

Every day, thousands of Americans are involved in motor vehicle crashes on public roadways that result in injury or death. Unintentional Motor Vehicle Traffic (MVT) injuries include those to motor vehicle occupants (drivers and passengers), motorcyclists, pedestrians, pedal cyclists, and other persons.

## Burden and Overview

MVT injuries are a leading cause of hospitalization and death in the United States and Ohio. For every MVT injury death in Ohio, there were 4 non-fatal hospitalizations and 52 non-fatal emergency department (ED) visits. Figure 1 reflects total counts for 2020. During a ten-year period, the overall rate of MVT injury deaths increased (Figure 2), with the largest increase occurring among Black non-Hispanic Ohioans.

FIGURE 1: MVT Injury Pyramid, 2020

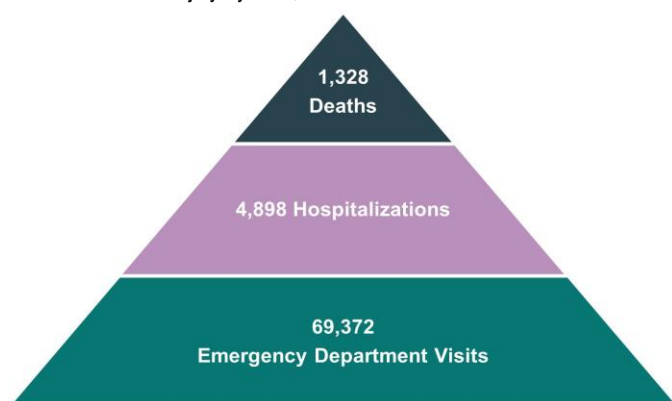
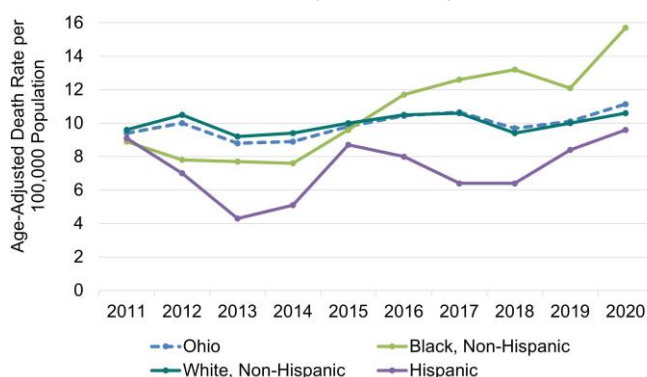


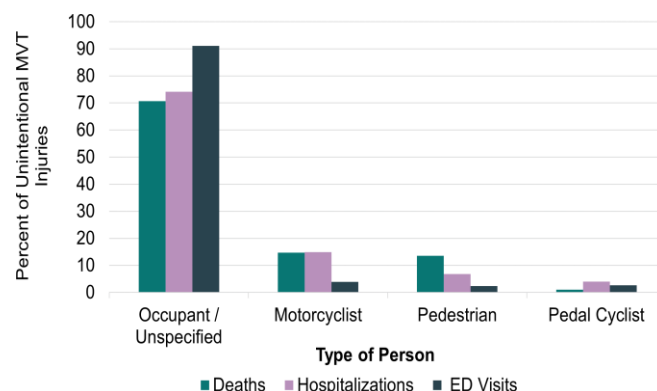
FIGURE 2: Rate of MVT Deaths by Race/Ethnicity, 2020



## Injuries by Type of Person

Figure 3 illustrates that most persons injured or killed by MVT injuries are occupants (drivers, passengers, or unspecified). In 2020, occupants accounted for 71% of MVT deaths, 74% among hospitalizations, and 91% among ED visits. Figures 4 through 6 will focus on occupant-related injuries.

FIGURE 3: Percent of MVT Injuries by Type of Person, 2020



## MVT Injuries by Geography

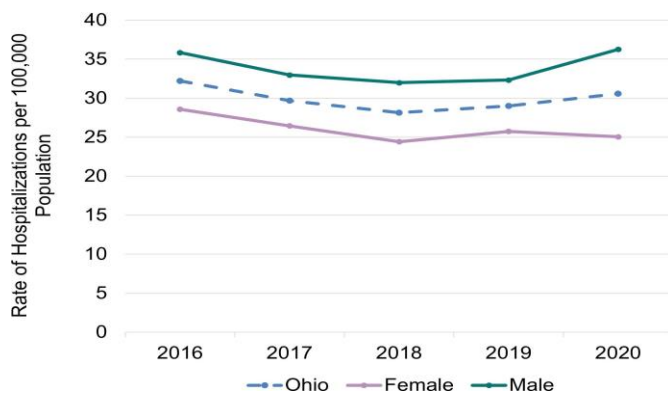
In 2020, counties with the highest number of MVT deaths include Franklin (148), Cuyahoga (117), Hamilton (72), Montgomery (70), and Lucas (61). Together, these counties accounted for 35% of MVT deaths in Ohio. From 2016 to 2020, Pike County had the highest average rate of MVT deaths (27.6 per 100,000), while Delaware County had the lowest death rate (6.4 per 100,000).

# Special Emphasis Report: Unintentional Motor Vehicle Traffic Injuries

## MVT Injuries by Sex and Age Group

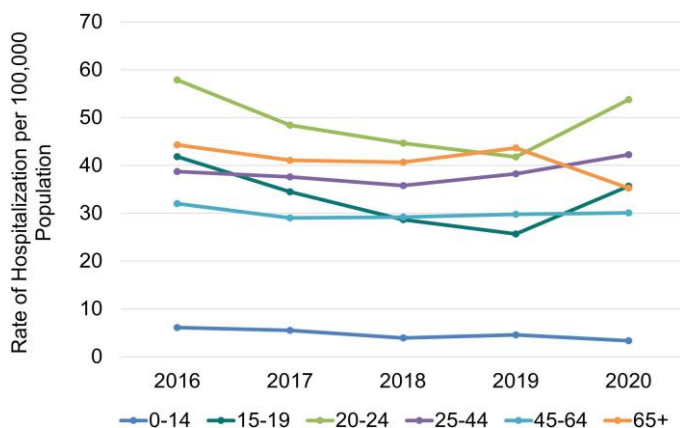
The MVT hospitalization rate increased from 2018-2020. The rate was higher among males, which increased 12% from 2019 to 2020, compared to females, which decreased 3%.

**FIGURE 4:** MVT Occupant-Related Hospitalization Rate by Sex, 2016-2020



The MVT hospitalization rate among children (0-14) and older adults (65+) decreased from 2019-2020. The rate among youth 15-19 years had the highest increase during this time. Ohioans 20-24 years had the highest rate in 2020, followed by those 25-44 years of age.

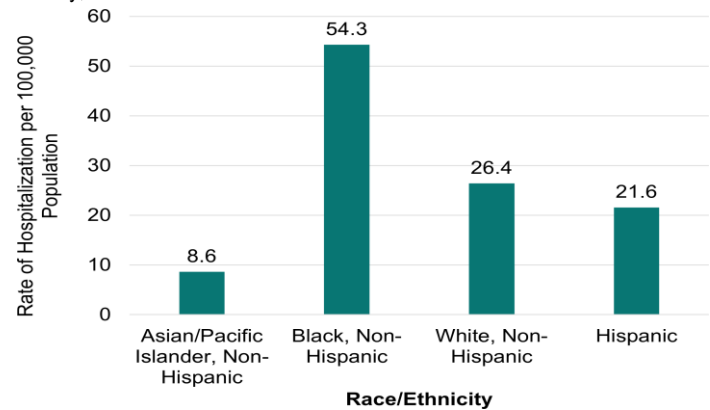
**FIGURE 5:** MVT Occupant-Related Hospitalization Rate by Age Group, 2016-2020



## MVT Injuries by Race

Figure 6 presents MVT hospitalization rates by race/ethnicity among Ohioans. The rate was highest among Black non-Hispanic Ohioans (54.3 per 100,000) followed by white non-Hispanic (26.4 per 100,000) Ohioans.

**FIGURE 6:** MVT Occupant-Related Hospitalization Rate by Race/Ethnicity, 2020



## Quick Facts

According to the National Highway Traffic Safety Administration:

- In 2020, observed seat belt use in Ohio was 86%. This is a 2% increase over 2011.

- 22% of drivers involved in fatal crashes were unrestrained in 2019.

- In 2017, an estimated 138 lives (5+ years) could have been saved with 100% seat belt usage.

- In 2020, 36% of drivers with fatal MVT injuries in Ohio had a blood alcohol concentration of more than the legal limit (0.08).

Based on 2019 data from the Ohio Youth Risk Behavior Survey (YRBS), 8% of teens rarely or never wore a seat belt while riding in a car driven by someone else and 49% of Ohio teens texted or emailed while driving.

CDC's Web-Based Injury Statistics Query and Reporting System (WISQARS) estimated the economic cost of MVT deaths that occurred among Ohioans in 2020 to be \$13.85 billion. Costs include medical care and value of statistical life.

# Special Emphasis Report: Unintentional Motor Vehicle Traffic Injuries

## MVT Injury Prevention Activities

National Activities	
<b>PREVENTION</b>	Ohio participates in Click It or Ticket campaigns, Distracted Driving campaigns, National Child Passenger Safety Week, and National Bike Month. Ohio also participates Child Passenger Safety Technician certification.
<b>SURVEILLANCE</b>	The Ohio Department of Health (ODH) Violence and Injury Epidemiology and Surveillance Section (VIESS) participates in the CSTE Injury Surveillance Workgroup and utilizes national definitions to conduct surveillance.
<b>PARTNERSHIPS</b>	National partnerships include National Highway Traffic Safety Administration Region 5; National Child Passenger Safety Board; Safe Kids Worldwide; CSTE; Greater Lakes and Mid-Atlantic Injury Prevention Network.
<b>ACCOMPLISHMENTS/ SUCCESSES</b>	2021: Top 3 National Child Passenger Safety Recertification rate; regular participation in National Child Passenger Safety Week; local subgrantee participation in Click It or Ticket mobilizations; sharing car seat program information with other states, upon request.
State Activities	
<b>PREVENTION</b>	The ODH Violence and Injury Prevention Section (VIPS) serves as the state lead for child passenger safety (CPS) and coordinates regional implementation of state child passenger safety programs. ODH VIPS promotes Child Passenger Safety Week (including a Governor's Proclamation), policy of rear-facing car safety seats as long as possible, and the Graduated Driver's License (GDL) law. ODH VIPS implements a low-income car seat program which is funded, in-part, by citations through the child restraint law. ODH VIPS participates in education for law enforcement on the child restraint law and CPS, as well as education of CPS in pediatric offices, home visiting, and Jobs and Family Services programs.
<b>SURVEILLANCE</b>	ODH VIESS conducts statewide MVT surveillance through death certificate, inpatient hospitalization, and emergency department data.
<b>PARTNERSHIPS</b>	ODH VIPS coordinates the Ohio Injury Prevention Partnership's (OIPP) Child Injury Action Group which includes subcommittees for Child Passenger Safety, Teen Driving, and Traumatic Brain Injury (pedestrian safety). OIPP/CIAG is a multidisciplinary statewide coalition of organizations that convene to create and address a strategic plan to reduce child injury in Ohio. Other partnerships include Impact Teen Driver; Fahlgren Mortine (Booster Seat Campaign vendor); and Ohio Bureau of Motor Vehicles (BMV).
<b>ACCOMPLISHMENTS/ SUCCESSES</b>	Ohio has developed the following resources/materials: Booster Seat Campaign, policy template for bike helmet usage at local levels; GDL toolkit; parent/student online GDL module; GDL Brochure in Ohio BMVs. Ohio has also assessed local high school policies for GDL language and GDL education requirements for parking passes at local high school(s).

## Footnotes

Mortality data was provided by the ODH Bureau of Vital Statistics. Hospitalizations and ED visits are based on discharge diagnosis data provided by the Ohio Hospital Association. Analysis was conducted by ODH VIESS and include Ohio residents. ED visits exclude fatal cases. Hospitalization exclude ED visits and fatal cases.

Race/ethnicity categories are mutually exclusive. Hispanic includes any race. Specified race (Black, white, etc.) excludes Hispanic ethnicity. Rates presented for age groups are age-specific. Rates presented for sex and race/ethnicity are age-adjusted to the 2000 U.S. standard population. Rates are calculated per 100,000 population and suppressed when counts <10.