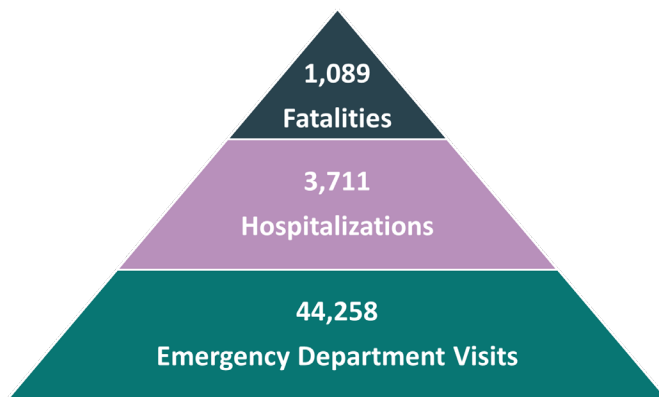


Every day, thousands of Americans are involved in motor vehicle crashes on public roadways that result in injury or death. Unintentional Motor Vehicle Traffic (MVT) injuries include those to motor vehicle occupants (drivers and passengers), motorcyclists, pedestrians, pedal cyclists, and other persons.

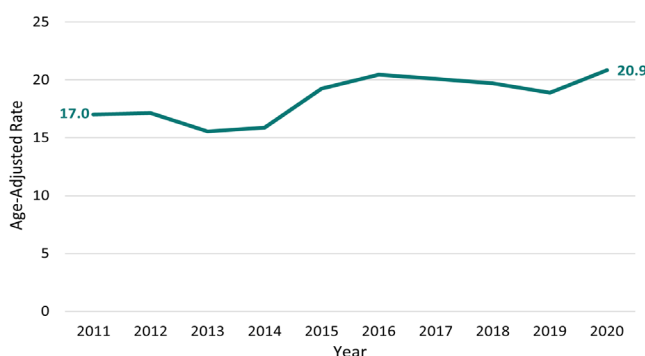
## Burden and Overview

MVT injuries are a leading cause of hospitalization and death in the United States and South Carolina. For every MVT injury death in South Carolina there were 4 non-fatal hospitalizations and 65 emergency department visits. Figure 1 reflects total counts for 2020. During a ten-year period, the rate of MVT injury deaths increased (see Figure 2), with the largest increase occurring among those aged 25 to 34.

**FIGURE 1:** Motor Vehicle Traffic Injury Pyramid in 2020



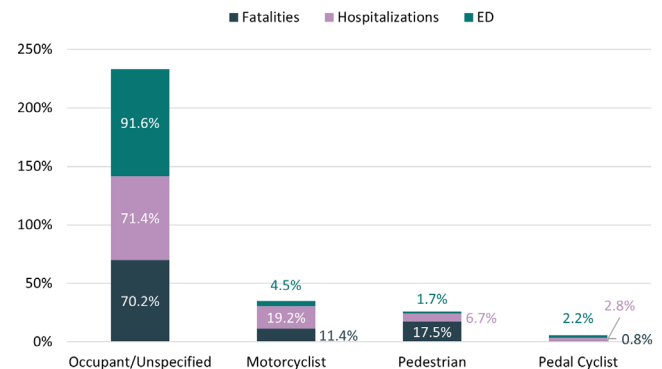
**FIGURE 2:** Rate of Motor Vehicle Traffic Deaths Among Residents



## Injuries by Type of Person

Figure 3 illustrates that most persons injured or killed by MVT injuries are occupants (drivers and passengers). In 2020, occupants accounted for 70.2% of MVT deaths, 71.4% among hospitalizations, and 91.6% among ED visits. Motorcyclists account for 19.2% of hospitalizations and pedestrians account for 17.5% of ED visits.

**FIGURE 3:** Percent of Unintentional MTV Injuries by Type of Person in 2020



## MVT Injuries by Geography

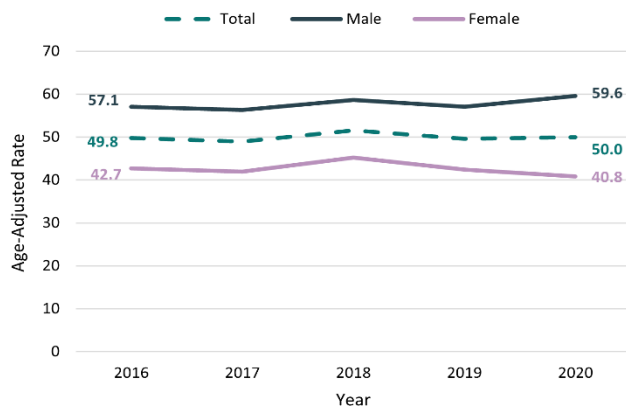
In 2020, the majority of nonfatal motor vehicle traffic occupant injuries in South Carolina occurred among residents who live in highly populated counties, with Richland County having the most injuries, followed by Charleston and Horry Counties. The counties with the highest rates of age-adjusted MVT fatalities were in Colleton (53.7 per 100,000), Fairfield (48.5 per 100,000), and Allendale (47.8 per 100,000). Colleton and Allendale are rural counties.

# Special Emphasis Report: Unintentional Motor Vehicle Traffic Injuries

## MVT Injuries by Sex and Age Group

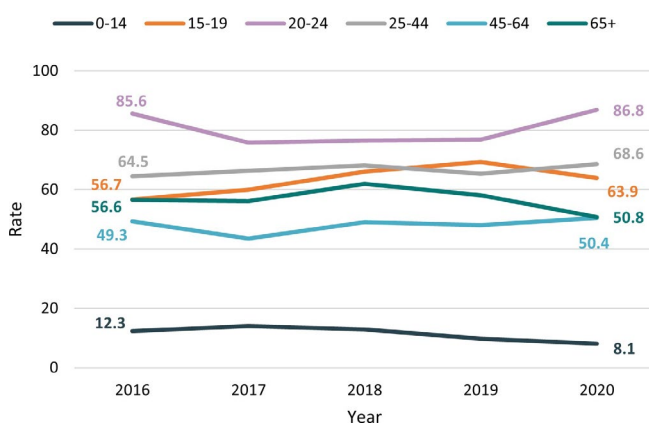
Males had higher non-fatal MVT-occupant hospitalization injury rates than did females (59.6 per 100,000 and 40.8 per 100,000 respectively).

**FIGURE 4:** MVT Occupant-related Hospitalization Rates by Sex, 2016-2020



The age groups with the highest non-fatal MVT-occupant hospitalization injury rates in South Carolina were ages 20 to 24 and ages 25 to 44.

**FIGURE 5:** MVT Occupant-related Hospitalization Injury Rates by Age Group, 2016-2020



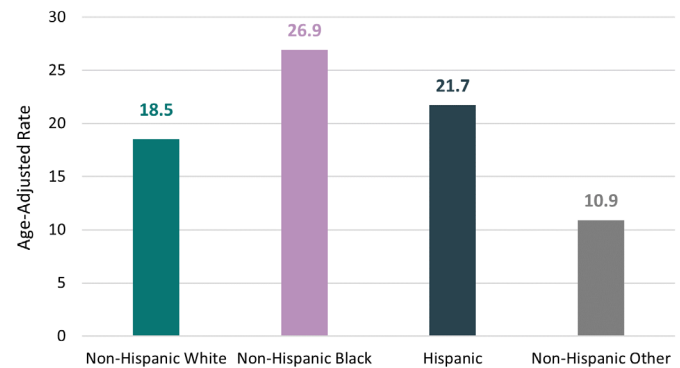
## Footnotes

This Special Emphasis Report was prepared by the South Carolina Department of Health and Environmental Control. Motor vehicle traffic injury death data is provided by South Carolina Vital Statistics, and emergency department and hospitalization data are provided by the South Carolina Revenue and Fiscal Affairs Office. MVT-related cases were identified by limiting the datasets to injury cases based on external cause of injury (deaths) and primary diagnosis (hospitalizations and emergency department visits), and then all fields were searched for MVT diagnostic codes. For more information visit: [www.scdhec.gov](http://www.scdhec.gov).

## MVT Injuries by Race

Figure 6 presents fatal MVT rates by race/ethnicity for South Carolina residents. The highest rates were noted for non-Hispanic Blacks (26.9 per 100,000), followed by Hispanic residents (21.7 per 100,000).

**FIGURE 6:** MVT Fatality Rates by Race and Ethnicity, 2020



## Quick Facts

**Seat Belt Use:** According to the National Occupant Protection Use Survey, seat belt use in South Carolina was 90.3 in 2020. This is an increase of 5.0% from 2011 to 2020.

In 2020, 53.5% of occupants killed in a motor vehicle crash in South Carolina were not wearing a seat belt.

**Cost Data:** In 2020, the total combined cost of medical care and the value of statistical life lost due to fatal MVT injuries was \$11.7 billion.

**Alcohol Level:** In 2020, 30% of drivers with fatal MVT injuries in South Carolina had a blood alcohol concentration of more than the legal limit (.08).

**Helmet Usage:** In 2020, South Carolina reported 116 motorcyclist deaths and 64% were not wearing a helmet. Compared to all motorcyclist injuries, a helmet was not used 49% of the time.

# Special Emphasis Report: Unintentional Motor Vehicle Traffic Injuries

## MVT Injury Prevention Activities

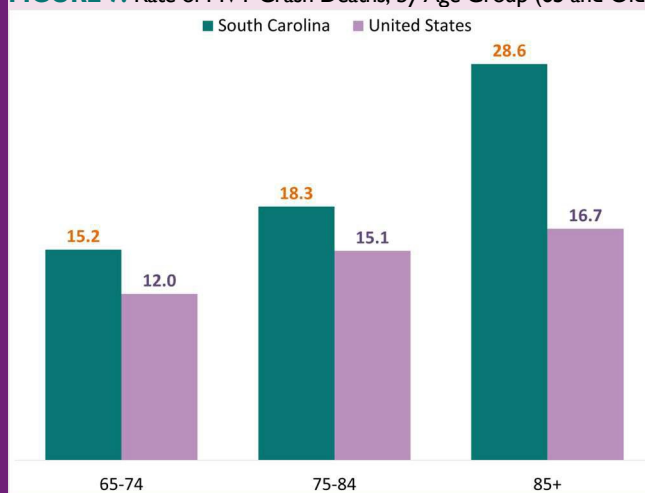
### PREVENTION

### SURVEILLANCE

#### CarFit Expands Across South Carolina

CarFit is a national driver safety program designed for adults 65 years and older. Nationally in 2020, there were 6,549 people 65 and older killed in traffic crashes, accounting for 17% of all traffic fatalities. Seventy percent (70%) of older pedestrian fatalities in 2020 occurred at non-intersection locations. In 2020, the national rate of fatalities of people 65 and older was 11.8 per 100,000 compared to the much higher South Carolina rate of 21.6 per 100,000.

**FIGURE 7:** Rate of MVT Crash Deaths, by Age Group (65 and Older)



Source: SC DHEC Vital Statistics, CDC NCHS, 2020

In South Carolina during 2020, the rate of motor vehicle crash deaths for the adults aged 65-74 was 15.2 per 100,000 compared to a lower national rate of 12.0 per 100,000. The rate for adults aged 75-84 was 18.3 per 100,000 compared to the national rate of 15.1 per 100,000. The motor vehicle crash death rate for 85 and older is 28.6 per 100,000, which is much higher than the national rate of 16.7 per 100,000. More of the fatal injuries for adults over the age of 65 involved male occupants, however, more female occupants reported a possible or suspected injury.

### PARTNERSHIPS

CarFit was created in collaboration with the American Automobile Association (AAA), the American Association of Retired Persons (AARP), and the American Occupational Therapy Association (AOTA). CarFit is a community-based educational program that promotes continued safe driving and mobility among older drivers by focusing attention on driver safety.

In collaboration with the AOTA Learning Management System, the SC State Injury Prevention Program had the ability to expand both the number of people trained and increase access to the online CarFit classes. After the virtual training is complete, each new technician is required to attend an in-person CarFit event. Technicians receive hands-on experience and help the driver learn the best fit for their personal vehicle. The program promotes driver safety and helps increase mobility in the community.

### ACCOMPLISHMENTS/ SUCCESES

The Core State Injury Prevention Program within the Division of Injury and Substance Abuse Prevention is expanding the number of CarFit events to target older communities where there has been a higher crash burden. GIS mapping will be used to locate high crash burden roadways from 2016-2020 in relationship to the location of each South Carolina AAA office, the State's Rural Health Offices, and the local Community Recreation Centers. The maps will be used to increase the number of prime event locations for the CarFit program.

In South Carolina, the CarFit program will be promoted in the following counties: Charleston, Greenville, Horry, Lexington, and Florence. At each event, the CarFit technician will partner with a driving rehabilitation specialist to assess the driver's need for adaptive equipment.