

# Community Health Assessment Quarterly

Volume 5, Issue 2

Fall 2010

## Motor Vehicle Injury Prevention

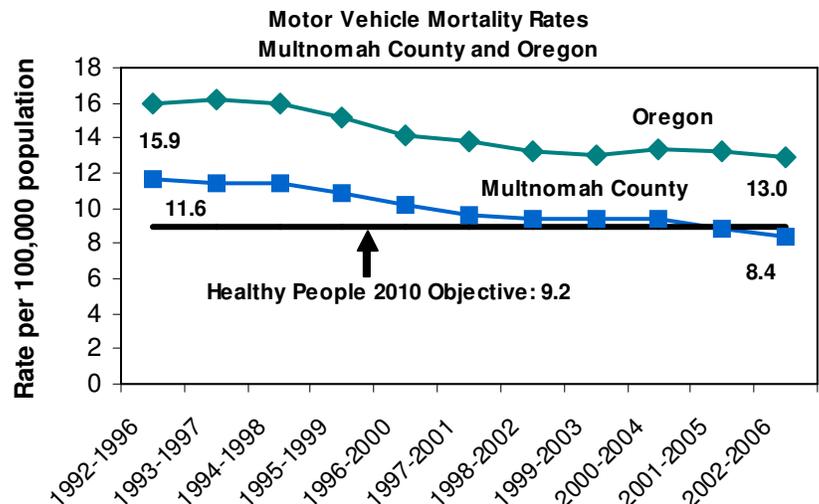


Motor vehicle injury prevention was recently named as a public health issue that is a “winnable battle” by the Centers for Disease Control and Prevention (CDC). In the United States, motor vehicle–related injuries are the leading cause of death for people ages 1–34, and nearly 5 million people sustain injuries that require an emergency department visit.<sup>1</sup> Youth age 16 to 19 have the highest risk of motor vehicle crashes compared with any other age group, followed by older adults age 65+. In the United States, the crash rate per mile driven for 16-19 year-olds is four times the risk for older drivers.<sup>2</sup>

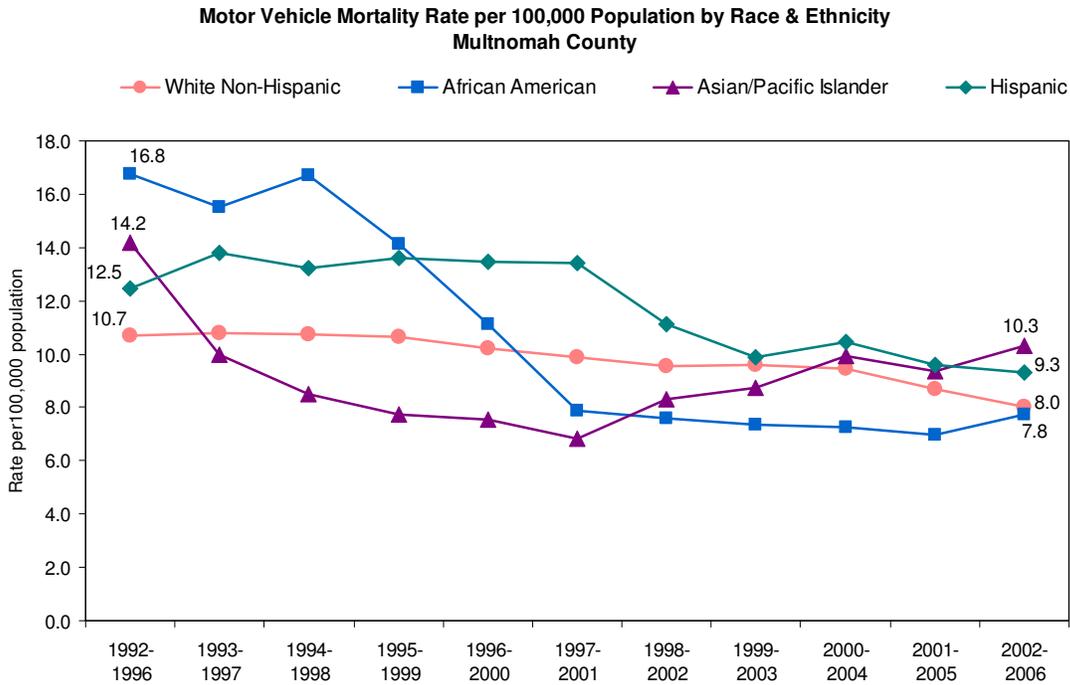
### *Motor Vehicle Crash Mortality*

Overall motor vehicle mortality rates have declined in Multnomah County. During the 2002 to 2006 time period, Multnomah County had a rate of 8.4 deaths per 100,000 population, which met the Healthy People 2010 objective of 9.2 deaths per 100,000 population.

Males have motor vehicle crash related fatality rates that are higher than females. In Multnomah County the motor vehicle fatality rate among males is two and a half times the rate for females. In the 2002 to 2006 time period, males had a rate of 12.6 fatalities per 100,000 males compared to 5.0 per 100,000 females.

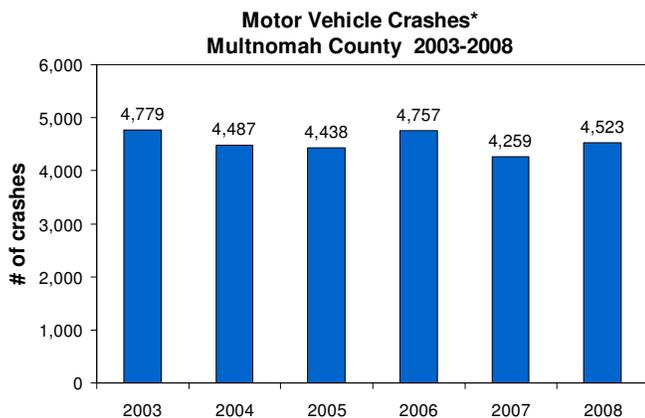


Source: Oregon Department of Human Services, Center for Health Statistics



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Motor vehicle fatality rates have declined for White Non-Hispanics, African Americans, Asians and Hispanics between 1992 and 2006. There were too few American Indian motor vehicle fatalities to calculate rates. The number of motor vehicle crash fatalities also declined from 56 in 2003 to 27 in 2008. In addition, the total number of motor vehicle crashes in Multnomah County declined from 2003 to 2008. This decline in both injury crashes and fatalities has also been seen in Oregon the United States.



Source: Oregon Department of Transportation  
\*Includes fatal and non-fatal injury crashes; does not include property damage only

### Teen Drivers

Motor vehicle crashes are the leading cause of death for U.S. teens, accounting for more than one in three deaths in this age group. Among teen drivers, those at especially high risk for motor vehicle crashes are males, teens driving with teen passengers, and teens who have recently received their license. Teens buckle up far less frequently than adults do. Despite efforts aimed at increasing belt use among teens, observed seat belt use among U.S. teens and young adults (16 to 24 years old) stood at 76% in 2006 – the lowest of any age group. In 2006 more than half (58%) of young people 16 to 20 years old involved in fatal motor vehicle crashes were not wearing seatbelts.<sup>4</sup>

Oregon enacted the Graduated Driver’s License (GDL) program in March 2000, and it includes both a nighttime driving restriction and passenger restrictions for the first year, in addition to required hours of supervised driving. The program has been shown to reduce teen crashes, convictions and license suspensions.



### ***Distracted Driving***

There is a growing concern over distracted driving, especially among teenagers. Distracted driving is any non-driving activity a person engages in while operating a motor vehicle including talking on the phone, eating or drinking, adjusting the radio, or tending to a child in the back seat. While the overall total number of vehicle crashes decreased from 2004 to 2008 nationally, the percent of crashes that were due to distracted driving increased from 11% to 16% during the same time period.<sup>5</sup> Inexperienced drivers under 20 years old have the highest proportion of distraction-related fatal crashes.<sup>6</sup> The impairment associated with using a cell phone while driving can be as serious as those associated with driving while intoxicated.<sup>7</sup> Oregon passed a law in January that prohibits driving while talking or texting on a hand-held cell phone.

### ***Alcohol Related Crashes***

In 2008, 11,773 people were killed in alcohol-impaired driving crashes, accounting for nearly one-third (32%) of all traffic-related deaths in the United States.<sup>8</sup> In Multnomah County, drinking was a contributing factor in 44% of all motor vehicle fatalities in 2008.<sup>9</sup> Of all adult drivers in the U.S., older drivers (age 65 and older) involved in fatal crashes had the lowest proportion of all age groups with a blood alcohol concentration of .08 or greater. For an average 180 pound man, this would be 4 drinks consumed in an hour; for a 137 pound woman this would be 3 drinks consumed in an hour.

### ***Older Drivers***

Age-related factors such as visual deterioration, declines in cognitive or motor skills, and increased use of multiple medications due to the onset of diseases may impair driving ability. In Oregon, 12.5% of all motor vehicle fatalities were among drivers age 65 and older in 2008.<sup>10</sup> Per mile traveled, fatal crash rates increase starting at age 75 and increase markedly after age 80. This is largely due to increased susceptibility to injury and medical complications among older drivers.

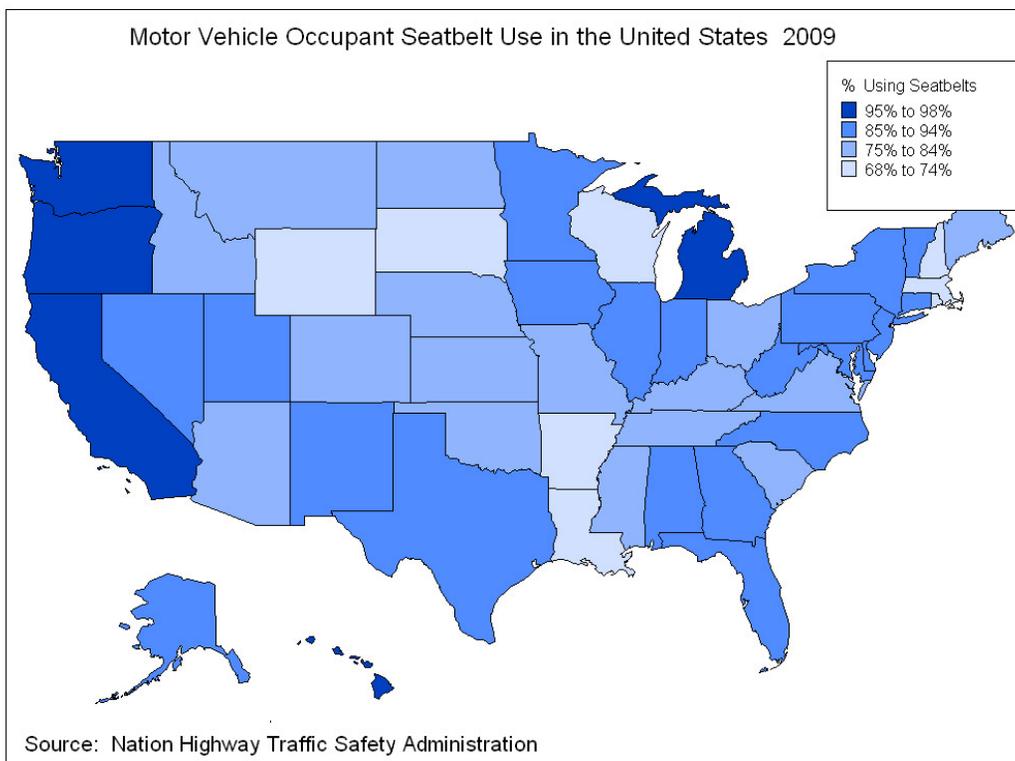
### ***CDC Recommendations***

The CDC's Task Force on Community Preventive Services recommends 1) increasing the use of child safety seats, 2) increasing the use of seat belts and 3) reducing alcohol-impaired driving.

Oregon has specific laws requiring the use of child safety seats and booster seats. Although not required by Oregon law, the National Highway Traffic Safety Administration recommends that children under age thirteen always ride in the back seat. This reduces the risk of motor vehicle injury by 37% for this age group.<sup>11</sup> Child safety seats are available at reduced cost for income eligible families through the Alliance for Community Traffic Safety at [ACTS Oregon](#).

Seat belt use across the U.S. varies widely from state to state, with a national rate of 84%. Oregon has the third highest rate among the states, with 96.6% of vehicle occupants using seat belts. A 2008 national study by the National Highway Traffic Safety Administration revealed that seat belt use was lowest among 16 to 24 year olds. African Americans also had lower rates when compared to other races, and males had lower rates of seat belt use than females. Oregon has a primary seat belt law, meaning that an officer can issue a ticket for not wearing a seatbelt, without any other traffic offense having taken place.

Public policy solutions to reduce impaired driving include requiring ignition interlock



devices for all individuals convicted of driving with blood alcohol levels over the legal limit. Other suggestions include mandating the use of sobriety checkpoints and supporting policies that prevent excessive alcohol consumption such as compliance checks and responsible beverage server training.

Policymakers can play an important role in reducing the human and economic toll of motor vehicle-related injuries by supporting prevention policies that have been shown to save lives and reduce costs.

#### References:

- <sup>1</sup> Centers for Disease Control and Prevention, Injury Prevention & Control: Motor Vehicle Safety.
- <sup>2</sup> Insurance Institute for Highway Safety (IIHS). *Fatality Facts: Teenagers 2008*.
- <sup>3</sup> Multiple Medications and Vehicle Crashes: Analysis of Databases, National Highway Traffic Safety Administration. May 2008.
- <sup>4</sup> National Highway Traffic Safety Administration *Teen Drivers, Graduated Driver Licensing*.
- <sup>5</sup> The Governors Highway Safety Association. *Curbing Distracted Driving; 2010 Survey of States Safety Programs*. June, 2010. [www.ghsa.org](http://www.ghsa.org)

<sup>6</sup> National Highway Traffic Safety Administration. Policy Statement on Distracted Driving.

<sup>7</sup> Strayer, D., Frank A. Drews, F., and Crouch, D. (2005) *A Comparison of the Cell Phone Driver and the Drunk Driver*. University of Utah, Salt Lake City, Utah.

<sup>8</sup> National Highway Traffic Safety Administration (NHTSA). *Traffic Safety Facts 2008: Alcohol-Impaired Driving*. Washington (DC): NHTSA; 2009.

<sup>9</sup> Oregon Department of Transportation. *Crash Analysis and Reporting, 2008 Crash Summary Book*.

<sup>10</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts 2008 Data: The Older Population*.

<sup>11</sup> Oregon Department of Transportation. *Occupant Protection Program. Safety Belt and Child Seat Laws*.

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#### Community Health Assessment

**Quarterly** is published four times per year, by Multnomah County Health Department Health Assessment and Evaluation Office 426 SW Stark St 9<sup>th</sup> Floor, Portland OR 97204. If you have questions or comments, please contact Diane McBride by email at [diane.e.mcbride@co.multnomah.or.us](mailto:diane.e.mcbride@co.multnomah.or.us) or by phone at 503-988-3663 x26567. This publication is available **online** at: [http://web.multco.us/sites/default/files/documents/fall2010\\_motorvehicle.pdf](http://web.multco.us/sites/default/files/documents/fall2010_motorvehicle.pdf)