Introduction

Injury deaths are a huge burden on families and communities. In the decade of the 1990s, nearly 21,000 Minnesotans died from injury-related causes. During the decade, injuries were the leading cause of death for people ages 1 to 34.

Most injuries are preventable. By gathering information on deaths that resulted from injuries, we can learn more about causes, and that knowledge can lead to prevention. The Minnesota Department of Health (MDH) collects data on injury-related deaths based on death certificates provided by the Minnesota Center for Health Statistics.

This fact sheet summarizes data in Injury-Related Mortality in Minnesota, 1990-99, which is available on the MDH Injury and Violence Prevention website at http://www.health.state.mn.us/divs/fh/chp/injury.htm

You may print out portions of the databook or obtain a copy by calling 651.281.9857.

Causes Of Injury Death

All

- Overall, for all ages, motor vehicle traffic crashes were the leading cause of injury death. Unintentional falls were the second leading cause and self-inflicted firearm injuries were the third.

Disparities by Race/Ethnicity

- American Indians and African Americans are over-represented in injury-related mortality. The injury mortality rate per 100,000 people is 2.6 times greater for American Indians than for whites and 1.7 times greater for African Americans than for whites.

- For American Indians, unintentional injury rates were more than twice as high as for any other racial/ethnic group. Motor vehicle crashes were the leading cause of injury death for all age groups from 10-44. Suicide also was more prevalent among American Indians than other groups, and homicide appears among the first four leading causes of death up to age 54. For teens and young adults, firearm homicide was among the three leading causes.

- For African Americans, firearm homicide was the first leading cause of injury death when all age groups were combined. For 15-24 year old males, the firearm homicide rate is more than 70 times higher for African Americans than for non-Hispanic whites.

- For Asians, suicide was the first, second, or third leading cause for most age groups. Firearm homicide was also a leading cause for children and young adults and was the second leading cause of injury death overall among Asians.
For Hispanics (all races), the second leading cause of injury death for all ages was firearm homicides and the third leading cause was firearm suicides. Homicidal cut/pierce injuries (most often stabbing) appeared frequently as a leading cause for all Hispanic adult age groups.

**Disparities by Age**

- Teens and young adults are particularly affected by injury-related death because of the years of potential life lost (see other side).
- Considering all types of self-inflicted injuries (firearm, poisoning, suffocation), suicide is the leading cause of injury death for ages 25-74.
- Self-inflicted poisonings were among the first four leading causes of injury-related death for all age groups from 25-64.
- Self-inflicted (suicidal) firearm injuries were the first leading cause of injury-related death for one age group, 55-64 year olds. Such injuries were the second leading cause in all age groups from ages 10-54. The effect continues in older groups: suicidal firearm injuries are the third leading cause for people ages 65-84 and the sixth cause for those 85 and over.
- Unintentional injuries were the leading cause of injury deaths for all ages, with the exception of ages 55-64 (for whom suicide by firearm was the leading cause). For infants, the leading cause was suffocation; for 1-4 year olds, it was drowning; for people over age 65, it was falls. For the rest, ages 5-54, unintentional motor vehicle injuries were the first leading cause of injury death.
- Homicide by firearm was the fifth leading cause for 25-34 year olds, and among the ten leading causes for all age groups from 10-54.

**Disparities by Gender**

- Males are more than twice as likely to die of injury-related causes than are females.
- For both genders, motor vehicle occupant injuries are the leading cause of injury-related death.
- For males, self-inflicted firearm injuries are the leading cause.
- For females, falls are the leading cause.

**Disparities by Residence**

- For greater Minnesota (outside the metropolitan area), as for the state as a whole, the first leading cause of injury death was unintentional injury for nearly all age groups. In greater Minnesota, suicide by firearm ranks second for all groups from 15-64.
- In the metro area, suicidal firearm injuries are the first leading cause of injury death for adults in all groups from 25-64. For 10-24 year olds, firearm homicide is the second leading cause (after unintentional motor vehicle crashes).

**Impact: Years of Potential Life Lost**

One way to measure the impact of injury-related mortality is in years of potential life lost (YPLL), which is the number of years between the age of death from injury, and age 75.

MDH data show that YPLL is 31 percent greater for 15-24 year olds than for any other age group. Although death from injury or violence is tragic at any age, the loss to society is especially great for this age group because so many die from injury and each loses so many potential years of life.
Prevention efforts thus need to focus more heavily on this age group, for whom unintentional injuries, suicide, and violence are leading causes of death.

YPLL is low among 5-9 year olds, since few of them die from injuries. This may be because preventive measures such as seatbelt and helmet usage are most effective in this age group, or because the 5-9 year olds do not face the same risks as do younger children and teenagers.

**Preventing Specific Types of Injury-Related Death**

**Firearms**
- Promote safe and secure storage of firearms and ammunition.
- Limit access to firearms by youth.

**Poisoning**
- To prevent self-inflicted poisoning, increase access to mental health services, make use of antidepressant medications, and encourage exercise.
- To prevent unintentional poisoning, ensure that household hazardous chemicals, alcoholic beverages, and medications are inaccessible to children.

**Falls**
- To prevent falls by older adults, increase physical activity, modify the home environments and manage medications and alcohol use.

**Motor Vehicle Injuries: Occupants**
- Adopt legislation to make 0.08 blood alcohol level, rather than 1.0, the threshold for a charge of driving while intoxicated.
- Increase use of seatbelts and airbags.
- Limit driving privileges of youth.

**Motor Vehicle Injuries: Pedestrians**
- Promote traffic calming strategies.

**Preventing All Types of Injury-Related Death**

**To prevent all causes of injury:**
- Encourage public officials and local organizations to make community-based injury prevention a priority.
- Work with community organizations to develop culturally-relevant and culturally-specific prevention recommendations based on these data.
- Increase prevention efforts focusing on youth and young adults.
- Continue to collect data on injuries, so that trends can be monitored.
- Improve coordination of the trauma care system, so that effective services are available statewide and that people can receive trauma care quickly and seamlessly.