

Injury Fact Book 2001–2002

**National Center for Injury Prevention and Control
Centers for Disease Control and Prevention**

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Centers for Disease Control and Prevention

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About the Cover

The cover photo depicts a firefighter rescuing a boy from a home fire. Every 27 minutes in the U.S., someone is killed or injured in a residential fire. CDC works to prevent these injuries and deaths. To learn more, turn to page 86.

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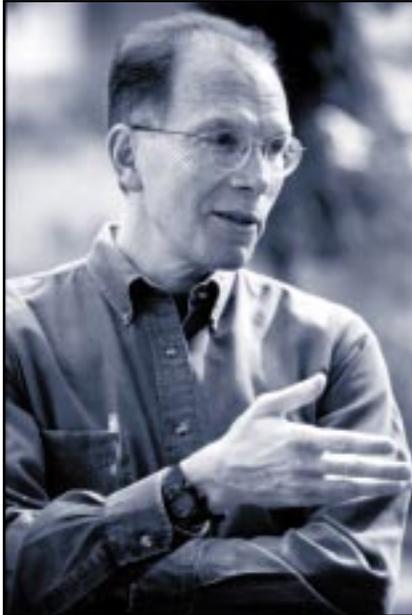
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Injury Fact Book 2001-2002

Message from the Director of the Centers for Disease Control and Prevention

A Message from the CDC Director



Millions of Americans are injured each year. Thousands die. And hundreds of thousands who survive their injuries experience long-term or permanent disabilities, time lost from work or family responsibilities, costly medical expenses, and pain and suffering.

A decade ago, the Centers for Disease Control and Prevention recognized injury as a serious public health problem and formed a Center to focus on preventing and controlling injuries and associated deaths and disabilities. Today, that Center—the National Center for Injury Prevention and Control—consists of nearly 200 professionals dedicated to identifying risk factors for injuries, developing and sharing strategies to prevent them, and supporting organizations and individuals working to do the same.

The 2001–2002 Injury Fact Book offers a comprehensive look at injury in America and shares some of CDC’s exciting accomplishments in injury prevention. It also provides a glimpse of future goals and directions for our Injury Center.

At CDC, we take injury prevention and control very seriously. As you read this book, I hope you will see our commitment to this important area of public health and understand why it is an integral part of our work toward safer, healthier people.

Handwritten signature of Jeffrey P. Koplan in black ink.

Jeffrey P. Koplan, M.D., M.P.H.

Director

Centers for Disease Control and Prevention

Message from the Director of CDC's Injury Center

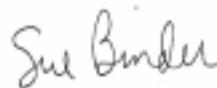
A Message from the Director of CDC's Injury Center

Unintentional injuries—those caused by accidents—kill more Americans in their first three decades of life than any other cause of death. In fact, injuries—both unintentional and those caused by acts of violence—are among the top ten killers for Americans of all ages.

Since 1992, CDC's Injury Center has worked tirelessly to see that injury loses its place of prominence among the leading causes of death. And we've made some progress. We have helped reduce motor vehicle-related deaths, an accomplishment touted as one of the great public health achievements of the 20th century. We have supported smoke alarm distribution and fire safety education programs and prevented hundreds of people from perishing in residential fires. We have also studied programs to prevent youth violence and shared our findings with communities across the country, equipping them with information they need to protect young people against violent injuries and death.

Despite our best efforts, and those of the many others working in the injury field, injury and violence continue to pose a significant threat to public health. In 1900, accidents were the seventh leading cause of death overall. At the start of the 21st century, they were the fifth leading cause. And people die from suicide today at about the same rate they did in 1900.

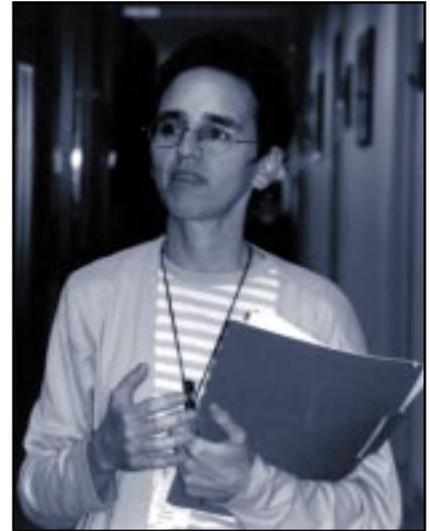
Next year we will reach an important milestone—our tenth anniversary. It will be an opportunity to celebrate accomplishments in injury prevention and reflect on the challenges our nation struggles with. But it will also be a time to rededicate ourselves to our mission so that 100 years from now, when we celebrate our 110th anniversary and look at the leading causes of death at the start of the 22nd century, we will no longer see injury among the top ten.



Sue Binder, M.D.

Director

National Center for Injury Prevention and Control





Introduction

Introduction

Injuries Affect Everyone

Injuries are a leading cause of death for Americans of all ages, regardless of gender, race or economic status. But injury deaths are only part of the picture. Millions of Americans are injured each year and survive. For many of them, the injury causes temporary pain and inconvenience, but for some, the injury leads to disability, chronic pain, and a profound change in lifestyle.

10 Leading Causes of Deaths by Age Group - 1998

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 6,212	Unintentional Injuries 1,935	Unintentional Injuries 1,544	Unintentional Injuries 1,710	Unintentional Injuries 13,349	Unintentional Injuries 12,045	Malignant Neoplasms 17,022	Malignant Neoplasms 45,747	Malignant Neoplasms 87,024	Heart Disease 605,673	Heart Disease 724,859
2	Short Gestation 4,101	Congenital Anomalies 564	Malignant Neoplasms 487	Malignant Neoplasms 526	Homicide 5,506	Suicide 5,365	Unintentional Injuries 15,127	Heart Disease 35,056	Heart Disease 65,068	Malignant Neoplasms 384,186	Malignant Neoplasms 541,532
3	SIDS 2,822	Homicide 399	Congenital Anomalies 198	Suicide 317	Suicide 4,135	Homicide 4,565	Heart Disease 13,593	Unintentional Injuries 10,946	Bronchitis Emphysema Asthma 10,162	Cerebrovascular 139,144	Cerebrovascular 158,448
4	Maternal Complications 1,343	Malignant Neoplasms 365	Homicide 170	Homicide 290	Malignant Neoplasms 1,699	Malignant Neoplasms 4,385	Suicide 6,837	Liver Disease 5,744	Cerebrovascular 9,653	Bronchitis Emphysema Asthma 97,896	Bronchitis Emphysema Asthma 112,584
5	Respiratory Distress Synd. 1,295	Heart Disease 214	Heart Disease 156	Congenital Anomalies 173	Heart Disease 1,057	Heart Disease 3,207	HIV 5,746	Cerebrovascular 5,709	Diabetes 8,705	Pneumonia & Influenza 82,989	Unintentional Injuries 97,835
6	Placenta Cord Membranes 961	Pneumonia & Influenza 146	Pneumonia & Influenza 70	Heart Disease 170	Congenital Anomalies 450	HIV 2,912	Homicide 3,567	Suicide 5,131	Unintentional Injuries 7,340	Diabetes 48,974	Pneumonia & Influenza 91,871
7	Perinatal Infections 815	Septicemia 89	Bronchitis Emphysema Asthma 54	Bronchitis Emphysema Asthma 98	Bronchitis Emphysema Asthma 239	Cerebrovascular 670	Liver Disease 3,370	Diabetes 4,386	Liver Disease 5,279	Unintentional Injuries 32,975	Diabetes 64,751
8	Unintentional Injuries 754	Perinatal Period 75	Benign Neoplasms 52	Pneumonia & Influenza 51	Pneumonia & Influenza 215	Diabetes 636	Cerebrovascular 2,650	HIV 3,120	Pneumonia & Influenza 3,856	Nephritis 22,640	Suicide 30,575
9	Intrauterine Hypoxia 461	Cerebrovascular 57	Cerebrovascular 35	Cerebrovascular 47	HIV 194	Pneumonia & Influenza 531	Diabetes 1,885	Bronchitis Emphysema Asthma 2,828	Suicide 2,963	Alzheimer's Disease 22,416	Nephritis 26,182
10	Pneumonia & Influenza 441	Benign Neoplasms 53	HIV 29	Benign Neoplasms 32	Cerebrovascular 178	Liver Disease 506	Pneumonia & Influenza 1,400	Pneumonia & Influenza 2,167	Septicemia 2,093	Septicemia 19,012	Liver Disease 25,192

Source: National Center for Health Statistics, 2000.
Chart developed by the National Center for Injury Prevention and Control, CDC.

The federal government pays about \$12.6 billion each year in injury-related medical costs.

An injury affects more than just the person injured—it affects everyone who is involved in the injured person’s life. With a fatal injury, family, friends, coworkers, employers, and other members of the injured person’s community feel the loss. In addition to experiencing grief, they may experience a loss of income or the loss of a primary caregiver, as well.

With a nonfatal injury, family members are often called upon to care for the injured person, which can result in stress, time away from work, and possibly lost income. They may also experience a change in their relationship with the injured person and with others in the family. For instance, if a wife and mother is seriously injured, her spouse may find himself in the role of primary caregiver—not only for his wife, but also for his children. Friends of the injured person may be called upon to help out and, like family members, may experience a change in their relationship with the injured person. The injured person’s employer may struggle with the temporary or permanent loss of a valued employee. Others in the community—volunteer groups, religious organizations, neighbors—may also feel the effects of the injury.

Society at large is also profoundly affected by injuries. The financial cost of injuries is estimated at more than \$224 billion each year. These costs include direct medical care, rehabilitation, lost wages and lost productivity. The federal government pays about \$12.6 billion each year in injury-related medical costs and about \$18.4 billion in death and disability benefits. Insurance companies and other private sources pay about \$161 billion.

Injury Prevention and the CDC

Injuries have been a leading cause of death throughout history, and many people and agencies have undertaken efforts to prevent them. In 1985, the National Research Council and the Institute of Medicine (IOM) recognized a need for a coordinated effort to prevent injuries in the U.S. They identified CDC as the federal agency best-suited to lead injury research. CDC had a strong history of interdisciplinary research, data collection and analysis, information sharing, and

relationships with states—elements the council and IOM deemed important. And unlike other federal agencies involved in injury prevention, CDC had no regulatory or enforcement role. In 1997, IOM's Committee on Injury Prevention and Control recommended that no one agency could effectively serve as the sole leader for injury. Rather, agencies should collaborate on injury prevention activities, with each agency leading in its area of expertise. In this scenario, CDC's Injury Center functions as the focal point for the public health approach to preventing and treating injuries, a paradigm that enriches the entire injury field.

The Public Health Approach to Injury Prevention

To solve public health problems—including injuries—CDC uses a systematic process called the public health approach. This approach has four steps: define the problem, identify risk and protective factors, develop and test prevention strategies, and assure widespread adoption of injury prevention principles and strategies.

Define the problem

Before we can tackle an injury problem, we need to know how big the problem is, where it is, and whom it affects. CDC accomplishes this by gathering and analyzing data—often called surveillance. These data can show us how an injury problem changes over time, alert us to troubling trends in a particular type of injury, and let us know what impact prevention programs are having. These data are critical because they help decision makers allocate programs and resources where they are needed most.

Identify risk and protective factors

It is not enough to simply know that a certain type of injury is affecting a certain group of people in a certain area. We also need to know why. What factors put people at risk for that injury? And conversely, what factors protect people from it? CDC conducts and supports research to answer these important questions. Once we have that information, we can develop and implement programs to eliminate or reduce risk factors for injuries and to capitalize on or increase factors that protect people from being injured.

Develop and test prevention strategies

In this step, we put knowledge into action. Using information gathered in our research, CDC develops strategies to prevent particular injury problems. We implement these strategies in communities that are experiencing the problem. And we study the effects of these strategies to determine whether and how well they're working. We use this information to identify any elements we need to change to eliminate difficulties or increase effectiveness.

Assure widespread adoption

What we learn in the developing and testing step has little benefit if we keep the information to ourselves. In this final step of the public health approach, CDC shares the "best practices" or "lessons learned" for a strategy. This information helps communities to replicate successful strategies. CDC may also provide funding or expert consultation to help communities adopt these strategies.

The Public Health Approach at Work

CDC has already moved through the first three steps of the public health approach for some injury issues and is ready to encourage widespread adoption. Since the study of injury is a relatively new public health field, however, in several cases CDC is still trying to fully define the problem.

Here's how the public health approach works in injury:

Defining the Problem

Violence in America

In the U.S. in 1998, 17,983 people died as a result of homicide and 30,575 died from suicide. While public health officials may know how many people die from violence each year, they don't know much about the circumstances surrounding those deaths. Federal, state and local agencies all have detailed information that could answer important, fundamental questions about trends and patterns in violence, but the information is fragmented and difficult to access. CDC is working to establish a National Violent Death Reporting System to gather data from states about violent deaths in America. The system would pull together this vital information so it could be shared among states and communities in order to gain an accurate understanding of the problem of violence in America. Such a system would assist policy makers and community leaders in making educated decisions about strategies and programs to prevent violence.

Traumatic brain injury among children
Many injury professionals describe traumatic brain injury (TBI) as the leading cause of disability among children, but evidence to support this assertion is lacking. CDC's Injury Center will soon fund a study to find out how many children have disabilities related to TBI and how those disabilities affect them and their families. This research will build on recommendations generated by a group of injury researchers, professionals and advocates convened by CDC in October 2000.

Intimate partner violence

An estimated 2.3 million Americans—1.5 million of them women—are raped or physically assaulted by an intimate partner each year. But inconsistencies in data collection and different ways of describing the problem have fostered a lack of consensus about the magnitude of the problem. Early in FY 2000, CDC's Injury Center published a set of definitions designed to improve data collected concerning violence against women by standardizing the terminology used by all parties involved in the problem—the criminal justice system, hospitals, and others. Five states are now establishing tracking systems for intimate partner violence. The states will use the Injury Center's Uniform Definitions and Recommended Data Elements in gathering their data. These pilot tests will help CDC assess states' capacity to identify existing data sources that include some or all of these elements, identify opportunities to link data sources, and develop and implement more comprehensive systems.

Identifying Risk and Protective Factors

Suicide

More than 30,000 people took their own lives in 1998, but no one really knows why. Public health officials are still learning what puts people at risk for committing or attempting suicide and what prevents them from doing so. Injury Center staff and CDC-funded researchers have begun studying factors that may increase or decrease a person's risk for suicide. One study in Texas, which interviewed people who experienced nearly lethal suicide attempts, found that many factors—in addition to mental health factors—may influence suicidal behavior, including alcohol use, geographic mobility, exposure to suicidal behavior, hopelessness, help-seeking behavior, impulsiveness, and physical illness. Researchers at Atlanta's Emory University examined suicide risk factors among African Americans ages 18 to 44. They found a strong connection between intimate partner violence and suicidal behavior among African American women.

Assessing attitudes and beliefs about child maltreatment

CDC is funding an analysis of attitudes, beliefs, and behaviors relating to child maltreatment in various cultural and ethnic populations. The analysis will describe how communities feel about outcomes of abuse, characteristics of abusers, risk and protective factors for abuse, and efforts to prevent it. This information will help practitioners develop prevention messages that are more meaningful to those groups and can more effectively change behavior.

Developing and Testing Prevention Strategies

Fire injury prevention

Through tracking and monitoring injuries and deaths from residential fires, CDC has learned that one of the biggest risk factors is not having a functional smoke alarm in the home. For several years, CDC funded states to distribute smoke alarms and educate citizens most at risk for residential fires (older adults, poor families, families living in manufactured housing). As part of the program, the Injury Center conducted a long-term evaluation of these efforts and found that only two-thirds of homes receiving smoke alarms through a distribution program had a working alarm three to four years later. The researchers concluded that future programs should distribute alarms that do not require annual battery changes or find ways to ensure that batteries are changed routinely.

Preventing pressure ulcers after spinal cord injury

Persons with spinal cord injuries are at risk for pressure ulcers, a condition that can be quite debilitating and costly. Over a one-year period, participants in a CDC-funded intervention experienced a 46% decrease in pressure sore occurrence and a 36% decrease in pressure sore severity. The intervention, part of the Arkansas Spinal Cord Commission's Consumer Action to Prevent Pressure Sores (CAPPS) project, eliminated sores among one-third of the intervention group and saved \$660,000 in hospital costs associated with pressure sores.

This project demonstrated that in-home education conducted by public health nurses can prevent new pressure sores and reduce the number and severity of existing sores among a rural, underserved population of persons with spinal cord injury.

Assuring Widespread Adoption

Alcohol and motor vehicle crashes
Epidemiologists from CDC's Injury Center recently found that laws lowering the legal blood alcohol concentration (BAC) for drivers from 0.10% to 0.08% are effective in reducing deaths from alcohol-related motor vehicle crashes. They shared their findings with the Task Force on Community Preventive Services, which strongly recommended that state policy makers consider enacting this type of law. The Task Force's recommendation led the House Appropriations Committee to add language to its appropriations bill requiring states to enact such laws; states that do not will lose federal funding for highway construction. On October 23, 2000, the President signed the transportation appropriations bill containing the 0.08% BAC language, thus creating a new, national standard for the legal BAC for motor vehicle drivers. The new standard does not guarantee that all states will adopt the lower BAC limit, but the funding consequences increase the likelihood.

Preventing falls among older adults
Nearly 10,000 Americans 65 and older die from falls each year. In 2001, the Injury Center published a compendium of selected, community-based programs to prevent falls among older people. U.S. Fall Prevention Programs for Seniors: Selected

Programs Using Home Assessment and Modification describes 18 fall prevention programs that include education, home assessment, and home modification strategies for fall prevention. Using the detailed program descriptions, as well as sample program materials provided in the appendix, communities can develop similar strategies to protect their older residents from fall-related injuries.

National poison control center access
CDC and the Health Resources and Services Administration are funding the American Association of Poison Control Centers to implement a single, toll-free, poison control number nationwide. All state poison centers are expected to implement this toll-free number by the end of 2001. One, nationwide number will improve access to poison control services for all Americans, including those in underserved areas. An education program and media campaign will inform Americans about the new number and raise awareness about the services that poison control centers provide.

As one can see from these examples, CDC addresses the full range of injury issues among diverse populations. The sections that follow describe data used for injury prevention; highlight several important partnerships; provide in-depth details about how injuries affect groups of all ages, genders, races, and ethnicities and what the Injury Center is doing to prevent injuries among those groups; and discuss nearly two dozen injury problems that Center staff are working to prevent.



Data for Injury Prevention

Data for Injury Prevention

Many Americans don't understand the magnitude of the injury problem in this country. Data allow us to show how many people are injured each year and how many die or suffer permanent disabilities as a result of those injuries. Data show us where the biggest injury problems are so we can best focus our resources. And they let us know whether our efforts to prevent injuries are effective. CDC gets its injury data from a number of sources and shares those data through several channels.

Data Sources

CDC gets data from several federal and state-run systems that routinely capture information about injuries and deaths and from surveys conducted by staff and partners to obtain information about particular injuries or conditions. A sample of these data sources follows.

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) monitors risk behaviors associated with the leading causes of injury and death among Americans 18 and older. The survey, conducted by the states, consists of standard questions CDC developed to facilitate state-by-state comparisons. Injury-related data in BRFSS include smoke alarm use, firearm storage, and bicycle helmet use. BRFSS data can be analyzed by age, race and ethnicity, income level and education.

Fatality Analysis Reporting System

The Fatality Analysis Reporting System (FARS), managed by the National Highway Traffic Safety Administration, contains data about all fatal traffic crashes on public roadways within the 50 states, the District of Columbia, and Puerto Rico. FARS provides descriptions of each fatal crash reported, with more than 100 coded data elements that characterize the crash, the vehicles, and the people involved.

National Crime Victimization Survey

Run by the Bureau of Justice Statistics at the Department of Justice, the National Crime Victimization Survey provides nationally representative data about the frequency, characteristics, and consequences of crime in the U.S., including violent crimes such as rape, physical and sexual assault, and homicide. Survey data include type of crime, time and location of the crime, relationship between victim and offender, characteristics of the offender, consequences of the victimization, whether the crime was reported to the police and reasons for reporting or not reporting, and offender use of weapons, drugs, or alcohol. Basic demographic information is also included.

National Electronic Injury Surveillance System

The National Electronic Injury Surveillance System (NEISS), operated by the U.S. Consumer Product Safety Commission (CPSC), provides injury data from inner city, urban, suburban, rural and children's hospitals. Originally, NEISS collected data only about nonfatal injuries related to consumer products and recreational activities. In July 2000, through a cooperative effort between CPSC and CDC, NEISS began collecting data about all nonfatal injuries treated in hospital emergency departments. CDC uses NEISS data to generate national estimates of nonfatal injuries in the U.S. and to guide decisions and policies about injury prevention and control.

National Hospital Discharge Survey

The National Hospital Discharge Survey, administered by CDC's National Center for Health Statistics (NCHS), provides annual information about persons who are discharged from inpatient hospital care. From this survey data, CDC's Injury Center obtains information about persons who are hospitalized for injuries and survive. NCHS gathers data annually from approximately 270,000 inpatient records acquired from a national sample of about 500 hospitals. Data include patient's age, sex, race, ethnicity, marital status and expected sources of payment; diagnosis; length of hospital stay; procedures performed; and condition at the time of discharge.

National Uniform Crime Reports

More than 17,000 city, county, and state law enforcement agencies voluntarily participate in the nationwide Uniform Crime Reports system, managed by the Federal Bureau of Investigation. From this system, CDC gets important information about violent crimes—rapes, physical and sexual assaults, and murders—committed in this country. Data can be broken down by geographic areas, municipalities of varying population sizes and specific cities.

National Vital Statistics System

Each state must send information about deaths that occur within its borders to CDC's National Center for Health Statistics, which manages the National Vital Statistics System. For each death—including those caused by injuries and violence—the system contains information about the decedent's age, sex, race, ethnicity and education level, as well as information about the causes of death.

Youth Risk Behavior Survey

The Youth Risk Behavior Survey monitors health-risk behaviors among the nation's ninth- through twelfth-grade students. State and local departments of education and health conduct this self-administered survey biennially, and CDC assists in analyzing the data. The survey includes several injury-related behaviors: seat belt use, driving after drinking alcohol, riding with a driver who has been drinking, wearing bicycle and motorcycle helmets, carrying a weapon to school, being in a physical fight, and attempting suicide or having suicidal thoughts. Data can be analyzed by sex, grade in school, and race and ethnicity.

Data Sharing

To help injury professionals, policy makers and researchers better understand the injury problem and develop strategies to reduce it, CDC shares injury data through a variety of means. Below are descriptions of three innovative communication channels.

Mapping Injury in the United States

In the fall 2001, CDC launched a new, interactive system for displaying injury data in a form that's easy to interpret and that offers an easy-to-see comparison among states and counties throughout the nation. This web-based application allows users to map injury death data by individual states and by counties within those states. Major cities and towns, highways, bodies of water and Congressional districts can also be added to the maps. To access the injury maps, go to www.cdc.gov/ncipc/maps.

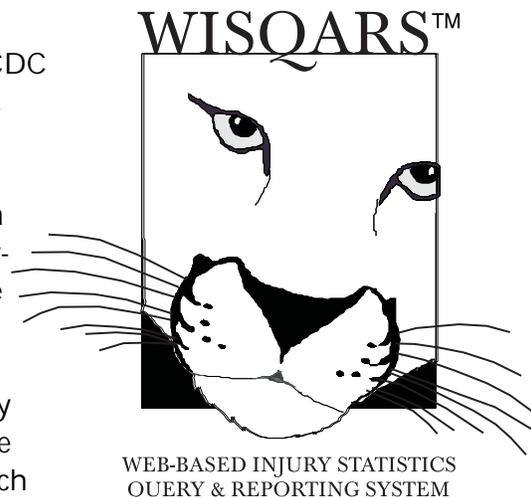
State Injury Profiles

CDC's State Injury Profiles give policy makers and health care workers an easier way to look at statistics about injuries to help them make informed decisions about where to allocate limited resources for prevention. Maps and graphs in the Profiles show each state's death rates from falls, poisoning, drowning, suffocation, fires and burns, suicide, homicide, traumatic brain injuries and injuries related to firearms. The graphics show how each state compares with others in the nation and with mortality rates in the United States as a whole. The Profiles also contain a table showing the Ten Leading Causes of Death for each state and for the United States overall. In 2001, the Injury Center began offering a free CD with data from the State Injury Profiles in slide presentation format to facilitate communication about injuries. To access the Profiles on the web, go to www.cdc.gov/ncipc/StateProfiles/index.htm

WISQARS™

Launched by CDC in March 2000, WISQARS™ (pronounced "whiskers") is a powerful, interactive database that allows easy access to injury mortality data that can be used for research and policy decisions.

Since its debut, WISQARS™—which stands for Web-based Injury Statistics Query and Reporting System—has provided researchers, policy makers, reporters and the public with customized reports about both unintentional and violent injuries. In October 2001, CDC expanded WISQARS™ to include national estimates of nonfatal injuries treated in hospital emergency departments.



A Note About CDC's Injury Data

As you read the Fact Book, you will note that data are 2 to 3 years old. However, the data presented are the most recent available. CDC must compile injury data from numerous sources, verify those data and prepare them in a way that makes them useful and meaningful for the public. While this process may result in substantial lag time between data collection and data release, it is necessary to ensure that CDC provides high-quality information the public can count on.



Partners in Prevention

Partners in Prevention

Partners are essential at all stages of the public health approach. They help us collect data about injuries, share insight into risk factors and strategies for prevention and help make sure effective injury prevention reaches people at risk. CDC's Injury Center works with other federal agencies, state and local health departments, national non-profit organizations, academic institutions, international agencies and private industry to achieve its goal of preventing injuries and resulting deaths and disabilities.

The list of partners found in this section is far from exhaustive. It is merely a sample of the wide variety of organizations and agencies with whom we work closely. While we value our relationships with all of our partners, there simply is not space to list them all in the Fact Book.

Federal Agencies

CDC works with many federal agencies on issues ranging from fire prevention to child maltreatment. Below are examples of activities underway with some of the Injury Center's federal partners.

Agency for Healthcare Research and Quality

CDC works with the Agency for Healthcare Research and Quality (AHRQ) on a number of issues. AHRQ has been involved in the Injury Center's research into alcohol problems among patients in emergency departments, in examining patient safety issues and in exploring strategies to prevent and treat spinal cord injuries.

Federal Highway Administration

The Federal Highway Administration (FHA) is a valuable partner in efforts to prevent injuries and deaths on the nation's roadways. For example, FHA worked with CDC and several other agencies and organizations to develop strategies to increase bicycle safety in this country.

Health Resources and Services Administration

CDC is working on a cooperative project with the Health Resources and Services Administration (HRSA) and the American Association of

Poison Control Centers to implement and promote a toll-free, nationwide poison control hotline. HRSA is also a partner in efforts to improve how states use traumatic brain injury data.

National Highway Traffic Safety Administration

In its efforts to prevent transportation-related injuries and deaths, CDC works closely with the National Highway Traffic Safety Administration (NHTSA), part of the Department of Transportation. NHTSA recently published strategies to improve bicycle safety, developed with CDC and several other partners. In addition, they co-sponsored a meeting to generate strategies to improve child pedestrian safety. NHTSA also offers vital data about motor vehicle crashes and related deaths.

U.S. Consumer Product Safety Commission

The U.S. Consumer Product Safety Commission has long been an important partner in injury prevention. They manage the National Electronic Injury Surveillance System, which collects vital information about nonfatal injuries. The Commission also helped develop a program to prevent fire- and fall-related injuries among older adults, and they are one of several agencies evaluating current and prototypic smoke alarm technologies.

U.S. Department of Education

Since 1992, CDC's Injury Center has worked with the Department of Education to conduct a national study of school-related violent deaths. This study allows public health officials to monitor trends in violence that occurs in and around our nation's schools.

U.S. Department of Justice

CDC works with the U.S. Department of Justice (DOJ) on a variety of injury and violence issues. For example, DOJ was one of the two agencies CDC worked with to conduct its national school violence study. DOJ also works with the Injury Center on EARLY ALLIANCE, a comprehensive project to prevent youth violence. Additionally, the agency co-sponsored the National Violence Against Women Survey, which resulted in national estimates of stalking, rape and physical and sexual assault among women.

U.S. Fire Administration
CDC works with the U.S. Fire Administration to address the problem of fire-related injuries and deaths in America. For example, this agency is one of several partners working with the Injury Center to evaluate the performance of a variety of smoke alarms.

State and Local Agencies

CDC relies heavily on state and local agencies. They provide critical data about injuries, offer an important perspective on how injuries affect communities nationwide and help reach communities in ways that CDC, as a federal agency, cannot.

State Health Departments

CDC has cooperative agreements with many state health departments. With CDC funding, states collect data about traumatic brain injuries, violence against women, and emergency department visits for injuries. They also conduct and evaluate programs to distribute smoke alarms, promote use of bicycle helmets and implement trauma care systems, to name a few.

CDC also works closely with organizations representing state and local public health professionals. A sampling of those organizations follows.

Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPE)

In June 2001, CDC and ASTDHPPE co-sponsored a 2-hour virtual seminar about program evaluation for more than 200 professionals from state health

departments. ASTDHPPE promotes health education and health promotion as core disciplines of public health practice.

Association of State and Territorial Health Officers (ASTHO)

ASTHO—which represents the chief health officials for all states, U.S. territories and the District of Columbia—formulates and influences sound public health policy and works to ensure excellence in state-based public health practice. ASTHO supports initiatives to improve states' abilities to develop, implement and evaluate injury prevention efforts.

Council of State and Territorial Epidemiologists (CSTE)

This organization, supported by CDC, works to improve state surveillance of public health problems. CSTE participated in efforts to develop recommendations for injury surveillance in state health departments. Additionally, CSTE will soon begin educating its membership about CDC's plans for a national violent death reporting system and solicit comments and recommendations about the system.

National Association of County and City Health Officials (NACCHO)

NACCHO provides information, education, research and technical assistance to more than 3,000 local health departments. Its members work to ensure that local public health systems have the capacity to effectively address health and safety issues, including those related to injury and violence. CDC's Injury Center has funded NACCHO to develop and test an

instrument for collecting data about how communities determine public health priorities.

State and Territorial Injury Prevention Directors' Association (STIPDA)
STIPDA's members work to enhance states' abilities to prevent injuries and reduce associated deaths and disabilities. They also share with their constituencies important information about prevention policies and strategies. In 1999, STIPDA produced *Consensus Recommendations for Injury Surveillance in State Health Departments* to help generate more comprehensive, state-level injury data. Additionally, STIPDA evaluates states' injury programs; CDC is invited to participate in these evaluations.

National Nonprofit Organizations

CDC works with many national nonprofit organizations. These groups help us reach a variety of audiences, including public health professionals, health care providers and communities at risk for injury. A sample of some of the organizations we work with follows.

American Academy of Pediatrics
Two members of the Injury Center staff serve as CDC liaisons to the American Academy of Pediatrics' Committee on Injury and Poison Prevention and Committee on Child Abuse. They contribute scientific expertise to help the Academy formulate policies about child maltreatment and childhood injuries.

American Association of Poison Control Centers
CDC and the Health Resources and Services Administration have funded the American Association of Poison Control Centers (AAPCC) to implement a single, toll-free poison control number nationwide. Having one, nationwide number will improve access to poison control services for all Americans, including those in underserved areas. AAPCC will also establish a public education program and public service media campaign to inform Americans about the new number and to raise awareness of the services that poison control centers provide.

American Psychological Association
The American Psychological Association (APA) recently launched ACT—Adults and Children Together—Against Violence, a national media campaign aimed at giving parents and other caregivers of young children the tools they need to prevent violence. CDC is currently developing plans to evaluate the program.

American Trauma Society
The American Trauma Society (ATS), with CDC support, is working on the Trauma Information and Education Program. Through this project, ATS will collect data from trauma centers and improve access to such data.

National Brain Injury Association
CDC works with the National Brain Injury Association (BIA) to promote education and research about traumatic brain injuries. The Injury Center serves on BIA's task force; and

BIA has provided input into both the English and Spanish versions of CDC's Facts About Concussion and Brain Injury, a brochure that provides brain-injured persons and their families with information about easing recovery, symptoms that indicate complications, and resources for help.

National Fire Protection Association
CDC and the National Fire Protection Association (NFPA) have worked together for years to prevent injuries from residential fires. Together with the U.S. Consumer Product Safety Commission and other partners, CDC's Injury Center and NFPA developed Remembering When: A Fire and Fall Prevention Program for Older Adults, a curriculum designed to help prevent fire- and fall-related injuries among older Americans.

National SAFE KIDS Campaign
CDC and SAFE KIDS recently began two projects to prevent injury among children. SAFE KIDS will implement and evaluate a drowning prevention program in two states or communities that have child drowning rates higher than the national average. The effort will educate parents and caregivers of young children about the need for multiple barriers to keep children away from pools and for close, adult supervision when children are around pools and other bodies of water. SAFE KIDS, with support from CDC, will implement a program to reduce injuries among children living in low-income housing in 10 communities across the U.S. Additionally, SAFE KIDS was one of several co-sponsors of the Panel to Prevent Pedestrian Injuries, a meeting that resulted in recently published strategies to improve

safety for child pedestrians. A member of the Injury Center's staff serves on the SAFE KIDS Advisory Committee.

National Safety Council
With CDC support, the National Safety Council (NSC) is working on a project to estimate the cost of off-the-job injuries among America's workforce. The project's goal is to develop guidelines for implementing a reporting system to capture data about non-occupational injuries and to increase employers' awareness of the costs of these injuries. NSC will also explore roles corporate America can play in preventing injuries off the job.

Prevent Child Abuse America
An important partner in CDC's effort to prevent child maltreatment is Prevent Child Abuse America. The organization took part in CDC's expert meeting to develop a plan to prevent child maltreatment. When the plan was complete, this group shared it with policy makers, an action that resulted in the allocation of funds for research and programs to prevent child maltreatment. Prevent Child Abuse America is the lead organization working to prevent child abuse and neglect in the U.S.

Suicide Prevention Advocacy Network
CDC recently worked with the Suicide Prevention Advocacy Network (SPAN) to develop Suicide Prevention Now: Linking Research to Practice, a CD-ROM containing important documentation to help guide suicide prevention efforts in the U.S. Included on the CD-ROM are several articles about the effects of suicide among

various population groups, The Surgeon General's Call to Action to Prevent Suicide and the executive summary of the National Strategy for Suicide Prevention.

Academic Organizations

CDC works with a number of academic organizations to help ensure that universities' curricula and research address injury prevention issues. Below is a sample of our academic partners.

American Association of Medical Colleges
With funding from CDC, the American Association of Medical Colleges (AAMC) will identify core elements of injury prevention that should be part of the medical school curriculum, as well as opportunities for and barriers to including these elements. AAMC, which represents more than 125 American and 16 Canadian accredited medical schools, has a standing cooperative agreement with CDC to increase collaboration between the two organizations.

Association of Schools of Public Health
CDC recently funded the Association of Schools of Public Health (ASPH) to explore ways to encourage injury prevention at schools of public health and to gather from experts recommendations for incorporating injury prevention and control into public health education. Additionally, through the ASPH internship program, CDC's Injury Center has provided valuable experience to students pursuing an education in public health.

National Association of Injury Control Research Centers

The National Association of Injury Control Research Centers promotes scholarly research in injury control and prevention. They were one of several partners that helped develop injury surveillance recommendations for state health departments. These recommendations were put into action recently, yielding new state data about injury issues such as fires, motor vehicle crashes and homicide.

Society for Public Health Education
CDC's Injury Center worked with Society for Public Health Education (SOPHE) to develop the Injury Prevention and Behavioral Science web site, launched in 1999 and updated in 2000. The site, designed to strengthen ties between behavioral science and unintentional injury prevention, offers injury facts, tips for implementing and evaluating behavioral science-based interventions, links to CDC-funded injury control research, and information about opportunities for research funding and injury fellowships. Additionally, CDC supports the SOPHE/CDC Student Fellowship in Unintentional Injury Prevention. SOPHE, composed of health education professionals and students, stimulates research, supports performance standards, advocates policy and legislation, and develops standards for professional development in the field of health education and health promotion.

International Agencies

Because injuries and violence occur throughout the world, not just in America, CDC's injury partners extend beyond our nation's borders. A recent collaboration with one international partner is described below.

World Health Organization

Since 2000, the Injury Center has been working with the World Health Organization (WHO) on the first World Report on Violence and Health. The report, to be launched in mid-2002, will raise awareness of violence as a global public health problem, facilitate comparisons among nations, summarize existing prevention strategies and policies, and recommend future public health action.

Private Industry

Corporations have the opportunity to reach millions of Americans with health and safety messages. CDC recently began working with corporate partners on injury prevention initiatives to take advantage of this opportunity.

CDC Business and Health Partnership

Since 1999, CDC has collaborated with the Washington Business Group on Health (WBGH), the National Business Coalition on Health and the Employers' Managed Health Care Association to promote health and safety programs in the workplace. This business and health partnership benefits both CDC and its corporate partners by improving the overall health and safety of American workers and their families, reducing health-related costs, improving

productivity and reducing absenteeism. CDC's Injury Center contributes to this partnership by participating in quarterly consultations with WBGH and providing information for Healthy Business, a quarterly e-mail publication for employers. The corporate partners represent more than 8,000 employers and managed care organizations and reach approximately 94 million employees, dependents and retirees.

Liz Claiborne Inc.

CDC provided information and technical assistance to Liz Claiborne Inc. during the company's development of A Parent's Guide to Teen Dating Violence: 10 Questions to Start the Conversation. The guide, one of a series of educational booklets produced as part of Liz Claiborne Inc.'s 10-year anti-abuse program, gives parents and guardians of teens language they can use to help them communicate with their children about intimate partner violence. CDC has provided feedback on other Liz Claiborne Inc. publications about the subject.

Cross-Cutting Partnerships

CDC works with several groups that represent a variety of interests all working for the common goal of injury prevention. Following are three examples.

Partnership for Prevention

CDC's Injury Center has begun working with Partnership for Prevention's Violence Prevention Committee. The committee advocates activities and policies to reduce violence in America. Partnership for Prevention works to improve the nation's

health through community-based and clinical preventive services, prevention-oriented policies, and information and support tools that help Americans take better care of themselves. It is composed of employers, health-related professional and trade associations, universities and academic health centers, nonprofit policy and research institutions, health plans and state health departments.

SafeUSA™

CDC is one of about 30 partners that make up SafeUSA, an alliance of public and private organizations dedicated to eradicating unintentional and violent injuries and deaths. Its mission is to make our nation's homes, schools, work sites, transportation areas and communities safer by enhancing public awareness and supporting injury prevention efforts at all levels. To achieve this mission, SafeUSA supports science-based exploration of new interventions for injury prevention and promotes existing programs that demonstrate success in preventing injury. In December 2001, SafeUSA will hold a national conference in Atlanta. At this event, supported in part by CDC, participants will share information about effective prevention programs, develop new partnerships and strengthen existing ones, improve the quality of programs, identify resources to support research efforts and advance the research agenda for injury prevention and control.

Sexual Assault Prevention Working Group
The Sexual Assault Prevention Working Group—consisting of researchers, state health department representatives and advocates—works to increase awareness about sexual violence. They are part of the planning committee for CDC's Second National Sexual Violence Prevention Conference, to be held in June 2002. They participated in planning the first national conference, helping CDC to identify issues and prevention strategies for discussion.



Different People, Different Injuries

Different People, Different Injuries

Injuries affect everyone. But some injuries are a bigger problem for some groups of people. CDC's Injury Center staff works hard to identify the groups that are disproportionately affected by various injuries and to address the prevention needs of those groups.

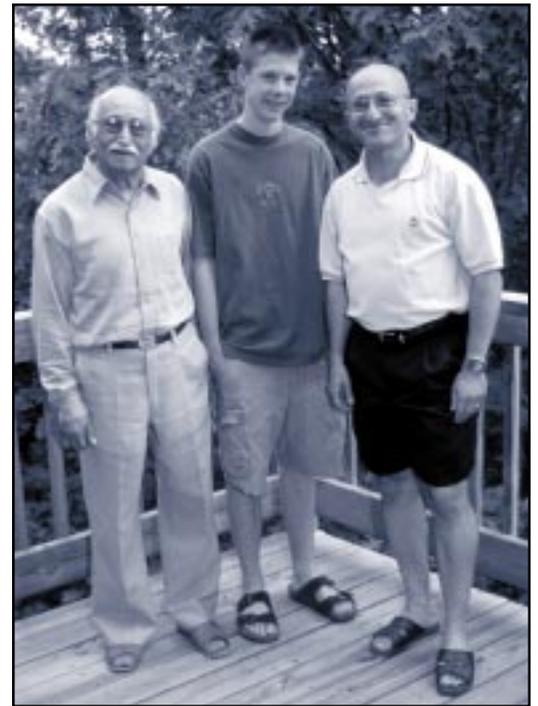
Why focus on different groups of people? The U.S. population can be split along many different lines—racial and ethnic, gender, age, socioeconomic, and geographic. When determining who is affected by a particular type of injury, it is important to consider all of these characteristics. They shape a person's beliefs, values, preferences, and life experiences. Those factors, in turn, strongly affect how a person responds to prevention efforts.

By focusing on a small segment of the population—the segment affected most by a particular type of injury—we can do two things: 1) design a prevention program tailored to the needs, preferences, and life circumstances of that group, and 2) maximize the use of resources by targeting our efforts where they will have the greatest impact. Simply stated, we reach the people most in need with programs that will get the best results.

Following is a look at how injuries affect different groups of Americans and what CDC is doing to address them.

Males

- Males are at least four times as likely as women to die from suicide.
- Men 65 and older have the highest suicide rate.
- More than three-quarters of school homicide and suicide victims were males.
- Compared with women, men are twice as likely to sustain a traumatic brain injury and four times as likely to sustain a spinal cord injury.
- Among adults ages 65 and older, motor vehicle–related injury rates are twice as high for men than for women.
- Male high school students are less likely than female students to wear seat belts.
- Men ages 65 and older are 22% more likely than women to die as a result of a fall.
- More than 80% of drownings occur among males.
- The pedestrian death rate is twice as high for men as for women.
- Boys ages 5 to 9 are at highest risk for dog bite–related injuries.



Males are at higher risk than women for many injuries.

Males are at higher risk than women for motor vehicle crashes, falls, drowning, and homicide. Several factors may account for these differences. For instance, males are more likely than females to engage in behaviors that put them at risk, such as driving or boating after drinking alcohol, failing to wear seat belts, participating in potentially dangerous sports and leisure activities, and perpetrating violent acts.

It is also believed that men are less likely to ask for help, especially emotional help. This factor may contribute to the increased risk of suicide death among men. In nearly all cases, men 65 and older who commit suicide suffer from depression. Because men seldom reach out for help with depression, they are more socially isolated and vulnerable to suicide. Males attempting suicide are also more likely to use more lethal means, such as guns, which increase their likelihood of completing the act.

Females

- Women are more likely than men to attempt suicide.
- In a national survey, 25% of women reported being raped or physically assaulted by an intimate partner at some time in their lives; only 8% of men reported such an experience.
- One in three women injured during a physical assault or rape requires medical care.
- Women are more likely than men to be murdered by an intimate partner.
- Among adults 65 and older, women are hospitalized for hip fractures three times as often as men.

Although females are less at risk for many injuries when compared with males, in several injury areas, the risk to women is much greater.

Among older women, for example, the risk of falling and fracturing a hip is much higher than among men in the same age group. Bone loss is a contributing factor for this increased risk. Many more women than men suffer from osteoporosis, a condition that makes bones brittle and susceptible to fractures.

Many more women than men are victims of sexual or physical assault by someone they are dating, living with, married to, or separated or divorced from. Such violence may be a consequence of conflicts related to power and control within the family or relationship.

CDC's Injury Center examines ways to prevent the injuries that disproportionately affect women. For example, CDC-sponsored researchers are looking into methods to prevent fractures from falls. They have developed a flooring material that reduces the impact of falls, and they are looking into ways to decrease bone loss. The Injury Center also supports many efforts to prevent intimate partner violence. The Center has funded resource networks to increase awareness and information sharing and developed uniform definitions to improve reporting of intimate partner violence. Center staff is also working to develop culturally sensitive programs to prevent intimate partner violence and help those who experience it.



Women are at much higher risk than men for falls and intimate partner violence.

African Americans

- More African Americans ages 15 to 19 die from homicide than from any other cause.
- African Americans are among those at greatest risk for injuries from residential fires.
- The pedestrian fatality rate for African Americans is nearly twice that for whites.
- The drowning rate for African Americans overall is about 1.6 times as high as for whites. For African American children ages 5 to 9, it's 2.5 times as high.
- African American high school students are less likely than white students to wear seat belts all the time, putting them at increased risk of motor vehicle-related injuries.
- The rate of spinal cord injuries is higher among African Americans than among whites.

The injury rate for African Americans is higher than that for nearly all other racial and ethnic groups. This disparity may be due in part to the fact that a greater percentage of African Americans have lower education levels and higher poverty levels. Such characteristics have been shown to increase risk for injury. They are clearly associated with higher pedestrian fatality rates and higher fatality rates from residential fires. These factors are also linked to an increase in violence-related injuries and deaths.



The injury rate for African Americans is higher than for nearly all other racial and ethnic groups.

CDC is working to eliminate this disparity. In several areas, work is underway to develop interventions that are culturally sensitive and tailored to the needs of African American populations. One such program aims to prevent intimate partner and sexual violence. Another, funded by CDC, focuses on preventing youth violence among a predominantly African American group of 6th-, 7th- and 8th-grade students living in rural Alabama. CDC also supports programs to install smoke alarms in high-risk neighborhoods, many of which have a high concentration of African American residents.

Hispanic Americans

- Motor vehicle crashes are the leading cause of injury-related deaths for Hispanics; poisonings are second.
- The pedestrian fatality rate for Hispanics is 1.77 times higher than for whites.
- Homicide is the second leading cause of death for Hispanics ages 15 to 34.

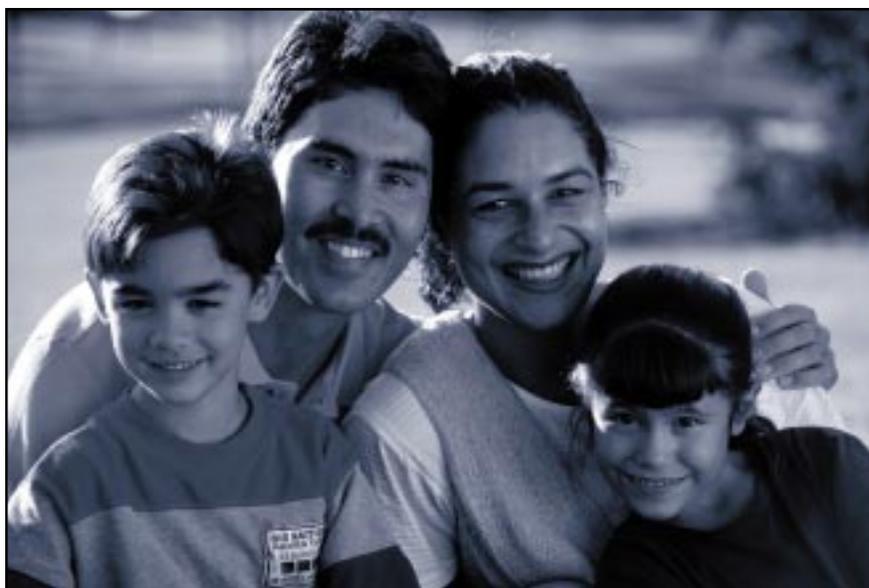
Overall, the injury rate for Hispanic Americans is lower than for non-Hispanics. However, for some injury problems, Hispanics are at a higher risk than other racial or ethnic groups.

Among this group, pedestrian fatalities are nearly twice as high as for whites. This disparity may be explained largely by the fact that Hispanics make 55% more walking trips than do non-Hispanics, according to the Department of Transportation's 1995 Nationwide Personal Transportation Survey. This difference may be attributable to a lower vehicle ownership rate among Hispanics.

Hispanic youth are at higher risk than whites for injuries resulting from violence. This disparity may be due in part to the fact

that a greater percentage of Hispanic Americans have lower education levels and higher poverty levels. Such characteristics, along with family disruption and weak intergenerational ties in families and communities, have been shown to increase risk for violent behavior.

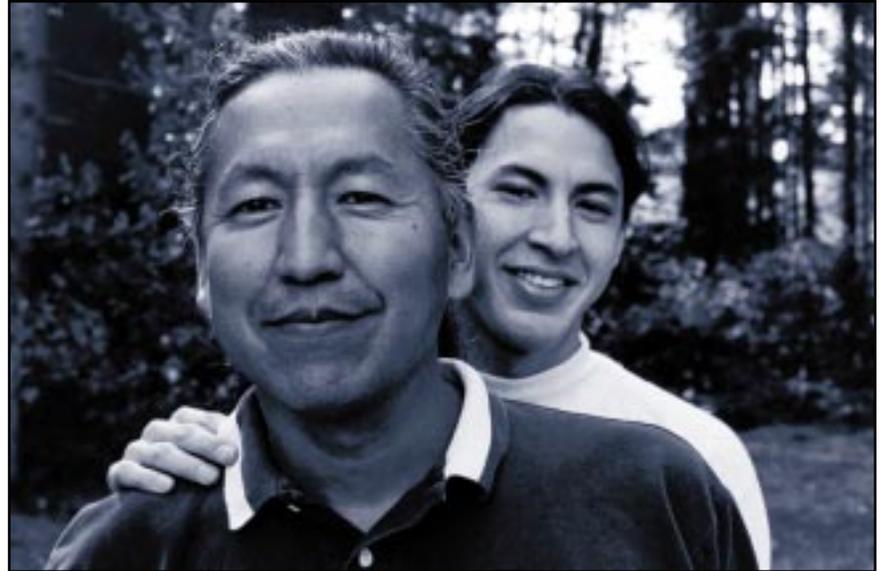
CDC supports efforts to develop prevention programs that meet the cultural needs of Hispanics in America. As part of this effort, in the fall 2001, CDC's Injury Center will publish a Spanish translation of *Best Practices of Youth Violence: A Sourcebook for Community Action*, a detailed presentation of proven strategies for preventing violence among young people.



Hispanic Americans are at increased risk for pedestrian fatalities and homicide.

American Indians and Alaska Natives

- American Indians and Alaska Natives are among those at greatest risk for injuries from residential fires.
- The pedestrian fatality rate for this group is nearly three times higher than for whites.
- In a national survey, American Indian/Alaska Native women were more likely than any other racial or ethnic group to report being raped or physically assaulted.
- Suicide is the second leading cause of death for American Indians and Alaska Natives ages 15 to 34.



American Indians and Alaska Natives are at high risk for fire-related injuries and pedestrian fatalities.

American Indians and Alaska Natives are at higher risk for several types of injuries, both unintentional and violence-related.

This group has a higher rate than many racial and ethnic groups for injuries resulting from fires in their homes. This disparity may be attributable to a higher percentage of American Indians and Alaska Natives living in rural areas and in manufactured housing, a known risk for fire-related injuries and deaths.

Teens and young adults among this racial group are at increased risk for suicide. This higher risk may be due to several factors, including limited availability of employment and educational opportunities, alcohol use among this population, and loss of traditional spiritual practices and indigenous languages.

American Indian and Alaska Native women appear to be at higher risk of rape and physical assault, according to findings from the National Violence Against Women Survey, conducted jointly by CDC and the U.S. Department of Justice. However, more research is needed to determine if more women in this population are victims of rape and physical assault or if the difference is due to a higher percentage of victims in this population reporting their attacks.

CDC is looking into how these types of injuries and violence affect different racial and ethnic groups, including American Indians and Alaska Natives, and is developing culturally appropriate strategies for prevention.

Infants and Young Children

- For children ages 1 to 4, motor vehicle injuries are the leading cause of death.
- Nearly half of children 4 and younger who died in motor vehicle crashes were riding unrestrained.
- Drowning is the second leading cause of injury-related death for children ages 1 to 4.
- In 1999, children under 5 accounted for more than half of all poison exposures.
- Children under 5 are among those most at risk for injuries from residential fires.
- Head trauma, often the result of violent shaking, is the leading cause of death and disability among abused infants and children.

Infants and young children are at greater risk for many injuries. This increased risk may be attributable to many factors. Children are curious and like to explore their environment. This characteristic may lead children to sample the pills in the medicine cabinet, play with matches, or venture into the family pool. Young children have limited physical coordination and cognitive abilities. This factor can lead to a greater risk for falls from bicycles and playground equipment and make it difficult for them to escape from a fire. And their small size and developing bones and muscles may make them more susceptible to injury in car crashes if they are not properly restrained.

Because babies and young children are so dependent on others and often cannot express themselves well verbally, they may



Infants and young children are at high risk for motor vehicle injuries, drowning, and poisoning.

be at higher risk for abuse or neglect. A baby or toddler who experiences abuse cannot tell someone about it, so the abuse may continue. And because of their small size, they can be seriously injured if hit, pushed, or shaken by an adult.

CDC is involved in many efforts to keep young children safe. The Injury Center supports programs to increase child safety seat use, prevent injuries related to residential fires, increase bicycle helmet use, and prevent child maltreatment. Center staff is also working with partners to increase access to poison control services.

Children and Adolescents

- For children ages 5 to 14, motor vehicle injuries are the leading cause of death.
- Only about 6% of children ages 4 to 8 ride in booster seats, the recommended safety seat for this age group.
- Nearly two-thirds of children 15 and younger who died in alcohol-related motor vehicle crashes were riding with the drinking driver.
- Drowning is the second leading cause of injury-related death among children 5 to 14.
- For children ages 10 to 14, suicide is the third leading cause of death.
- Between 1980 and 1997, the suicide rate for children 10 to 14 years old increased 109%.
- Nearly one-third of bicyclists killed in traffic crashes are children ages 5 to 14.



Risks for children and adolescents—motor vehicle crashes, bicycle crashes, pedestrian fatalities, dog bites, and suicide.

- An estimated 140,000 children are treated each year in emergency departments for traumatic brain injuries sustained while bicycling.
- Children 15 and younger accounted for 11% of pedestrian fatalities and 30% of nonfatal pedestrian injuries in 1998.
- Children are at increased risk for dog bites; 2.5% of children are bitten each year compared with 1.6% of adults.
- Nearly 30% of rapes occur before age 12.

Children and adolescents are at a higher risk for injuries for many reasons. Because of their stage of cognitive development, they are often impulsive and unable to judge the safety of a situation. For example, they may dart out into a busy street to retrieve a ball, fail to follow the rules of the road while riding a bike, or assume that an unfamiliar dog is friendly. Their size may also put them

at risk. Because they are small, they are hard to see when walking in traffic, they may be seen as an easy target for a dog prone to attack, and they are not well protected by adult seat belts in motor vehicles.

The risk of abuse—including sexual abuse—and suicide is high for this age group, as well. Many children and adolescents do not report abuse because

they fear punishment, loss of a parent's love, or getting someone they love and rely on in trouble. The emotional and social changes that occur during this life stage may increase the risk of suicide.

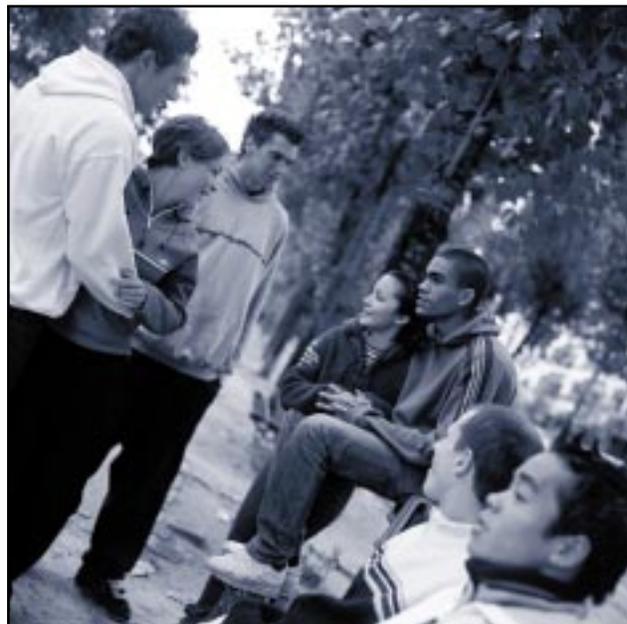
CDC's Injury Center staff is working to prevent injuries among this group by increasing the use of booster seats, encouraging children to ride in the back seat of motor vehicles, and promoting bicycle helmet use and safe riding. CDC is also looking into the risk factors for abuse and suicide and exploring programs to prevent these injury problems among our nation's children.

Teens and Young Adults

- Homicide is the second leading cause of death for Americans ages 15 to 19. In 1997, 85% of young homicide victims were killed with guns.
- In a 1999 study, 14% of high school students had been in a physical fight on school property at least once in the preceding year.
- For Americans ages 15 to 24, suicide is the third leading cause of death.
- The risk of motor vehicle crashes is higher among teen drivers than any other age group.
- Only 35% of high school students report that they always wear their seat belt.
- In 1998, 21% of drivers ages 15 to 20 who died in motor vehicle crashes had blood alcohol concentrations of at least 0.10%.

- The percentage of teens who wear bicycle helmets is close to zero.
- More than half the people who sustain spinal cord injuries are between 16 and 30 years old.
- Among young males, alcohol is a major factor in 50% of drownings.

Teens and young adults are at higher risk for many types of injuries. They are involved in violence more than any other age group. This increased risk may be due to developmental factors such as a greater tendency to act impulsively and to engage in risk-taking behaviors. Personal and social factors like substance abuse and involvement with delinquent peers may also increase one's risk of interpersonal violence. These factors may also increase this age group's risk of suicide and suicidal behavior.



Motor vehicle injuries and homicide—the leading causes of death for teens and young adults.

For many reasons, teens are at increased risk for motor vehicle–related injuries and deaths. Teens are more likely than older drivers to speed, run red lights, make illegal turns, ride with an intoxicated driver, and drive after using alcohol or drugs. Teens are also more likely than older drivers to underestimate the dangers in hazardous situations, and they have less experience coping with such situations. Additionally, nearly two-thirds of high-school students do not consistently wear seat belts. Just as with violent behavior, driving behaviors such as not wearing a seat belt and speeding may be linked to teens’ impulsiveness and tendency to take risks. These factors are also likely linked to teens’ and young adults’ higher risk for spinal cord injuries and drowning and to the reluctance to wear bicycle helmets.

CDC supports many programs to reduce injuries and violence among teens and young adults. CDC projects include evaluating the effectiveness of graduated licensing, examining how parents’ actions affect teen driving behavior and exploring ways to increase bike helmet use among youth. Several projects are also underway to identify and address risk factors for youth suicide and interpersonal violence.

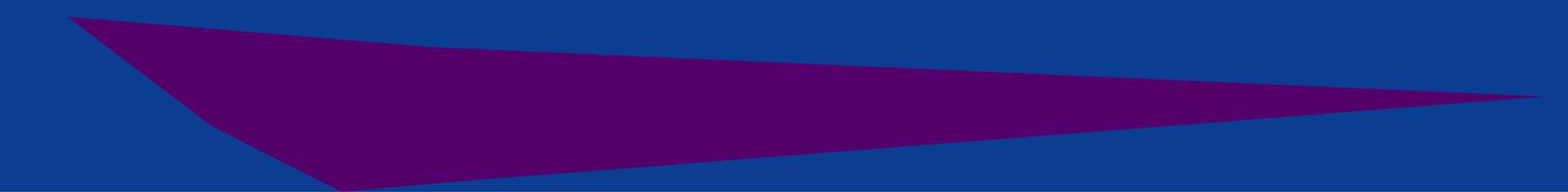
Older Americans

- Per mile driven, adults 65 and older have a higher crash rate than all but teen drivers.
- The pedestrian death rate for people 65 and older is higher than for any other age group.

- Falls are the leading cause of injury-related death among this age group.
- Hip fractures are among the most serious fall-related injuries. Half of older adults who suffer a hip fracture never regain their previous level of functioning.
- Older adults are among those at greatest risk for injuries from residential fires.
- Adults 65 and older account for nearly 20% of suicides. This age group has had the highest suicide rate since 1933, when reporting of such data began.



Americans 65 and older are at increased risk for motor vehicle–related injuries, suicide, and falls.



Americans ages 65 and older are at higher risk for many types of unintentional injuries. Older adult drivers are at greater risk of dying in a car crash than younger and middle-age drivers. This risk may be due to vision problems, slower reflexes, and impaired thinking due to mental illness. Older adults are also at greater risk than any other age group for pedestrian deaths. The same risk factors that apply to motor vehicle-related deaths may also lead to pedestrian deaths. Decreased bone density and medical conditions that can complicate injuries may also contribute to deaths among older pedestrians. These same conditions are linked to this age groups' high risk of fall- and fire-related injuries and deaths.

Older Americans are also at higher risk for suicide. This risk may be associated with several factors including depression and other mental illness and chronic diseases. A chronic illness can cause not only frequent pain, but also limited ability to run errands, attend social gatherings, and participate in religious functions. This limited mobility can lead to isolation, which can increase suicide risk.

Several CDC efforts address the problem of injury among older Americans. They include a program to prevent fires and falls among older adults, a recently published collection of selected fall-prevention programs across the country, and a study to examine reasons that older drivers decide to stop driving. Additionally, CDC is funding research to determine the effectiveness of a program to prevent depression and associated suicide risk among older adults.