

Health Indicators

Motor Vehicle Injuries

Motor vehicle-related injuries are the leading cause of death for people ages 5 to 34 years old in the United States, and the top cause of death for teens nationally.¹ Nearly one in three deaths from vehicle crashes involve an impaired driver. Motor vehicle-related injuries send more than 4 million people to hospital emergency departments every year.

Motor vehicle injuries and fatalities are preventable, however. The use of age-appropriate seat restraints in cars, and helmets and safety gear for motorcyclists reduce the risk of injury or death. It is estimated that child safety seats reduce deaths nationally by 71 percent for infants and 54 percent for toddlers.² Focus areas for further reducing the risk of injury from motor vehicles include teen driver education and alcohol-impaired driving prevention.

How is it measured?

Motor vehicle traffic injuries and fatalities are those which occur on a public trafficway (roadways, shoulders, roadsides, medians) and involve at least one motor vehicle. These injury measures include pedestrians, bicyclists, and other non-motorists involved in the accident. Data regarding motor vehicle traffic crashes, injuries, and deaths are obtained from the Colorado Department of Transportation (CDOT), the Electronic Accident Reporting System, the

National Highway Traffic Safety Administration, and Colorado hospital discharge data. CDOT publishes information on all motor vehicle crashes, including those causing property damage, injury, and fatalities. Crashes are examined for contributing factors such as impaired drivers, occupant protection, inexperienced drivers, and speeding.

Risk factors for injuries, such as seat belt usage, driving while impaired, and riding with someone who is impaired are collected through state-based surveys, including the Behavioral Risk Factor Surveillance System survey of adults and the Youth Risk Behavior Survey of high school students.

How are we doing in El Paso County?

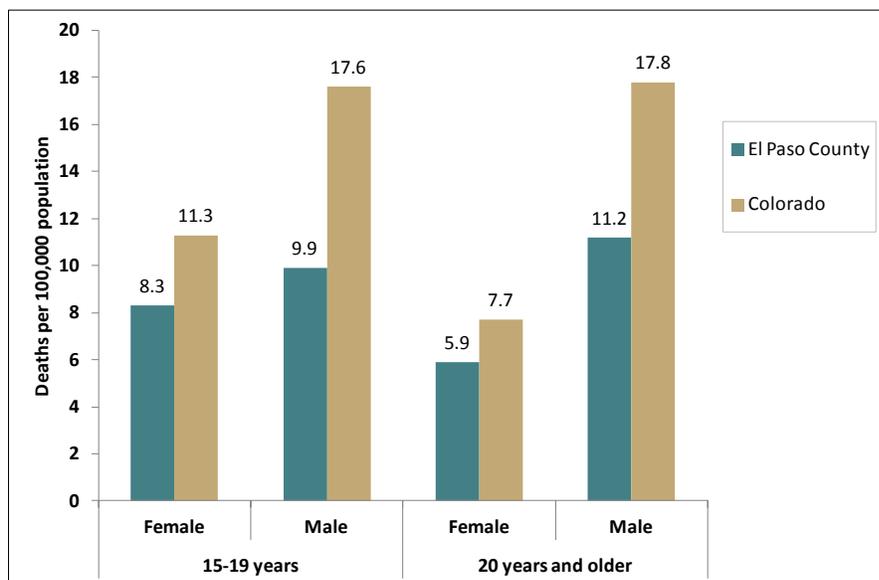
The rate of motor vehicle

traffic injuries resulting in hospitalization in El Paso County declined from 95.6 injuries per 100,000 population in 2000 to 53.7 injuries per 100,000 population in 2010, which was lower than the 2010 state average rate of 58.8 per 100,000.³

The rate of motor vehicle traffic fatalities in El Paso County has declined 53 percent between 2000 and 2010, from 13.7 to 6.5 fatalities per 100,000 population, respectively.⁴ In 2010, there were 8,335 reported traffic crashes in El Paso County of which 37 (less than 1 percent) resulted in at least one fatality.⁵ Among 448 motor vehicle-related deaths in Colorado in 2010, 41 (9 percent) occurred within El Paso County.

Table 1 highlights several characteristics of motor vehicle traffic fatalities in El Paso

Figure 1. Rate of motor vehicle traffic fatalities, by age and sex, 2006 to 2010



County and demonstrates the impact on fatalities of passenger restraint systems, helmet usage, impaired driving, and speeding. For example, nearly two out of five fatalities involved alcohol-impaired drivers, and in three-quarters of motorcycle fatalities either a driver or rider were not wearing a helmet.⁴ Additionally, residents of El Paso County who ride motorcycles are 60 percent more likely than drivers to be involved in an injury crash.⁵ Although overall, 85 percent of vehicle occupants use age-appropriate seat restraints, more than half of passenger vehicle fatalities in El Paso County involved an

unrestrained passenger.^{4,5}

Disparities exist in terms of age and sex when examining motor vehicle traffic fatalities (Figure 1). The fatality rate is higher among teens ages 15 to 19 years old compared to adults 20 years and older (9.1 versus 8.5 per 100,000 population in El Paso County, respectively).⁴ Motor vehicle traffic fatality rates in males remain higher than females, regardless of age.

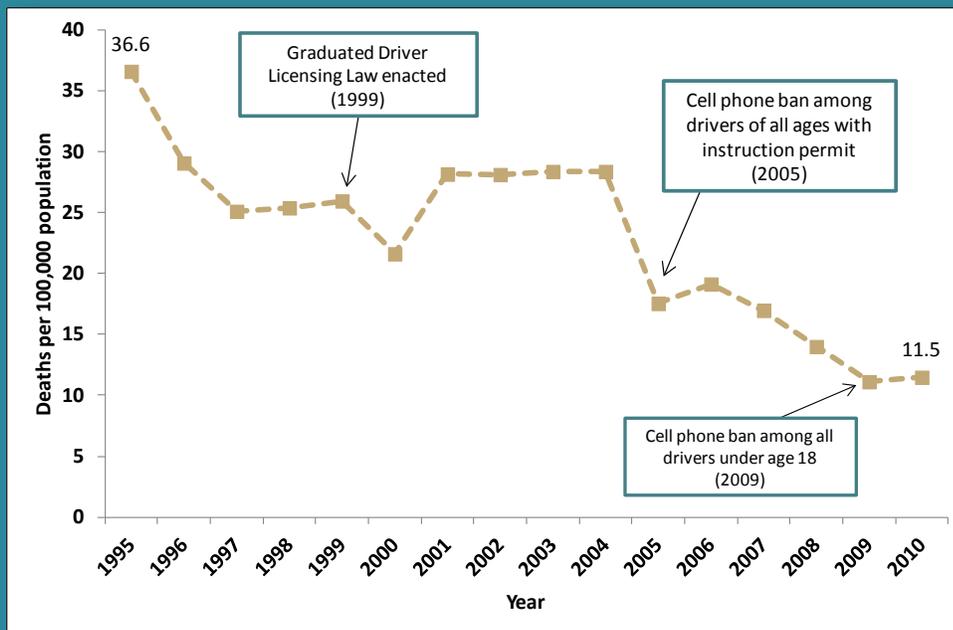
Adolescent driving behaviors may contribute to poor outcomes for this age group. Teens ages 15 to 19 years accounted for 12.2 percent

of motor vehicle fatalities in 2010 (Table 1). Survey data from 2009 shows that nearly 8 percent of Colorado high school students reported driving after consuming alcohol and approximately one in four students admitted to getting in a car with someone they knew to have consumed alcohol.⁶ Since 1999, several state laws have been enacted to promote safety among young drivers including graduated driver licensing and bans on cell phone use (Figure 2).⁷ Concurrently, there has been a 56 percent decrease in motor vehicle fatalities among teens ages 15 to 19 years between 1999 and 2010.⁴ ■

Table 1. Characteristics of motor vehicle traffic fatalities in El Paso County, 2010

Vehicle and driver-related factors	Percent of total fatalities
Occupant in a passenger vehicle (all seat positions)	73.1%
Unrestrained driver or passenger	46.7% of passenger vehicle occupant fatalities
Motorcycle	19.5%
Driver or rider not wearing helmet	75.0% of motorcycle fatalities
Alcohol-impaired driver (BAC = 0.08+)	39.0%
Speeding-related crash	43.9%
Teen fatalities (ages 15-19)	12.2%

Figure 2. Rate of motor vehicle traffic fatalities among adolescents ages 15 to 19 years and enactment of state laws, Colorado 1995 to 2010



¹Centers for Disease Control and Prevention [Internet]. Winnable Battles: Motor Vehicle Injuries. Available from: www.cdc.gov/WinnableBattles/MotorVehicleInjury/index.html.

²U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA) [Internet]. Traffic Safety Facts 2009: Children. Washington (DC): NHTSA; 2009. Available from: www-nrd.nhtsa.dot.gov/pubs/811387.pdf.

³Colorado Department of Public Health and Environment [Internet]. Colorado Health Information Dataset: 2000-2010 Injury Hospitalizations. Available from: www.chd.dphe.state.co.us/cohid/topics.aspx?q=Injury_Hospitalizations.

⁴U.S. Department of Transportation, National Highway Traffic Safety Administration [Internet]. Fatality Analysis Reporting System Encyclopedia: 2000-2010 Fatality Query. Available from: www-fars.nhtsa.dot.gov//QueryTool/QuerySection/SelectYear.aspx.

⁵Colorado Department of Transportation [Internet]. FY 2011 Problem Identification Report. Available from: www.coloradodot.info/programs/safety-data-sources-information/2011%20Problem%20Identification_DRAFT1.pdf/view.

⁶Colorado Department of Public Health and Environment [Internet]. Adolescent Health Data: 2009 Youth Risk Behavior Survey. Available from: www.chd.dphe.state.co.us/topics.aspx?q=Adolescent_Health_Data.

⁷Colorado Revised Statutes [Internet]. Title 42, Article 4. Available from: www.state.co.us/gov_dir/leg_dir/olls/analyses/title42.pdf.