

Preventing Injury in New Jersey: Priorities for Action



Office of Injury Surveillance & Prevention
Center for Health Statistics
Office of Policy
New Jersey Department of Health & Senior Services

August 2008
(Reprinted May 2009)



Jon S. Corzine
Governor



Heather Howard
Commissioner

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The New Jersey Office of Injury Surveillance & Prevention, Department of Health & Senior Services would like to thank those who volunteered their time and expertise as members of the New Jersey Advisory Committee on Injury Prevention. We greatly appreciate your valuable contribution to injury prevention in the state of New Jersey.

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Introduction

Regardless of age, gender, race, or income level, injury is a major cause of death and disability in New Jersey. Injury is the fourth leading cause of death overall, resulting in more than 3,500 deaths annually. Each year approximately 60,000 more are injured, and receive treatment in a hospital or emergency room. Countless others are treated in an outpatient setting or at home. Many injuries result in disability, chronic pain, and major changes in lifestyle. The consequences of serious injury as measured by medical costs, lost productivity, and reduced quality of life are profound. In 2005 alone, the costs of injuries treated in New Jersey hospitals are estimated to be over 2 billion dollars, and that includes only direct medical costs.

Yet injuries are not random and uncontrollable events, and can often be prevented. Public and private efforts to reduce injury have been underway since the nineteenth century. Seatbelts, smoke detectors, helmets, and improved regulation of products and workplaces are just a few of the many improvements which have greatly reduced the burden of injury over time. New Jersey has relatively low rates of fatal injury compared to other states, but there is more to be done. Proposed actions include calls for better safety education, standardization of safety policies, and better enforcement of existing regulations. Some call for improved surveillance and better data systems. Despite progress in vehicle safety and improved regulations, motor vehicle crashes cause approximately 770 deaths each year in New Jersey. Nearly as many die each year in our state from drug overdoses and poisonings. There are approximately 8,000 traumatic brain injuries each year, of which nearly 1,000 are fatal. Hundreds of New Jersey teenagers sustain concussions and other serious injuries while playing sports. Falls cause nearly 200 deaths each year among seniors. Approximately 150 New Jerseyans die each year from fires and drownings. Almost 950 deaths each year result from homicide and suicide. (See Appendix IV for a table of New Jersey's top 10 causes of injury death by age group).

The desire to reduce the impact of injury in New Jersey through improved prevention and control is the motivation for this report. The New Jersey Department of Health and Senior Services, Office of Injury Surveillance and Prevention (OISP) has invited experts from throughout the state to participate on an advisory committee. The New Jersey Advisory Committee on Injury Prevention includes representatives from state and local government, in addition to experts from medicine, academia, law enforcement, and the private and non-profit sectors. The Advisory Committee was asked to provide recommendations in eight key injury areas. These recommendations are presented in the chapters that follow, which are organized in descending order by the number of fatalities caused by each injury.

The publication of this report represents a significant achievement on the part of the Advisory Committee, yet it also signals the beginning of a new process of strategic planning for injury reduction in New Jersey. The implementation of these recommendations will require the sustained efforts of the many partners. Additionally, continued monitoring of progress and reassessment of objectives is essential, so that this report can lead the way to a sustained reduction in the burden of injury in our state.



Motor Vehicle

1

Motor vehicle crashes are the leading cause of unintentional injury death in New Jersey and in the United States.¹ Rates are highest among young adults and older adults, and nearly 70% percent of motor vehicle fatalities are among males. Each year there are approximately 300,000 motor vehicle crashes in New Jersey, resulting in an average of 6,900 hospitalized injuries and 770 deaths. This figure includes motor vehicle and motorcycle drivers and passengers, pedestrians, and bicyclists struck by motor vehicles both on roadways in traffic and in other areas such as parking lots and driveways. Death rates for motor vehicle-related injuries have been fairly stable from 2000 to 2004 in New Jersey and the United States after experiencing a steady decline since the early 1990's. New Jersey rates are consistently around 40% lower than the rest of the nation. In 2004, across the United States nearly 45,000 people died as the result of a motor vehicle crash, at an age-adjusted rate of 15.3 per 100,000. In New Jersey that same year, there were 771 deaths at a rate of 8.9 per 100,000. Pedestrians in New Jersey, especially senior citizens, are at increased risk of injury and death crossing traffic on busy roadways. Motorcycle deaths, although relatively low, are on the rise in the rest of the country and were trending upward in New Jersey as well, but by 2005 the rate returned down to what it was in 2000.

New Jersey and National Objectives

HEALTHY NEW JERSEY 2010 OBJECTIVE 3F-1a: Reduce mortality from motor vehicle-related injuries

	Baseline (2000)		Current (2005)		Target (2010)
	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey	772	9.2	760	8.7	7.8
United States*	43,354	15.4	45,343	15.1	No target

*Healthy People 2010 Objective 15-15a, Reduce deaths from motor vehicle crashes per 100,000, is defined for motor vehicle (traffic) deaths, and has a target of 9.2 per 100,000 population. Healthy New Jersey's Objective 3F-1a is defined for motor vehicle (overall) deaths.

HEALTHY NEW JERSEY 2010 OBJECTIVE 3F-3: Reduce the motor vehicle traffic-related mortality rate among high risk groups of pedestrians [aged 65 and over].

	Baseline (2000)		Current (2005)		Target (2010)
	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
Aged 65 and over					
New Jersey	45	4.0	40	3.4	3.3
United States*	1,036	3.0	1,059	2.9	No target

*No Healthy People 2010 objective established for this age group. Healthy People 2010 Objective 15-16, Reduce pedestrian deaths on public roads per 100,000 population for persons 70 years and older, does not have a set target.

HEALTHY PEOPLE 2010 OBJECTIVE 15-21: Increase motorcycle helmet usage.

	Baseline (2000)	Current (2005)	Target (2010)
	%	%	%
New Jersey*	No state comparison data available.		
United States	71	48	79

*No Healthy New Jersey 2010 objective established. Data source for Healthy People objective is the National Occupant Protection Use Survey (NOPUS), Controlled Intersection Study, Department of Transportation (DOT), National Highway Traffic Safety Association (NHTSA), (2005).

CONTRIBUTING FACTORS

Motor vehicle (overall) mortality rates, 2000-2005 New Jersey, selected other states, and U.S.	
Mississippi	Highest, 31.4 per 100,000
New Jersey	47 th , 9.0 per 100,000
Massachusetts	Lowest, 8.1 per 100,000
United States	15.3 per 100,000

The primary factors that contribute to motor vehicle occupant fatalities in New Jersey are speed, alcohol, and failure to use restraint options, such as seatbelts, infant seats and booster seats.² Nationally, nearly one-third of motor vehicle fatalities result from excess speed. While data from the National Highway Traffic Safety Administration show that New Jersey is the state with the lowest proportion of speed-related motor vehicle

fatalities, the New Jersey Department of Transportation shows the number of crashes involving speed increased by nearly 25% from 2001 to 2005. Speeding drivers involved in fatal crashes in New Jersey are more likely to be male,² and speed-related crashes are often linked to alcohol involvement, even at the national level.³ In 2005, alcohol was involved in 38% of all New Jersey traffic fatalities.⁴ The alcohol-related fatality rate of motor vehicle occupants in the state declined from 2.7 to 2.6 per 100,000 between 2001 and 2004, but increased to 2.9 per 100,000 in 2005.²

Adolescents and young adult drivers are at highest risk of injury and death from motor vehicle crashes. The fatality rate among those aged 16 to 19 years is approximately four times that of adults aged 25 to 69 years. The Graduated Driver License (GDL) regulations in New Jersey are designed to increase the period of supervised driving, resulting in a reduction in crashes involving teens and young adults.

Occupant restraints such as seatbelts and child car seats play an important role in reducing fatalities and serious injuries in the event of a crash. Seatbelt use in New Jersey is above the national average, and 2007 data from the New Jersey Division of Highway Traffic Safety estimated the usage rate at over 91%. Seatbelts have been found to reduce motor vehicle occupants' risk of injury by almost half.⁵

Improper installation and use of car seats is very common in the U.S., and greatly reduces the opportunity to prevent injuries as intended. Some of the factors contributing to difficulty in proper car seat use include vehicle-seat incompatibility and improper seating position.⁶

**Pedestrian (traffic) mortality rates among
population aged 65 and over, 2000-2005**
New Jersey, selected other states, and U.S.

Hawaii	Highest, 7.2 per 100,000
New Jersey	7th, 3.6 per 100,000
Wyoming	Lowest, 4 deaths in 6 yrs
United States	3.0 per 100,000

New Jersey has a disproportionate number of injuries and fatalities involving older pedestrians, as compared to the nation as a whole. Children, older adults, and non-English speakers are all at higher risk for pedestrian injury.⁷ Despite a 5% decrease in the total number of pedestrian crashes in New Jersey between 2002 and 2005, the number of pedestrian fatalities increased by almost 13% during this time period.⁴

Motorcycle injury mortality rates, 2000-2005
New Jersey, selected other states, and U.S.

Wyoming	Highest, 2.3 per 100,000
New Jersey, Virginia	Lowest, 0.7 per 100,000
United States	1.2 per 100,000

Nationwide, motorcycle fatalities are on the rise. National trends show a steady increase in the death rate from motorcycle injuries, but New Jersey's rate, while averaging 0.7 per 100,000 for 2000-2005, ranged from a low of 0.56 per 100,000 in 2002 to a high of 0.92 per 100,000 in 2004.¹ Each year in New Jersey, motorcyclists are involved in

approximately 2,600 crashes, around 60 of them fatal.² Inexperienced riders, excessive motorcycle speed, roadway intersections, and turns and corners increase the likelihood of a motorcycle crash.⁸ As of June 2005, 48% of motorcyclists in the US used DOT-compliant helmets, a 10-point drop in the usage rate since 2004, and this drop was mostly seen in states that do not require motorcyclists to use helmets.⁹ Failure to wear a helmet increases the likelihood of a fatality resulting from a crash by a factor of three.⁸

RECOMMENDATIONS

1.1 Adopt the annual goals of the New Jersey Highway Safety Plan.

The New Jersey Highway Safety Plan is published annually by the New Jersey Division of Highway Traffic Safety (NJDHTS), as required by the New Jersey Highway Traffic Safety Act of 1987 (N.J.S.A. 27:5F-18 et seq.). The purpose of this comprehensive set of goals is to reduce traffic crashes, deaths, injuries, and property damage in the state. The NJDHTS and other stakeholders should assess progress toward the Plan's objectives.

1.2 Enact revision of the charter for the New Jersey Division of Highway Traffic Safety (NJDHTS) to allow for direct funding of non-profit organizations engaged in injury prevention activities.

New Jersey is one of the few states in the nation that has not allowed non-profit organizations to apply directly to their state highway traffic safety office for federal funding. This discourages valuable injury prevention efforts by these organizations. Involving non-profits and municipalities in injury prevention efforts can only serve to improve efforts and further decrease injury. NJDHTS should be encouraged to promulgate and adopt regulations to allow non-profit organizations to apply for injury prevention project funding as soon as possible.

1.3 Strengthen the Graduated Driver's License (GDL) process and increase enforcement.

The 2006 Emergency Nurses Association National Scorecard on State Highway Laws identified only one weakness in New Jersey's highway laws. Currently, students are only required 6 hours of supervised driving before taking the driver's road examination. Yet research has demonstrated that additional hours of supervised driving reduce crashes among teens. Currently, new drivers in New Jersey have inadequate experience before being eligible for a driver's license. The New Jersey Graduated Driver's License (GDL) process should be strengthened to include certification of 30 to 50 hours of supervised driving. Additionally, enforcement of the provisions of GDL regulations should be increased. Activities in this area should also be informed by recommendations to be issued by the Teenage Driver Safety Study Commission, established in March 2007 with the passage of (P.L. 2007, c.48).

1.4 Improve child car seat use.

When properly installed, car safety seats are an important mechanism in reducing injuries and fatalities among child passengers. Consumer access to installation assistance and the most up-to-date information about child passenger safety should be made more available. Permanent child car seat fitting stations should be established in each county, and permanent regional fitting stations should be established for children with special needs.

1.5 Increase seat belt use.

The use of seat belts has a major impact on the likelihood of serious injury or death in the event of a crash. While New Jersey has above-average seat belt use rates, the goal of the New Jersey Division of Highway Traffic Safety is 100% compliance. A recent "Click it or Ticket" mobilization effort, which combined education and enforcement, resulted in an increase in seat belt use among motorists. These efforts to increase seat belt use should continue.

1.6 Decrease pedestrian injury.

New Jersey has above-average rates of pedestrian injury and fatality, especially among older adults. The New Jersey Department of Transportation, the Attorney General, and the Motor Vehicle Commission are collaborating on Governor Jon S. Corzine's \$74 million pedestrian safety initiative. The projects include facility improvements, education and enforcement efforts, planning and technical guidance. Specific initiatives include safety improvements at intersections and crosswalks, the creation of safe routes to school and mass transit, increased enforcement, and education of both drivers and pedestrians. The New Jersey Division of Highway Traffic Safety assists localities in developing pedestrian safety programs based on education, enforcement, and engineering. The education and enforcement components target high risk pedestrians and drivers, and emphasize the fact that pedestrian safety is a shared responsibility. The engineering component involves reviewing dangerous intersections and recommending roadway modifications. The impact of these efforts on pedestrian safety should be assessed. Municipal master plans should address walking, biking, transit, and safe routes to school.

1.7 Encourage consistent use of motorcycle helmets at all times.

New Jersey currently has a mandatory helmet law for motorcyclists, but drivers and passengers should be encouraged to keep their helmets on while riding in states that do not require it.

Definition: Motor vehicle crashes resulting in injuries to vehicle occupants, pedestrians, motorcyclists, and pedal cyclists can occur in traffic on public roadways as well as in parking lots, driveways, and other off-road areas. For the Healthy New Jersey motor vehicle objective, this broader category is used. For the Healthy New Jersey pedestrian objective, however, only those pedestrian deaths on public roadways (“in traffic”) are included.

Deaths (ICD-10):

Motor vehicle (overall):	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Motor vehicle (traffic):	V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9), V60-V69 (.4-.9), V70-V79 (.4-.9), V81.1, V82.1, V83-V86 (.0-.3), V20-V28 (.3-.9), V29 (.4-.9), V12-V14 (.3-.9), V19 (.4-.6), V02-V04 (.1-.9), V09.2, V80 (.3-.5), V87(.0-.8), V89.2
Pedestrians (overall):	V02-V04 (.0,.1,.9), V01, V05, V06, V09 (.0,.1,.2,.3,.9)
Pedestrians (traffic):	V02-V04 (.1,.9), V09.2
Motorcyclists:	V20-V28 (.3-.9), V29 (.4-.9)

Mortality data for the figures and tables, maps, rankings, and Healthy New Jersey/Healthy People 2010 objectives are from the New Jersey Department of Health and Senior Services, Bureau of Vital Statistics; national comparison data are from the Centers for Disease Control and Prevention (WISQARS); population estimates are Bridged-Race Estimates from the National Center for Health Statistics.

¹ Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. 2008. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available from: www.cdc.gov/ncipc/wisqars.

² New Jersey Department of Transportation, Bureau of Safety Programs.

³ Traffic Safety Facts: Speeding. NHTSA’s National Center for Statistics and Analysis, 2006 data. Available from: <http://www.nrd.nhtsa.dot.gov/Pubs/810809.PDF>.

⁴ Fatality Analysis Reporting System (FARS), 2005. National Highway Traffic Safety Administration (NHTSA).

⁵ Traffic Safety Facts: Strengthening Seat Belt Use Laws. NHTSA’s National Center for Statistics and Analysis, February 2007. Available from: <http://www.nhtsa.dot.gov/people/injury/TSFLaws/PDFs/810729W.pdf>.

⁶ Taft CH, Mickalide AD, Taft AR. Child Passengers at Risk in America: A National Study of Car Seat Misuse. Washington, D.C.: National SAFE KIDS Campaign. 1999 February.

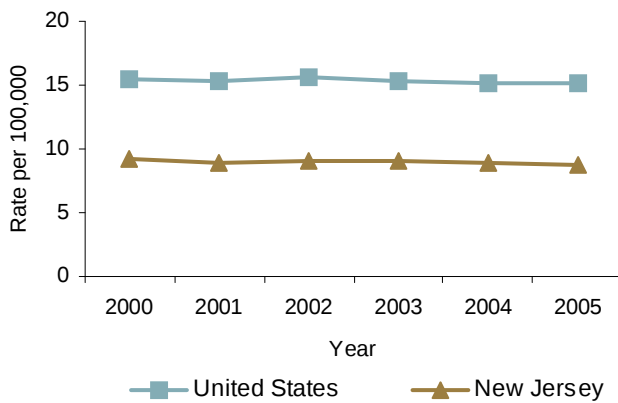
⁷ New Jersey Department of Law & Public Safety, Office of the Attorney general, Division of Highway Traffic Safety. Available from: <http://www.state.nj.us/lps/hts/pedestrian.html>.

⁸ New Jersey Department of Law & Public Safety, Office of the Attorney general, Division of Highway Traffic Safety. Available from: <http://www.nj.gov/oag/hts/motorcycle/index.html>.

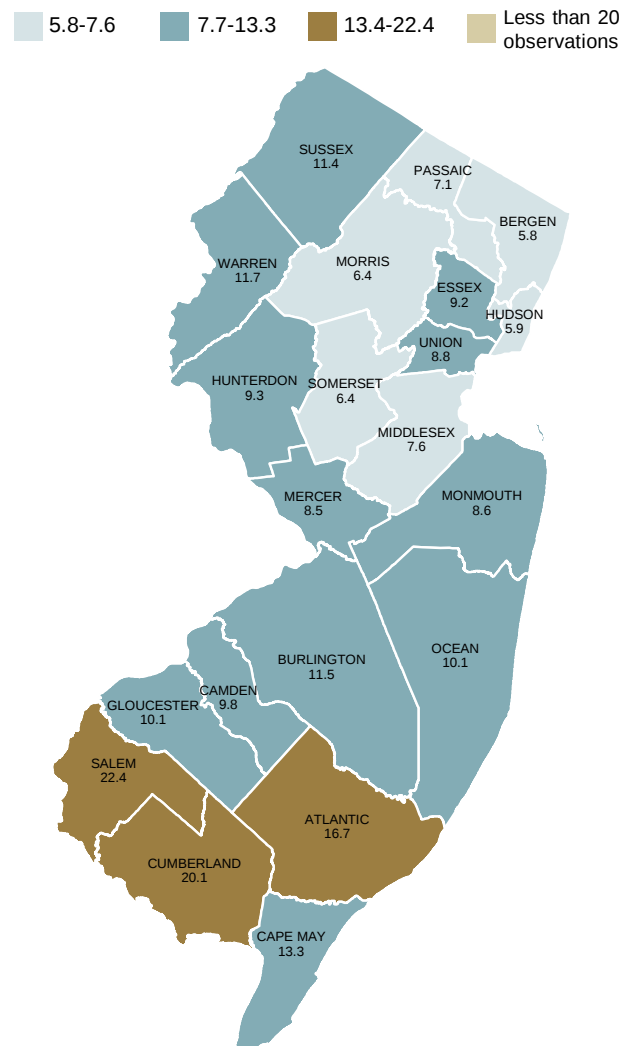
⁹ National Occupant Protection Use Survey, NHTSA’s National Center for Statistics and Analysis. Available from: www.nrd.nhtsa.dot.gov/Pubs/809937.pdf.

New Jersey has the 4th lowest mortality rate from MOTOR VEHICLE injuries in the nation.

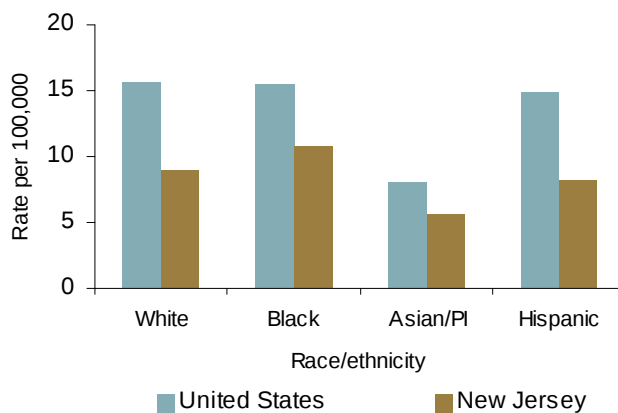
Unintentional motor vehicle (overall) fatality rate, 2000-2005



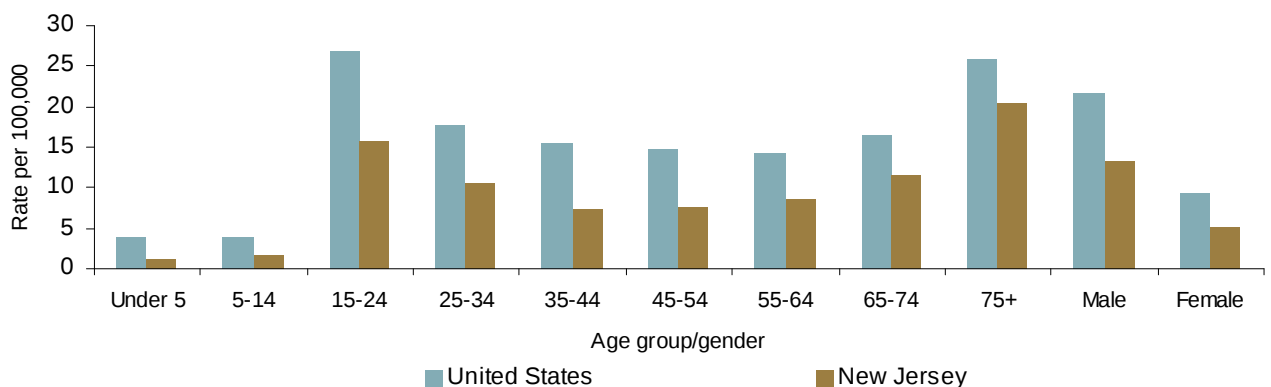
Unintentional motor vehicle (overall) fatality rate by county of residence, New Jersey 2000-2005



Unintentional motor vehicle (overall) fatality rate by race and ethnicity, 2000-2005

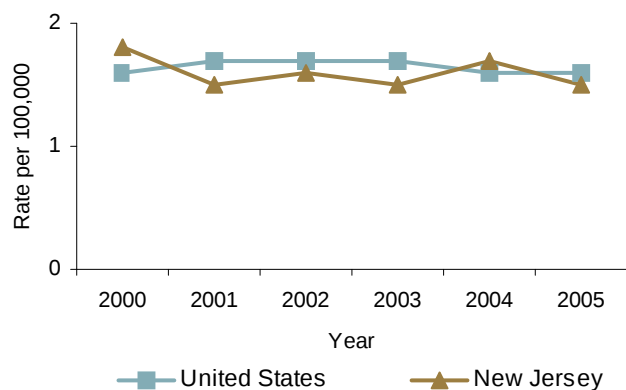


Unintentional motor vehicle (overall) fatality rate by age group and gender, 2000-2005

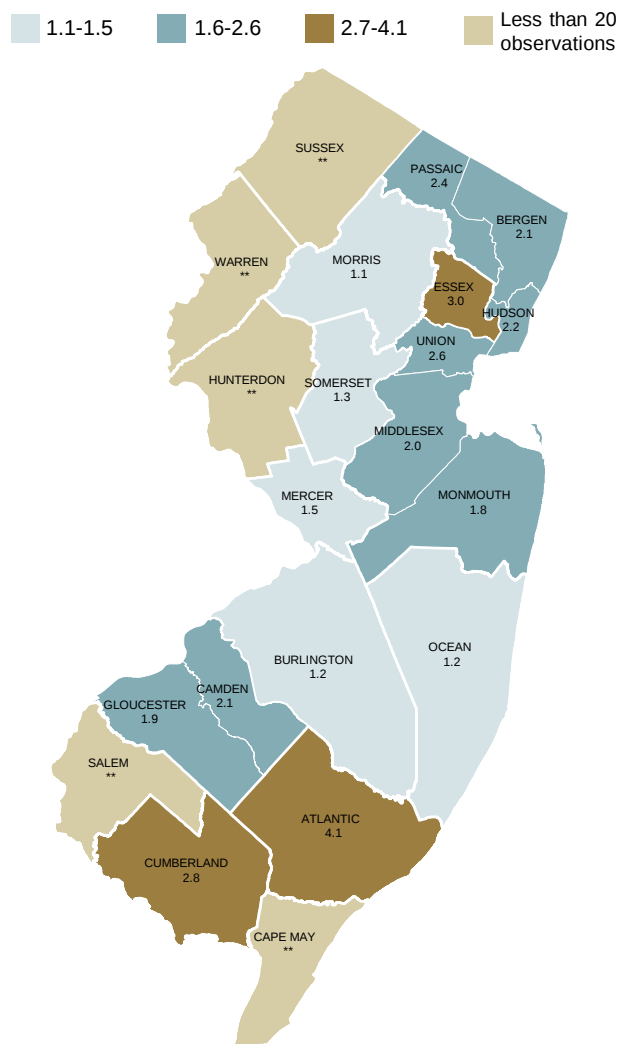


New Jersey's PEDESTRIAN fatality rates are highest for those aged 65 and over.

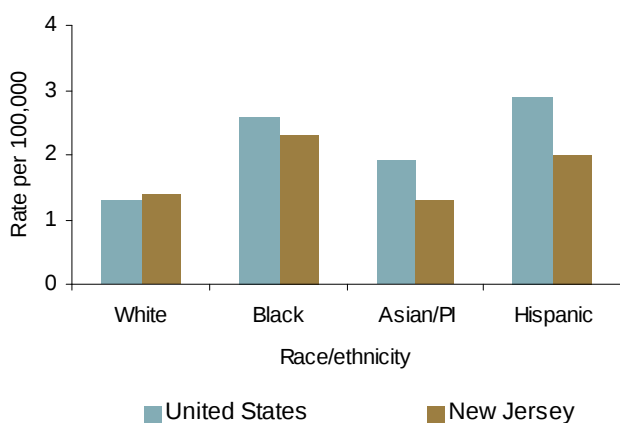
Unintentional pedestrian (traffic) fatality rate, 2000-2005



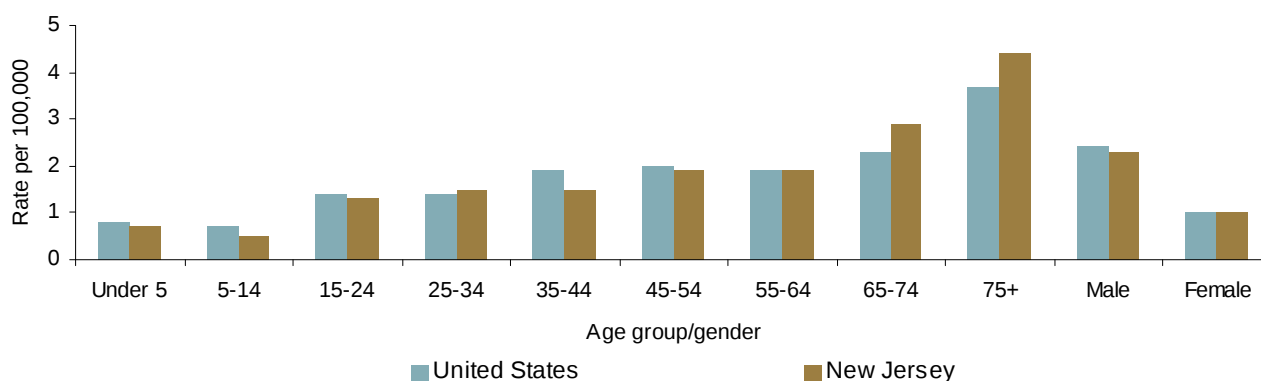
Unintentional pedestrian (traffic) fatality rate by county of residence, New Jersey 2000-2005



Unintentional pedestrian (traffic) fatality rate by race and ethnicity, 2000-2005

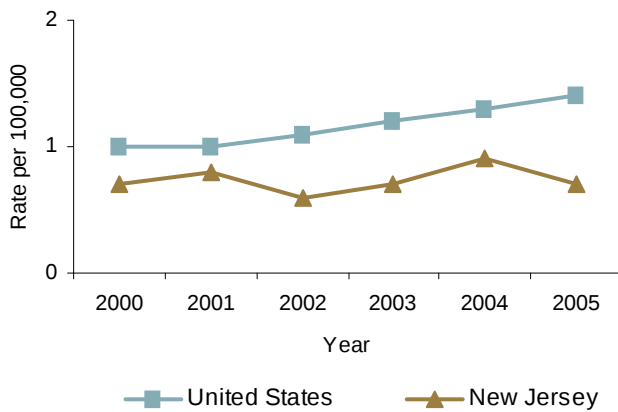


Unintentional pedestrian (traffic) fatality rate by age group and gender, 2000-2005

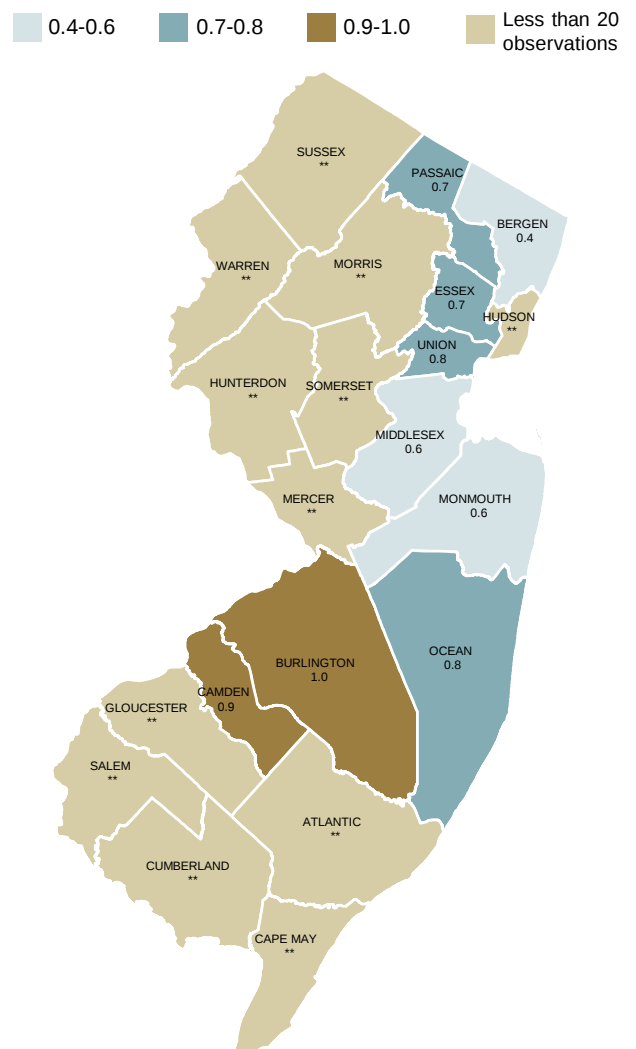


New Jersey's MOTORCYCLE fatality rates had been rising with the nation's rates, but in 2005 began to decline again.

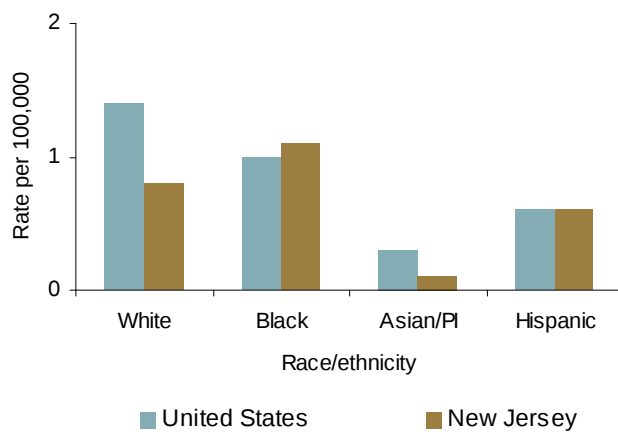
Unintentional motorcycle fatality rate, 2000-2005



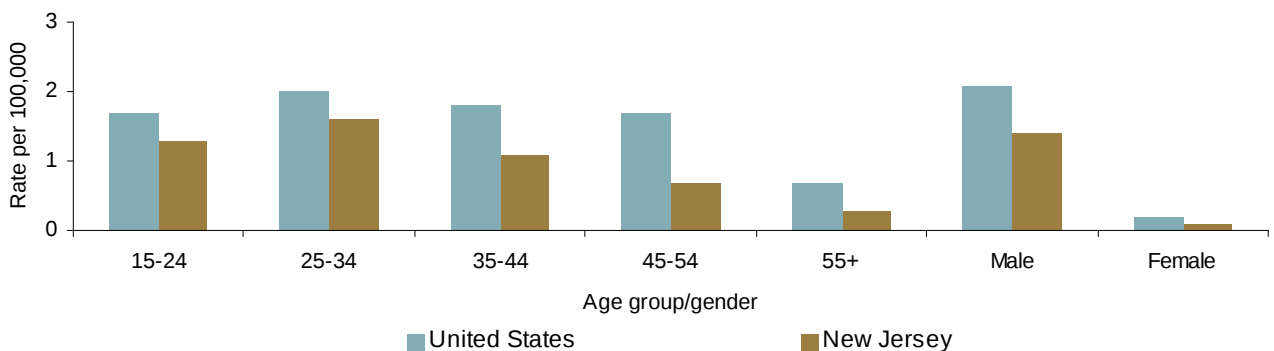
Unintentional motorcycle fatality rate by county of residence, New Jersey 2000-2005



Unintentional motorcycle fatality rate by race and ethnicity, 2000-2005



Unintentional motorcycle fatality rate by age group and gender, 2000-2005





Unintentional Poisoning

2

Poisoning is the second leading cause of unintentional injury death in New Jersey, and the third leading cause nationwide.¹ While these deaths are mainly from the acute effects of drug misuse and abuse, environmental sources such as pesticides, heavy metals, and carbon monoxide are still a significant hazard. Unintentional poisoning death rates have increased significantly in New Jersey over the past decade as they have elsewhere in the nation. Most of those dying from unintentional drug overdose are non-Hispanic white males in their late 30's and early 40's. Males are three times more likely to die from an unintentional poisoning as females.

New Jersey and National Objectives

HEALTHY PEOPLE 2010 OBJECTIVE 15-08: Reduce deaths from [all] poisoning.

	Baseline (2000)		Current (2005)		Target (2010)
	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey*	703	8.2	890	10.1	No target
United States	20,230	7.2	32,691	10.9	1.5

*No Healthy New Jersey 2010 objective established for this definition. Healthy New Jersey 2010 Objective 4F-1, Reduce deaths from drug-related causes, has a set target of 8.4 per 100,000. See "Definitions" box for more information on causes included in the Healthy People 2010 and Healthy New Jersey 2010 objectives.

CONTRIBUTING FACTORS

Unintentional poisoning mortality rates, 2000-2005 New Jersey, selected other states, and U.S.	
New Mexico	Highest, 15.2 per 100,000
New Jersey	17th, 7.0 per 100,000
Rhode Island	Lowest, 1.3 per 100,000
United States	6.3 per 100,000

There are many types of unintentional poisoning. Hazardous household substances and over-the-counter medicines are some of the most well-known sources in childhood poisonings, and there have been many safety measures taken in recent decades to prevent these exposures, such as child-proof caps and improved labeling. These measures have been very effective, and

New Jersey has had only eight deaths among children aged 14 years and under due to poisoning between 2000 and 2005.¹ Poisonings can also be caused by environmental sources such as carbon monoxide and lead. The major cause of poisoning fatalities, however, in New Jersey and nationally is overdose, primarily among those who are intentionally misusing drugs. Abuse of illicit drugs has long been a problem, and the purity of heroin in New Jersey is among the highest in the nation.² Abuse of prescription drugs, particularly opiates, is now contributing to the increase in unintentional overdose.

RECOMMENDATIONS

2.1 Distribute appropriate poison prevention information to New Jersey's diverse communities.

Many poisonings among children can be prevented by home safety practices. Awareness of poison hazards and appropriate prevention measures can be increased through the distribution of educational materials in appropriate languages at community centers, schools, child care centers, churches, and other community settings. The New Jersey Department of Health and Senior Services and the New Jersey Poison Information Education Service should distribute educational materials and publicize the availability of the poison control center hotline.

2.2 Add single family dwellings to the legislative requirements for the provision of carbon monoxide detectors in multi-family dwellings.

Carbon monoxide detectors are a proven and effective method of detecting carbon monoxide leaks inside homes. Existing statutes in New Jersey concerning mandatory carbon monoxide detectors relate only to multi-family dwellings. Yet many carbon monoxide exposures occur in single family dwellings in which there is no existing regulation mandating provision for carbon monoxide detection/alarm equipment. To decrease the potential morbidity and mortality, single family houses should also fall under the mandate for carbon monoxide detectors.

2.3 Encourage increased professional awareness of the magnitude of the problem of unintentional overdose, and the risks and signs of unintentional overdose.

Health professionals can play an important role in poison prevention by identifying and treating substance abuse. The educational and credentialing requirements for health professionals should include sufficient attention to poisoning prevention. This professional education should include identification of drug-seeking behavior and substance abuse symptoms, and intervention techniques, including referrals to treatment. The state's schools of medicine, nursing, and other health professions should ensure that poison and substance abuse prevention are included in their curricula.

2.4 Establish a prescription drug monitoring program in New Jersey.

Prescription drug abuse is a rising component of the unintentional poisoning problem nationally and in New Jersey. Many states have created electronic databases designed to monitor controlled substances listed in Schedules II – IV, which are drug categories established by the U.S. Drug Enforcement Administration. New Jersey has recently passed legislation to establish such a program, which would help to prevent fraudulent prescription practices, “doctor-shopping,” and other kinds of drug-seeking behavior associated with abuse.

2.5 Expand needle exchange programs in New Jersey to bring more substance abusers in contact with treatment services.

Current legislation in New Jersey allows implementation of pilot needle exchange programs in six select cities in the State. Four currently are operating. Data from existing needle exchange programs show that there are many benefits to administering such programs: cleaner streets,

lower transmission rates for HIV/AIDS and other infectious diseases, and access to a population not easily targeted for disease prevention and health promotion activities. Needle exchange centers may be used to distribute drug treatment and program information to participants.

2.6 Include an objective for reducing deaths caused by unintentional poisoning in *Healthy New Jersey 2020*.

Unintentional poisoning is the second leading cause of unintentional injury death in New Jersey. *Healthy New Jersey 2010*, which is the public health agenda for the state, should include an objective for reducing unintentional poisoning deaths within a decade. This would encourage the greater prioritization of poison prevention, particularly through reducing substance abuse.

2.7 Create a monitoring system using data from the New Jersey Department of Health & Senior Services (NJDHSS), the Office of the State Medical Examiner (OSME), and the New Jersey Poison Information and Education System (NJPIES).

A number of states have developed simple and timely surveillance systems based on existing data that allows monitoring of emerging trends in fatal and non-fatal overdoses. Such systems are designed to rapidly alert first responders, law enforcement officials, prevention workers, and others about new substances resulting in injuries and deaths. The NJPIES, OSME and NJDHSS should partner to create a low-cost monitoring system that provides data from each source and serves to alert the public health community about trends in fatal and non-fatal poisoning.

Definition: CDC uses the ICD-10 definition of acute poisoning in categorizing “poisoning” deaths. However, many people also intentionally misuse drugs and substances over time and eventually succumb to the cumulative effects of substance abuse. *Healthy New Jersey 2010* objective 4F-1 is defined as reducing mortality due to “drug-related” causes, which *excludes* toxic exposures to non-drug substances, and *includes* the long-term effects of drug abuse, including mental health and behavioral changes.

Unintentional poisoning (CDC, WISQARS, NJDHSS Office of Injury Surveillance and Prevention):
X40-X49

Healthy People 2010 Objective 15-08, Reduce deaths from [all] poisonings:
X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2

Healthy New Jersey 2010 Objective 4F-1, Reduce mortality rate from drug-related causes:
F11-F16 (.0-.5, .7-.9), F17(.0, .3-.5, .7-.9), F18-F19 (.0-.5, 7-.9); X40-X44, X85, Y10-Y14

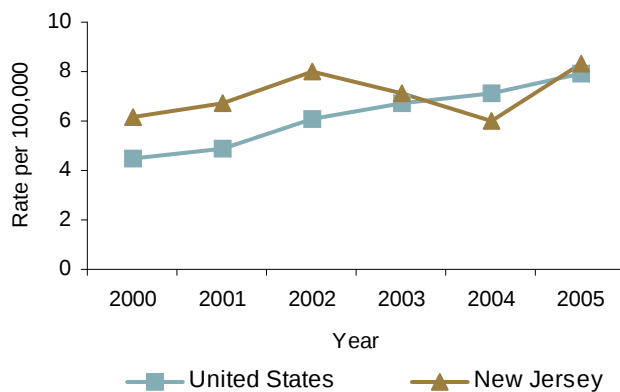
Mortality data for the figures and tables, maps, rankings, and Healthy New Jersey/Healthy People 2010 objectives are from the New Jersey Department of Health and Senior Services, Bureau of Vital Statistics; national comparison data are from the Centers for Disease Control and Prevention (WISQARS); population estimates are Bridged-Race Estimates from the National Center for Health Statistics.

¹Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. 2007. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available from: www.cdc.gov/ncipc/wisqars. Accessed September 1, 2007.

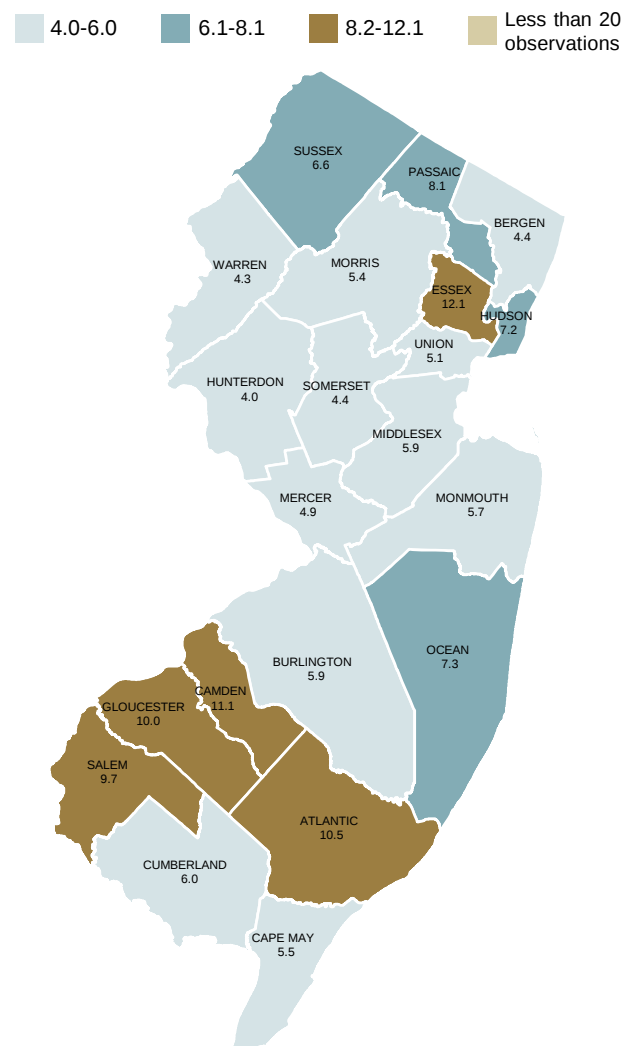
²New Jersey Drug Threat Assessment Update, April 2004. National Drug Intelligence Center, US Department of Justice. Johnstown, PA. Product No. 2004-S0378NJ-001. April 2004.

New Jersey's unintentional POISONING fatalities have been generally higher than the rest of the nation, but the national rate is now similar to New Jersey's.

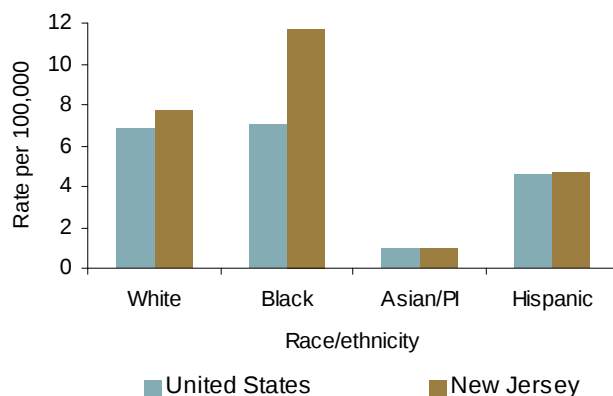
Unintentional poisoning fatality rate, 2000-2005



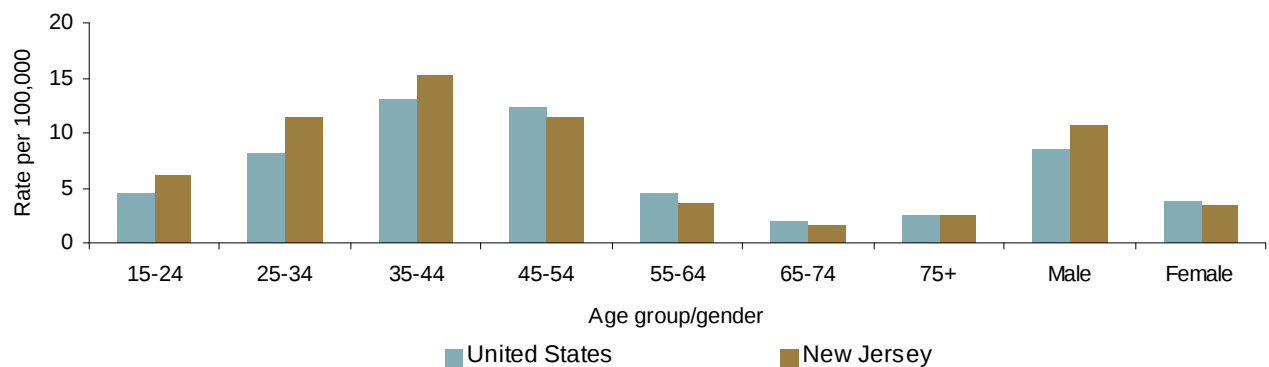
Unintentional poisoning fatality rate by county of residence, New Jersey 2000-2005



Unintentional poisoning fatality rate by race and ethnicity, 2000-2005



Unintentional poisoning fatality rate by age group and gender, 2000-2005





Falls

3

Falls are a major cause of injury hospitalization at all ages, and are a leading cause of serious injury among young children. However, the probability of dying from a fall increases dramatically with age, making falls the second leading cause of injury death among persons 65 years and older in New Jersey.¹ In recent years, fall rates have risen nationally and in New Jersey, particularly among the elderly. This may reflect better survival among the relatively frail elderly, who are at above average risk of falling. Between 2000 and 2005, age-adjusted fatality rates from falls among New Jerseyans 65 to 84 years old and 85 years and older have increased about 50%. While mortality rates are higher among males, hospitalization rates are higher among females.

New Jersey and National Objectives

HEALTHY NEW JERSEY 2010 OBJECTIVE 3F-4: Reduce mortality per 100,000 population from falls of persons aged 65 and over.

	Baseline (2000)		Current (2005)		Target (2010)
Aged 65-84 years	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey	107	11.0	156	15.7	7.8
United States*	5,501	17.9	8,276	25.5	No target
Aged 85 and over					
New Jersey	57	41.9	115	71.9	7.8
United States*	4,772	112.6	7,526	148.2	No target

*Healthy People 2010 Objective 15-27, Deaths from falls per 100,000, has no target set for adults aged 65-84 years or for adults aged 85 and older. Rates are per 100,000 age-specific population.

CONTRIBUTING FACTORS

Mortality rates due to falls among population aged 65 years and over, 2000-2005 New Jersey, selected other states, and U.S.	
New Mexico	Highest, 48.6 per 100,000
New Jersey	48th, 12.8 per 100,000
Alabama	Lowest, 12.7 per 100,000
United States	22.2 per 100,000

Falls among the elderly are most likely to occur in the home. Among this population, falls are frequently caused by tripping hazards, loss of balance, drowsiness from medications, or poor vision.¹ Outside the home, stairs and steps, slippery surfaces from winter ice or snow, and obstructed and poorly lit walkways can increase the risk of falling.² Fall rates are high in healthcare facilities, particularly nursing homes, where

one study suggests that as many as 75% of nursing home residents experience recurrent falls.³ New Jersey general acute care hospitals reported falls with injury as the “most frequent, serious, preventable adverse event” according to Patient Safety Reporting Initiative (PSRI) data.⁴ The PSRI also showed that falls comprised one third of all reported adverse events, with most occurring in the patient’s room (82%). Injuries sustained in a preventable fall incident

within a healthcare facility were likely to result in major surgery, temporary or permanent disability, and additional testing/monitoring. Fall-related fatalities and injuries are expected to rise due to population aging and increasing life expectancy.

RECOMMENDATIONS

3.1 Enhance public awareness that most falls are preventable and promote actions that reduce the risk of injury.

Consumer and caregiver education are key strategies in the primary prevention of falls. Educational materials should be disseminated in multiple settings, such as senior centers, hospital emergency departments, health clinics, adult day health centers and through local departments of health and area agencies on aging. Culturally and linguistically appropriate materials should be available for distribution.

3.2 Educate healthcare providers about fall prevention strategies and standards of practice across the spectrum of care.

Falls affect patients in all healthcare settings, particularly long-term care facilities. National guidelines and recommendations for fall prevention in older adults should be disseminated to health care providers in these settings. Additionally, healthcare professionals, program volunteers, supervisory staff, and family caregivers often encounter community-dwelling older adults who fall or are at risk for falls. These individuals could benefit from an educational program emphasizing “best practices” in fall prevention. For example, the NJ Department of Health and Senior Services developed the *Project Healthy Bones Program*, which is a 24-week education and physical activity program for older men and women with or at risk of osteoporosis. Fall prevention educational programs should be provided to healthcare professionals and others caring for older adults in multiple settings.

3.3 Translate fall data generated by New Jersey’s Patient Safety Reporting Initiative into quality improvement initiatives to reduce falls in hospitals.

The elderly in hospitals or nursing homes are at high risk for falls and fall-related injury. Approximately 75% of nursing home residents fall each year.⁵ The NJ Patient Safety Initiative carries out the New Jersey Patient Act (PL 2004, c9), which was designed to improve patient safety in hospitals and other healthcare facilities by establishing a medical error reporting system. The NJDHSS Division of Healthcare Quality Oversight reported in 2005 that falls comprise about 30% of adverse patient events in hospitals. The NJDHSS has been working with acute care hospitals to offer fall prevention education with a goal of assisting hospital teams develop a quality improvement project to prevent falls. Of the 51 hospital teams trained during 2005-2006, 15 developed quality improvement projects that significantly reduced falls on their hospital units. Plans are underway to investigate and further define the components of successful hospital-based projects, so as to develop and further define strategies for possible interventions and dissemination of best practices.

Definition: “Unintentional Falls” are defined using the following ICD-10 codes:

Fall: W00-W19

Mortality data for the figures and tables, maps, rankings, and Healthy New Jersey/Healthy People objectives are from the New Jersey Department of Health and Senior Services, Bureau of Vital Statistics; national comparison data are from the Centers for Disease Control and Prevention (WISQARS); population estimates are Bridged-Race Estimates from the National Center for Health Statistics.

¹ National Center for Injury Prevention and Control. Centers for Disease Control & Prevention. Falls among older adults: An overview [online]. Available from: <http://www.cdc.gov/ncipc/factsheets/adultfalls.htm>.

² Minnesota Safety Council. Fall prevention home safety checklist: What you can do to prevent falls [online]. Available from: <http://www.mnsafetycouncil.org/seniorsafe/fallcheck.pdf>

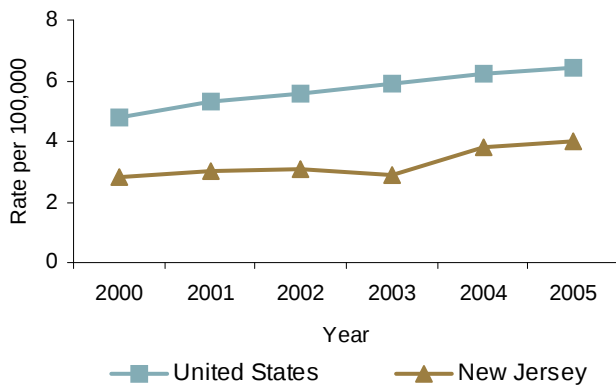
³ Rubenstein LZ. Preventing falls in the nursing home. *Journal of the American Medical Association* 1997;278(7):595–6.

⁴ New Jersey Department of Health & Senior Services. Patient Safety Reporting Initiative – Updates. February 2006, Issue 2. Available from: http://www.state.nj.us/health/ps/documents/feb2006_newsletter.pdf.

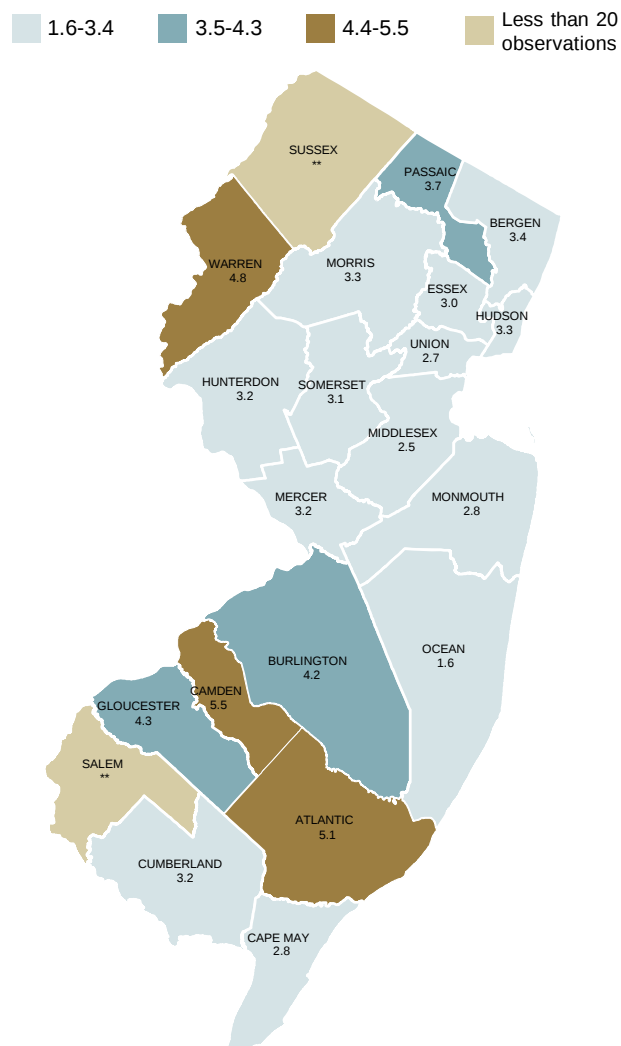
⁵ Rubenstein LZ, Josephson KR, Robbins AS. Falls in the nursing home. *Ann Internal Med* 1994; 121:442-51.

Fatal FALLS disproportionately affect older Americans and New Jerseyans, and rates of fatal falls overall are rising.

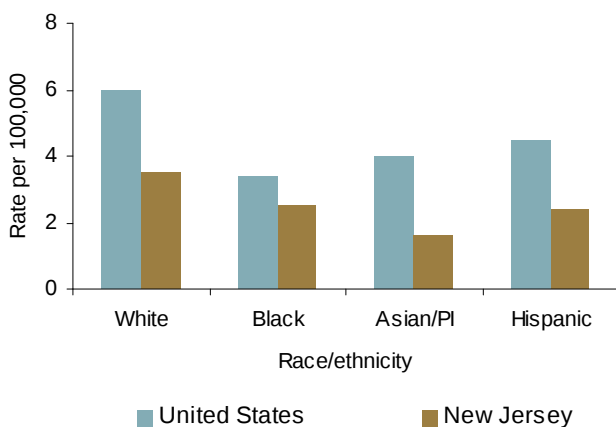
Fatality rate due to falls, 2000-2005



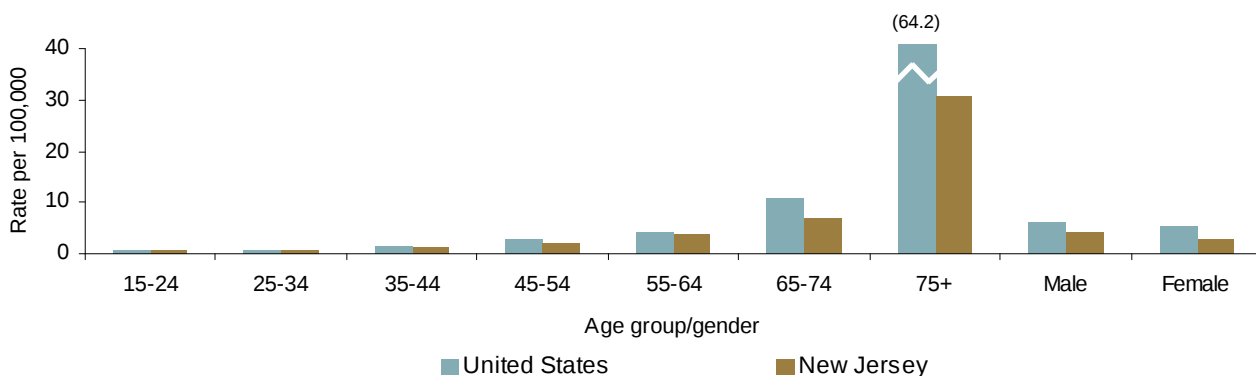
Fatality rate due to falls by county of residence, New Jersey 2000-2005



Fatality rate due to falls by race and ethnicity, 2000-2005



Fatality rate due to falls by age group and gender, 2000-2005





Fire and Burns

4

Fire and burns are the sixth leading cause of unintentional injury death in New Jersey, and the fifth leading cause nationwide.¹ Most fire victims (70%) die from smoke inhalation and toxic gases. Only about 30% of fire-related deaths are the result of injuries from burns.² Fires are not the only cause of burns; scalding water, steam, electrical energy, and acidic and caustic chemicals claim victims both in and outside the workplace. Deaths from burns affect the youngest and oldest residents of New Jersey disproportionately.

New Jersey and National Objectives

HEALTHY PEOPLE 2010 OBJECTIVE 15-25: Reduce mortality from residential fires.

	Baseline (2000)		Current (2005)		Target (2010)
	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey*	68	0.8	56	0.6	No target
United States	2,955	1.1	2,816	1.0	0.2

*No Healthy New Jersey 2010 objective established for this injury. Rates are age-adjusted per 100,000 population using the 2000 US Standard Population.

CONTRIBUTING FACTORS

Mortality rates due to residential fires and burns, 2000-2005 New Jersey, selected other states, and U.S.	
Mississippi	Highest, 2.9 per 100,000
New Jersey	45th, 0.6 per 100,000
Hawaii	Lowest, 0.3 per 100,000
United States	1.2 per 100,000

New Jersey has an active smoke detector distribution program directed by the State Division of Fire, and supplemented by local municipal authorities as well as prominent non-governmental organizations such as The Burn Center at Saint Barnabas Hospital in Livingston, NJ, and the New Jersey Safe Kids Campaign, a division of the New Jersey State Safety Council. Studies have revealed that in homes where smoke detectors were

present, they were often found not working or disconnected, and when they were functioning, a family exit plan was never devised or practiced.³

Preventing injury and death from fire-related causes entails multiple strategies. Some examples for preventing residential fires can include keeping flammable products such as matches, lighters, and candles away from small children; scheduling regular professional maintenance and cleaning of heating equipment such as furnaces and chimneys; and keeping cloth items off lighted lamps. Burn prevention can include activities such as setting the maximum water heater temperature to 120 degrees Fahrenheit or lower, testing bath water with a finger or elbow before bathing a child, and turning pot handles inward and away from the reach of children while cooking. Preventing burn and smoke inhalation injuries also requires the installation of smoke detectors and the establishment of fire escape plans with direction on how to exit quickly and safely, both at home and in public buildings.

Tailoring prevention strategies to the location and population at risk is essential to maintaining a fire-safe environment. Fire drills in schools and businesses are mandated and compliance is addressed at the state, county and municipal level, but fire-safety regulations are not enforced at the residential level.

Burn prevention education is conducted at many levels and in many communities, but it is inconsistent or uncoordinated at the state level. Fire prevention and fire safety education is available, but because it is dependent on local resources, very few communities have adequate resources dedicated to effectively address fire safety issues.

RECOMMENDATIONS

4.1 Develop statewide recommendations for fire and burn prevention education activities and materials.

Improved coordination of fire and burn prevention education in the state could result in a more efficient presentation of information and would maximize outreach to high risk groups such as young children and the elderly. The exposure to fire and burn prevention education in schools should be consistent across the state. Core curriculum standards for physical education and health have incorporated injury prevention education. New Jersey schools should ensure that health educators are trained in fire safety education.

4.2 Distribute materials on smoke detectors and exit drills for all of New Jersey's diverse communities.

New Jersey has an active distribution program for smoke detectors directed by the State Division of Fire, which is supplemented by local municipal authorities as well as non-governmental organizations. Given that smoke detectors are often found to be disconnected or not working, culturally and linguistically appropriate information on how they should be installed and maintained should be widely distributed. Community level information about developing fire escape exit plans should also be distributed.

4.3 Improve the reporting of burn injuries, so as to better identify the most common causes of burns.

Burn injuries from sources other than structural fires are under-reported. New Jersey participates in the National Incident Fire Reporting Service (NIFRS), and use of this service is increasing. Gaps still exist, however, because clinics and doctors' offices treat burn injuries yet rarely report them to NIFRS. The New Jersey Division of Fire and the New Jersey Department of Health and Senior Services should encourage more complete reporting of burn injuries by outpatient facilities.

4.4 Develop, implement, and expand burn prevention education, targeting most common causes of burn injury and most vulnerable groups.

Burn injuries are among the most costly to both the individual and society, involving very intensive, specialized, and expensive medical interventions. Expansion of burn prevention education is required to reduce the impact of these injuries. Higher priority for burn prevention among seniors and young children should be required since these are the groups at greatest risk.

Definition: Residential fire and burn deaths are defined using the following ICD-10 codes:
Fire and Burn: X00-X09, Place of Injury = Home.

Mortality data for the figures and tables, maps, rankings, and Healthy New Jersey/Healthy People objectives are from the New Jersey Department of Health and Senior Services, Bureau of Vital Statistics; national comparison data are from the Centers for Disease Control and Prevention (WISQARS); population estimates are Bridged-Race Estimates from the National Center for Health Statistics.

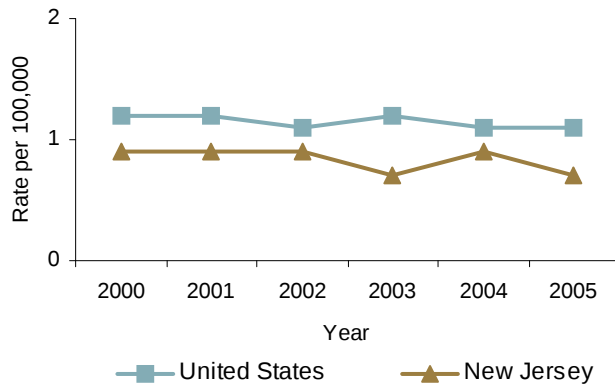
¹Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. 2007. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available from: www.cdc.gov/ncipc/wisqars. Accessed September 1, 2007.

²National SAFE Kids Campaign and U.S. Fire Administration. Available from: <http://www.lpch.org/DiseaseHealthInfo/HealthLibrary/safety/firestat.html>

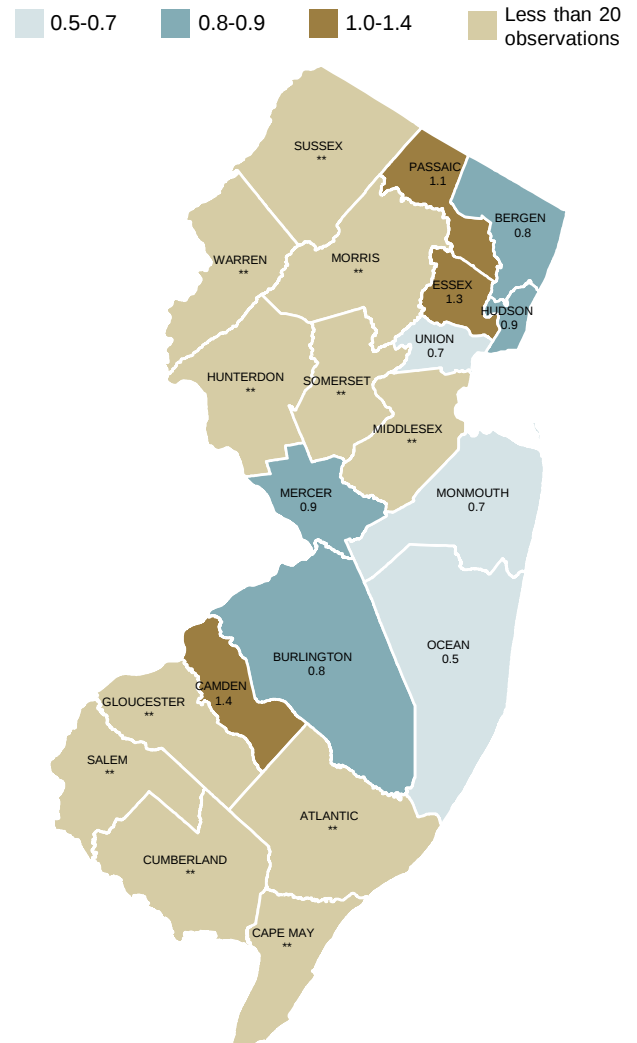
³Istre, Gregory R. Smoke alarms and prevention of house-fire-related deaths and injuries. *West J Med* 2000;173:92-93. Available from: <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1071009&blobtype=pdf>

Most fatal FIRE AND BURN injuries, both in New Jersey and nationally, are the result of residential fires.

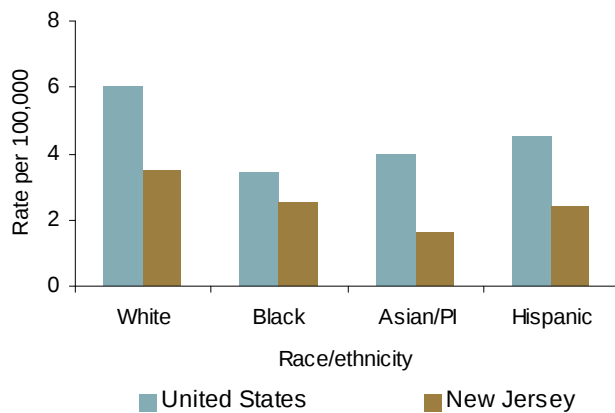
Fatality rate due to fires or burns, 2000-2005



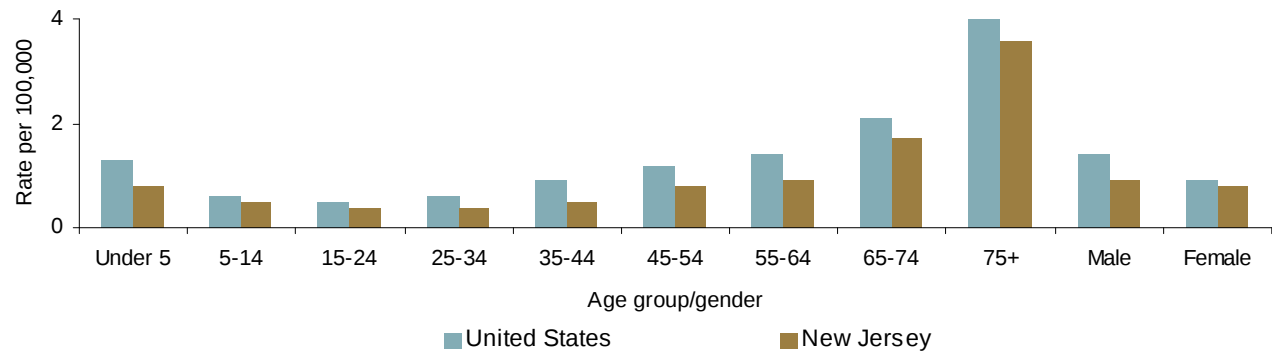
Fatality rate due to fires or burns by county of residence, New Jersey, 2000-2005



Fatality rate due to fires or burns by race and ethnicity, 2000-2005



Fatality rate due to fires or burns by age group and gender, 2000-2005





Sports, Recreation, and Exercise

5

Sports, recreation, and exercise (SRE) covers a broad range of activities, including organized sports, “free play,” recreational pursuits such as biking, skiing, swimming and playground activities, as well as exercise and fitness-related activities, such as jogging, weight lifting and aerobics. According to the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (NCIPC, CDC), an estimated seven million Americans receive medical attention for SRE injuries each year.¹ A study of SRE-related injury episodes in the US between 1997 and 1999 showed that a majority of the injuries occurred among 5 to 24-year-olds and the highest rate of injuries (3.9 per 1,000 SRE injuries) were incurred while playing basketball.² Furthermore, males were greater than two times more likely to sustain such injuries than females.

New Jersey and National Objectives

HEALTHY PEOPLE 2010 OBJECTIVE 15-31: Increase percentage of public and private schools requiring students to wear protective gear when engaged in school-sponsored physical activities.

	Baseline (1998)	Current (2005)	Target (2010)
	%	%	%
Physical Education (15-31a)			
New Jersey*	No state comparison data available.		
United States	77	Not Available	85
Interscholastic Activities (15-31b)			
New Jersey*	No state comparison data available.		
United States	98	Not Available	100
Intramural activities or physical activity clubs (15-31c)			
New Jersey*	No state comparison data available.		
United States	88	Not Available	97

*No Healthy New Jersey 2010 objective established for this definition. Data for Healthy People 2010 Objective 15-31 was obtained from the National School Health Policies and Programs Study (SHPPS) conducted by the Centers for Disease Control and Prevention. SHPPS data reveal that NJ schools do not require students to wear protective gear when engaged in school-sponsored activities.

CONTRIBUTING FACTORS

Rates of participation in SRE activities are rising across varying age groups, and while these activities generally promote health and fitness, they also have the inherent risk of injury. Children aged 5 to 14 years are typically injured while riding a bicycle or playing basketball or football. Among adolescents and young adults aged 15 to 24 years, the top three activities resulting in injury are basketball, football, and exercising or training activities, which include weight-lifting, aerobics, and jogging.

Leading annual number (in 1,000s) and rate (per 1,000) of sports and recreation-related injuries² Persons aged 5 and older, United States, 1997-1999			
Rank	5-14 years	15-24 years	25+ years
1	Pedal cycling 332, 8.3	Basketball 440, 11.8	Recreational Sports 370, 2.1
2	Basketball 261, 6.5	Football 287, 7.7	Exercising 331, 1.9
3	Football 243, 6.0	Exercising 172, 4.6	Basketball 276, 1.6
4	Playground 219, 5.4	Soccer 145, 3.9	Pedal cycling 231, 1.3
5	Baseball/Softball 185, 4.6	Recreational Sports 123, 3.3	Baseball/Softball 205, 1.2

RECOMMENDATIONS

5.1 Improve surveillance of sports and recreational injuries.

The New Jersey State Trauma Registry is a valuable source of data on sports and recreation injuries requiring hospitalization. This registry can be further developed to capture detailed information on injury from various SRE activities. The Office of Injury Surveillance and Prevention (OISP) in the New Jersey Department of Health and Senior Services should increase surveillance of SRE injuries to inform prevention efforts. Additionally, OISP should encourage the CDC's National Center for Health Statistics and the International Collaborative Effort on Injury Statistics (ICE) to work toward including more detailed external cause of injury codes in the next revision of the International Classification of Diseases to better reflect SRE injuries.

5.2 Disseminate standardized safety recommendations for sports and recreational activities to schools and municipal recreation departments.

Despite the large amount of safety information available for sports and recreational activities, there is no consistent statewide dissemination of this information. The New Jersey Council on Physical Fitness and Sports should gather appropriate safety recommendations for various sports and distribute them to schools and municipal recreation departments and other appropriate agencies. Additionally, these recommendations should be placed on the Council's website.

5.3 Promote the expansion of environmental modifications known to reduce injuries from wheeled sports and other outdoor recreational activities.

The development of bicycle trails and lanes, and jogging/walking paths have increased safety in recreational activities. Planning efforts at the local and state level should consider the need to create safe outdoor environments for individuals participating in wheeled sports (bicycling, rollerblading, riding a scooter, and skateboarding) and exercise such as walking and jogging.

that takes place outdoors. Recommendations about outdoor environments should be informed by an understanding of their effectiveness in injury prevention.

5.4 Encourage the use of appropriate safety equipment while recreating.

Safety equipment such as kneepads, batting helmets, and safety glasses, is available for many recreational sports. Instructions for the appropriate use of protective equipment based on age, size, and specific activity should be posted at appropriate retailers, municipal recreation departments, and private and commercial athletic facilities.

5.5 Concussion and return-to-play policies should be standardized and disseminated statewide.

Recent research has highlighted the danger of permanent brain injury associated with repeated concussions. School personnel including nurses, health teachers, and all athletic staff in both secondary and post-secondary settings should be aware of safety standards concerning concussion and return-to-play policy.

Data for this study² were obtained through the National Health Interview Survey (NHIS), and the 1997-1999 NHIS collected detailed information about the four most recent medically attended injury episodes for each family member. Episodes were defined as any traumatic event during the past three months that resulted in an injury or injuries from an external cause where the injured person was participating in a SRE activity and the injury required treatment by a health care professional, either in person or over the phone. Only episodes involving organized or unorganized sports or recreational activities were included, and leisure activities such as playing in a yard, climbing a tree, or gardening were excluded.

Analysis by external cause of injury was based on ICD-9-CM E-codes, and all episodes include at least one health condition classified using ICD-9-CM diagnosis codes 800-959 and 990-999.

To categorize activity at the time of injury, three researchers independently reviewed narratives of the reported incident and used the International Classification of External Causes of Injury (ICECI)³ to classify injury episodes.

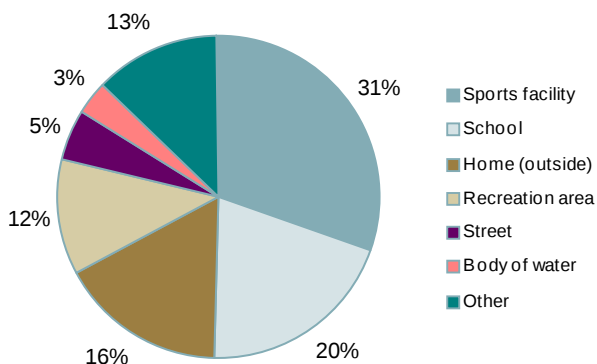
¹ National Center for Injury Control and Prevention, Centers for Disease Control and Prevention, NCIPC, CDC. Available from: http://www.cdc.gov/ncipc/pub-res/research_agenda/05_sports.htm

² Sports and recreation related injury episodes in the US population, 1997-1999. JM Conn, JL Annett, and J Gilchrist. *Inj Prev* 2003; 9:117-123.

³Data dictionary: international classification of external causes of injury (ICECI). Version 1.0. Amsterdam, Netherlands: Consumer Safety Institute, 2001.

Safety recommendations and protective equipment for SPORTS, RECREATIONAL, and EXERCISE activities are available but their use needs to be encouraged among participants.

Sports, recreation, and exercise-related injuries, 1997-1999



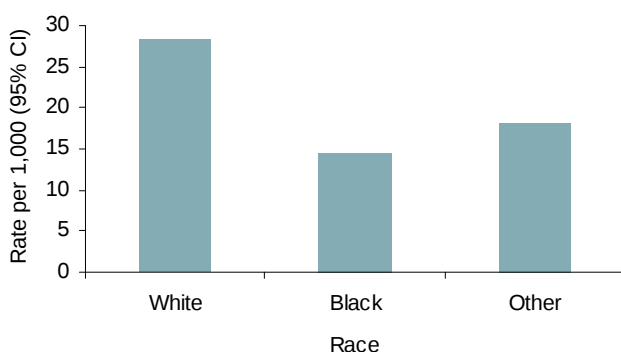
Estimated number of Sports, recreation, and exercise-related injury episodes, persons aged 5 and older, United States, 1997-1999

Activity	N (1,000's)	Rate per 1,000†
Basketball	977	3.9
Pedal cycling	649	2.6
Recreational sports*	647	2.6
Exercising	614	2.5
Football	572	2.3
Baseball/softball	492	2.0
Soccer	352	1.4
Ice/roller skating, skateboarding	342	1.4
Gymnastics/cheerleading	302	1.2
Snow sports	284	1.1
Playground equipment	238	1.0
Water sports	226	0.9
Combative sports	180	0.7
Other individual sports*	493	2.0
Other team sports*	414	1.7
Total	6,781	27.2

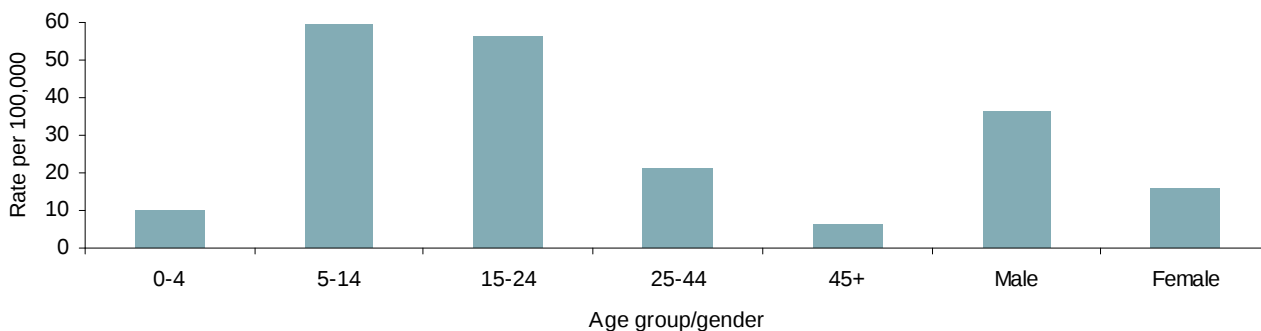
† See Appendix for 95% confidence intervals

* Recreational sports include tennis, racquetball, badminton, and other racquet sports, as well as golf, bowling, fishing, hunting, hiking, mountain climbing and other leisure sports; Other individual sports includes all other sport recreation categories; for example, horseback riding, all-terrain vehicle, Frisbee, and catch; Other team sports includes volleyball, rugby, hockey, lacrosse, cricket and others.

Sports, recreation, and exercise-related injuries by race, United States, 1997-1999



Sports, recreation, and exercise-related injuries by age group and gender, United States, 1997-1999



Statistics from JM Conn, JL Annest, and J Gilchrist.



Occupational Injury

6

Occupational injuries, fatal and non-fatal, are serious public health concerns which are largely preventable through efforts such as occupational health surveillance, enforcement, outreach, compliance assistance, training, and education. Each day in the United States, on average, 16 workers die as a result of a traumatic injury on the job. In New Jersey, 111 workers were killed in workplace injuries in 2005. The work-related fatality rate in the New Jersey working population over the past seven years ranged from 2.6 deaths per 100,000 workers in 1998 (103 deaths) to 3.1 per 100,000 workers in 2004 (129 deaths).¹ In 2005, the transportation and public utilities had the highest work-related fatality rate (9.4 per 100,000 employed civilian workers), followed by the construction industry (7.6 per 100,000 employed civilian workers) among all industries in the state.

Non-fatal work-related injuries had a much higher incidence rate. In 2005, the construction industry had the highest injury rate (5.1 per 100 full time workers), followed by the educational and health services industry (5.0 per 100 full time workers) among all industry divisions in New Jersey.²

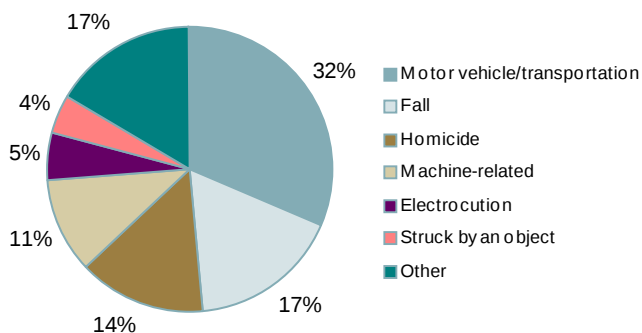
New Jersey and National Objectives

HEALTHY NEW JERSEY 2010 OBJECTIVE 3E-1: Reduce mortality from work-related injuries in the construction industry to 9.7 per 100,000 construction workers

	Baseline (2000)	Current (2004)	Target (2010)
	Rate	Rate	Rate
New Jersey	11.4	11.0	9.7
United States*	No objective established.		

*Note there is no Healthy People 2010 objective established for this HNJ 2010 objective. The HP 2010 objective 20-2b is to reduce work-related injuries resulting in medical treatment, lost time from work, or restricted activity. At baseline the rate of injury per 100 full-time workers aged 16 years or older was 9.3, the target for this objective is 6.5. Other HP 2010 objectives target a reduction in injuries in all industries, and health services, agriculture, forestry, and fishing, transportation, mining, manufacturing, and adolescent workers.

CONTRIBUTING FACTORS



In New Jersey, between 1990 and 2005, a total of 1,672 fatal work-related injuries were reported to the New Jersey Department of Health and Senior Services, Occupational Health Service's work-related fatality assessment surveillance system.³ Motor vehicle incidents, falls, homicides, machine-related incidents, electrocutions, and being struck by objects were the predominant causes of occupational fatalities in New Jersey over

the 16-year period. In 2004 a majority (94%) of the 129 victims were male. The age at death ranged from 18 to 88 years; and the mean age at death was 45 years. Twenty-seven percent of the work-related fatal injury victims during this year were Hispanic, and 30% were foreign born.

RECOMMENDATIONS

6.1 Investigate occupational fatalities/injuries and disseminate results to stakeholders.

Investigation of occupational injuries and fatalities provides important information for use in prevention activities. The U.S. Occupational Safety and Health Administration (OSHA) conducts on-site inspections for all fatalities in the private sector and inspects high-hazard worksites in accordance with OSHA's Site Specific Targeting plan as well as National, Regional and Local Emphasis programs. These emphasis programs address hazards such as machine guarding, amputations, falls, highway work zones, and electrocutions. OSHA will continue to partner with the NJ State Police, NJ Dept. of Transportation, Laborers, Rutgers University and other organizations to prevent highway work zone accidents/fatalities and to address hazards such as machine guarding to prevent amputations, falls from elevations and motor vehicle accidents.

For the public sector, New Jersey Public Employees Occupational Safety and Health Program (NJPEOSH) continues to conduct on-site inspections for all fatalities and inspect high hazard worksites. Reports are issued and distributed to the employees and employers.

The NJDHSS Fatality Assessment Control and Evaluation (NJFACE) Project conducts investigations of work-related fatal incidents designated by the FACE Consortium as priority targets. Investigators seek to identify how the agent (source of fatal injury), host (victim), and environment (workplace) contributed to the fatality in the three significant incident phases: pre-event, event, and post-event. Results are compiled into a comprehensive NJFACE investigation report and distributed to relevant groups. The NJFACE surveillance system includes a registry of all work-related fatalities occurring in New Jersey, identified through various sources. The variables in the registry are updated during investigations of the fatalities and include demographic information, external cause of injury, and a narrative describing the incident.

6.2 Provide injury prevention education to employees and employers in high risk workplaces.

Federal OSHA develops and provides a broad array of compliance assistance programs, outreach and assistance products and services, education, and training materials and courses that promote occupational safety and health. To help employers and employees better understand their obligations, opportunities and safety and health issues, OSHA will continue to serve as a resource for safety and health providing products and services such as education centers, face-to-face guidance, 1-800 number assistance, interactive e-tools, a free on-site consultation program and an extensive website. Federal OSHA will continue to enter into voluntary relationships such as the Voluntary Protection Program, Strategic Partnerships, Safety and Health Achievement Recognition Program (SHARP) and alliances with employers,

employees, employee representatives and trade and professional organizations to encourage, assist and recognize their efforts to increase worker safety and health.

New Jersey Public Employees Occupational Safety & Health (NJ PEOSH) conducts educational seminars for both public employers and employee groups as well as free on-site consultations for employers. Health and Safety Alerts, information bulletins, model programs, and newsletters are distributed and made available on a comprehensive website. Additionally, NJ PEOSH works with employers, employees, and employee representatives to enter into the voluntary Safety and Health Achievement Recognition Program (SHARP).

The New Jersey Fatality Assessment Control and Evaluation (NJFACE) project develops culturally relevant educational outreach material and disseminates to appropriate groups, outlining the hazards of their job activities and providing recommendations to enhance worker safety and prevent injuries. Surveillance data are used to identify high risk groups who can most benefit from an intervention. NJFACE also partners with relevant organizations to develop and disseminate educational materials.

Definition: Work-related fatality data were developed by the US Department of Labor, Bureau of Labor Statistics. Additional data were taken from the Census of Fatal Occupational Injuries and the NJ Fatality Assessment Control and Evaluation project, which is funded by The National Institute for Occupational Safety and Health.

Non-fatal injury data were obtained from the NJ Department of Labor and Workforce Development.

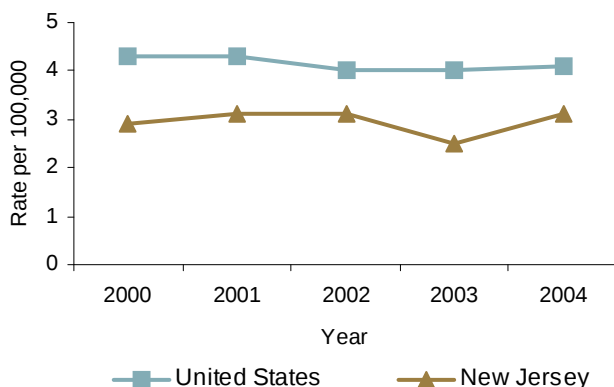
¹ New Jersey Fatality rates were developed by the U.S. Department of Labor, Bureau of Labor Statistics.

² New Jersey Department of Labor & Workforce Development, Survey of Occupational Injuries and Illnesses, in cooperation with Bureau of Labor Statistics, U.S. Department of Labor.

³ NJ DHSS Fatality Assessment Control and Evaluation (NJFACE) Project data.

Overall, New Jersey's rate of fatal OCCUPATIONAL INJURY was lower than the national average, but rates among workers aged 35-44 years are higher in New Jersey.

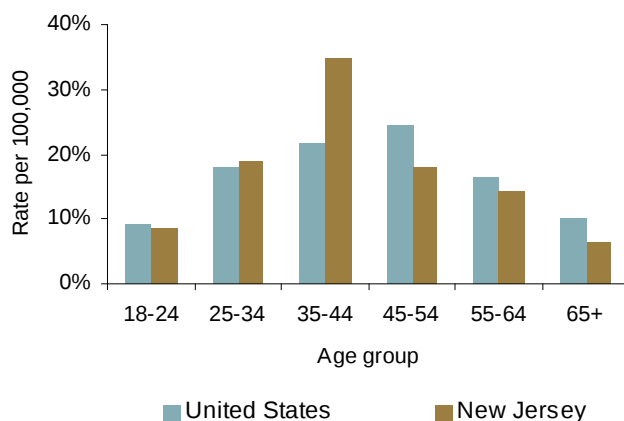
Work-related fatal injuries (from BLS), 2000-2004



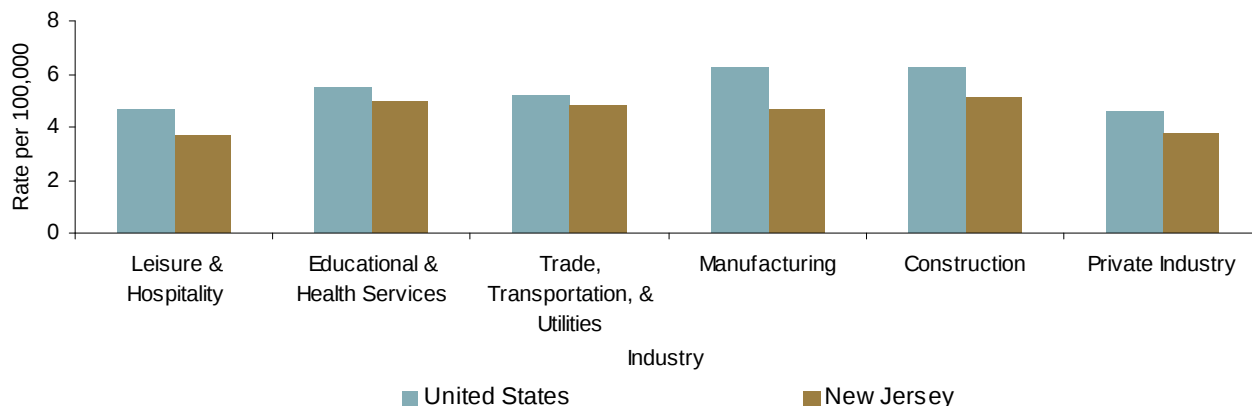
Work-related fatal injuries, demographics, 2004

Fatal Occupational Injury Characteristics, 2004		
Total number in New Jersey	129	
Total number in United States	5,703	
Age range	18 to 88 years old	
Average age	45 years old	
By gender		
Males	121	94%
Females	8	6%
By Race and ethnicity		
White, Non-Hispanic	74	57%
Black, Non-Hispanic	14	11%
Hispanic/Latino	34	26%
Asian	6	5%
Unknown	1	>1%
Foreign-born	39	30%
120 (93%) worked for private industry		
118 (92%) worked for New Jersey employer		
58 (45%) worked for employers with 10 or fewer employees		
The Census of Fatal Occupational Injuries (CFOI), New Jersey – 2004. Department of Health and Senior Services, Occupational Health Surveillance Program. www.nj.gov/health/eoh/survweb		

Age distribution of work-related fatal injuries, workers aged 18 and older, 2005



Private sector nonfatal work-related injury incidence rates for selected industries, New Jersey and the United States, 2005





Unintentional Childhood Injuries

7

Unintentional injuries are the leading cause of death among children aged 1 to 17 years, both in New Jersey and nationwide.¹ In New Jersey approximately half of these deaths are due to motor vehicle traffic crashes. About 15% of injury deaths among New Jersey children result from drowning, while nearly another 10% are the consequence of fires and burns. While the number of childhood injury deaths is relatively low, the benefits to society of preventing childhood injury are relatively high. New Jersey is fortunate in that the rate of death from injury among children is low, in part because of relatively fast EMS response times. The state's dense population allows most residents to enjoy close proximity to hospitals that offer high quality trauma treatment. The Emergency Medical Services for Children (EMSC) program, established in 1992, has improved the odds of survival among injured children.

New Jersey and National Objectives

HEALTHY NEW JERSEY 2010 OBJECTIVE 3F-1B: Reduce mortality from [overall] motor vehicle-related injuries among high risk groups.

	Baseline (2000)		Current (2005)		Target (2010)
Aged 15-19 years	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey	73	13.9	71	12.1	11.2
United States*	5,251	26.0	4,967	23.6	No target

*No Healthy People 2010 target set for this age group. Objective 15-15a, Deaths from motor vehicle crashes per 100,000, has no target set for children ages 14 years and under or persons aged 15 to 24 years.

HEALTHY PEOPLE 2010 OBJECTIVE 15-20: Increase use of child restraints in motor vehicles among children aged 4 years and under.

	Baseline (2000)	Current (2005)	Target (2010)
	%	%	%
New Jersey*	No state comparison data available.		
United States	95	91	100

*No Healthy New Jersey 2010 objective established. Data source for Healthy People objective is the National Occupant Protection Use Survey (NOPUS), Controlled Intersection Study, DOT, NHTSA (2004).

HEALTHY PEOPLE 2010 OBJECTIVE 15-23a: Increase regular bike helmet use among children aged 1 to 15 years.

	Baseline (1998)	Current (2004)	Target (2010)
	%	%	%
New Jersey*	No state comparison data available		
United States	69	NA	76

*No Healthy New Jersey 2010 objective established. Data source for Healthy People objective is the National Bike Helmet Survey, U.S. Consumer Product Safety Commission (1999).

HEALTHY PEOPLE 2010 OBJECTIVE 15-25: Reduce mortality from residential fires.

	Baseline (2000)		Current (2005)		Target (2010)
Aged 4 years & under	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey*	4	DSU	1	DSU	No target
United States	312	1.6	230	1.1	No target

*No Healthy New Jersey 2010 objective established for this injury. DSU = data statistically unreliable.

HEALTHY PEOPLE 2010 OBJECTIVE 15-29: Reduce mortality from drowning.

	Baseline (2000)		Current (2005)		Target (2010)
Aged 4 years & under	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey*	5	DSU	8	DSU	No target
United States	568	3.0	557	2.7	No target
Aged 10-14 years					
New Jersey*	2	DSU	2	DSU	No target
United States	174	0.9	132	0.6	No target
Aged 15-19 years					
New Jersey*	3	DSU	4	DSU	No target
United States	371	1.8	310	1.5	No target

*No Healthy New Jersey 2010 objective established for this injury. HP2010 objective 15-29 has no target set for specific age group, but has a set target of 0.7 per 100,000 population. Rates are per 100,000 age and/or sex-specific population. DSU = data statistically unreliable.

CONTRIBUTING FACTORS

Unintentional injury mortality rates among children 14 years and under, 2000-2005 New Jersey, selected other states, and U.S.

South Dakota	Highest, 20.4 per 100,000
New Jersey	48th, 4.4 per 100,000
Massachusetts	Lowest, 3.4 per 100,000
United States	8.9 per 100,000

Unintentional injury mortality rates among children aged 15-17 years, 2000-2005 New Jersey, selected other states, and U.S.

Mississippi	Highest, 49.5 per 100,000
New Jersey	Lowest 12.9 per 100,000
United States	25.9 per 100,000

Children are at significant risk from unintentional injury-related death and disability. Injury rates vary with a child's age, gender, race, and socioeconomic status. Children younger than 4 years old are at greatest risk from unintentional injury-related death and disability. These children account for nearly half of the deaths among children under 14 years old. Males, minorities, and poor children suffer disproportionately from unintentional injuries.

Poor children, in particular, are at greatest risk of dying or sustaining permanent disabilities due to unintentional injuries.² For example, children from low-income families are twice as likely to die in a motor vehicle crash, four times more likely to

drown, and five more times likely to die in a fire. Low-income families are less likely to use safety devices due to lack of money, lack of transportation to obtain safety devices, lack of control over housing conditions, or some combination of these factors. Strategies that reduce financial barriers to safety devices, increase education efforts and improve the safety of the environment are effective at reducing death and injury among populations at risk.

Water and children can be a deadly mix when an unsafe environment, inadequate supervision or improperly used safety gear are present. Drowning remains the second leading cause of unintentional injury-related death among children aged 1 to 14 years, despite a 40% decline in the childhood drowning death rate from 1987 to 2001.¹

Parents do not always recognize the potential for drowning and near-drowning. According to a study conducted by Safe Kids Worldwide, more than half of parents (55%) reported that they do not worry very much or at all about their child drowning. A 2004 Safe Kids Worldwide publication also noted that nearly 9 in 10 deaths reviewed occurred while the child was being supervised.³

The New Jersey Department of Education has included safety and injury prevention education in its core curriculum standards for physical and health education. It is crucial that every school district in the state meet these standards in order to increase knowledge and prevent unintentional injuries.

The recommendations below are organized by cause. While it is recognized that the incidence of the individual causes of injury may be relatively small, the cumulative effect demonstrates that unintentional injuries as a whole are *the* leading cause of death and disability among New Jersey children.

RECOMMENDATIONS

Motor Vehicle

7.1 Educate parents and caregivers about the increased risk of death or serious injury for unrestrained children.

Motor vehicle crashes are the number one cause of death of children over the age of six months in the United States.⁴ The proper use of child car seats is one of the simplest and most effective methods available for protecting the lives of young children in the event of a motor vehicle crash. Unrestrained children are more likely to be injured, suffer severe injuries and die in motor vehicle crashes than children who are restrained. Parents and caregivers should be better informed about the importance of using the appropriate restraints, with a focus on belt-positioning booster seats. This education should target at-risk populations, using culturally and linguistically appropriate messages and materials.

7.2 Increase child safety seat distribution and education about proper fitting.

Fitting stations should be available and publicized in every New Jersey county. Fitting stations for special needs children should be established in each region of the state. Additionally, the public should be educated about the new universal child restraint attachment system LATCH

(Lower Anchors and Tethers for Children) and on the correct selection, installation, and use of child safety seats.

Pedestrian

7.3 Conduct a media awareness campaign aimed at changing attitudes and behaviors of drivers and pedestrians to improve road sharing.

New Jersey experiences a disproportionately high number of pedestrian injuries and fatalities compared to the nation as a whole, with children being a high risk group for pedestrian injuries.⁵ Pedestrian safety is a shared responsibility. Public education should be developed to encourage parents, children, and motorists to adopt safer behaviors. Parents and children should be educated about the importance of wearing retro-reflective materials.

7.4 Ensure the implementation of the New Jersey Core Curriculum Standards, which include pedestrian safety for grades K-12.

Increased and developmentally appropriate education in schools can help prevent pedestrian injuries among children. Additionally, schools can partner with community organizations to conduct interactive school-based and community pedestrian safety awareness programs such as International Walk to School Day and Safe Routes to Schools.

Bicycle

7.5 Present more targeted messages to parents and children about the consequences of not wearing a helmet when participating in any wheeled sport.

Each year, bicyclists are killed or injured in New Jersey. Brain injury is one of the most serious injury type and the most common cause of death among bicyclists, and survivors of severe brain injuries frequently experience permanent damage. Public education of children and parents about the importance of wearing helmets should be increased. Caregivers should be encouraged to be role models by also wearing helmets.

7.6 Encourage and fund positive enforcement programs of New Jersey's recently enhanced helmet law that requires use up to age 17 for all wheeled sports.

Public education should increase awareness of New Jersey's enhanced helmet law. Millions of citizens could be reached via a multi-year, multi-faceted public information campaign to promote New Jersey's enhanced helmet law for all wheeled sports that may include: bus and transit signage in urban areas; bike helmet distribution and education; media campaigns; and retail partnerships. Private and foundation support could be sought for such a campaign.

Recreational/Playground/Sports

Brain injury is the leading cause of sports and recreation-related death. Bicycle, in-line skating and skateboard incidents account for a large percentage of sports and recreation-related head injuries. Children are more susceptible to these injuries because they are still growing and gaining motor and cognitive skills.

7.7 Create and enforce school and community policies requiring pre-participation fitness exams, appropriate safety gear for all sporting events, and the availability of certified athletic trainers for all organized sports.

Coaches and parents should be educated about safety standards for various sports and recreational activities. Coaching, park, and recreational staffs should be trained in emergency first aid and CPR.

7.8 Encourage active adult supervision of young children using playground and recreational facilities.

Lack of active supervision is associated with many recreational injuries occurring on public playgrounds, community sports fields or school recreational areas. Parents and other caregivers should provide developmentally-appropriate supervision to children and should be aware of age-appropriate use of playground equipment.

7.9 Ensure appropriate recreational surfacing and maintenance of equipment as per guidelines issued by the US Consumer Product Safety Commission and the American Society for Testing and Materials.

Schools and other entities maintaining playgrounds should ensure the safety of equipment and surfaces by complying with state law and national standards.

Drowning

7.10 Increase public education for parents, caregivers and children that address the dangers from drowning in swimming pools, spas, bathtubs, five-gallon buckets, toilets and open bodies of water.

Parents and caregivers need more education about drowning prevention, particularly the importance of active supervision of children in and around water. Parents, caregivers and older children should be educated to be role models by wearing personal floatation devices (PFDs) and adopting safe behaviors, such as never swimming alone. Existing and developing programs, curricula and activities should be evaluated to determine their effectiveness and to allocate limited resources appropriately. Low cost and highly effective tools such as the Safe Kids New Jersey's "Water Watcher" program should be included in educational efforts.

7.11 Pass pool safety legislation that would require adequate fences around recreational pools, and incorporate language to address entrapment-related dangers.

Many child drownings in recreational pools could be prevented by improving the fencing of pools. Ensure safe swimming environments by installing multiple layers of protection around pools and equipping all water recreation sites with appropriate signage and emergency equipment. Incorporate personal floatation device (PFD) loaner programs where possible. A coordinated educational campaign targeting residential pool owners and pool service providers to promote pool safety and the adoption of safety enhancements should be conducted.

Fire/Burns

7.12 Target messages about fire and burn prevention to families at greatest risk.

According to Safe Kids Worldwide (Washington, DC), thousands of children sustain burn-related injuries each year. Children aged 4 and under are at greatest risk, and have an injury death rate more than two times that of children aged 5 to 14 years. Scald injuries are the most prevalent in younger children and many can be prevented through education. The information provided to parents and caregivers should also include importance of smoke alarms, escape plans and practice drills, and the proper setting of the hot water heater (not above 120 degrees Fahrenheit). This fire and burn prevention information should be developed in multiple languages so as to reach New Jersey's diverse population, many of whom live in high-risk, densely populated areas.

7.13 Distribute and install smoke alarms.

Smoke alarms are extremely effective at preventing fire-related deaths and injury. The chances of dying in a residential fire are cut in half when a working smoke alarm is present. The distribution and proper installation of smoke alarms, including those designed for visually and hearing-impaired children should be increased, and families should be educated about the importance of testing smoke alarm batteries each month. Ten-year lithium batteries are recommended for use in smoke alarms when possible, which will last for the life of the alarm. If regular batteries are used, they should be replaced twice each year using the time change from Eastern Standard Time to Daylight Savings Time as a reminder.

Falls

7.14 Educate parents about the importance of home safety in fall prevention, through modifications such as window guards and stair gates.

Falls are the leading cause of unintentional non-fatal injury for children. The severity of a fall-related injury is determined by the distance of the fall and the landing surface, and head injuries are associated with the majority of deaths and severe injuries from falls. Parents and other caregivers should be educated with linguistically and culturally appropriate materials about the importance of home safety in fall prevention, particularly for young children.

Educational outreach should heighten awareness among parents and caregivers that infants and other children must be actively supervised at play, both inside and outside the house.

7.15 Improve surveillance on falls among children, to gain a better understanding of major causes.

Data on falls resulting in serious injury or death needs to be better recorded and reported, which will enable analysis to better understand the causes and risk factors for falls, and to better inform further prevention efforts.

Definition: Unintentional Childhood Injuries are defined for deaths among those aged 0 to 17 years for the following ICD-10 codes:

Unintentional injuries: V01-X59, Y85-Y86

Motor vehicle (overall): V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,
V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,
V88.0-V88.8,V89.0,V89.2

Drowning: W65-W74

Fire/burn (residential): X00-X19 and PLACE = HOME

Mortality data for the figures and tables, maps, rankings, and Healthy New Jersey/Healthy People objectives are from the New Jersey Department of Health and Senior Services, Bureau of Vital Statistics; national comparison data are from the Centers for Disease Control and Prevention (WISQARS); population estimates are Bridged-Race Estimates from the National Center for Health Statistics.

¹ Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. 2007. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available from: www.cdc.gov/ncipc/wisqars. Accessed September 1, 2007.

² Safe Kids Worldwide, Washington, DC. <http://www.safekids.org>

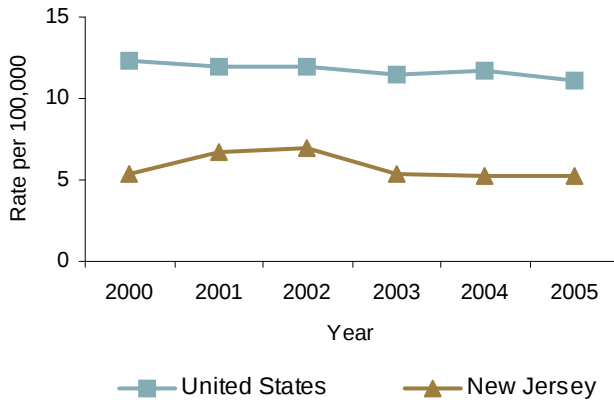
³ Clear Danger: A National Study of Childhood Drowning and Related Attitudes and Behaviors, National SAFE KIDS Campaign, Washington, DC, April, 2004

⁴ National Highway Traffic Safety Administration. <http://www.nhtsa.dot.gov>

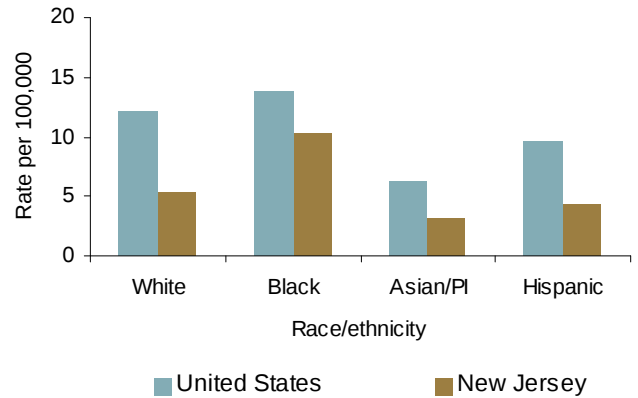
⁵ New Jersey Division of Highway Traffic Safety. <http://www.nj.gov/oag/hts/index.html>

The rate of fatal UNINTENTIONAL CHILDHOOD INJURIES is slowly declining across the country. The lower rate in New Jersey is largely influenced by motor vehicle injuries.

Fatality rate among children due to unintentional injuries, 2000-2005

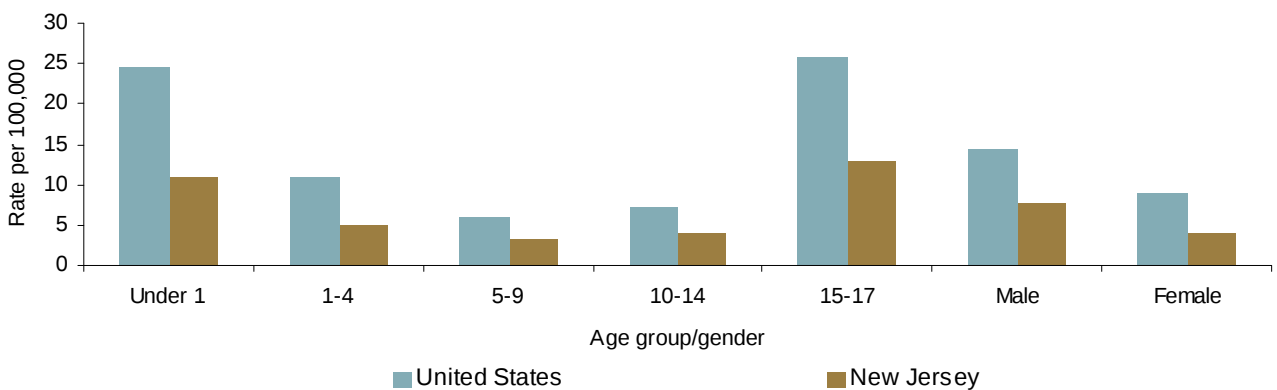


Fatality rate among children due to unintentional injuries, by race/ethnicity, 2000-2005



Leading causes of unintentional injury fatalities among children aged 0-17, New Jersey 2000-2005				
Under 1 year	1-4 years	5-9 years	10-14 years	15-17 years
Suffocation 40	Motor vehicle 39	Motor vehicle 45	Motor vehicle 75	Motor vehicle 180
Motor vehicle 10	Drowning 36	Fire/burn 26	Drowning 18	Poisoning 21
Drowning 6	Fire/burn 22	Drowning 20	Fire/burn 9	Drowning 18
Fire/burn 4	Suffocation 13	Suffocation 8	Suffocation 7	Unspecified 12
Unspecified 4	Fall 7	Pedestrian (other) 4	Fall 5	Pedestrian (other) 8

Fatality rate among children due to unintentional injuries, by age group and gender, 2000-2005





Violence

8

Violence is a leading cause of injury and death, and a major public health problem nationally and in New Jersey. Between 2000 and 2004, homicide and suicide represented the second and third leading causes of death respectively for those aged 15 to 24 years.¹ In 2005, homicide and suicide caused approximately 1,000 deaths in New Jersey. In recent years there has been an increase in homicide in the state, particularly in homicides committed with firearms in urban areas. Homicide rates have risen approximately 25% in New Jersey since 2000, while remaining relatively stable nationally. There were more than 400 homicides in New Jersey in 2005. Homicide victims in New Jersey are disproportionately young black males. Among female homicide victims, nearly 40% are killed by a current or former intimate partner. Suicide rates in the state are relatively low compared to national levels, yet there were nearly 600 suicides in New Jersey in 2005. Middle-aged and elderly white males have the highest risk of suicide completion. Mental health problems, particularly depression, are the most important risk factor for suicide for both males and females.

New Jersey and National Objectives

HEALTHY NEW JERSEY OBJECTIVE 3C-10: Reduce mortality rate from homicide among 15 to 19-year-old males.

	Baseline (2000)		Current (2005)		Target (2010)
	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
Males aged 15-19 years					
New Jersey	26	9.6	39	12.9	7.4
United States*	1,613	15.5	1,815	16.8	No target

*No Healthy People 2010 objective set for this age group. Objective 15-32, Reduce homicides, has a set target of 3.2 per 100,000 population.

HEALTHY NEW JERSEY 2010 OBJECTIVE 3D-5: Reduce mortality rate from homicide among 20 to 34-year-olds.

	Baseline (2000)		Current (2005)		Target (2010)
	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
Aged 20-34 years					
New Jersey	162	9.9	231	14.2	6.0
United States*	7,189	12.2	8,142	13.2	No target
Black non-Hispanic males aged 20-34 years					
New Jersey	102	84.2	481	118.5	33.2
United States*	3,456	91.1	4,062	97.2	No target

*No Healthy People 2010 objective established for this age or race group. Objective 15-32, Reduce homicides, has a set target of 3.2 per 100,000 population.

HEALTHY NEW JERSEY 2010 OBJECTIVE 4E-2: Reduce the mortality rate from suicide for males.

	Baseline (2000)		Current (2005)		Target (2010)
Males aged 15-19 years	<i>N</i>	<i>Rate</i>	<i>N</i>	<i>Rate</i>	<i>Rate</i>
New Jersey	24	8.9	22	7.3	4.8
United States*	1,351	13.0	1,303	12.1	No target
White non-Hispanic males age 65 years and over					
New Jersey	68	18.5	62	16.9	4.8
United States*	4,128	35.5	4,217	33.7	No target

*No Healthy People 2010 objective established for males in this age or race group. Objective 18-01, Reduce suicide, has set target of 4.8 for all males. Rates are per 100,000 age and/or sex-specific population.

CONTRIBUTING FACTORS

Homicide rates, 2000-2005 New Jersey, selected other states, and U.S.	
Louisiana	Highest, 13.2 per 100,000
New Jersey	29th, 4.4 per 100,000
Maine, New Hampshire	Lowest, 1.4 per 100,000
United States	6.1 per 100,000

Assault and homicide have multiple potential causes, including childhood exposure to family and community violence, lack of educational and employment opportunities, poor conflict resolution and problem solving skills, geographically concentrated poverty, and the breakdown of families and traditional social structures. All of these factors place

poor urban dwellers in New Jersey at particular risk of becoming both homicide victims and offenders.

State and federal efforts to address violent crime emphasize law enforcement and the incarceration of perpetrators. Improved law enforcement strategies, such as intelligence-led policing and targeted operations are some of the ways in which jurisdictions are attempting to reduce violent crime. However law enforcement can only be part of any effort to reduce violence. Many school and community based violence prevention programs have proven to be highly cost effective in preventing the development of violent behavior. Additionally, reducing the supply of firearms is an important component of violence prevention.

Suicide rates, 2000-2005 New Jersey, selected other states, and U.S.	
Alaska	Highest, 20.2 per 100,000
New Jersey	49th, 6.5 per 100,000
New York	Lowest, 6.1 per 100,000
United States	10.8 per 100,000

While risk factors for being a victim or perpetrator of homicide appear mostly external, risk factors for suicide appear to be much more internal to the victim. Major risk factors for suicide include mental health problems, particularly depression, physical health problems, and substance abuse.² Access to lethal means, particularly firearms, is also a risk factor. For males

especially, intimate partner conflicts, as well as financial and job-related problems are also factors which contribute to suicide. Suicide rates are highest among middle-aged and older white males, and in areas of the state where firearm prevalence is highest, generally the less densely populated counties of Southern and Northwestern New Jersey.³

In addition to crisis-oriented suicide prevention services geared at high risk individuals, there are many other opportunities to expand suicide prevention efforts. While New Jersey has one of the lowest firearms ownership rates in the nation, those who do own firearms should be made aware of the suicide-related risks posed by a gun in the house. Health care providers should be aware of risk factors and warning signs for suicide, since many people who take their own lives are already in mental health treatment, or see physicians regularly for chronic illnesses or disabilities. More generally, there are a number of effective population-based suicide prevention programs which promote awareness of depression and suicidal behavior and encourage people who may be suicidal to seek help.

RECOMMENDATIONS

8.1 Adopt the Governor's Public Safety Plan, "A Strategy for Safe Streets and Neighborhoods"

The Governor's Public Safety Plan, "A Strategy for Safe Streets and Neighborhoods" includes recommendations around three core strategies: prevention, enforcement and re-entry. This comprehensive plan includes a wide-range of strategies in all three, for example, a data-driven approach to policy, emphasizing intelligence-led policing to guide law enforcement activities, and recommending that prevention efforts be focused on programs that have been shown to be effective. In particular, the emphasis on the prevention strategy holds promise for effectively addressing issues of violence in communities around the state. This strategy focuses on (1) improving coordination of existing resources, (2) empowering local communities to address prevention, (3) emphasizing evidence-based programs and accountability, and (4) communications and advocacy. The re-entry strategy focuses on reducing recidivism rates by bolstering the policies, programs, and services that improve inmates' prospects for successful integration into society.

8.2 Expand promising programs designed to prevent youth violence.

Prevention is a cost-effective approach to reducing violence as compared with the cost of violence-related injury, death, prosecution, and incarceration of perpetrators. As emphasized in the Governor's "Strategy for Safe Streets and Neighborhoods", prevention is a prioritized strategy. It is recommended that the state continue this effort to further promote evidence-based primary prevention programs in schools and the community. These programs should pay particular attention to preventing gang violence, juvenile delinquency, bullying and family violence.

8.3 Increase the use of intelligence-led policing by state and local law enforcement agencies in combating gang and gun crime.

Intelligence-led policing is an approach to law enforcement which encourages the use of multiple technologies to collect and share information. This approach has been adopted by the New Jersey State Police, and has been used to combat various types of organized crime. Effective use of data is essential to the success of intelligence-led policing. Recent law enforcement strategies to reduce gang-related crime have focused enforcement and prosecutorial resources on particularly violent offenders and high crime areas, as well as on reducing the proliferation of illegal guns.

8.4 Promote awareness that suicide is a public health problem that is preventable.

Awareness of suicide prevention as a public health activity has increased in recent years. For progress to continue, it is important to increase the number of communities, organizations, and consumer and client groups that recognize suicide as a preventable public health problem and are actively involved in prevention activities. Furthermore, it is desirable to increase the number of New Jersey residents who can recognize suicide warning signs in themselves and others and know how to find help.

8.5 Develop and implement community-based suicide prevention programs.

Suicide prevention planning at the community level involves providing information about warning signs and risk factors, as well as where to obtain help. All New Jersey counties should have comprehensive suicide prevention plans. Additionally, suicide prevention resources should be available in all schools, colleges and universities, correctional institutions, and state and county programs that target seniors.

8.6 Promote efforts to reduce access to lethal means and methods of self-harm.

Access to lethal means such as firearms, drugs, and poisons, is independently related to an increased risk of suicide. Primary care and mental health providers and local law enforcement should be aware of the risk posed by the presence of lethal weapons in the home. Information should be provided to at-risk households about how to reduce access to lethal means; including firearms, medications and automobiles without ignition shutoff sensors. Guidelines for safer prescribing and dispensing of medications should be developed for doctors to distribute to patients at heightened risk of suicide.

8.7 Promote comprehensive public education about the risks of firearms.

Research has shown that ownership of a firearm significantly increases suicide risk. Information about this risk should be disseminated widely, but particularly to the gun-owning community. Safe storage practices, such as trigger locks and lock boxes, should be encouraged. Healthcare professionals should consider the presence of firearms in assessing risks to patients with depression or other suicide risk factors.

Definitions: Homicide and suicide are defined using the following ICD-10 codes:

Homicide: X85-Y09, Y87.1 (Terrorism homicides (incl. 9/11 deaths) (U01-U02) are *excluded*)

Suicide: X60-X84, Y87.0 (Terrorism suicides (incl. 9/11 deaths) (U03) are *excluded*)

Mortality data for the figures and tables, maps, rankings, and Healthy New Jersey/Healthy People objectives are from the New Jersey Department of Health and Senior Services, Bureau of Vital Statistics; national comparison data are from the Centers for Disease Control and Prevention (WISQARS); population estimates are Bridged-Race Estimates from the National Center for Health Statistics.

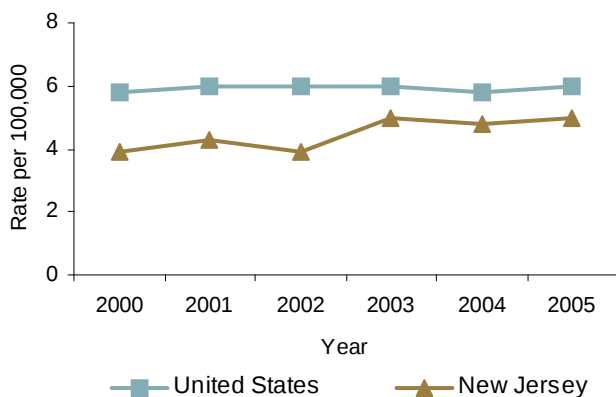
¹ Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. 2007. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available from: www.cdc.gov/ncipc/wisqars.

² Violent Deaths in New Jersey, 2003-2005. Office of Injury Surveillance and Prevention, Center for Health Statistics, New Jersey Department of Health and Senior Services. Trenton, NJ. 2008.

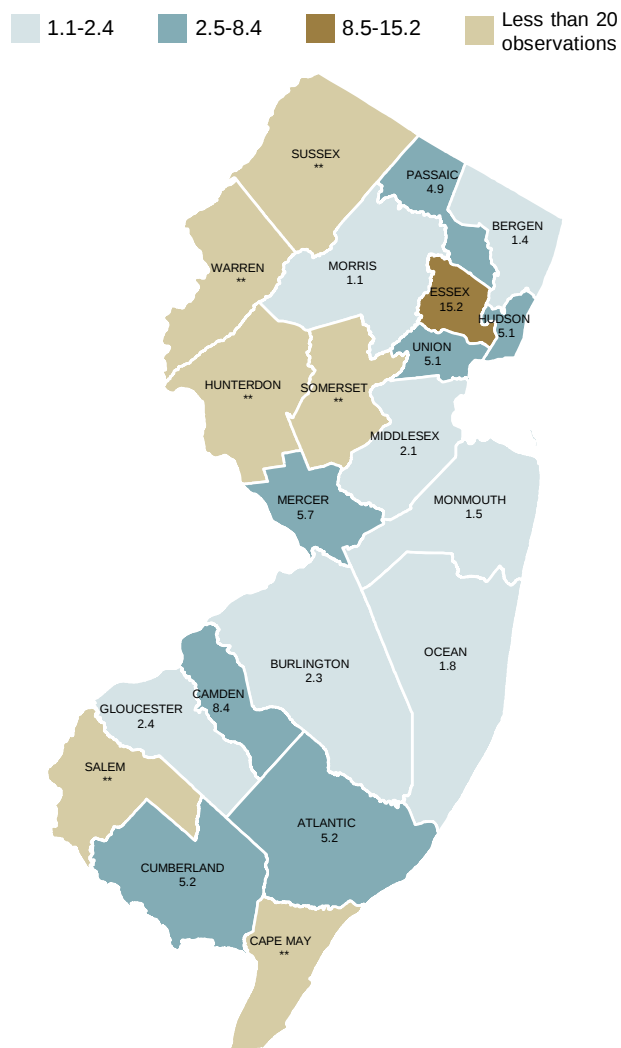
³ Suicide and firearm ownership, New Jersey, 2003-2005. Office of Injury Surveillance and Prevention, Center for Health Statistics, New Jersey Department of Health and Senior Services. Trenton, NJ. 2007.

Despite being lower than the national rate, HOMICIDE rates in New Jersey have been increasing in recent years, mostly among young urban males.

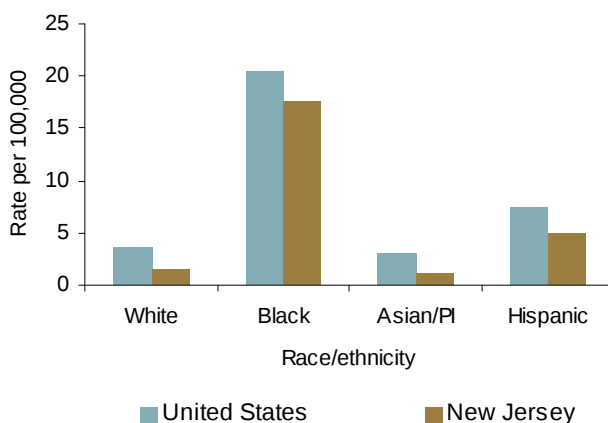
Homicide rate, 2000-2005



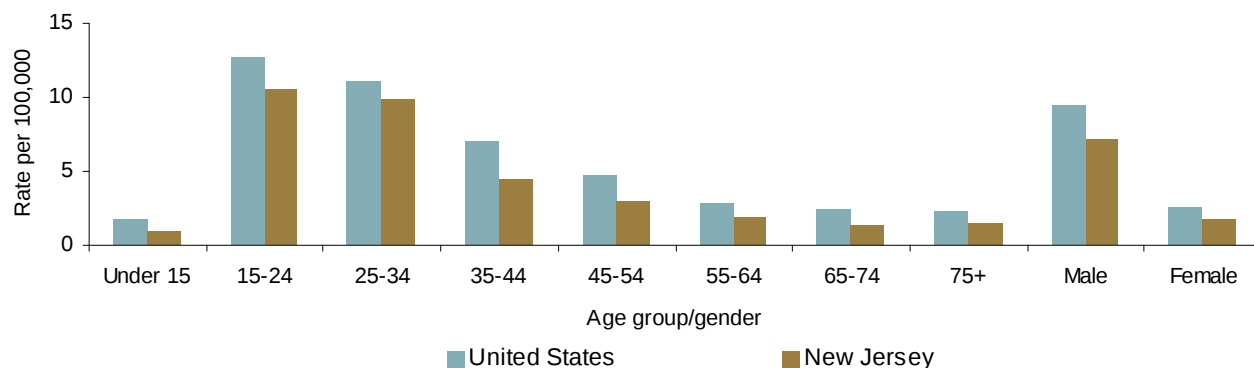
Age adjusted death rates due to homicides, by county of residence, 2000-2005



Homicide rates by race and ethnicity, 2000-2005



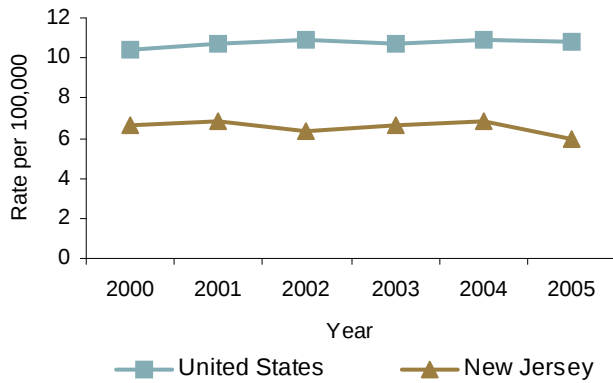
Homicide rates by age group and gender, 2000-2005



Note: Homicide rates exclude 9/11 deaths.

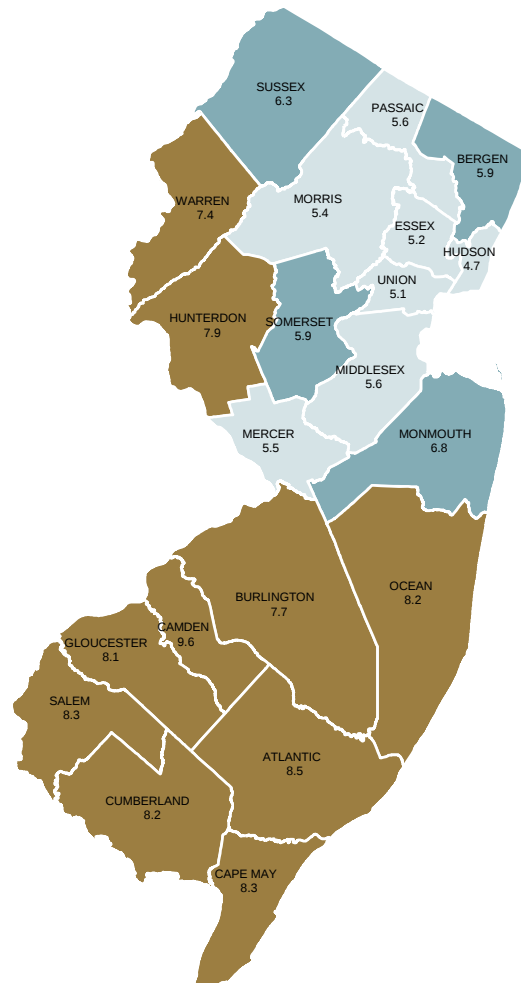
SUICIDE rates in New Jersey have been lower than the national average for several years, but rates in New Jersey are still relatively higher in rural counties and among males.

Suicide rate, 2000-2005

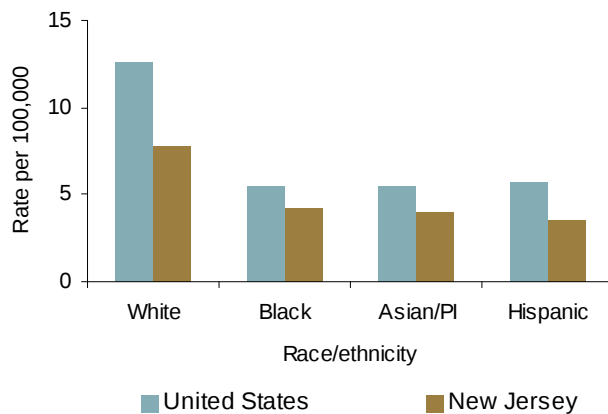


Age adjusted death rates due to suicide, by county of residence, 2000-2005

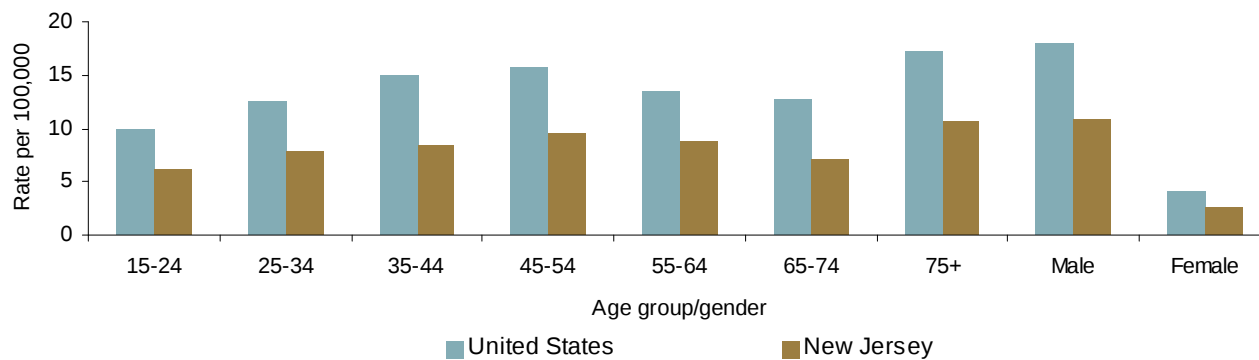
4.7-5.6 5.7-6.8 6.9-19.6 Less than 20 observations



Suicide rates by race and ethnicity, 2000-2005



Suicide rates by age group and gender, 2000-2005



TECHNICAL NOTES

DEFINITIONS

Cause of Death Classification — a system of specification of the diseases and/or injuries which led to death and the sequential order of their occurrence. Mortality is classified using the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10). Other classification systems may be additionally used when ICD-10 is inadequate to fully describe the cause or context of death, such as for fatal occupational injuries.

Healthy New Jersey 2010 (HNJ 2010) — a set of health objectives that New Jersey is aiming to achieve during the decade between 2000 and 2010. These objectives can be used by government, non-profit agencies, community groups, professional organizations, and others to help develop programs to improve the health of New Jerseyans. Sixty-seven objectives, or targets and their associated indicators, were established in eleven major health categories, ranging from improving maternal and child health to reducing the adverse impacts of diseases such as cancer, HIV/AIDS, and cardiovascular disease. Injury-related objectives included in HNJ 2010 are referenced in every chapter of *Preventing Injury in New Jersey* (where available), and are used in comparison with national Healthy People 2010 objectives and rates.

Healthy People 2010 (HP 2010) — a set of health objectives for the United States to achieve during the decade between 2000 and 2010. It has been used by states, communities, professional organizations, and others to help develop programs to improve public health. HP 2010 builds on initiatives pursued over the past two decades. The 1979 Surgeon General's Report, *Healthy People*, and *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, both established national health objectives and served as the basis for the development of state and community plans. For *Preventing Injury in New Jersey*, HP 2010 objectives are used for comparison to Healthy New Jersey 2010 goals whenever possible.

ICD-10 - the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision. In existence since 1893, and with revisions coordinated by the World Health Organization (WHO) in Geneva, Switzerland since the 6th Revision in 1948, it is the international standard for disease and injury mortality classification throughout the world.

Motor Vehicle (Overall) Injuries — Motor vehicle crashes resulting in injuries to vehicle occupants, pedestrians, motorcyclists, and pedal cyclists can occur in traffic on public roadways as well as in parking lots, driveways, and other off-road deaths. For the HNJ 2010 motor vehicle objective, this broader category is used. For the Healthy New Jersey pedestrian objective, however, only those pedestrian deaths on public roadways ("in traffic") are included.

RATE COMPUTATION

Age-adjusting and age-adjusted rates – The direct method of age adjustment is frequently used to eliminate the effect of differences in age distribution of populations so rates may be compared, particularly between states or to make national comparisons. Age-specific rates are applied to a standard population to arrive at the theoretical number of events that would occur in the standard population at the rates prevailing in the actual population. The number of events is divided by the total number of persons in the standard population to arrive at the adjusted rate. The resulting age-adjusted rate is an index number and can only be compared to other rates age-adjusted using the same standard population and cannot be compared to crude or other actual rates. In this report, mortality rates are age-adjusted unless otherwise noted. The standard population used in this report is the United States 2000 standard million, derived from the projection of counts from the 2000 decennial census.

Mortality (death) rate - rate calculated by dividing the number of deaths occurring in a population during the stated period of time, usually a year, by the number of persons at risk of dying during the period. In this report:

- the *crude* mortality rate is the number of resident deaths per 100,000 population.
- the *cause-specific* mortality rate can either be the number of resident deaths from a specific cause (falls, homicide, etc.) per 100,000 population (e.g., crude fall mortality rate), or age-adjusted per 100,000 population using the 2000 US Standard Population (e.g., age-adjusted motor vehicle fatality rate).
- the *age-specific* mortality rate is the number of resident deaths in a specific age group per 100,000 population in the age group (e.g., fall mortality rate among those 65 and older).
- the *age-adjusted* mortality rate (described above) is the number of resident deaths per 100,000 population adjusted using the 2000 US Standard Population (e.g., age-adjusted poisoning rate, age-adjusted suicide rate).

The denominators consist of the entire population during the year(s) in which the deaths occurred. In order to compare mortality and morbidity experiences among various ages and races or between the sexes, rates may be computed for subgroups of the population. These age-, race-, or sex-specific rates are calculated by dividing the relevant events within a subgroup by the population in the subgroup. Race- and sex-specific rates may also be age-adjusted. Death rates from specific causes may also be calculated, with the numerator consisting of the deaths from the particular cause in an area and the denominator comprised of the population at risk of the disease or condition.

Mortality rates based on fewer than 20 deaths do not meet National Center for Health Statistics (NCHS) standards for reliability and precision and therefore have been suppressed throughout this document. For this report a notation of DSU (data is not statistically reliable) is made to indicate that the NCHS standards have not been met.

POPULATION ESTIMATES

Population estimates used to calculate various rates in this report were derived from the bridged-race postcensal population estimates prepared by the National Center for Health Statistics (NCHS) in collaboration with the U.S. Bureau of the Census. These estimates result from bridging the 31 race categories used in the 2000 Census, as specified in the 1997 federal OMB standards for the collection of data on race and ethnicity, to the four race categories specified under the 1977 standards. Many data systems are continuing to use the 1977 standards during the transition to full implementation of the 1997 standards. Population estimates as of April 1, 2000 were used with 2000 data, Vintage 2003 estimates were used with 2001 - 2003 data, and Vintage 2004 estimates were used with 2004 data. For more information about the bridged-race population estimates: www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm.

APPENDIX I: Glossary of acronyms

Acronym	Definition
DOT	Department of Transportation
DSU	Data not statistically reliable
HNJ 2010	Healthy New Jersey 2010
HP 2010	Healthy People 2010
ICECI	International Classification of External Causes of Injury
NCHS	National Center for Health Statistics
NHTSA	National Highway Traffic Safety Association
NJPEOSH	New Jersey Public Employees Occupational Safety and Health Program
NJDHSS	New Jersey Department of Health and Senior Services
NJDHTS	New Jersey Division of Highway Traffic Safety
NJFACE	New Jersey Fatality Assessment Control and Evaluation Project
NJPIES	New Jersey Poison Information System
NVDRS	National Violent Death Reporting System
OISP	Office of Injury Surveillance and Prevention
OSHA	Occupational Safety and Health Administration
OSME	Office of the State Medical Examiner
SHPPS	National School Health Policies and Programs Study
SIMS	State Police Information Management System
WISQARS	Web-based Injury Statistics Query and Reporting System

APPENDIX II: ICD-10 codes for injury mortality

Cause of Injury/Death	ICD-10 Codes
Unintentional Injuries	V01-X59, Y85-Y86
Motor Vehicle (Overall) (HNJ 2010)	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Motor Vehicle (traffic) (HP 2010)	V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9), V60-V69 (.4-.9), V70-V79 (.4-.9), V81.1, V82.1, V83-V86 (.0-.3), V20-V28 (.3-.9), V29 (.4-.9), V12-V14 (.3-.9), V19 (.4-.6), V02-V04 (.1,.9), V09.2, V80 (.3-.5), V87(.0-.8), V89.2
Pedestrians (overall) (HP 2010)	V02-V04 (.0,.1,.9), V01, V05, V06, V09 (.0,.1,.2,.3,.9)
Pedestrians (traffic) (HNJ 2010)	V02-V04 (.1,.9), V09.2
Motorcyclists	V20-V28 (.3-.9), V29 (.4-.9)
Unintentional poisoning	X40-X49
Unintentional poisonings, drugs	X40-X44
Intentional self-poisoning	X60-X69
Intentional self-poisoning, drugs	X60-X64
Assault by poisoning	X85-X90
Assault by poisoning, drugs	X85
Poisoning, undetermined intent	Y10-Y19
Poisoning, undetermined intent, drugs	Y10-Y14
Legal intervention poisoning (gas)	Y35.2
Mental and behavioral disorders due to psychoactive substance abuse	F11-F16 (.0-.5, .7-.9), F17(.0, .3-.5, .7-.9), F18-F19 (.0-.5, 7-.9)
Falls	W00-W19
Fire/burns	X00-X09
Fire/burns, residential	X00-X09 and place of injury = HOME
Drowning	W65-W74
Suffocation (incl. hanging and strangling)	W75-W84
Homicide	X85-Y09, Y87.1 (excluding U01-U02, terrorism)
Suicide	X60-X84, Y87.0 (excluding U03, terrorism)

APPENDIX III: 95% Confidence Intervals

Rates and percentages presented on page 31 in the Sports, Recreation, and Exercise chapter were computed using survey data (1997-1999 data; JM Conn, et al for statistics). Below are the 95% confidence intervals for each rate, as provided from the source publication.

Estimated number of sports, recreation, and exercise-related injury episodes, persons aged 5 and older, United States, 1997-1999

Activity	N (in thousands)	Rate per 1,000	95% C.I.
Basketball	977	3.9	3.3 - 4.5
Pedal cycling	649	2.6	2.1 - 3.1
Recreational sports*	647	2.6	2.2 - 3.0
Exercising	614	2.5	2.1 - 2.9
Football	572	2.3	1.9 - 2.7
Baseball/softball	492	2.0	1.6 - 2.4
Soccer	352	1.4	1.1 - 1.7
Ice/roller skating, skateboarding	342	1.4	1.1 - 1.7
Gymnastics/cheerleading	302	1.2	0.9 - 1.5
Snow sports	284	1.1	0.7 - 1.5
Playground equipment	238	1.0	0.7 - 1.3
Water sports	226	0.9	0.7 - 1.1
Combative sports	180	0.7	0.5 - 0.9
Other individual sports*	493	2.0	1.6 - 2.4
Other team sports*	414	1.7	1.3 - 2.1
Total	6,781	27.2	25.6 - 28.8

Sports, recreation, and exercise-related injuries by race, United States, 1997-1999

Race	Rate per 1,000	95% C.I.
White	28.3	26.7 - 29.9
Black	14.5	12.0 - 17.0
Other	18.1	13.9 - 22.3

Sports, recreation, and exercise-related injuries by age group and gender, United States, 1997-1999

Age group/Sex	Rate per 1,000	95% C.I.
0-4 years	9.9	7.2 - 12.6
5-14 years	59.3	54.4 - 64.2
15-24 years	56.4	50.4 - 62.4
25-44 years	21.0	18.9 - 23.1
45 years and older	6.2	5.0 - 7.4
Males	36.3	33.9 - 38.7
Females	16.0	14.6 - 17.4

* Recreational sports include tennis, racquetball, badminton, and other racquet sports, as well as golf, bowling, fishing, hunting, hiking, mountain climbing and other leisure sports; Other individual sports includes all other sport recreation categories; for example, horseback riding, all-terrain vehicle, Frisbee, and catch; Other team sports includes volleyball, rugby, hockey, lacrosse, cricket and others.

APPENDIX IV: Leading causes of injury death

Figure A. Leading causes of injury death by age group, New Jersey, 2000-2005

Rank	Under 1 year	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
1	Homicide 34	MV Traffic 34	MV Traffic 39	MV Traffic 65	MV Traffic 821	Homicide 725	Poisoning 1079	Poisoning 660	Suicide 378	MV Traffic 311	Fall 428	Unspec. 653	MV Traffic 3781
2	Suffocation 32	Drowning 30	Fire/Burn 24	Suicide 17	Homicide 568	Poisoning 642	Suicide 612	Suicide 600	MV Traffic 337	Suicide 208	MV Traffic 416	Fall 373	Poisoning 2949
3	MV Traffic 9	Homicide 24	Drowning 19	Drowning 16	Poisoning 318	MV Traffic 600	Homicide 595	MV Traffic 465	Fall 145	Fall 185	Unspec. 401	Suffocation 200	Suicide 2886
4	Drowning 4	Suffocation 10	Homicide 17	Homicide 11	Suicide 315	Suicide 460	MV Traffic 525	Homicide 326	Poisoning 130	Unspec. 126	Suicide 213	MV Traffic 154	Homicide 2532
5	Unspec. 4	Fall 7	Suffocation 5	Fire/burn 7	Drowning 59	Drowning 44	Fall 82	Fall 122	Homicide 126	Suffocation 81	Suffocation 196	Fire/burn 33	Unspec. 1496

Unintentional injury

Homicide

Suicide

Suffocation includes hanging, strangling, and suffocation.

Data source: New Jersey Department of Health and Senior Services, Bureau of Vital Statistics.

APPENDIX V: Summary of recommendations

Chapter 1: Motor Vehicle

- 1.1 Adopt the annual goals of the New Jersey Highway Safety Plan.
- 1.2 Enact revision of the charter for the New Jersey Division of Highway Traffic Safety (NJDHTS) to allow for direct funding of non-profit organizations engaged in injury prevention activities.
- 1.3 Strengthen the Graduated Driver's License (GDL) Process and increase enforcement.
- 1.4 Improve child car seat use.
- 1.5 Increase seat belt use.
- 1.6 Decrease pedestrian injury.
- 1.7 Encourage consistent use of motorcycle helmets at all times

Chapter 2: Unintentional Poisonings

- 2.1 Distribute appropriate poison prevention information to New Jersey's diverse communities.
- 2.2 Add single family dwellings to the legislative requirements for the provision of carbon monoxide detectors in multi-family dwellings.
- 2.3 Encourage increased professional awareness of the magnitude of the problem of unintentional overdose, and the risks and signs of unintentional overdose.
- 2.4 Establish a prescription drug monitoring program in New Jersey.
- 2.5 Expand needle exchange programs in New Jersey to bring more substance abusers in contact with treatment services.
- 2.6 Include an objective for reducing deaths caused by unintentional poisoning in *Healthy New Jersey 2010*.
- 2.7 Create a monitoring system using data from the New Jersey Department of Health & Senior Services (NJDHSS), the Office of the State Medical Examiner (OSME), and the New Jersey Poison Information and Education System (NJPIES).

Chapter 3: Falls

- 3.1 Enhance public awareness that most falls are preventable and promote actions that reduce the risk of injury.
- 3.2 Educate healthcare providers about fall prevention strategies and standards of practice across the spectrum of care.
- 3.3 Translate fall data generated by New Jersey's Patient Safety Reporting Initiative (NJPSRI) into quality improvement initiatives to reduce falls in hospitals.

Chapter 4: Fire and Burns

- 4.1 Develop statewide recommendations for fire and burn prevention education activities and materials.
- 4.2 Distribute materials on smoke detectors and exit drills for all of New Jersey's diverse communities.
- 4.3 Improve the reporting of burn injuries, so as to better identify the most common causes of burns.
- 4.4 Develop, implement, and expand burn prevention education, targeting most common causes of burn injury and most vulnerable groups.

Chapter 5: Sports, Recreation and Exercise

- 5.1 Improve surveillance of sports and recreational injuries.
- 5.2 Disseminate standardized safety recommendations for sports and recreational activities to schools and municipal recreation departments.
- 5.3 Promote the expansion of environmental modifications known to reduce injuries from wheeled sports and other outdoor recreational activities.
- 5.4 Encourage the use of appropriate safety equipment while recreating.
- 5.5 Policies regarding concussion and return-to-play policies should be standardized and disseminated statewide.

Chapter 6: Occupational Injury

- 6.1 Investigate occupational fatalities/injuries and disseminate results to stakeholders.
- 6.2 Provide injury prevention education to employees and employers in high risk workplaces.

Chapter 7: Unintentional Childhood Injuries

- 7.1 Educate parents and caregivers about the increased risk of death or serious injury for unrestrained children.
- 7.2 Increase child safety seat distribution and education about proper fitting.
- 7.3 Conduct a media awareness campaign aimed at changing attitudes and behaviors of drivers and pedestrians to improve road sharing.
- 7.4 Ensure the implementation of the New Jersey Core Curriculum Standards, which include pedestrian safety for grades K-12.
- 7.5 Present more targeted messages to parents and children about the consequences of not wearing a helmet when participating in any wheeled sport.
- 7.6 Encourage and fund positive enforcement programs of New Jersey's recently enhanced helmet law that requires use up to age 17 for all wheeled sports.

- 7.7 Create and enforce school and community policies requiring pre-participation fitness exams, appropriate safety gear for all sporting events, and the availability of certified athletic trainers for all organized sports.
- 7.8 Encourage active adult supervision of young children using playground and recreational facilities.
- 7.9 Ensure appropriate recreational surfacing and maintenance of equipment as per guidelines issued by the US Consumer Product Safety Commission and the American Society for Testing and Materials.
- 7.10 Increase public education for parents, caregivers and children that address the dangers from drowning in swimming pools, spas, bathtubs, five-gallon buckets, toilets and open bodies of water.
- 7.11 Pass pool safety legislation that would require adequate fences around recreational pools, and incorporate language to address entrapment-related dangers.
- 7.12 Target messages about fire and burn prevention to families at greatest risk.
- 7.13 Distribute and install smoke alarms.
- 7.14 Educate parents about the importance of home safety in fall prevention, through modifications such as window guards and stair gates.
- 7.15 Improve surveillance on falls among children, to gain a better understanding of major causes.

Chapter 8: Violence

- 8.1 Adopt the Governor's Public Safety Plan, "A Strategy for Safe Streets and Neighborhoods"
- 8.2 Expand promising programs designed to prevent youth violence.
- 8.3 Increase the use of intelligence-led policing by state and local law enforcement agencies in combating gang and gun crime.
- 8.4 Promote awareness that suicide is a public health problem that is preventable.
- 8.5 Develop and implement community-based suicide prevention programs.
- 8.6 Promote efforts to reduce access to lethal means and methods of self-harm.
- 8.7 Promote comprehensive public education about the risks of firearms.

