

## **2005-2009 INJURY SUMMARY**

### INTRODUCTION

This summary and the accompanying Excel tables present data on injury-related deaths and hospitalizations of Delaware residents between 2005 and 2009. 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 "Injury Indicators: Instructions for Preparing 2005 Data" available at: [http://www.cdc.gov/ncipc/pub-res/State\\_Injury\\_Indicators\\_Instructions\\_2005.pdf](http://www.cdc.gov/ncipc/pub-res/State_Injury_Indicators_Instructions_2005.pdf).

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 2,414 deaths due to STIPDA defined injuries in 2005-2009. Males were more likely than females to die of an injury and had an age-adjusted mortality rate 2.7 times that of females. Motor vehicle traffic injuries caused the greatest number of injury deaths, followed by poisonings and firearms 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** – Injuries accounted for over 23,000 hospitalizations between 2005 and 2009, which equated to 483 million in total aggregate charges. Hospitalization rates were highest for males and those 65 and older.

**Unintentional Drowning Fatalities** – Deaths due to drowning accounted for just over 1 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. Sixty 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 85 and older, and the second most common cause for those 75-84 years of age. 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. Fall hospitalization rates were higher for females than males.

**Hip Fracture Hospitalizations of People Aged 65 Years and Older** – Patients hospitalized with a diagnosis of hip fracture accounted for 3,083 stays between 2005-2009. Ninety-five percent of hip

fractures were caused by unintentional falls. Female patients accounted for three-quarters of all hip fracture hospitalizations and their 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 44 fire-related deaths in 2005-2009, 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 0.2 percent of all injury-related hospitalizations.

**Firearm-related Fatalities** – Deaths due to firearm-related fatalities include all intents and accounted for 16.5 percent of injury deaths. They were the third leading cause of injury deaths. Males comprised 90 percent of firearm-related deaths; their age-adjusted mortality rate was 8.8 times the female rate. The highest mortality rates were seen in the 15-24 and 25-34 year 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 nearly 11 times that of females. Firearm-related hospitalizations were the seventh leading cause of hospitalizations. The highest discharge rates were seen in the 15-24 and 25-34 year-old age groups.

**Homicides** – There were 256 homicides between 2005 and 2009; the majority (82 percent) of decedents was male. Seventy-two percent of homicides were committed using a firearm. Homicides occurred most frequently in the 15-24 and 25-34 year age groups.

**Assault-related Hospitalizations** – In 2005-2009, 1,255 people were hospitalized for assault-related injuries, 88 percent of whom were males. At 53 hospitalizations per 100,000, male discharge rates were 7.5 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** – One in four injury fatalities was due to an injury sustained in a motor vehicle traffic accident. In 2005-2009, Delawareans died at a rate of 13.7 deaths per 100,000 population. Death rates were highest for people ages 15-24 years 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 decline until the 65-74 age group, where they start to rise again.

**Motor Vehicle Traffic Hospitalizations** – Hospitalizations resulting from motor vehicle traffic accidents accounted for 16 percent of all injury-related hospitalizations. The 2005-2009 age-adjusted hospitalization rate was 87.7 per 100,000 population. Age-specific discharge rates were highest for people between the ages of 15 and 34, and older patients, 75 years and older.

**Poisoning Fatalities** – Deaths due to poisoning, of any intent, were the second leading cause of injury death after motor vehicle traffic accidents. Poisonings may result from exposure to a variety of damaging substances, such as gases, vapors, chemicals, and drugs. There were 535 deaths as a result of poisoning in 2005-2009, 75 percent of these were unintentional, 15 percent were self-inflicted, and 10 percent were of undetermined intent.

**Poisoning Hospitalizations** – A total of 3,356 patients, representing fifteen percent of hospital stays in 2005-2009, were discharged due to poisoning. Unlike the majority of injury hospitalizations, male poisoning discharge rates were 10 percent lower than female rates (74.1 versus 82.8). Age-specific

rates were higher for females in every age group from 5 to 74 years; the largest difference was in the 15-24 age group, where female discharge rates were 24 percent higher than male rates. Poisonings accounted for 22 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, 17.9 deaths per 100,000 males, was 4.3 times that of females. Suicide mortality rates were highest for those ages 45-54 years, followed by those ages 35-44 years. Firearms, suffocation, and poisoning were the most common causes of suicide. For males, firearms were the most common mechanism; for females, poisoning was the most common mechanism.

**Suicide Attempt Hospitalizations** – There were 2,169 hospital discharges of patients who attempted suicide, 55 percent of whom were women. Female hospitalization rates for suicide were 20 percent higher than male rates, and the largest female to male discrepancy was in the 15-24 year age group. The vast majority (93 percent) of suicide-related hospital stays were caused by poisoning.

**Traumatic Brain Injury (TBI) Fatalities** – TBIs were associated with 705 deaths between 2005 and 2009. Age-specific mortality rates were highest for older Delawareans; mortality rates doubled with each 10-year increase in age for those 55 years and older. Sixty percent of TBI-related deaths were the result of unintentional injuries, 25 percent were self-inflicted, and 11 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-related TBI deaths.

**Traumatic Brain Injury Hospitalizations** – In 2005-2009, there were 4,475 hospital stays for TBIs. Patients 75 years and older were hospitalized most frequently for TBIs. Overall, male hospitalization rates for TBIs were double female rates (134.8 versus 68.4); higher male rates persisted in every age group. Ninety percent of TBI hospitalizations were the result of an unintentional injury, 9 percent stemmed from assault, and less than 1 percent were self-inflicted. Falls were the most common cause of TBIs and accounted for 45 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 accounted for 35 and 9 percent, respectively, of TBIs.