RESEARCH REPORT 2007

State regulation of CELL PHONE USE WHILE DRIVING

. . . and the risks of DRIVER DISTRACTION

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State Regulation of Cell Phone Use While Driving

Legislation is emerging in several states related to the hazards of using a cell phone while driving. This report, prepared for the 2007 session of the Oregon Legislative Assembly, summarizes an expanding body of research on driver cell-phone use and other distractions, and answers key questions likely to be of most interest to legislators.

CONTENTS

POLITICS

What are the main arguments for and against a law to limit the use of cell phones while driving in Oregon?[1]

FAVOR

- Cell phones are a cause of traffic crashes.
- A crash may be 4 times as likely when a driver uses a cell phone.
- An increasing number of other states and foreign countries have passed laws to limit the use of cell phones while driving.
- High-risk groups for crashes should be protected, particularly minors.

OPPOSE

- Exemptions need to be considered for police, emergency service providers, and those in communication with emergency service providers.
- Other issues of distracted driving may be more dangerous, and would not be addressed by a ban on cell phones.
- Cell phones are a valuable communication tool for drivers, used for about 3 million emergency calls per year from vehicles in Oregon.
- Cell phones are involved in few crashes, the harm is so small that a regulation is unnecessary.
- Education and media campaigns are likely to work best.
- Little information is available on the comparative risks of other driving distractions.
- Existing laws on reckless driving already adequately cover any problem with cell phones.
- The causal relation of cell phones to crashes is in doubt.
- The number of state police is insufficient to enforce traffic laws already on the books.

New research

In 2006, the National Highway Traffic Safety Administration published two detailed reports on the Virginia Tech Transportation Institute's "100-car Field Experiment."[2] Cameras were mounted in cars, and drivers were observed for 1 year. The study provides the first really convincing data for comparing the risks of various driver distractions and other conditions related to crash events. A denominator to calculate risk ratios was established by sampling 20,000 6-second "epochs" to create a baseline of total driving exposure. The epochs were then coded for the presence of distractions and other conditions, and the occurrence of driving incidents or crash events. Results are reported here as the "Virginia 100-car study."

REFERENCES ON P. 16

PROBLEM

How often is a cell phone a factor in a driving crash?

For the past 10 years, Oregon crash data indicate a cell phone was in use in less than 1% of all traffic crashes.[3] Police incident reports, however, probably fail to record the use of cell phones in a large number of cases.[4]

The Virginia 100-car study found the use of a cell phone was a factor in 7% of all crash events (crashes and near crashes).[2] The National Highway Traffic Safety Administration estimates all types of driver distraction are a factor in about 25% of traffic crashes, including a fraction due to use of a cell phone.

PREVALENCE

How many drivers use a cell phone in Oregon?

Cell-phone use is continually increasing. Earlier surveys have shown 30%-85% of drivers use a cell phone, indicating 1-2½ million of Oregon's 3 million licensed drivers may use a cell phone at least occasionally while driving.

Driving time and cell-phone use varies widely among drivers. About one-fifth of the drivers in the Virginia 100-car study reported high mileage (over 18,000 miles per year), and about one-half had high cell-phone use.[2] Certain categories of drivers, notably young drivers, are more likely to drive and use a cell phone.

The number of drivers using a cell phone at any one moment is increasing. NHTSA traffic studies in 2000 observed 3% of all drivers using a cell phone, which rose in 2004 to 5% (6% in western states).[5]

Only a very small number of drivers was observed using headsets, but the use of handsfree equipment is probably much higher than could be directly observed. Up to one-third of drivers with a cell phone in their vehicle have reported that they use handsfree equipment.[6]

Population Risk

Drivers are not the only persons at risk. 2005 Oregon crash data illustrates how other drivers, passengers, pedestrians, and cyclists share the risks in traffic injuries.

Total crashes =	44,878
Crashes with injury =	19,890
Total persons injured =	29,510
Persons injured per crash with injury =	1.5
Proportion of multiple-vehicle crashes =	79%
Proportion of injured outside vehicle =	5%

RISK ASSESSMENT

Is a driver using a cell phone more likely to crash?

Two recent occupational fatalities, tracked by OR-FACE, implicate the use of a cell phone as a causal factor.

> A gas utility worker was killed when an SUV veered into his short-term work zone and struck him on the edge of a five-lane city road. The worker parked the company pickup half on the sidewalk and half in the bike lane, and correctly set up safety cones for a temporary worksite. He was wearing a bright red T-shirt. The 18-year-old female driver of the SUV was allegedly talking on a cell phone.

> A 23-year-old driver of a medical transport van was killed when the van veered off the road into a ditch. The van traveled down the ditch until it hit a driveway, which sent it airborne. The van landed again in the ditch and plowed through 100 feet of chain-link fence before stopped by a telephone pole. The driver was apparently killed by a fence pole that penetrated the windshield. An open flip-type cell phone was found on the floor near the driver's right foot.

Actual stories decide the question whether driver use of a cell phone causes crashes. Although some doubt remains even in the stories above, drivers have their own personal stories or know stories of others where distraction resulted in a crash, near crash, or a frightening incident. A United Kingdom study of driver cell-phone use, for example, gives abstracts of 20 such cases, gleaned from newspaper and coroner reports, where the use of a cell phone was a definite contributing factor to a crash.[7]

In the Virginia 100-car study, dialing a cell phone nearly tripled the risk of a crash or near crash, and talking on a cell phone increased the risk 1.3 times.[2] These calculations of risk correspond to earlier findings.

Dialing is more dangerous, but talking is more frequent, so both activities contribute about the same to increased crash events. The number of "incidents" (defined as an "evasive maneuver of lesser magnitude" than a crash event) increase dramatically when drivers dial a handheld cell phone or talk on any cell phone.

Cognitive Distraction

Poor driving performance while conversing on any cell phone – handheld or handsfree – is confirmed in numerous studies, indicating cognitive rather than physical distraction.[8] The condition of "looking but not seeing" or "inattention blindness" can occur when alone daydreaming or in conversation. Listening to music or a book on tape appears to have no effect on performance. Similar attention deficits are found in phone conversations or with a passenger, but a passenger may be able to pace the conversation according to the situation and concentration of the driver.[9]

Unlike the hazard of physical distraction when reaching for or dialing a cell phone, drivers are less likely to control cognitive distraction, because they are unaware when it occurs.

RISK ASSESSMENT

How does use of a cell phone compare with other driver distractions?

Primary Driver Distractions and the Risk of Crash Events Distracted Condition	Frequency (Rank) of Distracted Condition	Relative Risk of a Crash Event vs. Attentive Driving	Proportion of Crash Events in Population Due to Distracted Condition
GENERAL			
All "simple" distractions: e.g., talk to passenger in adjacent seat, adjust radio, sing, drink, smoke	1	1.2 NS	3.3%
All "moderate" distractions: e.g. talk/listen on phone, eat, change CD/cassette	2	2.1	15.2%
All "complex" distractions: e.g., dial phone, read, apply makeup, reach for moving object	3	3.1	4.3%
SPECIFIC			
Use handheld cell phone or personal digital asst	1	–	–
- Talk/Listen		1.3 NS	3.6%
- Dial		2.8	3.6%
Passenger in adjacent seat	2	0.5	–
Eat	3	1.6 NS	2.2%
Read	4	3.4	2.9%
Apply makeup	5	3.1	1.4%
Reach for moving object	6	8.8	1.1% NS

Source: Virginia Tech Transportation Institute, 2006[2]
Crash Event = "Rapid, severe evasive maneuver" that succeeds (near-crash) or results in physical contact (crash).
NS = Not significant; statistical difference or magnitude is not established.

The Virginia 100-car study found inattention involved in 78% of all observed crashes and 66% of all crash events (crash/near-crash). In less severe "incidents," inattention was involved only 29% of the time. Distraction is a very common factor in traffic crashes.

Moderate and complex distractions, with varying levels of hazard, occur in 20% of all crash events.

Certain distractions while driving actually reduce the risk of a crash event. Protective behaviors include driving tasks, nonspecific eyeglances (best under 2 seconds), and a passenger in the front seat (see relative risk in table).

A cell phone is the most frequent single source of driver distraction. About 7% of crash events are attributed to cell-phone dialing and conversation alone. Retrieving and handling adds 1%-2%.

RISK ASSESSMENT

How does cell-phone use and driver distraction compare with other risk factors while driving?

Alcohol

Oregon crash data in 2005 records alcohol use in 2.4% of total crashes.[3] The count is likely to be vastly underreported, just as it is for the use of cell phones. The Transportation Safety Division in 2005 reported "60% of Oregon cities and counties do not have a systematic approach addressing transportation-related injury and death." Medical examiner records, 1997-2001, show 38% of Oregon crash fatalities involved alcohol. The number reflects increased severity for impaired-driving crashes, but also suggests the incidence of alcohol in all crashes could be as high as one-third of the total.

A much-cited 1997 article in the *New England Journal of Medicine* associated driver use of a cell phone with a fourfold increase in risk for a crash, and concluded that the relative risk "is similar to the hazard associated with driving with a blood alcohol level at the legal limit."[10] A controlled study to directly compare the drunk driver with the cell-phone driver confirmed the statement, finding each condition, for different reasons, about equally hazardous.[11] The attributable risk for intoxicated drivers is far higher, though, because in contrast to intermittent use of a cell phone, alcohol impairment endures for the entire driving episode.

Drowsiness

Drowsiness is sometimes included as a subcategory of driver distraction, but deserves separate attention both for the high magnitude of risk involved and the high severity of injuries. Drivers that fall asleep and veer off the road often suffer extremely severe injuries, and a higher fatality rate.[12] For commercial drivers, one study found drowsiness increased the likelihood of a fatality 21 times – much higher than any other risk factor.[13]

2005 Oregon crash data records 8.8% of total crashes involved a driver who was "sick, blinded, sleepy, distracted." The Virginia 100-car study, making a definite distinction between drowsiness and distraction, found drowsiness alone increased the risk of a crash event 4.2 times. The frequency of drowsiness was only 2%-4% of driving time, but contributed to 25% of all crash events.

Seatbelts

In 2005, 36% of Oregon drivers killed in a crash were not wearing a seatbelt. Oregon has one of the highest rates of seatbelt use in the USA, but lack of restraint continues to be a major factor in crash injuries.

PRIORITY POPULATION

How do cell phones and other distractions affect teen drivers?

Age

Traffic crashes remain the leading cause of death for persons under age 35; and teens, both as drivers and passengers, are at highest risk. According to 2005 Oregon crash data, the highest crash risk occurs for drivers at age 18, reflecting the same conclusion in national data. Crash risk rates are highest from age 17 through age 21, and only decline to a steady, relatively low level after age 24.

Age appears to be an independent risk factor. Studies show that novice drivers, aged 16-19, are more likely to crash than drivers aged 20 and older with the same driving experience.[14]

Distraction

In the Virginia 100-car study, drivers aged 18-20 were significantly more likely than others to be in a crash event that involved distraction.[2] Teen drivers are most likely to engage in distracting secondary tasks, and their driving performance is more likely to be affected: involving deterioration of reaction times, lane position, appropriate speed, and judgment.[15]

Cell Phones

Cell-phone use is a major source of distraction for teen drivers. Observed use for drivers, aged 16-24, at any one time rose from 3% in 2000 to 8% in 2004, about 1.5 times the rate of cell-phone use for other drivers.[5]

Graduated Licensing

Graduated licensing programs for novice drivers, especially for teens, spread through the states in the 1990s, with positive results in reducing crashes.[16] In Oregon, a provisional license following the instruction permit requires a driving test, a number of hours of driving instruction, a limit on carrying passengers younger than age 20, and a restriction on night driving. The restrictions end after 1 year or at age 18.

In 2003, the National Transportation Safety Board, in response to a specific crash investigation, recommended that education efforts on distracted driving should be increased, and that states should pass legislation to prohibit the use of interactive wireless communication devices for drivers with learning or intermediate licenses. Delegates at an international conference on distracted driving in 2005, reportedly agreed that teen drivers are a primary target audience where graduated licensing prohibitions on cell-phone use could be effective.[17]

EQUIPMENT

Are handheld cell phones more hazardous?

Handheld Cell Phones

The Virginia 100-car study confirmed the common finding that dialing a handheld phone while driving significantly elevates the risk of a crash event.[2] A long series of studies has confirmed that dialing increases lateral deviation and missed signals, reduces reaction time, and increases mental workload. Conversing is far less distracting, but endures longer.

Multiple variables interact in driving results, and simulated driving experiments sometimes produce different results. Other significant factors in driver error while talking on the phone include the content of a conversation, age of the driver, or conditions outside the vehicle. The situation of the phone inside the vehicle also matters. Answering from a designated phone holder is not much of a distraction.[18]

Responding to accumulated evidence, the National Highway Transportation Safety Administration and others now plainly state that no significant difference exists in the risk of using a handheld versus a handsfree cell phone while driving.

Handsfree Cell Phones

The distinction between handheld and handsfree cell phones is confused by the design of the handsfree equipment, which most commonly allows only for handsfree conversation, while access, dialing, and hanging up the phone still involves physical manipulation and direct glances toward the device.

One study of dialing while driving compared three types of equipment – a handheld phone, a handsfree headset with voice-digit dialing, and a handsfree speaker kit with voice-digit dialing and fixed phone location.[19] Participants rated the handsfree devices easiest to use and least distracting, but in reality, difficulties with dialing occurred more frequently with handsfree phones. Voice activation required more time in dialing, and required redialing about twice as often as the handheld phone.

The concern in these results is twofold: (a) the period of concentration during dialing is extended for handsfree phones, and (b) a handsfree phone may induce a false sense of security, leading drivers to ignore the effects of cognitive distraction.

. . . than handsfree cell phones?

Common Characteristics

Numerous studies confirm that driving performance while using a handsfree phone is somewhat better than with a handheld phone, but still poorer than when driving normally. The slim difference in performance is hard to detect. Many studies conclude "no essential difference" between handheld and handsfree phones. Drivers using either phone miss target signals, react more slowly, and experience a similar mental workload.

Cognitive distraction is associated with both handheld and handsfree phones, and is explored in a large number of studies. Researchers are still sorting out distinctions between types of mental tasks. In some cases the effect of a conversation is not distracting at all. Math and spatial problems appear to distract the most.[8]

Multiple tasks or distractions naturally prove to be the most demanding. A ringing phone that demands attention – handheld or handsfree – produces a particular hazard in conjunction with other tasks, such as interacting with music or navigation systems, high speed, or following another car.[20]

Learning Behavior

In actual driving situations, drivers can and do strategically modify behavior to accommodate phone use. They may pause in conversation or slow down when a driving situation becomes too demanding. Moreover, drivers learn over time, so an experimental math operation over the phone, for example, proves distracting the first time it is encountered, but performance later stabilizes.[21]

Performance and learning in general is poorest for older drivers. In some cases, novice teen drivers actually perform better and learn faster to deal with distractions.

The Virginia 100-car study emphasized the main risk for teen drivers is their high "willingness to engage" in distracting secondary tasks while driving.[2] Adult drivers evidently learn not simply to accommodate distractions, but to avoid them.

MODELS

What laws have states passed to regulate the use of cell phones and other distractions while driving?

States commonly make exceptions for emergency use of a cell phone while driving, and for legitimate use by school buses without passengers, and use in buses, taxis and tow trucks in the performance of job duties.

PROHIBIT DISTRACTED DRIVING

Prohibit video monitors forward of the driver's seat or visible to the driver.
[37 states (including Oregon) and DC]

Prohibit all drivers from engaging in activities unrelated to the operation of the motor vehicle.
Connecticut, District of Columbia, New Hampshire [2 + DC]

PRODUCE MORE INFORMATION

Collect crash data.
Alaska, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Illinois, Indiana, Iowa, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, Nevada, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Utah, Virginia, Washington [27 + DC]

Study and make recommendations on driver distraction, including cell-phone use.
Delaware, Florida, Hawaii, Louisiana, New Jersey, New Mexico, New York [7]

PROTECT STATE UNIFORMITY

Preempt local jurisdictions from enacting restrictive ordinances on cell-phone use while driving.
Florida, Kentucky, Louisiana, Mississippi, Nevada, New Jersey, New York, Oklahoma, Oregon, Oklahoma, Pennsylvania, Utah [12]

PROHIBIT SELECTED DRIVERS FROM USING ANY CELL PHONE

Prohibit school bus drivers from using a cell phone while driving.
Arizona, Arkansas, California, Connecticut, Delaware, Illinois, Massachusetts, New Jersey, Rhode Island, Tennessee, Texas [11]

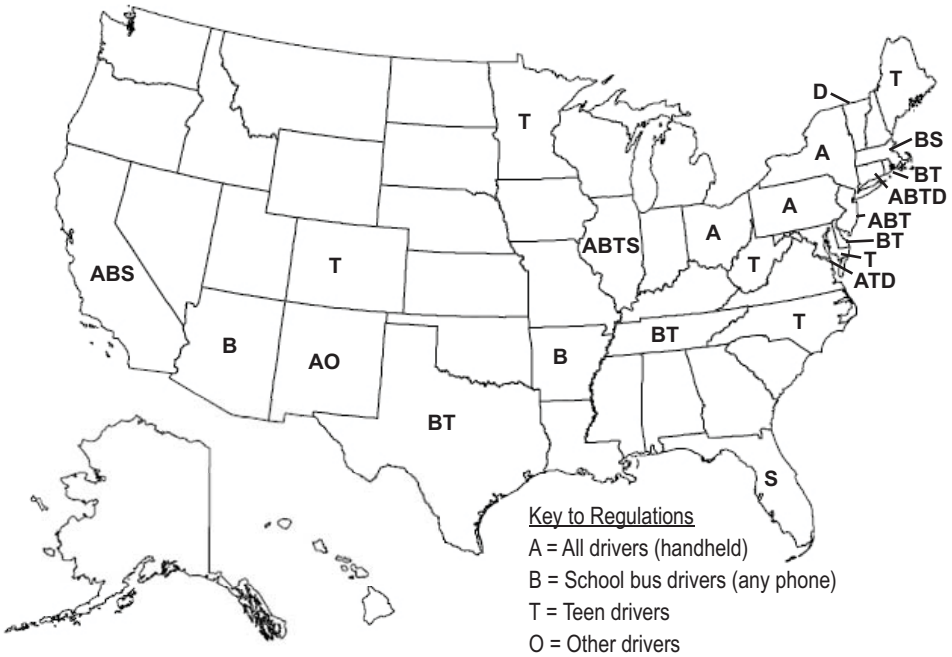
Prohibit minors (or drivers of any age) with an instructional permit from using a cell phone while driving.
Colorado, Connecticut, Delaware, District of Columbia, Illinois, Maine, Maryland, Minnesota, New Jersey, Tennessee, West Virginia [10 + DC]

Prohibit all minors under age 18 from using a cell phone while driving.
North Carolina, Rhode Island (includes minor passengers with minor driver) [2]

Prohibit driver-education students and instructors from using a cell phone.
New Mexico [1]

Prohibit use for all drivers. [0]

State Regulation of Cell Phone Use While Driving



PROHIBIT DRIVERS FROM USING HANDHELD CELL PHONE

Prohibit use of handheld cell phone by all drivers.
California, Connecticut, District of Columbia, Illinois cities, New York, New Jersey, New Mexico cities, Ohio cities, Pennsylvania cities [4 + 4 in specific cities + DC]

Prohibit minors (or drivers of any age) with an instructional permit from using a handheld cell phone while driving.
Texas [1]

Prohibit drivers of state vehicles from using a handheld cell phone, including police officers. New Mexico [1]

SPECIAL REQUIREMENTS FOR DRIVERS USING A CELL PHONE

Require drivers who use a headset to keep one ear free.
Florida, Illinois [2]

Rental cars with an installed cell phone must include written operating instructions on safe use.
California [1]

Permit use of a cell phone as long as one hand remains on the wheel.
Massachusetts [1]

SOURCE: NATIONAL CONFERENCE OF STATE LEGISLATURES 2005, AND NOV 2006 UPDATE (WWW.NCSL.ORG); ALSO, GOVERNORS HIGHWAY SAFETY ASSOCIATION, 2006 (WWW.STATEHIGHWAYSAFETY.ORG)

STANDARDS

What national laws or standards regulate the use of cell phones while driving?

The federal government has not acted to limit the use of cell phones while driving, but a House bill in 2001 to prohibit drivers from using cell phones prompted a transportation committee hearing with Oregon U.S. Reps DeFazio and Blumenauer present. In 2003, similar legislation was introduced in the Senate, but did not move from committee.

The proliferation of electronic devices inside motor vehicles has earned renewed attention from the Society of Automotive Engineers, in alliance with the Intelligent Transportation Society, and the Alliance of Automobile Manufacturers, together seeking "telematic" design solutions to the growing number of driver interactions with onboard devices.[22]

PRECEDENT

What is the legislative history in Oregon on driver use of cell phones and other driver distractions?

Three sets of laws in Oregon address the issue of distracted driving.

- The law that prohibits visual display monitors in view of the driver was enacted in 1983 and 1985 (ORS 815.240, 815.290), and updated in 2005 (HB2811).
- The Graduated Driver License program for novice teen drivers passed in 1999, recommending a period of supervised driving that includes limits on teen passengers.
- State preemption, disallowing more restrictive bans by local governments on drivers using cell phones, passed in 2001 (HB2987).

Since 1995, measures to prohibit drivers from using a handheld cell phone on a public highway were introduced in the Oregon legislature in 1995 (SB576), 1997 (SB514), 1999 (SB478, HB2616), 2001 (HB2943, HB2649), and 2003 (HB3064). None moved from committee. All of the measures referred to handheld cell phones. Variations included location (within urban growth boundary), or related equipment (portable computers), or exemptions (CB radio).

For the 1999 bill, a public hearing was held on March 31 by the Senate Transportation Committee, recording the views of representatives from state agencies and interested private associations.

Measures to address distracted driving overall were introduced in the Oregon legislature in 2001 (HB2307) and 2003 (SB666). Neither moved from committee. (The bill in 2003 was revised and passed as a bill on snow tires, so fails to appear in the index under driving distraction.)

IMPACT

How effective is regulation?

The *2004 Oregon Transportation Safety Action Plan* reported a decline in the number of fatalities and injuries in traffic crashes to about one-third of the peak level recorded in 1972. The decline is attributed to stricter regulation on alcohol-impaired driving, seatbelts, helmets, graduated licensing for teens, and other factors. The downward trend in crash injuries has now leveled off, but traffic crashes remain the leading cause of death for persons under age 35. More effort is needed to improve traffic safety.

In regard to cell phones, the new *Oregon Parent Guide to Teen Driving,* recommends that teen drivers leave cell phones at home, but so far no regulation forces the issue. A 2005 Oregon study reported in the parent guide found formal driver education substantially reduces the risk of crashes, traffic convictions, and license suspensions among teen drivers – demonstrating that education alone can be effective.

Regulation, rather than education, may not produce the intended results. In New York, for example, once the state passed a law in 2002 that made the use of a handheld cell phone a $100 traffic violation, the observed rate of cell-phone use by drivers declined significantly, from 2.3% to 1.1% in the first few months following the passage of the law. By the following year, the rate of use rose again to 2.1% – about the same as before the law.

During the same period, the rate of cell-phone use by drivers in Connecticut, where no regulation occurred, rose from 2.9% to 3.3%. From that comparison, researchers concluded the rate of use in New York was about one-fifth lower than it would have been without regulation. Most of the decrease was concentrated in a few localities. In other areas, the rate of use rose after one year to the level expected without regulation.[23]

As many studies have shown in relation to seatbelt use, compliance to regulation requires a vigorous, well publicized enforcement campaign. Otherwise, the effect of initial publicity gradually dissipates as drivers learn they are unlikely to be caught and charged.

In Australia, where driver cell-phone use is prohibited, a survey found about one-third to one-half of the respondents used their cell phones while driving, though the majority stopped the car first. More worrisome, over one-half of the drivers aged 17-29 reported reading a text message while driving, and over one-third reported sending a text message. Most of the teens who sent text messages felt it was safe to do so when stopped at a traffic light. In an environment of prohibition, it may be reasonable to fear that teens will be more likely to use text messaging while driving – a far more dangerous activity than talking on a cell phone – in order to avoid detection by police.[24]

POLICY RECOMMENDATIONS

What policies do public safety agencies recommend?

The 2004 *Oregon Transportation Safety Action Plan*, states three objectives related to distracted driving: (a) identify risk factors, (b) educate the public, and (c) educate law enforcement officers and judges to the role of distraction in crashes, and apply existing laws as an appropriate response to the problem.

Oregon Transportation Safety Division's *Comprehensive, Coordinated Youth Traffic Safety Plan for Oregon* (2005), Initiative B-2, emphasizes education campaigns on distracted driving for teen drivers, parents, and law enforcement. Changing the requirements for current graduated driver licenses is recommended if research can identify safety priorities among the many factors in distracted driving.

An AAA 10-point action plan to combat distracted driving emphasizes a national education campaign, and voluntary telematic manufacturing standards for vehicle communication devices.

Safety legislation added to the National Transportation Safety Board's "most wanted" list in 2005 seeks a prohibition on cell-phone use by holders of learner's permits and intermediate licenses, directed mostly at teen drivers.

TRAFFIC SAFETY ONLINE INFORMATION RESOURCES

Automobile Association of America: **www.aaa.com**

Governors Highway Safety Association: **www.statehighwaysafety.org**

National Center for Statistics and Analysis, Fatality Analysis Reporting System: **www-fars.nhtsa.dot.gov/main.cfm**

National Highway Transportation Safety Administration, Office of Crash Avoidance Research Technical Publications: **www-nrd.nhtsa.dot.gov/departments/nrd-12/pubs_rev.html**

National Safety Council, Driver Safety: **www.nsc.org/issues/drivsafe.htm**

National Transportation Safety Board: **www.ntsb.gov**

Oregon Department of Transportation, Crash Analysis & Reporting: **www.oregon.gov/ODOT/TD/TDATA/car/CAR_Publications.shtml**

Society of Automotive Engineers: **www.sae.org**

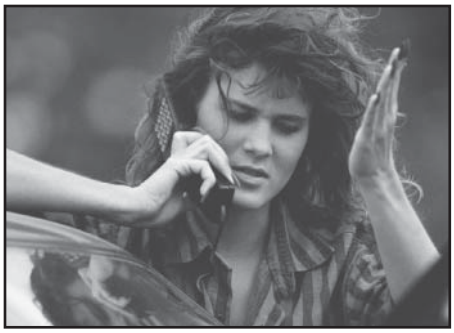
DRIVER RECOMMENDATIONS

What recommendations are most likely to improve safety for drivers using cell phones?

Recommendation #1
Consider turning off your cell phone when you drive, or place it in an inaccessible location where you will not be tempted to reach for it.

Recommendation #2
If you choose to use your cell phone while driving, consider the following precautions.

- Familiarize yourself with your phone features for easy dialing.
- Place your phone in an accessible location, preferably in a fixed holder in front of you.
- Avoid using the phone in hazardous conditions or on unfamiliar roads.
- Keep your conversations short.
- Inform the person on the phone that you are speaking from the car.
- Thinking can blind you to objective events: avoid conversations that involve concentration, especially calculations with numbers or spatial relationships. If you must engage in a conversation that demands your concentration, pull to the side of the road and stop your vehicle completely.
- Be prepared to end a conversation abruptly if hazardous conditions develop.



Pull to the side and stop your vehicle completely to engage in a conversation that demands your concentration.

Recommendation #3
Avoid any distraction or secondary task that removes your attention from driving. Never engage in multiple secondary tasks at the same time.

Recommendation #4
Looking around helps to keep you aware of your driving environment, but any eye glance that removes your attention from the forward roadway should be kept to under 2 seconds.

Recommendation #5
Driving while drowsy is extremely hazardous, especially at night. Conversation with a passenger can help to keep you alert, but the best option is to stop the vehicle and take a nap. Never engage in any driving distraction when tired.

Recommendation #6
Never drive while intoxicated.

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