

DISTRACTED DRIVING IS IMPAIRED DRIVING

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If this were your company, What would you do?



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Types of Driver Distractions

Visual – Eyes off road

Most are for short durations of 1-2 secs (billboards, dashboard glances, scenery). Low crash risk of 0-1.5x.

Mechanical – Hand off wheel

Most do not significantly affect driving (eating, drinking, tuning radio). Low crash risk of 0-1.6x.

Combinations of Visual & Mechanical

Moderately increased risk (handling or retrieving object, such as CD, mobile device, personal grooming, applying makeup). Crash risk of 0-3.8x.



Cell Phones Are Higher Risk

- Epidemiological studies define cell phone use while driving as a 4x crash risk.
- A meta-analysis of 33 experimental studies found effects in reaction time, speed, headway and lateral lane position.
- The slower reaction times caused by cell phone use are comparable to those of a driver with a .08 BAC.

Why Are Cell Phones Higher Risk?

Cognitive Distraction – Mind off driving

Brain cannot multitask; instead the brain gets overloaded by two competing tasks and switches from driving to talking.

Often exhibited through inattention blindness and tunnel vision, evidenced by decrements in speed, headway and response times.

Can impair driving for long periods.



Inattention Blindness



What a driver in a simulator saw when not using a phone.



What the same driver saw while on a phone conversation.

Inattention Blindness

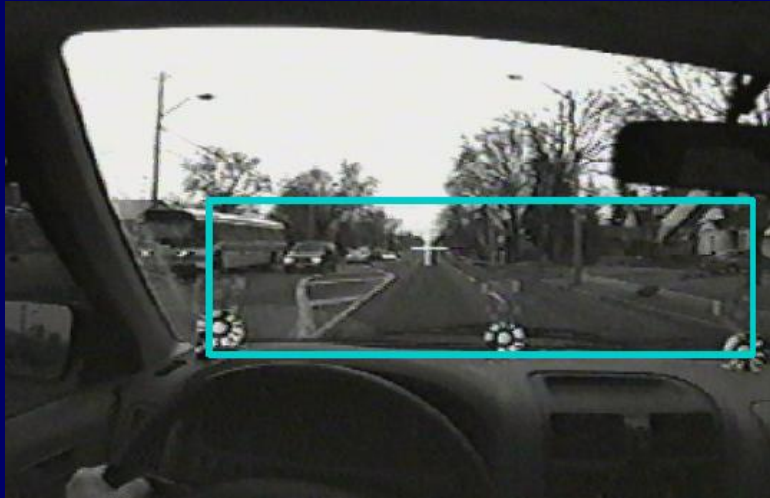


What a driver in a simulator saw when not using a phone.

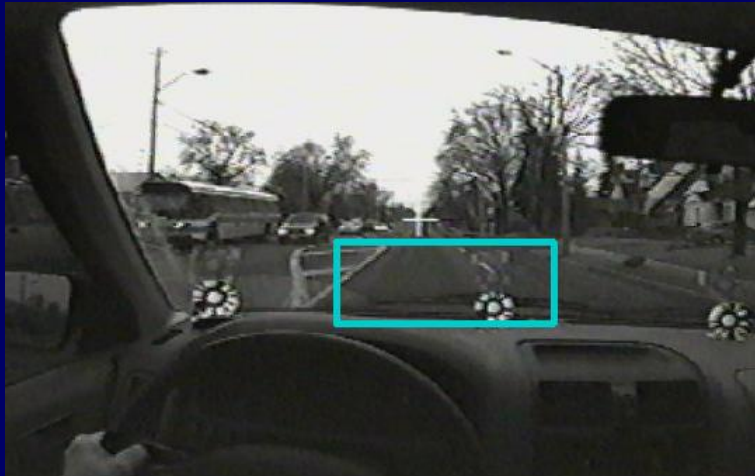


What the same driver saw while on a phone conversation.

Tunnel Vision



Frame of vision of drivers not using a phone.



Frame of vision of same drivers during phone conversations.

Do Hands-Free Devices Reduce The Risk?

- More than 30 studies reported substantial negative effects of cell phone use on driving for hands-free and hand-held phones.
- Effects in reaction time, speed, headway and lateral lane position, for hand-held and hands-free phones.
- Principal explanation: hands-free devices do not reduce cognitive distraction.

Are Passenger Conversations A Risk?

- Conversations with passengers are generally low risk, though there can be exceptions.
- Passengers provide collaborative problem-solving, shared situation awareness and active support of the driver by the passenger.
- A front seat passenger reduces the risk of a crash to 38% of that of a cell phone conversation.

Translating Risk Into Crashes

- While some activities are higher risk than others, they do not necessarily cause more crashes, injuries or deaths.
- How many crashes occur due to a specific behavior is a function of the level of risk and the prevalence of the activity. How many people are doing it for what period of time?

Texting: Risk + Prevalence

- **Risk:** Increased risk of injury from texting while driving: 8x up to 23x.
- **Prevalence:** 1% of drivers at any one time are manipulating hand-held devices. The number texting is lower than that.
- **Result:** Minimum of 200,000 crashes, or 3% of all crashes, are caused by texting.

Cell Phone Use: Risk + Prevalence

- **Risk:** Increased risk of injury from using a cell phone while driving: 4x
- **Prevalence:** 11% of drivers at any one time, or more than 800,000 drivers, observed using hand-held devices. The number engaged in conversations is likely higher as hands-free is not measured in observation surveys.
- **Result:** 1.4 million crashes/year or 25% of all crashes, caused by cell phone use.



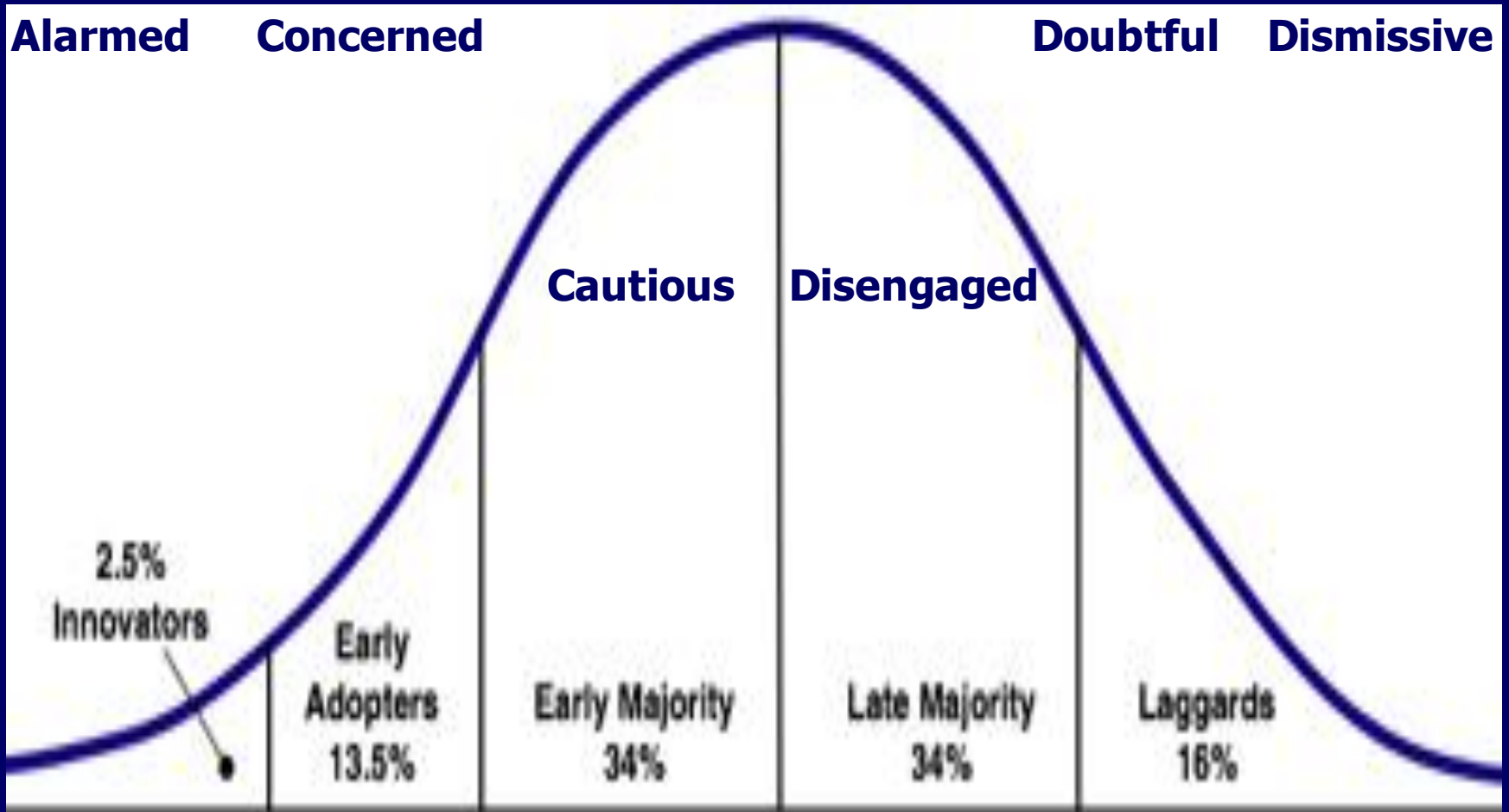
**How Do We Solve This Problem
of 1.6 million crashes/year
caused by cell phone use & texting?**



**1. Education is very important,
but by itself,
does not change much behavior.**



Changing Behaviors



What We Learned From Seat Belts

- Millions of dollars in PSAs, education had almost zero impact. Seat belt use in 1981 before the first law was 14%.
- Laws increased use from 14% to 61% in 15 years.
- “Click it or Ticket” – high visibility enforcement – combined with more laws increased use from 61% to 84% in 10 years.



Education Strategy

- Conventional “awareness” education is important in building understanding, but has limited impact in changing behaviors.
- Business policies can be effective in changing behavior at work.
- Encourage business leaders and safety professionals to adopt “no cell phone use” as best practice in their organizations.
- Make it socially unacceptable to use a cell phone while driving.



Example of Industry Messaging

For your well being and the well being of those around you, you should consider turning your phone off and allowing calls to go to voice mail while you are driving.

...Verizon Website



**2. Strong Laws,
Actively Enforced,
Are Proven Effective
in Changing Behaviors.**

And the Public Supports Them.



Public Support for Laws

- 80% support bans on texting and emailing, 67% support restrictions on phone use, 53% support total bans.
- 82% of those who admit to using cell phones while driving say a law would change their behavior.



Current Legislative Landscape

- Handheld Cell Phone Bans for All Drivers
8 states & DC
- Ban on cell phone use by school bus drivers
17 states & DC
- Ban on cell phone use by novice drivers
20 states & DC
- Ban on text messaging by all drivers
23 states & DC
- Ban on text messaging by novice drivers
9 states



3. The business community is leading the way.



Implications for Employers: Adopt Best Practices

- Allowing employees to conduct company business on cell phones while driving is to allow a 4x increase in crash risk.
- Employers must recognize the even higher risks associated with text messaging, reading and answering email while driving.



Implications for Employers: Increased Liability

\$21.6 million - A jury found a driver negligent for talking on her cell phone and causing a fatal crash.

\$20.9 million - Dykes Industries lost a personal injury suit resulting from an employee using a cell phone when a fatal crash occurred.

\$18 million - Holmes Transport was ordered by a judge to pay damages to a man left unable to walk or talk after a crash caused by one of their drivers distracted by a cell phone.



Implications for Employers: Increased Liability

\$5.2 million - International Paper employee was using her company-supplied cell phone when she rear-ended a vehicle.

\$2.5 million - State of Hawaii agreed to pay as its share of liability in an accident involving a state employee who was talking on her cell phone when she hit a tourist.

\$1.5 million – City of Palo Alto has agreed to pay the victim of a 2006 vehicle crash involving a city worker who was using his cell phone while driving.



Engaging Business To Lead On This Issue



DistractedDriving.nsc.org



What Should Employers Do?

- **Personal Leadership** – stop using cell phones when driving & change your voice mail greeting.
- **Educate employees** about the issue and help them develop new social norms with friends, spouses, cab drivers.
- **Implement a policy** banning cell phone use while driving and enforce it wisely.
- **Monitor** compliance just as you would for any safety policy.
- **Measure** effectiveness and impact on crash reductions, productivity and customer service.



Survey of Company Cell Phone Policies

August, 2009

- 469 of 2,004 participants (23%) have bans that include both hands-free and hand-held wireless communication devices.
- 36% of NSC members w/o policies have plans in the next 12 months to create policies.



Effects of Policies

- 71% of companies with policies have seen either an increase (10%) in productivity or no impact (61%).
- Only seven companies (1.5%) with policies reported a decrease in employee productivity.
- 22% of companies with policies reported decreases in employee crash rates and vehicle property damage.
- 65% have observed improvements or no impact on employee morale.



What About Productivity?

Survey of AMEC employees one year after corporate cell phone driving ban.

- 97 % agreed that talking on a cell phone impacts a person's ability to drive safely.
- 96% felt that responsible companies should discourage use of wireless communications while driving.
- 95% said they did not experience a decrease in productivity.
- 83% said they had reduced or quit using wireless devices while driving outside of work.



Policy Implementation Plan

Week 1	Week 2	Week 3	Week 4
<i>Inform</i>	<i>Educate</i>	<i>Implement</i>	<i>Reinforce</i>
NSC Cell Phone Announcement	Frequently Asked Questions	Presentation Script for Policy Rollout	Tips for Distraction-Free Driving
Call to Action	Distracted Driving Top 10 List	Policy	Pocket Policy Card
Articles about the scientific facts of the issue.	Distracted Driving One Hour Training Course	Voice Mail Greeting	Safety Stuffer
Voice Mail to Employees	Pull Over Poster		Focus on Your Driving Poster



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Making our World Safer®

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