



Cell Phone Use & Driving

Impact on Employee Safety,
Productivity and Employer Liability

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Motor vehicle crashes

- 1 million people have died in motor vehicle crashes in the last 25 years
- 35,000 deaths each year in the U.S.
- Leading cause of on and off-the-job unintentional deaths in the U.S.
- Leading cause of death for people 5- to 24-years-old
- Cost to society = \$100 billion per year
- Society appears to have grown complacent, accepting these deaths and injuries
- Safety engineering has made significant advances

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Motor vehicle crashes

Vehicle maintenance factors

- Definite cause 10% of the time
- Probable cause 13% of the time

Environmental factors

- Definite cause 20% of the time
- Probable cause 33% of the time

Human error

- Definite cause 70% of the time
- Probable cause 93% of the time

Source: Auto Alliance

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Driving distractions

The Science of Distraction

Visual: eyes on road

Mechanical: hands on wheel

Cognitive: mind on driving

- Much more than “eyes on the road, hands on the wheel”
- Visual and mechanical distractions are short lived - cognitive distractions last much longer

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Selective attention / switching

- When brains are overloaded by two cognitive tasks, people switch attention (without recognizing it)
 - Make one task “primary” and the other “secondary”
- Cognitive attention to driving can become secondary to a phone conversation
- When driving is a secondary task for the brain, driving becomes impaired
 - Impairment takes several forms, including inattention blindness and tunnel vision

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“Tunnel Vision”

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Crashes and cell phones

Risk – how risky is the distraction

Reading	3.4x
Reaching for a moving object	8.8x
Turning around in a seat	8.8x
Talking on a cell phone	4x
Texting	8-23x

Prevalence – how often is it happening

Manipulating a wireless device	1.3%
Talking on a cell phone	9%


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Crashes and cell phones (2011)

- Minimum of 213,000 crashes
 - 4% of all crashes, involve texting
- 1.1 million crashes per year
 - 21% of all crashes, involve cell phone conversations

25% of all crashes involve cell phone use

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What we know about cell phone use and driving

Role of Mobile Phones in Motor Vehicle Crashes Resulting in Hospital Attendance
 Suzanne P McEvoy, Mark R Stevenson, Anne T McCart, et al - 2004

- Likelihood of crashing increases by 4x
- Risk was raised irrespective of whether or not a hands-free device was used

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Hands-free and crash risk


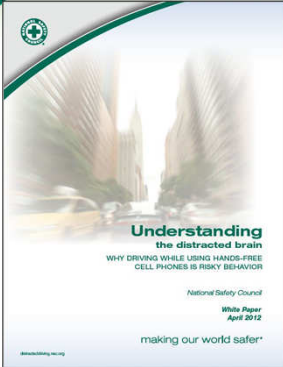
Hands free devices do not reduce crash risk:

- National Safety Council
- National Transportation Safety Board
- World Health Organization
- Insurance Institute for Highway Safety
- Governors Highway Safety Association

- 30+ studies reported substantial negative effects of cell phone use on driving for hands-free and handheld phones
- Similar effects in reaction time, speed, headway and lateral lane position, for hands-free and handheld phones

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Free download at:
thebrain.nsc.org


Understanding the distracted brain
 WHY DRIVING WHILE USING HANDS-FREE CELL PHONES IS RISKY BEHAVIOR

National Safety Council
 White Paper
 April 2012

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What we know about cell phone use while driving

Comparison of the Cell Driver and Drunk Driver
 Strayer, Drews, et al, University of Utah - 2004

- No difference between handheld and hands-free
- Cell phone distracted drivers have slower reaction times and were more likely to crash than drivers with a .08 BAC

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What we know about cell phone distraction

A Decrease in Brain Activation Associated With Driving
Carnegie Mellon University, Center for Cognitive Brain Imaging - 2008

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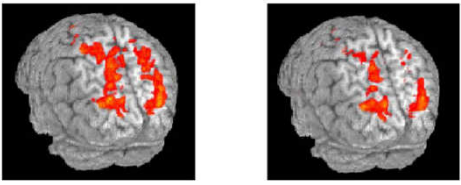
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Result


The parietal activation associated with driving decreases substantially (by 37%) with sentence listening.

Driving Alone **Driving with Sentence Listening**



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Misperceptions

There isn't enough evidence to prove that using a cell phone while driving causes crashes


- Difficult to collect crash data
- Much evidence, few statistics
- An absence of statistics does not prove or even indicate the absence of a problem

It's no more dangerous than talking to a passenger

- A passenger in a vehicle is aware of the driving situation and can even serve as an additional look-out
- The phone carries a certain obligation of immediacy

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Putting it all together


Motor vehicle crashes are the leading cause of death for people 5 to 24 years old

- Human error causes the vast majority of crashes
- Cell phone drivers four times more likely to be involved in a personal injury crash
- Reaction times slower than .08 BAC
- Hands-free as dangerous as handheld
- Inattention blindness
- 37% reduction in spatial processing in the part of the brain used for the task of driving
- Cell phone use involved in 25% of all crashes


Voluntary compliance is difficult

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NSC Leading the Way



National Safety Council NEWS

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For Immediate Release
Jan. 12, 2009

Contact: Meredith Morris
(630) 775-2367

Editors' note: scientific references are available from NSC media relations, 630/775-2367 or media@nsc.org.

National Safety Council Calls for Nationwide Ban on Cell Phone Use While Driving
Bold Plan Seeks to Involve Law Makers, Businesses and Public

Itasca, Ill. — The National Safety Council today is calling on motorists to stop using cell phones and messaging devices while driving, and is urging businesses to enact policies prohibiting it and governors and legislators in all 50 states and the District of Columbia to pass laws banning the behavior.

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NTSB Recommends:

- (1) Ban the nonemergency use of portable electronic devices (other than those designed to support the driving task) for all drivers;
- (2) Use the National Highway Traffic Safety Administration model of high visibility enforcement to support these bans; and
- (3) Implement targeted communication campaigns to inform motorists of the new law and enforcement, and to warn them of the dangers associated with the nonemergency use of portable electronic devices while driving.

December 13, 2011

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Sample cell phone policy

Company employees may not use cellular telephones or mobile electronic devices while operating a motor vehicle under any of the following situations, regardless of whether a hands-free device is used:

- When employee is operating a vehicle owned, leased or rented by the Company.
- When the employee is operating a personal motor vehicle in connection with Company business.
- When the motor vehicle is on Company property.
- When the cellular telephone or mobile electronic device is company owned or leased.
- When the employee is using the cellular telephone or mobile electronic device to conduct Company business.

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Companies with policies

• Exxon/Mobil	• Abbott
• DuPont	• EnCana
• Halliburton	• Cargill
• Shell	• CSX Intermodal
• Chevron	• Schneider National
• BP	• Sysco Corporation
• Enbridge	• Time Warner Cable
• AstraZeneca	• Potash
• Spectra Energy	• Owens Corning
• CA Office of Traffic Safety	• NTSB

Just a sample - no national database of companies with policies

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Company cell phone policies

Survey of NSC member companies – August 2009

- 2,004 respondents
- 469 (23.3%) had bans that included both hands-free and handheld wireless communication devices
- 36.1% of NSC members w/o policies have plans in the next 12 months to create policies
- Only seven companies (1.5%) with policies reported a decrease in employee productivity
- 46 companies (10%) reported a productivity increase

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Employer liability

\$21.6 million: A stay-at-home dad received the award for the violent wreck that killed his wife, after a jury found a driver negligent for either talking on her cell phone or some other distraction.

\$21 million: A soft drink beverage truck driver was using a hands-free headset, in compliance with a handheld ban, when she struck another vehicle and injured the driver. A jury awarded \$21 million in damages to the injured driver.

\$20.9 million: Dykes Industries of Little Rock, Ark., lost a personal injury suit in which its employee was using a cell phone when the crash occurred.

\$18 million: Holmes Transport, of Muscle Shoals, Ala., was ordered to pay the damages by a U.S. District Judge to Mark Tiburzi who was left unable to walk or talk after a crash caused by one of their drivers distracted by a cell phone.

\$5.2 million: International Paper employee Vanessa McGrogan was using her company-supplied cell phone when she rear-ended a vehicle driven by Debra Ford.

\$2.5 million: State of Hawaii agreed to pay as its share of liability in a crash 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.

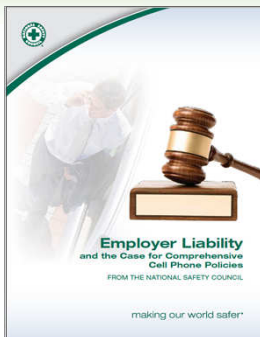
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Employer Liability white paper distracteddriving.nsc.org



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Selling Proposition

1. Employee cell phone use while driving is a significant and growing safety threat to our employees and the driving public.
2. It has also become a significant financial risk and liability.
3. If a total ban policy is properly implemented and supported, there will not be a negative effect on productivity, customer service or employee morale.

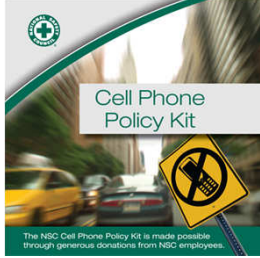
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 **Cell Phone Policy Kit**

- Executive communication
- Employee education campaign
- Campaign rollout plan
- Sample policy



The NSC Cell Phone Policy Kit is made possible through generous donations from NSC employees.

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 **Cell Phone Policy Kit**

Materials for Executives
NSC encourages you to share the materials in this section with your executives. These resources support why cell phone distracted driving is a problem and explain the need for a corporate cell phone policy.

- Letter from NSC Chairman Hersman
- Executive Summary
- Annual Estimate of Cell Phone Crashes
- Sample Cell Phone Policy
- Cognitive Distraction White Paper
- State of the Nation Report
- Employer Liability White Paper
- Managing Compliance

Get executive materials

Materials for Roll-Out Team
NSC recommends establishing a roll-out team. This team should include someone from your HR and Marketing/Communications Departments as well as someone from your Safety Team. The following resources should be shared with the Roll-Out Team.

- "How To" Guide
- Cell Phone Distracted Driving Presentation
- One Year Roll-Out Calendar
- Building Employee Buy-In
- Additional Resources
- Managing Compliance

Get roll-out materials


Educational Materials for Employees
We've included a wide variety of educational materials for your roll-out team to use such as posters, tip sheets and articles. These materials can be included in your corporate communications. We encourage you to read the Additional Resources page as there are videos NSC has made available.

Get educational materials




Technical Support: rad@safety@nsc.org

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 **Technology: may be best solution**

- Signal jamming
 - Jamming device in vehicle
 - Limited geographic reach
 - Currently illegal
- Smartphone app without vehicle integration
 - Uses phone's GPS to trigger "driving condition"
 - Sends calls to VM, stores texts and emails
- Smartphone app with vehicle integration
 - Sensor plugs in to vehicle OBD port
 - Communicates "driving" to phone via Bluetooth
- Wireless network solution
 - "Thin client" on smart phone signals network of "driving condition"
 - Network applies call management tools

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 **Public support**

Quinnipiac University

- 2424 US Voters
- November 2010, +/- .02
- **By a 63% – 34% margin, American voters support a federal ban on cell phone use while driving, even while using a "hands-free" device**

Nationwide Insurance "On Your Side Survey"

- 1008 US drivers
- August 2009, +/- .03
- **80% support ban on texting or emailing**
- **57% support a ban on all cell phone use while driving**

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Public support

Scientific research on the subject of wireless phone use and driving has been conducted worldwide for several years. According to the National Highway Traffic Safety Administration, the available research indicates that using a wireless phone while driving degrades a driver's performance, whether it is a hands-free or hand-held wireless phone. NHTSA advises that the "safest course of action is to refrain from using a cell phone while driving." NHTSA's policy on "Cell Phone Use While Driving," as well as Frequently Asked Questions on the subject, are available at www.nhtsa.gov.

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
(May 2010)

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Takeaways

- We need full attention for the task of driving - cognitive distraction is real - Multitasking is a myth
- Hands-free is not risk free
- Risk exposure is what makes cell phone use the biggest threat
- A total ban on employee cell phone use while driving is "best safety practice" and your company's best defense against liability exposure.

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What you can do

- Personal example – stop using cell phone when driving (change no answer greeting)
- Don't talk with people who call you while they are driving
- Educate employees, drivers, parents, friends and family
- Implement cell phone driving bans
- Support legislation and enforcement

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Margay Schee – 13 year old killed when her school bus was rear ended by a big-rig driver distracted by a cell phone. Eight others injured. (September 2008, FL)

"Frances "Margay" Schee was a wonderful and beautiful child, Margay only knew friends in her life, if you knew Margay, then you knew she was your friend." The Schee Family

Erica Forney – Nine year old killed by a cell phone driver while riding her bicycle home from school. (November 2008, CO)


My name is Michelle. I am 36 years old. On Nov. 25, 2008, I accidentally struck Erica Forney. Although I do not have a clear memory of the accident, the police tell me I recently finished a cell phone call and may have been distracted...





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Kelsey Raffaele - 17-year-old lost control of her car when she passed another vehicle while talking on the phone with a friend. (January 2010, Sault Ste. Marie, MI)


Jay & Jean Good – Killed when hit by a tractor-trailer that swerved to avoid a minivan that ran a light, 18-year-old minivan driver talking on a cell phone. (May 2008, PA)

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FOCUSDRIVEN™
ADVOCATES FOR CELL-FREE DRIVING



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Thank you!