



# The Dangers of Distracted Driving

## Hands-Free Isn't Risk-Free

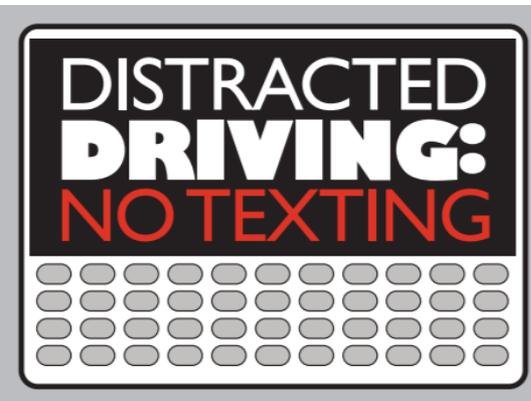
March 6, 2017

### Presenter

Alan Phillips, Director, NASA Safety Center

### Presenter Organization

NASA Safety Center



# Technology and Distracted Driving

- As a society, we have become more and more dependent on technology
- This reliance on technology, especially cell phones, has affected how we communicate, and therefore our relationships
  - Belief that we *need* to respond immediately
  - Feeling that it is rude to not respond right away
- Cell phone use while driving has increased
- Often we address the risks associated with phone use while driving by prohibiting hand-held devices, but **hands-free isn't risk-free**
- A culture change is needed



# State Laws and NASA Policy

- Forty-six states, D.C., Puerto Rico, Guam, and the U.S. Virgin Islands ban texting for all drivers
- The Occupational Safety and Health Administration as well as the Official U.S. Government Website for Distracted Driving recommend having a workplace policy for distracted driving

- NASA's policy, **NPR 8715.3C**, states:  
"3.2.2.1 Operators of motor vehicles on NASA property or operating a NASA vehicle both on and off NASA property shall...

"c. Not use hand-held communication devices while the vehicle is [in] motion except for emergency, security, and fire vehicles during official operations (Requirement).

*"Note: This includes cell phones, UHF radios, or other hand-held wireless communication devices. When there are two individuals traveling in an emergency, security, or fire vehicle during official operations, the passenger should be the person to use the hand-held communication device."*



# Facing the Facts

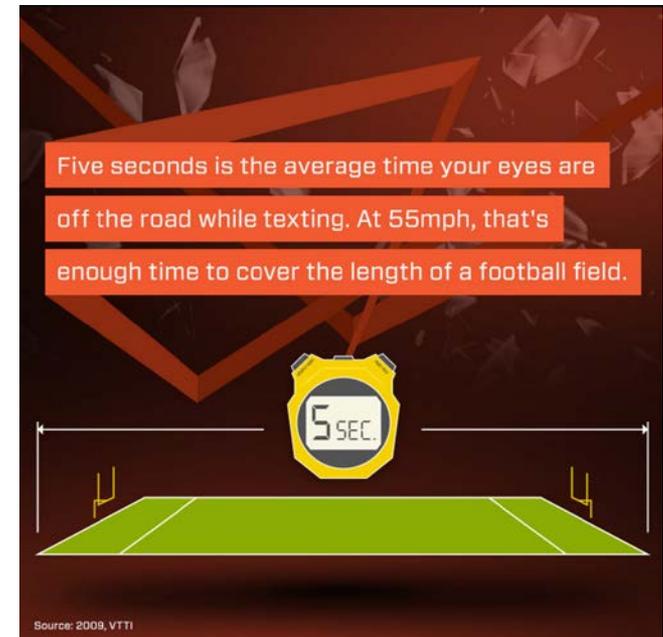
- According to the National Safety Council:
  - Driver error accounts for 94 percent of car crashes
  - At any moment, 7 percent of drivers are using their cell phones
  - The brain can toggle between tasks, but not do two things at once
    - Activity in the part of the brain that processes moving images decreases up to 1/3 when listening to talking on the phone
    - Drivers can miss up to 50 percent of things out the windshield when talking on the phone
  - Laws tend to prohibit hand-held devices, but hands-free is not risk-free
    - Hands-free devices are still a distraction
    - The seemingly harmless activity of talking actually reduces what we see or process when driving
    - Drivers need eyes on the road, hands on the wheel, AND mind on driving
  - Voice-to-text is more distracting than typing
  - Cell phone conversations are more distracting than conversations with passengers
    - Passengers are another set of eyes, can recognize when traffic is challenging and stop talking, and are able to spot and point out driving hazards



Fatal car crash due to distracted driving, featured in the U.S. Department of Transportation National Highway Traffic Safety Administration video "Tyler's Story."

# Cell Phones and Driving

- Reaction time is delayed for a driver talking on a cell phone as much as it is for a driver who is legally drunk
- With each additional 1 million text messages, fatalities from distracted driving rose more than 75 percent
- Studies show that drivers who send or receive text messages focus their attention away from the road for an average of 4.6 seconds
  - At 55 miles per hour, this is equivalent to driving the length of a football field
- According to a study by the Virginia Tech Transportation Institute, the likelihood of a crash or near-crash event (vs. non-distracted driving) when:
  - Talking or listening to a cell phone is 1.3 times more likely (based on light vehicles or cars)
  - Dialing a cellphone is 2.8 times more likely (based on light vehicles or cars)
  - Texting while driving is 23.2 times more likely (based on heavy vehicles or trucks)



# Tips for Safer Habits

- What we can do
  - Set expectations with friends, family, and colleagues for how quickly they can expect a response
  - Speak up when others use their phone while driving
  - Put your phone out of reach when driving or turn it off
  - Let calls go to voicemail—your recording can include language indicating you are unable to answer right now
  - Remember that using a hands-free device is still a distraction
  - Pull over if you need to call or text someone before arriving at your destination
- Remember: Those who care about you would prefer you be safe than respond immediately



The NASA Safety Center highlights distracted driving in its Transportation Safety video.

# Videos

Close to Home | It Can Wait. AT&T.

<https://www.youtube.com/watch?v=OVnRcIXEqaU>.

Accessed Feb. 28, 2017.

Distracted Driving. AAA Foundation for Traffic Safety.

<https://www.aaafoundation.org/distracted-driving>.

Accessed March 2, 2017.

The Last Text. AT&T.

<https://www.youtube.com/watch?v=AZVc9XSH7pA>.

Accessed Feb. 28, 2017.

# References

Hands-free is not Risk-Free. National Safety Council.  
<http://www.nsc.org/learn/NSC-Initiatives/Pages/distracted-driving-hands-free-is-not-risk-free-infographic.aspx>.  
Accessed Feb. 14, 2017.

New data from Virginia Tech Transportation Institute provides insight into cell phone use and driving distraction.  
<http://vtnews.vt.edu/articles/2009/07/2009-571.html>.  
Accessed Feb. 14, 2017.

