Injury

GOAL

Reduce injuries, disabilities, and deaths due to unintentional injuries, suicide, and violence.

OVERVIEW

Most people at some point in their lives will sustain a significant injury. For Maine people under the age of 58, deaths from injuries far surpass all other causes of death and are responsible for more productive years of life lost than any other cause. Even though death rates due to chronic diseases in Maine people over age 57 surpass those due to injuries, injury death rates are higher in this age group than among younger people. In fact, injury is the third leading cause of death for all Maine people age 85 and younger.

In addition to deaths and lifelong pain and suffering, the economic costs from serious injuries are high. Injuries represent the second leading cause of direct medical costs among civilian non-institutionalized individuals. It has been estimated that the average cost of an injury hospitalization in Maine from 1995–1997 was about $20,600, for a total cost of $231 million a year. Nationwide, one-third of all hospitalizations are due to injury.

Despite the enormous impact of injuries, there is a basic misconception that many are the result of unpreventable "accidents." In fact, most injuries are predictable and preventable. In Maine, as well as across the country, we face challenges in building data systems to track and evaluate the impact of injuries, as well as increasing public understanding of injury risk factors and effective prevention practices.

Although each type of injury requires its own set of prevention initiatives, often effective interventions act synergistically. For instance, those interventions that reduce alcohol abuse also reduce the risk of injury due to motor vehicle crashes, drownings, falls, and intentional injuries. Interventions that identify and assist those individuals who are threatening violence to themselves may also protect the safety of others.

Effective injury prevention initiatives have the potential to affect all of us. For instance, if every vehicle occupant were properly restrained; if every vehicle driver, including snowmobile drivers, were sober; if

every vehicle driver drove at or below the speed limit; if every child had a safe area in which to play; if every home had a working smoke alarm on every level and sleeping area; if every senior had a home with a low risk of falls; if no home had an unlocked and loaded gun; if every home and school were safe from abuse, all of us would live significantly longer and healthier lives.

PRIMARY
SECONDARY
TERTIARY

Strategies

Primary and Secondary prevention strategies to reduce injuries are focused on the three E's: Environment, Education, and Enforcement.

Policies that Prevent the Risk for Injury: Laws requiring vehicle restraints; driving, speed, and alcohol laws; firearm safety laws (such as requiring trigger locks); smoke detector requirements and safety codes for buildings; home fire escape plans; and enforcement of anti-harassment and bullying prevention policies are some examples.

Initiatives that Prevent the Risk for Injuries: Home safety programs for the elderly to reduce falls; firearm safety courses; playground safety measures; violence prevention initiatives that raise awareness of violence and abuse; child safety and booster seat checks and seat procurement programs; and media campaigns that raise awareness and educate people about ways to prevent injury (such as changing batteries in smoke detectors, and the importance of having child safety seats checked) are some examples.

Policies that Reduce the Risk for Injuries: Some examples include school-based crisis response plans and protocols, routine emergency department screening of injured persons for risk of self-inflicted injuries or assault, graduated drivers' licenses, health care provider forms that ask all patients risk for abuse questions, and enforcement of motor vehicle speeding laws.

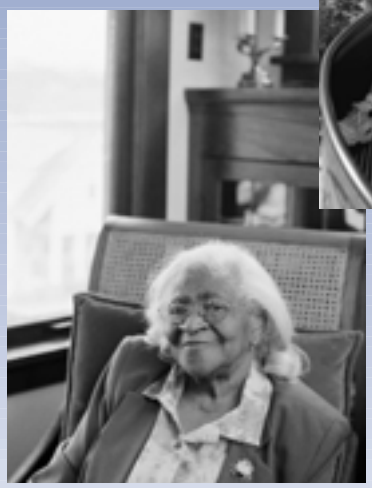
Initiatives that Reduce the Risk for Injuries: Interventions that make smoke detectors more available for low income people, the elderly, residents of mobile homes, and other high-risk homes; violence prevention initiatives that give information and education to those at risk for violence – those who have a history of relationship abuse, adolescents, substance abusers and their families; initiatives that make trigger locks more available to families with children; driver education for new drivers; conflict management, anti-bullying, and other safe school programs; and substance abuse prevention and treatment programs are some examples.

Policies that Reduce the Burden of Injuries: Criminal justice laws regarding child abuse, domestic violence, sexual assault, homicide, motor vehicle crashes related to substance abuse, and stalking are examples.

Initiatives that Reduce the Burden of Injuries: Help lines and treatment programs, including post-trauma treatment for those who are the victims of domestic violence, sexual assault, child abuse, or self-inflicted injuries are examples.

Health Disparities

(Populations at risk for injury, based on national data in *Healthy People 2010*)



- **Children, Teens, and Young Adults** (higher death rates from motor vehicle crashes, suicide, and house fires; higher risk of injury from falls and fires; at risk for physical, sexual, and emotional abuse)
- **Elders** (higher risk for death from house fires, falls, and suicides; at risk for physical and emotional abuse)
- **People with Disabilities** (higher risk for physical, sexual, and emotional abuse; higher risk for death from house fires)
- **Females** (higher rates of reported victimization from abuse and domestic violence; higher rates of non-fatal, self-inflicted injuries)
- **Males** (higher death rates from injury)
- **African Americans** (higher death rates from unintentional injury, drowning; higher rates of homicide victimization; steepest increase in youth suicide rates)
- **Hispanics** (higher rates of homicide victimization)
- **Native Americans** (disproportionately higher death rates from motor vehicle crashes, residential fires, and drowning; higher overall death rates due to injury; children at higher risk for home fire deaths)
- **Sexual Minorities** (higher risk for injury victimization and self-inflicted injuries)
- **Low Socioeconomic Status** (higher risk for injury and violence; adolescents from families with lower income at higher risk for physical assault)

Objectives

Objective numbers are *Healthy People 2010* objective numbers.

- **15–10, 15–11 (Developmental) Create a comprehensive injury surveillance system that routinely collects, interprets, analyzes, and disseminates injury, suicide, and violence data.**

  Improved data collection, analysis, and dissemination is needed to monitor the leading causes of injury and to allow informed decisions about focusing limited resources. While injury mortality data are easily available, for every death there are an estimated 25–30 injuries serious enough to require hospitalizations and about 600 other injuries that receive medical attention on an outpatient basis. The accessibility and quality of these morbidity data have not been reliable, but due to improvements in coding they are becoming more useful. Collecting and conducting analysis of injury data are time- and resource-consuming, but are necessary if effective initiatives are to be implemented.

FIREARMS

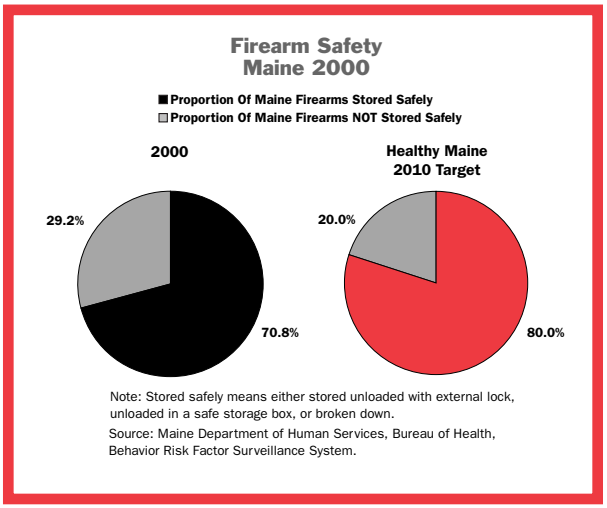
The United States has by far the highest rate of gun violence of any developed country, including the highest rate of lethal childhood gun violence. The large increase in homicides seen nationally between 1979 and 1993 resulted solely from the increase in firearm-related homicides. For each of the approximately 33,000 Americans killed by a firearm, two more were treated for nonfatal gunshot wounds in a hospital's emergency department. Safe gun storage is a major strategy to reduce injury resulting from these powerful weapons. Approximately one in five Americans live in homes with an unlocked and loaded firearm; placing family members and visitors at risk for unintentional or intentional injury from these guns.

Firearms pose different risks for different age groups. For instance, young children have the strength to fire a gun, but lack the knowledge that guns are not child's play. A 1991 General Accounting Office study found that childproof safety devices could have prevented all cases of unintentional firearm injuries to children under six. Elevated suicide rates among adolescents are often attributable to easy access to firearms. For any age, a gun in the home is 18 times more likely to be involved in the death of a member of the household rather than a stranger.

In Maine, the rate of suicide by firearms is higher than firearm homicides, and more than half (60%) of all suicides are committed with a firearm. Maine's death rate due to firearm suicide is higher than the national rate and the second highest in New England.

- **15–4 Increase the proportion of firearms stored safely in homes – unloaded and locked.**

  Firearms Stored Safely
  Healthy Maine 2010 Baseline: 70.8%
  Healthy Maine 2010 Target: 80%



SMOKE ALARMS

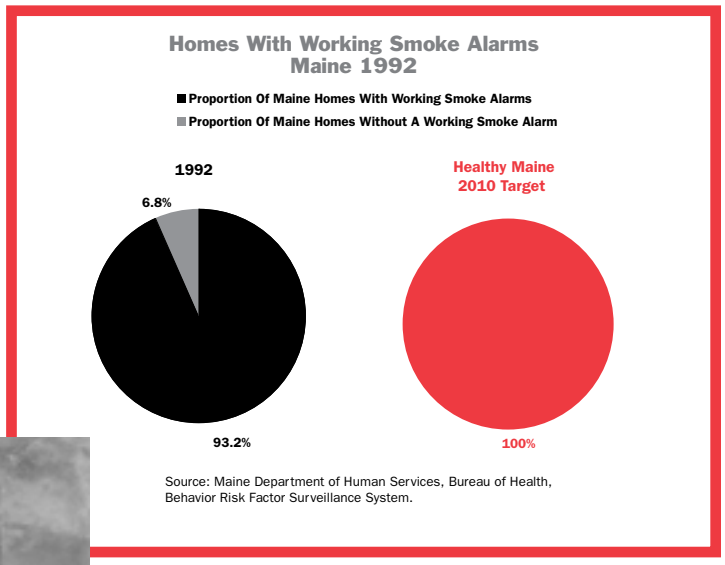
An average of 17 Maine people die every year in fires, and several dozen are hospitalized because of fire-related injuries. Elders and children are disproportionately affected by fires – they are less likely to be able to escape and they are more susceptible to severe injuries from fires. In fact, for Maine children ages one through five, fires are the second leading cause of death. Nationally, young children have a death rate from fire more than twice the fire death rate for all ages.

Functioning smoke alarms are critical to preventing fire-related injuries and death. Two-thirds of all fire-related deaths and injuries among young children under age five occur in homes without functioning smoke alarms. If a fire occurs in a home with functioning smoke alarms on every level and in every sleeping area, the warning provided for people to escape means they are twice as likely to survive than if there were no smoke alarm.

- **15–26 Increase the proportion of homes with working smoke alarms.**

  Homes With Working Smoke Alarms
  Healthy Maine 2010 Baseline: 93.2%
  Healthy Maine 2010 Target: 100%

  The last time this question was asked for BRFSS was in 1992 when 93.2% of adults reported having a working smoke detector in the building. BRFSS plans on asking this question again in 2004 and possibly in later years.



Source: Maine Department of Human Services, Bureau of Health, Behavior Risk Factor Surveillance System.

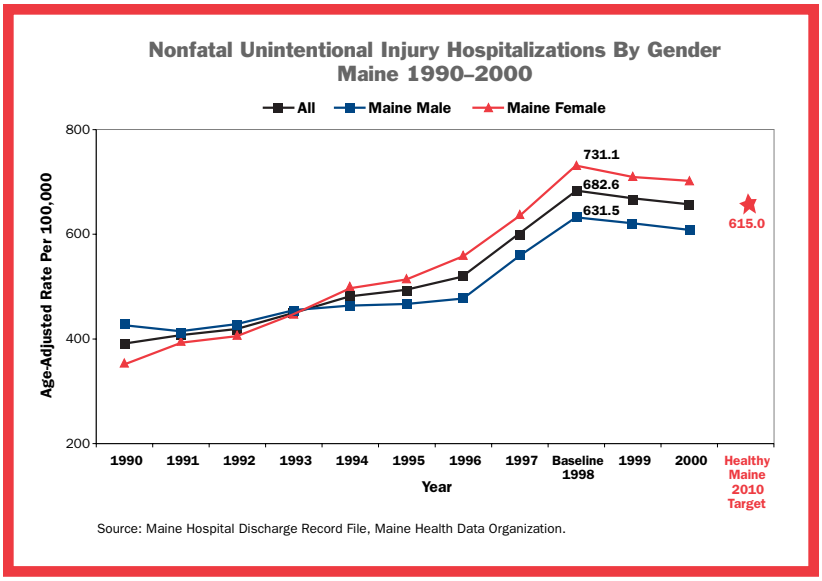
Unintentional Injuries

Unintentional injuries are those not expected or intended to take place, also known as "accidents." They account for two-thirds of all injury deaths. The most common unintentional injuries are: motor vehicle crashes, drownings, unintentional poisonings, falls, fires, and suffocation.

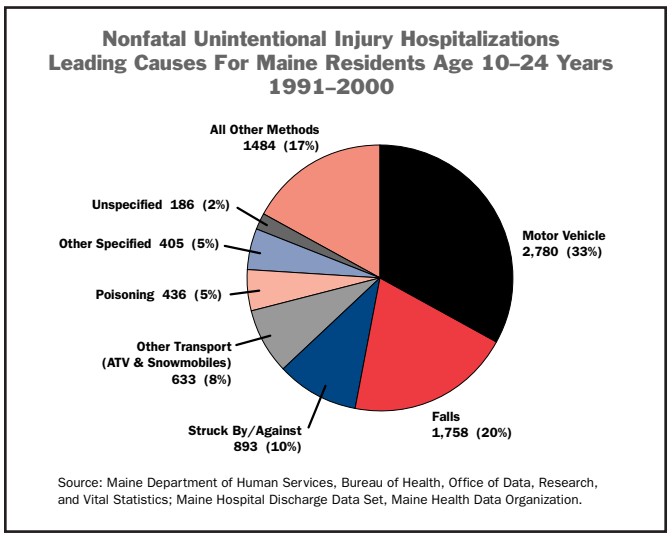
- **15–14 Reduce nonfatal unintentional injuries.**

  Healthy Maine 2010 Baseline: 682.6
  Healthy Maine 2010 Target: 615.0

  This objective is developmental on the Federal level.



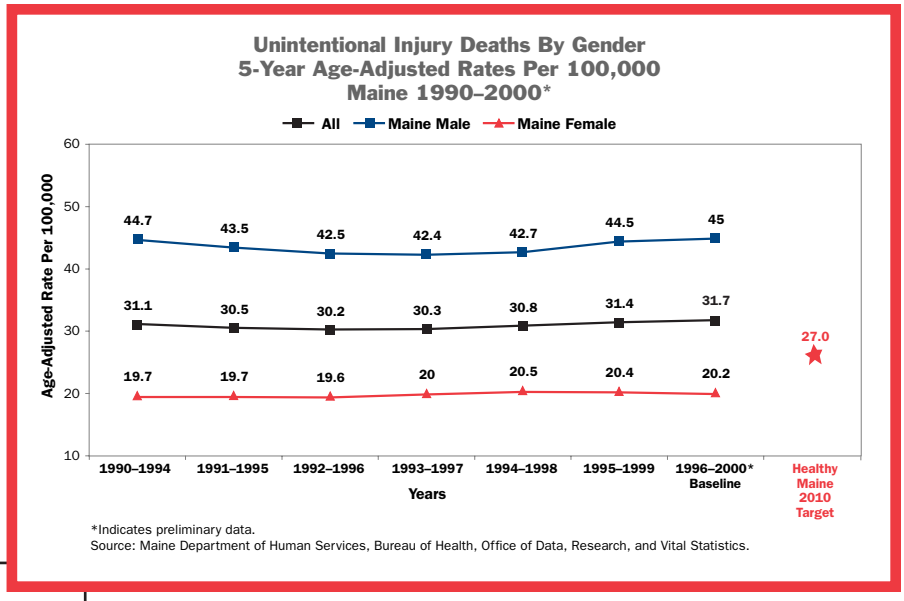
Source: Maine Hospital Discharge Record File, Maine Health Data Organization.



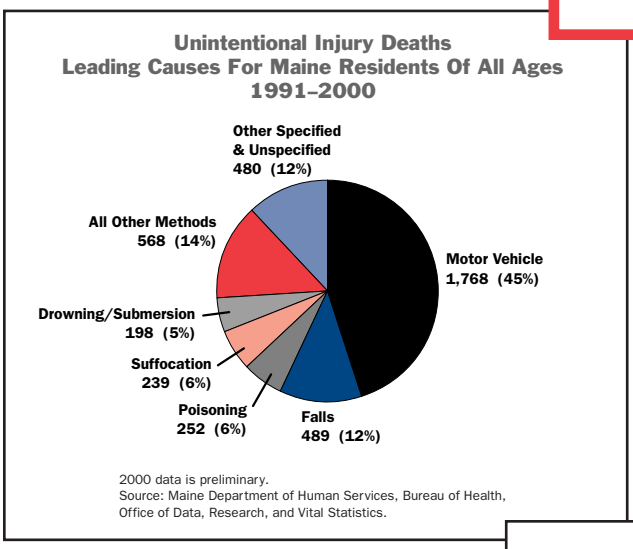
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics; Maine Hospital Discharge Data Set, Maine Health Data Organization.

- **15–13 Reduce deaths caused by unintentional injury.**

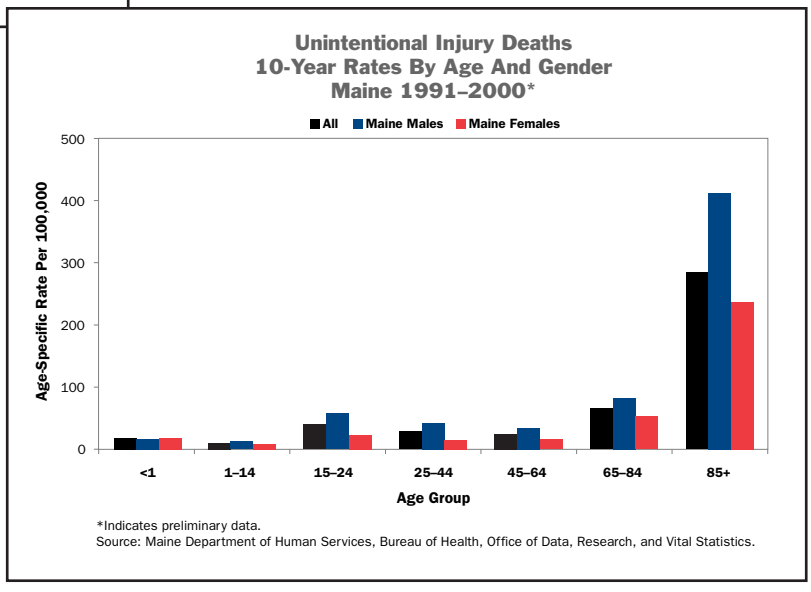
  Healthy Maine 2010 Baseline: 31.7
  Healthy Maine 2010 Target: 27.0



*Indicates preliminary data.
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.



2000 data is preliminary.
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.



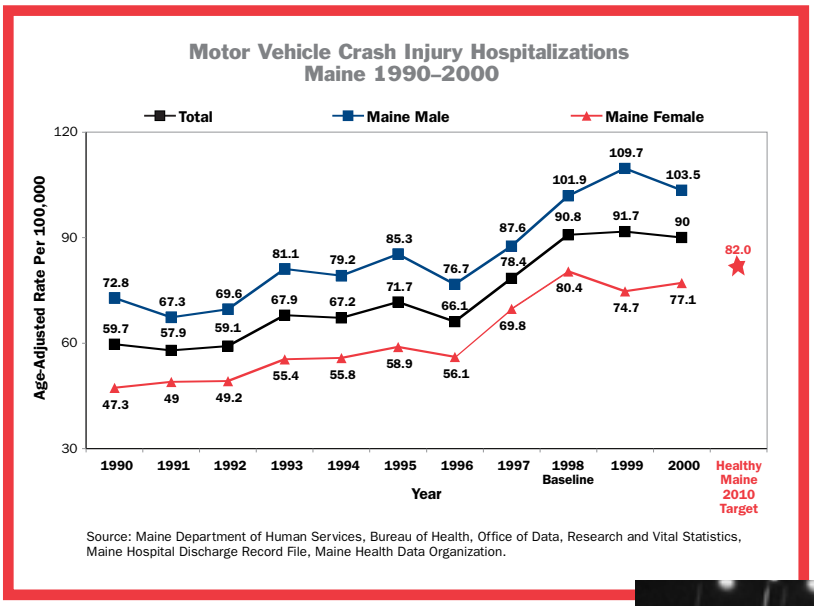
*Indicates preliminary data.
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.

MOTOR VEHICLE CRASHES

On average, one person dies about every two days on Maine highways from motor vehicle crashes (170–200 people per year, with an average of 186). Motor vehicle crashes are among the three most common causes of hospitalization due to injury for all ages above four years old, resulting in about 1,400 hospitalizations per year of Maine residents. Nationally, about 24,000 die prematurely from motor vehicle crashes.

In Maine, over one-quarter (27%) of motor vehicle-related deaths are linked to alcohol, which is down from over half (60%) only 20 years ago. Motor vehicle crashes are the leading cause of death in the US for people ages 1–29 years. Death rates are especially high for those ages 16–24 years and over 75 years. Death rates per mile traveled are 16 times higher for motorcycles than for cars. Most bicyclist deaths are associated with crashes involving motor vehicles with resulting head injuries.

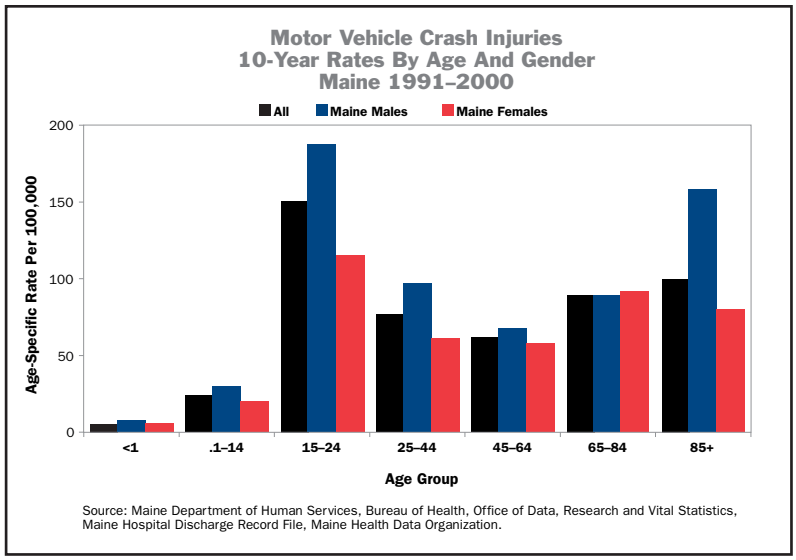
Effective strategies to reduce injuries and deaths from motor vehicle crashes include implementing and enforcing safety restraint laws such as those requiring the use of seat belts, booster seats or child safety seats; allowing primary enforcement of seat belt laws (Maine only allows secondary enforcement); enforcing speed and drunk driving laws; requiring graduated licenses (Maine law includes some aspects of graduated licensing); and mandating the wearing of motorcycle and bicycle helmets.



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics, Maine Hospital Discharge Record File, Maine Health Data Organization.

- **15–17 Reduce nonfatal injuries caused by motor vehicle crashes.**

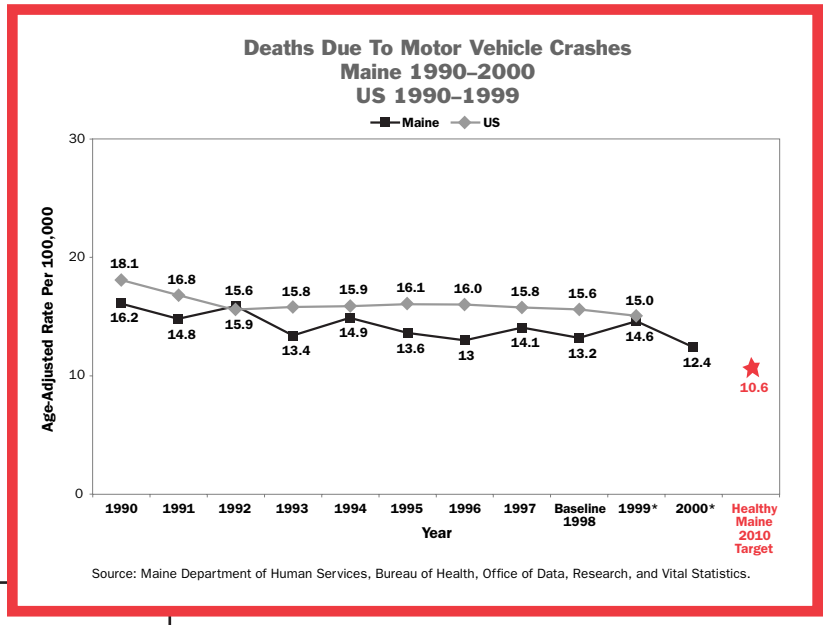
  Healthy Maine 2010 Baseline: 90.8
  Healthy Maine 2010 Target: 82



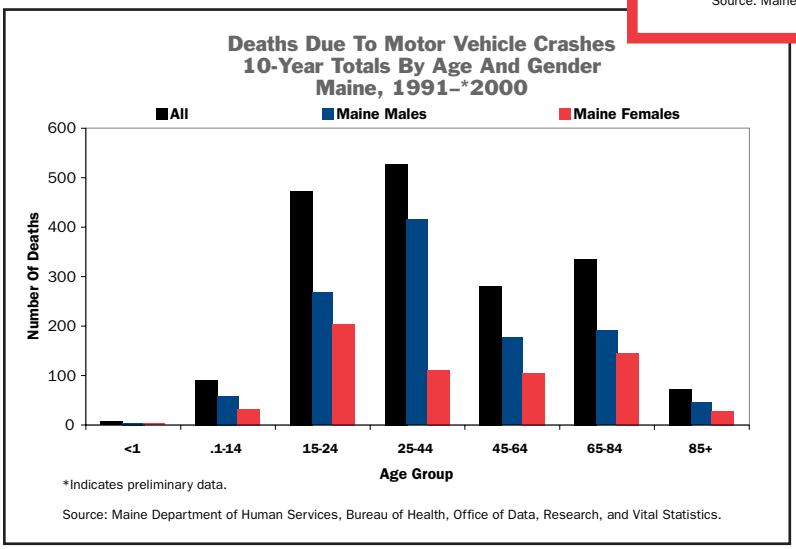
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics, Maine Hospital Discharge Record File, Maine Health Data Organization.

- **15–15 Reduce deaths caused by motor vehicle crashes.**

  Healthy Maine 2010 Baseline: 13.2
  Healthy Maine 2010 Target: 10.6



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.



*Indicates preliminary data.

Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.

VEHICLE RESTRAINTS

The most effective way to reduce one's risk of death or serious injury from a motor vehicle crash is to properly restrain oneself in a seat and shoulder belt (if taller than about 4'9" or over 80 pounds) or in a booster or car seat (if shorter than 4'9" or under 80 pounds). About 80% of Maine adults use seat belts. Safety restraint laws and proper enforcement of them have been shown to be very effective in reducing injury and death from motor vehicle crashes. In fact, the only age for which motor vehicle crashes are not among the most common causes of hospitalization and death in Maine is under age four – the ages for which safety seats are legally required and for which there is primary enforcement of safety restraints in Maine.

HIGHLIGHTS OF MAINE'S PASSENGER SAFETY LAWS (As of 1/1/03)

All people riding in a vehicle must be properly restrained. Enforcement is primary for those under 18 years of age and secondary for those over 18. Secondary enforcement means that generally, the vehicle can only be pulled over if another violation appears to exist.

Children less than 18 years of age but more than 8 years of age or taller than 4'7" must be properly secured in a seat belt, unless they are required to be in a federally approved child restraint system such as a booster seat.

Children less than 12 years of age and under 100 pounds must sit in the rear seat when possible.

Children less than 8 years of age and under 80 pounds but over 40 pounds must be restrained in a federally approved child restraint system such as a booster seat.

Children under 40 pounds must be restrained in a child safety seat.

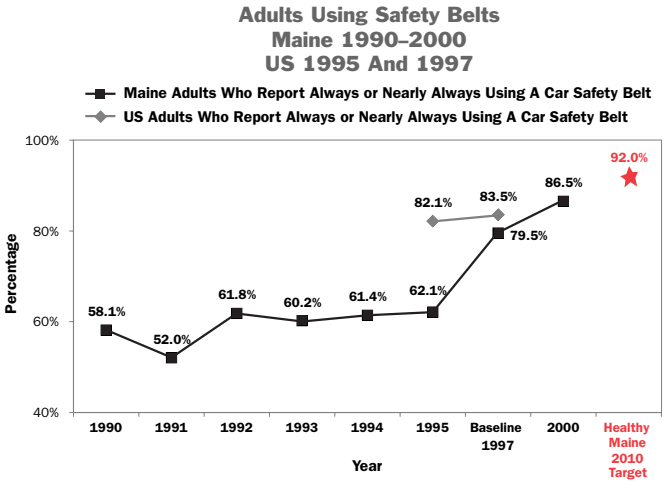
People and dogs riding in the back of trucks must be restrained.

Although an estimated 87% of Maine children under four are placed in a child car safety seat, it is estimated that close to 100% of them are not properly restrained; i.e., the safety seats are not properly installed or the child is not properly placed in them. The availability of safety seat checks in many more communities in Maine will aid in addressing this problem.

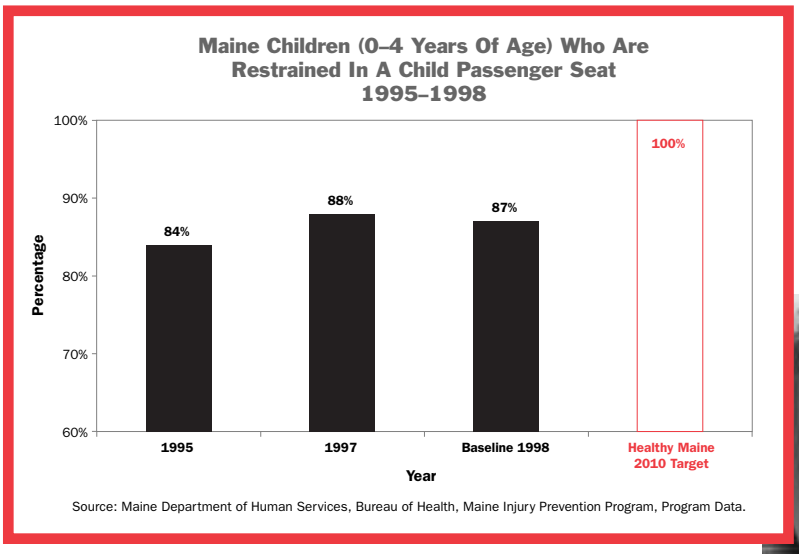
Booster seat usage is much less, about 8% of children ages 4–8 according to Maine data. Usage should increase, however, as the result of the 2002 passage of a bill requiring their use for children 40–80 pounds starting in January 2003. Because lap and shoulder belts are made for an average body of 5'10" and 165 pounds, a child under 80 pounds or less than about 4'9" (generally ages 4–8) is too small for the adult lap and shoulder belts, and often will sustain serious head, neck, or abdominal injuries in car crashes. With increased booster seat use, the vast majority of the 23 Maine children in this age group who sustain serious injuries and the two who are killed each year should be saved from these fates.

- **15–19 Increase the use of safety belts.**

  Healthy Maine 2010 Baseline: 79.5%
  Healthy Maine 2010 Target: 92%



Source: Maine Department of Human Services, Bureau of Health, Behavior Risk Factor Surveillance System.



Source: Maine Department of Human Services, Bureau of Health, Maine Injury Prevention Program, Program Data.

- **15–20 Increase the use of child restraints.**

  Healthy Maine 2010 Baseline: 87%
  Healthy Maine 2010 Target: 100%

  In future years, it is hoped that this objective will be routinely measured for children from birth to eight years of age.

GRADUATED DRIVER'S LICENSE

Motor vehicle crashes kill more teenagers than any other cause in Maine and across the country. New teen drivers in Maine are four times more likely to die in a crash than adults. Young drivers comprise 12.5% of all drivers, but suffer 25% of all fatalities and 30% of all injuries.

One initiative that has worked to reduce these grim statistics is the implementation of a Graduated Driver's License (GDL) for youth drivers. For instance, Michigan and North Carolina saw declines of 25% and 27% respectively in motor vehicle crashes involving 16-year-old drivers from 1996 to 1999 after a GDL was implemented in 1997. North Carolina saw a 57% decline in fatal crashes during the same time period.

Thirty-seven states have now implemented a three-tier GDL. Maine implemented a modified version of a GDL in 1998 and includes the following in its three-tiered approach:

- **Instruction Permit: An instruction permit is issued to a person 15 years of age or older and who has completed a driver education course (if under 18 years). The permit is valid for 18 months.**
- **Provisional License: The first license issued to a new applicant under 21 years of age is provisional for two years.**
  - **If convicted of a moving violation with a provisional license, the license will be suspended for 60 days. Second and third offenses carry more severe penalties.**
  - **If the licensee is less than 18 years, the driver is prohibited from carrying passengers other than immediate family members for a period of 90 days, unless accompanied by another licensed driver who is at least 20 years of age and has held a valid license for the past 2 years.**
  - **All drivers under the age of 21 years with any blood alcohol level will have their license revoked for one year, and an additional 6 months if there are any passengers under the age of 21.**
- **Regular Driver's License: A driver can be issued a regular driver's license if he or she is under 21 years of age and has had a provisional license for a period of 2 years.**

Some states also require that drivers with the provisional license who are under 18 be supervised by a licensed adult age 21 or older when driving between 10 PM and 5 AM. Some new studies also suggest it may be safer for all drivers under age 18 to not be allowed to carry other youth for an extended period of time.

FALLS

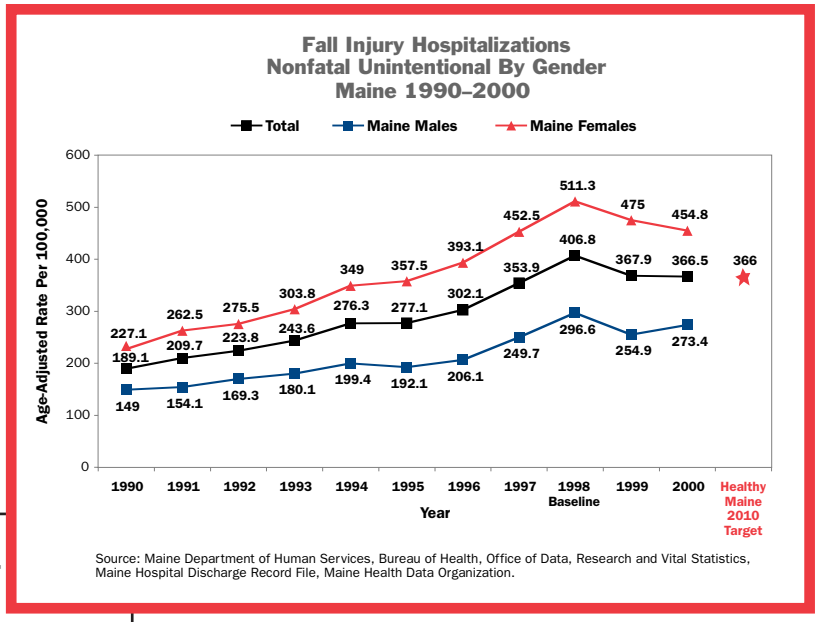
Nearly 5000 Maine people every year are hospitalized as a result of a fall. Almost three-quarters of these hospitalizations occur among people over the age of 65. Falls are the leading cause of injury deaths and one of the leading causes of hospitalizations for people over age 65 in Maine, as well as across the country. Between 1994 and 1998, 169 Maine people over the age of 65 died as a direct result of a fall. Hip fractures are the most common serious injury as a result of falls in this group. The impact of these injuries on the quality of life of our seniors is enormous.

There are many factors that are modifiable that contribute to falls among people over 65. Among them are: difficulties in gait and balance, neurological and musculoskeletal disabilities, use of psychoactive medications, visual impairment, slippery surfaces, uneven floors, poor lighting, loose rugs, unstable furniture, unstable grab bars in bathrooms, and objects on the floor. With regular exercise, including those to improve balance, as well as some simple home improvements, many of these devastating falls can be prevented.

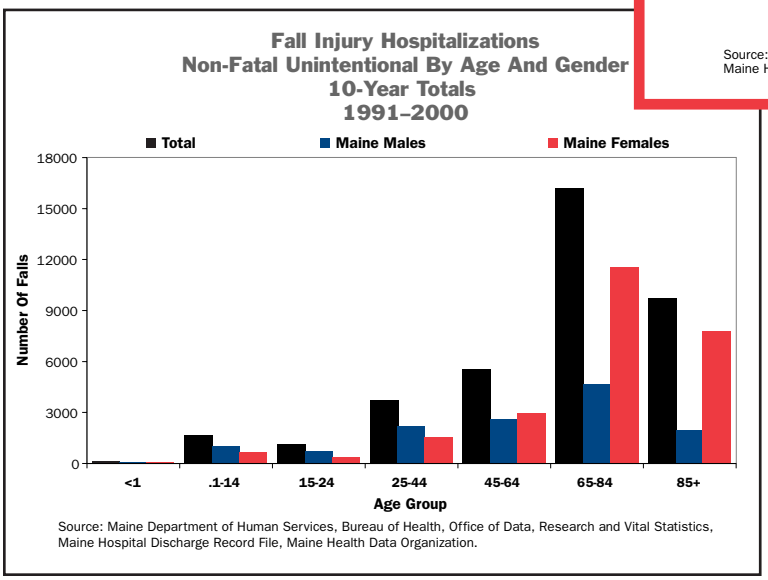
Falls are also the leading cause of injury hospitalization for children and teens. These types of falls include falling from playground equipment, trees, and stairs. Although injuries from playground falls are often preventable by making sure the playground surface is safe, many are still found on grass or dirt surfaces rather than wood chip and other safer surfaces.

- **Reduce hospitalizations from falls.**

  Healthy Maine 2010 Baseline: 406.8
  Healthy Maine 2010 Target: 366



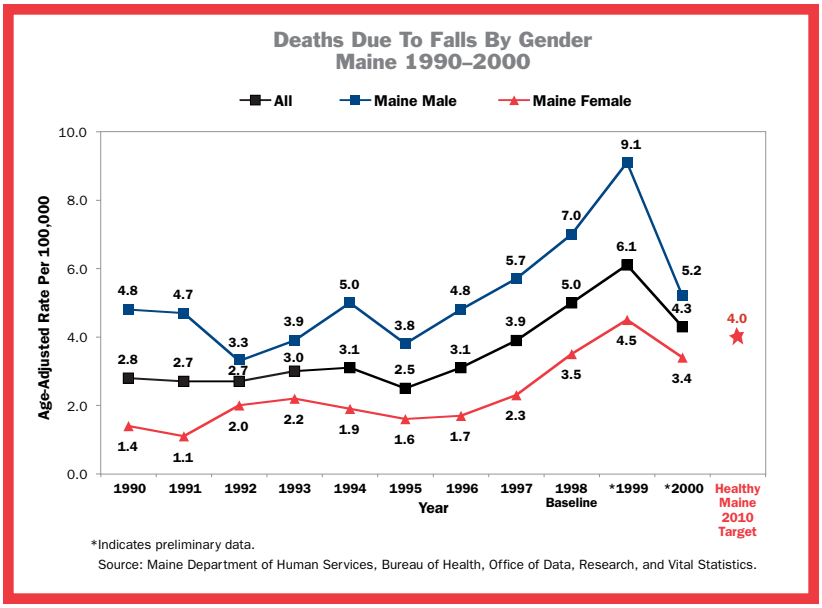
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics, Maine Hospital Discharge Record File, Maine Health Data Organization.

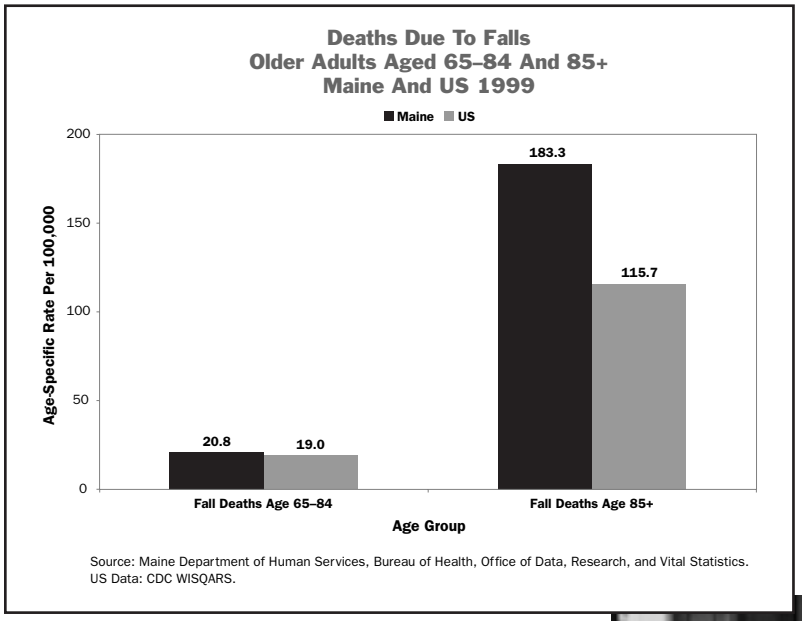


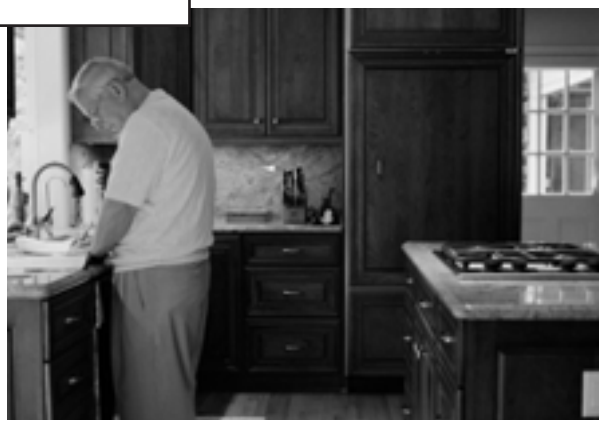
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research and Vital Statistics, Maine Hospital Discharge Record File, Maine Health Data Organization.

- **15–27 Reduce deaths from falls.**

  Healthy Maine 2010 Baseline: 5.0
  Healthy Maine 2010 Target: 4.0





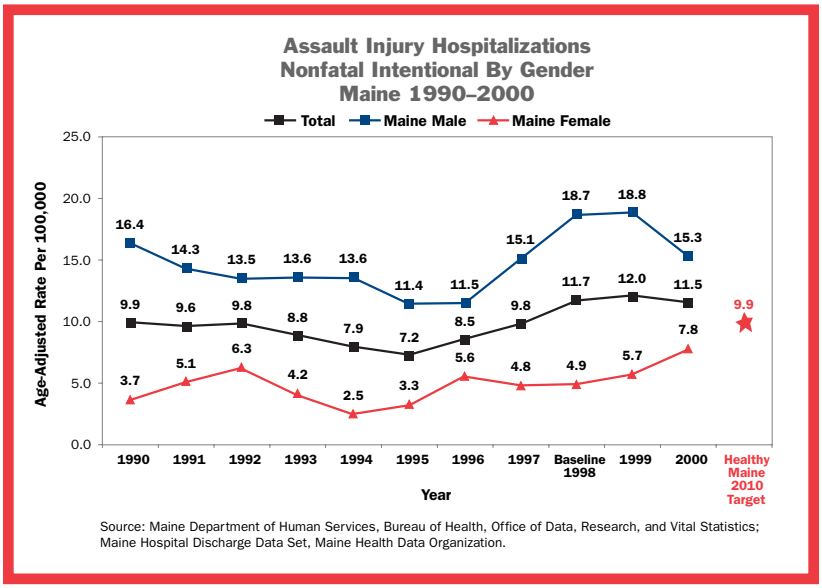


Intentional Injuries

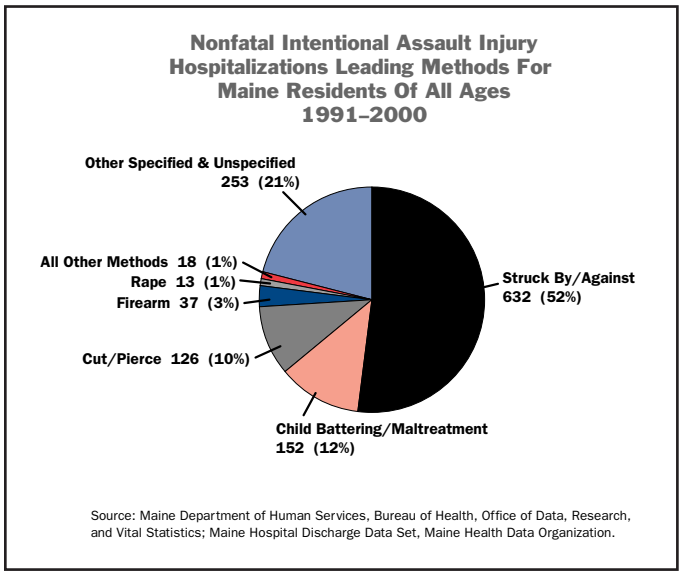
Intentional injuries are those that result from purposeful human action intended to cause harm directed to self or others. They account for one-third of all injury deaths. The most common intentional injuries are: suicide, homicide, self-injurious behavior, and assault such as physical and sexual assault, domestic violence, and bullying.

- **15–37 Reduce physical assaults.**

  Healthy Maine 2010 Baseline: 11.7
  Healthy Maine 2010 Target: 9.9



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics; Maine Hospital Discharge Data Set, Maine Health Data Organization.

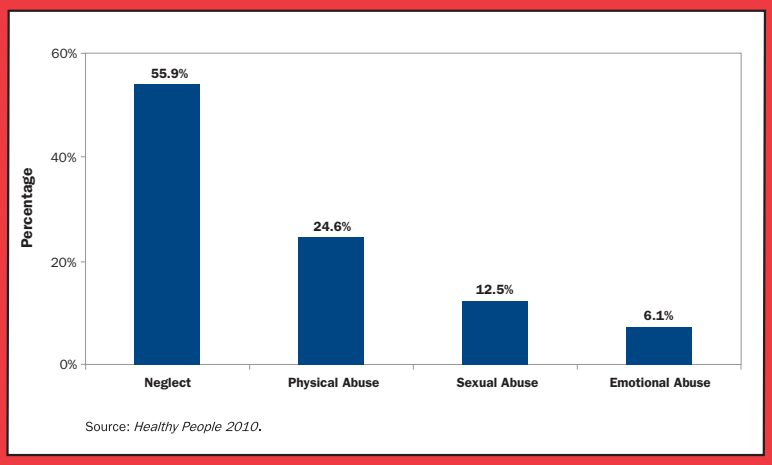


Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics; Maine Hospital Discharge Data Set, Maine Health Data Organization.

DOMESTIC VIOLENCE

Physical and sexual assault, in the forms of domestic violence, child abuse, elder abuse, sexual assault, and sexual abuse pose serious public health and safety threats throughout our society. We all are affected to some degree by these violent behaviors, since no one is completely protected from them.

Types Of Child Maltreatment Reported Nationally



Source: *Healthy People 2010*.

About one million children every year are reported in the US to be victims of maltreatment. Based on data from 39 states of reported child abuse, about 75% of the perpetrators are the victim's parents. Most of the remainder are either relatives or caregivers.

The effects of child abuse can last a lifetime, so implementing effective prevention and treatment strategies are critical. Some long-term studies on home visitation programs for families at risk have shown potential for preventing child abuse and neglect. Since 1996, Maine has funded and recently expanded these types of programs.

Sexual assault is one of the most under-reported crimes, especially among children. Only about 15% of sexual assault victims report the crime to the police. Nationally, surveys show that one in four girls and one in seven boys will be sexually victimized before their 18th birthday; and one in three women and one in five men will be sexually victimized in their lifetime.

In 1985, violence occurred among at least 16% of US heterosexual couples. Recently, there has been increased recognition of physical and sexual violence during pregnancy. Research shows that up to about 20% of women during pregnancy experience intimate partner violence. Additionally, there has been increased recognition of teen intimate partner violence.

Males who are physically violent toward their partners are more likely to be sexually violent toward them and are more likely to use violence toward children. The perpetration of intimate partner violence is most common in adults, who as children witnessed intimate partner violence or became the targets of violence from their caregivers.

The consequences of sexual and physical assault are long-range, and include suicide and other forms of self-inflicted injury, substance abuse, delinquency, violent behavior, and health problems such as phobias and eating disorders.

There has also been increased awareness of elder abuse, abuse of those who are disabled, are a sexual minority, or a racial or ethnic minority. It is hoped that our abilities to measure abuse of these populations will improve.

Approaches to reducing domestic violence, child abuse, elder abuse, and sexual assault need to be multi-faceted, including improving reporting of these crimes, enforcement of laws against perpetrators (especially since recidivism is so common), treatment of victims, prevention strategies aimed at those at risk and the general population. However, because of the perceived private nature of physical and sexual assault, this important public health and safety problem is difficult to study. Consequently, we have much to learn about effective strategies to prevent domestic violence, and treat victims and perpetrators.

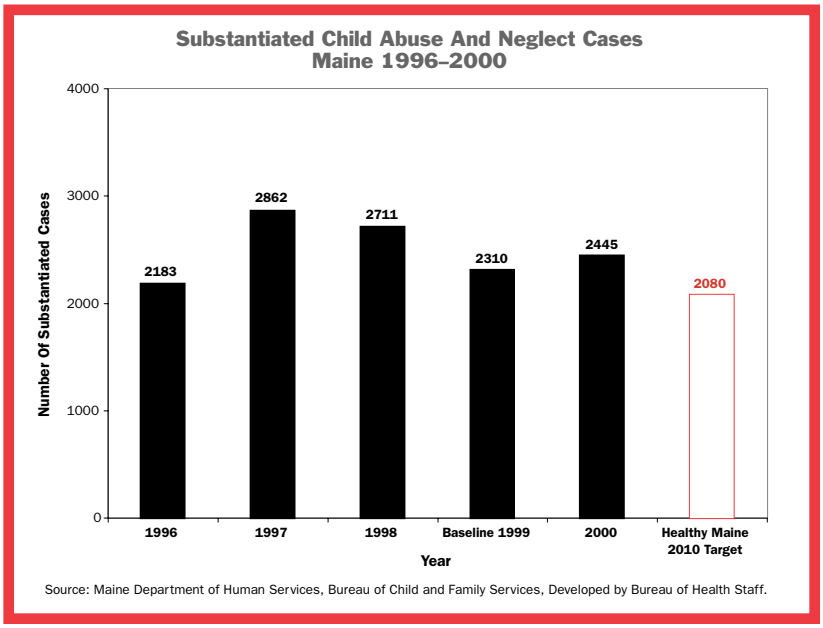
- **15–34 Reduce the rate of physical assault by current or former intimate partners.**

Maine's Domestic Assaults With Physical Injuries 1996–2000												
	1996		1997		Baseline 1998		1999		2000		Healthy Maine 2010 Target	
	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000
Total Assaults	3,914	3.15	4,222	3.39	**3,855**	**3.09**	3,986	3.18	4,486	3.52	**3,469**	**2.78**
Male Assaults on Females	2,550	4.47	2,690	2.16	**2,338**	**1.87**	2,336	1.86	2,656	2.08	**2,104**	**1.68**
Female Assaults on Males	411	0.33	463	0.37	**441**	**0.35**	505	0.40	535	0.42	**397**	**0.32**
Parent Assaults on Child	266	0.21	298	0.24	**230**	**0.18**	261	0.21	341	0.27	**207**	**0.16**
Child Assault on Parent	251	0.20	269	0.22	**213**	**0.17**	224	0.18	310	0.24	**192**	**0.15**
All Other Familial Assaults	436	0.35	502	0.40	**633**	**0.51**	660	0.53	644	0.51	**570**	**0.46**

Source: Maine Department of Public Safety, Developed by Bureau of Health Staff.
Rates based on Maine population for all ages.

- **15–33 Reduce child abuse and neglect.**

  Healthy Maine 2010 Baseline: 2310
  Healthy Maine 2010 Target: 2080



Source: Maine Department of Human Services, Bureau of Child and Family Services, Developed by Bureau of Health Staff.

- **15–35 Reduce the annual rate of rape or attempted rape.**

Reported Rape And Attempted Rapes 1996–2000												
	1996		1997		1998		Baseline 1999		2000		Healthy Maine 2010 Target	
	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000	Number	Rate/ 1,000
Total Rapes	266	0.21	254	0.20	229	0.18	**273**	**0.22**	318	0.25	**195**	**0.15**
Forcible Rapes	238	0.19	234	0.19	208	0.17	**245**	**0.20**	291	0.23	**177**	**0.14**
Attempted Rapes	28	0.02	20	0.02	21	0.02	**28**	**0.02**	27	0.02	**18**	**0.02**

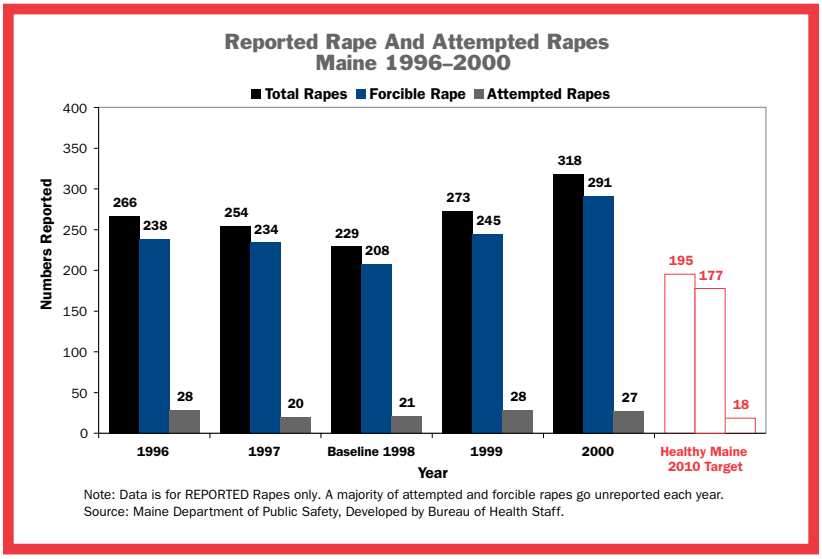
Source: Maine Department of Public Safety, Developed by Bureau of Health Staff.
Rates based on Maine population for all ages.

15–35a Maine reported rape and attempted rapes 1996–2000.

Total Rapes
Healthy Maine 2010 Baseline: 229
Healthy Maine 2010 Target: 195

Forcible Rapes
Healthy Maine 2010 Baseline: 208
Healthy Maine 2010 Target: 177

Attempted Rapes
Healthy Maine 2010 Baseline: 21
Healthy Maine 2010 Target: 18



Note: Data is for REPORTED Rapes only. A majority of attempted and forcible rapes go unreported each year.
Source: Maine Department of Public Safety, Developed by Bureau of Health Staff.

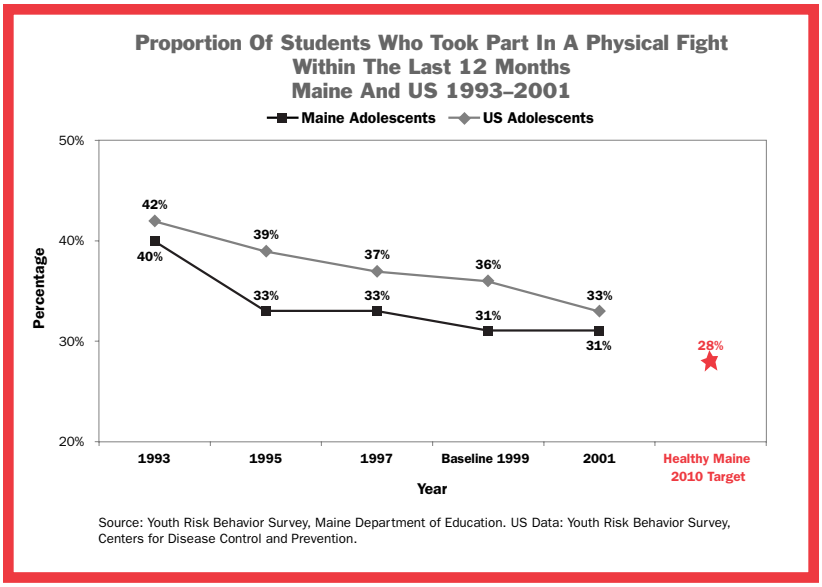
BULLYING/HARASSMENT IN SCHOOLS

Although the roots of violence are multifaceted, exposure to violence is a common precursor to violent behavior. Exposure to violence happens in many settings – through the media, home life, and school life. Therefore, strategies to reduce exposure must involve many settings. However, since most children spend most of their waking hours in schools, this is a particularly critical setting.

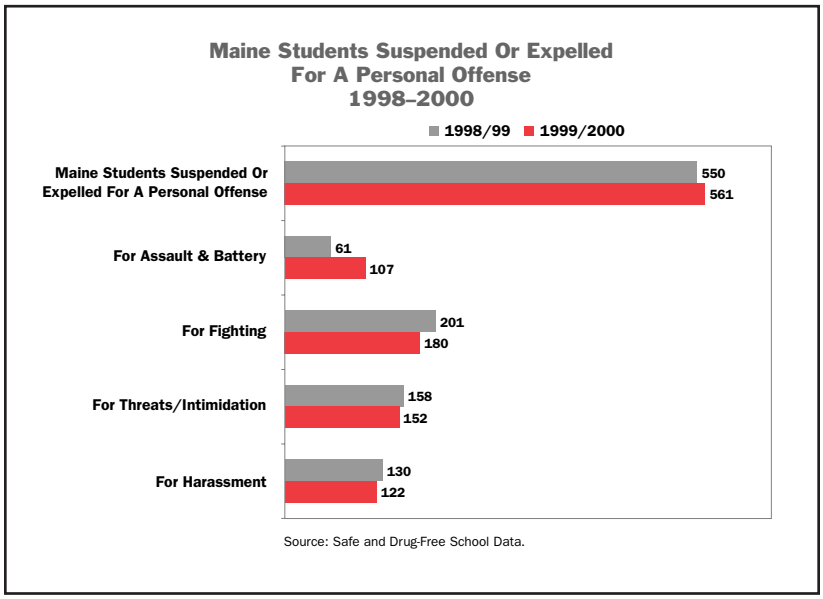
Recent Youth Risk Behavior Surveys of Maine high school students show a significant exposure to violence. Forty percent (40%) of male and 24% of female youth report being in a physical fight within the past year. Additionally, 22% of students report carrying a weapon, and 7% report carrying a gun at least once during the previous month. During the 1998–1999 school year, Maine schools reported 650 personal and weapons-related offenses that were serious enough to remove a child from school.

- **15–38 Reduce physical fighting among adolescents.**

  Healthy Maine 2010 Baseline: 31%
  Healthy Maine 2010 Target: 28%



Source: Youth Risk Behavior Survey, Maine Department of Education. US Data: Youth Risk Behavior Survey, Centers for Disease Control and Prevention.



Source: Safe and Drug-Free School Data.

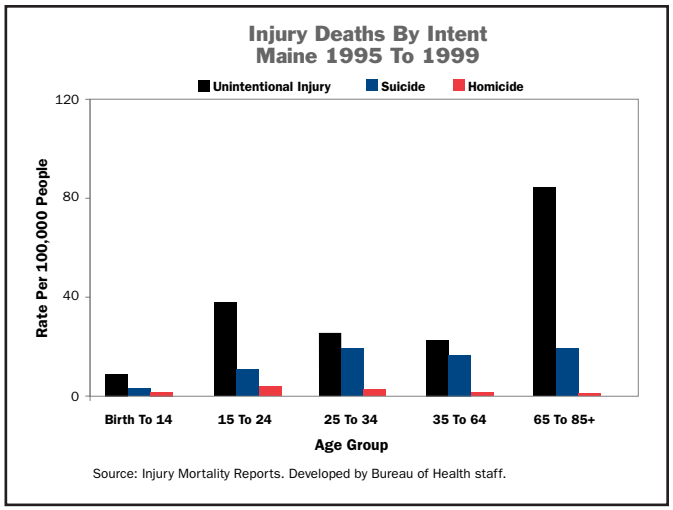
Number Of Students Removed From School For Personal Offenses

Academic Year	Elementary			Middle School			High School		
	Personal Offenses	Weapon Related	Other Criminal Acts	Personal Offenses	Weapon Related	Other Criminal Acts	Personal Offenses	Weapon Related	Other Criminal Acts
1998–1999	47	18	6	227	33	17	276	49	13
1999–2000	228	16	11	125	79	14	209	74	34

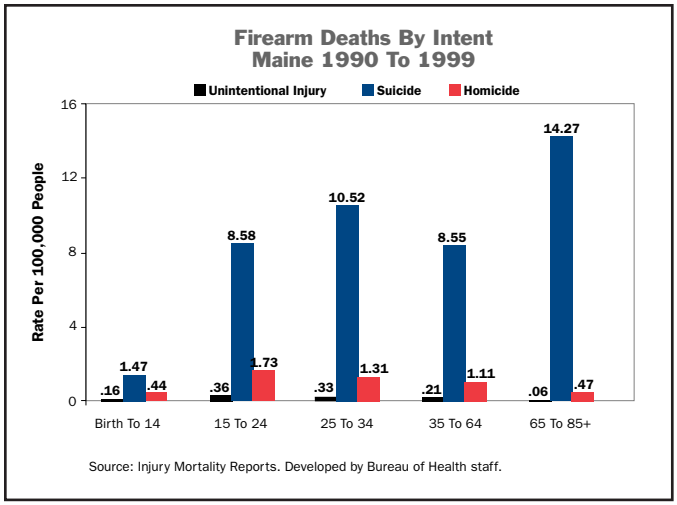
Source: Maine Safe and Drug-Free School Survey, Developed by Bureau of Health Staff.

SUICIDE

About 50% more people die from homicide than suicide nationwide, although in Maine there is a much higher proportion of people dying from suicide than homicide. There are about 170 suicides annually in Maine – on average one person every two days – although available statistics are probably underestimated because of the stigma associated with taking one's own life. Six out of ten Maine suicides are completed with a firearm. It is not known exactly how many suicide attempts there are in Maine very year, but we do know that there are about 900 hospitalizations every year for self-inflicted injuries and about 1,200 emergency medical services responses to suicidal individuals every year. Hospitalization rates are highest among adolescents and young adults.



Source: Injury Mortality Reports. Developed by Bureau of Health staff.



Source: Injury Mortality Reports. Developed by Bureau of Health staff.

Suicide rates are the highest among those over age 65 both in Maine and the nation, and even higher among those over age 80. Depression (which tends to be underdiagnosed and undertreated), social isolation, and chronic physical illness are all factors associated with suicide in the elderly.

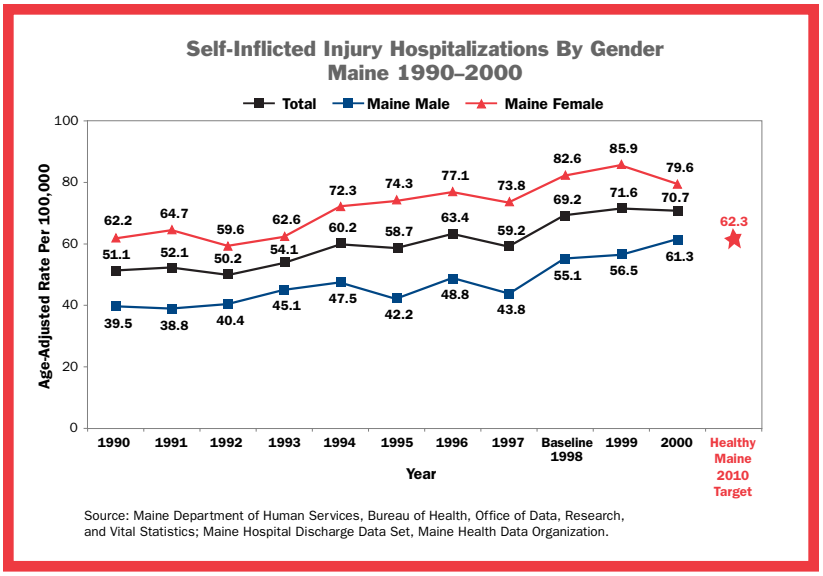
Suicide is the second leading cause of death among Maine people ages 15–34 – only motor vehicle crashes take more teen and young adult lives than suicide in Maine. Our youth suicide rates have consistently been higher than the national average, though both State and national rates have fallen in the past several years. There is no typical profile of a suicidal youth; suicide is the usually the result of a complex set of circumstances. Risk factors for suicide among youth include: history of prior suicide attempts, depression, conduct disorder, substance abuse, social isolation, sexual minority status, and history of physical or sexual abuse.

Nationally, 90% of those adults who complete suicide have a diagnosed mental illness. Clearly, early identification and treatment of mental illness are strategies to effectively reduce suicide (see Mental Health chapter).

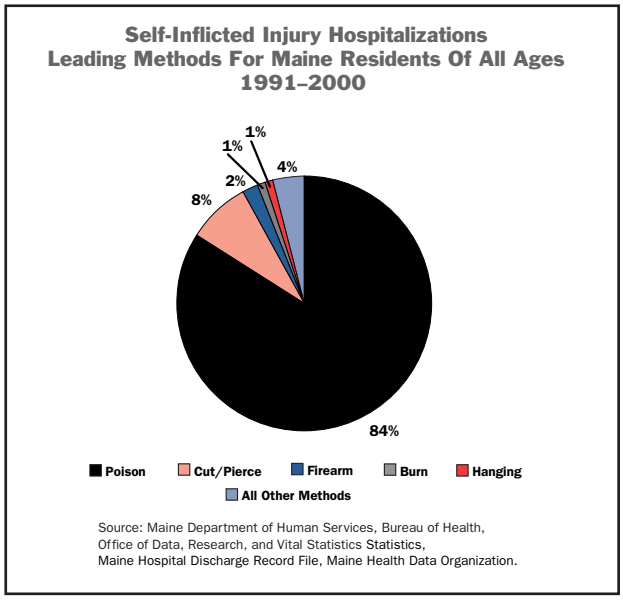
- **18–2 Reduce suicide attempts.**

  Healthy Maine 2010 Baseline: 69.2
  Healthy Maine 2010 Target: 62.3

  This objective is measured in Maine by self-inflicted injury hospitalization rates. Not all suicide attempts result in a hospitalization, and not all self-inflicted injuries are necessarily a suicide attempt.



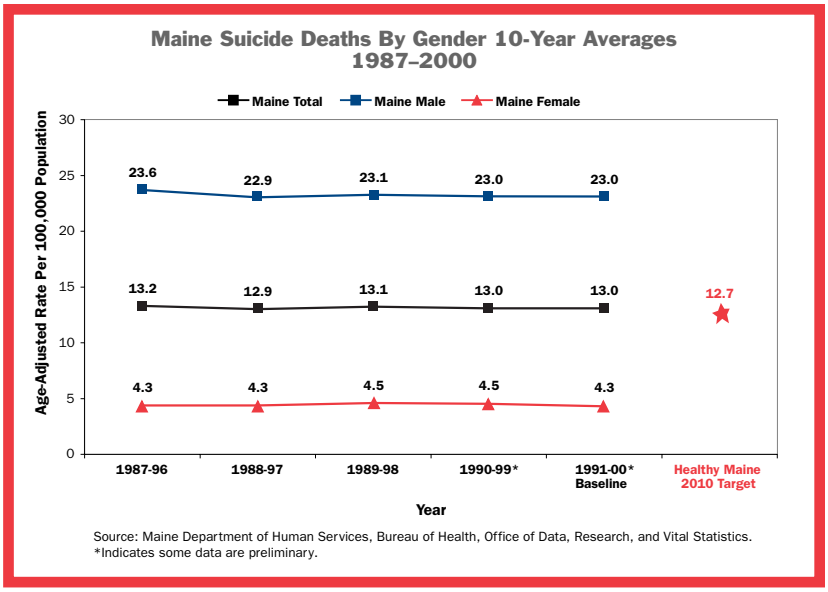
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics; Maine Hospital Discharge Data Set, Maine Health Data Organization.



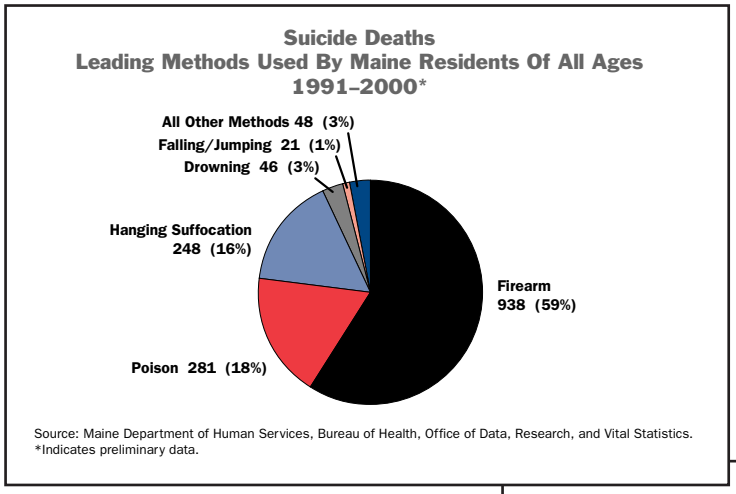
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics Statistics, Maine Hospital Discharge Record File, Maine Health Data Organization.

- **18–1 Reduce the suicide rate.**

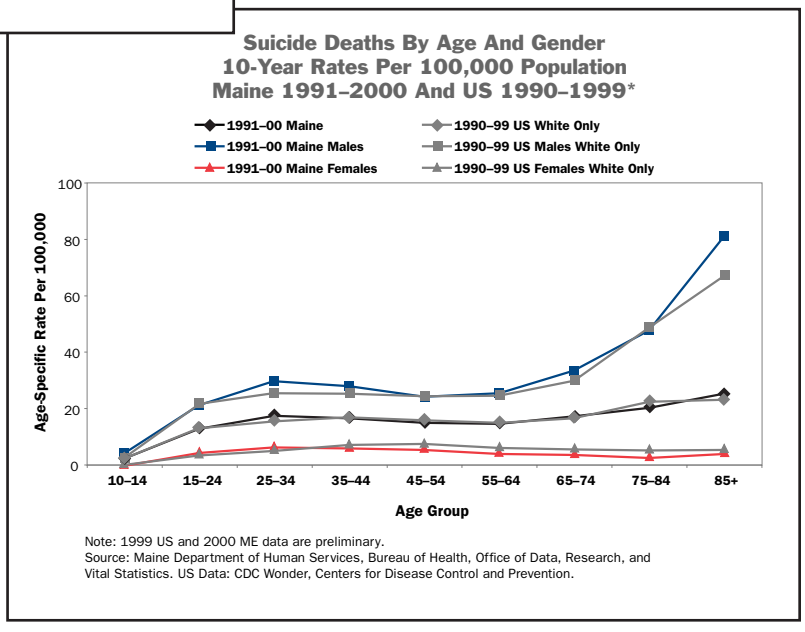
  Healthy Maine 2010 Baseline: 13.0
  Healthy Maine 2010 Target: 12.7



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.
*Indicates some data are preliminary.



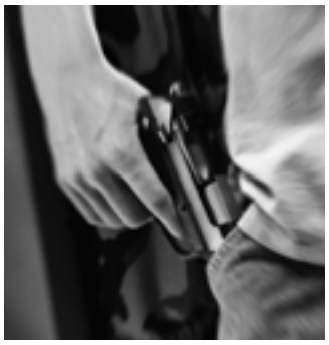
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.
*Indicates preliminary data.



Note: 1999 US and 2000 ME data are preliminary.
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics. US Data: CDC Wonder, Centers for Disease Control and Prevention.

HOMICIDE

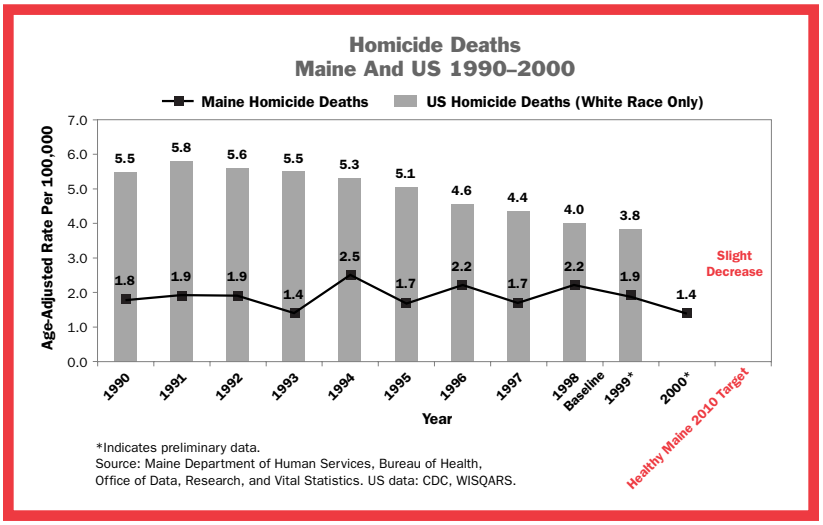
Although Maine's homicide rate averages much lower than the national rate, we still have a rate that is many times higher than most developed countries such as Canada and European countries. In addition, about half of all homicides in Maine are related to domestic violence. About 85% of women across the US who are murdered, are murdered by someone they knew.

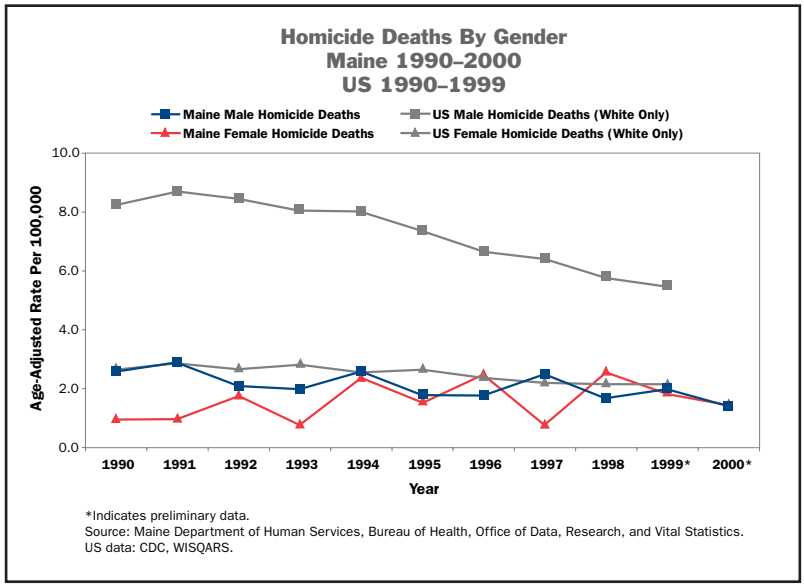


Nationally, homicide is the second leading cause of death for young persons aged 15 to 24, and the leading cause of death for African Americans in this age group. Homicide rates are dropping among all groups, but the decreases are not as dramatic among youth, who already exhibit the highest rates. The national homicide rates among males aged 15 to 24 years are 10 times higher than in Canada, 15 times higher than in Australia, and 28 times higher than in France or Germany.

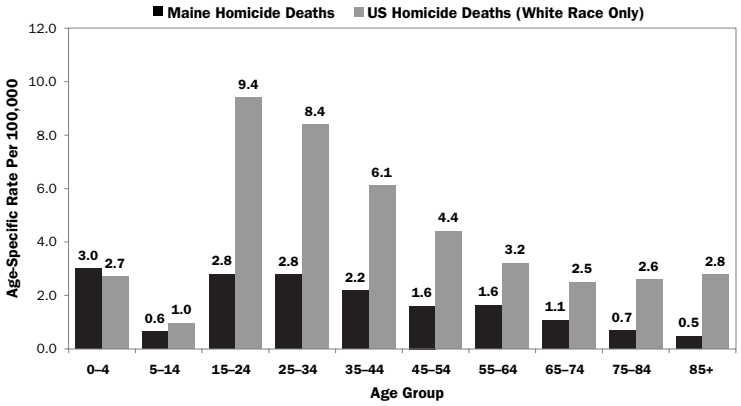
- **15–32 Reduce homicides.**

  Healthy Maine 2010 Baseline: 2.2
  Healthy Maine 2010 Target: Slight decrease in homicide rate



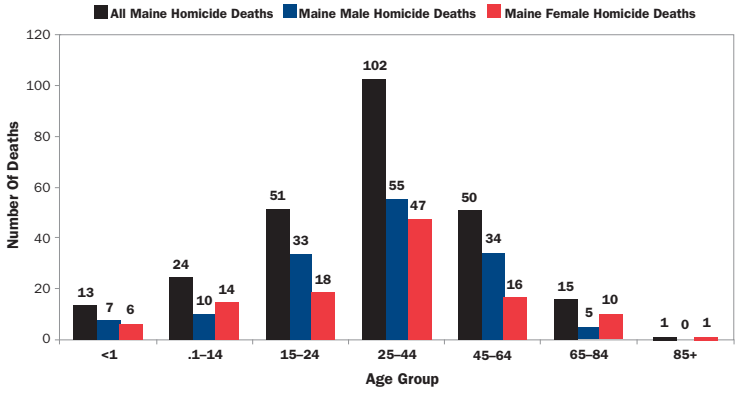


Homicide Deaths By Age
Maine 1991–2000
US 1990–1999



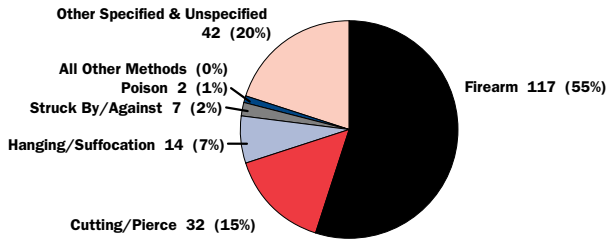
Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.
US data: CDC, WISQARS.
1999 US and 2000 ME data are preliminary.

Maine Homicide Deaths
10-Year Totals By Age And Gender
1991–2000



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.
2000 data are preliminary.

Homicides
Leading Methods Of Assault
Maine 1991–2000



Source: Maine Department of Human Services, Bureau of Health, Office of Data, Research, and Vital Statistics.

WORK GROUP LEADERS

* **Diane F. Arbour, BA**
Maine Injury Prevention Program
Bureau of Health

* **Cheryl DiCara, BSW**
Maine Injury Prevention Program
Bureau of Health

OTHER SIGNIFICANT CONTRIBUTORS

* **Dean E. Bailey, MPA,** Maine Injury Prevention Program, Bureau of Health
Barbara Leonard, MPH, Director, Division of Community Health, Bureau of Health

WORK GROUP

First Name	Last Name	Organization Name
Donna	Allen	Maine DHS, Bureau of Health
Pamela	Anderson	University of Maine Law School
* Kathleen	Askland	Maine DHS, Bureau of Health
Peter	Bates	Maine Medical Center
Susan	Berry	Maine Department of Education
Nancy	Birkhiner	Maine DHS, Bureau of Health
Jan	Bondeson	Maine Primary Care Association
Richard	Bruns	Maine Primary Care Association
Edgar	Caldwell	American Lung Association of Maine
Ronald	Carroll	Maine Medical Center
* Rebecca	Chandler	Evergreen Behavior Services
Trudi	Chase	Central Maine Medical Center
David	Clark	Maine Medical Center
Linda	Conover	Saint Joseph's College, Department of Nursing
Paula	Curtis-Everett	CIGNA Health Care of Maine
* Debbie	Dodge	Maine DHS, Bureau of Health
* Michael	Doran	Regional Medical Center at Lubec
* Grace	Eaton	MSAD #36
* Heather	Emerson	Maine Coalition Against Sexual Assault
* Ray	Fannin	St. Mary's Regional Medical Center
* Karl	Finison	Maine Health Information Center
Joni	Foster	Maine Department of Education
* Kathryn	Gaianguest	Peace Studies Program, University of Maine
Robin	Gautier	Regional Medical Center at Lubec
Roy	Gedat	Child Health Center
* Debbie	Giguere	Good Samaritan Agency
Barbara	Ginley	Maine Migrant Health Program
David & Wendy	Gordon	Child Safety Solutions, Inc.
* Layne	Gregory	Portland Public Health Division
Diane	Greslick	Saint Joseph's College
* Barbara	Grindle	Downeast Health, Maternal Child Health
DeEtte	Hall	Maine Department of Education
Betsy	Hart	University of New England
* Suzanne	Hart	Margaret Chase Smith Center for Public Policy, University of Maine
Kate	Herlihy	Maine Medical Center
Maureen	Higgins	Maine Medical Center
Joanne	Iennaco	Saint Joseph's College
James	Jacobsen	Maine DHS, Bureau of Health
Anne	Jennings	Maine Department of Behavioral and Developmental Services
David	Johnson	SRISSS
Donna	Jordan	Central Maine Medical Center
Joseph	Kerwin	Maine Chiropractic Association
Julie	Knight	Saint Joseph's College
Roger	LaJeunesse	Muskie School of Public Service, USM, School Mental Health Program

First Name	Last Name	Organization Name
Gilbert	Landry	Town of Benton Selectman
Don	Leaver	Central Maine Medical Center
* Jennifer	LeDuc	Child Health Center
Virginia	Lewis	Maine Primary Care Association
Cindy	Look	Maine DHS, Bureau of Health
Tina	Love	Central Maine Medical Center
Bill	Lowenstein	Maine Department of Behavioral and Developmental Services
Sharon	Martin	Saint Joseph's College
* Doreen	McDaniel	Maine DHS, Bureau of Elder and Adult Services
Michael	Meserve	Maine Medical Center
* Carol	Minnis	Maine Emergency Nurses Association
Michelle	Mosher	Maine DHS, Bureau of Health
Diane	Mulkhey	Central Maine Medical Center
* Wendy	Nivision	Maine Emergency Nurses Association
Luc	Nya	Maine Department of Behavioral and Developmental Services
* Susan	O'Halloran	Medical Care Development
Karen	O'Rourke	Maine Center for Public Health
Sally-Lou	Patterson	Maine DHS, Bureau of Health
Richard	Perkins	Maine Department of Transportation
Kristine	Perkins	Maine DHS, Bureau of Health
Diane	Peterson	Maine Medical Center
* Paul	Plaisted	Justice Planning and Management Association
Bonnie	Post	Maine Primary Care Association
Bill	Primmerman	Maine Department of Education
Jean	Rabon	Central Maine Medical Center —Trauma Program
Janet	Rensink	Central Maine Medical Center, Department of Social Work
Roger	Richards	Maine Department of Education
Valerie	Ricker	Maine DHS, Bureau of Health
* Alice	Rohman	Maine DHS, Bureau of Health
Tammy	Rolfe	Maine DHS, Bureau of Health
* Shirley	Rush	University of Maine at Presque Isle
Susan	Savell	Communities for Children
* Michael	Sawyer	Maine Department of Inland Fisheries and Wildlife
Roanne	Seeley	Maine Department of Education
Stephen	Shannon	University of New England, College of Osteopathic Medicine
Sharron	Sieleman	Central Maine Medical Center
* Karen	Simone	Maine Poison Control
Andrew	Smith	Maine DHS, Bureau of Health
Dawn	Stiphen	CIGNA Healthcare Of Maine
Stephanie	Swan	Maine Department of Education
Wendy	Tardif	Central Maine Medical Center
Donna	Thompson	Central Maine Medical Center
* Anthony	Tomasoni	Maine Medical Center, Maine Poison Center
Carl	Toney	University of New England
* Greg	Toot	New England Rehab Hospital
Clough	Toppan	Maine DHS, Bureau of Health
Edward	Trainer	Medical Care Development, Inc.
Chris	Trout	Peoples Regional Opportunities Program
* Julia	Underwood	University of Maine
* Lynn	Walkiewicz	Maine Primary Care Association
Lisa	Wallace	Maine Department of Behavioral and Developmental Services
* Karen	Westburg	Maine DHS, Bureau of Child and Family Services
Debra	Wigand	Maine DHS, Bureau of Health
Katherine	Wilbur	Maine Department of Education
* Fredericka	Wolman	Maine DHS, Bureau of Health
Bob	Woods	Maine DHS, Bureau of Health
* Donna	Zimmerman	Maine Emergency Nurses Association
* Kathryn	Zwicker	Maine Injury Prevention Program

** Members who attended half-day Healthy Maine 2010 Injury Priority Area Work Group meeting.*