

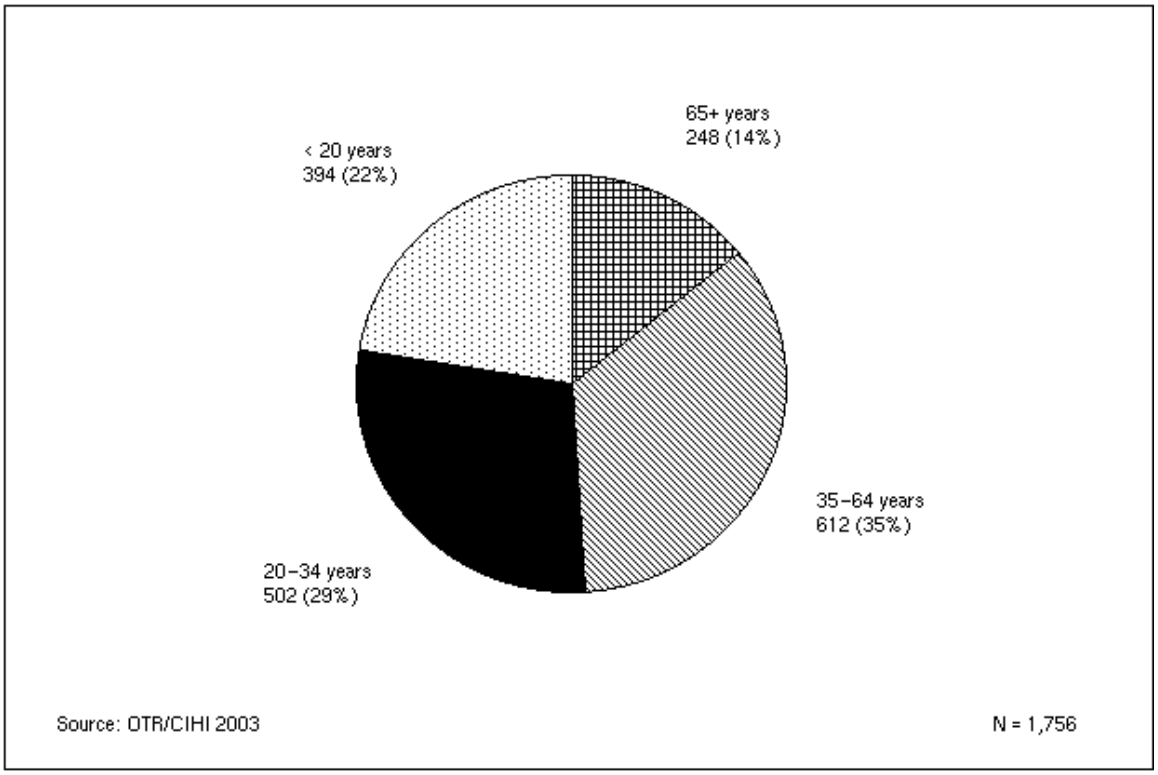


Figure 8. Motor Vehicle Traffic and Non-traffic Incidents by Age Group, 2001–2002

Figure 9 shows there is a peak in the number of traffic and non-traffic incidents in young adult males around 20 years of age and a smaller peak in young adult females around the same age.

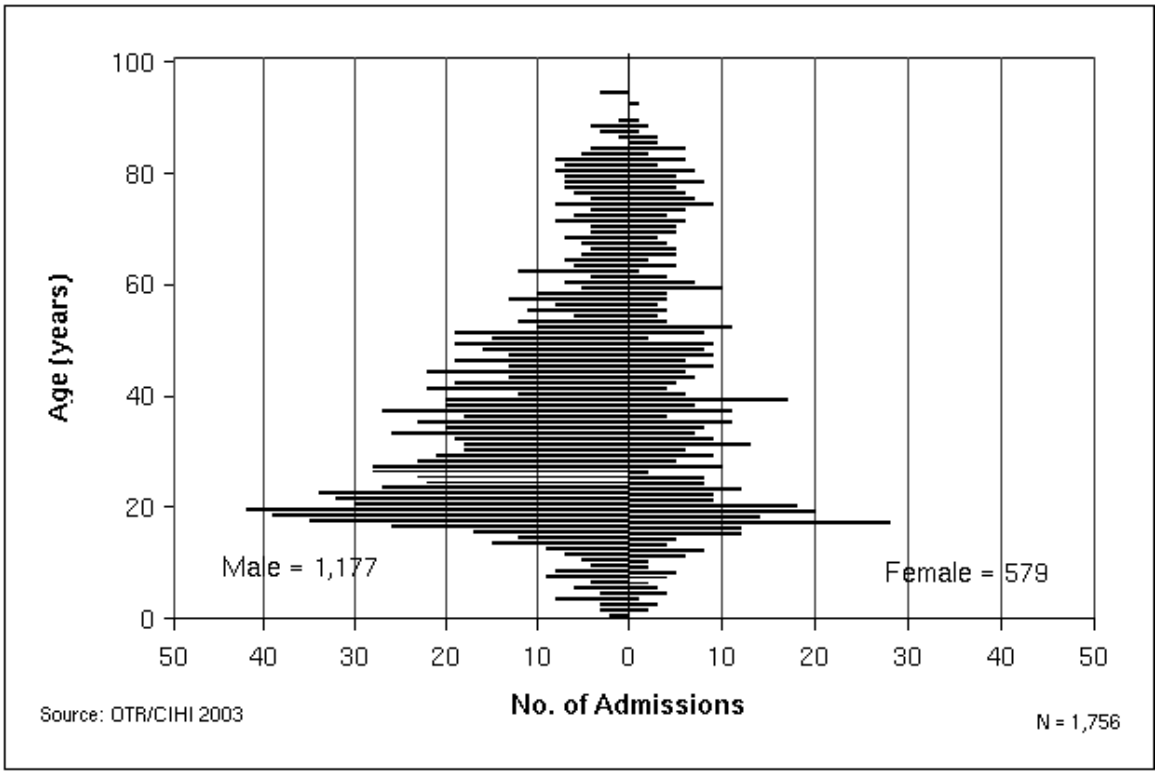


Figure 9. Traffic and Non-traffic Incidents (E810–825) by Sex and Single Year of Age, 2001–2002

The mean length of hospital stay for motor vehicle collision injuries is 17 days (median = 10). The mean age is 38 years (median = 34). Almost all (over 99%, n = 1,754) motor vehicle collision injuries are documented as blunt injury. The mean ISS is 27 (median = 25).

The mean length of hospital stay for motor vehicle collision deaths in 2001–2002 is 9 days (median = 2). The mean age is 46 and the median age is 42 years. All motor vehicle collision deaths are documented as blunt injury (100%, n = 205). The mean ISS is 40 (median = 41).

ii. Injured Persons

The ICD coding system identifies the injured person for transport incidents (E800–E845) through the use of a required fourth digit.

Figure 10 shows the 1,756 motor vehicle traffic and non-traffic injury cases in the 2001–2002 Comprehensive Data Set by injured person. Over half are drivers (55%, n = 971), including 149 motorcycle drivers. Passengers comprised almost one quarter (23%, n = 409) of the injured cases, of which 7 were motorcycle passengers.

Nine percent (n = 156) of the 1,756 motor vehicle traffic and non-traffic injury cases in the 2001–2002 Comprehensive Data Set are motorcycle drivers or passengers.

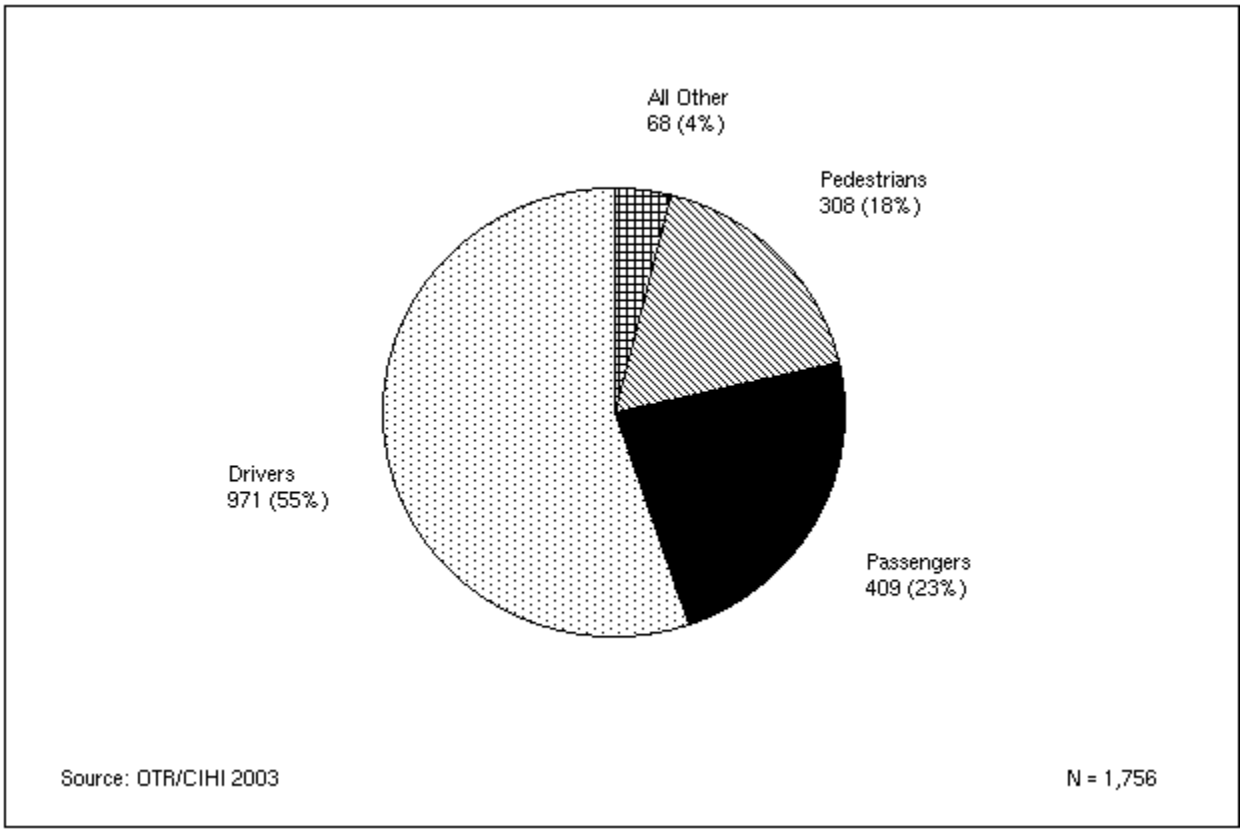


Figure 10. Motor Vehicle Collisions (E810–825) by Injured Person—All Cases, 2001–2002*

*Note: *Drivers* and *passengers* categories include those injured while riding a motorcycle.

Figure 11 shows the 205 deaths due to motor vehicle collisions in the 2001–2002 Comprehensive Data Set by injured person. Almost half are drivers (48%, n = 99), which includes 12 motorcycle drivers. Nearly one-quarter (24%, n = 50) are pedestrians.

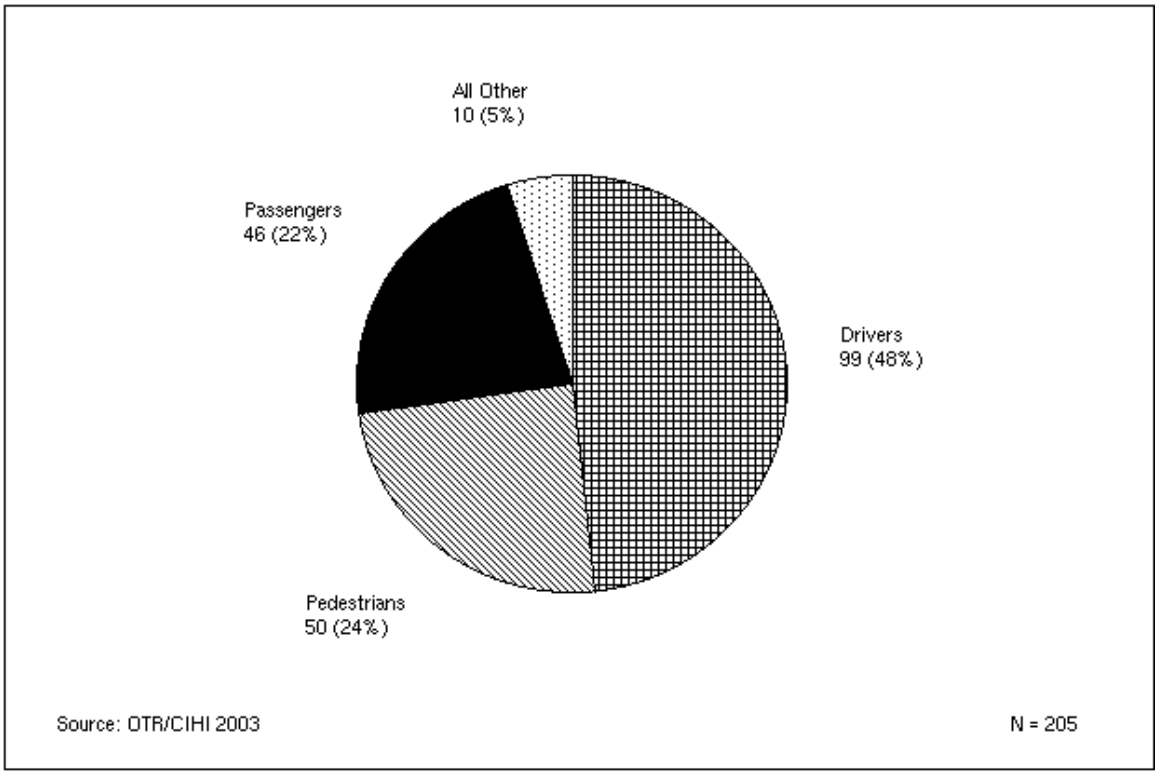


Figure 11. Motor Vehicle Collisions (E810–825) by Injured Person—Deaths, 2001–2002

Figures 12 and 13 summarize use of protective devices for motor vehicle collision occupants, both survivors and those who died. Seatbelt use is documented in nearly half (48%, n = 514) of motor vehicle occupants for survivors but somewhat less so for deaths (41%, n = 54). For fifteen percent of both survivors and deaths (n = 157 and n = 19, respectively) protective equipment was available but not used.

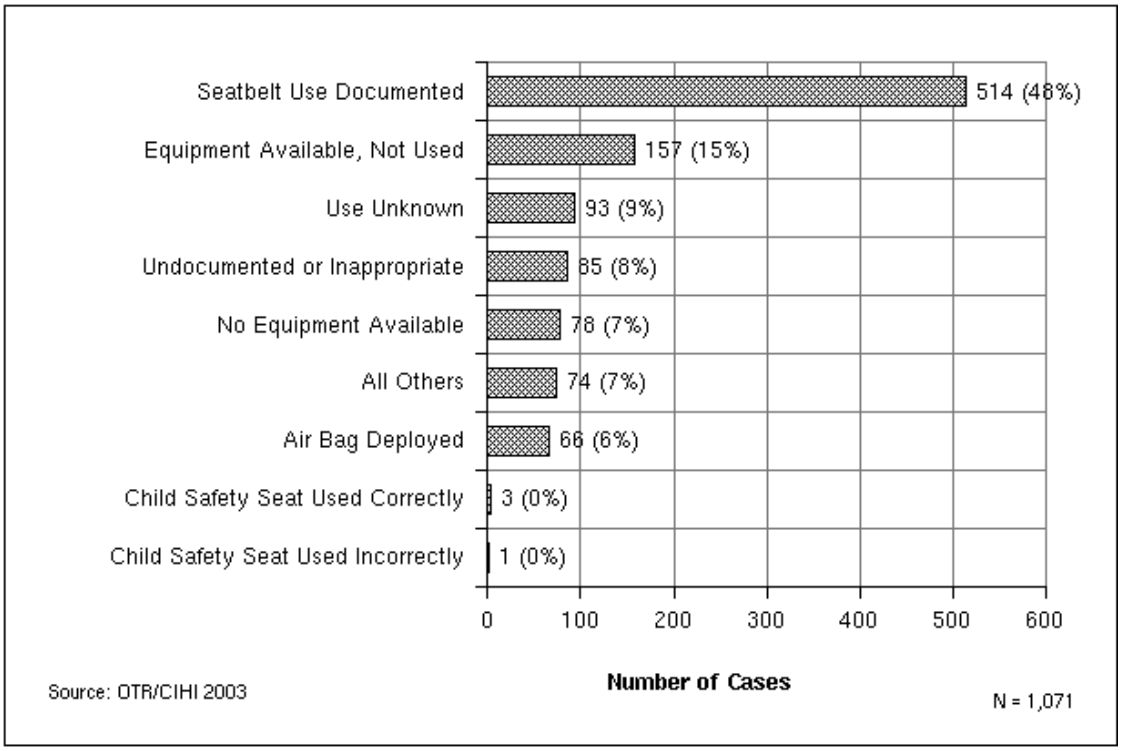


Figure 12. Protective Devices Summary for Motor Vehicle Collisions (E810–825)—Occupant Survivors, 2001–2002

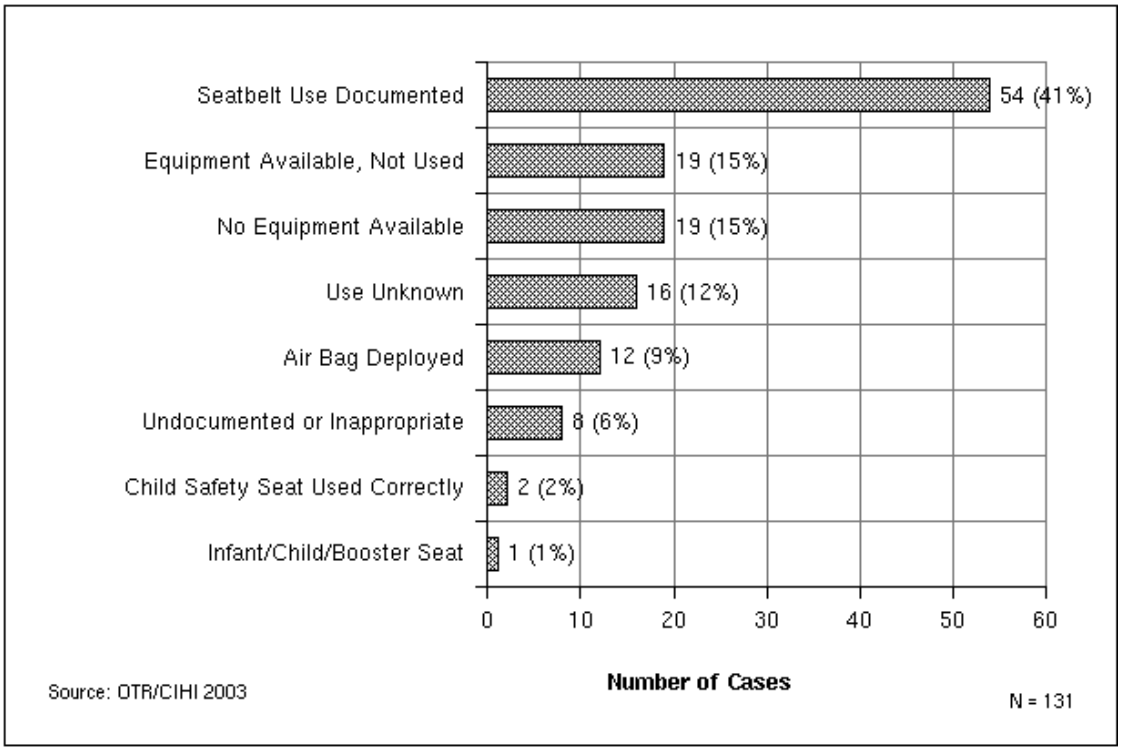


Figure 13. Protective Devices Summary for Motor Vehicle Collisions (E810–825)—Occupant Deaths, 2001–2002

D. Unintentional Falls

In the 2001–2002 Comprehensive Data Set, unintentional falls account for:

- 30% (n = 1,104) of all cases
- 34% (n = 175) of all injury deaths

The mean length of hospital stay for falls is 15 days (median = 8). The mean age is 58 years (median age = 65). Over 99% of all falls are documented as blunt injury (n = 1,101). The mean ISS is 22 (median = 22).

For deaths due to falls (n = 175):

- the mean ISS is 28 (median = 26)
- the mean age is 70 years (median = 73)
- the mean LOS is 11 days (median = 4)

Figure 14 shows that more males experienced major injury due to falls than females. For both males and females the number of falls increased with increasing age.

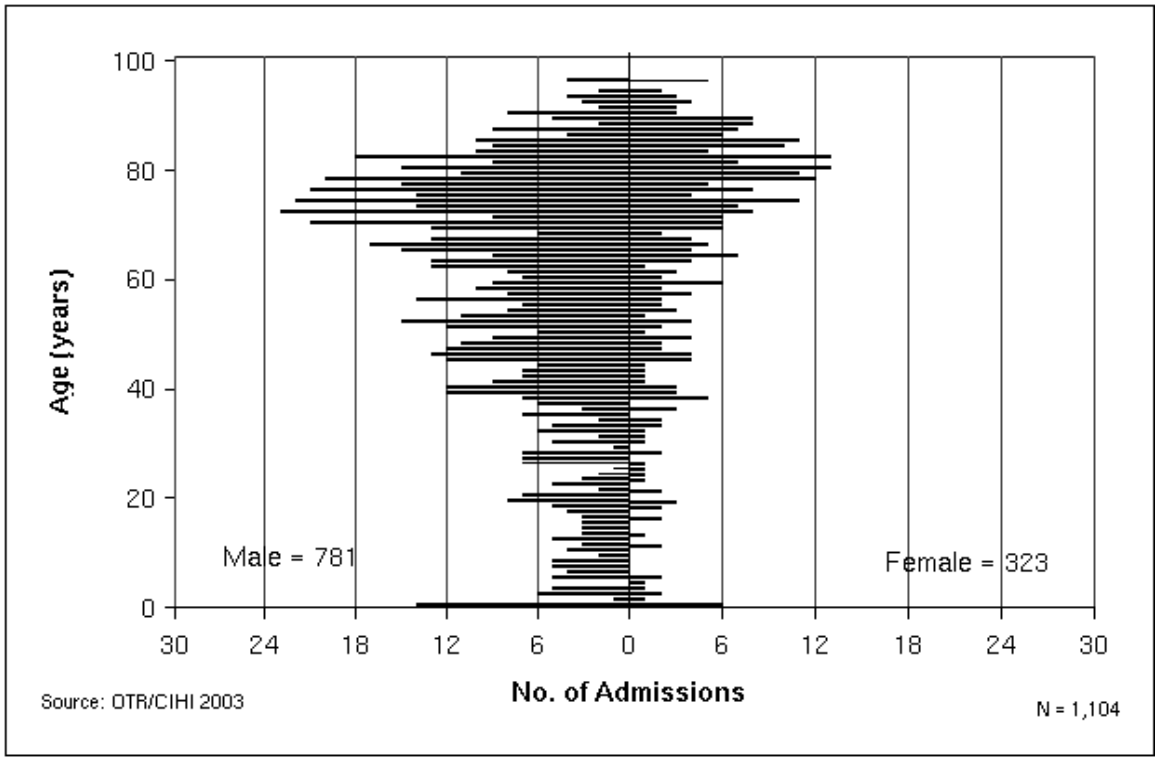


Figure 14. Falls (E880–888) by Sex and Single Year of Age, 2001–2002

The ICD External Cause of Injury Code category E880–E888 defines injuries due to unintentional falls as follows:

E880 On or from stairs/steps
E881 On or from a ladder/scaffold
E882 From or out of building/other structure
E883 Into hole or other surface opening
E884 From one level to another
E885 Slipping, tripping, stumbling on same level
E886 Collisions, pushing, shoving by or with other person
E887 Fracture, cause unspecified
E888 Other and unspecified fall

Among the 1,104 cases injured in unintentional falls, the most common specified types of falls were falls on or from stairs/steps (24%, n = 264) and slipping, tripping, or stumbling (16%, n = 178).

Figure 15 shows the number of cases by sex for each E Code category.

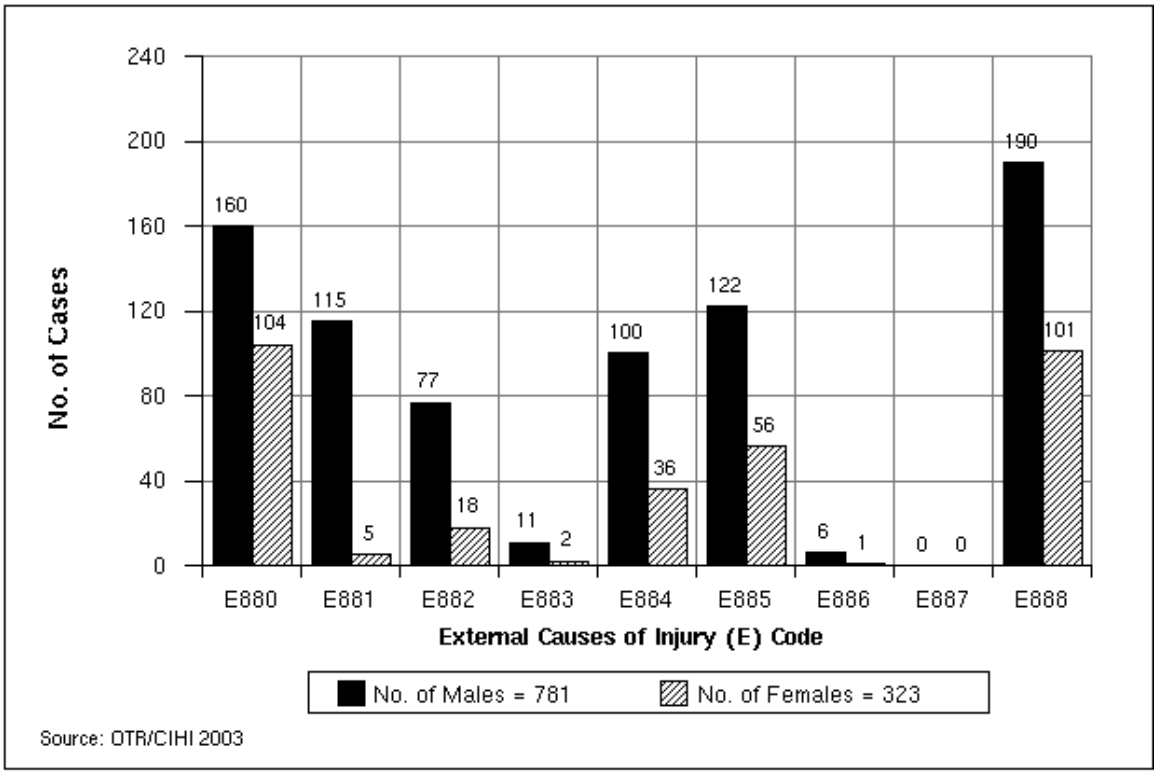


Figure 15. Unintentional Falls by External Causes of Injury (E) Code and Sex, 2001–2002

Figure 16 shows cases of unintentional falls by age group. Half of the unintentional falls are cases aged 65 years and over (50%, n = 555). The most common specified cause of falls in this age group are falls on or from stairs or steps (23%, n = 127).

Cases aged 35 to 64 years comprise 33% (n = 361) of all unintentional falls. The most common specified cause of falls in this age group is falls on or from stairs or steps (29%, n = 104).

Ten percent (n = 111) of the cases occur among persons under 20 years of age. The most common specified cause of falls in this age group are falls from one level to another (39%, n = 43).

Only 7% (n = 77) of all cases due to unintentional falls occurred among cases between 20 to 34 years of age. The most common cause of major trauma hospitalization due to falls in this age group are falls out of buildings or other structures (29%, n = 22).

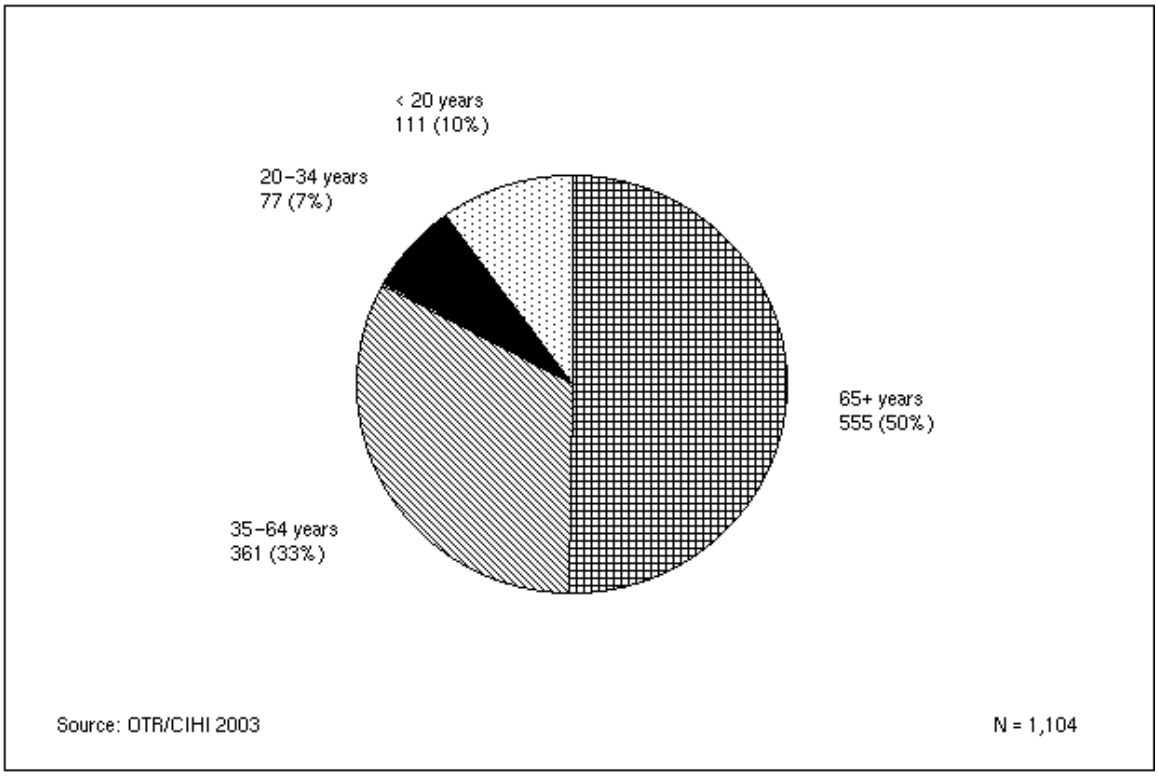


Figure 16. Unintentional Falls by Age Group, 2001–2002

E. Intentional Injuries

i. Suicide and Self Inflicted Injury (Excluding Poisoning)

There were 98 cases admitted to lead/trauma hospitals due to suicide and self inflicted injury (excluding poisoning) in the 2001–2002 Comprehensive Data Set, accounting for 3% of cases and 6% (n = 30) of all injury deaths. The majority of self-inflicted injuries admitted to lead/trauma hospitals are males (69%, n = 68). The mean length of stay for suicide and self-inflicted injury (excluding poisoning) is 21 days (median = 12). The mean ISS is 27 (median = 25).

Figure 17 shows self-inflicted injury cases by age group. Fifty percent (n = 49) of the cases occurred among persons aged 35 to 64 years, followed by persons between the ages of 20 and 34 years (34%, n = 33). The mean age for self-inflicted injury is 39 (median = 37).

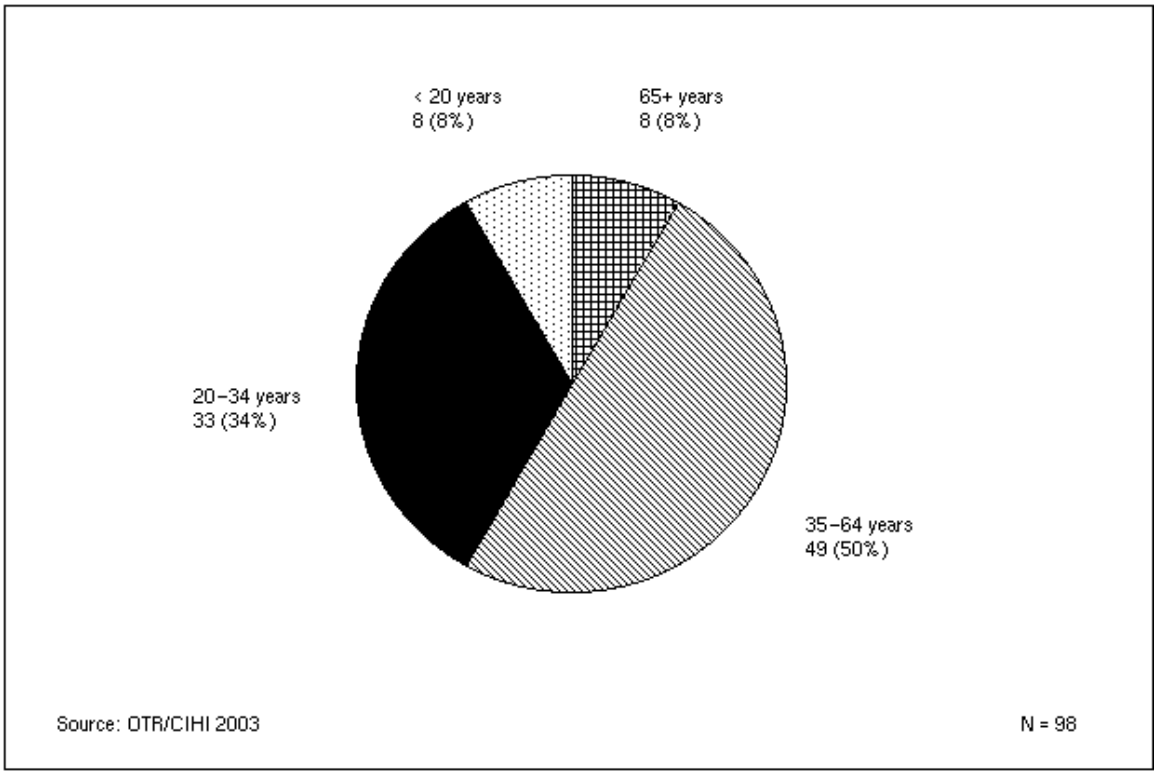


Figure 17. Suicide and Self-Inflicted Injury (E953–958) by Age Group, 2001–2002

As seen in Figure 18, the most common specified means of self-inflicted injury (excluding poisoning) were by jumping (37%, n = 36) followed by stabbing (21%, n = 21).

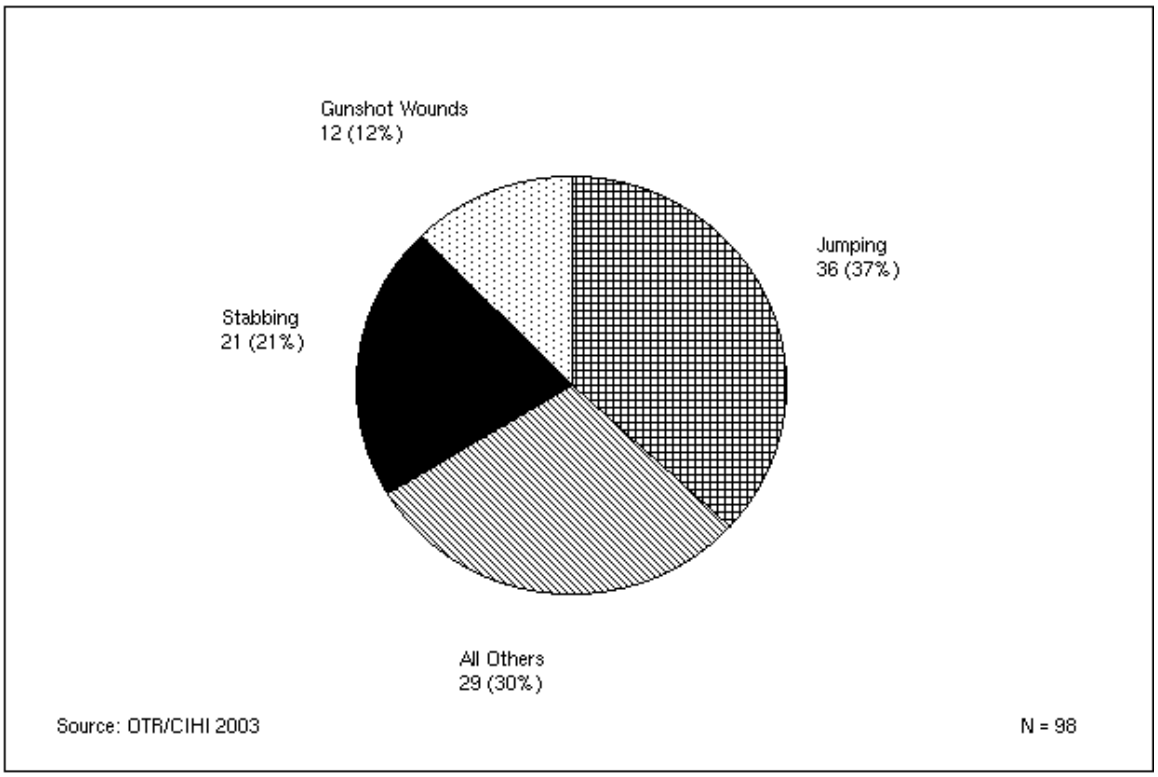


Figure 18. Means of Suicide and Self-Inflicted Injury (E953–958), 2001–2002

ii. Injury Purposely Inflicted by Another Person

There were 284 cases due to injury purposely inflicted by another person in the 2001–2002 Comprehensive Data Set accounting for 8% of cases and 8% (n = 39) of all injury deaths.

Figure 19 shows these cases by age group. Almost half are aged 20 to 34 years (47%, n = 133), followed by cases aged 35 to 64 years (32%, n = 91). The mean age is 30 (median = 28).

The mean length of stay is 12 days (median = 6). The mean ISS is 23 (median = 20).

Eighty-eight percent (n = 250) of these cases are males.

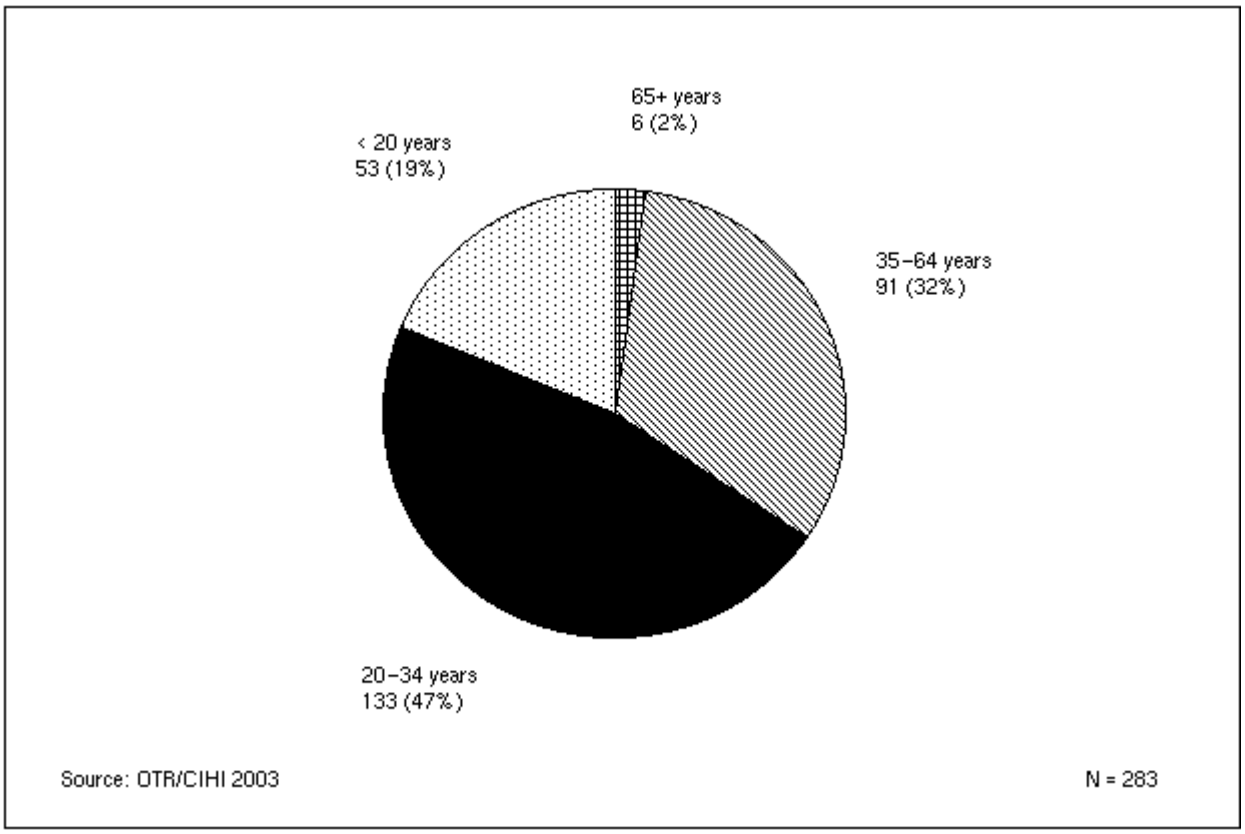


Figure 19. Injury Purposely Inflicted by Another Person by Age Group, 2001–2002*

*Note: 1 case with unknown age

Figure 20 shows that the most common specified means of injury purposely inflicted by another person are stabbing (30%, n = 84) and fighting (29%, n = 82), followed by gunshot wounds (17%, n = 48).

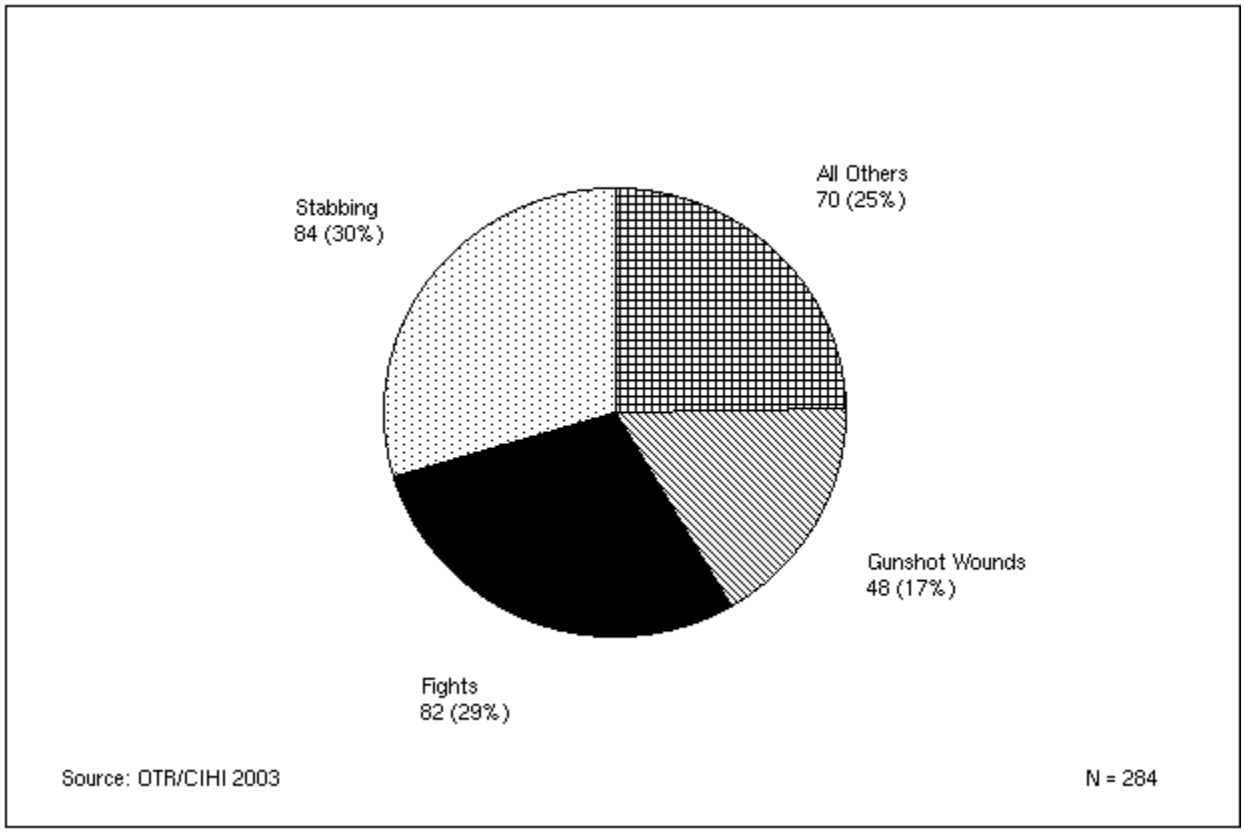


Figure 20. Means of Injury Purposely Inflicted by Another Person (E960–961, E963–968), 2001–2002

F. Cycling Injuries

Injuries due to cycling are defined using ICD E Code E826 and appropriate fourth digits from E800–E829 identifying the injured person as a cyclist.

In the 2001–2002 Comprehensive Data Set, cycling incidents account for 3% (n = 100) of all cases and 2% (n = 12) of all in-hospital deaths.

For these cases:

- mean age is 30 years
- mean ISS is 24
- mean length of stay is 12 days

G. Other Causes of Injury

In this report, 450 (12%) injury cases are reported as due to all other causes (other than motor vehicle collisions, unintentional falls and intentional injury). All other causes account for 66 (13%) of in-hospital deaths. All other causes include injuries due to railway incidents, other road vehicles, water transport, air and space transport, vehicle incidents not elsewhere classified, fire and flames, natural and environmental factors, drowning and suffocation, foreign bodies (excluding choking), injuries due to legal intervention, injuries in which the intentionality is undetermined and injuries due to operations of war.

5. Context of Injury

A. Place of Injury

Place of injury is documented in the Comprehensive Data Set based on ICD definitions.

As seen in Table 5, Appendix F, 3,685 cases (over 99%) are documented with a place of injury:

- 1,820 (49%) indicate a street or highway
- 808 (22%) indicate home as the place of injury

There are 7 cases (0.2%) that do not have a place of injury documented in the 2001–2002 Comprehensive Data Set.

B. Work Related Injury

237 (6%) of cases are work related injuries. Of these cases:

- mean ISS is 25
- mean age is 43 years
- mean length of stay in hospital is 20 days
- 21 (9%) died inhospital, 4 (2%) died in emergency (DIE)
- 223 (94%) are male

C. Sports and Recreational Injury

The OTR CDS permits the documentation of whether the injured person was involved in a sports or recreational activity at the time of injury, and if so, specification of the type of activity. Currently, the sports and recreation code in the OTR CDS distinguishes 95 types of sports and recreational activities.

Ten percent (n = 354) of injury admissions are due to participating in sports and recreational activities as defined by the customized sports and recreational activity code in the Comprehensive Data Set.

The most common sports and recreational injuries documented in the 2001–2002 Comprehensive Data Set are cycling (19%, n = 66), all terrain vehicles (17%, n = 59), snowmobile (driver or passenger) (11%, n = 39), dirt biking/motocross (6%, n = 21), and play not further specified (ie: running, jumping, skipping, general play activities) (6%, n = 22).

Table 1 provides further information about sports and recreational injuries and leading activities.

Table 1. Summary Statistics for Sport and Recreational Injury Activities, 2001–2002

Activity	Cases n (%*)	Mean			Males n (%**)	In-hosp. deaths n (%**)	DIEs n (%**)
		Age (years)	ISS	LOS (days)			
Cycling	66 (19)	28	24	13	55 (83)	9 (14)	1(2)
All terrain vehicle	59 (17)	33	22	10	53 (90)	0	0
Snowmobile (driver or passenger)	39 (11)	31	22	11	33 (85)	0	0
Play not further specified	22 (6)	7	18	11	16 (73)	0	0
Dirt bike/motocross	21 (6)	24	22	12	21 (100)	1 (5)	0
ALL SPORTS/REC	**354**	**28**	**22**	**11**	**290 (82)**	**21 (6)**	**1 (0.3)**

* Percent of all sports and recreational injuries (n = 354)
** Percent within cause of sport and recreational injury

D. Blood Alcohol Concentration (BAC)

The Trauma Registry Advisory Committee has recommended that blood alcohol concentration (BAC) be routinely collected at lead/trauma hospitals on all trauma patients over 10 years of age when the patient is admitted within 12 hours of the incident.

There are 464 cases (13%) in the 2001–2002 Comprehensive Data Set with a positive BAC, which is defined as ≥ 17.0 mmol/L. Among these cases, 50%(n = 233) are admitted due to motor vehicle collisions (MVCs), 22%(n = 101) are admitted due to unintentional falls, and 18%(n = 82) are admitted due to injury purposely inflicted by another person.

Table 2 provides further information about cases with BAC ≥ 17.0 mmol/L and the leading causes of injury among these cases.

Table 2. Summary Statistics for Cases with Blood Alcohol Concentration ≥ 17.0 mmol/L, 2001–2002

Cause	Cases	Mean			Males	In-hosp. deaths	DIEs
	n (%*)	Age (years)	ISS	LOS (days)	n (%**)	n (%**)	n (%**)
Motor vehicle collision	233 (50)	33	28	18	198 (85)	23 (10)	2 (1)
Unintentional fall	101(22)	46	25	20	76 (75)	21 (21)	2 (2)
Intentionally inflicted by others	82 (18)	32	21	11	76 (93)	5 (6)	2 (2)
ALL POSITIVE BAC	**464**	**37**	**26**	**17**	**390 (84)**	**59 (13)**	**8 (2)**

* Percent of all positive BAC cases (n = 464)
** Percent within cause of injury

6. Clinical Aspects of Injury

A. Type of Injury

3,406 (92%) of cases are documented with blunt injury, 188 (5%) with penetrating injury and 98 (3%) with burns.

B. Prehospital Care

COLLECTOR has been customized to include several data elements to describe the patient's care at the scene and enroute to hospital. Included in prehospital care data elements are mode of transport information, vital signs and non-operative procedures at the scene.

As seen in Table 5, Appendix F:

- 506 cases (14%) require extrication from the scene
- mean scene time is 21 minutes (defined as the time the ambulance arrived at the scene to the time the ambulance left the scene) (median = 18.0)
- mean prehospital time is 66 minutes (defined as the time of incident to the time the ambulance arrives at the first hospital) (median = 51.0)

Note: the 95th percentile is used for prehospital time calculations to exclude those cases who are not transported directly from the scene and therefore have long prehospital times.

C. Discharge Disposition

Figure 21a shows the discharge disposition of all cases. In the 2001–2002 Comprehensive Data Set, 14% (n = 515) of the 3,692 cases died, either inhospital or in the emergency department (DIE).

Figure 21b shows the discharge disposition of the survivors:

- 57% (n = 1,807) were discharged home including 432 discharged home with support services
- 19% (n = 591) were discharged to an acute care facility
- 18% (n = 571) were discharged to a rehabilitative facility
- 7% (n = 208) were discharged to chronic care, nursing home, or other facility

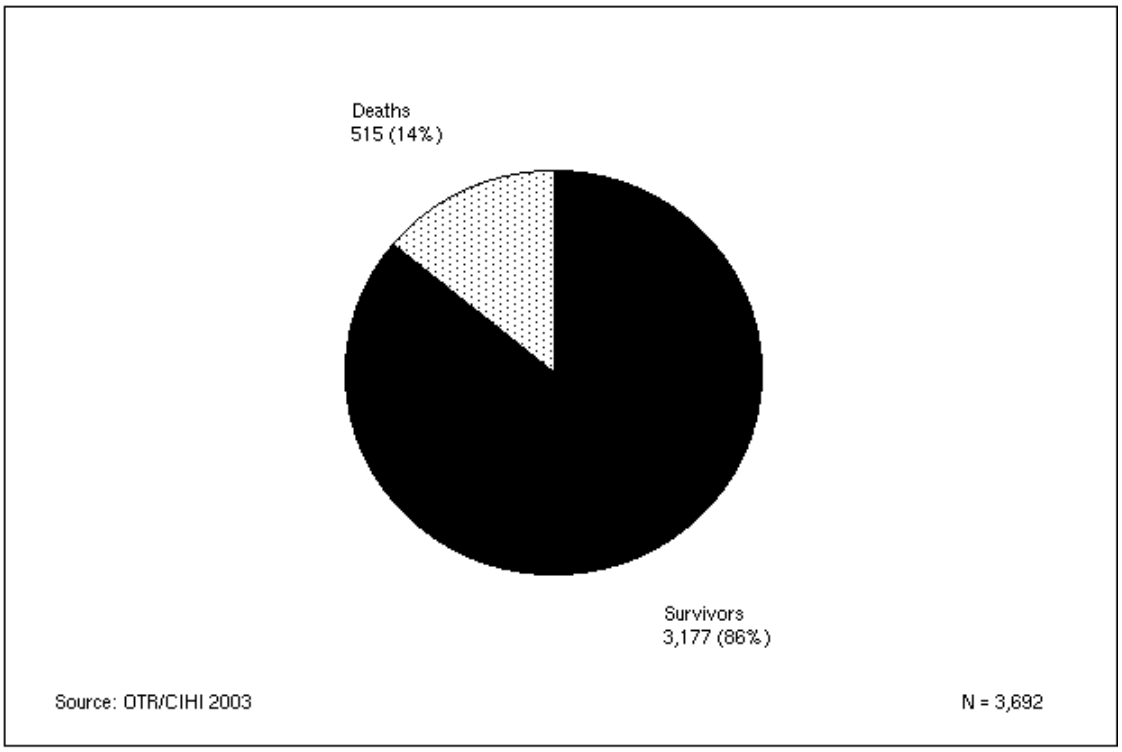


Figure 21a. Discharge Disposition—All Cases, 2001–2002

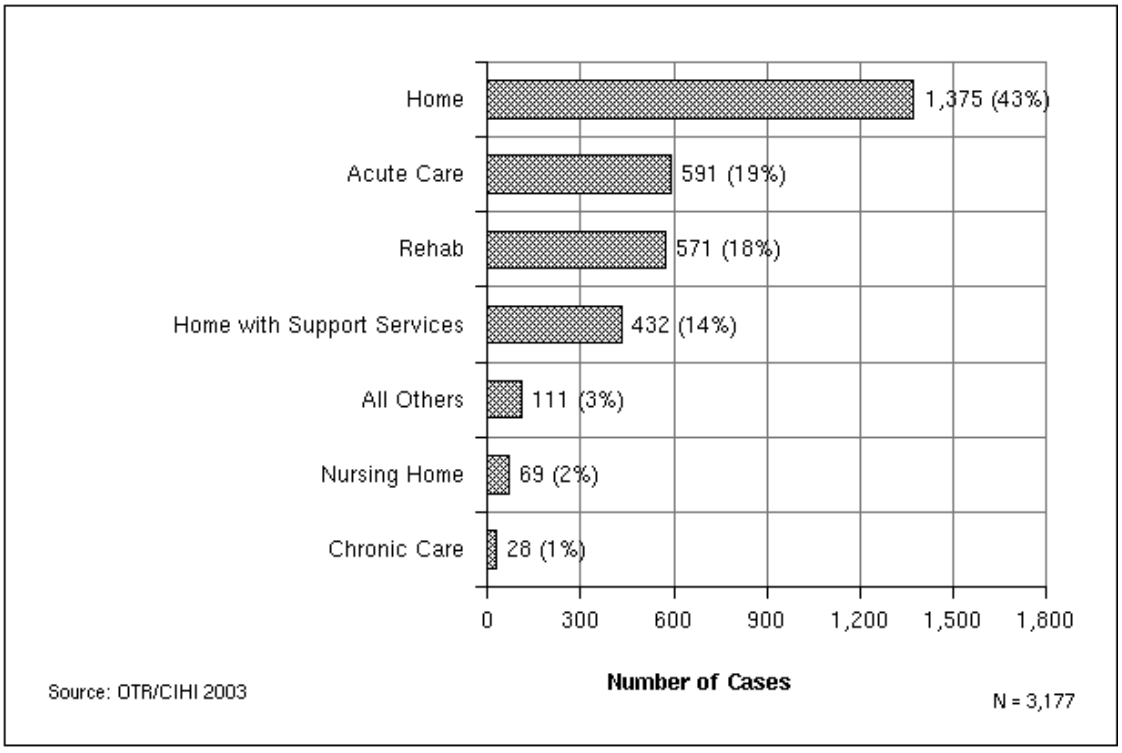


Figure 21b. Discharge Disposition—Survivors, 2001–2002

D. Deaths

i. All Cases

In the 2001–2002 Comprehensive Data Set, there were a total of 515 deaths (14% of all cases). These deaths include 431 inhospital deaths (12% of all cases) and 84 deaths in the Emergency department (DIEs) (2% of all cases).

Figure 22 shows the causes of deaths for these cases. Of these deaths:

- 40% (n = 205) were due to motor vehicle collisions
- 34% (n = 175) were due to unintentional falls

Tables 5 and 8 in Appendix F show some highlight statistics for all deaths:

- mean age is 53 years (median = 57)
- mean ISS is 34 (median = 27)
- 69% (n = 354) were males
- 86% (n = 441) of deaths had a blunt injury, 9% (n = 45) had a penetrating injury and 6% (n = 29) had a burn injury
- mean length of stay was 9 days (median = 2)
- half of the cases (50%, n = 255) had post mortem examinations documented as completed
- 14% (n = 70) of the cases donated organs

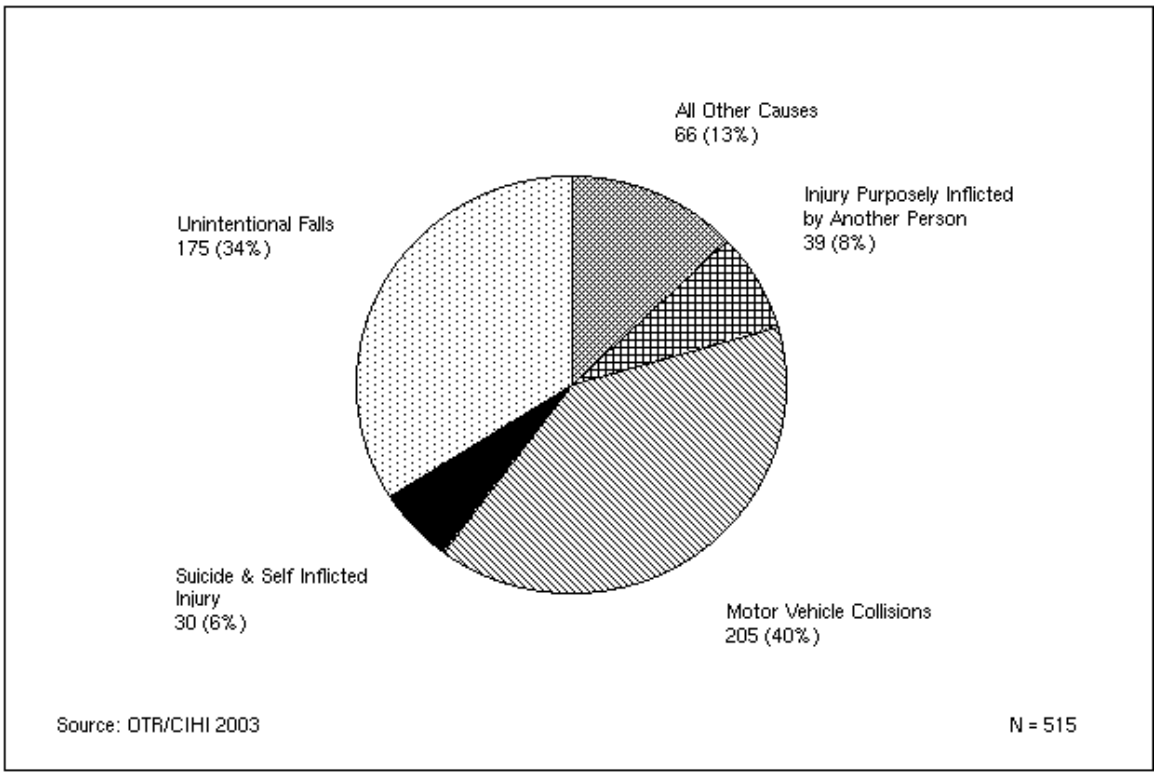


Figure 22. Causes of Death—All Cases, 2001–2002

Figure 23 shows the causes of injury for cases who died compared to survivors.

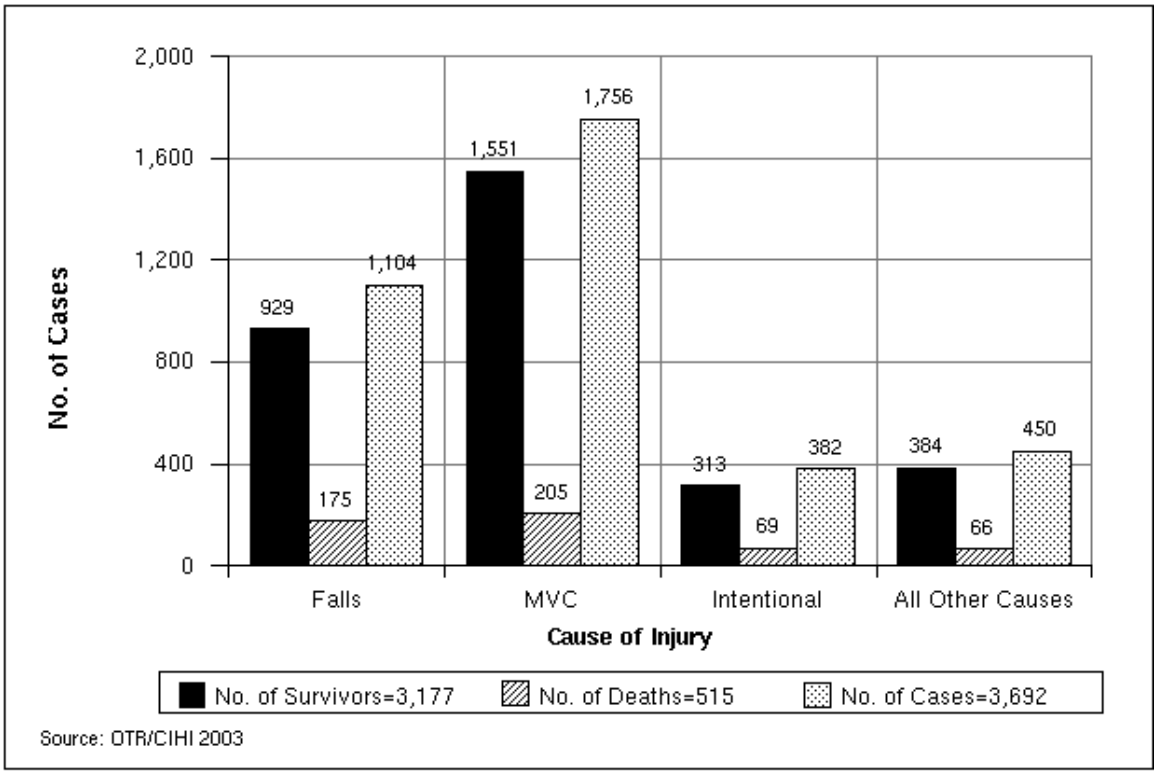


Figure 23. All Cases by Outcome and Cause of Injury, 2001–2002

ii. Inhospital Deaths

In the 2001–2002 Comprehensive Data Set, there were 431 inhospital deaths. In total, these cases were responsible for 3,863 hospital days (7% of total days). The mean length of stay was 9 days (median = 2), the mean age was 55 years, and the mean ISS was 33. Over two thirds of the inhospital deaths were male (69%, n = 299).

iii. DIEs–Died in Emergency

In the 2001–2002 Comprehensive Data Set, there were 84 DIEs. Of these cases:

- mean ISS is 39
- mean age is 42 years
- 65% (n = 55) are male

E. ISS (Injury Severity Score)

The Injury Severity Score is an internationally recognized scoring system developed to assign a level of severity to injury. ISS scores range from 1 (minor) to 75 (major). Cases with ISS > 12 are included in the Comprehensive Data Set.

In the 2001–2002, the mean ISS was 25 (median = 24).

Figure 24 shows the mean ISS by age group and outcome. Among all cases, the mean ISS was slightly higher in the 20 to 34 year age group (ISS = 26). Among survivors, the mean ISS was highest among the 20 to 34 age group and the 35 to 64 year age group (ISS = 24). Among deaths, the mean ISS was considerably higher for all age groups compared to survivors. The highest mean ISS was seen in the 20 to 34 age group (ISS = 40).

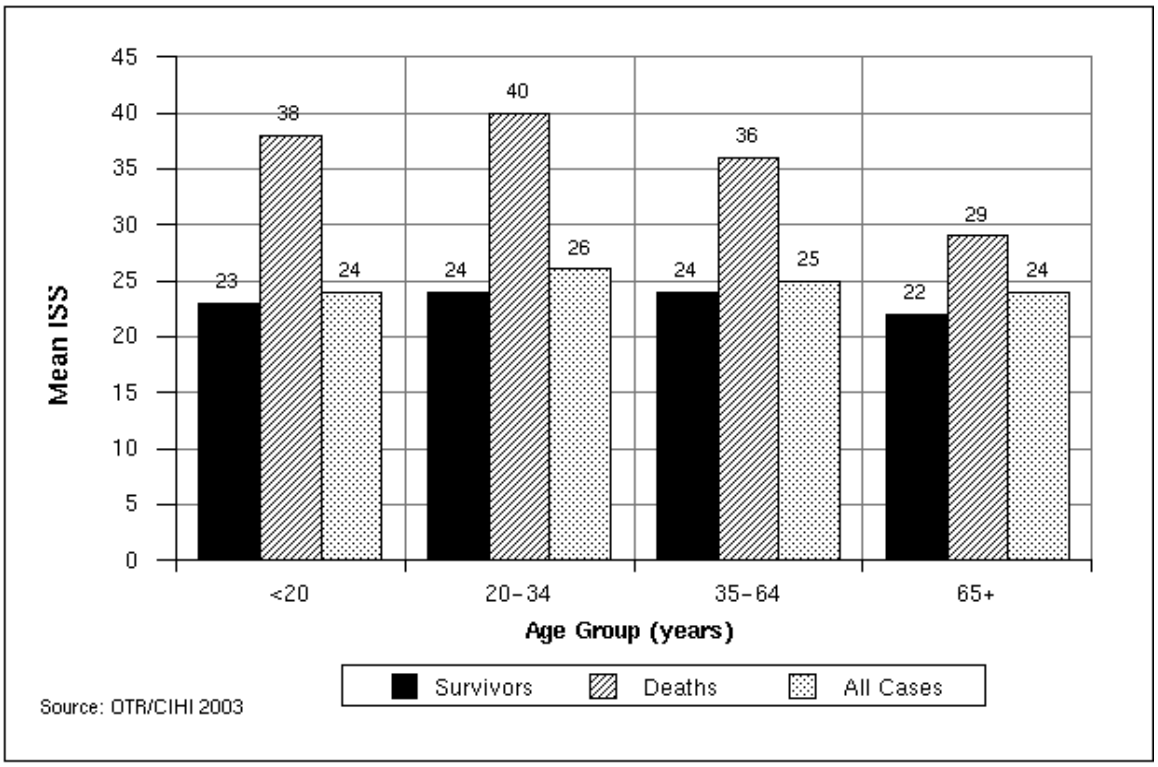


Figure 24. Mean Injury Severity Score (ISS) by Outcome and Age Group, 2001–2002

Figure 25 shows the mean ISS by outcome and cause of injury. Among all cases, survivors, and deaths, the highest mean ISS is among motor vehicle collisions (ISS = 27, 25, and 40, respectively).

Figure 26 shows the mean ISS by outcome and type of injury. Among all cases, survivors, and deaths, the highest mean ISS is found among cases with burn injuries (ISS = 28, 25, 37, respectively).

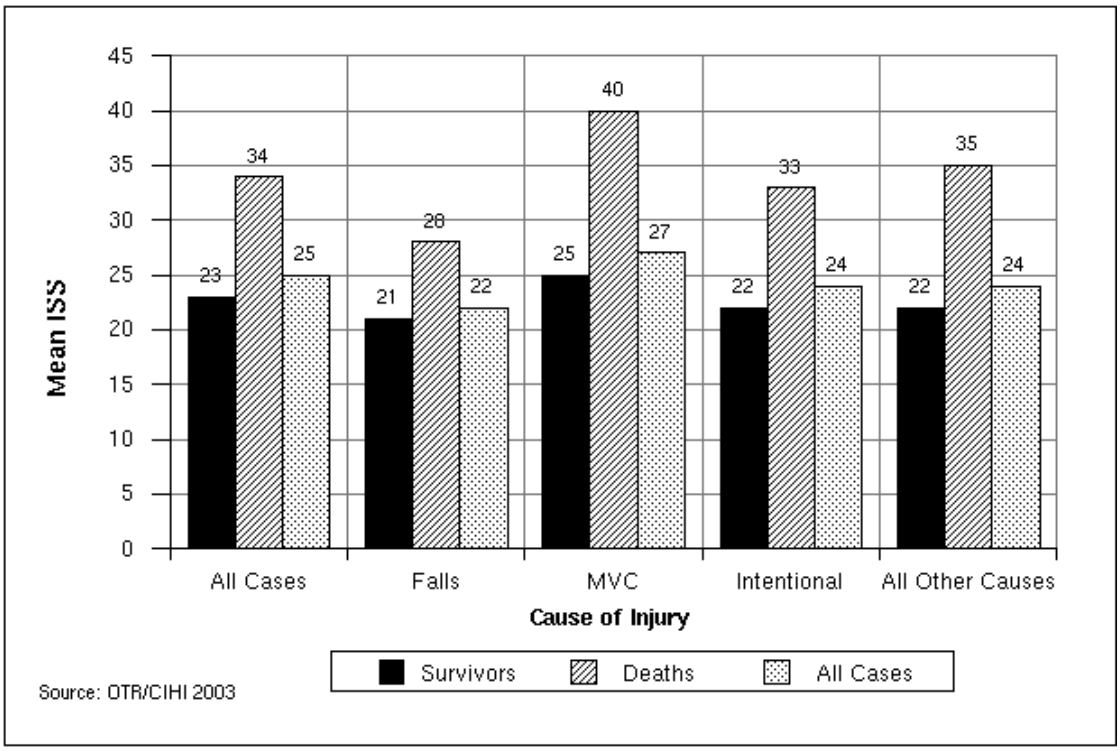


Figure 25. Mean Injury Severity Score (ISS) by Outcome and Cause of Injury, 2001–2002

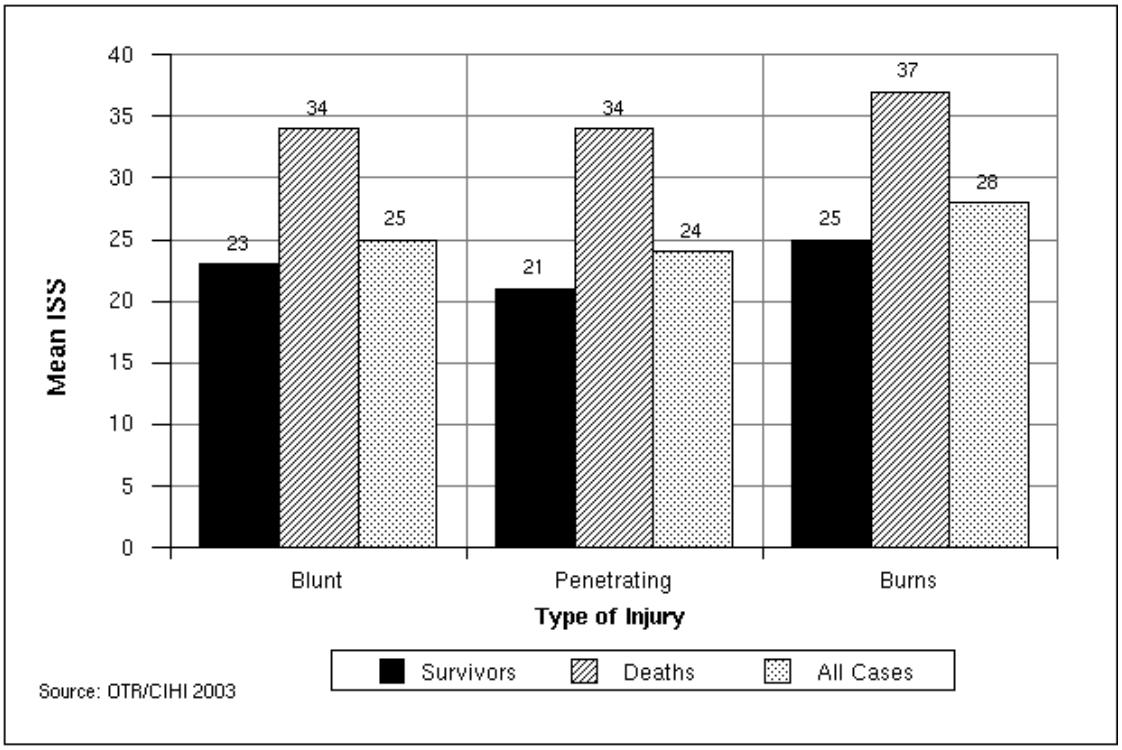


Figure 26. Mean Injury Severity Score (ISS) by Outcome and Type of Injury, 2001–2002

F. Length of Stay

Length of stay is defined as the total number of hospital days as calculated from date of admission to date of discharge or death. Patients who are not admitted are excluded from length of stay calculations.

Injury cases in the 2001–2002 Comprehensive Data Set accounted for 57,559 hospital days with a mean length of stay (LOS) of 16 days (median = 9).

Figure 27 shows mean LOS by outcome and age group. Among all cases, survivors, and deaths, the highest mean LOS is among cases 65 years of age and over (LOS = 18, 20, and 11 days, respectively). There is a general trend of increasing LOS with increasing age group.

Figure 28 shows mean LOS by outcome and major cause of injury. For all cases the highest mean LOS is found among all other causes (LOS = 18). Among specific causes of injury, motor vehicle collision cases had the highest mean LOS (LOS = 17 days). Among survivors, the highest mean LOS is among motor vehicle collision cases and all other causes (LOS = 17 and 19 days, respectively). Among deaths, the highest mean LOS is among unintentional fall cases and all other causes (LOS = 11 days each).

Figure 29 shows mean LOS by outcome and type of injury. For all cases, survivors, and deaths, the highest mean LOS is among cases with burn injuries (LOS = 30, 37, and 14 days, respectively).

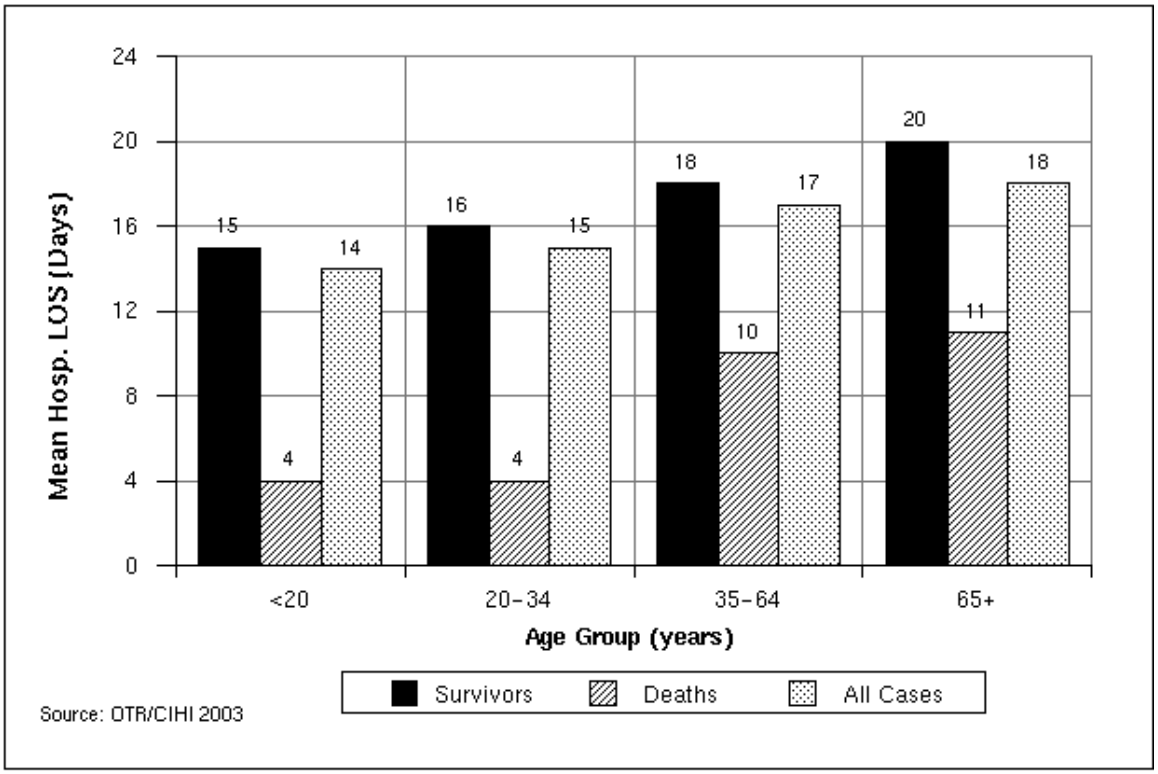


Figure 27. Mean Length of Stay (LOS) by Outcome and Age Group, 2001–2002

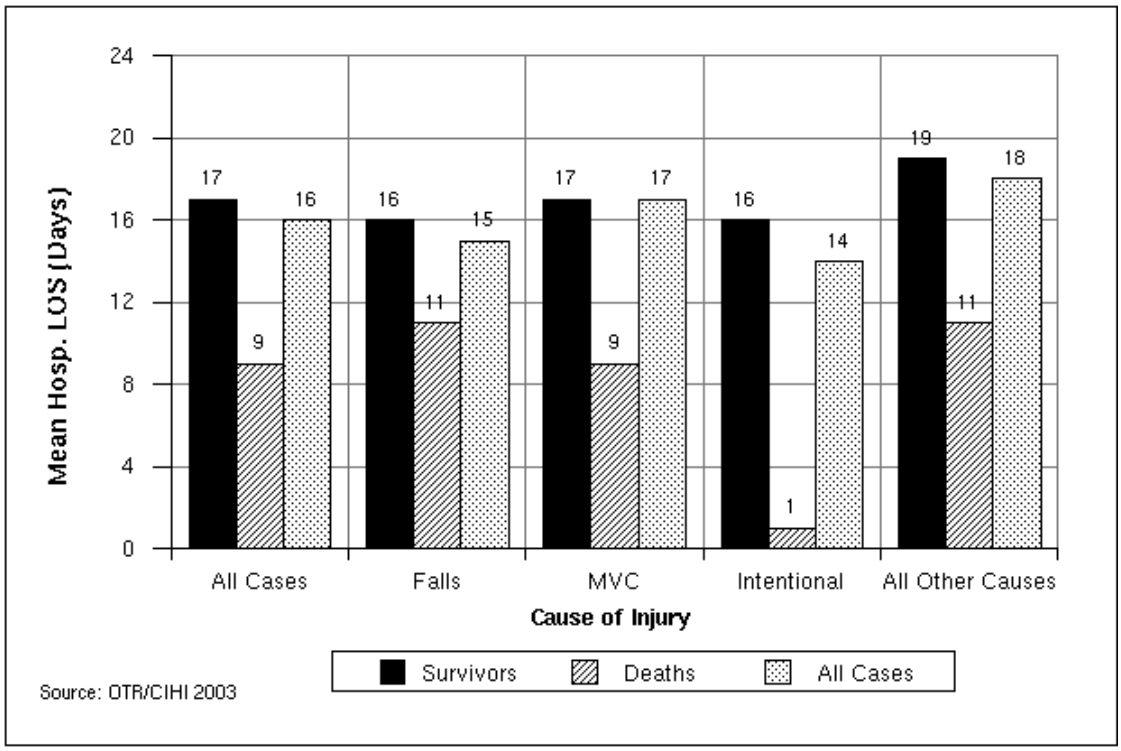


Figure 28. Mean Length of Stay (LOS) by Outcome and Cause of Injury, 2001–2002

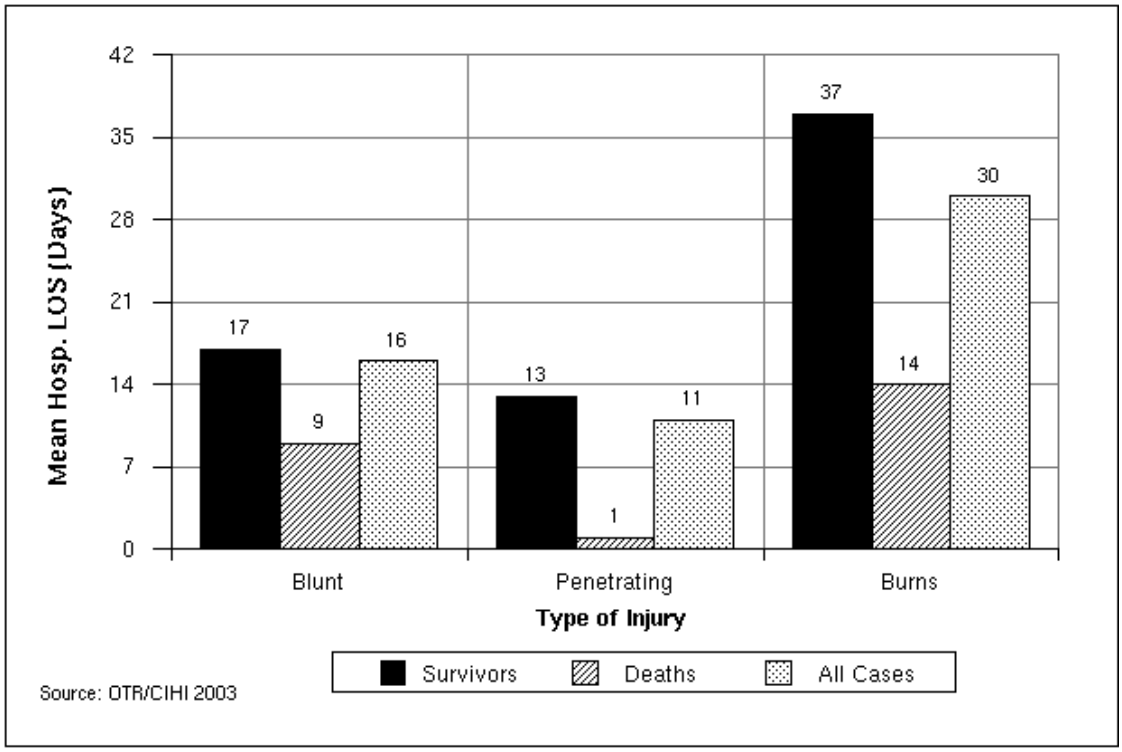


Figure 29. Mean Length of Stay (LOS) by Outcome and Type of Injury, 2001–2002

G. Special Care Units

For the purposes of the Comprehensive Data Set, Special Care Units include intensive care and observation units with a normal patient-to-nurse ratio of at least 2:1.

Of the 2,372 cases (64% of all cases) in the Comprehensive Data Set that stayed in a Special Care Unit in 2001–2002, 84% (n = 2,001) were discharged from hospital alive, and 16% (n = 371) died.

Table 3 shows further information for cases treated in special care units.

Table 3. Summary Statistics for Special Care Unit (SCU) Cases, 2001–2002

Discharge Status	Cases	Mean			
	n (%*)	Age (years)	ISS	SCU LOS (days)	Hospital LOS (days)
Discharged alive	2,001 (84)	42	26	9	21
Died in hospital	371 (16)	54	33	6	9
ALL SCU CASES	**2,372**	**44**	**27**	**8**	**19**

* Percent of all special care unit cases (n = 2,372)

H. PRE Analysis

PRE analysis is a methodology that can be used by a trauma institution for self audit. To implement PRE using TRISS[1] each patient is characterized by the Revised Trauma Score (RTS) measured at hospital admission and the Injury Severity Score (ISS) based on surgery, CT scan, autopsy or definitive diagnosis. Each patient's values are plotted on a graph with ISS and RTS axes. Survivors (L) and non-survivors (D) have different plotting symbols. The sloping line identified as "P_s50" represents the combinations of RTS and ISS which have a 0.50 probability of survival for patients in the baseline population.

Patients whose RTS-ISS coordinates are above the P_s50 line (non-shaded region) have probabilities of survival less than 0.50. Patients whose coordinates are below the line (shaded region) have survival probabilities which exceed 0.50. Survivors whose coordinates are above the P_s50 line (non-shaded region) and non-survivors whose coordinates are below the line (shaded region) are considered atypical (unexpected in a statistical sense) and worthy of medical review. Data from such non-survivors may be reviewed for the possibility of predictive index failure, health care system failure, or therapeutic failure. Reviews for exceptional survivors may provide guidelines for future patient management.

[1] TRISS is a calculated field by COLLECTOR based on the first recorded set of vital signs at the lead/trauma hospital. It combines both physiologic and anatomic indices to characterize the severity of injury and estimate patient survival probability.

Appendix E shows PRE analyses for adult patients 15–54 years of age and 55+ years of age for blunt and penetrating wounds. PRE analysis for pediatric patients (less than 15 years of age) is also shown.

i. Blunt Injuries: 1997–1998 through 2001–2002

As indicated above, PRE analyses are available for 5 different groups. However, only blunt injuries to adults offer enough cases to provide meaningful comparison across the five years of data since 1997–1998.

Table 4 shows that over the past 5 years the proportion of unexpected deaths among adults aged 15 to 54 years hospitalized with blunt injuries has gradually declined from a high of 1.4% (n=24) in 1997–1998 to 0.6% (n=11) in the current fiscal year. The percentage of unexpected survivors decreased from 0.6% (n=11) in 1997–1998 to 0.2% (n=3) in 2000–2001, but increased to 0.5% (n=9) in 2001–2002.

Table 4. PRE Analyses of Adult (Aged 15 to 54 years) Blunt Injuries, 1997–1998 to 2001–2002

	1997–1998 n (%)	1998–1999 n (%)	1999–2000 n (%)	2000–2001 n (%)	2001–2002 n (%)
Unexpected Deaths	24 (1.4)	21 (1.2)	22 (1.2)	15 (0.8)	11 (0.6)
Unexpected Survivors	11 (0.6)	7 (0.4)	7 (0.4)	3 (0.2)	9 (0.5)
Eligible Cases	1,724	1,798	1,827	1,855	1,960

PRE analyses indicate that percentage of unexpected deaths among cases 55 years of age and over has fluctuated from a low of 6.6% (n=67) in 1998–1999 to a high of 9.2% (n=94) in 1999–2000. The proportion of unexpected survivors has also fluctuated, with a low of 0.7% (n=7) in 1999–2000 and a high of 2.0% (n=20) in 2000–2001 (Table 5).

Table 5. PRE Analyses of Adult (Aged 55+ years) Blunt Injuries, 1997–1998 to 2001–2002

	1997–1998 n (%)	1998–1999 n (%)	1999–2000 n (%)	2000–2001 n (%)	2001–2002 n (%)
Unexpected Deaths	84 (8.7)	67 (6.6)	94 (9.2)	82 (8.3)	79 (7.0)
Unexpected Survivors	14 (1.5)	15 (1.5)	7 (0.7)	20 (2.0)	9 (0.8)
Eligible Cases	963	1,011	1,019	983	1,136

Appendix A

Definition of Terms

Definition of Terms

Note: In this report, the terms "accident" and "accidentally" used in the International Classification of Diseases have been replaced with "incident" and "unintentionally".

Acute Care Hospital
A hospital in which active treatment is received.

Admission
An admission to a participating acute care hospital in Ontario as a result of injury defined by an appropriate ICD External Cause of Injury Code (E Codes) and an ISS > 12. Admissions include hospital deaths. For more information on inclusion criteria for admissions in the Comprehensive Data Set, refer to Appendices B and C.

Admission Day
The day of the week the patient is admitted to hospital.

Age Groups
The age groups used by the OTR for reporting have been selected for comparability to other sources of information and to report on specific trends such as injury in children, young adults and in the elderly. Generally, the age groups reported are: <1, 1–4, 5–9, 10–14, 15–19, 20–24, 25–34, 35–44, 45–54, 55–64, 65–74, 75–84 and over 85 years of age. Age groups have been adjusted in Table 13 to match the Ontario Road Safety Annual Report from the Ministry of Transportation.

Aircraft
Any device for transporting passengers or goods in the air including airplanes, balloons, bombers, gliders, parachutes and military aircraft.

AIS
The Abbreviated Injury Scale was developed to provide researchers with a numeric method for ranking and comparing injuries by severity, and to standardize the terminology used to describe injuries. The AIS is a consensus derived, anatomically based system that classifies individual injuries by body region on a 6-point ordinal severity scale ranging from AIS 1 (minor) to AIS 6 (currently untreatable).

Autopsy
Refers to a case for which a post mortem examination or autopsy was completed.

BAC
A positive blood alcohol concentration (BAC) is greater than or equal to 17.0 mmol/L. The Trauma Registry Advisory Committee recommends that BAC be routinely collected on all trauma patients 10 years of age and over with an ISS (Injury Severity Score) > 12 who is admitted within 12 hours of the incident.

Blunt Injury Type
Injury type reflects the cause of injury (e.g. a motor vehicle collision, a blow to the head). Blunt injury may include deep lacerations but does not include any injury in which a missile such as a knife or bullet enters the body.

Burn Injury Type
Isolated burns with an ISS > 12 or burns with AIS = 1 are documented as a burn injury. These cases would not be included in a TRISS analysis. A burn injury with another injury AIS > 1 should be documented as a blunt or penetrating injury type depending on the other injury.

Case
A case in the Comprehensive Data Set is any patient who has an ISS > 12 and an appropriate E code and who meets one of the following criteria:

- admitted to a lead/trauma hospital;
- treated in the Emergency Department of a lead/trauma hospital (not admitted);
- die in the Emergency Department of a lead/trauma hospital after treatment is initiated (not admitted).

Chronic Care
The level of care required by a person who is chronically ill or has a functional disability (physical or mental) whose acute phase of illness is over, whose vital processes may or may not be stable, whose potential for rehabilitation may be limited and who requires a range of therapeutic services, medical management and/or skilled nursing care plus provision for meeting psychosocial needs. The period of time during which care is required is unpredictable but usually consists of months or years.

CIHI
The Canadian Institute for Health Information (CIHI) was established in February 1994. This not-for-profit corporation was created by integrating the Hospital Medical Records Institute (HMRI), the MIS Group and specific health information programs from Health Canada and Statistics Canada.

COLLECTOR
Specialized software from Digital Innovation, Inc and Tri-Analytics, Inc. used by participating hospitals to collect prehospital, demographic, nature and cause of injury and follow up information on severely injured patients. This software has been customized for use in Ontario.

Comprehensive Data Set
One of three major data sets of the OTR that includes data on severely injured patients admitted to trauma hospitals in the province. Inclusion in the Comprehensive Data Set is based on injury severity.

Cyclists
Injured cyclists are defined by International Classification of Diseases (ICD) External Cause of Injury Codes (E Codes) E826 (Pedal Cycle Incident) and decimals identifying the injured person as a cyclist from the E Code range E820–825 (Motor Vehicle Nontrafffic Incidents) and E810–819 (Motor Vehicle Traffic Incidents).

Death Data Set from the Office of the Chief Coroner
One of three major data sets of the OTR that includes data on all injury deaths in the province of Ontario. These data are provided by the Office of the Chief Coroner.

Deaths
All deaths occurring in participating hospitals with an ISS > 12. Those patients who are DOA (dead on arrival) are excluded.

DIE
A DIE (Died in Emergency) is defined as a patient who dies in the emergency department after any active treatment or resuscitation by the trauma team or emergency department physician after the patient enters the emergency department. DIEs may include patients who arrive VSA (vital signs absent) if treatment or resuscitation is initiated. Patients who are admitted to hospital and die in the emergency department while waiting for transfer are considered an in-hospital death rather than a DIE.

Direct Admission
A direct admission is defined as a patient whose first contact with a hospital is at a participating hospital (not referred).

Discharged Alive
An admitted patient that is discharged from hospital alive, including those patients that sign themselves out against medical advice.

Discharge Disposition
A patient's discharge disposition is the location to which the patient is discharged or the services arranged for the patient immediately upon discharge from the lead/trauma hospital. Discharge disposition is documented as inappropriate for deaths. Menu options for discharge disposition include home, home with support services, another acute care facility, general rehabilitation facility, chronic care facility, nursing home, special rehabilitation facility, Foster Care/Children's Aid and other.

Driver
A driver of a motor vehicle is the occupant of the motor vehicle operating it or intending to operate it.

English Speaking
Refers to patients who are reasonably conversant in the English language and do not require an interpreter.

External Cause of Injury (E Codes)
The External Cause of Injury chapter of the ICD coding system allows the classification and analysis of environmental events, circumstances, and conditions as the cause of injury. Examples include Falls (E880–888) and Motor Vehicle Traffic Incidents (E810–819). Where a code from this section is applicable, it is intended that it shall be used in addition to a code from one of the main chapters of ICD-9-CM indicating the nature of the condition. All reports are based on the first documented E Code recorded unless otherwise specified. COLLECTOR allows hospitals to document up to 3 E Codes. E Codes that are included in the trauma definition can be found in Appendix B.

Extrication Required
Extrication is documented if a patient was trapped and required release from the scene of the incident. Examples include extrication from motor vehicles, dwellings on fire and falls where extrication is required.

General Rehabilitation
See Rehabilitation definition. General rehabilitation involves less intensive rehabilitation of shorter duration than special rehabilitation.

Homicide
Injuries inflicted by another person with intent to injure or kill, by any means.

ICD (International Classification of Diseases)
The International Classification of Diseases is a World Health Organization (WHO) publication that classifies morbidity and mortality information for statistical purposes, and for the indexing of hospital records by disease and operations, for data storage and retrieval. ICD manuals may be located in hospital Health Record Departments or in public libraries.

ICD-9
The International Classification of Diseases, 9th Revision is based on the official version of the World Health Organization's 9th revision.

ICD-9-CM
In 1977, a Steering Committee was convened by the National Centre for Health Statistics to provide advice on the development of a clinical modification of the ICD-9 with increased detail necessary for medical research. ICD-9-CM is totally compatible with ICD-9, meeting the need for comparability of morbidity and mortality statistics at the international level.

ICP Days
Refers to the number of days that intracranial pressure is monitored. ICP days include any part of one day up to midnight including the days the ICP is discontinued (excluding the day ICP is begun). ICP monitoring is used to evaluate a head injured patient's response to therapy and may also be used as a treatment modality to vent cerebrospinal fluid.

In-hospital Deaths
A patient who dies after arrival at the participating hospital, excluding those patients who are dead on arrival (DOA).

Injured Person
An injured person is identified by a subdivision of the External Causes of Injury Codes for all transport E Codes (E800–E848). Injured persons include drivers, passengers, pedestrians, cyclists and other specified persons.

Injury Resulting from Operations of War
An E Code category used to classify injuries to military personnel and civilians caused by war and civil insurrection and occurring during the time of war and insurrection.

Injury Type
Refers to the patient's most serious injury and may be classified as blunt, penetrating or burns. In determining the type of injury, the cause of injury is considered. Also see definitions for penetrating injury type, blunt injury type and burn injury type.

Injury Undetermined Whether Unintentionally or Purposely Inflicted
An E Code category used when after a thorough investigation by the medical examiner, coroner, or other legal authority, it cannot be determined whether the injuries are unintentional, suicidal or intentional.

Intentional Injury
Intentional injury refers to injury purposely inflicted by another person or by the patient.

Intubated
Refers to patients who are intubated for airway maintenance.

Injury Severity Score (ISS)
The Injury Severity Score is an internationally recognized scoring system developed to assign a level of severity to injury. ISS scores range from 1 (minor) to 75 (major).

Late Effects
Conditions reported as such or occurring as sequelae one year or more after injury. Late effects are excluded from the definition of trauma.

Legal Intervention
An E Code category used to classify injuries inflicted by the police or other law enforcing agents, including military on duty, in the course of arresting or attempting to arrest lawbreakers, suppressing disturbances, maintaining order and other legal action.

Length of Stay (LOS)
Total number of hospital days as calculated from date of admission to date of discharge or death.

Master Numbering System
A system developed for the purpose of bringing together all Health Facilities and Programs under one system of identification. Included are health and health related units, facilities, clinics, programs and services. Each such organization has been assigned a unique four digit identifying code. A two digit alphabetic code is used to identify the type of institution.

Mean
A measure of central tendency of a set of observations; the average.

Median
A measure of central tendency of a set of observations; 50th percentile (the point above and below which 50% of data fall).

Minimal Data Set
One of three major data sets of the OTR that includes data on injury admissions to acute care hospitals in Ontario. Data are downloaded from the CIHI Discharge Abstract Database.

Month of Admission
Reports are generated by the month in which a patient was admitted to hospital rather than discharge date.

Motor Vehicle
Any mechanically or electrically powered device, not operated on rails, upon which any person or property may be transported or drawn upon a highway. Any object such as a trailer, coaster, sled, or wagon being towed by a motor vehicle is considered a part of the motor vehicle. This category includes automobiles, buses, fire engines, motorcycles, mopeds or scooters, vans, trucks, and construction machinery, farm and industrial machinery, steam rollers, tractors, army tanks, highway graders, or similar vehicles on wheels or treads, while in transport under its own power.

Motor Vehicle Incident
A transport incident involving a motor vehicle. It is defined as a motor vehicle traffic incident or as a motor vehicle non-traffic incident according to whether the incident occurs on a public highway or elsewhere.

Motor Vehicle Non-traffic Incident
Any motor vehicle incident which occurs entirely in any place other than a public highway.

Motor Vehicle Traffic Incident
Any motor vehicle incident occurring on a public highway (e.g. originating, terminating, or involving a vehicle partially on the highway). A motor vehicle incident is assumed to have occurred on the highway unless another place is specified, except in the case of incidents involving only off-road motor vehicles which are classified as non-traffic incidents unless the contrary is stated.

Motorcycle
A two wheeled motor vehicle having one or two riding saddles and sometimes having a third wheel for the support of a sidecar. The sidecar is considered part of the motorcycle.

Nature of Injury (N Codes)
The Nature of Injury section (Chapter 17) of the ICD coding system is used to describe in detail the specific results of an injury. Examples include fractures, dislocations, sprains and strains, intracranial injuries, internal injuries and open wounds.

Off Road Motor Vehicle
A motor vehicle of special design, to enable it to negotiate rough or soft terrain or snow. Examples of special design are high construction, special wheels and tires, driven by treads, or support on a cushion of air. This category includes all terrain vehicles, army tanks, hovercrafts, and snowmobiles.

Operative Procedures
Up to 10 operative procedures may be documented for 5 OR visits at the primary and secondary hospital and 10 OR visits at the participating hospital.

OR Visits per Admission
Refers to the number of OR encounters for the patient's admission. Up to 99 OR visits may be documented for each patient. Detailed information is collected on 5 OR visits at the primary and secondary hospital and 10 OR visits at the participating hospital.

Organ Donations
Up to 4 specific organs or tissue may be documented. Participating hospitals may also document if greater than 4 organs or tissue samples were procured.

Other Incidents
Refers to the "Other Accidents" category as described in the ICD-9-CM manual for the E Code range of E916–E928.

Other Road Vehicle
Any device, except a motor vehicle in, on, or by which any person or property may be transported on a highway. This category includes pedal cycles, animals carrying persons or goods, animal drawn vehicles, animals harnessed to conveyances and streetcars.

Outcome
Refers to whether the patient lived or died.

Out of Province Residents
Defined as a patient whose province of residence is not Ontario.

Paralytic Agents
The purpose of collecting the number of paralytics agents in the Comprehensive Data Set is not to document the number of paralytic agents administered but the number of cases in which the Glasgow Coma Score could not be calculated because a paralytic agent was administered. Paralytic agents stop muscular activity and help preserve or increase cerebral venous draining in severe head injury, helping to reduce or keep the intracranial pressure in the normal range.

Participating Hospital
One of eleven hospitals (14 sites) in the province which contribute data on severely injured patients to the Comprehensive Data Set using specialized software and dedicated staff.

Patient Days
The number of days a patient is hospitalized.

Pedal Cycle
Any road transport vehicle operated solely by pedals including bicycles, pedal cycles and tricycles.

Pedal Cyclist
Any person riding on a pedal cycle or in a sidecar attached to such a vehicle. Also see definition for cyclist.

Pedestrian
Any person involved in an incident who was not at the time of the incident riding in or on a motor vehicle, railroad train, streetcar, animal-drawn or other vehicle, or on a bicycle or animal. The pedestrian category includes a person changing a tire on a vehicle, in or operating a pedestrian conveyance, making adjustments to the motor of a vehicle or on foot.

Pedestrian Conveyance
Any human powered device by which a pedestrian may move other than by walking or by which a walking person may move another pedestrian including baby carriages, wagons, ice skates, roller skates, scooters, skateboards, skis, sleds and wheelchairs.

Penetrating Injury Type
Refers to an injury caused by a missile entering the body. Missiles include bullets, knives and items such as pieces of sharp glass or metal.

Place of Injury
The ICD options are used to specify place of injury for all cases in the Comprehensive Data Set. Options include home, farm, mine, industry, recreation, street, public building, residential institution, other and unspecified. A place of injury may be documented for the primary, secondary and tertiary E Codes.

Prehospital Time
Prehospital time is calculated based on the incident time to the time the ambulance arrived at the first hospital.

Protective Devices
Any devices in use or not in use by the injured patient at the time of the incident. Menu options for protective devices include none, lap and shoulder belt, lap belt only, lap belt only of combined assembly, child safety seat used incorrectly, child safety seat used correctly, air bag deployed, other passive restraint device, helmet, equipment available, but not used, no equipment available, use unknown, other safety equipment used, infant seat (less than 20 pounds), child seat (between 20–40 pounds), booster seat (greater than 40 pounds), seatbelt NFS and helmet flew off. Up to 4 menu options may be documented.

Public Highway
A public highway or trafficway is the entire width between property lines of every way or place, of which any part is open to the use of the public for purposes of vehicular traffic as a matter of right or custom. This category excludes private driveways, parking lots, and roads in airfields, farms industrial premises, mines, private grounds or quarries.

Railway Incident
A transport incident involving a railway train or other railway vehicle operated on rails, whether in motion or not.

Readmission
A readmission is a related inpatient admission to the same participating hospital related to a previous trauma (ISS > 12) within unlimited time.

Region
There are 7 health planning regions in Ontario (Southwest, Central South, Central West, Central East, Toronto, East, and North) defined by the Ministry of Health and Long Term Care according to residence codes.

Rehabilitation
That required by a person whose condition is relatively stable but unlikely to be resolved through convalescence or the normal healing process and who requires a specialized rehabilitation program to restore or improve functional ability. The intensity and duration of the type of care is dependent on the nature of the disability and the patient progress, but maximum benefits usually can be expected within a period of several months.
Also see Special Rehabilitation or General Rehabilitation.

Residence Code
Unique four digit numbers have been assigned to each municipality and populated Indian Reserve or settlement in the province to classify patient residence information. The first two digits represent the county, district or regional municipality in which the place is located. Digits three and four identify municipalities within the county.

Roadway
That part of the public highway designed, improved, and ordinarily used, for vehicular travel. This excludes driveways, parking lots, ramps, roads in farms, airfields, industrial premises, private grounds, mines and quarries.

Scene Time
Scene time is calculated based on the time the ambulance arrived at the scene to the time the ambulance left the scene.

SCU
A Special Care Unit is any unit where the normal patient: nurse ratio is 2:1. Other beds such as ED or the recovery room may be documented as an SCU bed if they are used for > 24 hours as an SCU bed. SCUs include surgical ICUs, pediatric ICUs, neuro ICUs, burn ICUs, ICUs stepdown/observation units or other designated SCUs. Up to 5 SCU visits may be documented.

Single Year of Age
Individual values for ages less than 1 year through 100 years which may be used rather than age groups.

Small Boat
Any watercraft propelled by paddle, oars, or a small motor, with a passenger capacity of less than ten.

Special Rehabilitation
See Rehabilitation definition. Special rehabilitation involves more intensive rehabilitation of longer duration than general rehabilitation.

Suicide
Self inflicted injuries specified as intentional excluding admissions that result from poisonings.

Survivors
Refers to those patients who are discharged alive.

Total Admissions
Total number of patients admitted to hospital excluding those who are Dead on Arrival (DOA), Died in Emergency (DIE) and discharged from the Emergency Department.

Total Patient Days
Sum of length of stay for all admissions.

Transfers
A transferred patient is one whose first contact with a hospital is with a non participating hospital and who is subsequently transferred to a participating hospital.

Transport Incident
Any incident (E800–E848) involving a device designed primarily for, or being used at the time primarily for, conveying persons or goods from one place to another. In classifying incidents which involve more than one kind of transport, the following order of precedence of transport incidents should be used: aircraft and spacecraft, watercraft, motor vehicle, railway, other road vehicles.

Incidents involving agricultural and construction machines, such as tractors, cranes, and bulldozers, are regarded as transport incidents only when these vehicles are under their own power on a highway, otherwise the vehicles are regarded as machinery. Vehicles which can travel on land or water, such as hovercraft and other amphibious vehicles, are regarded as watercraft when on the water, as motor vehicles when on the highway, and as off road vehicles when on land, but off the highway.

Trauma
Injury resulting from the transfer of energy e.g. kinetic, thermal. See Appendix B for External Causes of Injury (E Codes) used to define trauma.

Trauma Registry Advisory Committee (TRAC)
The multidisciplinary group responsible for guiding the implementation and operation of the OTR.

Ventilator Days
The number of days the patient was intubated and mechanically ventilated intermittently or continuously excluding nonintubated patients on BIPAP and intubated patients on CPAP. Ventilator days include any part of 1 day up to midnight including the day the ventilator is discontinued and excluding the day the ventilator is begun. A ventilator day is counted if a ventilated patient is admitted and discharged in the same day or if the ventilation is started and discontinued in the same day. Routine intubation for OR is not included.

Watercraft
Any device for transporting passengers or goods on the water.

Appendix B

Trauma Definition:
E Code Inclusions and Exclusions

Trauma Definition: E Code Inclusions

The definition of trauma as injury resulting from the transfer of energy has been approved by the Ontario Trauma Registry Advisory Committee.

The following lists the E Code categories used for reporting purposes based on the trauma definition. "Incident" and "unintentional" have been substituted for the terms "accidents" used in the ICD definitions.

E Code Inclusions	
E Code Category	**Definition**
E800-E807	Railway incidents
E810-E819	Motor vehicle traffic incidents
E820-E825	Motor vehicle non-traffic incidents
E826	Pedal cycles
E827-E829	Other road vehicle incidents
E830-E838	Water transport incidents
E840-E845	Air and space transport incidents
E846-E848	Vehicle incidents not elsewhere classifiable
E880-E888	Unintentional falls
E890-E899	Incidents caused by fire and flame
E900-E902, E906-E909	Incidents due to natural and environmental factors
E910	Incidents caused by drowning
E913	Incidents caused by suffocation
E914-E915	Foreign bodies (excluding choking)
E916-E928	Other incidents
E953-E958	Suicide and self inflicted injury (excluding poisoning)
E960-E961, E963-E968	Homicide and injury purposely inflicted by other persons
E970-E976, E978	Legal intervention
E983-E988	Injury undetermined whether unintentionally or purposely inflicted
E990-E998	Injury resulting from operations of war

Trauma Definition: E Code Exclusions

The following lists the E Code categories that are excluded from the Ontario Trauma Registry definition of trauma.

E Code Exclusions	
E Codes	**Definition**
E850-E858	Poisonings by drugs
E860-E869	Poisoning by gases
E870-E876	Misadventures
E878-E879	Complications
E903	Travel and motion
E904	Hunger, thirst, exposure, neglect
E905	Venomous animals and plants
E911	Inhalation and ingestion of food causing obstruction
E912	Inhalation and ingestion of other objects causing obstruction
E929	Late effects
E930-E949	Drugs, medicinal and biological substances causing adverse effects
E950-E952	Suicide and self inflicted injury (poisonings)
E959	Late effects of self inflicted injury
E962	Assault by poisoning
E969	Late effects of injury purposely inflicted by other person
E977	Injury due to legal intervention
E980-E982	Poisoning undetermined whether unintentionally or purposely inflicted
E989	Late effects intentionality undetermined
E999	Late effects due to war

Appendix C

Definition of Trauma

Definition of Trauma

The following points are guidelines for inclusion criteria for the Comprehensive Data Set. The inclusion and exclusion criteria for the Comprehensive Data Set listed below reflect discussion by the TRAC, the TRAC Subcommittee and the Comprehensive Data Set Working Group.

New inclusion criteria are effective for patients admitted on and after April 1, 1995.

1. Patients included in the Comprehensive Data Set must have an ISS > 12 with an appropriate E Code as defined by the Minimal Data Set Trauma Patient Definition (attached). In addition to the included E Codes, patients admitted with the following E Codes may also be included in the Comprehensive Data Set (as of April 1, 1995).

   E Code Exceptions

   - Inhalation injury as defined in the AIS dictionary should be used as a reference when there is documentation of the carboxyhemoglobin level. Inhalation injury should not be used in drowning or hanging cases.

   - Ingestion poisoning resulting in a physical injury with an ISS > 12 can be included. An example is a perforated esophagus due to chemical ingestion. If the perforated esophagus was due to vomiting, the case would not be included.

   - AIS 90 injuries describing length of unconsciousness and level of consciousness (includes response to painful stimuli) found in the Head section of the AIS Dictionary can be used for hypoxic injury including hanging, strangulation and near drowning. Any documented head injury (i.e. hypoxic brain injury, cerebral edema) from the post mortem report or diagnostic tests (i.e. CT, X-ray) must be included for these cases. If there is no documented head injury either from diagnostic tests or a post mortem examination, level of consciousness can not be used. As stated in the AIS Dictionary, length of unconsciousness should always be used in preference to level of consciousness. Length of unconsciousness is defined from the first time the patient is known to be unconscious to the time the patient wakes up or is pronounced dead.

2. Patients that are DIEs (Died in Emergency) are included and will be included in reports created centrally. A DIE is defined as a patient who dies in the emergency department after any active treatment or resuscitation by the trauma team or emergency department physician after the patient enters the emergency department. DIEs may include patients who arrive VSA if treatment or resuscitation is initiated. Patients who are admitted to hospital and die in the emergency department while waiting for transfer are considered an in-hospital death rather than a DIE.

3. Patients that are DOAs (Dead on Arrival) are excluded. A DOA is defined as a patient who has not had active treatment by the trauma team or emergency department physician and is pronounced dead in the emergency department.

4. The injury must have occurred within 1 year of hospital admission and be the first admission to the lead/trauma hospital. Patients admitted with chronic subdurals are included in the Comprehensive Data Set as a new record if the injury occurred within one year and the admission is the first to the lead/trauma hospital.

5. The trauma team leader or trauma team need not be activated.

6. Patients may bypass the emergency department and be directly admitted to a service.

7. Patients with ISS > 12 and an appropriate E Code who are treated in the emergency department at a lead/trauma hospital and transferred to another lead/trauma hospital for admission should be included in both lead/trauma hospitals.

8. These cases will be reported centrally in the lead/trauma hospital where the majority of the critical care is given rather than using the longest length of stay.

9. Only cases where active care is being given should be included. Patients who are admitted to a lead/trauma hospital for convalescence or rehabilitation because the facility is closer to home should not be included.

10. If a trauma patient with ISS < 12 is admitted to hospital and then is further injured in hospital (ISS < 12), the case should not be included in either instance. Injuries should not be combined. If the second incident results in an ISS > 12 the case should be included but the injuries from the first incident should not be included but should be listed as a comorbidity if they contribute to the patient LOS. The only injuries used for scoring are the ones sustained related to the incident resulting in an ISS > 12.

11. A trauma patient (ISS > 12) admitted to a lead/trauma hospital who is further injured in hospital (ISS > 12) should be considered two separate incidents and would require two records in the Comprehensive Data Set.

General Coding Guidelines

a) Every data element in the Comprehensive Data Set should be documented. As of April 1, 1995 blanks are not acceptable except in cases where data elements are skipped by COLLECTOR. All menus include unknown and inappropriate as a menu selection to facilitate documenting every data element.

   Unknown should be used in cases where the information is not documented. Unknown should also be used if there are two conflicting sources of information that can not be verified or for data elements where the information is expected to be made available but has not arrived at the time the record is closed. In cases where there are conflicting sources of information, the Medical Director should be consulted.

   Inappropriate is used when the information would not be meaningful or appropriate for a specific case. An example is a BAC in a child less than 10 years of age or occupation in a non work related injury.

b) Dates and times should be documented whenever they are known. Many calculations are done in COLLECTOR including prehospital time, scene time and length of stay. It is important that all dates and times are entered sequentially for these calculations to be done. Data checks have been built in to alert the user to times that are not sequential. For example, the time the ambulance call is received and the time the ambulance is dispatched (Screen 3.3) must be sequential. If these times are documented as the same on the Ambulance Call Report, the second time should be documented as one second later. A best guess should not be used in order to maintain the integrity of the data. It is possible to enter "U" in portions of the date and time data elements in COLLECTOR when all the information is not available. A data element has been added to COLLECTOR to document the approximate date of injury (i.e. within 1 week, within 1 month, within 3 months, within 1 year) when the actual date is not available.

c) Old injuries such as healing fractures should not be included. Only injuries that are related to the cause of admission should be documented.

d) When patients are readmitted to a participating hospital with a missed injury, the missed injury should be added to the original list of injuries. If the patient is admitted for the first time to the lead/trauma hospital with a missed injury, all injuries relating to the ISS > 12 incident should be documented.

Appendix D

Comprehensive Data Set Data Elements

Appendix D—Comprehensive Data Set Data Elements

"Restricted" in the Comments column means that the specific data element is unavailable to researchers.

Data Element—Group/Single	**Data Element—Single**	**Comments**
Accident Number		
ACS Filters		
Address (Legal Next of Kin)	Street Address City Province Country Postal Code Postal Code (Other Country)	**Restricted**
Address (Patient)	Street Address City Province Country Postal Code Postal Code (Other Country)	Restricted
Admission Date		
Admitting Service		
Age		
Age Units		
AIS Code		
AIS Version		
ALC Days: Number of, Reasons For, Form Completed, Date Ready		
BAC (mm/L)	Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Campus Number		
Cause of Injury: Specify		
Chart Number		**Restricted**
Collision Detail Comorbidities	Primary Impact, Secondary Impact	

Data Element—Group/Single	**Data Element—Single**	**Comments**
Complications		
Coroner Notified?		
CT Scan Location	Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Date of Arrival	Primary Hospital Secondary Hospital Lead/Trauma Hospital Lead/Trauma Hospital ED	
Date of Birth		
Date of Departure	Primary Hospital Secondary Hospital Lead/Trauma Hospital ED	
Dates: Scene	Date Call Received Date Dispatched Date Arrived at Scene Date Arrived at Patient Date Departed from Scene	
Direct Admission to Service (Bypass ED)		
Disposition		
Disposition: Other		
Distance Ejected (in Meters)		
E Codes	Primary, Secondary, Tertiary Sports/Recreational	
ED Physician (Lead/Trauma Hospital)		**Restricted**
Ejected From Vehicle		
Extrication Required?		
Extrication Time		
FIM Components	At Discharge, At Follow Up	
FIM Total Score	At Discharge, At Follow Up	
FIM Type	At Discharge, At Follow Up	

Data Element—Group/Single	**Data Element—Single**	**Comments**
FIM: Taken From Chart at Discharge?		
Follow Up: Admissions Related to Injury in 6 Months Post Discharge?		
Follow Up: Contact		
Follow Up: Date		
Follow Up: Hospital Admitted To		
Follow Up: Level of Employment		
Follow Up: Level of Study		
Follow Up: Percent of Previous Income		
Follow Up: Therapy Received after Discharge?		
Follow Up: Therapy Type (Other)		
Follow Up: Therapy Type		
Geocode of Incident Location		
Glasgow Coma Scale	**Scene, Primary Hospital, Secondary Hospital, Lead Trauma Hospital** Eye Opening Motor Response Verbal Response Total GCS	
Glasgow Outcome Scale		
Health Number (Ontario)		**Restricted**
Health Number (Other than Ontario)		**Restricted**
Heart Rate	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Height (not collected as of April 1, 1995)		

Data Element—Group/Single	**Data Element—Single**	**Comments**
Home with Support Services		
Home with Support Services: Other		
ICD 9 CM Injury Codes		
ICP Days	Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Impact Location	Primary Impact Secondary Impact	
Impact Type		
Incident Date		
Incident Location (if out of Province): Other		
Incident Location (if out of Province)		
Incident Time		
Injury Text		**Restricted**
Injury Type (Primary)		
Institution Discharged to Outside of Ontario		**Restricted**
Institution Discharged to Outside of Canada		**Restricted**
Institution Discharged to Inside of Ontario		**Restricted**
Institution Transferred To	Primary Hospital Secondary Hospital Second Secondary Hospital Lead/Trauma Hospital	**Restricted** **Restricted** **Restricted** **Restricted**
Intentional Injury		
Intubated (was the patient)?	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Is this a Readmission?		

Data Element—Group/Single	**Data Element—Single**	**Comments**
ISS		
IV Lines	Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Language Spoken	Patient, Legal Next of Kin	
Legal Next of Kin: Relationship to Patient		
Length of Stay	Special Care Units Lead/Trauma Hospital	
MAIS		
Memo Fields	Demographic Follow Up Injury Lead/Trauma Hospital Lead/Trauma Hospital Care Nursing Outcome Primary Hospital Quality Assurance Readmission Scene Secondary Hospital System	**Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted** **Restricted**
Modes of Transport	**Scene, From Primary Hospital, From Secondary Hospital** First Provider Second Provider Third Provider	
Name: Legal Next of Kin Middle name not collected as of April 1, 1995	Surname, First Name, Middle Name	**Restricted**
Name: Patient	Surname, First Name, Middle Name	**Restricted**
Non Operative Procedures	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Occupation		

Data Element—Group/Single	**Data Element—Single**	**Comments**
Occupation (Other)		
OR Visits: Dates	Primary Hospital (5 Visits) Secondary Hospital (5 Visits) Lead/Trauma Hospital (10 Visits)	
OR Visits: Elapsed Times	Primary Hospital (5 Visits) Secondary Hospital (5 Visits) Lead/Trauma Hospital (10 Visits)	
OR Visits: Finish Time	Primary Hospital (5 Visits) Secondary Hospital (5 Visits) Lead/Trauma Hospital (10 Visits)	
OR Visits: Number of	Primary Hospital Secondary Hospital Lead/Trauma Hospital	
OR Visits: Procedures	Primary Hospital (5 Visits) Secondary Hospital (5 Visits) Lead/Trauma Hospital (10 Visits)	
OR Visits: Services Performing Operation Procedures	Primary Hospital (5 Visits) Secondary Hospital (5 Visits) Lead/Trauma Hospital (10 Visits)	
OR Visits: Start Time	**Primary Hospital (5 Visits)** **Secondary Hospital (5 Visits)** **Lead/Trauma Hospital** **(10 Visits)**	
Organ Donation: Was family approached?		
Organs Donated: List of		
Organs Donated: Were Organs Donated?		
Overflow		
Paralytic Agents in Effect	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	

Data Element—Group/Single	**Data Element—Single**	**Comments**
Pediatric Trauma Score	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Place of Death		
Place of Injury	Primary, Secondary, Tertiary	
Place of Injury: Specify		
Police Force		**Restricted**
Police Force Division		**Restricted**
Position in Vehicle		
Post ED Destination		
Post Mortem Examination Done?		
Post Mortem Report Received?		
Post OR Destination		
Post OR Destination: SCU		
Predot Code		
Prehospital Number	**First, Second and Third Provider** From Scene From Primary Hospital From Secondary Hospital	
Prehospital Time: Total		
Protective Devices		
Protective Devices (Other)		
Qualified Personnel (Number of)	**First, Second and Third Provider** From Scene From Primary Hospital From Secondary Hospital	
RANCHOS at Discharge		
Readmission	Number of Readmissions	
Referring Physician	Primary Hospital, Secondary Hospital	**Restricted**

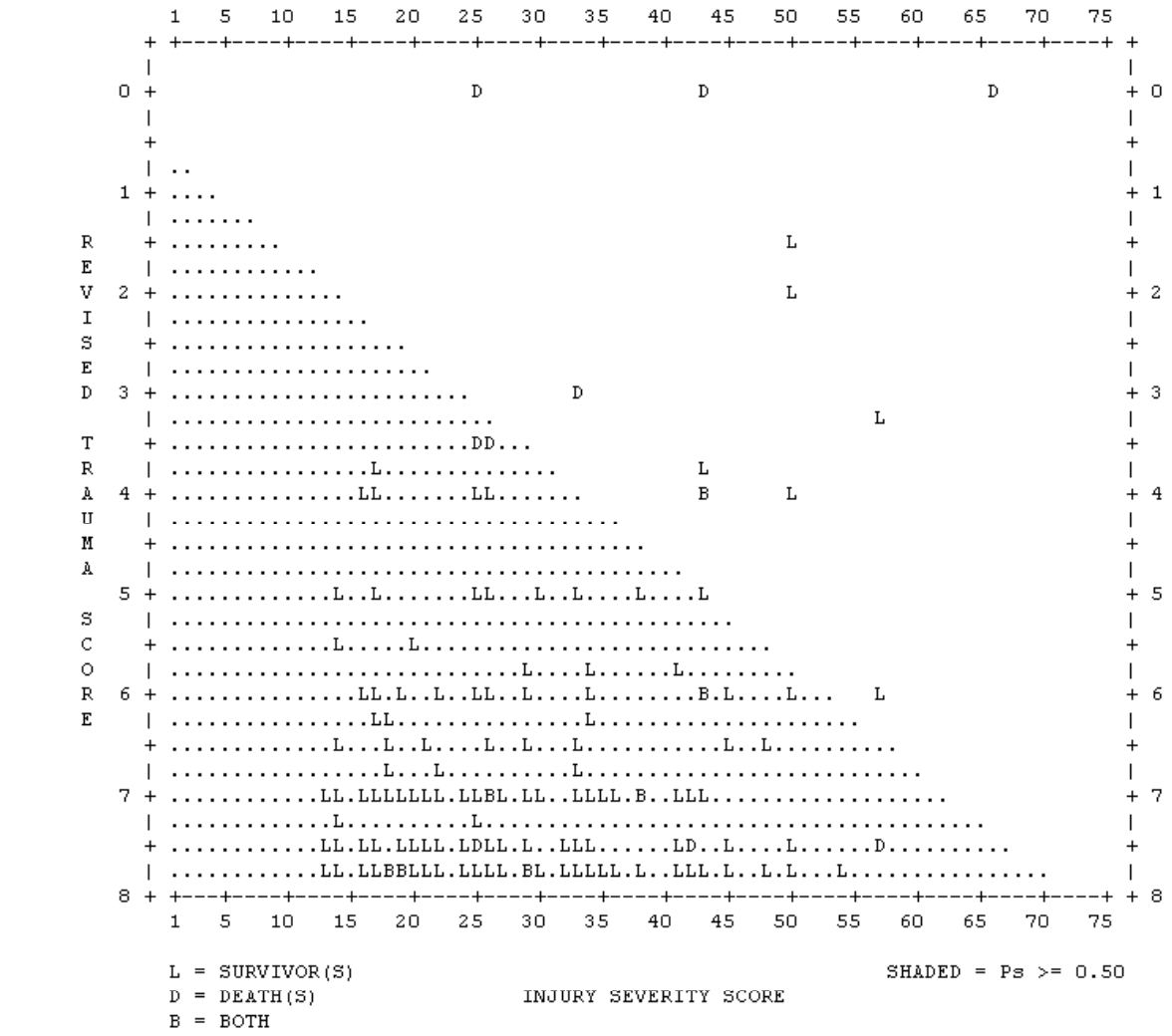
Data Element—Group/Single	**Data Element—Single**	**Comments**
Residence Code		
Residence: Province of		
Respiration Rate (Unassisted)	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Revised Trauma Score: Total	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Runsheet Available	**First, Second and Third Provider** From Scene From Primary Hospital From Secondary Hospital	
Scene Time: Total		
Separation	Date, Time, Status	
Service Transfers	**Type of Service, Date Admitted, Date Discharged, Length of Stay** Up to six Service Transfers	
Sex		
Special Care Units	**Type of Special Care Unit, Date Admitted, Date Discharged, Length of Stay** Up to 5 SCUs	
Systolic Blood Pressure	Scene Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Telephone Number (Patient)		**Restricted**
Temperature	Primary Hospital Secondary Hospital Lead/Trauma Hospital	

Data Element—Group/Single	**Data Element—Single**	**Comments**
Time of Arrival	Primary Hospital Secondary Hospital Lead/Trauma Hospital Lead/Trauma Hospital ED	
Time of Departure	Primary Hospital Secondary Hospital Lead/Trauma Hospital ED	
Times: Scene	Time Call Received Time Call Dispatched Time Arrived at Scene Time Arrived at Patient Time Departed from Scene	
Transport Mode to Discharge Care Facility (not collected as of April 1, 1995)		
Trauma Number		
Trauma Team Activated		
Trauma Team Leader		**Restricted**
TRISS		
Vehicle Type		
Vehicle Type: Other		
Ventilator Days	Primary Hospital Secondary Hospital Lead/Trauma Hospital	
Weight		
Work Related?		

Appendix E

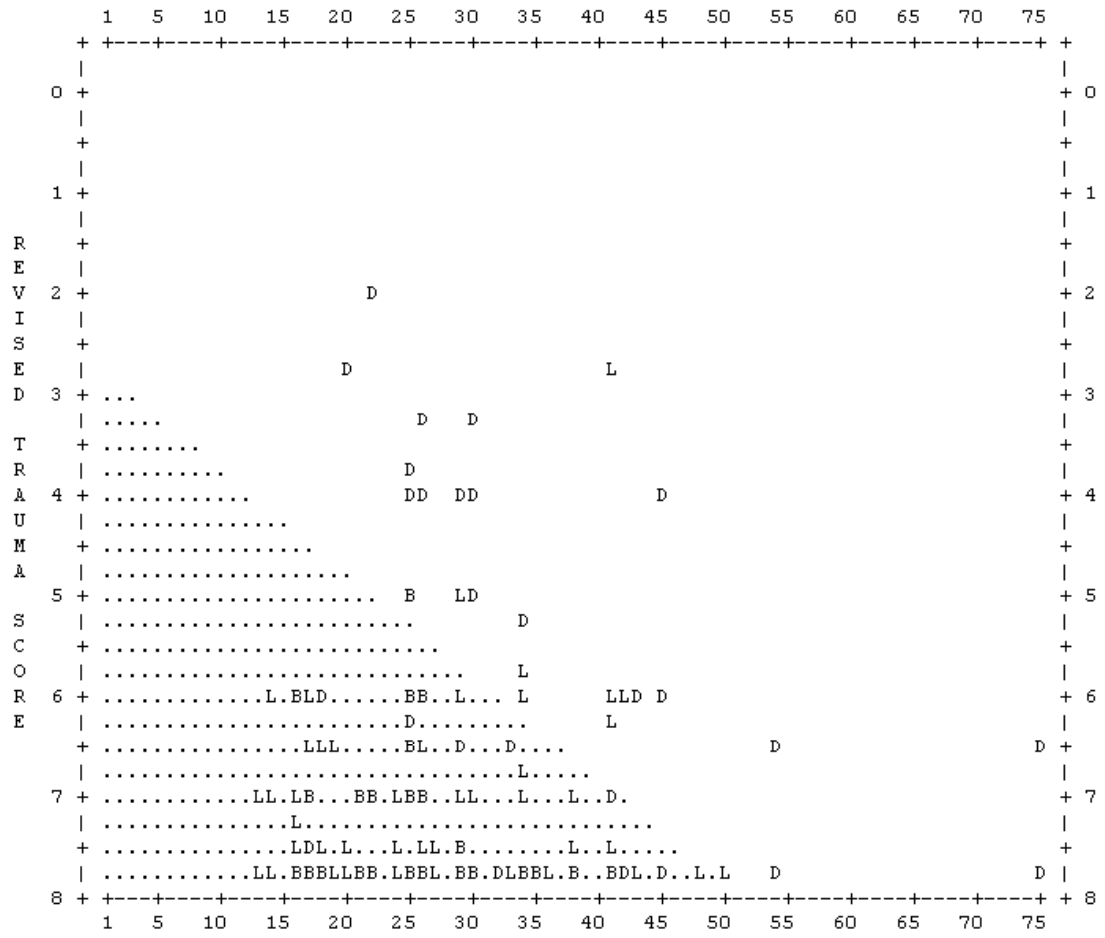
PRE Analysis

PRE Chart Adult Blunt (15-54 Years) 2001/2002 Data



No. of unexpected deaths=11
No. of unexpected survivors=9

PRE Chart Adult Blunt (55+ Years) 2001/2002 Data

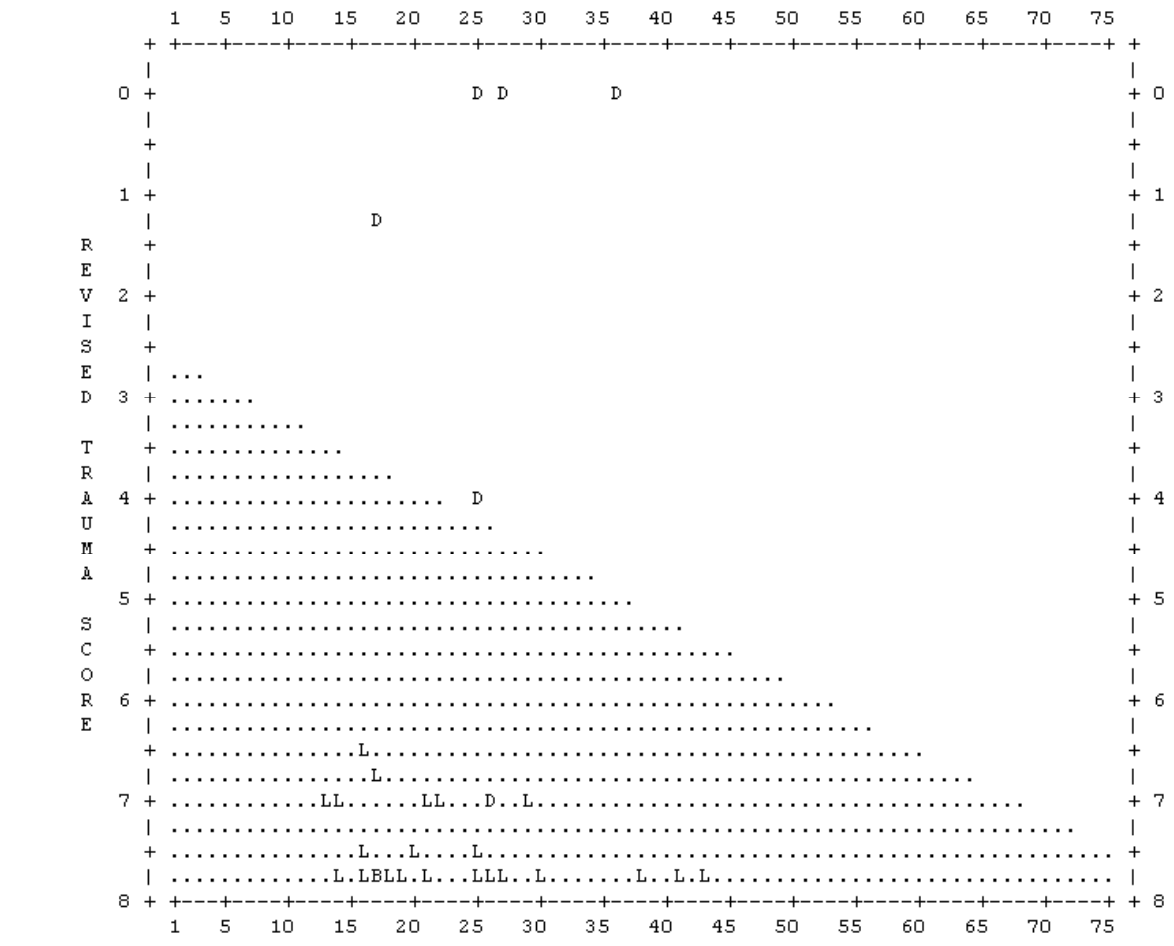


L = SURVIVOR(S)
D = DEATH(S)
B = BOTH

SHADED = Ps >= 0.50

No. of unexpected deaths=79
No. of unexpected survivors=9

PRE Chart Adult Penetrating Wounds (15-54 Years) 2001/2002 Data



No. of unexpected deaths=2
No. of unexpected survivors=0

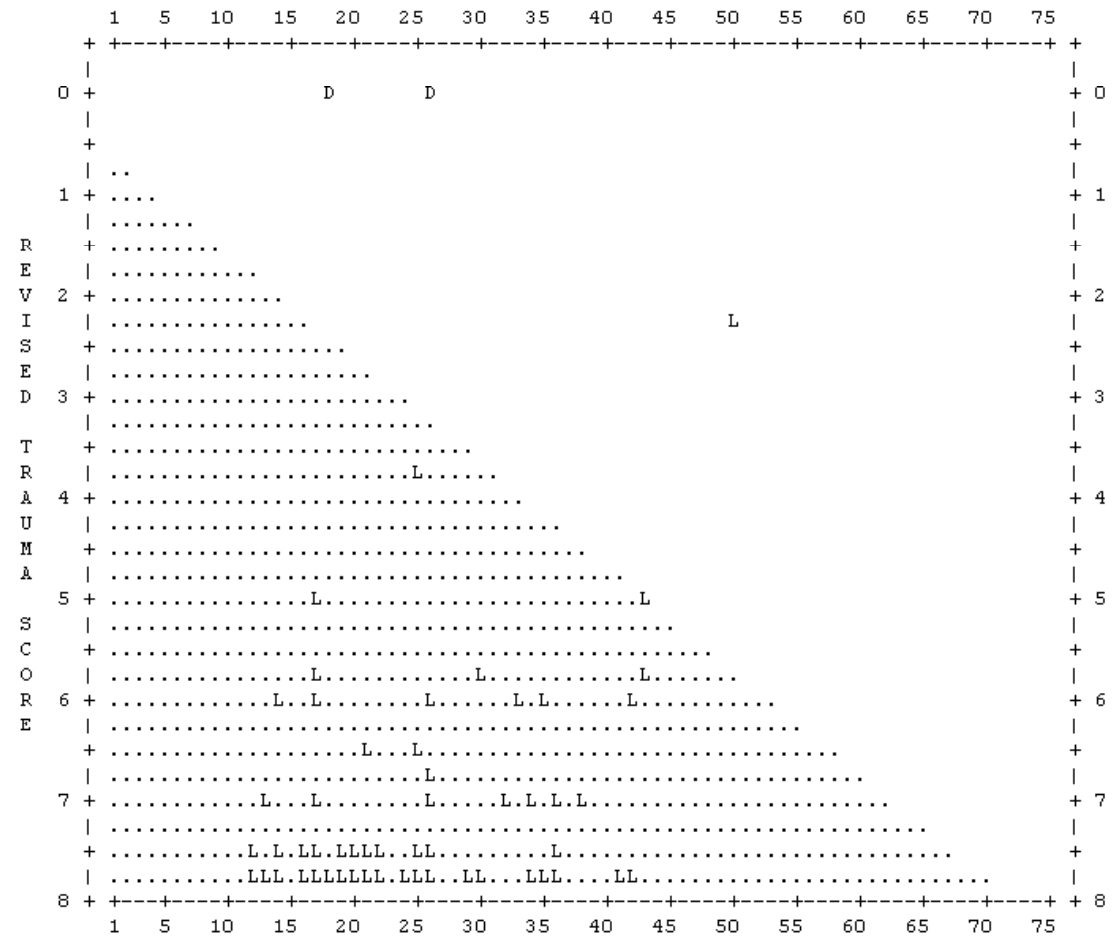
```
    PRE Chart Adult Penetrating Wounds (55+ Years) 2001/2002 Data

        1   5   10   15   20   25   30   35   40   45   50   55   60   65   70   75
      + +---+----+----+----+----+----+----+----+----+----+----+----+----+----+----+ +
      |                                                                             |
    0 +                                                                             + 0
      |                                                                             |
      +                                                                             +
      |                                                                             |
    1 +                                                                             + 1
      |                                                                             |
R     +                                                                             +
E     |                                                                             |
V   2 +                                                                             + 2
I     |                                                                             |
S     +                                                                             +
E     |                                                                             |
D   3 +                                                                             + 3
      |                                                                             |
T     +                                                                             +
R     | .                                                                           |
A   4 + .....                                                                       + 4
U     | ........                                                                    |
M     + ............            L                                                   +
A     | ................                                                            |
    5 + ....................                                                        + 5
S     | ........................                                                    |
C     + ............................                                                +
O     | ...............................                                             |
R   6 + ...................................                                         + 6
E     | .......................................                                     |
      + ...........................................                                 +
      | ...............................................                             |
    7 + ..................................................                          + 7
      | ......................................................                      |
      + ..........................................................                  +
      | .............L...LL.D....D..L.....L...........................              |
    8 + +---+----+----+----+----+----+----+----+----+----+----+----+----+----+----+ + 8
        1   5   10   15   20   25   30   35   40   45   50   55   60   65   70   75

        L = SURVIVOR(S)                                         SHADED = Ps >= 0.50
        D = DEATH(S)                INJURY SEVERITY SCORE
        B = BOTH

No. unexpected deaths=2
No. of unexpected survivors=1
```

PRE Chart Pediatric 2001/2002 Data



L = SURVIVOR(S)
D = DEATH(S)
B = BOTH

SHADED = Ps >= 0.50

No. of unexpected deaths=0
No. of unexpected survivors=1

Appendix F

Data Tables

Appendix F—Data Tables

Table of Contents

TREND ANALYSIS REPORT, 1997–1998 to 2001–2002

	1997–1998		1998–1999		1999–2000		2000–2001		2001–2002	
	No.	%	No.	%	No.	%	No.	%	No.	%
CASES	3,263		3,418		3,437		3,437		3,692	
INHOSPITAL DEATHS (For admitted patients only)	394	12.1	412	12.1	429	12.5	394	11.5	431	11.7
DIED IN EMERGENCY ROOM	90	2.8	96	2.8	96	2.8	94	2.7	84	2.3
DIRECT ADMISSIONS	1,501	46	1,506	44.1	1,544	44.9	1,594	46.4	1,766	47.8
MALES	2,330	71.4	2,419	70.8	2,424	70.5	2,471	71.9	2,636	71.4
AGE_YEARS										
MEAN(+/-STANDARD DEVIATION)	41.2(+ / -23.6)	-	42.1(+ / -23.3)	-	42.5(+ / -23.3)	-	41.6(+ / -23.3)	-	43.4(+ / -23.7)	-
MEDIAN	38.0	-	39.0	-	40.0	-	39.0	-	41.0	-
AGE GROUPS										
<20 YEARS	675	20.7	653	19.1	648	18.9	696	20.3	673	18.2
20 - 34 YEARS	804	24.6	805	23.6	761	22.1	806	23.5	831	22.5
35 - 64 YEARS	1,077	33	1,188	34.8	1,275	37.1	1,220	35.5	1,317	35.7
65+ YEARS	703	21.5	771	22.6	751	21.9	715	20.8	870	23.6
UNKNOWN AGE	0	0	0	0	2	.1	0	0	1	0

TREND ANALYSIS REPORT, 1997–1998 to 2001–2002

	1997–1998		1998–1999		1999–2000		2000–2001		2001–2002	
	No.	%	No.	%	No.	%	No.	%	No.	%
INJURY SEVERITY SCORE										
MEAN(+/-STANDARD DEVIATION)	24.8(+ / -10.7)	-	25.1(+ / -11.0)	-	25.4(+ / -11.2)	-	24.9(+ / -10.7)	-	24.8(+ / -10.6)	-
MEDIAN	24.0	-	25.0	-	25.0	-	22.0	-	24.0	-
LENGTH OF STAY (DAYS)										
MEAN(+/-STANDARD DEVIATION)	17.0(+ / -25.9)	-	16.8(+ / -23.7)	-	16.5(+ / -23.4)	-	16.2(+ / -26.1)	-	16.1(+ / -25.3)	-
MEDIAN	9.0	-	9.0	-	9.0	-	9.0	-	9.0	-
MINIMUM	1	-	1	-	1	-	1	-	1	-
MAXIMUM	405	-	311	-	395	-	608	-	607	-
TYPE OF INJURY										
BLUNT	3,026	92.7	3,139	91.8	3,176	92.4	3,154	91.8	3,406	92.3
PENETRATING	170	5.2	175	5.1	146	4.2	194	5.6	188	5.1
BURNS	67	2.1	104	3	115	3.3	89	2.6	98	2.7
EXTERNAL CAUSE OF INJURY										
MVC(E810 - E825)	1,677	51.4	1,675	49	1,673	48.7	1,655	48.2	1,756	47.6
FALLS(E880 - E888)	862	26.4	966	28.3	993	28.9	988	28.7	1,104	29.9
INTENTIONAL	338	10.4	335	9.8	332	9.7	371	10.8	382	10.3
ALL OTHER	386	11.8	442	12.9	439	12.8	423	12.3	450	12.2

TREND ANALYSIS REPORT, 1997–1998 to 2001–2002

	1997–1998		1998–1999		1999–2000		2000–2001		2001–2002	
	No.	%	No.	%	No.	%	No.	%	No.	%
DISCHARGE DISPOSITION										
DEATHS	486	14.9	508	14.9	525	15.3	488	14.2	515	13.9
HOME	1,097	33.6	1,189	34.8	1,155	33.6	1,295	37.7	1,375	37.2
HOME W/SUPPORT SERV.	519	15.9	589	17.2	631	18.4	541	15.7	432	11.7
OTHER ACUTE CARE FAC.	514	15.8	485	14.2	460	13.4	477	13.9	591	16
GENERAL REHAB	245	7.5	300	8.8	312	9.1	326	9.5	346	9.4
CHRONIC CARE	28	.9	26	.8	20	.6	23	.7	28	.8
NURSING HOME	44	1.3	57	1.7	40	1.2	41	1.2	69	1.9
SPECIAL REHAB	231	7.1	201	5.9	200	5.8	178	5.2	225	6.1
FOSTER CARE	19	.6	11	.3	12	.3	12	.3	17	.5
OTHER	55	1.7	47	1.4	77	2.2	54	1.6	89	2.4
UNKNOWN	25	.8	5	.1	5	.1	2	.1	5	.1

*** Intentional Injury includes:**

- Suicide excluding poisoning (E953 - E958)

- Injury purposely inflicted by other person (E960, E961, E963-E968)

PATIENT DAYS, MEAN & MEDIAN LOS BY SEX AND AGE

2001–2002 CASES

	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK	Total
TOTAL															
No. of CASES	42	61	95	123	352	309	522	539	459	319	355	371	144	1	3,692
% of CASES	1.1	1.7	2.6	3.3	9.5	8.4	14.1	14.6	12.4	8.6	9.6	10.0	3.9	0.0	100.0
No. of PATIENT DAYS	309	727	912	2,192	4,774	4,047	7,700	7,922	8,172	5,937	6,224	6,378	2,265	0	57,559
% of PATIENT DAYS	0.5	1.3	1.6	3.8	8.3	7.0	13.4	13.8	14.2	10.3	10.8	11.1	3.9	0.0	100.0
MEAN LOS	7.5	12.3	9.7	18.1	14.2	13.8	15.3	15.4	18.2	18.9	18.1	17.8	16.3	0.0	16.1
STANDARD DEVIATION	11.5	20.5	14.6	50.4	20.2	18.2	19.0	30.5	27.8	25.2	26.5	22.1	19.9	0.0	25.3
MEDIAN LOS	3.0	5.0	5.0	7.0	7.0	8.0	8.5	9.5	11.0	10.0	9.0	10.0	8.0	0.0	9.0
MALES															
No. of CASES	27	40	70	84	250	243	412	417	339	228	236	221	68	1	2,636
% of CASES	1.0	1.5	2.7	3.2	9.5	9.2	15.6	15.8	12.9	8.6	9.0	8.4	2.6	0.0	100.0
No. of PATIENT DAYS	156	313	631	1,326	3,421	3,193	6,113	6,393	5,905	4,141	4,239	3,846	1,097	0	40,774
% of PATIENT DAYS	0.4	0.8	1.5	3.3	8.4	7.8	15.0	15.7	14.5	10.2	10.4	9.4	2.7	0.0	100.0
MEAN LOS	6.0	8.2	9.1	16.2	14.3	13.8	15.4	15.9	17.7	18.5	18.5	17.9	16.4	0.0	16.0
STANDARD DEVIATION	6.6	11.5	10.7	44.7	20.1	19.2	19.7	33.7	27.9	23.9	29.1	23.7	20.2	0.0	25.9
MEDIAN LOS	3.5	4.0	5.0	7.0	8.0	8.0	8.0	9.0	11.0	10.5	8.0	10.0	7.0	0.0	8.0
FEMALES															
No. of CASES	15	21	25	39	102	66	110	122	120	91	119	150	76	0	1,056
% of CASES	1.4	2.0	2.4	3.7	9.7	6.3	10.4	11.6	11.4	8.6	11.3	14.2	7.2	0.0	100.0
No. of PATIENT DAYS	153	414	281	866	1,353	854	1,587	1,529	2,267	1,796	1,985	2,532	1,168	0	16,785
% of PATIENT DAYS	0.9	2.5	1.7	5.2	8.1	5.1	9.5	9.1	13.5	10.7	11.8	15.1	7.0	0.0	100.0
MEAN LOS	10.2	19.7	11.2	22.2	13.8	13.6	15.0	13.4	19.7	20.0	17.4	17.7	16.2	0.0	16.5
STANDARD DEVIATION	17.0	29.7	22.5	61.1	20.6	13.8	16.6	14.9	27.6	28.4	20.4	19.5	19.8	0.0	23.9
MEDIAN LOS	3.0	8.0	3.0	7.0	7.0	9.0	9.0	10.0	11.0	10.0	12.0	11.0	9.0	0.0	10.0

Note: Cases with no LOS recorded are excluded from LOS calculations.

PATIENT DAYS, MEAN & MEDIAN LOS BY SEX AND AGE FOR INHOSPITAL DEATHS

2001–2002 CASES

	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK	Total
TOTAL															
No. of CASES	1	10	7	7	30	16	39	40	34	50	67	85	45	0	431
% of CASES	0.2	2.3	1.6	1.6	7.0	3.7	9.0	9.3	7.9	11.6	15.5	19.7	10.4	0.0	100.0
No. of PATIENT DAYS	3	21	8	137	66	34	181	152	309	754	689	999	510	0	3,863
% of PATIENT DAYS	0.1	0.5	0.2	3.5	1.7	0.9	4.7	3.9	8.0	19.5	17.8	25.9	13.2	0.0	100.0
MEAN LOS	3.0	2.1	1.1	19.6	2.2	2.1	4.6	3.8	9.1	15.1	10.4	12.0	11.3	0.0	9.0
STANDARD DEVIATION	0.0	2.0	0.4	48.7	2.2	3.0	9.6	6.4	23.5	36.8	19.1	24.0	19.6	0.0	21.7
MEDIAN LOS	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.5	2.0	4.0	6.0	3.0	0.0	2.0
MALES															
No. of CASES	0	9	2	5	20	12	34	32	26	33	45	63	18	0	299
% of CASES	0.0	3.0	0.7	1.7	6.7	4.0	11.4	10.7	8.7	11.0	15.1	21.1	6.0	0.0	100.0
No. of PATIENT DAYS	0	20	2	135	49	29	165	111	142	603	498	832	114	0	2,700
% of PATIENT DAYS	0.0	0.7	0.1	5.0	1.8	1.1	6.1	4.1	5.3	22.3	18.4	30.8	4.2	0.0	100.0
MEAN LOS	0.0	2.2	1.0	27.0	2.5	2.4	4.9	3.5	5.5	18.3	11.1	13.6	6.3	0.0	9.1
STANDARD DEVIATION	0.0	2.0	0.0	57.6	2.5	3.4	10.2	5.0	6.1	42.2	22.2	27.5	7.1	0.0	22.8
MEDIAN LOS	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.5	3.0	4.0	6.0	5.0	0.0	2.0
FEMALES															
No. of CASES	1	1	5	2	10	4	5	8	8	17	22	22	27	0	132
% of CASES	0.8	0.8	3.8	1.5	7.6	3.0	3.8	6.1	6.1	12.9	16.7	16.7	20.5	0.0	100.0
No. of PATIENT DAYS	3	1	6	2	17	5	16	41	167	151	191	167	396	0	1,163
% of PATIENT DAYS	0.3	0.1	0.5	0.2	1.5	0.4	1.4	3.5	14.4	13.0	16.4	14.4	34.0	0.0	100.0
MEAN LOS	3.0	1.0	1.2	1.0	1.7	1.3	3.2	5.1	20.9	8.9	9.1	7.6	14.7	0.0	8.9
STANDARD DEVIATION	0.0	0.0	0.4	0.0	1.3	0.5	3.0	10.5	47.5	22.8	10.4	8.8	24.3	0.0	19.1
MEDIAN LOS	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4.0	1.0	9.0	5.0	2.0	0.0	2.0

DENOMINATORS BY INSTITUTION CODE

2001–2002 DATA

DENOMINATORS	INSTITUTION CODE														Total
	'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
No. OF CASES	83	524	405	188	51	445	170	161	74	189	944	181	232	45	3,692
No. OF CASES DISCHARGED ALIVE	64	463	352	151	45	381	146	149	65	168	800	158	195	40	3,177
No. OF DEATHS*	19	61	53	37	6	64	24	12	9	21	144	23	37	5	515
No.WHO DIED IN EMERGENCY ROOM	6	10	15	5	3	4	5	0	1	0	25	5	4	1	84
No.OF PEDIATRIC CASES(<18 YEARS OF AGE)	12	13	13	8	51	13	25	161	66	22	52	20	7	45	508
No.OF CASES(>10 YEARS OF AGE)**	76	523	405	188	26	445	159	57	44	178	944	174	232	25	3,476
No.OF CASES<20 (YEARS OF AGE)	13	40	42	14	51	39	35	161	67	26	102	24	14	45	673
No.OF CASES 20-64 (YEARS OF AGE)	47	332	285	99	0	288	96	0	6	106	643	112	134	0	2,148
No.OF CASES >64 (YEARS OF AGE)	23	151	78	75	0	118	39	0	1	57	199	45	84	0	870

This table provides denominators to allow calculation of percentages.
*** The total number of deaths reported include inhospital deaths and DIE's. Deaths occuring at the scene are excluded.**
**** Number of cases for pediatric >10 years of age can be used for B.A.C calculation.**

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

DEMOGRAPHICS		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
TOTAL NUMBER OF CASES		83	524	405	188	51	445	170	161	74	189	944	181	232	45	3,692
DIRECT ADMISSIONS	NUMBER	52	235	176	121	30	167	81	54	21	145	406	120	147	11	1,766
	%	62.7	44.8	43.5	64.4	58.8	37.5	47.6	33.5	28.4	76.7	43.0	66.3	63.4	24.4	47.8
READMISSIONS	NUMBER	0	0	1	0	0	0	0	0	0	0	109	0	0	0	110
	%	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0	3.0
MALES	NUMBER	60	368	276	130	33	337	116	112	51	132	702	129	159	31	2,636
	%	72.3	70.2	68.1	69.1	64.7	75.7	68.2	69.6	68.9	69.8	74.4	71.3	68.5	68.9	71.4
AGE(YEARS)	MEAN	45.4	48.7	44.4	53.9	9.3	47.7	43.0	7.3	14.1	47.5	44.6	45.5	51.1	9.7	43.4
	STANDARD DEVIATION	24.2	21.8	20.6	22.4	5.3	21.7	24.2	5.2	13.7	25.5	20.8	22.1	22.2	5.0	23.7
	MEDIAN	45.0	47.0	41.0	51.5	12.0	46.0	40.0	7.0	12.0	45.0	41.0	43.0	48.0	11.0	41.0
<20 YEARS OF AGE	NUMBER	13	40	42	14	51	39	35	161	67	26	102	24	14	45	673
	%	15.7	7.6	10.4	7.4	100.0	8.8	20.6	100.0	90.5	13.8	10.8	13.3	6.0	100.0	18.2
>=65 YEARS OR AGE	NUMBER	23	151	78	75	0	118	39	0	1	57	199	45	84	0	870
	%	27.7	28.8	19.3	39.9	0.0	26.5	22.9	0.0	1.4	30.2	21.1	24.9	36.2	0.0	23.6
ENGLISH SPEAKING	NUMBER	80	474	399	160	36	436	169	156	74	185	876	178	222	44	3,489
	%	96.4	90.5	98.5	85.1	70.6	98.0	99.4	96.9	100.0	97.9	92.8	98.3	95.7	97.8	94.5
OUT-OF-PROVINCE RESIDENTS	NUMBER	5	8	6	16	12	5	8	2	1	2	18	4	19	2	108
	%	6.0	1.5	1.5	8.5	23.5	1.1	4.7	1.2	1.4	1.1	1.9	2.2	8.2	4.4	2.9

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

INJURY SEVERITY SCORE		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
ALL CASES	MEAN	25.4	24.2	26.3	24.3	22.6	22.7	25.3	21.7	23.7	23.4	27.2	24.1	23.7	21.9	24.8
	STANDARD DEVIATION	12.6	9.5	12.0	10.5	10.2	8.3	12.7	8.8	11.8	8.5	11.4	8.6	10.2	8.8	10.6
	MEDIAN	25.0	24.5	22.0	24.5	20.0	22.0	22.0	18.0	17.0	22.0	25.0	25.0	24.0	17.0	24.0
SURVIVORS	MEAN	22.5	23.1	24.5	22.8	21.1	21.7	22.8	20.7	21.0	23.0	25.2	23.1	22.6	20.6	23.4
	STANDARD DEVIATION	8.0	8.5	10.3	9.0	7.1	7.1	8.7	6.9	8.3	8.7	9.5	7.5	9.5	7.4	8.9
	MEDIAN	20.5	21.0	21.0	21.0	17.0	20.0	20.0	17.0	17.0	21.0	24.0	22.0	20.0	17.0	21.0
DEATHS	MEAN	35.1	32.8	37.8	30.6	33.7	28.8	40.3	35.8	43.0	27.0	37.9	31.0	29.4	32.2	34.2
	STANDARD DEVIATION	19.2	12.1	15.7	13.8	20.9	11.9	21.0	16.0	15.4	5.7	14.7	11.9	11.8	12.9	14.7
	MEDIAN	26.0	27.0	35.0	26.0	25.0	25.5	31.5	28.0	43.0	26.0	35.0	26.0	26.0	38.0	27.0

TYPE OF INJURY		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
BLUNT	NUMBER	77	474	388	173	48	410	160	155	70	184	823	172	227	45	3,406
	%	92.8	90.5	95.8	92.0	94.1	92.1	94.1	96.3	94.6	97.4	87.2	95.0	97.8	100.0	92.3
PENETRATING	NUMBER	5	50	16	4	2	13	8	2	1	5	73	4	5	0	188
	%	6.0	9.5	4.0	2.1	3.9	2.9	4.7	1.2	1.4	2.6	7.7	2.2	2.2	0.0	5.1
BURNS	NUMBER	1	0	1	11	1	22	2	4	3	0	48	5	0	0	98
	%	1.2	0.0	0.2	5.9	2.0	4.9	1.2	2.5	4.1	0.0	5.1	2.8	0.0	0.0	2.7
WORK RELATED	NUMBER	10	34	30	9	0	17	10	0	2	16	86	17	6	0	237
	%	12.0	6.5	7.4	4.8	0.0	3.8	5.9	0.0	2.7	8.5	9.1	9.4	2.6	0.0	6.4
SPORTS/RECREATIONAL INJURIES	NUMBER	5	20	29	5	17	37	34	47	23	18	70	29	8	12	354
	%	6.0	3.8	7.2	2.7	33.3	8.3	20.0	29.2	31.1	9.5	7.4	16.0	3.4	26.7	9.6

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

INTENTIONALITY OF INJURY*		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
HOMICIDE/ASSAULT	SURVIVOR	3	63	19	6	4	28	7	8	4	17	71	4	7	1	242
	DEATHS	3	10	4	1	0	5	0	0	0	0	14	2	1	0	40
SUICIDE/SELF INFLICTED	SURVIVOR	3	21	9	0	3	10	3	2	0	2	27	6	6	0	92
	DEATHS	1	5	4	6	0	1	1	0	0	0	7	2	5	0	32

PLACE OF INJURY**		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
HOME	NUMBER	24	97	61	53	14	138	43	44	15	57	143	58	52	9	808
	%	28.9	18.5	15.1	28.2	27.5	31.0	25.3	27.3	20.3	30.2	15.1	32.0	22.4	20.0	21.9
INDUSTRIAL	NUMBER	3	29	20	2	0	10	3	0	2	6	69	4	3	1	152
	%	3.6	5.5	4.9	1.1	0.0	2.2	1.8	0.0	2.7	3.2	7.3	2.2	1.3	2.2	4.1
RECREATION/SPORT	NUMBER	2	17	22	6	1	13	7	10	8	3	75	17	9	1	191
	%	2.4	3.2	5.4	3.2	2.0	2.9	4.1	6.2	10.8	1.6	7.9	9.4	3.9	2.2	5.2
STREET/HIGHWAY	NUMBER	33	252	255	66	26	210	80	66	35	82	512	74	105	24	1,820
	%	39.8	48.1	63.0	35.1	51.0	47.2	47.1	41.0	47.3	43.4	54.2	40.9	45.3	53.3	49.3
OTHER	NUMBER	21	128	46	61	10	74	37	40	13	41	145	25	63	10	714
	%	25.3	24.4	11.4	32.4	19.6	16.6	21.8	24.8	17.6	21.7	15.4	13.8	27.2	22.2	19.3

*** Intentionality is determined by the Intentional Injury data element rather than by External Cause of injury for this report.**

**** Place of injury is documented for all cases in the Comprehensive Data Set using ICD categories. There are 7 cases that do not have a documented place of injury.**

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

EXTERNAL CAUSE OF INJURY		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
UNINTENTIONAL FALLS	NUMBER	28	196	69	80	6	156	44	50	8	79	227	59	92	10	1,104
	%	33.7	37.4	17.0	42.6	11.8	35.1	25.9	31.1	10.8	41.8	24.0	32.6	39.7	22.2	29.9
MOTOR VEHICLE TRAFFIC	NUMBER	30	185	239	62	22	174	79	64	33	66	472	66	97	25	1,614
	%	36.1	35.3	59.0	33.0	43.1	39.1	46.5	39.8	44.6	34.9	50.0	36.5	41.8	55.6	43.7
MOTOR VEHICLE NON TRAFFIC	NUMBER	4	11	18	7	4	8	18	5	10	6	30	14	6	1	142
	%	4.8	2.1	4.4	3.7	7.8	1.8	10.6	3.1	13.5	3.2	3.2	7.7	2.6	2.2	3.8
CYCLING	NUMBER	3	20	7	7	4	7	3	9	10	7	12	3	3	5	100
	%	3.6	3.8	1.7	3.7	7.8	1.6	1.8	5.6	13.5	3.7	1.3	1.7	1.3	11.1	2.7
HOMICIDE & ASSAULT	NUMBER	5	74	21	7	5	36	7	9	4	16	83	7	8	2	284
	%	6.0	14.1	5.2	3.7	9.8	8.1	4.1	5.6	5.4	8.5	8.8	3.9	3.4	4.4	7.7
SUICIDE (Excl.Poisoning)	NUMBER	2	22	12	6	2	10	3	1	0	1	24	4	11	0	98
	%	2.4	4.2	3.0	3.2	3.9	2.2	1.8	0.6	0.0	0.5	2.5	2.2	4.7	0.0	2.7

The above External Cause of Injury groups are based on the following definitions:
Unintentional Falls: E880-E888
Motor Vehicle Traffic: E810-E819
Motor Vehicle Non Traffic: E820-E825
Cycling: E800-E807 (.1), E810-E825 (.6), E826, E827-E829 (.1)
Homicide & Assault: E960, E961, E963-E968
Suicide (Excl.Poisoning): E953-E958

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

SCENE INFORMATION		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
PREHOSPITAL TIME (MINUTES) 95th PERCENTILE*	MEAN	98.6	56.8	61.1	80.0	62.9	59.0	76.4	67.1	55.6	71.0	64.8	80.8	74.9	55.0	65.6
	STANDARD DEVIATION	74.4	62.0	51.1	76.7	33.4	49.4	51.3	52.8	36.6	77.4	59.6	72.2	74.8	32.2	59.9
	MEDIAN	76.0	45.0	50.0	55.0	55.0	49.0	66.0	54.0	43.0	51.5	50.0	60.0	55.0	46.0	51.0
SCENE TIME (MINUTES)	MEAN	22.3	18.7	18.0	22.3	21.0	20.8	22.2	15.8	20.8	19.9	21.3	21.6	26.1	18.7	20.5
	STANDARD DEVIATION	12.7	9.5	11.1	35.0	14.2	15.7	11.6	7.6	20.7	10.0	12.8	15.2	49.7	14.8	18.3
	MEDIAN	18.0	17.0	16.0	18.0	17.0	18.0	20.0	14.5	14.0	17.0	19.0	18.0	21.0	15.0	18.0
ADMISSIONS WITH SCENE TIME>1 HOUR	NUMBER	0	1	4	1	1	3	1	0	2	2	9	5	2	1	32
	%	0.0	0.3	1.2	0.9	4.2	0.9	0.9	0.0	4.7	1.4	1.9	3.4	1.7	3.4	1.4
ADMISSIONS WITH EXTRICATION REQUIRED	NUMBER	19	34	118	19	3	68	20	5	15	27	101	33	40	4	506
	%	22.9	6.5	29.1	10.1	5.9	15.3	11.8	3.1	20.3	14.3	10.7	18.2	17.2	8.9	13.7

*** The 95th percentile is used for prehospital time calculations to exclude those who are not transported directly from the scene and thereforehave long prehospital times (i.e.,days/weeks). Of the 2,750 cases with prehospital times in 2001/2002, 138 (5%) had times greater than 590 minutes**

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

PARTICIPATING HOSPITAL CARE		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
LENGTH OF HOSPITAL STAY(DAYS)	ALL CASES MEAN	16.7	14.0	12.9	17.9	14.6	15.8	18.4	15.8	13.5	16.1	17.0	16.4	23.4	8.4	16.1
	ALL CASES S.D.	21.1	16.6	33.2	26.6	17.2	18.0	32.7	44.3	22.7	17.5	22.1	23.2	33.9	8.9	25.3
	ALL CASES MEDIAN	9.0	8.0	7.0	9.0	7.5	10.0	8.0	5.0	6.0	11.0	10.0	9.0	10.0	5.5	9.0
	SURVIVORS MEAN	19.0	14.6	13.9	20.0	15.3	16.7	20.0	17.0	12.9	16.1	18.0	17.5	25.0	9.2	17.1
	SURVIVORS S.D.	22.1	16.7	34.8	28.3	17.4	18.3	34.3	45.9	18.7	16.3	20.8	24.0	33.5	9.0	25.6
	SURVIVORS MEDIAN	10.0	9.0	7.0	10.0	9.0	11.0	9.5	6.0	6.0	11.0	11.0	9.0	12.0	6.5	10.0
	DEATHS MEAN	5.7	8.1	3.7	6.7	3.0	10.0	5.8	1.5	18.3	16.0	10.4	7.4	13.8	1.0	9.0
	DEATHS S.D.	9.6	14.5	6.3	9.6	3.5	14.3	9.3	1.0	45.2	25.4	28.8	12.2	34.8	0.0	21.7
	DEATHS MEDIAN	1.0	3.0	1.0	2.0	1.0	5.0	2.0	1.0	2.0	6.0	2.0	2.5	2.0	1.0	2.0
LENGTH OF SCU STAY(DAYS)	ALL CASES MEAN	5.8	6.1	7.6	10.5	4.1	8.9	8.0	4.9	6.6	5.5	10.8	7.4	8.7	5.9	8.2
	ALL CASES S.D.	7.6	9.6	34.9	15.8	3.6	12.2	12.5	7.3	10.1	6.3	19.5	8.6	12.2	6.4	18.2
	ALL CASES MEDIAN	2.0	2.0	3.0	5.0	3.0	5.0	3.0	2.0	3.0	3.0	4.0	4.0	5.0	4.0	3.0
	SURVIVORS MEAN	6.9	5.8	8.2	11.9	4.2	9.3	9.0	5.6	6.7	5.3	11.4	7.6	8.8	6.4	8.6
	SURVIVORS S.D.	8.3	8.6	36.8	16.9	3.6	12.8	13.3	7.9	10.0	5.7	19.3	8.1	10.9	6.5	18.8
	SURVIVORS MEDIAN	4.5	2.0	3.0	5.0	3.0	5.0	3.0	2.0	3.5	3.0	4.0	4.5	5.0	4.5	4.0
	DEATHS MEAN	2.0	7.6	2.9	4.5	3.0	7.4	3.8	1.5	6.3	6.9	8.0	6.2	7.9	1.0	6.3
	DEATHS S.D.	2.1	14.8	4.1	7.6	3.5	9.3	7.3	1.0	11.4	9.6	20.4	11.4	18.1	0.0	14.1
	DEATHS MEDIAN	1.0	3.0	1.0	2.0	1.0	4.0	1.0	1.0	2.0	3.0	2.5	1.5	2.0	1.0	2.0

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

PARTICIPATING HOSPITAL CARE(CONT'D)		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
LENGTH OF STAY >= 3 DAYS	NUMBER	62	451	333	153	37	395	139	121	52	164	785	140	197	31	3,060
	%	74.7	86.1	82.2	81.4	72.5	88.8	81.8	75.2	70.3	86.8	83.2	77.3	84.9	68.9	82.9
NUMBER OF O.R. VISITS PER CASE	MEAN	1.7	1.4	1.4	1.6	1.4	1.4	1.4	1.6	1.2	1.4	1.7	1.4	1.4	1.3	1.5
	STANDARD DEVIATION	1.2	0.9	0.7	1.3	0.8	0.8	0.9	1.5	0.6	0.8	1.5	0.8	1.0	0.6	1.1
	MEDIAN	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
CASES WITH ICP DAYS	NUMBER	0	46	2	7	4	28	0	13	9	24	15	4	13	4	169
	%	0.0	8.8	0.5	3.7	7.8	6.3	0.0	8.1	12.2	12.7	1.6	2.2	5.6	8.9	4.6
	MEAN(ICP Days)	0.0	3.9	7.0	4.4	5.3	4.4	0.0	7.7	6.3	3.7	29.7	6.5	5.1	5.8	6.9
	S.D(ICP Days)	0.0	3.5	7.1	4.1	2.1	4.3	0.0	4.0	4.3	3.9	101.1	5.2	3.5	2.2	30.3
	MEDIAN(ICP Days)	0.0	3.0	7.0	2.0	5.0	3.0	0.0	8.0	6.0	2.0	3.0	6.0	5.0	6.0	3.0
CASES WITH VENTILATION DAYS	NUMBER	30	216	150	60	16	175	58	32	26	66	432	56	60	15	1,392
	%	36.1	41.2	37.0	31.9	31.4	39.3	34.1	19.9	35.1	34.9	45.8	30.9	25.9	33.3	37.7
	MEAN(Vent.Days)	3.9	6.5	5.2	2.8	4.0	4.5	4.8	2.5	4.8	5.7	9.8	3.3	4.7	2.7	6.4
	S.D(Vent.Days)	5.7	10.2	7.5	4.1	3.5	7.0	7.2	2.6	5.3	6.8	30.8	4.4	9.7	2.7	18.4
	MEDIAN(Vent.Days)	1.0	2.0	2.0	1.0	2.5	2.0	2.0	2.0	3.5	3.5	2.0	1.0	2.0	1.0	2.0
GCS INCOMPLETE DUE TO USE OF PARALYTIC AGENTS	NUMBER	11	51	34	11	5	26	9	24	6	9	29	12	18	6	251
	%	13.3	9.7	8.4	5.9	9.8	5.8	5.3	14.9	8.1	4.8	3.1	6.6	7.8	13.3	6.8
POSITIVE B.A.C(>=17.0 mmol/L)	NUMBER	12	80	58	18	1	78	28	0	0	30	114	22	23	0	464
	%	14.5	15.3	14.3	9.6	2.0	17.5	16.5	0.0	0.0	15.9	12.1	12.2	9.9	0.0	12.6

HIGHLIGHTS BY INSTITUTION CODE

2001–2002 CASES

DEATHS		INSTITUTION CODE														Total
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
ISS FOR DEATHS	MEAN	35.1	32.8	37.8	30.6	33.7	28.8	40.3	35.8	43.0	27.0	37.9	31.0	29.4	32.2	34.2
	STANDARD DEVIATION	19.2	12.1	15.7	13.8	20.9	11.9	21.0	16.0	15.4	5.7	14.7	11.9	11.8	12.9	14.7
	MEDIAN	26.0	27.0	35.0	26.0	25.0	25.5	31.5	28.0	43.0	26.0	35.0	26.0	26.0	38.0	27.0
INHOSPITAL DEATHS	NUMBER	13	51	38	32	3	60	19	12	8	21	119	18	33	4	431
	%	15.7	9.7	9.4	17.0	5.9	13.5	11.2	7.5	10.8	11.1	12.6	9.9	14.2	8.9	11.7
DIED IN EMERGENCY DEPARTMENT (DIE)	NUMBER	6	10	15	5	3	4	5	0	1	0	25	5	4	1	84
	%	7.2	1.9	3.7	2.7	5.9	0.9	2.9	0.0	1.4	0.0	2.6	2.8	1.7	2.2	2.3
POST MORTEM EXAMINATIONS	NUMBER	11	28	33	11	3	32	11	11	6	4	68	12	22	3	255
	%	57.9	45.9	62.3	29.7	50.0	50.0	45.8	91.7	66.7	19.0	47.2	52.2	59.5	60.0	49.5
PATIENTS WHO DONATE ORGANS	NUMBER	2	6	12	4	5	5	5	5	2	2	15	3	3	1	70
	%	10.5	9.8	22.6	10.8	83.3	7.8	20.8	41.7	22.2	9.5	10.4	13.0	8.1	20.0	13.6

Percentage Denominators:

The denominator used in the percentage calculations is the total number of admissions for the specific institution. The only exception are those below.

(1) Denominator for 'Post Mortem Examinations' & 'Patients who donate Organs' is the total number of deaths for the specific institution.

OUTCOME SCORES BY INSTITUTION CODE

2001–2002 CASES

		INSTITUTION CODE														ALL INST.
		'A'	'B'	'C'	'D'	'E'	'F'	'G'	'H'	'I'	'J'	'K'	'L'	'M'	'N'	
TOTAL NUMBER OF CASES		83	524	405	188	51	445	170	161	74	189	944	181	232	45	3,692
ISS	MEAN	25.4	24.2	26.3	24.3	22.6	22.7	25.3	21.8	23.7	23.4	27.2	24.1	23.7	21.9	24.8
	STANDARD DEVIATION	12.6	9.5	12.0	10.5	10.2	8.3	12.7	8.8	11.8	8.5	11.4	8.6	10.2	8.8	10.6
	MEDIAN	25.0	24.5	22.0	24.5	20.0	22.0	22.0	18.0	17.0	22.0	25.0	25.0	24.0	17.0	24.0
RTS @ L/T	MEAN	7.03	7.64	7.63	7.48	7.56	7.61	7.63	7.56	7.51	7.38	7.67	7.48	7.50	7.69	7.58
	STANDARD DEVIATION	1.58	0.55	0.65	0.91	0.62	0.60	0.62	0.72	0.74	1.04	0.55	0.89	0.91	0.54	0.74
	MEDIAN	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
TRISS	MEAN	0.836	0.928	0.916	0.892	0.925	0.934	0.933	0.966	0.960	0.896	0.927	0.909	0.899	0.983	0.921
	STANDARD DEVIATION	0.267	0.107	0.165	0.169	0.190	0.092	0.113	0.077	0.076	0.164	0.120	0.172	0.152	0.018	0.136
	MEDIAN	0.955	0.955	0.976	0.943	0.984	0.970	0.975	0.988	0.989	0.955	0.972	0.964	0.952	0.989	0.970
ASCOT	MEAN	0.845	0.926	0.933	0.887	0.918	0.932	0.942	0.971	0.963	0.900	0.930	0.907	0.900	0.982	0.924
	STANDARD DEVIATION	0.264	0.125	0.147	0.183	0.222	0.110	0.116	0.060	0.079	0.168	0.127	0.188	0.158	0.019	0.143
	MEDIAN	0.963	0.967	0.985	0.960	0.986	0.974	0.982	0.989	0.985	0.971	0.973	0.973	0.962	0.989	0.974

ISS - Injury Severity Score
RTS @L/T - Revised Trauma Score at Lead/Trauma hospital
TRISS - Trauma and Injury Severity Score
ASCOT - A Severity Characterization of Trauma

CAUSE OF INJURY HIGHLIGHTS—ALL CASES

2001–2002 CASES

	ALL CAUSES	MVC	FALLS	ASSAULT & HOMICIDE	SELF INFLICTED	OTHER INCIDENTS	ALL OTHER CAUSES
CASES							
Number	3,692	1,756	1,104	284	98	225	225
%	100.0	47.6	29.9	7.7	2.7	6.1	6.1
MALES							
Number	2,636	1,177	781	250	68	197	163
%	71.4	67.0	70.7	88.0	69.4	87.6	72.4
DIRECT ADM.							
Number	1,766	790	512	189	71	105	99
%	47.8	45.0	46.4	66.5	72.4	46.7	44.0
AGE(YEARS)							
MEAN(+ / - SD)	43.4(+ / - 23.7)	37.7(+ / - 21.0)	58.4(+ / - 24.1)	30.4(+ / - 15.0)	38.7(+ / - 15.1)	39.3(+ / - 20.7)	36.4(+ / - 21.5)
MEDIAN	41.0	34.0	65.0	28.0	37.0	39.0	36.0
No. <20 years	673	394	111	53	8	48	59
No. 65+ years	870	248	555	6	8	27	26
INJURY SEVERITY SCORE							
MEAN(+ / - SD)	24.8(+ / - 10.6)	27.0(+ / - 11.7)	22.4(+ / - 7.8)	22.6(+ / - 8.6)	27.3(+ / - 12.8)	22.4(+ / - 10.1)	24.7(+ / - 11.2)
MEDIAN	24.0	25.0	22.0	20.0	25.0	19.0	25.0
TYPE OF INJURY							
BLUNT - Number	3,406	1,754	1,101	150	60	186	155
- %	92.3	99.9	99.7	52.8	61.2	82.7	68.9
PENETRATING - Number	188	0	1	133	33	12	9
- %	5.1	0.0	0.1	46.8	33.7	5.3	4.0
BURNS - Number	98	2	2	1	5	27	61
- %	2.7	0.1	0.2	0.4	5.1	12.0	27.1

CAUSE OF INJURY HIGHLIGHTS—ALL CASES

2001–2002 CASES

	ALL CAUSES	MVC	FALLS	ASSAULT & HOMICIDE	SELF INFLICTED	OTHER INCIDENTS	ALL OTHER CAUSES
LENGTH OF STAY (DAYS)							
MEAN(+ / - SD)	16.1(+ / - 25.3)	16.6(+ / - 23.7)	15.1(+ / - 23.1)	12.0(+ / - 17.1)	21.4(+ / - 25.0)	21.2(+ / - 49.2)	15.5(+ / - 20.0)
MEDIAN	9.0	10.0	8.0	6.0	12.0	8.0	8.0

Cause of Injury Summary
- MVC: E810-825
- Falls: E880-888
- Assault & Homicide: E960, 961 & 963-968
- Self Inflicted (Excluding Poisoning): E953-958
- Other Incidents: E916-928

CAUSE OF INJURY HIGHLIGHTS—DEATHS

2001–2002 CASES

	ALL CAUSES	MVC	FALLS	ASSAULT & HOMICIDE	SELF INFLICTED	OTHER INCIDENTS	ALL OTHER CAUSES
CASES							
Number	515	205	175	39	30	20	46
%	100.0	39.8	34.0	7.6	5.8	3.9	8.9
MALES							
Number	354	138	112	31	24	17	32
%	68.7	67.3	64.0	79.5	80.0	85.0	69.6
DIRECT ADM.							
Number	291	97	102	31	24	10	27
%	56.5	47.3	58.3	79.5	80.0	50.0	58.7
AGE(YEARS)							
MEAN(+ / - SD)	53.0(+ / - 25.6)	46.0(+ / - 25.6)	70.2(+ / - 16.9)	32.9(+ / - 15.6)	39.4(+ / - 16.8)	51.4(+ / - 24.9)	44.7(+ / - 28.6)
MEDIAN	57.0	42.0	73.0	29.0	37.5	51.0	49.5
No. <20 years	68	40	2	7	4	2	13
No. 65+ years	217	62	127	2	4	8	14
INJURY SEVERITY SCORE							
MEAN(+ / - SD)	34.2(+ / - 14.7)	40.0(+ / - 14.2)	27.7(+ / - 10.8)	32.0(+ / - 14.6)	34.1(+ / - 15.7)	35.5(+ / - 19.9)	34.4(+ / - 16.3)
MEDIAN	27.0	41.0	26.0	26.0	26.0	26.0	26.0
TYPE OF INJURY							
BLUNT - Number	441	205	175	8	17	12	24
- %	85.6	100.0	100.0	20.5	56.7	60.0	52.2
PENETRATING - Number	45	0	0	31	10	3	1
- %	8.7	0.0	0.0	79.5	33.3	15.0	2.2
BURNS - Number	29	0	0	0	3	5	21
- %	5.6	0.0	0.0	0.0	10.0	25.0	45.7

CAUSE OF INJURY HIGHLIGHTS—DEATHS

2001–2002 CASES

	ALL CAUSES	MVC	FALLS	ASSAULT & HOMICIDE	SELF INFLICTED	OTHER INCIDENTS	ALL OTHER CAUSES
LENGTH OF STAY (DAYS)							
MEAN(+ / - SD)	9.0(+ / - 21.7)	8.5(+ / - 21.3)	10.8(+ / - 22.1)	1.2(+ / - 0.5)	1.6(+ / - 1.1)	20.1(+ / - 49.4)	8.0(+ / - 13.7)
MEDIAN	2.0	1.5	4.0	1.0	1.0	2.0	2.0

Cause of Injury Summary:
- MVC: E810-825
- Falls: E880-888
- Assault & Homicide: E960, 961 & 963-968
- Self Inflicted (Excluding Poisoning): E953-958
- Other Incidents: E916-928

INJURY CASE SUMMARY BY EXTERNAL CAUSES OF INJURY (E CODES), 2001–2002 CASES

	CASES WITH E CODE		MEAN			STANDARD DEVIATION LOS	MEDIAN LOS	DEATHS	
	No.	%	AGE	ISS	LOS			No.	%
TOTAL	**3,692**	**100.0**	**43.4**	**24.8**	**16.1**	**25.3**	**9.0**	**515**	**100.0**
E800-807 RAILWAY									
- EMPLOYEES	2	0.1	51.5	32.0	36.5	19.1	36.5	1	0.2
- PASSENGERS	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
- PEDESTRIANS	8	0.2	42.0	26.4	17.6	11.2	19.5	1	0.2
- PEDAL CYCLISTS	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
- OTHER	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
- SUBTOTAL	10	0.3	43.9	27.5	21.4	14.2	23.5	2	0.4
E810-819 MOTOR VEHICLE TRAFFIC									
- DRIVERS	726	19.7	41.3	27.9	17.1	22.0	10.0	87	16.9
- PASSENGERS	383	10.4	33.5	27.0	16.3	25.8	9.0	46	8.9
- MOTORCYCLE DRIVERS	131	3.5	35.4	26.0	14.4	15.5	11.0	12	2.3
- MOTORCYCLE PASSENGERS	7	0.2	34.6	28.9	15.7	11.4	15.0	0	0.0
- PEDAL CYCLISTS	53	1.4	27.9	27.0	14.1	17.0	7.0	8	1.6
- PEDESTRIANS	302	8.2	40.4	27.4	20.0	31.7	11.0	49	9.5
- OTHER	12	0.3	48.3	22.2	8.3	4.3	8.0	1	0.2
- SUBTOTAL	1,614	43.7	38.4	27.4	17.1	24.4	10.0	203	39.4
E820-825 MOTOR VEHICLE NON TRAFFIC									
- DRIVERS	96	2.6	32.6	22.7	11.1	12.3	7.0	0	0.0
- PASSENGERS	19	0.5	24.2	18.3	9.6	7.2	8.0	0	0.0
- MOTORCYCLE DRIVERS	18	0.5	26.2	22.6	12.7	16.6	9.0	0	0.0
- MOTORCYCLE PASSENGERS	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
- PEDAL CYCLISTS	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
- PEDESTRIANS	6	0.2	30.7	25.3	18.4	16.7	11.0	1	0.2
- OTHER	3	0.1	28.0	21.7	6.0	2.8	6.0	1	0.2
- SUBTOTAL	142	3.9	30.5	22.2	11.3	12.4	8.0	2	0.4

INJURY CASE SUMMARY BY EXTERNAL CAUSES OF INJURY (E CODES), 2001–2002 CASES

		CASES WITH E CODE		MEAN			STANDARD DEVIATION LOS	MEDIAN LOS	DEATHS	
		No.	%	AGE	ISS	LOS			No.	
TOTAL		**3,692**	**100.0**	**43.4**	**24.8**	**16.1**	**25.3**	**9.0**	**515**	**100.0**
E826	**PEDAL CYCLE**									
	- PEDESTRIANS	2	0.1	76.5	27.5	38.5	43.1	38.5	1	0.2
	- PEDAL CYCLISTS	43	1.2	29.6	21.1	8.5	10.5	4.0	3	0.6
	- OTHER	2	0.1	29.0	19.5	2.5	2.1	2.5	0	0.0
	- SUBTOTAL	47	1.4	31.6	21.3	9.5	13.4	4.0	4	0.8
E827-829	**OTHER ROAD VEHICLE**									
	- PEDESTRIANS	3	0.1	34.0	30.7	4.5	2.1	4.5	1	0.2
	- PEDAL CYCLISTS	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
	- OTHER	22	0.6	35.7	20.3	9.6	7.4	7.0	0	0.0
	- SUBTOTAL	25	0.7	35.5	21.5	9.2	7.2	6.5	1	0.2
E830-838	**WATER TRANSPORT**									
	- OCCUPANT UNPOWERED	1	0.0	53.0	30.0	18.0	0.0	18.0	1	0.2
	- OCCUPANT POWERED	6	0.2	34.5	27.7	10.7	7.2	9.0	0	0.0
	- CREW	3	0.1	42.7	21.0	16.0	10.4	11.0	0	0.0
	- NON CREW	3	0.1	45.0	24.0	10.3	6.5	10.0	0	0.0
	- WATER SKIER	1	0.0	37.0	18.0	31.0	0.0	31.0	0	0.0
	- SWIMMER	2	0.1	35.0	18.0	9.0	11.3	9.0	0	0.0
	- OTHER	2	0.1	24.5	13.0	7.0	8.5	7.0	0	0.0
	- SUBTOTAL	18	0.6	37.7	22.8	12.4	8.7	11.0	1	0.2
E840-845	**AIR AND SPACE TRANSPORT**									
	- OCCUPANTS	6	0.2	42.7	21.2	13.3	7.1	15.0	1	0.2
	- PARACHUTIST	3	0.1	46.3	18.7	8.7	7.2	5.0	0	0.0
	- PGROUND CREW	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
	- OTHER	1	0.0	35.0	34.0	5.0	0.0	5.0	0	0.0
	- SUBTOTAL	10	0.3	43.0	21.7	11.1	7.0	10.0	1	0.2

INJURY CASE SUMMARY BY EXTERNAL CAUSES OF INJURY (E CODES), 2001–2002 CASES

		CASES WITH E CODE		MEAN			STANDARD DEVIATION LOS	MEDIAN LOS	DEATHS	
		No.	%	AGE	ISS	LOS			No.	
TOTAL		**3,692**	**100.0**	**43.4**	**24.8**	**16.1**	**25.3**	**9.0**	**515**	**100.0**
E846-848	**VEHICLE INCIDENTS NOT ELSEWHERE CLASSIFIED**	1	0.0	5.0	17.0	3.0	0.0	3.0	0	0.0
E880-888	**UNINTENTIONAL FALLS**	1,104	29.9	58.4	22.4	15.1	23.1	8.0	175	34.0
E890-899	**FIRE AND FLAMES**	63	1.7	44.4	29.8	24.6	28.8	16.0	20	3.9
E900-902 & E906-909	**NATURAL AND & ENVIRONMENTAL FACTORS**	13	0.4	44.2	22.3	14.6	16.5	14.0	3	0.6
E910	**DROWNING**	7	0.2	12.0	25.1	5.0	5.3	2.5	6	1.2
E913	**SUFFOCATION**	1	0.0	10.0	25.0	1.0	0.0	1.0	1	0.2
E914-915	**FOREIGN BODIES (EXCLUDING CHOKING)**	1	0.0	6.0	16.0	12.0	0.0	12.0	0	0.0
E916-928	**OTHER INCIDENTS**	225	6.1	39.3	22.4	21.2	49.2	8.0	20	3.9
E953-958	**SUICIDE & SELF INFLICTED INJURY(EXCL.POISONINGS)**	98	2.7	38.7	27.3	21.4	25.0	12.0	30	5.8
E960-961 & E963-968	**HOMICIDE AND INJURY PURPOSELY INFLICTED**	284	7.7	30.4	22.6	12.0	17.1	6.0	39	7.6
E970-976 & E978	**LEGAL INTERVENTION**	3	0.1	31.3	20.3	10.3	8.7	8.0	0	0.0
E983-988	**UNDETERMINED WHETHER UNINTENTIONALLY OR PURPOSELY INFLICTED**	22	0.6	25.8	26.8	16.5	21.5	7.0	7	1.4
E990-998	**OPERATIONS OF WAR**	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0
	ALL OTHER	4	0.1	34.0	16.3	26.0	31.9	16.5	0	0.0

INJURY CASE SUMMARY BY

EXTERNAL CAUSES OF INJURY (E CODES) AND SEX, 2001–2002 CASES

		FEMALES					MALES					TOTAL*	
		CASES		MEAN			CASES		MEAN				
		No.	%	AGE	ISS	LOS	No.	%	AGE	ISS	LOS	No.	%
TOTAL		**1,056**	**100.0**	**47.6**	**24.8**	**16.5**	**2,636**	**100.0**	**41.7**	**24.8**	**16**	**3,692**	**100.0**
E800-807	**RAILWAY**												
	- EMPLOYEES	0	0.0	0.0	0.0	0.0	2	0.1	51.5	32.0	36.5	2	0.1
	- PASSENGERS	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- PEDESTRIANS	2	0.2	62.0	20.0	19.5	6	0.2	35.3	28.5	17.0	8	0.2
	- PEDAL CYCLISTS	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- OTHER	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- SUBTOTAL	2	0.2	62.0	20.0	19.5	8	0.3	39.4	29.4	21.9	10	0.3
E810-819	**MOTOR VEHICLE TRAFFIC**												
	- DRIVERS	204	19.3	43.5	26.9	17.1	522	19.8	40.4	28.3	17.1	726	19.7
	- PASSENGERS	210	19.9	37.1	26.9	16.6	173	6.6	29.0	27.1	15.9	383	10.4
	- MOTORCYCLE DRIVERS	8	0.8	43.5	22.5	31.1	123	4.7	34.9	26.2	13.3	131	3.5
	- MOTORCYCLE PASSENGERS	6	0.6	34.0	31.3	15.5	1	0.0	38.0	14.0	17.0	7	0.2
	- PEDAL CYCLISTS	9	0.9	27.9	26.8	20.1	44	1.7	27.9	27.1	12.9	53	1.4
	- PEDESTRIANS	121	11.5	42.6	26.0	16.3	181	6.9	39.0	28.3	22.5	302	8.2
	- OTHER	5	0.5	49.4	21.2	9.0	7	0.3	47.6	22.9	7.9	12	0.3
	- SUBTOTAL	563	53.3	40.6	26.6	16.9	1,051	39.9	37.2	27.8	17.2	1,614	43.7
E820-825	**MOTOR VEHICLE NON TRAFFIC**												
	- DRIVERS	6	0.6	35.7	15.8	7.2	90	3.4	32.4	23.1	11.4	96	2.6
	- PASSENGERS	8	0.8	30.3	17.4	9.4	11	0.4	19.8	18.9	9.8	19	0.5
	- MOTORCYCLE DRIVERS	0	0.0	0.0	0.0	0.0	18	0.7	26.2	22.6	12.7	18	0.5
	- MOTORCYCLE PASSENGERS	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- PEDAL CYCLISTS	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- PEDESTRIANS	1	0.1	45.0	18.0	11.0	5	0.2	27.8	26.8	20.3	6	0.2
	- OTHER	1	0.1	45.0	20.0	8.0	2	0.1	19.5	22.5	4.0	3	0.1
	- SUBTOTAL	16	1.5	34.1	17.0	8.6	126	4.8	30.0	22.8	11.7	142	3.9

INJURY CASE SUMMARY BY
EXTERNAL CAUSES OF INJURY (E CODES) AND SEX, 2001–2002 CASES

		FEMALES					MALES					TOTAL*	
		CASES		MEAN			CASES		MEAN				
		No.	%	AGE	ISS	LOS	No.	%	AGE	ISS	LOS	No.	%
TOTAL		**1,056**	**100.0**	**47.6**	**24.8**	**16.5**	**2,636**	**100.0**	**41.7**	**24.8**	**16**	**3,692**	**100.0**
E826	**PEDAL CYCLE**												
	- PEDESTRIANS	1	0.1	84.0	25.0	8.0	1	0.0	69.0	30.0	69.0	2	0.1
	- PEDAL CYCLISTS	10	0.9	33.1	18.2	8.5	33	1.3	28.6	22.0	8.5	43	1.2
	- OTHER	0	0.0	0.0	0.0	0.0	2	0.1	29.0	19.5	2.5	2	0.1
	- SUBTOTAL	11	1.0	37.7	18.8	8.5	36	1.4	29.7	22.1	9.8	47	1.4
E827-829	**OTHER ROAD VEHICLE**												
	- PEDESTRIANS	2	0.2	41.0	35.0	3.0	1	0.0	20.0	22.0	6.0	3	0.1
	- PEDAL CYCLISTS	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- OTHER	12	1.1	35.4	19.3	9.5	10	0.4	36.0	21.5	9.7	22	0.6
	- SUBTOTAL	14	1.3	36.2	21.5	9.0	11	0.4	34.5	21.5	9.4	25	0.7
E830-838	**WATER TRANSPORT**												
	- OCCUPANT UNPOWERED	0	0.0	0.0	0.0	0.0	1	0.0	53.0	30.0	18.0	1	0.0
	- OCCUPANT POWERED	2	0.2	37.0	34.0	17.5	4	0.2	33.3	24.5	7.3	6	0.2
	- CREW	0	0.0	0.0	0.0	0.0	3	0.1	42.7	21.0	16.0	3	0.1
	- NON CREW	2	0.2	53.5	25.5	10.5	1	0.0	28.0	21.0	10.0	3	0.1
	- WATER SKIER	0	0.0	0.0	0.0	0.0	1	0.0	37.0	18.0	31.0	1	0.0
	- SWIMMER	0	0.0	0.0	0.0	0.0	2	0.1	35.0	18.0	9.0	2	0.1
	- OTHER	2	0.2	24.5	13.0	7.0	0	0.0	0.0	0.0	0.0	2	0.1
	- SUBTOTAL	6	0.6	38.3	24.2	11.7	12	0.5	37.4	22.2	12.8	18	0.6
E840-845	**AIR AND SPACE TRANSPORT**												
	- OCCUPANTS	0	0.0	0.0	0.0	0.0	6	0.2	42.7	21.2	13.3	6	0.2
	- PARACHUTIST	0	0.0	0.0	0.0	0.0	3	0.1	46.3	18.7	8.7	3	0.1
	- GROUND CREW	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	- OTHER	0	0.0	0.0	0.0	0.0	1	0.0	35.0	34.0	5.0	1	0.0
	- SUBTOTAL	0	0.0	0.0	0.0	0.0	10	0.4	43.0	21.7	11.1	10	0.3

INJURY CASE SUMMARY BY

EXTERNAL CAUSES OF INJURY (E CODES) AND SEX, 2001–2002 CASES

		FEMALES					MALES					TOTAL*	
		CASES		MEAN			CASES		MEAN				
		No.	%	AGE	ISS	LOS	No.	%	AGE	ISS	LOS	No.	%
TOTAL		**1,056**	**100.0**	**47.6**	**24.8**	**16.5**	**2,636**	**100.0**	**41.7**	**24.8**	**16**	**3,692**	**100.0**
E846-848	**VEHICLE INCIDENTS NOT ELSEWHERE CLASSIFIED**	0	0.0	0.0	0.0	0.0	1	0.0	5.0	17.0	3.0	1	0.0
E880-888	**UNINTENTIONAL FALLS**	323	30.6	65.4	22.2	16.2	781	29.6	55.5	22.5	14.6	1,104	29.9
E890-899	**FIRE AND FLAMES**	15	1.4	53.3	35.3	13.5	48	1.8	41.6	28.0	28.0	63	1.7
E900-902 & E906-909	**NATURAL AND & ENVIRONMENTAL FACTORS**	4	0.4	18.8	16.8	3.0	9	0.3	55.4	24.8	21.3	13	0.4
E910	**DROWNING**	3	0.3	25.3	25.0	2.5	4	0.2	2.0	25.3	6.3	7	0.2
E913	**SUFFOCATION**	0	0.0	0.0	0.0	0.0	1	0.0	10.0	25.0	1.0	1	0.0
E914-915	**FOREIGN BODIES (EXCLUDING CHOKING)**	0	0.0	0.0	0.0	0.0	1	0.0	6.0	16.0	12.0	1	0.0
E916-928	**OTHER INCIDENTS**	28	2.7	42.5	20.7	15.2	197	7.5	38.9	22.7	22.0	225	6.1
E953-958	**SUICIDE & SELF INFLICTED INJURY(EXCL.POISONINGS)**	30	2.8	35.6	27.2	32.4	68	2.6	40.0	27.3	16.7	98	2.7
E960-961 & E963-968	**HOMICIDE AND INJURY PURPOSELY INFLICTED**	34	3.2	31.1	24.6	15.0	250	9.5	30.3	22.3	11.5	284	7.7
E970-976 & E978	**LEGAL INTERVENTION**	0	0.0	0.0	0.0	0.0	3	0.1	31.3	20.3	10.3	3	0.1
E983-988	**UNDETERMINED WHETHER UNINTENTIONALLY OR PURPOSELY INFLICTED**	6	0.6	25.0	21.3	7.5	16	0.6	26.1	28.8	18.8	22	0.6
E990-998	**OPERATIONS OF WAR**	0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.0
	ALL OTHER	1	0.1	2.0	16.0	70.0	3	0.1	44.7	16.3	11.3	4	0.1

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP

2001–2002 CASES

		<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES		**42**	**61**	**95**	**123**	**352**	**309**	**522**	**539**	**459**	**319**	**355**	**371**	**144**	**1**	**3,692**	**100.0**
% of CASES		**1.1**	**1.7**	**2.6**	**3.3**	**9.5**	**8.4**	**14.1**	**14.6**	**12.4**	**8.6**	**9.6**	**10.0**	**3.9**	**0.0**	**100.0**	
E800-807	**RAILWAY**																
	- EMPLOYEES	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0.1
	- PASSENGERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	- PEDESTRIANS	0	0	0	0	2	0	1	2	1	1	0	1	0	0	8	0.2
	- PEDAL CYCLISTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	- OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	SUBTOTAL	0	0	0	0	2	0	2	2	1	1	0	2	0	0	10	0.3
E810-819	**MOTOR VEHICLE TRAFFIC**																
	- DRIVERS	0	0	1	1	83	98	141	121	108	61	48	55	9	0	726	19.7
	- PASSENGERS	2	16	18	22	88	46	45	40	22	25	25	30	4	0	383	10.4
	- MOTORCYCLE DRIVERS	0	0	0	1	9	19	43	25	25	6	2	0	1	0	131	3.5
	- MOTORCYCLE PASSENGERS	0	0	0	0	0	2	2	2	0	1	0	0	0	0	7	0.2
	- PEDESTRIANS	0	7	22	25	31	19	32	37	39	27	25	29	9	0	302	8.2
	- PEDAL CYCLISTS	0	0	3	15	5	4	7	12	3	0	4	0	0	0	53	1.4
	- OTHER	0	0	0	0	3	0	1	1	1	2	1	3	0	0	12	0.3
	SUBTOTAL	2	23	44	64	219	188	271	238	198	122	105	117	23	0	1,614	43.7

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP

2001–2002 CASES

		<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES		**42**	**61**	**95**	**123**	**352**	**309**	**522**	**539**	**459**	**319**	**355**	**371**	**144**	**1**	**3,692**	**100.0**
% of CASES		**1.1**	**1.7**	**2.6**	**3.3**	**9.5**	**8.4**	**14.1**	**14.6**	**12.4**	**8.6**	**9.6**	**10.0**	**3.9**	**0.0**	**100.0**	
E820-825	**MOTOR VEHICLE NON TRAFFIC**																
	- DRIVERS	0	0	0	8	16	7	22	29	7	4	2	1	0	0	96	2.6
	- PASSENGERS	0	2	2	1	4	2	3	2	3	0	0	0	0	0	19	0.5
	- MOTORCYCLE DRIVERS	0	0	1	0	5	3	5	3	1	0	0	0	0	0	18	0.5
	- MOTORCYCLE PASSENGERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	- PEDESTRIANS	0	2	0	0	0	0	0	2	1	1	0	0	0	0	6	0.2
	- PEDAL CYCLISTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	- OTHER	0	0	0	0	1	1	0	0	1	0	0	0	0	0	3	0.1
	SUBTOTAL	0	4	3	9	26	13	30	36	13	5	2	1	0	0	142	3.8
E826	**PEDAL CYCLE**																
	- PEDESTRIANS	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0.1
	- PEDAL CYCLISTS	0	0	5	7	5	1	8	8	4	4	1	0	0	0	43	1.2
	- OTHER	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.1
	SUBTOTAL	0	0	5	7	5	1	10	8	4	4	2	1	0	0	47	1.3
E827-829	**OTHER ROAD VEHICLE**																
	- PEDESTRIANS	0	0	0	1	0	1	0	0	0	0	1	0	0	0	3	0.1
	- PEDAL CYCLISTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	- OTHER	0	0	2	1	2	1	3	4	7	2	0	0	0	0	22	0.6
	SUBTOTAL	0	0	2	2	2	2	3	4	7	2	1	0	0	0	25	0.7

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP

2001–2002 CASES

		<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES		**42**	**61**	**95**	**123**	**352**	**309**	**522**	**539**	**459**	**319**	**355**	**371**	**144**	**1**	**3,692**	**100.0**
% of CASES		**1.1**	**1.7**	**2.6**	**3.3**	**9.5**	**8.4**	**14.1**	**14.6**	**12.4**	**8.6**	**9.6**	**10.0**	**3.9**	**0.0**	**100.0**	
E830-838	**WATER TRANSPORT**																
	- OCCUPANT UNPOWERED	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.0
	- OCCUPANT POWERED	0	0	0	0	0	1	1	3	1	0	0	0	0	0	6	0.2
	- CREW	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3	0.1
	- NON CREW	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3	0.1
	- WATER SKIER	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.0
	- SWIMMER	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	0.1
	- OTHER	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0.1
	SUBTOTAL	0	0	0	0	2	1	4	4	5	2	0	0	0	0	18	0.5
E840-845	**AIR AND SPACE TRANSPORT**																
	- OCCUPANTS	0	0	0	0	0	0	2	1	2	1	0	0	0	0	6	0.2
	- PARACHUTIST	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	0.1
	- GROUND CREW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
	- OTHER	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.0
	SUBTOTAL	0	0	0	0	0	0	2	4	2	1	1	0	0	0	10	0.3
E846-848	**VEHICLE INCIDENTS NOT ELSEWHERE CLASSFIED**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.0
E880-888	**UNINTENTIONAL FALLS**	20	17	23	21	30	23	54	94	136	131	212	230	113	0	1,104	29.9
E890-899	**FIRE AND FLAMES**	0	1	3	2	4	2	9	14	6	8	6	5	3	0	63	1.7

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP

2001–2002 CASES

		<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES		**42**	**61**	**95**	**123**	**352**	**309**	**522**	**539**	**459**	**319**	**355**	**371**	**144**	**1**	**3,692**	**100.0**
% of CASES		**1.1**	**1.7**	**2.6**	**3.3**	**9.5**	**8.4**	**14.1**	**14.6**	**12.4**	**8.6**	**9.6**	**10.0**	**3.9**	**0.0**	**100.0**	
E900-902 & E906-909	**NATURAL AND ENVIRONMENT FACTORS**	0	0	2	2	0	0	1	0	3	1	2	2	0	0	13	0.4
E910	**DROWNING**	0	4	1	0	1	0	0	0	1	0	0	0	0	0	7	0.2
E913	**SUFFOCATION**	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.0
E914-915	**FOREIGN BODIES (EXCLUDING CHOKING)**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.0
E916-928	**OTHER INCIDENTS**	0	9	9	12	18	8	32	50	33	27	15	8	4	0	225	6.1
E953-958	**SUICIDE & SELF INFLICTED INJURY (EXCL.POISONINGS)**	0	0	0	2	6	9	24	25	19	5	6	2	0	0	98	2.7
E960-961 & E963-968	**HOMICIDE AND INJURY PURPOSELY INFLICTED**	16	1	1	1	34	60	73	54	27	10	2	3	1	1	284	7.7
E970-976 & E978	**LEGAL INTERVENTION**	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3	0.1
E983-988	**UNDETERMINED WHETHER UNINTENTIONALLLY OR PURPOSELY INFLICTED**	4	1	0	0	3	1	5	4	4	0	0	0	0	0	22	0.6

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP

2001–2002 CASES

	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES	**42**	**61**	**95**	**123**	**352**	**309**	**522**	**539**	**459**	**319**	**355**	**371**	**144**	**1**	**3,692**	**100.0**
% of CASES	**1.1**	**1.7**	**2.6**	**3.3**	**9.5**	**8.4**	**14.1**	**14.6**	**12.4**	**8.6**	**9.6**	**10.0**	**3.9**	**0.0**	**100.0**	
E990-998 OPERATIONS OF WAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
ALL OTHER	0	1	0	0	0	0	2	0	0	0	1	0	0	0	4	0.1

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP FOR FALLS (E880-E888)

2001–2002 CASES

	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES	**20**	**17**	**23**	**21**	**30**	**23**	**54**	**94**	**136**	**131**	**212**	**230**	**113**	**0**	**1,104**	**100.0**
% of CASES	**1.8**	**1.5**	**2.1**	**1.9**	**2.7**	**2.1**	**4.9**	**8.5**	**12.3**	**11.9**	**19.2**	**20.8**	**10.2**	**0.0**	**100.0**	
E880 ON OR FROM STAIRS/STEPS																
- ESCALATOR	0	0	0	0	0	0	1	0	0	2	0	1	0	0	4	0.4
- FROM SIDEWALK CURB*	0	0	0	0	0	0	0	0	1	0	1	3	3	0	8	0.7
- OTHER STAIRS OR STEPS	7	5	5	3	2	2	8	29	35	37	51	53	15	0	252	22.8
SUBTOTAL	7	5	5	3	2	2	9	29	36	39	52	57	18	0	264	23.9
E881 ON/FROM LADDER/SCAFFOLD																
- LADDER	0	0	0	0	1	1	5	14	25	20	22	11	3	0	102	9.2
- SCAFFOLD	0	0	0	0	0	1	2	4	4	5	2	0	0	0	18	1.6
SUBTOTAL	0	0	0	0	1	2	7	18	29	25	24	11	3	0	120	10.9
E882 FROM/OUT OF BUILDING OR OTHER STRUCTURE	0	3	8	1	6	10	12	15	16	6	11	6	1	0	95	8.6
E883 INTO HOLE OR OTHER SURFACE OPENING																
- DIVING/JUMPING INTO WATER	0	0	0	0	2	1	4	0	0	1	0	1	0	0	9	0.8
- INTO WELL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
- INTO STORM DRAIN/MANHOLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
- OTHER HOLE OR OPENING	0	1	0	0	1	0	1	0	0	0	1	0	0	0	4	0.4
SUBTOTAL	0	1	0	0	3	1	5	0	0	1	1	1	0	0	13	1.2
E884 FROM ONE LEVEL TO ANOTHER																
- PLAYGROUND EQUIPMENT	0	1	0	0	0	0	0	0	0	0	2	0	1	0	4	0.4
- FROM CLIFF	0	0	0	1	6	0	3	1	2	1	1	1	0	0	16	1.4
- FROM CHAIR**	1	1	0	0	0	0	1	0	0	0	1	5	1	0	10	0.9
- FROM WHEELCHAIR*	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3	0.3
- FROM BED*	2	1	0	1	0	0	0	0	2	0	2	8	5	0	21	1.9
- FROM OTHER FURNITURE*	0	1	0	0	0	0	0	0	0	2	0	0	1	0	4	0.4
- FROM COMMODE*	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0.3
- OTHER FALL	9	4	7	5	3	4	7	6	10	13	5	2	0	0	75	6.8
SUBTOTAL	12	8	7	7	9	4	11	7	15	16	12	17	11	0	136	12.3

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP FOR FALLS (E880-E888)

2001–2002 CASES

	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%
No. of CASES	**20**	**17**	**23**	**21**	**30**	**23**	**54**	**94**	**136**	**131**	**212**	**230**	**113**	**0**	**1,104**	**100.0**
% of CASES	**1.8**	**1.5**	**2.1**	**1.9**	**2.7**	**2.1**	**4.9**	**8.5**	**12.3**	**11.9**	**19.2**	**20.8**	**10.2**	**0.0**	**100.0**	
E885 SLIPPING, TRIPPING, STUMBLING	1	0	1	7	7	2	6	11	18	19	38	49	19	0	178	16.1
E886 COLLISIONS, PUSHING, SHOVING BY OR WITH OTHER PERSON																
- IN SPORTS	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4	0.4
- OTHER AND UNSPECIFIED	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3	0.3
SUBTOTAL	0	0	2	2	2	1	0	0	0	0	0	0	0	0	7	0.6
E887 FRACTURE, CAUSE UNSPECIFIED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
E888 OTHER AND UNSPECIFIED FALL	0	0	0	1	0	1	4	14	22	25	74	89	61	0	291	26.4

*** Not available for cases prior to 1996.**

**** Prior to 1996 this code was 'Fall from chair or bed'.**

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP
FOR TRAFFIC, NONTRAFFIC AND OTHER ROAD VEHICLE INCIDENTS (E810-829), 2001–2002

	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UNK	TOTAL	%
No.of ADMISSIONS	**29**	**54**	**115**	**40**	**63**	**54**	**62**	**50**	**154**	**314**	**286**	**222**	**133**	**110**	**142**	**0**	**1,828**	**100.0**
% of ADMISSIONS	**1.6**	**3.0**	**6.3**	**2.2**	**3.4**	**3.0**	**3.4**	**2.7**	**8.4**	**17.2**	**15.6**	**12.1**	**7.3**	**6.0**	**7.8**	**0.0**	**100.0**	
E810-819 MOTOR VEHICLE TRAFFIC																		
- DRIVERS	0	1	3	7	22	22	30	22	76	141	121	108	61	48	64	0	**726**	**39.7**
- PASSENGERS	18	18	34	15	24	15	22	11	35	45	40	22	25	25	34	0	**383**	**21.0**
- MOTORCYCLE DRIVERS	0	0	1	3	3	1	2	4	15	43	25	25	6	2	1	0	**131**	**7.2**
- MOTORCYCLE PASSENGERS	0	0	0	0	0	0	0	2	0	2	2	0	1	0	0	0	**7**	**0.4**
- PEDESTRIANS	7	22	36	4	5	7	4	2	17	32	37	39	27	25	38	0	**302**	**16.5**
- PEDAL CYCLISTS	0	3	15	2	1	2	0	3	1	7	12	3	0	4	0	0	**53**	**2.9**
- OTHER	0	0	0	0	1	1	1	0	0	1	1	1	2	1	3	0	**12**	**0.7**
SUBTOTAL	**25**	**44**	**89**	**31**	**56**	**48**	**59**	**44**	**144**	**271**	**238**	**198**	**122**	**105**	**140**	**0**	**1,614**	**88.3**
E820-825 MOTOR VEHICLE NON TRAFFIC																		
- DRIVERS	0	0	11	5	5	0	3	3	4	22	29	7	4	2	1	0	**96**	**5.3**
- PASSENGERS	2	2	2	1	1	1	0	0	2	3	2	3	0	0	0	0	**19**	**1.0**
- MOTORCYCLE DRIVERS	0	1	0	1	1	3	0	1	2	5	3	1	0	0	0	0	**18**	**1.0**
- MOTORCYCLE PASSENGERS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.0**
- PEDESTRIANS	2	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	**6**	**0.3**
- PEDAL CYCLISTS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.0**
- OTHER	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	**3**	**0.2**
SUBTOTAL	**4**	**3**	**13**	**7**	**7**	**5**	**3**	**4**	**9**	**30**	**36**	**13**	**5**	**2**	**1**	**0**	**142**	**7.8**

EXTERNAL CAUSES OF INJURY (E CODES) BY AGE GROUP
FOR TRAFFIC, NONTRAFFIC AND OTHER ROAD VEHICLE INCIDENTS (E810-829), 2001–2002

	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UNK	TOTAL	%
No.of ADMISSIONS	**29**	**54**	**115**	**40**	**63**	**54**	**62**	**50**	**154**	**314**	**286**	**222**	**133**	**110**	**142**	**0**	**1,828**	**100.0**
% of ADMISSIONS	**1.6**	**3.0**	**6.3**	**2.2**	**3.4**	**3.0**	**3.4**	**2.7**	**8.4**	**17.2**	**15.6**	**12.1**	**7.3**	**6.0**	**7.8**	**0.0**	**100.0**	
E826-829 OTHER ROAD VEHICLE																		
- PEDESTRIANS	0	0	1	0	0	0	0	1	0	0	0	0	0	2	1	0	**5**	**0.3**
- PEDAL CYCLISTS	0	5	10	2	0	0	0	0	1	8	8	4	4	1	0	0	**43**	**2.4**
- OTHER	0	2	2	0	0	1	0	1	0	5	4	7	2	0	0	0	**24**	**1.3**
SUBTOTAL	**0**	**7**	**13**	**2**	**0**	**1**	**0**	**2**	**1**	**13**	**12**	**11**	**6**	**3**	**1**	**0**	**72**	**3.9**

Note - These age groups match the Ontario Road Safety Annual Report from the Ontario Ministry of Transportation.

TRAFFIC, NONTRAFFIC & OTHER ROAD VEHICLE INCIDENTS (E810-829)

2001–2002 CASES

	Drivers	Passengers	Motorcycle Drivers	Motorcycle Passengers	Pedal Cyclists	Pedestrians	Other	Total	%*
	822	**402**	**149**	**7**	**96**	**313**	**39**	**1,828**	**100.0**
MOTOR VEHICLE TRAFFIC**									
E810 INVOLVING TRAIN	7	1	0	0	0	0	0	**8**	**0.4**
E811 RE-ENTRANT COLLISION	2	1	0	0	0	0	0	**3**	**0.2**
E812 ANOTHER MOTOR VEHICLE	378	217	71	7	4	1	0	**678**	**37.1**
E813 WITH OTHER VEHICLE	3	2	1	0	46	1	2	**55**	**3.0**
E814 COLLISION WITH PEDESTRIAN	3	0	0	0	0	299	1	**303**	**16.6**
E815 COLLISION ON HIGHWAY	66	20	9	0	1	1	0	**97**	**5.3**
E816 DUE TO LOSS OF CONTROL	222	110	43	0	2	0	0	**377**	**20.6**
E817 NON COLLISION - BOARDING	1	2	0	0	0	0	2	**5**	**0.3**
E818 OTHER NON-COLLISION	11	10	2	0	0	0	1	**24**	**1.3**
E819 UNSPECIFIED	33	20	5	0	0	0	6	**64**	**3.5**
SUBTOTAL	**726**	**383**	**131**	**7**	**53**	**302**	**12**	**1,614**	**88.3**
MOTOR VEHICLE NON TRAFFIC*									
E820 MOTOR DRIVEN SHOW VEHICLE	33	9	0	0	0	0	1	**43**	**2.4**
E821 OFF ROAD MOTOR VEHICLE	56	7	13	0	0	2	0	**78**	**4.3**
E822 MOVING OBJECT	0	0	0	0	0	1	0	**1**	**0.1**
E823 STATIONARY OBJECT	3	1	3	0	0	0	0	**7**	**0.4**
E824 BOARDING	0	2	0	0	0	0	1	**3**	**0.2**
E825 UNSPECIFIED	4	0	2	0	0	3	1	**10**	**0.5**
SUBTOTAL	**96**	**19**	**18**	**0**	**0**	**6**	**3**	**142**	**7.9**

TRAFFIC, NONTRAFFIC & OTHER ROAD VEHICLE INCIDENTS (E810-829)

2001–2002 CASES

	Drivers	Passengers	Motorcycle Drivers	Motorcycle Passengers	Pedal Cyclists	Pedestrians	Other	Total	%*
	822	**402**	**149**	**7**	**96**	**313**	**39**	**1,828**	**100.0**
OTHER ROAD VEHICLE**									
E826 PEDAL CYCLE	0	0	0	0	43	2	2	**47**	**2.6**
E827 ANIMAL DRAWN VEHICLE	0	0	0	0	0	0	4	**4**	**0.2**
E828 ANIMAL BEING RIDDEN	0	0	0	0	0	1	18	**19**	**1.0**
E829 OTHER ROAD VEHICLE	0	0	0	0	0	2	0	**2**	**0.1**
SUBTOTAL	**0**	**0**	**0**	**0**	**43**	**5**	**24**	**72**	**3.9**

*** Denominator of percentages is all cases.**

**** 4th digits are used to identify the injured person in these E Code catagories.**

INJURY(N CODE) TYPE BY AGE GROUP FOR ALL INJURIES

2001–2002 CASES

TOTAL*	<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk	Total	%**
	76	**136**	**207**	**288**	**1,008**	**909**	**1,501**	**1,508**	**1,240**	**806**	**829**	**774**	**292**	**2**	**9,576**	
% of TOTAL **	**2.1**	**3.7**	**5.6**	**7.8**	**27.3**	**24.6**	**40.6**	**40.8**	**33.6**	**21.8**	**22.4**	**21.0**	**7.9**	**0.1**		
SUPERFICIAL	28	34	57	81	272	242	413	394	332	212	214	186	87	1	2,553	69.1
ORTHOPEDICS	6	19	33	58	237	229	384	411	336	208	188	172	50	0	2,331	63.1
BURNS	0	2	4	2	11	9	22	27	19	13	9	9	4	0	131	3.5
HEAD	41	49	69	86	249	203	337	313	279	206	267	276	118	1	2,494	67.5
SPINAL CORD	0	1	0	3	19	12	30	36	28	17	15	24	6	0	191	5.2
INTERNAL	1	25	36	54	167	158	223	244	177	117	107	87	23	0	1,419	38.4
BLOOD VESSELS	0	2	4	3	25	18	39	39	20	12	9	8	2	0	181	4.9
NERVES	0	3	4	0	17	21	30	22	24	8	8	3	0	0	140	3.8
OTHER	0	1	0	1	11	17	23	22	25	13	12	9	2	0	136	3.7

Note: If an admission has injuries which fall into several of the injury types above, each type will be counted once. Otherwise, if a case has several injuries which all fall into one type then the case will only be counted once.

*** 'Total' refers to the total number of injury types.**

**** The denominator for the percentage calculations is the total number of cases for the year.**