

# Hospitalizations and deaths among Teen Motor Vehicle Occupants

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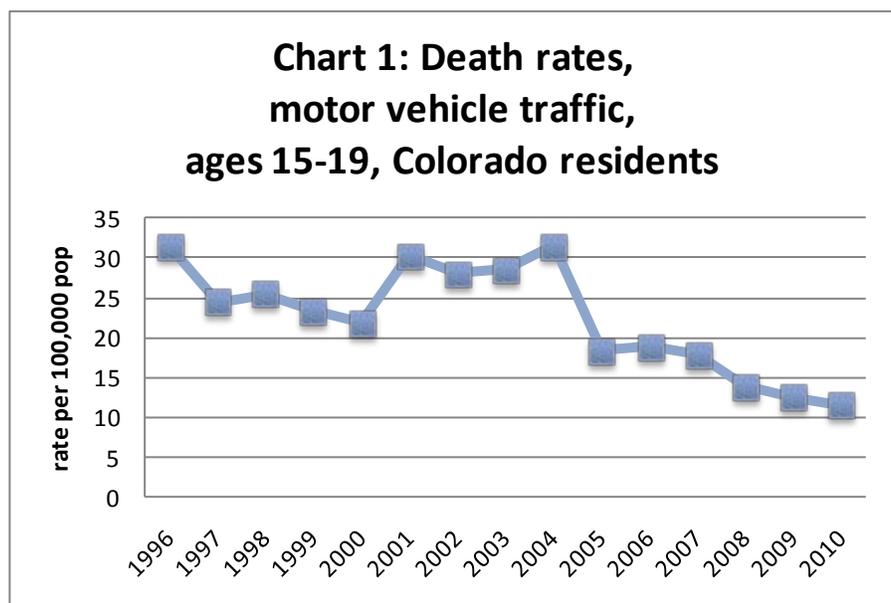
Motor vehicle crashes are the leading cause of death among U.S. teenagers. Per mile driven, crash rates for teen drivers 16 to 19 are four times higher than older drivers.<sup>1</sup> Teen drivers ages 15-20 in Colorado represent six percent of licensed drivers, but account for more than 11 percent of all traffic deaths.<sup>2</sup> In Colorado, 39 percent of all injury deaths (2007-2009) and 28 percent of injury hospitalizations involving 16 to 17-year-olds result from motor vehicle crashes.<sup>3</sup>

Graduated driver licensing (GDL) programs are widely credited with the decline in teen motor vehicle deaths. The provisions of GDL provide young drivers experience under controlled conditions, longer periods of restricted driving, limitations on driving under high-risk conditions (at night, with passengers and other distractions, without seatbelts) and require participation of parents in the learning process for their teens. These provisions address the teen factors of inexperience in driving and risky driving.<sup>4</sup> Colorado's graduated driver licensing provisions first went into effect July 1, 1999, with additional passenger and cell phone use restrictions added in 2005 (see [www.coteedriver.com](http://www.coteedriver.com) for more details on the law). Evaluations of GDL programs in the U.S. have found a 20 to 40 percent reduction in crash risk for the young drivers.<sup>4</sup>

### Teen Motor Vehicle Traffic Deaths<sup>3</sup>

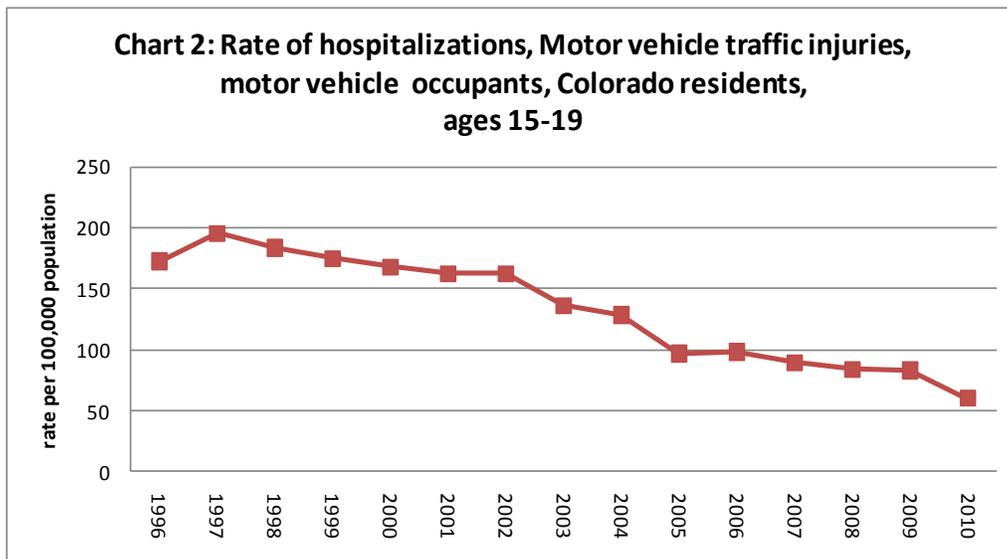
The rate of 15- to 19-year-olds killed in motor vehicle traffic crashes in Colorado fell approximately 60 percent from the rate of 31.6 deaths per 100,000 in 1996 to 11.5 deaths per 100,000 in 2010. Specifically, the rates for 2006-2010 (additional GDL restrictions and education in place) are significantly lower than rates for 1996-2000 (pre GDL) or the slightly higher rates in the GDL transition years of 2001-2005.

Year	# of deaths
1996	87
1997	69
1998	74
1999	70
2000	67
2001	99
2002	94
2003	96
2004	106
2005	62
2006	64
2007	61
2008	48
2009	43
2010	39



## Teen Motor Vehicle Occupant Hospitalizations<sup>3</sup>

Teen occupant (driver or passenger) hospitalization rates have been decreasing since 1997. The teen hospitalization rate in 1997 was 195.3 per 100,000 compared to a rate of 60.4 per 100,000 in 2010.



## Teen Passengers

The presence of teen passengers increases the crash risk for teen drivers. The risk increases with the number of teen passengers present.<sup>1</sup> In the U.S., sixty-three percent of teenage passenger deaths in 2008 were in vehicles driven by a teen.<sup>2</sup> In Colorado in 2008, 25 percent of teens (ages 15-20) who died in a motor vehicle crash were riding with teen drivers ages 15-17.<sup>2</sup>

## Seatbelt Use

Seatbelts are known to be effective in reducing the risk of fatal injury for adults. Compared to other age groups, teens generally have the lowest rate of seatbelt use.<sup>1</sup> In Colorado, the rate of seatbelt use for 16 to 20-year-olds has increased from 79.2 percent in 2008 to 82.2 percent in 2010.<sup>5</sup> The teen seatbelt use rate is now close to the overall adult seatbelt use in 2010 of 82.9 percent.<sup>6</sup> However, seventy-one percent of Colorado youth ages 15-17 who died in motor vehicle occupant crashes were wearing seatbelts.<sup>7</sup>

## Additional Colorado teen traffic safety statistics

- 15-17-year-old teenage motor vehicle driver deaths in Colorado for 2007-2009 occurred most frequently between 3 pm and 10 pm (47%) as compared to 10pm and 7 am (31%) or during the day from 7 am to 3 pm (22%).<sup>8</sup>
- In 2008, 26 percent of Colorado teen motor vehicle fatalities were alcohol-related.<sup>9</sup>

## References

<sup>1</sup> Centers for Disease Control and Prevention. (2010). Teen Drivers: Fact Sheet. Retrieved July 26, 2011, from [www.cdc.gov/motorvehiclesafety/teen\\_drivers/teen\\_drivers\\_factsheet.html](http://www.cdc.gov/motorvehiclesafety/teen_drivers/teen_drivers_factsheet.html)

<sup>2</sup> Rocky Mountain Insurance information Association. (2010) Teen Driving Statistics. Retrieved July 26, 2011, from [www.rmiaa.org/auto/teens/Teen\\_Driving\\_Statistics.asp](http://www.rmiaa.org/auto/teens/Teen_Driving_Statistics.asp)

<sup>3</sup> Colorado Department of Public Health and Environment. (2011). Colorado Health Information Dataset [online]. Available from <http://www.cdph.state.co.us/cohid/index.html>

<sup>4</sup> Centers for Disease Control and Prevention. (2010). Drivers Aged 16 or 17 Years Involved in Fatal Crashes—United States, 2004-2008. MMWR:1329-1334.59(41)

<sup>5</sup> Colorado Department of Transportation. (2010). 2010 State of Colorado Teen Seat Belt Survey. Retrieved July 29, 2011 from <http://www.coloradodot.info/library/surveys/2010%20CDOT%20Teen%20FinalReport.pdf/view>

<sup>6</sup> National Highway Traffic Safety Administration. (2011). Seat Belt Use in 2010—Use Rates in the States and Territories. Retrieved July 29, 2011, from <http://www-nrd.nhtsa.dot.gov/Pubs/811493.PDF>

<sup>7</sup> Colorado Department of Public Health and Environment. (2010) Colorado Child Fatality Prevention System; Annual Report 2010.

<sup>8</sup> National Highway Traffic Safety Administration. (2011). Fatality Analysis Reporting System (FARS) [online]. Available from <http://www-fars.nhtsa.dot.gov>.

<sup>9</sup> Fatal Analysis Reporting System (FARS). <http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectFields.aspx>.