

***Inventory of
Federal Data Systems
in the
United States
for
Injury Surveillance,
Research and
Prevention Activities***



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
Atlanta, Georgia 30333**



FOREWORD

The National Center for Injury Prevention and Control (NCIPC), Centers for Disease Control and Prevention (CDC) has prepared this inventory of federal data systems that provide national data on injuries in the United States. We have identified 31 data systems that provide data useful for injury surveillance, research and prevention activities. This report provides a brief summary of each system, including how to access the data, data collection methods, data sources, and types of data obtained. Our aim is to provide public health professionals and injury researchers with an overview of available information from existing national data sources for (1) monitoring national trends in the magnitude and distribution of injury mortality and morbidity; (2) identifying risk factors for sustaining injury; (3) generating hypotheses for further epidemiologic research; and (4) evaluating the effectiveness of injury and violence prevention programs. We also identify information gaps and give future directions of NCIPC for improving injury data nationwide.

We appreciate the assistance of other federal agencies in providing the descriptive and background information summarized in this report. It is our sincere desire to improve awareness of available data from these systems so they might be more widely used for research, program development and evaluation, policy decisions, and public education toward our efforts to prevent injuries—a serious public health problem.

A handwritten signature in black ink that reads "Mark L. Rosenberg". The signature is written in a cursive style with a large, stylized "M" and "R".

Mark L. Rosenberg, M.D., M.P.P.
Director, NCIPC

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TO THE READER

This report provides the results of a data inventory of 31 federally-funded national data systems that obtain information on injury mortality, morbidity, or risk factors. The Directory of Abbreviations provides a listing of the acronyms and names of these data systems and the federal agencies that operate them. The acronyms are used throughout the inventory in reference to their respective data system. In the Executive Summary, we present the purpose, highlights, information gaps, and future directions for the National Center for Injury Prevention and Control. The Introduction addresses the magnitude of the injury problem and the purpose of this inventory. The Methods section presents the inclusion criteria and the methods used in conducting this inventory. The Summary of Findings section presents descriptions of national data systems, system characteristics, and available data. The National Data Systems section presents the name and address of the responsible federal agency and a brief overview, as well as information on uses and limitations of each data system. The Summary Tables provide details about the characteristics and injury-related data for each data system. The Appendix provides the data collection instrument used for this inventory. Our intention is that this report will serve as a resource document on existing injury data systems for public health professionals and injury researchers and help them identify information gaps and future directions for improving data useful for research, policy decisions, public education, and the development and evaluation of effective injury prevention programs.

Directory of Abbreviations

Acronyms	Name of Data System	Federal Agency
CFOI	Census of Fatal Occupational Injuries	Bureau of Labor Statistics
SOII	Survey of Occupational Injuries and Illnesses	Bureau of Labor Statistics
NCVS	National Crime Victimization Survey	Bureau of Justice Statistics
AMCS	National Ambulatory Medical Care Survey	Centers for Disease Control and Prevention
NHAMCS	National Hospital Ambulatory Medical Care Survey	Centers for Disease Control and Prevention
NHDS	National Hospital Discharge Survey	Centers for Disease Control and Prevention
NHIS	National Health Interview Survey	Centers for Disease Control and Prevention
NMFS93	National Mortality Followback Survey — 1993	Centers for Disease Control and Prevention
NVSSS	National Vital Statistics System — Current Mortality Sample	Centers for Disease Control and Prevention
NVSSF	National Vital Statistics System — Final Mortality Data	Centers for Disease Control and Prevention
BRFSS	Behavioral Risk Factor Surveillance System	Centers for Disease Control and Prevention
YRBSS	Youth Risk Behavioral Surveillance System	Centers for Disease Control and Prevention
NTOF	National Traumatic Occupational Fatality Surveillance System	Centers for Disease Control and Prevention
NEISS	National Electronic Injury Surveillance System	Consumer Product Safety Commission
LEOKA	Law Enforcement Officers Killed and Assaulted	Federal Bureau of Investigation
NIBRS	National Incident Based Reporting System	Federal Bureau of Investigation

Directory of Abbreviations (Continued)

Acronyms	Name of Data System	Federal Agency
UCRSHR	Uniform Crime Reporting System — Supplemental Homicide Report	Federal Bureau of Investigation
NPTS	Nationwide Personal Transportation System	Federal Highway Administration
HCFA	Health Care Finance Administration — SAF and MEDPAR ¹	Health Care Finance Administration
IHSACS	Indian Health Service — Ambulatory Care System	Indian Health Service
IHSICS	Indian Health Service — Inpatient Care System	Indian Health Service
NCANDS	National Child Abuse and Neglect Data System	National Center for Child Abuse and Neglect
NIS	National Incidence Study of Child Abuse and Neglect	National Center for Child Abuse and Neglect
FARS	Fatal Accident Reporting System	National Highway Traffic Safety Administration
NASSCDS	National Accident Sampling System — Crashworthiness Data System	National Highway Traffic Safety Administration
NASSGES	National Accident Sampling System — General Estimates System	National Highway Traffic Safety Administration
NOPUS	National Occupant Protection Use Survey	National Highway Traffic Safety Administration
MTFS	Monitoring the Future Study	National Institute of Drug Abuse
DAWN	Drug Abuse Warning Network	Substance Abuse and Mental Health Services Administration
BCCOA	Census of Agriculture — 1992	Bureau of the Census
NFIRS	National Fire Incident Reporting System	Fire Administration

¹SAF=5% Sample Standard Analytic file; MEDPAR=Medicare Provider Analysis and Review file

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Inventory of Federal Data Systems in the United States

for Injury Surveillance, Research and Prevention Activities

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EXECUTIVE SUMMARY

Improving Data Systems

The mission of the National Center for Injury Prevention and Control (NCIPC) is to reduce morbidity, disability, death, and costs associated with injuries outside the workplace in the United States. NCIPC works closely with other federal agencies; national, state, and local organizations; state and local health departments; and research institutions. As part of its mission, NCIPC is working to improve the quality and availability of national, state, and local data on fatal and nonfatal injuries. These data are essential for monitoring trends in injury events, developing and evaluating the effectiveness of injury prevention programs, and providing the basis for decisions by policy makers and the public.

An Inventory of National Data Systems

As part of our effort to improve injury data, we conducted an inventory of existing federal data systems to determine current sources of national data on injury mortality, morbidity, and risk factors. In this report, we describe 31 federally-funded national data systems, including a brief overview of the data system, data collection methods, inclusion and exclusion criteria, useful features for injury research, limitations of data, and summary tables of the characteristics and data content for each system.

General Findings

- An overview of available injury-related data from each national data system is shown in Figure 1. Eight systems (CFOI, SOII, NCVS, NCSSE, NTOF, LEOKA, FARS, and BCCOA) provide data on work-related injuries and deaths; the remaining systems focus more broadly on injuries and deaths related to violence and unintentional causes. Only three systems (NCVS, NMFS93, and HCFA) provide data on cost of injury.
- More than one-half (17) of the national data systems are continuous, ongoing surveillance systems. The remaining systems are surveys conducted periodically.
- Almost three-fourths (23) of the data systems have data tapes and accompanying codebooks available to the public.
- Demographic data, especially age and sex, are collected by all but three national data systems.

- Over one-half (18) of the national data systems report some information on locale where the injury occurred.
- Intent of injury was recorded by more than 40% (13) of the national data systems.
- About 30% (9) of the data systems have ICD-9 or ICD-9-CM external cause of injury codes (E codes).
- Over one-fourth (8) of the data systems have the ICD-9-CM nature of injury diagnosis codes (N codes).

Information Gaps

Most of these national data systems were not specifically designed to monitor injury events and associated health outcomes and costs. However, data obtained from them are contributing substantially to our understanding of violence-related and unintentional injuries as a public health problem in the United States. An evaluation of data obtained from these systems reveals some important information gaps. Better, more comprehensive, standardized data are needed on circumstances of the injury event, risk behaviors and practices, health care needs, health outcomes, and cost of injury. Specifically, national, state, and community-based data are needed on:

- circumstances surrounding the injury event, such as activities (e.g., sports, recreation) and locale (e.g., home, school, workplace) at the time the incident occurred;
- intent of injury, such as unintentional, homicide/assault, or suicide/suicide attempt;
- risk behaviors and practices, such as illicit drug and alcohol use at the time of the injury, or use of safety devices and equipment;
- ICD-9 and ICD-9-CM nature of injury diagnosis (N codes) and external cause of injury codes (E codes);
- socioeconomic measures, such as educational attainment, occupation, marital status, employment status, and household income;
- severity of injury, such as the need for emergency and advanced trauma care services, hospitalization, long-term medical care, and rehabilitation services;
- health outcomes, such as physical and mental impairment, functional limitations (e.g., activities of daily living), and disability (e.g., the change in societal role); and
- cost of care, such as costs of physician services, hospital care, rehabilitation, and method of payment (e.g., self pay, private insurance, public reimbursement programs).

Future Directions

NCIPC will continue to provide leadership in the development and improvement of national injury surveillance systems. The following are some of the activities currently underway or planned:

- continuing to publish and distribute data from national data systems;
- providing technical expertise to state and local health departments and other federal agencies to promote the uniform collection of data for assessing quality of prehospital and hospital care and for designing and evaluating the effectiveness of injury prevention programs;
- investigating ways to improve existing national, state, and community-based data systems for use in monitoring changes in risk behaviors and practices and injury outcomes, and in evaluating the effectiveness of injury prevention programs;
- distributing, testing, and implementing national guidelines and standards for uniform collection, analysis, and reporting of traumatic brain and spinal cord injuries;
- developing, testing, and implementing national guidelines and standards for uniform collection, analysis, and reporting of injuries treated in hospital emergency departments;
- promoting the uniform collection, analysis and reporting of ICD-9 and ICD-9-CM E codes in national, state, and local data systems;
- assisting in the development of standard E code groupings for reporting injury-related data from mortality and morbidity data systems;
- collaborating with the National Highway Traffic Safety Administration in the development of a population-based system linking existing data systems to study nonfatal motor-vehicle injuries; and
- collaborating with the National Institute of Justice to explore mechanisms for establishing a national database on fatal and nonfatal firearm-related injuries.

Figure 1
Type of Injury Data Collected by Each Data System

Data System ¹	Work-Related	Violence-Related			Unintentional			Cost of Injury
		Mortality	Morbidity	Risk ²	Mortality	Morbidity	Risk ²	
CFOI	X	X		X	X		X	
SOII	X		X			X		
NCVS	X		X	X				X
NAMCS			X			X		
NHAMCS			X			X		
NHDS		X	X		X	X		
NHIS			X			X		
NMFS93		X		X	X		X	X
NVSSS		X			X			
NVSSF	X	X			X			
BRFSS				X			X	
YRBSS				X			X	
NTOF	X	X			X			
NEISS			X			X		
LEOKA	X	X	X	X				
NIBRS		X	X	X				
UCRSHR		X		X				
NPTS							X	
HCFA		X	X		X	X		X
IHSACS			X			X		
IHSICS			X			X		
NCANDS		X		X				
NIS		X	X	X				
FARS	X				X		X	
CDS					X	X	X	
GES					X	X	X	
NOPUS							X	
MTFS				X			X	
DAWN		X	X	X	X	X	X	
BCCOA	X				X	X		
NFIRS					X	X	X	

¹See Directory of Abbreviations for definitions of data system acronyms and responsible federal agencies.

²Refers to risk behaviors and practices.

INTRODUCTION

Injury — A Public Health Problem

An estimated 59.6 million persons—one in four U.S. residents—are injured annually.¹ Of these, 2.7 million were injured severely enough to require hospitalization.² Although the greatest cost of injury is in human suffering and loss, the financial cost of injury is estimated at more than \$224 billion—an increase of 42% in the last decade.³ In 1992, injury was the third leading cause of death, claiming 145,655 lives and the leading cause of years of potential life lost (1545.7 years lost before age 65 per 100,000 population).^{4,5} Injury deaths are mostly attributable to unintentional injury deaths (59.6%), suicide (20.9%) and homicide (17.5%).⁶

Injuries have a substantial impact on America's health care system. For every death from injury in the United States, there are 19 hospitalizations, 233 emergency department (ED) visits, and 450 visits to office-based physicians.⁷

Motor-vehicle-crashes accounted for 47% of all unintentional injury deaths in 1992 and is the leading cause of death for people aged 1 to 25. Alcohol and other drugs are involved in many injuries, including about 40% of all deaths due to motor-vehicle-crashes and about 40% of deaths in residential fires. Drowning is the second leading cause of death due to unintentional injuries among children and young adults aged 1 to 24. Each year about 60,000 people are hospitalized for burns. Among persons over age 65, falls account for about 10,000 deaths a year. Each year 550,000 people are treated in emergency departments for bicycle-related injuries and almost 800 die from this type of injury.

In 1992, homicide claimed the lives of over 25,000 Americans. Suicide was responsible for the deaths of 30,500 Americans. Homicide is the second leading cause of death for our nation's young people aged 15 to 24. It is the leading cause of death for young black men and women aged 15 to 34. For every violent death, there are at least 100 nonfatal injuries caused by violence. In 1992, an estimated 4.3 million women were victims of assault.⁸ In 1992, there were over 37,700 firearm-related deaths, including 17,800 firearm-related homicides, 18,200 suicides, and 1,400 unintentional deaths related to firearms. For every person shot and killed by a firearm, there are almost three others treated annually for nonfatal firearm-related injuries in hospital emergency departments.⁹

Purpose of the Inventory

Many of the statistics presented above have been compiled using data from the 31 federally-funded national data systems presented in this inventory. These data have helped us understand the magnitude and distribution of injuries in the United States, who is at risk of injury, and the need to intervene. These data are also being used to design interventions and evaluate the effectiveness of national injury prevention efforts.

In this report, we summarize each of these federally-funded, national data systems and the data they provide for use by injury researchers and public health professionals. This report can serve as a resource document to help access national data systems that provide injury data, identify information gaps, and assess methods to improve injury-related data systems at the national, state, and community levels. Improvements in injury data systems are needed for use in program development, policy decisions, and public education.

Brief overviews of data systems are presented elsewhere for intentional and unintentional injury for the United States^{10,11,12} and internationally¹³. This inventory presents a more in-depth overview of data systems that provide injury-related data.

METHODS

Data systems were included in this inventory if they met the following criteria:

- federal or federally-funded
- were national in nature
- obtained information on injury events or injury-related data
- were ongoing, that is, a continuous surveillance system or a periodically-conducted survey.

Using these criteria, we identified 31 national data systems. The inventory was conducted during the spring and summer of 1994 and updated in the summer of 1995.

We developed a comprehensive worksheet and conducted a pretest using four of the 31 data systems. Modifications were made as the result of the pretest. Each of the 27 remaining data system coordinators was contacted by telephone and then mailed a final worksheet (Appendix) along with a cover letter stating the purpose of the inventory and asking for their cooperation in completing the worksheet and submitting any relevant information to us. After a period of about 3 weeks, telephone calls were made to those coordinators who had not

submitted a completed worksheet. Ultimately, completed worksheets were obtained on all data systems that met the inventory criteria. The questions were coded and entered into the computer using dBASE and were edited. The data system coordinator or person who completed the worksheet was contacted if there were any inconsistencies. The draft report was sent back to the coordinators for final review and comment.

SUMMARY OF FINDINGS

Descriptions of National Data Systems

A description of each national data system is presented in the next section. These data systems use different data sources and a variety of methods for the collection, analysis, and reporting of injury data. Collectively, they provide a broad assembly of useful information on demographics; circumstances of the injury event; injury-related incidence and prevalence; risk behaviors and practices; injury morbidity, disability and death; and cost of injury. Useful features and limitations are presented for each system. Injury researchers and public health professionals should become familiar with these factors before analyzing and reporting data from these systems.

Summary of System Characteristics and Available Data

Following the Data System Descriptions Section, we present summary tables of responses (X=yes) to questions in the inventory worksheet (Appendix) pertaining to system characteristics and injury-related data for each of the 31 national data systems. A brief summary of findings for each table is as follows:

Table 1: Type of data system

More than one-half (17) of the national data systems that contain injury-related data are surveillance systems that collect data continuously (Appendix, Q.2).

Table 2: Availability of data

About three-fourths (23) of the data systems have data tapes and accompanying codebooks available to the public (Appendix, Q.5 & 6).

Table 3: Geographic detail

About three-fourths (23) of the data systems obtain data on the regional level. About half (15) of the data systems obtain estimates on the state level (Appendix, Q.7).

Table 4a and 4b: Type of data obtained

A majority (26) of data systems provide data on injury mortality or injury morbidity, or both. About one-third (11) obtain information about behavior risk factors and health care use. A few data systems obtain information on restricted activity, the length of hospitalization, and medical care charges. Two data systems (NHIS and NMFS93) had information about access to medical care (Appendix, Q.10).

Table 5a, 5b, and 5c: Sources of injury-related data

The sources of injury-related data vary. Police reports, ED records, vital statistics records, and medical examiner / coroner reports are the most common sources for obtaining data. Also, about one-third (10) of the data systems obtain data through telephone interviews (Appendix, Q.11).

Table 6: Unit of analysis

A majority (27) of data systems have the injury incident or injured person, or both, as the principle unit of analysis (Appendix, Q.12).

Table 7a and 7b: Demographic information

Over three-fourths (24) of the data systems obtain data on age, sex, and race of the injured person. One-fourth (9) collect information on occupation or industry, and 6 data systems collect education or income, or both. Three data systems (BRFSS, NPTS, NOPUS) do not collect any demographic information (Appendix, Q.13).

Table 8: Geographic location of injury event

The state where the injury occurred is reported in 12 data systems. The county of the injury incident is reported by one-fourth (8) of the data systems. The census tract and zip code of the injury incident are reported in two data systems (BCCOA, NFIRS) (Appendix, Q.15).

Table 9: Circumstances surrounding the injury event

Over half of the data systems (18) report place of occurrence (e.g., home, work, motor vehicle). One-third of data systems (11) have both the date and time of injury. The intent of injury is recorded in 13 data systems (Appendix, Q.16).

Table 10a and 10b: Activities associated with the injury event

Information is obtained on all types of activities associated with the injury incident for three data systems (NHAMCS, NHIS, NMFS93). Work-related activities are reported in eight other data systems. Sports, recreational, and day care activities are reported by NEISS (Appendix, Q.17).

Table 11a and 11b: Behavior risk factors

Of the practices or behaviors that could increase or decrease a person's risk of injury, alcohol involvement or drug abuse, or both, are obtained most often (16 of the data systems). About 30% of the data systems (10) collect information on seat belt usage. A few data systems obtain information on automobile air bags, bicycle helmet use, motorcycle helmet use, home storage of firearms, safety equipment, and home smoke detectors. Data on in-line skates are obtained in NEISS. Almost 30% of the data systems (9) report on physical violence (Appendix, Q.18).

Table 12a, 12b, and 12c: External cause of injury

Almost 30% (9) of the data systems obtain ICD-9 or ICD-9-CM the external cause of injury codes or E codes on all injuries reported in the data system. External causes most frequently reported are motor-vehicle-occupant-related, fire/burn, homicide/assault, firearm-related, and stabbing (Appendix, Q.19 & 20).

Table 13: Anatomic location of the injury

One-fourth (8) of the data systems report the nature of the injury diagnoses or N codes. The anatomic location for all types of injuries was obtained in over one-third (12) of the data systems (Appendix, Q.20 & 21).

Table 14: Injury severity scales

Only one of these data systems (NASSCDS) uses the Abbreviated Injury Severity Index. NEISS uses a crude severity scale and five other data systems use a nonanatomic severity coding scheme (Appendix, Q.22 & 23).

NATIONAL DATA SYSTEMS DESCRIPTIONS

CENSUS OF FATAL OCCUPATIONAL INJURIES

Contact: Office of Safety, Health and Working Conditions
Bureau of Labor Statistics
2 Massachusetts Avenue, N.E., Room 3180
Washington, DC 20212
Phone No. (202) 606-6175
Fax No. (202) 606-6196

Data System Acronym: CFOI

Purpose: To compile a complete, verifiable count of work-related injury fatalities using multiple data sources.

Description: All states and the District of Columbia obtain state documents on all work-injury fatalities and the Bureau of Labor Statistics (BLS) obtains federal documents. These documents (e.g., death certificates, worker's compensation reports and claims, and other federal and state administrative records) are cross-referenced and at least two independent source documents are used to verify work-relationship and code circumstances of the incident. Demographic information about the decedent, circumstances of the incident, industry of the employer, equipment or machines involved, activity the worker was performing at the time of the incident, and occupation of the worker are obtained for each decedent. Data are produced for the United States, states and metropolitan statistical areas (MSA).

Data Collection Methods: This is a federal/state cooperative program with shared costs and data collection responsibilities. Each state is responsible for data collection, follow-up, and coding of state-based data. A follow-up questionnaire is sent to the employer or another contact to obtain further information on the incident. The BLS supplies the federal documents and produces a report of the results.

Inclusion Criteria: A decedent must have been employed (that is, working for pay, compensation, profit or benefit) at the time of the event, engaged in legal work activity, or present at the site of the incident as a requirement for his or her job.

Exclusion Criteria: Fatalities of a personal nature off employer premises (e.g., not required by the employer) or when employee was dealing in illegal activities (e.g., dealing illicit drugs) are excluded.

Useful Features for Injury Research:

- A narrative description of how the incident occurred and demographic information are included.
- A data file is available for research purposes only to users who agree to maintain confidentiality of personal identifying information (through application process).

Limitations for Injury Research:

- In some cases, there is insufficient detail to code circumstances.
- Public access data tapes do not include state or county codes because of confidentiality pledges.
- The data system collects work-related fatalities only.

SURVEY OF OCCUPATIONAL INJURIES AND ILLNESSES

Contact: Office of Safety, Health and Working Conditions
Bureau of Labor Statistics
2 Massachusetts Avenue, N.E.
Washington, DC 20212
Phone No. (202) 606-6170
Fax No. (202) 606-6196

Data System Acronym: SOII

Purpose: To provide national and state data on work-related injuries and illnesses as reported by employers.

Description: Annual mail-out survey to a stratified random sample of employers in private industry in the United States and its territories. Excluded are the self-employed; farmers with fewer than 11 employees; private households; and employees in federal, state, and local government agencies. Occupational injuries and illnesses which are recognized as work-related are recordable if they result in death, loss of consciousness, restricted work activity, transfer to another job, or medical treatment beyond first aid.

Data Collection Methods: This is a federal/state cooperative program in which employer reports are collected and processed by state agencies cooperating with the Bureau of Labor Statistics (BLS).

Inclusion Criteria: All job-related injuries and illnesses for which employers are required to maintain records by the Occupational Safety and Health Administration (OSHA).

Exclusion Criteria: Nonwork-related injuries and illnesses and injuries and illnesses not meeting OSHA record keeping criteria are excluded.

Useful Features for Injury Research:

- Information is available on fatalities, lost work days, and nonfatal cases without lost work days by industry. In 1992, the BLS started using the Annual Summary to measure only nonfatal injuries and illnesses and implemented the Census of Fatal Occupational Injuries to monitor work-related deaths.

- Since 1992, survey data have been obtained on the event that brought about the injury, demographic characteristics, body part affected, and what object or substance directly harmed the employee.
- The data system provides national and state data on all job-related injuries and illnesses for which employers are required to maintain records by OSHA.

Limitations for Injury Research:

- Trends across years may reflect changes in reporting practices rather than changes in workplace safety and health conditions. OSHA has ongoing efforts to improve employers understanding of record keeping requirements.
- Data system collects information on work-related injuries only.
- There is likely an undercount of deaths.

NATIONAL CRIME VICTIMIZATION SURVEY

Contact: Victimization Statistics Branch
Bureau of Justice Statistics
633 Indiana Avenue, N.W.
Washington, DC 20531
Phone No. (202) 616-3494
Fax No. (202) 307-5846

Data System Acronym: NCVS

Purpose: To measure the number, nature and characteristics of specified types of crime and victims of crime.

Description: Sample of households in the United States to provide estimates and information on victimization of persons 12 years of age or older by certain criminal offenses (rape, sexual assault, robbery, assault, larceny, burglary, and motor-vehicle theft) whether completed or attempted.

Data Collection Methods: All eligible persons (age 12 or older) in the sample household are interviewed using a screening questionnaire. If they were a victim of one or more of the above criminal offenses within the previous 6 months, they are interviewed to complete the crime incident report.

Inclusion Criteria: All physical injuries resulting from nonfatal violent crimes are included.

Exclusion Criteria: Fatal injuries, self-inflicted injuries, noncrime-related injuries, injuries to children under 12 years of age and psychological trauma are excluded.

Useful Features for Injury Research:

- Information is available on type of victimization, weapon usage, family income, number of offenders, physical injury, economic loss, theft loss, time lost from work, place of occurrence, victim-offender relationship, and demographic/socioeconomic characteristics of the victim.

Limitations for Injury Research:

- The sample design does not allow for state or local area estimates.
- Intrafamilial violence is probably underreported.
- Information is based on self-reports of crime incidents.
- There is no information on children under 12 years of age.

NATIONAL AMBULATORY MEDICAL CARE SURVEY

Contact: Ambulatory Care Statistics Branch
Division of Health Care Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road
Hyattsville, MD 20782
Phone No. (301) 436-7132
Fax No. (301) 436-5452

Data System Acronym: NAMCS

Purpose: To collect data on visits by patients to nonfederal office-based (private) physicians.

Description: Sample survey of office-based nonfederally employed physicians in the United States to estimate provision and use of ambulatory medical care services.

Data Collection Methods: The National Center for Health Statistics (NCHS) trains the physician (preferred) or physician's staff to complete a 1-page form for each visit in a sample of visits for a randomly assigned 7-day period during the year.

Inclusion Criteria: Each physician office visit for a systematic random sample of office visits occurring within a randomly assigned 1-week reporting period are included.

Exclusion Criteria: Office visits to the physician specialties of anesthesiology, pathology and radiology, telephone contacts, and other non-office visits are excluded.

Useful Features for Injury Research:

- Data on age, sex, race, ethnicity, and expected source(s) of payment are obtained for each physician visit.
- The data include ICD-9 nature of injury coding (N-coding) of the principal diagnosis.
- Beginning in 1991, a field was added to the patient record form to indicate whether the visit was injury-related.

- The 1995-96 NAMCS will include a question on whether the office visit was injury-related, place where injury occurred, cause of injury (E-coded), and whether the injury was work-related.

Limitations for Injury Research:

- The database probably contains a majority of less severe injuries because the sample is based on physician office visits. However, follow-up visits of moderately or severely injured persons to the doctor's office are included.
- Prior to 1995, the external cause of injury data (E codes) were not obtained.
- This data system provides national estimates of physician visits, not of persons injured or injuries.

NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY

Contact: Ambulatory Care Statistics Branch
Division of Health Care Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 952
Hyattsville, MD 20782
Phone No. (301) 436-7132
Fax No. (301) 436-5452

Data System Acronym: NHAMCS

Purpose: To collect data on visits to U.S. short-stay hospital emergency and outpatient departments.

Description: Sample survey of nonfederal, short-stay hospitals with emergency departments (EDs) and/or outpatient departments (OPDs) in a set of primary sampling units in the United States to estimate the provision and use of hospital ambulatory medical care services.

Data Collection Methods: Bureau of Census field representatives train the hospital staff to sample visits and abstract information from medical records. Patient visit data are collected throughout the year. Each sample hospital has been randomly assigned to one of sixteen 4-week data collection periods. Up to five clinics and the EDs are sampled per hospital.

Inclusion Criteria: Sample of visits from a sample of nonfederal, short-stay hospitals with EDs and/or OPDs.

Exclusion Criteria: Visits for administrative purposes only, telephone contacts, and clinics that provide only ancillary services or that are not under the supervision of a physician are excluded.

Useful Features for Injury Research:

- Data are available on place of occurrence (starting in 1993), external cause of injury (E codes), and alcohol- or drug-relatedness for patient visits to hospital EDs.
- This data system includes ICD-9 nature of injury coding (N-coding) of the principal diagnosis.
- Whether the patient was counseled on injury prevention for patient visits to OPDs is contained in the data system.

- Data on patient age, sex, race, ethnicity, and expected method of payment are obtained for patient visits to EDs and OPDs.
- The 1995-96 NHAMCS ED and OPD components will contain data on: whether the injury-related visit was work-related, violence-related, or firearm-related; victim-offender relationship; and place of occurrence.
- The 1995-96 NHAMCS OPD component will also contain data on external cause of injury (E codes).

Limitations for Injury Research:

- This survey obtains estimates of patient visits, not persons injured or injuries.
- Many of the E codes obtained are unspecified for certain external causes of injury categories, e.g., motor-vehicle-related injuries.
- Only national / regional estimates are provided by this data system.
- Hospital participation in this survey is voluntary.

NATIONAL HOSPITAL DISCHARGE SURVEY

Contact: Hospital Care Statistics Branch
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 956
Hyattsville, MD 20782
Phone No. (301) 436-7125
Fax No. (301) 436-7955

Data System Acronym: NHDS

Purpose: To measure inpatient care and hospital utilization.

Description: National survey based on a probability sample of discharges from nonfederal short-stay hospitals in the United States. The NHDS provides national estimates of inpatient utilization and has been conducted annually since 1965.

Data Collection Methods: Data are collected from existing automated sources or are manually collected by hospital staff or National Center for Health Statistics (NCHS) representatives who abstract information from face sheets of sampled medical records.

Inclusion Criteria: Discharges, alive or dead, from nonfederal hospitals with 6 or more beds and an average length of stay for all inpatients of less than 30 days, or nonfederal hospitals with general medical or surgical specialty, or children's general hospitals regardless of length of stay.

Exclusion Criteria: Persons not admitted to a short-stay nonfederal hospital or persons admitted to an other-than-general, a federal, or a long-stay hospital are excluded.

Useful Features for Injury Research:

- This data system contains information on the expected source of hospital payment and any surgical or diagnostic procedures performed.
- N codes are available on almost all hospitalizations.

Limitations for Injury Research:

- The NHDS contains information on only the more severe injuries; that is, those which require hospitalization, with the exception of injuries resulting in death prior to hospitalization.

- Estimates are only available for the nation and the four census regions.
- This data system contains no information on the circumstances surrounding the injury.
- E codes are available for about 40% of injuries.
- Due to small sample size, estimates of rare occurrences may be unreliable.

NATIONAL HEALTH INTERVIEW SURVEY

Contact: Division of Health Interview Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 850
Hyattsville, MD 20782
Phone No. (301) 436-7085
Fax No. (301) 436-3484

Data System Acronym: NHIS

Purpose: To measure the health status of the civilian, noninstitutionalized U.S. population.

Description: Continuous nationwide survey of about 48,000 U.S. households annually. The core questionnaire obtains information on demographic characteristics of household members; number of restricted activity days, bed days, work- or school-loss days; all physician visits occurring during the 2-week period prior to the week of interview; and the number of hospital episodes during the prior 12 months, including length of stay and whether surgery was performed; acute and chronic conditions; and long-term limitations of activity resulting from chronic disease or impairment and the chronic conditions associated with the disability.

Supplemental questionnaires which usually change on an annual basis focus on emerging health issues such as HIV/AIDS infection, health insurance coverage, and Year 2000 objectives. In 1994-1995, NHIS included a comprehensive supplement on disability conducted in two phases. Phase 1 obtains information on pathology/impairment, functional limitation, mental health, social disability, access to medical care and social services. Phase 2 is administered to household members who experience serious physical, cognitive, or psychological impairments; detailed information is obtained about work/employment history, limitations, and access to and utilization of medical care and social services.

For the past several years, supplements have monitored various Year 2000 objectives including, for example, questions on firearm safety, home safety, occupational safety and health, and seat belt and helmet use. The 1992 Youth Risk Behavior Supplement administered to persons 12 to 21 years of age assessed risk taking behaviors common to this age group. In 1991, a detailed supplement on injuries was field tested.

Data Collection Methods: Trained personnel of the U.S. Bureau of Census conduct personal household interviews.

Inclusion Criteria:

- A probability sample of U.S. households.
- Civilian, noninstitutionalized population (college dorms are included).
- All ages included.

Exclusion Criteria:

- Active duty military (but the civilian household members are included).
- Persons whose usual residence is other than the selected household.
- Persons who reside in institutions.
- Babies born during interview week.

Useful Features for Injury Research:

- All injuries are E-coded and N-coded.
- There is a core questionnaire that addresses hospitalizations, doctor visits, restricted activity, whether the injury was work- or school-related or was motor-vehicle-related.
- In 1991, the child health supplement had questions on protective head gear for sports.
- More detailed questions on unintentional injuries and violence-related injuries are being developed as part of the 1996 NHIS questionnaire.

Limitations for Injury Research:

- The core is often answered by a knowledgeable proxy respondent for all household members.

NATIONAL MORTALITY FOLLOWBACK SURVEY — 1993

Contact: Division of Vital Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
Phone No. (301) 436-7464
Fax No. (301) 436-7066

Data System Acronym: NMFS93

Purpose: To investigate socioeconomic differentials in mortality, potentials for prevention of premature death by inquiring into the associated risk factors, health care in the last year of life, disability, and reliability of certain death certificate items.

Description: Sample survey of all resident deaths of persons aged 15 or older who died in the United States in 1993.

Data Collection Methods: Data collected by telephone and/or personal interview with the next of kin of the decedent. Medical Examiner/Coroner abstracts are obtained for postmortem results of autopsy, toxicology, police reports, and background data on traumatic deaths.

Inclusion Criteria: Sample of death certificate of persons 15 years of age and older comprised in the Current Mortality Sample (CMS) for 1993.

Exclusion Criteria: Death certificates of persons under 15 years of age in the CMS and death certificates of all persons who were fatally injured in South Dakota in 1993 were excluded.

Useful Features for Injury Research:

- This study includes an oversampling of deaths due to unintentional injuries, homicides and suicides, deaths among minorities, and deaths to persons 15-34 years of age.
- Data on use of health services prior to death, source of payment, limitations in activities, social, economic and occupational characteristics, and medical care information are available on each sampled decedent.

- Data are available on alcohol and substance abuse, circumstances of the injury incident, and mechanism and intent of injury, history of motor vehicle use, and firearm storage and safety practices during the last year of life.
- All injury-related deaths have been E-coded.

Limitations for Injury Research:

- This data system provides national estimates only.
- Detailed analyses of data by external cause of injury may be limited due to sample size.

NATIONAL VITAL STATISTICS SYSTEM — CURRENT MORTALITY SAMPLE

Contact: Mortality Statistics Branch
Division of Vital Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
Phone No. (301) 436-8884
Fax No. (301) 436-7066

Data System Acronym: NVSSS

Purpose: To collect, analyze, and publish data from a sample of death certificates filed in state vital statistics offices.

Description: Information obtained from the death certificate from a 10% systematic sample of all death certificates for each principle month of data submitted by the 50 states and the District of Columbia and the independent registration area of New York City. Current Mortality Sample (CMS) data include the underlying cause of death, sex, race, age, date of death, state of death, and month death certificate was submitted.

Data Collection Methods: In general, the attending physician, medical examiner, or coroner is responsible for completing the medical part of the death certificate, including date and time of death, cause of death, manner of death, and autopsy status. The certificate is then delivered to the funeral director who completes the demographic information and files the certificate with the state vital statistics office where the death occurred. All participating vital statistics offices send information to National Center for Health Statistics (NCHS) from a 10% systematic sample of death certificates received by their offices during the previous month, regardless of the month or year in which the death occurred.

Inclusion Criteria: All deaths that occur in the United States.

Exclusion Criteria: None.

Useful Features for Injury Research:

- All injury-related deaths are E-coded.
- The CMS data are published in a monthly report and are available 4-6 months after the death occurred; there is also an annual report. In the

middle of 1994 (or with the beginning of the 1994 data year), summary tables of firearm-related deaths were added to the monthly and annual reports.

- The data are coded uniformly by NCHS.

Limitations for Injury Research:

- This data system contains limited information on the circumstances of the injury incident or contributing factors to death.
- This data system probably underestimates deaths associated with some injuries, especially suicide. Because of pending investigations, some deaths remain under investigation for several months.
- Complete information concerning the underlying cause of death is sometimes unavailable when the sample is drawn.
- Degree of detail in reporting may vary among jurisdictions.

NATIONAL VITAL STATISTICS SYSTEM— FINAL MORTALITY DATA

Contact: Mortality Statistics Branch
Division of Vital Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
Phone No. (301) 436-8884
Fax No. (301) 436-7066

Data System Acronym: NVSSF

Purpose: To collect, analyze and publish data obtained from all death certificates filed in vital statistics offices in the United States and its territories.

Description: Information obtained from the death certificate for all persons who died in the United States and its territories. Since 1989, data for most states are obtained on the underlying and contributing cause of death, demographics of the decedent, place of occurrence, place of residence and educational attainment. Deaths are enumerated for the United States, by state, county, metropolitan statistical area (MSA), and places of 10,000 or more population.

Data Collection Methods: In general, the attending physician, medical examiner, or coroner is responsible for completing the medical part of the death certificate, including date and time of death, cause of death, manner of death, and autopsy status. The certificate is then delivered to the funeral director who completes the demographic information and files the certificate with the state vital statistics office where the death occurred. The National Center for Health Statistics (NCHS) purchases from each state either a data tape containing coded information for all death certificates or copies of the death certificates for NCHS coding and data preparation.

Inclusion Criteria: Includes all deaths that occur in the United States and its territories.

Exclusion Criteria: None.

Useful Features for Injury Research:

- All injury-related deaths are E-coded and N-coded.

- This data system contains geographic location where injury occurred for all injury-related deaths.
- This data system enumerates all deaths that occurred in the United States.
- Numbers of deaths and death rates are internationally comparable.

Limitations for Injury Research:

- There may be a lack of uniformity and specificity of medical reporting across jurisdictions.
- This data system contains limited information on the circumstances of the injury incident or factors contributing to death.
- Public access data tapes are usually not available until 2 years after the calendar year of death.
- Beginning in 1989, access to detailed geographic mortality data requires special permission from NCHS.

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

Contact: Office of Surveillance and Analysis
National Center for Chronic Disease Prevention
and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Hwy, N.E., (MS/K30)
Atlanta, GA 30341-3724
Phone No. (770) 488-5292
Fax No. (770) 488-5974

Data System Acronym: BRFSS

Purpose: To collect, analyze and interpret state-specific behavioral risk factor data in order to plan, implement, and monitor public health programs.

Description: Sample survey of households in a state to monitor behaviors related to the leading causes of death. Currently, the BRFSS extends to all 50 states, 3 territories, and the District of Columbia.

Data Collection Methods: Random digit dialing is used by state health departments to obtain self-reported information on persons in a household from a randomly chosen adult. Data are collected monthly.

Inclusion Criteria: Noninstitutionalized adults aged 18 years and older living in households with telephones.

Exclusion Criteria: Persons less than 18 years of age, persons living in institutions, and persons living in households without a telephone are excluded.

Useful Features for Injury Research:

- The core survey for all surveyed states includes information on age, race, sex, educational attainment, income, marital status, alcohol consumption, and drinking and driving habits.
- Fifteen states collected information on safety belt use continuously in the surveys from January 1984 to December 1993.
- An injury module was developed in 1988 that includes questions on smoke detectors, poison control, child safety restraint use, and hot water temperature testing with a thermometer. In the past, only a few states used the module (5 states in 1988, 9 states in 1989, 9 states in 1990, 13 states in 1991, and 9 states in 1992). In 1993, injury questions on child/adolescent safety

restraint use, ability to swim, and a household escape plan were added to the BRFSS core questionnaire; all participating states are now asking these questions in odd years. In 1995, the swimming and fire escape questions were replaced with questions on bicycle helmets and smoke detectors.

- A newly developed optional firearm module was introduced in 1995.
- These data are being used to evaluate state-specific progress toward the PHS Year 2000 Objectives and progress within specific target population subgroups.

Limitations for Injury Research:

- The data are subject to an unknown degree of measurement error due to self-reporting and lack of validity studies.
- This data system may be missing people of lower socioeconomic status without telephones.
- For the injury module, sample size may limit data analysis.

YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM

Contact: Division of Adolescent and School Health
National Center for Chronic Disease Prevention
and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Hwy, N.E., (MS/K33)
Atlanta, GA 30341-3724
Phone No. (770) 488-5330
Fax No. (770) 488-5665

Data System Acronym: YRBSS

Purpose: To monitor risk behaviors primarily of students in grades 9 through 12 associated with the leading causes of morbidity and mortality.

Description: There are four components of the YRBSS: (1) state and local school-based YRBS's conducted by departments of education biennially in the spring, (2) a national school-based YRBS conducted biennially in the spring, (3) a national household-based survey of 12 to 21 year-olds conducted in 1992, and (4) a national mail survey of college students in 2- and 4-year institutions conducted in 1995. Both school-based components use probability samples from defined sampling frames of schools and students in grades 9 through 12. The national school-based YRBS involves a representative sample of students from all 50 states and the District of Columbia. However, only some jurisdictions participate in the state and local YRBS. For example, in the spring of 1993, 43 states and 13 cities participated.

Data Collection Methods: Students are given a self-administered questionnaire to complete in the classroom. The questionnaire in the 1993 survey contained 84 multiple choice questions. The school-based surveys are administered every 2 years.

Inclusion Criteria: School-based surveys of all students in grades 9 through 12 attending public and private schools; household-based survey of all 12 to 21-year-olds in sample households; college student survey.

Exclusion Criteria: Students of grades 1 through 8 and school dropouts are excluded.

Useful Features for Injury Research:

- The survey includes age, race, ethnicity, and sex; tobacco use, alcohol, and other drug use; sexual behaviors (including HIV risk); dietary behaviors; physical activity; and injury risk behavior (seat belt use, motorcycle and

bicycle helmet use, drinking and driving, weapon carrying, fighting, suicide attempt).

- Data are used to monitor the PHS Year 2000 objectives and national education goal for safe, disciplined, and drug-free schools.

Limitations for Injury Research:

- Inferences are limited to high school students and are based on self-reports.
- Underlying causal and contributory factors for risk behaviors are not assessed.
- Since states and schools have the option of omitting questions, many do not ask about suicide, sexual behavior, weapons-carrying, and other sensitive issues. Urban schools are more likely to retain these questions, which may influence the representatives of these data.

NATIONAL TRAUMATIC OCCUPATIONAL FATALITY SURVEILLANCE SYSTEM

Contact: Division of Safety Research
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
1095 Willowdale Road (MSP-180)
Morgantown, WV 26505
Phone No. (304) 285-6013
Fax No. (304) 285-6047

Data System Acronym: NTOF

Purpose: To fill gaps in the knowledge of traumatic work-related injury by compiling a census of occupational injury deaths for all workers in the United States in order to describe the problem and to identify research and prevention priorities.

Description: Census of all E-coded injury deaths that occurred while the person was at work in the United States. Demographic characteristics, employment status, cause of death, and a narrative description of industry, occupation, causes of death, and the injury incident are obtained.

Data Collection Methods: The National Institute of Occupational Safety and Health (NIOSH) collects and automates death certificates from the 52 vital statistics reporting units (50 states, New York City and the District of Columbia) in the United States for workers 16 years of age or older for whom an external cause of death (ICD-9 E code) was noted and for whom the certifier entered a positive response to the "injury at work" item on the certificate.

Inclusion Criteria: Deaths of persons 16 years of age or older who were certified as injured at work and were E-coded.

Exclusion Criteria: Deaths of persons less than 16 years of age or persons who were not certified as injured at work.

Useful Features for Injury Research:

- Narrative text from the death certificate for industry, occupation, causes of death, and injury description is entered and maintained. This narrative text allows analyses that would not be possible using coded data alone.
- Beginning in 1980, data are available for workers who died.

- Data are obtained on external cause of injury (E codes), occupation (Bureau of the Census occupation codes), industry (Standard Industrial Classification codes), age, race, and sex.
- The data system allows the description of the nature and magnitude of the occupational injury problem in the United States, the identification of potential risk factors, the generation of hypotheses for further research, and the setting of research and prevention priorities.

Limitations for Injury Research:

- Motor-vehicle-crashes, homicides and suicides are likely to be under-represented in death certificate surveillance of occupational injuries. From 1980 through 1984, data on work-related homicides and suicides were not available in four states.
- Case identification depends upon whether work-relatedness of the death was recorded on the death certificate.
- There were no guidelines for the completion of the "Injury at Work?" item on the death certificates. Standardized operational guidelines were developed and disseminated to certifiers in 1993.
- Although the death certificate solicits usual employment information, the data may actually reflect current occupation and industry. As well, employment information may be missing or uncodable for some portion of cases (about 20% for occupation and 13% for industry).

NATIONAL ELECTRONIC INJURY SURVEILLANCE SYSTEM

Contact: Division of Hazard and Injury Data Systems
Consumer Product Safety Commission
4330 East West Highway
Washington, DC 20207-0001
Phone No. (301) 504-0539
Fax No. (301) 504-0038

Data System Acronym: NEISS

Purpose: To identify and quantify the risks of injury associated with consumer products in the United States.

Description: NEISS is a probability sample of 91 hospitals that are statistically representative of hospitals with emergency departments (EDs) in the United States and its territories. The database includes those injuries associated with consumer products or recreational activities that are treated in hospital EDs. The U.S. Consumer Product Safety Commission (CPSC) uses these data to set priorities, develop product standards, evaluate the effectiveness of standards, and identify products under CPSC's jurisdiction to be banned or recalled.

Data Collection Methods: Data are abstracted from hospital ED records by coders trained by CPSC supervisors. After the data are coded on paper, they are typed into an online data entry system by the coders and transferred nightly to a central database for access by CPSC staff in Washington, D.C.

Inclusion Criteria: All first visits to a sample hospital emergency department for persons injured in incidents associated with consumer products under CPSC's jurisdiction or in recreation or sports activities are included.

Exclusion Criteria: Occupational injuries, injuries associated with motor vehicles, boats, planes, trains, drugs (except poisoning to persons less than 5 years of age) and other products that are regulated by other federal agencies are usually excluded.

Useful Features for Injury Research:

- This data system serves as a means of locating injured persons so that further information can be obtained concerning the nature and probable cause of the injury.
- Information on the locale of the incident (home, farm, street, place of recreation, etc.) and type of injury are included in this data system.

- Data on product-related injuries are available to CPSC within 72 hours after the injury incident for the majority of the injuries.
- Beginning in June 1992, a special study to obtain national data on nonfatal firearm injuries began for the Centers for Disease Control and Prevention.
- In October 1993, a special study of intentional injuries was started for the Bureau of Justice Statistics at one-third of the NEISS hospitals.
- A special study of work-related injuries is being conducted for the National Institute of Occupational Safety and Health (NIOSH). All work-related injury data on children aged 17 years and younger and persons aged 55 years and older treated in the EDs regardless of product involvement have been collected since 1992. A study of the construction industry for persons of all ages and emphasis on fall-related injuries was initiated in April 1995; and in July 1995, the system was modified to collect work-related injuries for persons of all ages.

Limitations for Injury Research:

- This is a sample of hospital EDs, so injuries treated elsewhere are not reported.
- Only injury-related cases associated with consumer products or recreational activities are reported.
- Injuries involving motor vehicles, airplanes, trains, boats, confirmed suicide attempts, fights and assaults, drug abuse, and alcoholism are excluded.
- There are unique coding systems for product, type of injury and severity of injury codes.
- This data system does not include N codes or E codes, but these are being considered.
- Only the primary injury diagnosis and body part injured are recorded.

LAW ENFORCEMENT OFFICERS KILLED AND ASSAULTED

Contact: Program Support Section
CJIS Division
Federal Bureau of Investigation
9th & Pennsylvania Avenue, N.W.
Washington, DC 20535
Phone No. (202) 324-5015
Fax No. (202) 324-6495

Data System Acronym: LEOKA

Purpose: To monitor law enforcement officer deaths and assaults to enhance awareness of hazards, to develop training curriculum, and to evaluate tactical practices and equipment needs for officers' safety.

Description: Data are obtained on incidence of law enforcement officers either killed or assaulted in the line of duty. Information is available on demographic information on the law enforcement officer (victim) and alleged assailant, time of day, type of assignment, state of occurrence, weapon used, body armor use, and circumstances of the injury incident.

Data Collection Methods: Notification of duty-related deaths is received by the Uniform Crime Reporting (UCR) Program from state and local law enforcement agencies participating in the UCR, or Federal Bureau of Investigation (FBI) field divisions and legal attache offices, or from the Bureau of Justice Assistance, Administrator of the Public Safety Officers Benefits Program. Data pertaining to assaults on law enforcement officers is collected on a monthly basis from UCR program contributors who compile and submit their data directly to the FBI or through their state UCR Programs.

Inclusion Criteria: Death or assault of a law enforcement officer in the line of duty that is reported to the FBI UCR Program.

Exclusion Criteria: None

Useful Features for Injury Research:

- This data system is a unique source of data on law enforcement officers killed and assaulted.
- Data on weapon used, circumstances surrounding the incident, and demographics on victim and alleged assailant are contained in this data system.

Limitations for Injury Research:

- For law enforcement officers assaulted but not killed, there is no information on the nature, severity, or outcome of the injury (e.g., hospitalization, impairment or permanent disability).

NATIONAL INCIDENT BASED REPORTING SYSTEM

Contact: Program Support Section
Federal Bureau of Investigation
9th & Pennsylvania Avenue, N.W.
Washington, DC 20535
Phone No. (202) 324-5015
Fax No. (202) 324-6495

Data System Acronym: NIBRS

Purpose: To collect data on each crime incident for use in law enforcement administration, operation, and management and to provide national crime statistics for legislators, municipal planners and administrators, criminologists, and the general public.

Description: Data are collected on each incident and arrest within 22 offense categories made up of 46 specific crimes (e.g., robbery, drug offenses, kidnaping, sex offenses) and 11 additional arrest categories (drunkenness, disorderly conduct, driving under the influence). The incident report form captures data on demographic information on the victim and offender, victim-offender relationship, type of weapon used, location of offense, criminal activity, and property loss.

Data Collection Methods: NIBRS is currently in the implementation stage and only some jurisdictions are reporting all offenses and arrests that meet NIBRS criteria. Participating law enforcement agencies collect the detailed data and submit them directly or through the Uniform Crime Reporting (UCR) system to the Federal Bureau of Investigation (FBI).

Inclusion Criteria: Reporting of each criminal offense and arrest within 22 offense categories that make up 46 specific crimes called Group A offenses and arrests only that comprise an additional 11 Group B offenses.

Exclusion Criteria: Crimes not reported to the police.

Useful Features for Injury Research:

- Relationship of the victim to offender, type of weapon involved, and circumstances of the incident are included in this data system.
- The NIBRS is an expansion of the UCR Program to obtain detailed information on all assaults, all sex offenses, and homicide offenses.

Limitations for Injury Research:

- Data are voluntarily reported to the FBI by state or local law enforcement agencies.

- Ethnicity is determined by the reporting officer's observation.
- Crimes and offenses are not uniformly being reported from all state and local jurisdictions.
- Data on injuries associated with offenses are limited and are primarily based on law enforcement officers' perceptions and observations.

UNIFORM CRIME REPORTING SYSTEM— SUPPLEMENTAL HOMICIDE REPORTS

Contact: Program Support Section
Federal Bureau of Investigation
9th & Pennsylvania Avenue, N.W.
Washington, DC 20535
Phone No. (202) 324-5015
Fax No. (202) 324-6495

Data System Acronym: UCRSHR

Purpose: To compile national crime statistics on homicides.

Description: Voluntary reporting by local law enforcement agencies to the Federal Bureau of Investigation (FBI) Uniform Crime Reporting (UCR) System on homicides in the United States. This system covers about 98% of the United States population.

Data Collection Methods: A Supplementary Homicide Report (SHR) is completed by the investigating law enforcement agency for all homicides and reported to the state FBI-UCR Program; these data are then forwarded to the FBI.

Inclusion Criteria: All homicides that are reported to the FBI-UCR Program.

Exclusion Criteria: Homicides in law enforcement agencies that do not report to the FBI-UCR Program are excluded.

Useful Features for Injury Research:

- This data system includes information on the relationship between victim and offender, circumstances of the incident, type of weapon used, number of victims and offenders, as well as demographic information of victim and offender (age, race, sex, and ethnic origin).

Limitations for Injury Research:

- These data are voluntarily reported to the FBI by state or local law enforcement agencies.
- The data system usually underestimates the actual incidence of homicides as compared to the National Center for Health Statistics (NCHS) National Vital Statistics System Mortality Data.
- Ethnicity is determined by the reporting officer's observation.

NATIONWIDE PERSONAL TRANSPORTATION SURVEY

Contact: Office of Highway Information Management (HPM-40)
Federal Highway Administration
400 7th Street, S.W.
Washington, DC 20590
Phone No. (202) 366-0160
Fax No. (202) 366-7742

Data System Acronym: NPTS

Purpose: To determine the amount and nature of household travel throughout the year.

Description: The 1990 NPTS was a national telephone survey of 18,000 households collecting information about all trips taken during a designated 24-hour period (travel day). In addition, data are collected for trips of 75 miles or farther (one way) that were taken during the preceding 14-day period ending on the designated travel day. Information on travel purpose, mode of transportation, trip length, day of week, time of day, vehicle used, vehicle occupancy, demographic characteristics of each household member, and, in 1990, for licensed drivers, most recent traffic collision within the past 5 years.

A 1995 NPTS is being conducted with a sample of approximately 24,000 households. The 1995 survey provides much of the same travel information; however, nothing is collected on highway traffic crashes.

Data Collection Methods: A contractor conducted the 1990 NPTS using computer-assisted telephone interviews (CATI). The geographic coverage of the survey included all 50 states and the District of Columbia. Interviews were conducted on a scientific sample of households with telephones stratified by geography and time so that the data collection would be dispersed nearly uniformly throughout the country and across the year-long data collection period. The sampling procedure also controlled by day-of-week to capture variations in personal travel within a week. Each person older than 13 years of age was asked to report all trips taken during the designated travel day, as well as trips of 75 miles or longer taken during the 14-day travel period ending on the travel day. Adult household members were asked to report on trips taken by children aged 5 to 13 years.

Inclusion Criteria: Civilian, noninstitutionalized population aged 5 years and older is included.

Exclusion Criteria: Household residents less than 5 years old are excluded.

Useful Features for Injury Research:

- This data system allows for comparisons of travel (e.g., person miles traveled, annual person trips) by household characteristics and the demographics of the household travelers.
- These data are useful as a measure of potential exposure to motor-vehicle collisions.
- In 1990, data for licensed drivers are obtained on the most recent motor-vehicle collision that occurred within the last 5 years on a public highway or road and whether the crash resulted in an injury or fatality.
- Information on seat belt use is being collected in the 1995 NPTS.

Limitations for Injury Research:

- Only the 1990 NPTS provides data on whether the motor-vehicle-crash resulted in an injury or fatality; no further details are given about the injury or who was injured or killed.
- The NPTS provides a rich source of travel data with the capacity to link characteristics of the traveler to characteristics of the trips. However, no data are available on the functional classification of the highways used for each trip.

HEALTH CARE FINANCE ADMINISTRATION— 5% SAMPLE STANDARD ANALYSIS FILE (SAF) AND MEDICARE PROVIDER ANALYSIS AND REVIEW (MEDPAR) FILE

Contact: Data Release Policy Staff
Health Care Finance Administration
7500 Security Boulevard, Room N3-11-17
Baltimore, MD 21244
Phone No. (410) 786-3691
Fax No. (410) 786-6418

Data System Acronym: HCFA

Purpose: To provide Medicare Claims data files for administrative and research purposes.

Description: Two sets of files have been established that provide Medicare claims data useful for injury research. One set, the Medicare Provider Analysis and Review Files (MEDPAR), provide national and state claims data, including beneficiary demographics, medical diagnosis (e.g., nature of injury diagnosis (N codes)), surgical procedures, utilization of hospital resources, and billing information. The other set, 5% Sample Standard Analysis Files (SAFs), provide final action claims data for a 5% sample of beneficiaries. Data are available for hospital inpatient, hospital outpatient, hospice, skilled nursing facility, and physician and medical supplier services.

Data Collection Methods: Analysis files have been developed by automating Medicare claims filed to Health Care Finance Administration (HCFA).

Inclusion Criteria: All bills submitted as Medicare claims to HCFA.

Exclusion Criteria: None.

Useful Features for Injury Research:

- Data can be analyzed on reimbursement for medical care and utilization of services for Medicare claims with injury diagnoses (N codes).
- Data are most useful for analysis of costs for persons aged 65 and over.

Limitations for Injury Research:

- Data are not obtained on external cause of injury, e.g., no E-coded data.

- The injury diagnosis (N code) data have not been validated with hospital records.
- There is lack of uniformity in assigning diagnosis codes for Medicare claims among hospitals and other services.

INDIAN HEALTH SERVICE — AMBULATORY CARE SYSTEM

Contact: Patient Care Statistics Branch
Indian Health Service
12300 Twinbrook Parkway, Suite 450
Rockville, MD 20852
Phone No. (301) 443-1180
Fax No. (301) 443-1522

Data System Acronym: IHSACS

Purpose: To describe the ambulatory health care provided to Indians by the Indian Health Service (IHS).

Description: A manual or automated Ambulatory Patient Care Report is completed for all ambulatory medical care services provided at IHS or tribally operated facilities.

Data Collection Methods: Data are collected through computer input at health facilities and sent through the IHS area offices to the IHS Data Center for processing.

Inclusion Criteria: All ambulatory medical care services supplied at IHS or tribally operated facilities.

Exclusion Criteria: Services other than direct ambulatory medical care at IHS or tribally operated facilities are excluded.

Useful Features for Injury Research:

- This data system provides an ambulatory injury database for American Indians and Alaska Natives on or near Indian reservations.
- Data are obtained on the nature of injury (N codes), external cause of injury (E codes), locale where the injury occurred, and demographic characteristics of the patient.
- This data system is useful for identifying high risk groups and injury problems in need of further epidemiologic study and has been useful in developing and evaluating IHS injury prevention programs.

Limitations for Injury Research:

- Data on the anatomic location of the external cause of injury are limited.

- ICD-9-CM N codes and E codes are grouped into broad categories on the report form, and these data are not systematically edited for accuracy, completeness, and consistency.
- Some of the tribally operated facilities do not report or underreport data.

INDIAN HEALTH SERVICE — INPATIENT CARE SYSTEM

Contact: Patient Care Statistics Branch
Indian Health Service
12300 Twinbrook Parkway, Suite 450
Rockville, MD 20852
Phone No. (301) 443-1180
Fax No. (301) 443-1522

Data System Acronym: IHSICS

Purpose: To describe the direct inpatient health care provided to Indians by the Indian Health Service (IHS).

Description: A manual or automated “Clinical Record Brief-IHS Inpatient Services” is completed for all admissions to all IHS and tribally operated hospitals.

Data Collection Methods: Data are collected through computer input at IHS and tribally operated hospitals and sent through the IHS area offices to the IHS Data Center for processing.

Inclusion Criteria: All admissions to an IHS or tribally operated hospital are included.

Exclusion Criteria: Outpatient visits to an IHS or tribally operated hospital are excluded.

Useful Features for Injury Research:

- This database provides an inpatient injury database for American Indians and Alaska Natives on or near Indian reservations.
- This data system contains ICD-9-CM N codes and E codes, and patient demographics.
- These data have been useful in developing and evaluating IHS injury prevention programs.

Limitations for Injury Research:

- Some of the E codes are nonspecific.
- At least one of the tribally operated hospitals does not report data.

NATIONAL CHILD ABUSE AND NEGLECT DATA SYSTEM

Contact: National Center on Child Abuse and Neglect
Administration on Children, Youth and Families
Department of Health and Human Services
Switzer Building, Room 2006
330 C Street, S.W.
Washington, DC 20201
Phone No. 1-800-394-3366
Fax No. (202) 205-8221

Data System Acronym: NCANDS

Purpose: To collect, compile, analyze, and make available state child abuse and neglect reporting information.

Description: The NCANDS consists of two components, the Summary Data Component (SDC) and the Detailed Case Data Component (DCDC). For the SDC, child protective services agencies in all 50 states, the District of Columbia and territories, as well as the armed services, voluntarily submit aggregate data to the National Center on Child Abuse and Neglect (NCCAN) on the number of reports and children referred for investigation of alleged maltreatment (neglect, physical abuse, sexual abuse, medical neglect, and emotional or psychological maltreatment) and the outcomes of those investigations. The SDC database provides information on key aggregate indicators of state child abuse and neglect statistics, including data on victims, reports, investigations, and the relationship of perpetrators to victims. Annual reports are published on the results of the SDC.

A subset of states provides automated case-level data for the DCDC. The DCDC provides more details about the victim and the perpetrator, including demographic characteristics, family characteristics or risk factors, and history of prior maltreatment and abuse. Periodic reports are issued on highlights of findings from the DCDC.

Data Collection Methods: In almost all participating jurisdictions, data are obtained from the automated state child abuse registries or the automated state child welfare social services information systems.

Inclusion Criteria: All reported incidents of child maltreatment to state or territorial child protective services agencies.

Exclusion Criteria: Incidents of child maltreatment not reported to state or territorial agencies are excluded.

Useful Features for Injury Research:

- This data system contains demographic data on the victims.
- The DCDC of the NCANDS provides information on characteristics of victims by each type of maltreatment.

Limitations for Injury Research:

- While aggregate data is available from all states, case-level data is available only from a subset of states.

NATIONAL INCIDENCE STUDY OF CHILD ABUSE AND NEGLECT

Contact: National Center on Child Abuse and Neglect
Administration on Children, Youth and Families
Department of Health and Human Services
Switzer Building, Room 2006
330 C Street, S.W.
Washington, DC 20201
Phone No. 1-800-394-3366
Fax No. (202) 205-8221

Data System Acronym: NIS

Purpose: To estimate the number of children under age 18 who are abused and neglected in the United States and to monitor changes in maltreatment over time.

Description: Results of the first (NIS-1) and second (NIS-2) National Incidence Studies have been published; the third (NIS-3) study is expected to be published in 1996. Data are collected on cases of child maltreatment which were recognized and reported to the study by "community professionals" in a probability sample of counties (e.g., 26 counties in NIS-1 and 29 counties in NIS-2) throughout the United States. The "community professionals" who participated in the studies included the local Child Protective Services (CPS) staff as well as key respondents in a variety of other non-CPS agencies (e.g., schools, hospitals, police departments, juvenile probation authorities, public health departments, day care centers, and social/mental health services) who were likely to come in contact with maltreated children. Cases reported to the study were assessed for their conformity to a set of standardized definitional criteria and only those cases which fit the standards were used to compute national estimates. Data were obtained on physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, and educational neglect.

Data Collection Methods: CPS agencies submitted forms on cases which had been reported during the time period and which were accepted for investigation by the agency. In addition, targeted professionals in a broad spectrum of community agencies remained on the lookout (a sentinel approach) for abuse and neglect cases that met the study criteria. These professionals from non-CPS agencies then submitted study data forms on each maltreated child they encountered during the study time frame. Methods were employed to avoid duplicate reporting for the same child.

Inclusion Criteria: The case must have been classifiable into an allowable abuse or neglect category on the basis of the caretaker's actions or inactions,

must have been perpetrated by an allowable caretaker (generally a parent / guardian), and must have had either documented harm or injury from abuse or neglect, or was deemed to be at serious risk of harm.

Exclusion Criteria: Residents 18 years of age or older, or nonresidents of study counties were excluded.

Useful Features for Injury Research:

- The NIS databases provide national estimates of the number of abused and neglected children.
- Data are gathered through a broad-based network of community professionals.
- The NIS database variables have been standardized and coded by trained in-house staff.

Limitations for Injury Research:

- The NIS databases provide only national estimates of child abuse and neglect.

FATAL ACCIDENT REPORTING SYSTEM

Contact: Fatal Accident Reporting System Branch —
Accident Investigation Division
National Highway Traffic Safety Administration
Department of Transportation
400 Seventh Street, S.W. (NRD-32)
Washington, DC 20590
Phone No. (202) 366-4709
Fax No. (202) 366-7078

Data System Acronym: FARS

Purpose: To provide an overall measure of highway safety, to help identify traffic safety problems, to suggest solutions, and to help provide an objective basis to evaluate the effectiveness of motor vehicle safety standards and highway safety programs.

Description: Information is collected on circumstances surrounding all motor-vehicle-related crashes in which a fatality occurred within 30 days of the crash, including details on all motor vehicles and persons involved in the fatal crash. Each year's data consist of three SAS files (person, vehicle, and circumstance) containing identifiers to allow merging of these files.

Data Collection Methods: State Fatal Accident Reporting System (FARS) analysts collect the information on all motor-vehicle-related crashes with a fatality occurring within 30 days of the incident and transmit the data to a central computer data file.

Inclusion Criteria: All crashes involving a motor vehicle in transport on a trafficway that resulted in a fatality within 30 days of the crash in the 50 states, the District of Columbia and Puerto Rico.

Exclusion Criteria: Motor-vehicle-crashes that did not result in a fatality within 30 days of the incident or occurred entirely off the trafficway; motor-vehicle-crashes that were intentional (e.g., homicides, suicides, police intervention) or directly caused by cataclysm; motor-vehicle-crashes involving watercraft or aircraft, and motor-vehicle-crashes involving a railway train prior to involvement of another motor vehicle in transport are excluded.

Useful Features for Injury Research:

- Information is available in this data system on all persons involved in the fatal motor-vehicle-related crash, on circumstances of the crash including

location, on the weather and type of road, and on all motor vehicles involved in the crash.

- Includes work-related fatalities for persons working in the transportation industry (e.g., bus drivers, truck drivers).
- This data system is the most comprehensive, computerized national census of fatal motor-vehicle-related crashes.
- Data are standardized from state to state; data are valid for national, state, county, and local totals.

Limitations for Injury Research:

- This data system includes only motor vehicle, traffic-related deaths that occur within 30 days of the crash.
- No information is collected on the race of the persons involved in the crash.
- This data system contains no E-coding.
- No medical information is available on survivors of the crash other than injury severity and whether they were taken to a medical facility.
- The police-reported injury severity index is broadly defined (e.g., killed, incapacitated, non-incapacitating injury, possible injury, no injury, unknown).
- The FARS and the NASSCDS data systems cannot be merged.

NATIONAL ACCIDENT SAMPLING SYSTEM — CRASHWORTHINESS DATA SYSTEM

Contact: Field Operations Branch
National Center for Statistics & Analysis
National Highway Traffic Safety Administration
Room 6213, Nassif Building (NRD-32)
400 7th Street, S.W.
Washington, DC 20590
Phone No. (202) 366-5390
Fax No. (202) 366-5374

Data System Acronym: NASSCDS

Purpose: To collect statistical data on motor-vehicle-related crashes to aid in the development, implementation, and evaluation of motor vehicle and highway safety countermeasures.

Description: The NASSCDS (1988-present) is a probability sample of motor-vehicle-related crashes that occur on a public trafficway where (1) the crash was reported to the local police and then to a central state agency to be used in compiling statewide data; (2) where either an injury occurred or where there was property damage as a result of the crash; and (3) where at least one passenger car, light truck or van (less than 10,000 pounds gross vehicle weight rating) involved in the crash was towed due to damage. The NASSCDS consists of seven SAS files (accident, accident events, general vehicle, exterior vehicle, interior vehicle, occupant assessment, and occupant injury) which can be merged. The NASSCDS includes data on injuries to occupants of towed passenger cars, light trucks, and vans involved in a crash.

Prior to 1988, the National Accident Sampling System (NASS) was a probability sample of all motor-vehicle-related crashes that occurred on a public trafficway. For each year from 1979 through 1986, NASS consists of five SAS files (accident, pedestrian, vehicle, driver, and occupant) which can be merged. Data on injuries to pedestrians and occupants of all motor vehicles (including motorcycles, medium/heavy trucks, and buses) involved in a crash are also included.

Data Collection Methods: NASSCDS investigators located at 24 sites in 17 of the contiguous states obtain information from police traffic crash reports, medical records, physical evidence (scene characteristics and vehicle damage profile) and interviews with individuals associated with the traffic crashes to complete the NASSCDS forms.

Inclusion Criteria: Motor-vehicle-related crashes of passenger car, light truck, or van where at least one light vehicle is towed due to damage.

Exclusion Criteria: Any nonmotor-vehicle crash, or any motor-vehicle-related crash not occurring on or initiated on a trafficway are excluded. Motorcycles, medium/heavy trucks, and buses are not included in the NASSCDS.

Useful Features of Injury Research:

- Information is available in the data system on location of crash, motor vehicle and driver, seat belt usage, the AAAM Accident Injury Severity code (using AIS-90 beginning in 1993), a crash severity code measured in velocity change, whether persons involved in the crash were injured, required a hospital stay, and /or lost days of work.

Limitations for Injury Research:

- The FARS and NASSCDS cannot be merged.
- This data system provides valid estimates on the national level only.
- The police reported injury severity index is broadly defined (e.g., killed, incapacitated, non-incapacitating injury, possible injury, no injury, unknown).

NATIONAL ACCIDENT SAMPLING SYSTEM — GENERAL ESTIMATES SYSTEM

Contact: National Center for Statistics and Analysis
National Highway Traffic Safety Administration
400 7th Street, S.W. (NRD-30)
Washington, DC 20590
Phone No. (202) 366-5351
Fax No. (202) 366-7078

Data System Acronym: NASSGES

Purpose: To provide estimates of national characteristics of police-reported motor-vehicle-crashes.

Description: The NASSGES is a probability sample of all motor-vehicle-related crashes that occur on a public trafficway that were reported to the local police and then to a central state agency to be used in compiling statewide data. Data are obtained on those incidents where either an injury occurred or where there was property damage as a result of the crash. The NASSGES database contains accident, vehicle/driver and person files. The person file has data on age, sex, injury severity, safety restraint use, and alcohol/drug involvement.

Data Collection Methods: Data collectors routinely visit police departments and review all new police traffic crash reports. From these reports, they draw a sample and make copies of the selected reports to send to a central contractor for coding. Trained personnel then interpret and code the data directly from the police traffic crash reports onto an electronic file.

Inclusion Criteria: Motor-vehicle-related crashes reported to the police that involved an injury or property damage.

Exclusion Criteria: Motor-vehicle-related crashes not reported to police are excluded.

Useful Features for Injury Research:

- Information is available on location of the crash, vehicle characteristics, demographics, injury severity, and other characteristics of the persons involved.

Limitations for Injury Research:

- Data on injury, restraint use, and alcohol and drug involvement are based on police officer's observation at the scene.

- FARS and NASSGES data cannot be merged.
- The police-reported injury severity index is broadly defined (e.g., killed, incapacitated, non-incapacitating injury, possible injury, no injury, unknown).
- The police-reported crash definition varies by jurisdiction.
- The data system only provides national estimates.

NATIONAL OCCUPANT PROTECTION USE SURVEY

Contact: National Center for Statistics and Analysis
National Highway Traffic Safety Administration
400 7th Street, S.W. (NRD-31)
Washington, DC 20590
Phone No. (202) 366-5362
Fax No. (202) 366-7078

Data System Acronym: NOPUS

Purpose: To obtain national estimates of passenger vehicle occupant shoulder belt use, motorcycle helmet use, and child restraint use.

Description: The NOPUS is an observational study based on a probability sample with three components: the “moving traffic study,” which provides information on overall shoulder belt use; the “controlled intersection study,” which provides more detailed information about shoulder belt use by type of vehicle, characteristics of the belt users and child restraint use; the “shopping center study,” which provides information on rear seat belt use, and shoulder belt misuse.

In the “controlled intersection study,” child restraint information was collected for children under five in the front and second seats of the vehicle. Helmet use for motorcycle riders and passengers was also recorded. Every day of the week and all daylight hours (8 a.m. to 6 p.m.) were covered by the study.

Data Collection Methods: Data are collected by direct observation by pairs of observers at randomly selected sites across the United States.

Inclusion Criteria: Observations of belt use and child restraint use for occupants of passenger cars and light trucks (vans, minivans, sports utility vehicles, and pickup trucks), and observations of helmet use for drivers and passengers of motorcycles.

Exclusion Criteria: Observations in vehicles other than passenger cars, light trucks, or motorcycles are excluded.

Useful Features for Injury Research:

- Data are obtained on restraint use by age, race, and sex of occupant based on the best judgement of the observers.
- Data are obtained on shoulder belt use by region of the country, type of area (city, suburban, or rural), day of week, and time of day.

- Data are obtained on rear seat belt use and lap belt use.

Limitations for Injury Research:

- No nighttime estimates are contained in this data system.
- Data cannot be used to make state-based estimates.

MONITORING THE FUTURE STUDY

Contact: Division of Epidemiology and Prevention Research
National Institute on Drug Abuse
Parklawn Building, Room 9A-53
5600 Fishers Lane
Rockville, MD 20857
Phone No. (301) 443-6637
Fax No. (301) 443-2636

Data System Acronym: MTFS

Purpose: To assess the changing lifestyles, values, and preferences of American youth.

Description: This comprehensive survey obtains national probability samples follow-up of eighth, tenth, and twelfth graders. There is also a longitudinal follow-up of a subset of students surveyed. Data collected include drug use (by type of drug), alcohol use, tobacco use, and related attitudes. This survey collects information on motor vehicle accidents while driving under the influence of drugs or alcohol, delinquent behaviors, and victimization resulting in an injury with or without a weapon.

Data Collection Methods: Self-administered questionnaire in school classrooms.

Inclusion Criteria: All students in a particular classroom in a particular grade in a selected school on the day the survey is administered.

Exclusion Criteria: Absentees on the day of the survey and dropouts are excluded.

Useful Features for Injury Research:

- This survey has collected data annually on seniors since 1975. The eighth and tenth graders were added in 1991. Data on college students and young adults are available each year starting with 1976. The use of alcohol and other drugs puts youth at risk for being victims or perpetrators of violence. This survey collects data on delinquent behaviors and victimization.

Limitations for Injury Research:

- The deviance and victimization questions are only asked of a subset of the seniors.
- Public release tapes do not include the study design variables.
- Publications presently do not provide standard errors.

DRUG ABUSE WARNING NETWORK

Contact: Office of Applied Studies
Substance Abuse and Mental Health Services Administration
5600 Fishers Lane, Room 16-105
Rockville, MD 20857
Phone No. (301) 443-9846
Fax No. (301) 443-9847

Data System Acronym: DAWN

Purpose: To serve as an indicator of the severity, scope, and nature of the nation's substance abuse problem.

Description: DAWN data are collected from over 500 hospital emergency departments (EDs) and approximately 150 medical examiner (MEs) jurisdictions throughout the United States. Information is obtained on all ED visits and ME cases that are induced by or related to drug abuse. ED visits include the nonmedical use of a legal drug or any use of an illegal drug or chemical substance for psychic effects, dependence, or suicide attempt or gesture. ME cases are reportable if the deaths are directly caused by drugs (e.g., fatal overdoses) or related to substance abuse (e.g., unintentional drug-related death or homicide).

Data Collection Methods: A trained reporter reviews the medical/coroner/medical examiner records to identify DAWN cases and abstract demographic and substance information. The reporter fills out a 1-page form for each drug-abuse-related episode and submits the completed forms to the DAWN Central Office for processing. Substance Abuse and Mental Health Services Administration publishes the DAWN annual emergency department and medical examiner reports.

Inclusion Criteria: Drug-abuse-related incidents/deaths seen at a participating ED or ME jurisdiction that meet case criteria.

Exclusion Criteria: Drug-related incidents that are not treated in the emergency department.

Useful Features for Injury Research:

- Demographic information is obtained for all cases.

Limitations for Injury Research:

- This data system contains no information on injury severity.
- Using DAWN ME data to monitor national trends and patterns may have an unknown bias because the system is not a probability sample of ME jurisdictions across the United States.
- The DAWN ED survey, however, is a national probability sample of hospital EDs.
- This information is based on ED visits, not persons.

CENSUS OF AGRICULTURE — 1992

Contact: Agriculture Division
Bureau of Census
Department of Commerce
3737 Branch Avenue
Suitland, MD 20746
Phone No. (301) 763-1113 or 1-800-523-3215
Fax No. (301) 763-8315

Data System Acronym: BCCOA

Purpose: To report on injuries or deaths connected with farm or ranch work in 1992.

Description: A census of all injuries that required paid medical care, or resulted in lost worktime or death to the farm operator, family members, and hired workers. Demographic data are obtained only on the farm operator.

Data Collection Methods: A self-administered questionnaire is mailed to all farm operators, who then complete the form and return it to the Bureau of Census.

Inclusion Criteria: All injuries connected with farm or ranch work that required paid medical care, or resulted in lost worktime or death.

Exclusion Criteria: Minor injuries that did not require paid medical care and did not result in lost worktime are excluded.

Useful Features for Injury Research:

- Data are obtained on the number of injuries and deaths to farm workers.

Limitations for Injury Research:

- No information is obtained on the nature, cause, or severity of injury, or on the characteristics of the person injured.
- In the earlier 1974 Census of Agriculture, injuries, illnesses, and deaths were reported for those which required more than first aid treatment and were farm work connected. The number of injuries and illnesses cannot be separated.

NATIONAL FIRE INCIDENT REPORTING SYSTEM

Contact: National Fire Data Center
Fire Administration
16825 S. Seton Avenue
Emmitsburg, MD 21727
Phone No. (301) 447-1340
Fax No. (301) 447-1213

Data System Acronym: NFIRS

Purpose: To collect and analyze fire incident information on the frequency, cause, spread, and extinguishment of fires; on the number, nature, and causes of injuries and deaths resulting from fires; and on property loss caused by fires.

Description: Local fire departments from 42 states and 30 major metropolitan areas voluntarily report on fire incidents and civilian and fire service casualties.

Data Collection Methods: At or after the incident, a local fire officer who was at the scene fills out standard NFIRS incident and casualty reporting forms and submits them to the state office. Fire-related data are sent quarterly to the National Fire Data Center, where it is added to the national database.

Inclusion Criteria: All reported fires from participating local fire departments.

Exclusion Criteria: None.

Useful Features for Injury Research:

- Information is obtained on how the fire started, smoke detectors and sprinklers, and persons injured during the fire. For civilian casualties, data are obtained on age and sex of the injured person, condition preventing escape, activity at the time of injury, nature and cause of injury, and body part affected.

Limitations for Injury Research:

- NFIRS relies on voluntary reporting and is not a statistical sample of local fire departments in the United States.

**SUMMARY TABLES OF SYSTEM CHARACTERISTICS
AND AVAILABLE DATA**

Table 1. How Often Data Are Collected and Latest Year Available, by Data System

Data System ¹	How Often Survey Conducted?					Most Recent Year Data Available
	Biennially	Annually	Monthly	Continuously	Periodically	
CFOI				X		1994
SOII		X				1994
NCVS			X			1994
NAMCS		X				1993
NHAMCS		X				1993
NHDS		X				1993
NHIS				X		1994
NMFS93					X	1993
NVSSS				X		1994
NVSSF				X		1993
BRFSS				X		1994
YRBSS	X					1995
NTOF				X		1992
NEISS				X		1995
LEOKA				X		1994
NIBRS				X		—
UCRSHR				X		1994
NPTS					X	1990
HCFA				X		1994
IHSACS				X		1994
IHSICS				X		1994
NCANDS		X				1993
NIS					X	1993
FARS				X		1995
NASSCDS				X		1994
NASSGES		X				1995
NOPUS					X	1994
MTFS		X				1995
DAWN				X		1994
BCCOA					X	1992
NFIRS				X		1993

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 2. Methods Used to Distribute Data to the Public, by Data System

Data System ¹	Data Tape	Codebook	Analyses Upon Req	Publication
CFOI	X	X	X	X
SOII			X	X
NCVS	X	X		X
NAMCS	X	X	X	X
NHAMCS	X	X	X	X
NHDS	X	X	X	X
NHIS	X	X		X
NMFS93	X	X		X
NVSSS		X		X
NVSSF	X	X		X
BRFSS	X	X	X	X
YRBSS	X	X		X
NTOF		X	X	X
NEISS	X	X	X	
LEOKA	X	X	X	X
NIBRS	X	X	X	X
UCRSHR	X	X	X	X
NPTS	X	X	X	X
HCFA	X	X	X	X
IHSACS				X
IHSICS				X
NCANDS				X
NIS	X	X		X
FARS	X	X	X	X
NASSCDS	X	X	X	X
NASSGES	X	X	X	X
NOPUS				X
MTFS	X	X		X
DAWN			X	X
BCCOA	X	X	X	X
NFIRS	X	X	X	X

¹See the Directory of Abbreviations for definitions of data system acronyms.

CD-ROM	Other	Other Specify
	X	Investigating making data available in electronic files
X		
X	X	Sets
X	X	Sets
X	X	Diskettes, CDC WONDER
X		
	X	Future release on CD-ROM
	X	Data are published monthly
	X	Injury data requests to National Clearinghouse
	X	By request for a processing fee
	X	By request for a processing fee
	X	By request for a processing fee
	X	Diskettes
	X	Data tapes available to specified persons
	X	Data tapes available to specified persons
	X	Diskettes available from National Clearinghouse
X		
X		
X		
X	X	Online data services (ARI network/dialog/CompuServe)

Table 3. Geographic Level for Which Injury-Related Estimates can be Obtained, by Data System

Data System ¹	National	Regional	State	County
CFOI	X	X	X	X
SOII	X		X	
NCVS	X	X		
NAMCS	X	X		
NHAMCS	X	X		
NHDS	X	X		
NHIS	X	X		
NMFS93	X	X		
NVSSS	X			
NVSSF	X	X	X	X
BRFSS	X	X	X	X
YRBSS	X			
NTOF	X	X	X	
NEISS	X			
LEOKA	X	X	X	X
NIBRS	X	X	X	X
UCRSHR	X	X	X	X
NPTS	X	X		
HCFA	X	X	X	X
IHSACS	X	X	X	X
IHSICS	X	X	X	X
NCANDS	X	X	X	
NIS	X			
FARS	X	X	X	X
NASSCDS	X			
NASSGES	X			
NOBUS	X	X		
MTFS	X	X		
DAWN	X			
BCCOA	X	X	X	X
NFIRS	X	X	X	X

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other	Other Specify
X	No state/county codes in user research file
X	Larger population subdomains can be examined in populous states
X	Publish cities of 10,000+, data tape cities of 100,000+
X	Metropolitan areas by size
X	Zip code
X	IHS area and Service unit
X	IHS area and Service unit
X	City level using GSA worldwide geographic location codes
X	21 metropolitan areas
X	Zip code

Table 4a. Type of Injury-Related Data Obtained, by Data System

Data System ¹	Morbidity	Mortality	Incidence	Prevalence
CFOI		X	X	
SOII	X		X	X
NCVS	X		X	
NAMCS	X			
NHAMCS	X			
NHDS	X	X		
NHIS	X		X	X
NMFS93		X	X	X
NVSSS		X		
NVSSF		X		
BRFSS				
YRBSS				
NTOF		X	X	X
NEISS	X		X	
LEOKA	X	X	X	X
NIBRS		X	X	X
UCRSHR		X	X	X
NPTS				
HCFA	X	X	X	
IHSACS	X			
IHSICS	X			
NCANDS		X	X	
NIS	X	X		X
FARS		X	X	X
NASSCDS	X	X	X	
NASSGES	X	X	X	
NOBUS				
MTFS				
DAWN	X	X		
BCCOA		X	X	
NFIRS	X		X	X

¹See the Directory of Abbreviations for definitions of data system acronyms.

Behavior Risk Factor	Restricted Activity	Length of Hospitalization
	X	
X		X
		X
	X	
X	X	
X		
X		
X	X	
		X
		X
X		
X		X
X		
X		
X		
X		

Table 4b. Type of Injury-Related Data Obtained, by Data System

Data System ¹	Disability/ Impairment	Medical Care Charges	Expected Source of Payment	Access to Medical Care	Health Care Use
CFOI					
SOII	X				
NCVS		X	X		X
NAMCS			X		X
NHAMCS			X		X
NHDS			X		X
NHIS	X			X	X
NMFS93	X		X	X	X
NVSSS					
NVSSF					
BRFSS					
YRBSS					
NTOF					
NEISS					
LEOKA	X				X
NIBRS	X				
UCRSHR					
NPTS					
HCFA		X	X		X
IHSACS					
IHSICS					X
NCANDS	X				
NIS					
FARS	X				X
NASSCDS					
NASSGES					
NOPUS					
MTFS					
DAWN					
BCCOA	X				
NFIRS	X	X			

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other	Other Specify
X	Surgical procedures
X	For disabled, adl/iadl, functional limitations
X	Out-of-pocket care expenses
X	Injury data on all individual crime incidents and arrests
X	Detailed injury data on murders
X	Motor-vehicle-crashes that involved injury or death; severity
X	Type of abuse; e.g., physical, sexual, neglect; disabilities (DCDC)
X	Alcohol/drug involvement/ tests for injured person and driver
X	Intentional injury, victimization
X	Injured/ill workers with/without work days lost

Table 5a. Sources of Injury-Related Data, by Data System

Data System ¹	Physician Record	EMS Record	ED Record	Outpatient Record	Hospital Discharge Record	Trauma Registry	Specialized Injury Registry
CFOI	X	X	X			X	X
SOII							
NCVS							
NAMCS	X						
NHAMCS			X	X			
NHDS					X		
NHIS							
NMFS93							
NVSSS							
NVSSF							
BRFSS							
YRBSS							
NTOF							
NEISS			X				
LEOKA							
NIBRS							
UCRSHR							
NPTS							
HCFA					X		
IHSACS				X			
IHSICS					X		
NCANDS							
NIS							
FARS		X	X				
NASSCDS	X	X	X		X	X	
NASSGES							
NOPUS							
MTFS							
DAWN			X				
BCCOA							
NFIRS							

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 5b. Sources of Injury-Related Data, by Data System

Data System ¹	Rehab Facility Record	Medical Examiner/Coroner Reports	Vital Statistics Record	Police Report	Fire Department Report	Worker's Comp Record	Medicaid/Medicare Public Bill
CFOI		X	X	X		X	
SOII							
NCVS							
NAMCS							
NHAMCS							
NHDS							
NHIS							
NMFS93		X	X				
NVSSS			X				
NVSSF			X				
BRFSS							
YRBSS							
NTOF			X				
NEISS							
LEOKA				X			
NIBRS				X			
UCRSHR				X			
NPTS							
HCFA							X
IHSACS							
IHSICS							
NCANDS							
NIS							
FARS		X	X	X			
NASSCDS		X		X	X		
NASSGES				X			
NOPUS							
MTFS							
DAWN		X					
BCCOA							
NFIRS					X		

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 5c. Sources of Injury-Related Data, by Data System

Data System ¹	Private Insurance Claim	Social Services Record	Telephone Interview	In-Person Interview
CFOI	X		X	X
SOII				
NCVS			X	X
NAMCS				
NHAMCS				
NHDS				
NHIS			X	X
NMFS93			X	X
NVSSS				
NVSSF				
BRFSS			X	
YRBSS				
NTOF				
NEISS				
LEOKA			X	
NIBRS			X	
UCRSHR			X	
NPTS			X	
HCFA				
IHSACS				
IHSICS				
NCANDS		X		
NIS		X		X
FARS				
NASSCDS			X	X
NASSGES				
NOPUS				
MTFS				
DAWN				
BCCOA				
NFIRS				

¹See the Directory of Abbreviations for definitions of data system acronyms.

Self-Admin (Mail)	Other	Other Specify
X	X	Up to 25 data sources used for verification
X	X	Mail questionnaire to employers
	X	Self-administered questionnaire in classroom
X		
	X	Local police complete report forms, submit to state and then to FBI
	X	Local police complete report forms, submit to state and then to FBI
X	X	Reports by targeted community service professionals
X		
	X	Observation
	X	Self-administered questionnaire in classroom
X		

Table 6. Unit of Analysis for Injury-Related Data, by Data System

Data System ¹	Injury Incident	Injured Person	Other
CFOI	X		
SOII	X	X	X
NCVS	X	X	X
NAMCS	X		
NHAMCS	X		
NHDS			X
NHIS	X	X	X
NMFS93		X	
NVSSS		X	
NVSSF		X	
BRFSS			X
YRBSS			X
NTOF	X	X	
NEISS		X	
LEOKA	X	X	
NIBRS	X	X	
UCRSHR		X	
NPTS	X		
HCFA	X	X	
IHSACS	X	X	
IHSICS	X	X	
NCANDS	X	X	X
NIS		X	
FARS	X	X	X
NASSCDS	X	X	X
NASSGES	X	X	X
NOBUS			X
MTFS	X	X	
DAWN	X		X
BCCOA		X	X
NFIRS		X	

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other Specify

Industry, occupation

Victims of violent crime

A hospital discharge

With some limitations

Respondents to telephone interview about risk behaviors

Respondents of self-administered questionnaire

Aggregate numbers of abuse and neglect reported by states; incident and child data (DCDC)

Also can analyze by accident and vehicle characteristics

Types and kinds of injuries to crash victims

Motor vehicles

Passenger vehicle occupant

Drug mentions per episode by types of drug

Can also analyze by operator/family members/hired workers

Table 7a. Demographic Characteristics Obtained for Injured Persons, by Data System

Data System ¹	Age	DOB	Sex	Race
CFOI	X	X	X	X
SOII	X		X	X
NCVS	X		X	X
NAMCS	X	X	X	X
NHAMCS	X	X	X	X
NHDS	X		X	X
NHIS	X	X	X	X
NMFS93	X	X	X	X
NVSSS	X		X	X
NVSSF	X	X	X	X
BRFSS				
YRBSS	X		X	X
NTOF	X	X	X	X
NEISS	X		X	
LEOKA	X		X	X
NIBRS	X		X	X
UCRSHR	X		X	X
NPTS				
HCFA	X	X	X	X
IHSACS	X	X	X	X
IHSICS	X	X	X	X
NCANDS	X		X	X
NIS	X	X	X	X
FARS	X		X	
NASSCDS	X		X	X
NASSGES	X		X	
NOBUS				
MTFS	X	X	X	X
DAWN	X		X	X
BCCOA	X	X	X	X
NFIRS	X		X	

¹See the Directory of Abbreviations for definitions of data system acronyms.

Ethnicity	Marital Status	Occupation	Industry
X		X	X
X		X	X
X	X	X	
X			
X			
	X		
X	X	X	X
X	X	X	X
X			
X	X	X	X
X			
X	X	X	X
X	X	X	X
X			
X			
X			
X			
X	X	X	X

Table 7b. Demographic Characteristics Obtained for Injured Persons, by Data System

Data System ¹	Education	Income	Other
CFOI			
SOII			X
NCVS	X	X	X
NAMCS			
NHAMCS			
NHDS			
NHIS	X	X	X
NMFS93	X	X	X
NVSSS			
NVSSF	X		
BRFSS			
YRBSS	X		X
NTOF			X
NEISS			
LEOKA			X
NIBRS			
UCRSHR			
NPTS			
HCFA			
IHSACS			
IHSICS			
NCANDS			
NIS		X	X
FARS			X
NASSCDS			
NASSGES			
NOBUS			
MTFS	X		X
DAWN			
BCCOA			X
NFIRS			

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other Specify

Tenure with employer

Place of residence, armed forces membership, type of residence

Health insurance, sources of income, veteran status

Cash value of assets, date of death

Parents' educational attainment

Date of death, industry, occupation

Height, body armor, uniform, other

Employment status of parent or caretaker

Driver zip code

Religion, political preference, self-perceived intelligence, other

Age/DOB/sex/race/ethnicity/marital status on operator only

Table 8. Geographic Information Obtained about the Location of the Injury Incident, by Data System

Data System ¹	Census Tract	Zip Code	County	State
CFOI			X	X
SOII				
NCVS				
NAMCS				
NHAMCS				
NHDS				
NHIS				
NMFS93				
NVSSS				
NVSSF			X	X
BRFSS				
YRBSS				
NTOF				
NEISS				
LEOKA			X	X
NIBRS			X	X
UCRSHR			X	X
NPTS				X
HCFA				
IHSACS				
IHSICS				
NCANDS				X
NIS			X	X
FARS			X	X
NASSCDS		X		
NASSGES				
NOBUS				
MTFS				
DAWN				X
BCCOA	X	X	X	X
NFIRS	X	X		X

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other	Other Specify
X	State/county codes not available to researchers
X	State and county of death, state and county of residence
X	Urban or rural area
X	City of occurrence if applicable
X	21 metropolitan areas

Table 9. Data Obtained on Circumstances Surrounding the Injury Incident, by Data System

Data System ¹	Date of Injury	Time of Injury	Place of Occurrence	Intent of Injury
CFOI	X	X	X	X
SOII				X
NCVS		X	X	X
NAMCS				
NHAMCS			X	
NHDS				
NHIS			X	
NMFS93	X	X	X	X
NVSSS				X
NVSSF	X		X	X
BRFSS				
YRBSS				
NTOF	X	X	X	X
NEISS	X		X	
LEOKA	X	X	X	X
NIBRS	X	X	X	X
UCRSHR	X	X	X	X
NPTS			X	
HCFA				
IHSACS			X	X
IHSICS			X	X
NCANDS				
NIS	X			
FARS	X	X	X	
NASSCDS	X	X	X	
NASSGES	X	X	X	
NOPUS				
MTFS				
DAWN	X	X		X
BCCOA				
NFIRS	X	X	X	

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other Other Specify

X General Qs.: what happened —before and when injury occurred

X Cause of injury

X Cause of injury

X Immediate cause, underlying cause and contributory cause of death

X Type of weapon/force, victim/offender relationship, type of criminal activity

X Whether a police report of crash was filed

X Date of report (DCDC)

X Abuse or neglect by case definition

X Time of death, date of death

X Locale of ignition, cond. preventing escape, cond. before injury

Table 10a. Data Obtained on Activities Associated with the Injury Incident, by Data System

Data System ¹	All Types	Sports	Day Care	Boating-Related	Home-Related
CFOI					
SOII					
NCVS					X
NAMCS					
NHAMCS	X	-	-	-	-
NHDS					
NHIS	X	-	-	-	-
NMFS93	X	-	-	-	-
NVSSS					
NVSSF					
BRFSS					
YRBSS					
NTOF				X	
NEISS		X	X		X
LEOKA					
NIBRS					
UCRSHR					
NPTS					
HCFA					
IHSACS					
IHSICS					
NCANDS					
NIS					
FARS					
NASSCDS					
NASSGES					
NOBUS					
MTFS					
DAWN					
BCCOA					
NFIRS					

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 10b. Data Obtained on Activities Associated with the Injury Incident, by Data System

Data System ¹	Recreation-Related	Work-Related	Farm-Related	Other	Other Specify
CFOI		X			
SOII		X			
NCVS	X	X		X	General Q.: "What were you doing when this incident happened/started?"
NAMCS					
NHAMCS	-	-	-	-	
NHDS					
NHIS	-	-	-	-	
NMFS93	-	-	-	-	
NVSSS				X	Motor-vehicle-related
NVSSF		X		X	Motor-vehicle-related
BRFSS					
YRBSS					
NTOF		X	X		
NEISS	X		X		
LEOKA		X			
NIBRS					
UCRSHR					
NPTS				X	Motor-vehicle-related
HCFA					
IHSACS					
IHSICS					
NCANDS					
NIS				X	Abuse/neglect related
FARS		X		X	Motor-vehicle-crash-related
NASSCDS				X	Motor-vehicle-crash-related
NASSGES				X	Motor-vehicle-crash-related
NOPUS					
MTFS				X	Motor-vehicle-related
DAWN					
BCCOA		X	X		
NFIRS				X	Escape, rescue attempt, fire control, response, cleanup, asleep

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 11a. Data Obtained on Practices or Behaviors that Could Increase or Decrease a Person’s Risk of Injury, by Data System

Data System ¹	Seat Belt Usage	Automobile Air Bag	Home Smoke Detector	Drug Abuse
CFOI	X			X
SOII				
NCVS				X
NAMCS				
NHAMCS				X
NHDS				
NHIS	X		X	X
NMFS93	X	X		X
NVSSS				
NVSSF				
BRFSS	X		X	
YRBSS	X			X
NTOF				
NEISS				
LEOKA				X
NIBRS				X
UCRSHR				
NPTS	X			
HCFA				
IHSACS				
IHSICS				
NCANDS				X
NIS				
FARS	X	X		X
NASSCDS	X	X		X
NASSGES	X	X		X
NOPUS	X			
MTFS				X
DAWN				X
BCCOA				
NFIRS			X	

¹See the Directory of Abbreviations for definitions of data system acronyms.

Alcohol Involvement	Bicycle Helmet Use	Motorcycle Helmet Use	In-Line Skates
X			
X			
X			
X	X	X	
X	X	X	
X			
X	X	X	
X			X
X			
X			
X			
X	X	X	
X			
X	X	X	
		X	
X			
X			

Table 11b. Data Obtained on Practices or Behaviors that Could Increase or Decrease a Person’s Risk of Injury, by Data System

Data System ¹	Protective Sports Gear	Swimming Pool Fencing	Safety Equipment	Physical Violence	Home Storage of Firearms
CFOI			X	X	
SOII					
NCVS				X	
NAMCS					
NHAMCS					
NHDS					
NHIS	X				X
NMFS93				X	X
NVSSS					
NVSSF					
BRFSS					X
YRBSS				X	
NTOF					
NEISS					
LEOKA			X	X	X
NIBRS				X	
UCRSHR				X	
NPTS					
HCFA					
IHSACS					
IHSICS					
NCANDS					
NIS				X	
FARS					
NASSCDS					
NASSGES					
NOPUS					
MTFS				X	
DAWN					
BCCOA					
NFIRS					

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other	Other Specify
X	Narrative of how fatality occurred
X	Lifestyle Qs: Shopping, evening activities, use of public transport
X	Supplement on firearm safety
X	Swimming ability, fire escape planning, driving after drinking
X	Weapon carrying, swim w/o supervision, DUI/riding with drinking driver
X	Use of personal protective gear, storage of firearms
X	Other driver/injured person risk factors
X	Alcohol use

Table 12a. Data Obtained on External Cause of Injury for the Injury Incident, by Data System

Data System ¹	E-Coding	All Injuries	Motor Vehicle Occupant	Pedestrian	Motor-cycle	Bicycle	Fall	Drowning
CFOI		X	-	-	-	-	-	-
SOII								
NCVS								
NAMCS								
NHAMCS	X	X	-	-	-	-	-	-
NHDS	X							
NHIS	X		X	X	X	X	X	X
NMFS93	X	X	-	-	-	-	-	-
NVSSS	X	X	-	-	-	-	-	-
NVSSF	X	X	-	-	-	-	-	-
BRFSS								
YRBSS								
NTOF	X	X	-	-	-	-	-	-
NEISS						X	X	X
LEOKA			X					
NIBRS								
UCRSHR								
NPTS			X	X	X	X		
HCFA								
IHSACS	X	X	-	-	-	-	-	-
IHSICS	X	X	-	-	-	-	-	-
NCANDS								
NIS							X	X
FARS			X	X	X	X		
NASSCDS			X					
NASSGES			X	X	X	X		
NOBUS								
MTFS								
DAWN								
BCCOA								
NFIRS			X		X		X	

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 12b. Data Obtained on External Cause of Injury for the Injury Incident, by Data System

Data System ¹	Near Drowning	Fire/Burn	Poisoning	Homicide/ Assault	Suicide/ Suicide Attempt	Firearm Injury	Stabbing
CFOI	-	-	-	-	-	-	-
SOII							
NCVS				X		X	X
NAMCS							
NHAMCS	-	-	-	-	-	-	-
NHDS							
NHIS	X	X	X	X	X	X	X
NMFS93	-	-	-	-	-	-	-
NVSS	-	-	-	-	-	-	-
NVSSF	-	-	-	-	-	-	-
BRFSS							
YRBSS							
NTOF	-	-	-	-	-	-	-
NEISS	X	X	X				
LEOKA				X		X	X
NIBRS		X	X	X		X	X
UCRSHR		X		X		X	X
NPTS							
HCFA							
IHSACS	-	-	-	-	-	-	-
IHSICS	-	-	-	-	-	-	-
NCANDS							
NIS	X	X	X	X	X	X	X
FARS							
NASSCDS		X					
NASSGES							
NOPUS							
MTFS							
DAWN					X		
BCCOA							
NFIRS		X					

¹See the Directory of Abbreviations for definitions of data system acronyms.

Table 12c. Data Obtained on External Cause of Injury for the Injury Incident, by Data System

Data System ¹	Domestic Violence	Child Abuse	Other
CFOI	–	–	–
SOII			
NCVS	X	X	X
NAMCS			
NHAMCS	–	–	–
NHDS			X
NHIS	X	X	X
NMFS93	–	–	–
NVSSS	–	–	–
NVSSF	–	–	–
BRFSS			
YRBSS			
NTOF	–	–	–
NEISS			X
LEOKA			X
NIBRS	X		X
UCRSHR	X		
NPTS			X
HCFA			
IHSACS	–	–	–
IHSICS	–	–	–
NCANDS		X	X
NIS	X	X	X
FARS			X
NASSCDS			
NASSGES			
NOPUS			
MTFS			
DAWN			
BCCOA			
NFIRS			X

¹See the Directory of Abbreviations for definitions of data system acronyms.

Other Specify

Rape/attempted rape, sexual assault other than rape

ICD-9-CM E codes available on some discharges

For disabled persons only

Other selected product-related injuries

Circumstances surrounding killing of law enforcement officer

Explosives

Road conditions, time of day, types of vehicles involved

Child neglect

Neglect

Other causes (fall, drowning, burns, etc.), if part of crash event

Fire product/radiation/chemical exposure, struck/trapped by object

Table 13. Data Obtained on Anatomic Location of the Injury, by Data System

Data System ¹	N-Coding	All Injuries	Head Injury	Spinal Cord Injury
CFOI		X	–	–
SOII		X	–	–
NCVS				
NAMCS				
NHAMCS	X			
NHDS	X	X	–	–
NHIS	X	X	–	–
NMFS93	X	X	–	–
NVSSS				
NVSSF	X	X	–	–
BRFSS				
YRBSS				
NTOF				
NEISS		X	X	X
LEOKA		X	–	–
NIBRS				
UCRSHR				
NPTS				
HCFA	X	X	–	–
IHSACS	X		X	X
IHSICS	X	X	–	–
NCANDS				
NIS				
FARS				
NASSCDS		X	X	X
NASSGES				
NOPUS				
MTFS				
DAWN				
BCCOA				
NFIRS		X	–	–

¹See the Directory of Abbreviations for definitions of data system acronyms.

Hip Fracture	Eye Injury	Other	Other Specify
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
X	X	X	
-	-	-	
-	-	-	
-	-	-	
-	X	X	Internal abdominal, internal thoracic
-	-	-	
X	X	X	See injury coding manual
-	-	-	
-	-	-	
-	-	-	

Table 14. Data Obtained on Injury Severity Based on Anatomic Location of the Injury or Other Information, by Data System

Data System ¹	AIS ²	Other Severity Scale	Non-anatomic Severity Coding	Other Scale — Specify
CFOI				
SOII				
NCVS				
NAMCS				
NHAMCS				
NHDS				
NHIS				
NMFS93				
NVSS				
NVSSF				
BRFSS				
YRBSS				
NTOF				
NEISS		X		CPSC crude severity scale (used for management purposes only)
LEOKA				
NIBRS				
UCRSHR				
NPTS				
HCFA				
IHSACS				
IHSICS				
NCANDS				
NIS			X	
FARS			X	
NASSCDS	X		X	
NASSGES			X	
NOPUS				
MTFS				
DAWN				
BCCOA				
NFIRS			X	

¹See the Directory of Abbreviations for definitions of data system acronyms.

²Abbreviated Injury Scale.

Non-anatomic Severity Coding — Specify

[This section contains 12 horizontal grey bars for specifying non-anatomic severity coding.]

NIS coding system for injury severity

KABCOU system (no injury, possible, non-incap, incap, fatal, unk)

Police reported injury severity (KABCOU)

Police reported injury severity (KABCOU)

[This section contains two horizontal grey bars.]

NFPA 901 1976 codes

REFERENCES

1. Benson V, Marano MA. Current estimates from the National Health Interview Survey. National Center for Health Statistics. Vital Health Stat 10(189), 1994.
2. Graves EJ. 1992 Summary: National Hospital Discharge Survey. Advance data from vital and health statistics; no. 249. Hyattsville, MD: National Center for Health Statistics, 1994.
3. Rice DP, MacKenzie EJ, et al. Cost of injury in the United States: a report to Congress. San Francisco, (CA): Institute for Health and Aging; University of California; Injury Prevention Center, John Hopkins University, 1989.
4. Centers for Disease Control and Prevention. Ten leading causes of death, 1992. Unpublished data. Atlanta (GA): National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 1995.
5. National Center for Health Statistics. Health, United States, 1994. Hyattsville, MD: Public Health Service, 1995; DHHS Pub. No. (PHS) 95-1232:99.
6. Centers for Disease Control and Prevention. Injury Mortality: National summary of injury mortality data, 1986-1992. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 1995.
7. Burt CW. Injury-related visits to hospital emergency departments: United States, 1992. Advance data from vital and health statistics; no 261. Hyattsville, MD: National Center for Health Statistics, 1995:13-14.
8. Bachman R, Saltzman LE. Violence against women: Estimates from the redesigned survey. National Crime Victimization Survey. Special Report. Washington, DC: Bureau of Justice Statistics; 1995; NCJ-154348:2.
9. Annett JL, Mercy JA, Gibson DR, Ryan GW. National estimates of firearm-related injuries. Beyond the tip of the iceberg. JAMA 1995;273:1749-1754.
10. Robertson LS. Injury Epidemiology. New York, NY: Oxford University Press Inc; 1992:47-72.
11. Halpern W, Baker E, ed. Public Health Surveillance. New York, NY: Van Nostrand Reinhold; 1992:142-156.

12. Education Development Center, Inc. Youth Violence: Locating and using the data. Newton, MA, March 1996. [To order, call (800) 225-4276 or (617) 969-7100, extension 2215].
13. National Center for Health Statistics. International Health Data Reference Guide, 1993. Hyattsville, MD: Public Health Service, 1994; DHHS Pub No.(PHS)94-1007.

APPENDIX: DATA COLLECTION INSTRUMENT

The Data Collection Instrument can be obtained from:

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