



Rural Roadway Safety



Train, sprayer collision kills 1

More Top News

The National Education Center for Agricultural Safety



“an agricultural safety and health partnership between the National Safety Council and Northeast Iowa Community College”



Your Safety & Health Leader for 90 Years

Mission:

The training center is dedicated to reducing the level of injuries, preventable illnesses, and fatalities among farmers, ranchers, their families and employees.



Rural Roadway Safety

- Iowa High School Drivers Education Instructors
- 680 surveys mailed
- 205 responses



Results

- 179 males
- 26 female
- 18.8 years average time teaching DE



Demographics

- 67% were 50 years old or older
 - 25% were 60 or older
 - 5 times as many instructors in the 70 plus range and in the 30 and under
 - 56% teach one course per year
 - 16% teach more than 4 courses per year
-

Top five hazards

- Speed
- Cell phone usage
- Passengers
- Soft Surfaces
- Alcohol/ night driving





Surprise

- **Some instructors reported not being able to drive on gravel**



National Farm Safety and Health Week



- September 20-26, 2009
 - Theme:
Rural Roadway Safety
Alert, Aware & Alive
-

National Farm Safety and Health Week



- 2008 circulation
30,383,122

Ladies and gentlemen, this is the captain speaking. Firstly, I'd like to thank you for choosing to fly Mandarin Airlines. As we taxi out to the runway please make yourself comfortable... and for those of you sitting on the right side of the plane... please look to your LEFT!





Highway Safety

205 million drivers (+1%)
255 million vehicles (+2%)
2,996 million vehicle-miles travel (-1%)
– 14,700 miles/driver

2009 Injury Facts (2007 data)





Highway Safety

43,100 deaths

2.3 million disabling injuries

\$257.7 billion in costs to society





Highway Safety Issues

Alcohol

- 21 year drinking age in all states and D.C.

0.08 BAC threshold in all states and D.C.

- Zero tolerance for minors in all states and D.C.
- 12,998 alcohol-related deaths in 2007
- 32% of deaths



Highway Safety Issues

Occupant protection

- 49 states & D.C. have mandatory use laws
- 83% belt use overall
- 87% belt use in “primary” enforcement states
- >15,627 deaths of unrestrained occupants in 2007





Highway Safety Issues

Young drivers

- 15-20 years old
- 6.7% of licensed drivers
- 12.1% of drivers in fatal crashes
- >6,552 deaths with young driver involved
- 48 states and D.C. have some form of GDL



Highway Safety Issues

Distracted driving

- 7.9% of fatal crashes in 2006
- Many kinds of distractions





Scope of the Issue

Inattention involved in 78% of all observed crashes and 66% of all crash events (crash / near crash). (*Virginia Tech*)

6% of drivers are using handheld cell phones at any one time. (*NHTSA*)

236 million cell phone subscribers in the U.S. (*CTIA, May 2007*)



Scope of the Issue

73% talked on cell phones while driving and 19% admitted text messaging while driving. (*Nationwide Insurance*)

2/3 of teens admit to text messaging while driving; 16% of all cell phone users. (*Zogby*)



Measuring the Risk

Relative risk of cell phone use is similar to the hazard associated with driving with a BAC of .08. (*Redelmeier & Tibshirani*)

Slower reaction times caused by cell phone use are comparable to that of a .08 BAC. (*Strayer*)



Measuring the Risk

In an observational study, 75% of cell phone users committed a traffic violation. *(Strayer)*

Cell phone users are 4 times as likely to be involved in injury crashes.
(Insurance Institute for Highway Safety)

Simulator study showed cell phone users were 5 times more likely to be in a crash. *(Strayer)*



Effects on Driving





Effects on Driving

It is well established that cell-phone usage significantly impairs driving performance.

“Inattention blindness” – looking but not seeing. (*James, Neisser, Simmons*)

Drivers talking on a cell phone look but fail to see up to half of the information in the driving environment.



Effects on Driving

“Dual-task Interference” – Active engagement in conversation raises the impairment.

Attention is withdrawn from the processing of the information in the driving environment necessary for safe operation of the vehicle.

Impairments occur from both hand-held and hands-free units.



Cell Phones vs. Passenger Conversations

Passengers provide collaborative problem-solving, shared situation awareness and active support of the driver by the passenger. (Strayer)

A front seat passenger reduces the risk of a crash to 38% of that of a cell phone conversation. (Virginia Tech)



Hand-Held vs. Hands Free

No difference in the interference from a hands-free or hand-held conversation. (Strayer)

- Dialing increases missed signals, reduces reaction time, and increases mental workload.
- Conversing is less distracting, but endures much longer, which leads to higher crash involvement.



Other Factors

Significant factors in the magnitude of the distraction:

- Content of the conversation
- Age of the driver
- Conditions outside the vehicle.





Other Factors

Multiple tasks or distractions are the most demanding.

- Interaction with music or navigation systems
- High speed
- Following another vehicle



Text-Messaging: $drv + txt = :($

9 out of 10 people believe that text messaging while driving is dangerous and distracting. (Harris Interactive & Pinger)

91% of American adults believe that those who text message while driving are as dangerous as those who have had a couple alcoholic drinks. (Harris Interactive & Pinger)

Almost 80% of crashes and 65% of near misses occur within three seconds of some form of driver distraction. (NHTSA)



www.distracteddriving.nsc.org

