Protecting People from Motor Vehicle-related Deaths and Injuries:

Keeping People Safe on the Road – Every Day

September 2014
Preventing motor vehicle injuries and deaths is a CDC “Winnable Battle”

- Tobacco use
- Nutrition/obesity (including food safety)
- HIV
- Healthcare-associated infections
- Motor vehicle crashes
- Teen pregnancy
Crashes are the second leading cause of injury death

- Motor vehicle crashes are the leading cause of death in the first three decades of American’s lives
- Motor vehicle-related injuries send more than 3.1 million people to hospital emergency departments every year
- Motor vehicle crashes killed over 33,500 people in 2012 – that’s 90 people every day


Motor vehicle crashes are the leading cause of death for children and young adults (ages 5-24)

Motor vehicle crash deaths

Unintentional injuries: 7,713
Suicide: 5,109
Homicide: 4,837
Cancers: 2,471

Number of deaths in 2011

Preventing crash-related deaths involves three priority areas:

- Seat belts and child passenger safety
- Teen driver safety
- Alcohol-impaired driving
Seat belts save thousands of lives each year

- Seat belts saved an estimated 12,174 lives in 2012
- Observed seat belt use still varies widely
  - From 66.5% in South Dakota to 96.9% in Washington state

If everyone had worn a seat belt on every trip in 2012, more than 3,031 additional lives would have been saved.


Primary enforcement seat belt laws increase seat belt use

- **What are they?**
  - Primary enforcement seat belt laws allow law enforcement to pull over a motorist solely for not wearing a seat belt.

- **Do they work?**
  - Yes – states with primary enforcement seat belt laws achieve significantly higher seat belt use than secondary law states.

In 2014, seventeen states still did not have a primary enforcement law.


Beck LF, West BA. Vital Signs: Nonfatal, Motor Vehicle – Occupant Injuries (2009) and Seat Belt Use (2008) Among Adults—United States. Centers for Disease Control and Prevention. MMWR 59(51); 1691–1686. 2011. [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5951a3.htm?s_cid=mm5951a3_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5951a3.htm?s_cid=mm5951a3_w)

Child passenger restraints prevent serious injury and death

- Motor vehicle crashes are a leading cause of death for children
- Child safety seat use reduces the risk for death to infants (aged <1 year) by 71%; and by 54% for toddlers (aged 1-4 years)
- Among children under age 5, an estimated 3,573 lives were saved by child safety seat use from 2002-2012

CDC’s Injury Center shares evidence on seat belts and child restraints

Seat Belts
- CDC is providing scientific expertise and consultation, and engaging with stakeholders to increase seat belt use in states

Child restraints
- CDC Vital Signs on child passenger safety
  - http://www.cdc.gov/vitalsigns/childpassengersafety
  - Describes the issue and highlights what can be done to prevent injuries and deaths among children
TEEN DRIVER SAFETY
Motor vehicle crashes are the #1 killer of teens

- Motor vehicle crashes are the leading cause of death for U.S. teens
  - Almost 2,800 teens ages 15-19 were killed in crashes in 2011

- Per mile driven, teen drivers aged 16-19 are three times more likely to be in a fatal crash than drivers aged 20 and older

- Among teens who died in crashes ~60% were unrestrained

Causes of Death for Teens (ages 15-19, 2011)

- Motor Vehicle Injuries 26%
- Suicide 17%
- Homicide 16%
- Other Unintentional Injuries 7%
- Cancer 6%
- Poisoning 7%
- Heart Disease 3%
- All Other Causes 18%
- Motor vehicle crashes are the #1 killer of teens


Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2011 on CDC WONDER Online Database, released 2014.

Insurance Institute for Highway Safety. Teenagers http://www.iihs.org/iihs/topics/t/teenagers/topicoverview
Graduated Driver Licensing (GDL) saves teen lives

- **What is GDL?**
  - GDL gives teens driving privileges in stages, helping new drivers gain experience in low-risk conditions

- **Does it work?**
  - GDL reduces motor vehicle deaths and injuries by about 30% among 16 year old drivers

- **All 50 states and DC have GDL**
  - However, some states’ GDL lack components that make GDL most effective

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The most comprehensive GDL systems include 5 components

1) Minimum age of 16 years for a learner’s permit,
2) Mandatory holding period of at least twelve months for a learner’s permit,
3) Restrictions against nighttime driving between 10:00 pm and 5:00 am (or longer),
4) Limit of zero or one for the number of young passengers without adult supervision, and
5) Minimum age of 18 years for full licensure
ALCOHOL-IMPAIRED DRIVING
Nearly 1 in 3 crash deaths involve an impaired driver

- In 2012, 10,322 people died in alcohol-impaired crashes.
- In 2012, 20% of the motor vehicle deaths among children aged <15 occurred in alcohol-impaired driving crashes.

In fatal crashes in 2012, the highest percentage of drivers with BACs $\geq 0.08$ g/dL were aged 21-24 (32%) followed by 25-34 (29%) and 35-44 (25%).

Sobriety checkpoints reduce alcohol-impaired driving

- **What are sobriety checkpoints?**
  - At sobriety checkpoints, law enforcement officers stop vehicles systematically to assess the driver’s level of alcohol impairment

- **Do they work?**
  - Yes – checkpoints reduce impaired driving crashes and deaths by a median of 9%

- **What can be done?**
  - Local and state law enforcement can use sobriety checkpoints to improve enforcement and deter impaired driving

Zero tolerance laws reduce teen drinking and driving crashes

- **What are zero tolerance laws?**
  - Zero tolerance laws set a lower legal blood alcohol content (BAC), usually between any detectable BAC and 0.02%, for drivers under 21

- **Do they work?**
  - Yes – zero tolerance laws lower fatal crash rates between 9 to 24%

- **What can be done?**
  - States can actively enforce zero tolerance laws and maintain the current minimum legal drinking age at 21
Ignition interlocks keep DUI offenders from offending again

- **What are ignition interlocks?**
  - Ignition interlocks are devices installed in vehicles for a period of time following a DUI conviction to prevent people from driving after consuming alcohol.

- **Do they work?**
  - Yes – use of interlocks reduces the re-arrest rate of convicted DUI offenders by about 70% during the time they are installed.

- **What can be done?**
  - States can implement ignition interlocks for everyone convicted of a DUI, even on a first offense.
To support efforts to keep impaired drivers off the road, CDC’s Injury Center will

- Release the “Evaluation of the State Ignition Interlock Programs”
- In partnership with NHTSA, finalize and disseminate “Increasing Alcohol Ignition Interlock Use Promising Practices for States”
For More Information, Visit…

- **Motor Vehicle Safety:**
  www.cdc.gov/motorvehiclesafety

- **Seat Belts:**
  www.cdc.gov/motorvehiclesafety/SeatBelts

- **Child Passenger Safety:**
  www.cdc.gov/Motorvehiclesafety/Child_Passenger_Safety

- **Teen Driving:**
  www.cdc.gov/Motorvehiclesafety/Teen_Drivers

- **Alcohol-Impaired Driving:**
  www.cdc.gov/Motorvehiclesafety/Impaired_Driving
Motor Vehicle-related Deaths and Injuries Are Preventable

For more information please contact Centers for Disease Control and Prevention

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.