

## 2006-2010 GHD8 5 INJURY SUMMARY

### INTRODUCTION

This summary and the accompanying Excel tables present data on injury-related deaths and hospitalizations of Delaware residents between 2006 and 2010. Injury, as used here, may be of any intent (unintentional, self-inflicted, homicide/assault, or undetermined) and mechanism (e.g. falls, drowning, or firearms). The injury indicators reported in this document were classified according to the State & Territorial Injury Prevention Directors Association's (STIPDA) categories and definitions. For more information, see the data preparation documents available at:

<http://www.cste.org/dnn/ProgramsandActivities/InjuryResources/tabid/471/Default.aspx#Uniform>.

Because these data were analyzed according to the STIPDA criteria and coding definitions, they may differ from other mortality and hospital discharge statistics released from the Delaware Health Statistics Center. It should also be noted that Delaware hospital discharge data represent Delawareans who were admitted to a Delaware inpatient facility only; residents who received their care out-of-state were not included, nor were those whose injuries were treated at a clinic, surgicenter, or emergency room. As such, the hospital data does not represent a complete picture of the injury burden on Delaware residents.

### INJURY INDICATORS

**All Injury Fatalities** – There were 2,512 deaths due to STIPDA defined injuries in 2006-2010. Males were more likely than females to die of an injury and had an age-adjusted mortality rate 2.6 times that of females. Poisonings caused the greatest number of injury deaths, followed by motor vehicle traffic and firearm injuries. Though nearly all of the motor vehicle injuries and three-quarters of the poisonings were unintentional, none of the firearm injuries were; the majority of firearm injuries were self-inflicted.

**All Injury Hospitalizations** – STIPDA-defined injury hospitalizations accounted for 4.6 percent of the total number of hospitalizations and \$534 million in aggregate charges in 2006-2010. The vast majority of patients were admitted through the emergency department (ED), and the average charge for an injury stay ranged from \$12,577 for poisoning injuries to \$37,278 for firearm injuries, with an overall average charge of \$22,662. Nearly half of patients hospitalized for injuries were discharged home, and 24 percent were discharged to a long-term care facility. Hospitalization rates were highest for males and those 65 and older.

**Unintentional Drowning Fatalities** – Deaths due to drowning accounted for 1.6 percent of all injury deaths; males were more likely than females to die from a drowning injury.

**Nonfatal Drowning Hospitalizations** – Hospital stays for nonfatal drownings were rare; 0.1 percent of all injury-related hospital discharges were due to nonfatal drownings. Fifty-two percent of all drowning hospitalizations were children under 15, with the 1-4 age group having the largest proportion of stays.

**Unintentional Fall-related Fatalities** – Mortality rates were higher for older decedents and rose with each increase in age group. Unintentional falls were the most common cause of injury death for those 75 and older. The male mortality rate for falls was nearly twice that of females. Overall, unintentional falls accounted for 11 percent of all injury deaths.

**Unintentional Fall-related Hospitalizations** – Falls were the most common reason for injury-related hospital stays and accounted for almost half (47 percent) of all injury-related hospitalizations.

Hospitalization rates for unintentional falls were highest for infants under 1 and people 55 and older. Among the age groups under 55, males had higher fall hospitalization rates than females; for those 55 and older, females had higher hospitalization rates.

Hip Fracture Hospitalizations of People Aged 65 Years and Older – Patients hospitalized with a diagnosis of hip fracture accounted for 3,081 stays in 2006-2010. Ninety-five percent of hip fractures were caused by unintentional falls. Female patients accounted for three-quarters of all hip fracture hospitalizations, and their hospitalization rates were more than double male rates.

Unintentional Fire-related Fatalities – Less than two percent of all injury deaths were due to fire-related injuries. There were 41 fire-related deaths in 2006-2010, most of which were due to uncontrolled fires in a building or structure.

Unintentional Fire-related Hospitalizations – Hospital stays for fire-related injuries were infrequent and represented 0.1 percent of all injury-related hospitalizations.

Firearm-related Fatalities – Deaths due to firearm-related fatalities include all intents and accounted for 16.3 percent of injury deaths. They were the third leading cause of injury deaths. Males comprised 89 percent of firearm-related deaths, and their age-adjusted mortality rate was 9 times the female rate. The highest mortality rates were in the 15-24 and 25-34 age groups. Over half of all firearm fatalities were self-inflicted.

Nonfatal Firearm-related Hospitalizations – Males were hospitalized for firearm-related injuries at a rate 12 times that of females. Firearm-related hospitalizations were the fifth leading cause of injury-related hospitalizations. The highest hospital discharge rates were seen in the 15-24 and 25-34 age groups.

Homicides – There were 259 homicides between 2006 and 2010; the majority (83 percent) of decedents were male. Seventy-five percent of homicides were committed using a firearm. Homicides occurred most frequently in the 15-24 and 25-34 age groups.

Assault-related Hospitalizations – In 2006-2010, 1,354 people were hospitalized for assault-related injuries, 85 percent of whom were males. At 54 hospitalizations per 100,000, male discharge rates were 5.8 times that of females. Youths and young adults ages 15-24 years had the highest hospitalization rate for assault-related injuries; with each increase in age group over 24 the rates declined.

Motor Vehicle Traffic Fatalities – Twenty-three percent of injury fatalities were due to an injury sustained in a motor vehicle traffic accident. In 2006-2010, Delawareans died from motor vehicle traffic-related injuries at a rate of 13.2 deaths per 100,000 population. Death rates were highest for people ages 15-24 and those 75 and older. Male death rates were higher than female death rates in every age group. With each increase in age group above 24, the age-specific mortality rates declined until the 65-74 age group, where they began to rise again.

Motor Vehicle Traffic Hospitalizations – Hospitalizations resulting from motor vehicle traffic accidents accounted for 16 percent of all injury-related hospitalizations. The 2006-2010 age-adjusted hospitalization rate was 83 per 100,000 population. Age-specific discharge rates were highest for people between the ages of 15 and 34, and patients 75 and older.

Poisoning Fatalities – Poisoning deaths of all intents led to more injury fatalities than any other cause; they accounted for one in four injury deaths in 2006-2010. Poisonings may result from exposure to a

variety of damaging substances, such as gases, vapors, chemicals, and drugs. There were 636 deaths as a result of poisoning in 2006-2010, 75 percent of these were unintentional, 15.3 percent were self-inflicted, 9.4 percent were of undetermined intent, and .3 percent were assault.

**Poisoning Hospitalizations** – A total of 3,525 patients, representing fifteen percent of injury-related hospital stays in 2006-2010, were discharged due to poisoning. Unlike the majority of injury hospitalizations, male poisoning discharge rates were 10 percent lower than female rates (76.9 versus 84.5). Age-specific rates were higher for females in every age group between 5 and 74 years; the largest difference was in the 65-74 age group, where female discharge rates were 59 percent higher than male rates. Poisonings accounted for 24 percent of hospital stays for children ages 1 to 4; for patients between 15 and 54 years, poisonings comprised more than one-fifth of all injury stays.

**Suicides** – Suicides accounted for 20 percent of all injury deaths. The age-adjusted mortality rate for males, 18.3 deaths per 100,000, was 4.3 times that of females. Suicide mortality rates were highest for those ages 45-54, followed by those ages 35-44. Firearms, suffocation, and poisoning were the most common mechanisms of suicide. For males, firearms were the most commonly used mechanism; for females, poisoning was the most commonly used mechanism.

**Suicide Attempt Hospitalizations** – There were 2,209 hospital discharges of patients who attempted suicide, 54 percent of whom were women. Female hospitalization rates for suicide were 10 percent higher than male rates (54.5 versus 47.8). Discharge rates for suicide attempts were highest in the 35-44 and 15-24 age groups. The vast majority (93 percent) of suicide-related hospital stays were caused by poisoning.

**Traumatic Brain Injury (TBI) Fatalities** – TBIs were associated with 637 deaths between 2006 and 2010. Age-specific mortality rates were highest for older Delawareans; mortality rates doubled with each 10-year increase in age for those 65 and older. Sixty percent of TBI-related deaths were the result of unintentional injuries, 28 percent were self-inflicted, and 12 percent were the result of assault. Firearms, motor vehicles, and falls were the most common causes of TBI-related deaths. Firearms were the primary mechanism of self-inflicted and assault-related TBI deaths; motor vehicle traffic accidents and falls were the most common causes of unintentional TBI deaths.

**Traumatic Brain Injury Hospitalizations** – In 2006-2010, there were 4,730 hospital stays for TBIs. Patients 75 years and older were hospitalized most frequently for TBIs. Overall, male hospitalization rates for TBIs were nearly double female rates (138.6 versus 70.7); higher male rates persisted in every age group. Eighty-eight percent of TBI hospitalizations were the result of an unintentional injury, 10 percent stemmed from assault, and less than 1 percent were self-inflicted. Falls were the most common cause of TBIs and they accounted for 46 percent of all TBI-related hospital stays. Motor vehicle traffic accidents and struck by/against events (which include colliding with a moving or stationary object), were the second and third most common causes, and they accounted for 34 and 9 percent, respectively, of TBIs.