Cell Phones and Other Driver Distractions: Legislation, Regulation, and Enforcement

International Conference on Distracted Driving

Toronto, Canada ◆ October 4, 2005

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Does drivers’ cell phone use merit regulation?
Of drivers who report using cell phones, most use hand-held phones. Observational surveys show at least 5% of U.S. drivers are using them at any given time.
Percent of drivers observed using hand-held phones

U.S. Department of Transportation
Cell phones and crash risk

- Police crash reports do not reliably document drivers’ phone use
- Best studies verify crash-involved driver phone use from billing records
  - Canadian study found 4-fold increased risk of property-damage crashes with phone use
Is injury crash risk associated with phone use?
IIHS study in Western Australia, 2005

- Driver’s hand-held phone use banned since July 2001
- Observed hand-held phone use by drivers about 2%
- Subjects
  - about 500 drivers ages 17 and older involved in crashes between April 2002-July 2004
  - owned or used cell phones
  - treated in emergency departments for injuries
Method

• Data sources: interviews with drivers at hospital, emergency and medical records, phone company records of use, cell phone call registers

• Compared each driver’s phone use at estimated time of crash to phone use on trips occurring at same time of day during prior week

• Phone use based on company billing records
Sample characteristics

<table>
<thead>
<tr>
<th></th>
<th>n=456</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>42%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>17-29</td>
<td>48%</td>
</tr>
<tr>
<td>30-49</td>
<td>37%</td>
</tr>
<tr>
<td>50 or older</td>
<td>15%</td>
</tr>
<tr>
<td>Phone type</td>
<td></td>
</tr>
<tr>
<td>hand-held</td>
<td>48%</td>
</tr>
<tr>
<td>hands-free kit</td>
<td>10%</td>
</tr>
<tr>
<td>ear piece, headset, other hands-free</td>
<td>42%</td>
</tr>
<tr>
<td>Time of crash 5 a.m. to 8 p.m.</td>
<td>96%</td>
</tr>
</tbody>
</table>
Results

- Phone use associated with fourfold increase in risk of injury crash
- Increased risk similar for males and females, for drivers 30+ and younger than 30
- Increased risk for hands-free and hand-held phones
- Risk could not be estimated for different types of hands-free phones; only a few voice-activated phones
- Ban on hand-held phone use didn’t eliminate use or prevent crashes; one-third of calls reportedly placed with hand-held phones
What is the status of laws limiting drivers’ phone use?
### International laws on driving and cell phone use

<table>
<thead>
<tr>
<th>Country</th>
<th>Law Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>European Union</strong></td>
<td>Hand-held phone use banned in most E.U. countries</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td>Hand-held phone use banned in all states</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>Hand-held phone use banned in Newfoundland and Labrador</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>All cell phone use banned</td>
</tr>
<tr>
<td></td>
<td>Enforcement is secondary and only if driver poses danger to others</td>
</tr>
</tbody>
</table>
Cell phone bans

- By local jurisdiction
- Teenage drivers
- School bus drivers
- Statewide hand-held ban

[Map showing cell phone bans across the United States]
Cell phone laws applying to teens are more restrictive than those applying to all drivers

**Teens**
- Graduated licensing laws (GDL) in 10 states and D.C. prohibit teens from using either hand-held or hands-free phones; most prohibit using any electronic device

**All drivers**
- 3 states and D.C. have cell phone laws that apply to all drivers but allow the use of hands-free phones
- D.C. law applies to other electronic devices; only devices with hands-free accessories may be used
D.C. and Connecticut laws prohibit driving while engaged in any distracting activity that results in unsafe driving.

Where there are no specific distracted driving or cell phone laws, states have general laws under which distracted drivers can be cited (e.g., negligent, careless, or inattentive driving).

Laws do not always make it clear whether phone functions other than talking and listening are prohibited.

Most laws were not drafted to accommodate emerging communication technologies.
What are the effects of laws limiting drivers’ hand-held phone use?
New York’s ban on hand-held cell phones while driving

- Effective dates
  - November 1, 2001: warnings
  - December 1, 2001: fines waived if hands-free device obtained
  - March 1, 2002: fines no longer waived

- Fine ≤ $100

- Bans holding phone at or near ear in moving vehicle

- Does not prohibit dialing, using hand-held phone when stopped, or using hands-free device
Percentage of drivers using hand-held cell phones before and after New York law
Connecticut and New York

---|---|---
New York | Connecticut | Law implemented Nov. 2001
Percentage of drivers using hand-held cell phones before and after New York ban

New York Communities

Albany  Binghamton  Kingston  Spring Valley

pre-law  Dec. 01 / Mar. 02  Mar. 2003
Why phone use went back up in New York

- Initial publicity but virtually none later
- From December 2001 thru February 2003, cell phone citations were 2% of all traffic citations and 4% of moving and seat belt violations
- No statewide intensive, publicized enforcement program targeting phone use
- Publicized enforcement is needed to achieve long-term compliance
Distracted Driving Safety Act, Washington, D.C.

- Prohibits inattentive driving that results in “unsafe operation”
- Bans talking on hand-held phone in moving vehicle and all phone use by school bus drivers and drivers with learner’s permits
- Does not prohibit dialing or using hands-free device
- Effective dates
  - July 1, 2004 warnings
  - August 1, 2004 citations
- $100 fine waived for first offense if hands-free device obtained
Percent of drivers using hand-held phones
Washington, D.C., metro area

- D.C.
- Maryland
- Virginia

March 2004: D.C. = 6, Maryland = 6, Virginia = 4
October 2004: D.C. = 2, Maryland = 6, Virginia = 6
Percent change in hand-held phone use by jurisdiction of license plate
Washington, D.C., metro area
Conclusions

- Relative to Virginia and Maryland, hand-held phone use in D.C. declined by 50 percent, consistent with short-term effect of New York’s phone ban.
- D.C. police issued 288 warnings in July and 2,668 citations during August-October.
- Some media coverage when the law took effect but little since.
Even if hand-held phone use is eliminated, risks from hands-free phones will remain

- Most hands-free devices still are hand-dialed and have cords that can tangle
- All phone conversations are distracting to some degree
- Studies of crash risk found no safety benefits from commonly used hands-free devices
- Unclear how laws prohibiting drivers’ hands-free phone use can be enforced.
Some vehicles have built-in hands-free technology, like OnStar, with voice activation. Other technologies, such as Bluetooth, eliminate wired connections between cell phones and other electronic devices. Any potential safety benefit of fully hands-free phones is unknown.
What about other types of technologies?
Other potentially distracting in-vehicle technologies and gadgets are increasingly available.
A worrisome trend is the increased availability of after-market systems permitting drivers to view DVDs, TV broadcasts, etc., on video screens.
Bans on video screens visible to driver

September 2005
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