Introduction

America is rapidly changing—its population is more mobile, more diverse, and older. Health care costs are soaring and our country is more vulnerable to outside threats. What hasn't changed, and continues to be a public health concern, is the toll injuries take on individuals and on the nation.

Injuries in a Changing America

The financial and economic impact of injuries in the United States is serious.

However, by expanding our science-based injury prevention programs, we can drastically reduce these costs and even more importantly help people live longer and healthier lives.

CDC Director, Dr. Julie Gerberding

Injuries Affect Everyone

Regardless of gender, race, or economic status, injuries remain a leading cause of death for Americans of all ages, accounting for more than 161,000 deaths in 2002. But injury deaths are only part of the picture. Millions of Americans are injured each year and survive. In 2004, about 29.6 million people were treated for an injury in U.S. hospital emergency departments, of which nearly 2 million injuries were severe enough to require hospitalization. For many people, the injury causes temporary pain and inconvenience; but for some, the injury leads to disability, chronic pain, and a profound change in lifestyle.

An injury affects more than just the person injured—it affects everyone 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 example, 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 their children. Friends of the injured person may be called upon to help 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.

10 Leading Causes of Death by Age Group - 2003

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Congenital Anomalies 5,621	Unintentional Injury 1,717	Unintentional Injury 1,096	Unintentional Injury 1,522	Unintentional Injury 15,272	Unintentional Injury 12,541	Unintentional Injury 16,766	Malignant Neoplasms 49,843	Malignant Neoplasms 95,692	Heart Disease 563,390	Heart Disease 685,089
2	Short Gestation 4,849	Congenital Anomalies 541	Malignant Neoplasms 516	Malignant Neoplasms 560	Homicide 5,368	Suicide 5,065	Malignant Neoplasms 15,509	Heart Disease 37,732	Heart Disease 65,060	Malignant Neoplasms 388,911	Malignant Neoplasms 556,902
3	SIDS 2,162	Malignant Neoplasms 392	Congenital Anomalies 180	Suicide 244	Suicide 3,988	Homicide 4,516	Heart Disease 13,600	Unintentional Injury 15,837	Chronic Low. Respiratory Disease 12,077	Cerebro- vascular 138,134	Cerebro- vascular 157,689
4	Maternal Pregnancy Comp. 1,710	Homicide 376	Homicide 122	Congenital Anomalies 206	Malignant Neoplasms 1,651	Malignant Neoplasms 3,741	Suicide 6,602	Liver Disease 7,466	Diabetes Mellitus 10,731	Chronic Low. Respiratory Disease 109,139	Chronic Low. Respiratory Disease 126,382
5	Placenta Cord Membranes 1,099	Heart Disease 186	Heart Disease 104	Homicide 202	Heart Disease 1,133	Heart Disease 3,250	HIV 5,340	Suicide 6,481	Cerebro- vascular 9,946	Alzheimer's Disease 62,814	Unintentional Injury 109,277
6	Unintentional Injury 945	Influenza & Pneumonia 163	Influenza & Pneumonia 75	Heart Disease 160	Congenital Anomalies 451	HIV 1,588	Homicide 3,110	Cerebro- vascular 6,127	Unintentional Injury 9,170	Influenza & Pneumonia 57,670	Diabetes Mellitus 74,219
7	Respiratory Distress 831	Septicemia 85	Septicemia 39	Chronic Low. Respiratory Disease 81	Influenza & Pneumonia 224	Diabetes Mellitus 657	Liver Disease 3,020	Diabetes Mellitus 5,658	Liver Disease 6,428	Diabetes Mellitus 54,919	Influenza & Pneumonia 65,163
8	Bacterial Sepsis 772	Perinatal Period 79	Benign Neoplasms 38	Influenza & Pneumonia 72	Cerebro- vascular 221	Cerebro- vascular 583	Cerebro- vascular 2,460	HIV 4,442	Suicide 3,843	Nephritis 35,254	Alzheimer's Disease 63,457
9	Neonatal Hemorrhage 649	Chronic Low. Respiratory Disease 55	Chronic Low. Respiratory Disease 37	Benign Neoplasms 41	Chronic Low. Respiratory Disease 191	Congenital Anomalies 426	Diabetes Mellitus 2,049	Chronic Low. Respiratory 3,537	Nephritis 3,806	Unintentional Injury 34,335	Nephritis 42,453
10	Circulatory System Disease 591	Benign Neoplasms 51	Cerebro- vascular 29	Cerebro- vascular 40	HIV 178	Influenza & Pneumonia 373	Influenza & Pneumonia 992	Viral Hepatitis 2,259	Septicemia 3,651	Septicemia 26,445	Septicemia 34,069

Source: National Vital Statistics System, National Center for Health Statistics, CDC.

Produced by: Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC

The Cost of Injuries

Society at large is profoundly affected by injuries. Unintentional injuries are the leading cause of death for Americans ages 1 to 44. Homicide and suicide are the second and third leading causes of death for persons ages 15 through 34 years. More than 16% of the population (44.7 million) reported needing treatment for at least one injury in 2000. Insurance costs and out-of-pocket spending for all medical services are quantified by the Medical Expenditure Panel Survey (MEPS), a nationally-representative survey of the U.S. civilian noninstitutionalized population. MEPS reported that injuries in 2000 contributed to 10% of U.S. medical expenditures; when MEPS percentages were applied to the annual National Health Accounts data (which trace expenditures within the health care system), injury-related medical expenditures were estimated to cost Americans \$117 billion each year.

Medical spending due to injuries is of the same magnitude as costs associated with other leading public health concerns such as obesity and smoking. By age group, costs ranged from \$5 billion for 20- to 29-year-olds to \$37.9 billion for ages 45 to 64, with the greatest injury-related medical costs (\$23.3 billion) for women ages 45 to 64. Overall, injury-attributable medical costs were higher for males (\$59.8 billion) than females (\$57.4 billion).

Although staggering, these costs still underestimate the overall societal burden caused by injury. When other losses are considered, a more definitive cost estimate emerges. Productivity losses, emotional toil, loss of patient and caregiver time, nonmedical expenditures (e.g., wheelchair ramps), litigation, diminished quality of life, and long-term consequences (e.g., rehabilitation and mental health care costs) must also be considered. A future CDC study will examine the cost of injuries from this broader perspective. Already, CDC's Injury Center activities

TABLE. Percentage and number* of persons reporting treatment for an injury and percentage and amount of medical expenditures attributable to injuries, by selected characteristics — United States, 2000

	Persons reporting treatment for an injury [†]		Medical expenditures attributable to injuries		Injury-attributable medical expenditures (\$) Per capita,			
Characteristic	(%)	No.§	%	MEPS ¹	NHA**	NHA		
Total	(16.3)	44.7	10.3	64.7	117.2	427		
Sex								
Male	(17.3)	23.1	12.5	33.2	59.8	448		
Female	(15.4)	21.6	9.2	31.8	57.4	409		
Age group (yrs)								
<10	(11.9)	4.8	7.8	3.1	5.7	141		
10–19	(17.9)	7.2	16.6	7.4	13.4	333		
20–29	(15.8)	5.7	6.8	2.7	5.0	137		
30-44	(17.8)	11.3	12.2	14.6	26.5	417		
45–64	(16.7)	10.2	10.6	20.9	37.9	621		
<u>≥</u> 65	(16.7)	5.5	8.7	16.0	29.0	881		
Sex by age group Male								
<10	(13.7)	2.8	9.4	1.6	3.0	145		
10–19	(20.7)	4.3	26.3	5.1	9.2	445		
20–29	(18.0)	3.2	7.9	1.0	1.7	98		
30-44	(20.0)	6.2	15.3	7.5	13.6	438		
45–64	(15.5)	4.6	7.9	7.6	13.7	463		
<u>≥</u> 65	(14.2)	2.0	11.8	9.6	17.4	1,233		
Female								
<10	(9.9)	1.9	6.7	1.3	2.3	118		
10–19	(15.0)	3.0	11.9	3.0	5.4	272		
20–29	(13.6)	2.5	4.8	1.4	2.5	139		
30-44	(15.7)	5.1	9.4	6.7	12.1	373		
45-64	(17.9)	5.7	12.5	12.9	23.3	732		
<u>≥</u> 65	(18.5)	3.5	6.7	7.1	12.9	680		

- * In millions.
- [†] On the basis of Medical Expenditure Panel Survey (MEPS) estimates.
- § Results were weighted to be nationally representative.
- ¹ In billions. MEPS estimate of U.S. medical expenditures in 2000 is restricted to the civilian, noninstitutionalized population.
- *** In billions. National Health Accounts (NHA) estimates include the U.S.-based military and institutionalized populations and are calculated by multiplying the NHA estimate of U.S. medical expenditures in 2000 by the percentage of medical expenditures attributable to injuries estimated by MEPS.

such as effective interventions and prevention programs are paving the way for substantial reduction of the economic burden of injury in this country (Finkelstein et al. 2004).

Injury Prevention and CDC

Injuries have been a leading cause of death and disability throughout history; consequently, many people and agencies have undertaken prevention efforts. In 1985, the National Research Council and the Institute of Medicine (IOM) recognized the need for a coordinated effort to prevent injuries in the United States. 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 and control activities, with each agency leading in its area of expertise. As it is, CDC's Injury Center now 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 effective injury prevention principles and strategies.

Define the problem

Before we can address 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—processes 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. Decision makers use these critical data in allocating programs and resources to the areas most in need.

Identify risk and protective factors

It is not enough to 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 its knowledge and may provide funding or expert consultation so that communities can replicate these successful strategies.



The Public Health Approach at Work

Defining the Problem

For some injury issues, CDC has already moved through the first three steps of the public health approach and is encouraging widespread adoption of programs that work. For other issues, CDC is working to fully define the problem. Always, CDC addresses injury issues that affect diverse populations, in every stage of life.

The examples in this book demonstrate how the public health approach is at work in CDC's Injury Center.

Violent death in America

In the United States in 2002, 17,638 people died as a result of homicide and 31,655 died from suicide. Although public health officials may know how many people die from violence each year, information about the circumstances surrounding those deaths is often lacking. Federal, state, and local agencies all have detailed data that could answer important, fundamental questions about violence patterns and trends, but the information is fragmented and difficult to access. The system that pulls together this vital information to be shared among states and communities is the National Violent Death Reporting System (NVDRS). NVDRS gathers data from states that can be used to increase our understanding of violent deaths in America. NVDRS data can assist policy makers and community leaders in making informed decisions about strategies and programs to prevent violence. Currently, 17 states have been funded to implement the system.

Injury mortality among Native American children and youth

Native Americans ages 19 years and younger are at greater risk of preventable injury-related deaths than are other children and youth in the United States. A 2003 study published in CDC's Morbidity and Mortality

Weekly Report found that injuries and violence account for 75% of all deaths among Native Americans in this age group—a rate that is about twice that of all children and youth in the United States. Motor vehicle crashes were the leading cause of injury-related death, followed by suicide, homicide, drowning, and fires. Between 1989 and 1998,

more than 3,300 Native American children and youth living on or near reservations died from injuries or violence (Wallace et al. 2003).

Intimate partner and sexual 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 its magnitude. In 2002, CDC's Injury Center revised its publication of definitions designed to improve data collected about intimate partner violence. This publication standardized the terminology used by all parties involved in the problem: the criminal justice system, hospitals, and others. Similar standards for sexual violence were also published in 2002. Uniform definitions and recommended data elements for both intimate partner violence and sexual violence are important to ensure consistency in the use of terminology and to standardize data collection. Consistent data allow researchers to better gauge the scope of the problem, identify high-risk groups, and monitor the effects of prevention programs.



Report to Congress on mild TBI

Evidence indicates that mild traumatic brain injury (MTBI) is a public health problem, the magnitude and impact of which are underestimated by current surveillance systems. Much research is needed to determine the full magnitude of MTBI, to identify preventable and modifiable risk factors, to develop and test strategies to reduce MTBI, and to improve outcomes for those who sustain these injuries. Such research will inform the development of more effective primary prevention strategies and policies to address the service and rehabilitation needs of persons with MTBI. The recommendations in the CDC report to Congress, Mild Traumatic Brain Injury in the United States: Steps to Prevent a Serious Public Health Problem, can help shape that research.

Nonfatal drownings at recreational water sites

In 2004, CDC scientists published in the Morbidity and Mortality Weekly Report the first national estimate for nonfatal drowning injuries treated in emergency departments (Gilchrist et al. 2004). Findings for the United States in 2001 and 2002 showed more than 4,100 people sought care in an emergency department each year for nonfatal drowning injuries, with more

than half requiring hospital admission or transfer for higher levels of care. Children ages 4 and under and males of all ages were at the greatest risk. The most common locations of nonfatal injuries for very young children were residential pools. As children grew older, more injuries occurred in natural water settings. The study also confirmed that injuries happen most often on weekends and during summer months—times when people typically enjoy water-related activities.

Identifying Risk and **Protective Factors**

Suicide

More than 31,000 people took their own lives in 2002. Public health officials want to expand the understanding of 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 Emory University examined suicide risk factors among African Americans ages 18 to 44 and found a strong connection between intimate partner violence and suicidal behavior among African-American women.

Human behavior in residential fires

CDC is directing development of the Human Behavior in Fire Study to identify behavioral factors in residential fires that are associated with injuries and fatalities. Researchers will interview survivors of residential fires to gather information about the sequence of events and learn more about their behaviors before, during, and after the fire. Researchers will gather and analyze data about the root cause of the fire, the events that led to an injury, the state of awareness and impairment level of those involved, and the actions taken in response to the fire. Results from this study will inform public health interventions to reduce the number of injuries and deaths in residential fires. CDC is developing this study with the Battelle Centers for Public Health Research and Evaluation, in collaboration with the Department of Fire Protection Engineering at the University of Maryland at College Park.

Developing and Testing Prevention Strategies

Targeting injury problems in states

Solving the problems of injury and violence in America requires a strong public health response. Both research and effective injury prevention programs in states are needed to help those at risk and to avoid costly injuries and needless deaths. In 2002, CDC began funding the Targeted Injury Intervention Program in four states to individually plan, develop, and implement prevention programs that target an important injury problem identified in each state. Maine and Virginia have each developed suicide prevention programs, while Washington and Michigan have focused on fall prevention. In 2002-2003, state injury experts planned and developed their prevention programs, and in 2004 the programs were implemented. The targeted programs continued through 2005, as the states tested prevention strategies in preparation to share the results.

Parenting strategies to prevent child maltreatment

CDC has launched several initiatives aimed at preventing child maltreatment through evidence-based parenting programs. These programs and policies encourage and promote positive parent-child interactions. Improving parenting skills will help parents and caregivers better manage behavior before violence can occur. CDC is funding the University of South Carolina to examine the effectiveness of the Triple P-Positive Parenting Program in reducing the risk of child maltreatment by enhancing the knowledge, skills, and confidence of parents. Even the most effective parenting programs will have a limited impact on child maltreatment if parents either do not attend or do not learn to apply alternative parenting skills. CDC is working with Purdue University and the University of Oklahoma Health Sciences Center to test ways to reduce attrition and improve engagement and compliance in parenting programs.

Community-based cognitive therapy for suicide attempters

CDC is working with the University of Pennsylvania to test the effectiveness of a cognitive therapy intervention for suicide attempters. Trained therapists at community mental health centers are conducting the intervention. The target group—people who have attempted suicide—consists largely of ethnic minorities and economically disadvantaged individuals exhibiting high rates of mental health and substance-use disorders. A previous study found that a brief cognitive intervention designed specifically for this high-risk population and delivered in a university setting reduced subsequent suicide attempts. The current study will implement the program in the community and evaluate its effectiveness for preventing subsequent suicide attempts.



Violence prevention for middle school students

CDC is testing one of the largest efforts to date to assess the effectiveness of school-based violence prevention among middle school students. It teaches students conflict resolution and problem-solving skills, trains teachers about violence prevention, and engages family members in program activities. The project is being conducted in 37 middle schools in four states. Affiliations include Virginia Commonwealth University, University of Illinois—Chicago, University of Georgia, and Duke University.

A boost for children ages 4 to 8

CDC's Injury Center funded state health departments in Colorado, Kentucky, and New York to develop, implement, and evaluate community-based programs to increase booster seat use among children ages 4 to 8. Between 2000 and 2003, grantees implemented and evaluated community awareness campaigns and school-based programs, aired public service announcements, posted billboards, and conducted booster seat distribution events and

car seat checkpoints. Evaluation data from Colorado showed a significant increase in booster seat use in target communities when compared with control communities. Results from these intervention evaluations will help guide future efforts to increase booster seat use.

Fall prevention strategies and effectiveness: Dane County SAFE Study

In October 2002, CDC's Injury Center funded the Wisconsin Department of Health, in collaboration with the University of Wisconsin, to conduct a randomized controlled trial to assess the effectiveness of a comprehensive approach to preventing falls among higher-risk adults age 65 and older. This project will use two complementary strategies: a comprehensive at-home assessment (followed by individualized risk reductions) and a broad-based program to educate primary care physicians and other health practitioners. To learn more about preventing falls among older adults, visit www.cdc.gov/ncipc/ pub-res/toolkit/toolkit.htm.

Remembering When: a fire and fall prevention program

In October 2000, CDC began funding state health departments in Arkansas, Maryland, Minnesota, North Carolina, and Virginia to implement and evaluate Remembering When: A Fire and Fall Prevention Program for Older Adults. This curriculum, which was developed by the National Fire Protection Association, the U.S. Consumer Product Safety Commission, CDC, and other partners, is the first program of its kind to educate older adults about prevention of both fall- and firerelated injuries. To date, more than 510 group presentations (with 12,427 attendees) and 3,566 individual/ home presentations have been conducted. More than 4,300 smoke alarms and 525 grab bars have been installed in the homes of older adults. Research is underway to measure the program's effectiveness.

Assuring Widespread Adoption

Effective interventions against alcohol-impaired driving

In systematic reviews of published research studies, CDC researchers found strong evidence for the effectiveness of 0.08% blood alcohol concentration (BAC) laws, minimum legal drinking age laws, sobriety checkpoints, and mass media campaigns that meet certain conditions (i.e., careful audience research, adequate audience exposure, and presence of other alcohol-impaired driving prevention activities). They also found sufficient evidence of the effectiveness for lower BAC laws specific to young or inexperienced drivers ("zero tolerance" laws) and intervention training programs for alcohol servers. Finally, they found sufficient evidence that school-based education programs decrease riding with alcohol-impaired drivers (though there was insufficient evidence

regarding the programs' effects on alcohol-impaired driving itself). These school-based interventions were effective in reducing fatal and nonfatal alcohol-related motor vehicle crashes. The reviews were published in The Guide to Community Preventive Services (2005) and are online at www. thecommunityguide.org.

Smoke alarm installation and fire-safety education

CDC has funded states to install smoke alarms and to provide fire-safety education in high-risk communities, targeting households with children ages 5 years and younger and adults ages 65 years and older. An informal sample of program homes found that since 1998, an estimated 1,071 lives may have been saved. In addition, program staff have canvassed more than 382,000 homes and installed more than 275,000 longlasting smoke alarms.

TBI tool kit for health care professionals

In 2002, CDC produced Heads Up: Brain Injury in Your Practice specifically for primary care physicians—CDC's first educational tool kit related to traumatic brain injury (TBI). The tool kit contains practical, easy-to-use clinical information, patient information in English and Spanish, scientific literature, and CD-ROM with printable versions of the materials in the kit. More than 150,000 copies have been distributed to health care providers nationwide and internationally. Although the tool kit was originally developed for physicians, many other health care providers, such as nurse practitioners and physical therapists, have requested the materials. CDC has received positive feedback from more than 2,000 recipients of the tool kit.

References

Finkelstein EA, Fiebelkorn IC, Corso PS, Binder SC. Medical expenditures attributable to injuries—United States, 2000 [published erratum appears in Morbidity and Mortality Weekly Report 2004;53(03):66]. Morbidity and Mortality Weekly Report 2004;53(01):1-4.

Gilchrist J, Gotsch K, Ryan GW. Nonfatal and fatal submersion injuries in recreational water settings-United States, 2001 and 2002. Morbidity and Mortality Weekly Report 2004;53(21):447-452.

Wallace LJD, Patel R, Dellinger A. Injury mortality among American Indian and Alaska Native children and youth—United States, 1989–1998. Morbidity and Mortality Weekly Report 2003;52(30):697-701.

Planning for the Future

e have a strategic roadmap V to improve the health of Americans, set forth in Healthy People 2010 disease prevention and health promotion objectives. To meet these objectives, CDC's Injury Center developed an agenda to articulate its priorities for research and injury prevention. And, CDC has refocused its mission in the form of new Health Protection Goals to make the best use of resources and to ensure steady, measurable progress toward meeting health challenges. Together, these three documents set the foundation for an even better CDC, with even greater health impact.

Healthy People 2010

Healthy People 2010 is a comprehensive set of disease prevention and health promotion objectives for the nation to achieve in the first decade of this century.

Created by scientists and evidence based, Healthy People 2010 identifies a wide range of public health priorities and specific, measurable objectives for improving the health of all people. Its overarching goals are to increase quality and years of healthy life and to eliminate health disparities. It details 28 focus areas and 467 specific objectives for reaching these goals. Healthy People 2010 serves as a model for state and international disease prevention and health promotion plans.

Injury Research Agenda

The CDC Injury Research Agenda is a five-year plan to help guide CDC's Injury Center activities, thereby meeting the objectives of Healthy People 2010. The Agenda was developed in 2002 with extensive input from CDC's academic research centers, national nonprofit organizations, and other federal agencies with a stake in injury prevention and control.

The Agenda sets priorities and serves as a blueprint for research, prevention, and cost analysis of injury in key areas:

- At home and in the community;
- Sports, recreation, and exercise;
- Transportation;
- Intimate partner violence, sexual violence. and child maltreatment;
- Suicidal behavior;
- Youth violence:
- Acute care: and
- Disability and rehabilitation.

In 2003, the Injury Center reviewed its agenda for acute care, disability, and rehabilitation and identified that acute injury care—in the context of terrorism preparedness and response—was not addressed. The Injury Center and its partners collaborated to revise the acute injury chapter to clearly state CDC's highest priorities for acute care research. The chapter, "Acute Injury Care Research Agenda," was released at the CDC-sponsored 2005 National Injury Prevention and Control Conference.

Implementing the Agenda will be a challenge, but improving the infrastructure of the nation's health care system is vital to the public's health. By defining research needs in a diverse field, CDC's Injury Center maximizes efficient and effective use of resources; encourages collaboration among researchers and practitioners; and fulfills its public health responsibilities. The Agenda also serves as a resource for policy makers, educators, service providers, and others interested in learning more about how the Injury Center addresses all phases of the injury research framework—from foundational research through dissemination research—for all major causes of injury among all age groups. To view the Agenda, log on to www.cdc.gov/ncipc/ pub-res/research_agenda.htm.

CDC's Health Protection Goals

CDC has defined specific Health Protection Goals to prioritize and focus its work, to maximize its investments, and to measure progress. With the Health Protection Goals in place, CDC prepares people for emerging health threats and renews its commitment to help Americans obtain optimal health in every stage of life.

New strategies, new goals, and innovative ways to conduct business bring new focus to the agency's work, enabling CDC to do even more to protect and improve health. As part of CDC, the Injury Center is setting a new course to meet these challenges. The new goals for the CDC and the Injury Center continue to improve upon how priorities are set and how resources are allocated. To strengthen its leadership position in injury prevention, the Injury Center is increasing support to state agencies and academic institutions, informing and guiding others through national conferences on injury topics, and responding to CDC's goals for preparedness (see pages 49 and 51). And, along with other national centers at CDC, the Injury Center is disseminating meaningful health-related information in the context of life stages and protection needs (see page 31). As America changes, CDC's Injury Center is also changing to better support the public's health needs (CDC 2005).

References

Centers for Disease Control and Prevention (CDC). CDC Protecting Health for Life; The State of the CDC, Fiscal Year 2004. Atlanta (GA): CDC; 2005.