

# IMPACT OF HAND-HELD LEGISLATION

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## Research Highlights:

Below are 19 studies on the impact of hands-free legislation on traffic safety.

Twelve studies or data sets conclude that legislation banning hand-held cell phones when driving has a material impact on reducing crashes and fatalities. For example:

- A 2012 California study concluded that deaths caused by drivers using phones fell by **47%**.
- Data from Tennessee reveals that since the state adopted a hand-held ban in July 2019, crashes from distracted driving declined from **12,942 in 2018 to 9,873 in 2023, a 31% change**.

(Note: Data on distracted driving resulting in crashes, injuries, and fatalities is often understated as it is typically self-reported; it is believed many people do not admit to driving distracted when in a crash).

Six studies focus on the connection between hands-free legislation on *levels of phone use* when driving and not the effect on crashes, leaving it to readers to deduce that a decline in the use of phones when driving results in a decrease in crashes and fatalities. **All six studies conclude that hands-free legislation reduces phone use when driving, in some cases, by up to 60%.**

## *Hand-Held Ban = Reduction in Crashes, Injuries, and Fatalities*

### Distracted Driving Crashes in Tennessee

#### Data Set

Data from Tennessee reveals that since the state adopted a hands-held ban in July 2019, crashes from distracted driving declined from **12,942 in 2018 to 9,873 in 2023, a 31% change**.

### Reduction in Fatalities per 100 Vehicle Miles Traveled

Source: National Highway Transportation Safety Administration

Observations from the data:

- 12 of the 15 states experienced a decrease in fatalities within two years after adopting a hands-free law, while two other states (New Hampshire and Oregon) did not have sufficient data;
- Six of these states experienced a greater than 20% decrease in fatalities.

State	Year of Law Passage	Fatality Increase/(Decrease) % From Year Before Passage to 2 Years After
California	2008	-31.1%
Connecticut	2005	-1.1%
Delaware	2010	-3.1%
D.C.	2004	-45.5%
Hawaii	2013	-26.6%
Illinois	2014	4.4%
Maryland	2010	-13.1%
Nevada	2011	-6.9%
New Hampshire	2015	n/a
New Jersey	2007	-21.6%
New Mexico	2014	-12.1%
New York	2001	-1.8%
Oregon	2017	n/a
Vermont	2014	-19.6%
Washington	2007	-22.3%
West Virginia	2013	-23.3%
Average		-16.0%

**Study by the Safe Transportation Research and Education Center at UC-Berkeley (2012)**

Based on an analysis of state crash records before and after the 2008 passage of a ban on hand-held electronic devices when driving, vehicle accident fatalities decreased by 22%, while deaths caused by drivers using hand-held cell phones fell 47%. An overall drop in cell phone usage while driving contributes to the decline in cell phone-related deaths and injuries. A Statewide

Intercept Opinion Survey commissioned with federal funds by OTS last summer showed that 40% of California drivers reported they talk less (with handheld and hands-free devices) since the ban's enactment.

## **Evaluating the Impact of Legislation Prohibiting Hand-Held Cellphone Use While Driving in New York.**

Alexander G. / Nikolaev A. / Matthew J. / Robbins B. / Sheldon H./ Jacobson C. January 2010.

### Abstract

In 2001, New York became the first state to ban hand-held phones while driving. This study concluded that after implementing this law, 46 counties in New York experienced lower fatal automobile accident rates, 10 of which did so at a statistically significant level, and all 62 counties experienced lower personal injury automobile accident rates, 46 of which did so at a statistically significant level.

## **On the identification of the effect of prohibiting hand-held cell phone use while driving in New York**

Sampio (2010)

### Abstract

The analysis found a reduction in fatal crash rates between the pre-ban and post-ban periods that was significantly greater in New York compared with Pennsylvania, a state without a hand-held ban.

## **Assessing the Long-Term Benefit of Banning the Use of Hand-held Wireless Devices While Driving in New York**

Jacobson SH / King DM / Ryan KC. *Transp Res Part A*. (2012)

### Abstract

The researchers examined the effects of New York's ban on the rate of injury crashes per licensed driver in New York and Pennsylvania during 1997–2008. The researchers concluded that there was a significant increase in crash rates at the onset of the ban for urban/suburban and very rural counties and a significant decreasing trend in injury crash rates during the years following the ban as compared with the years before the ban for urban/suburban and rural counties, relative to the changes in Pennsylvania.

## **The Effects of Mobile Phones and Hands-free Laws on Traffic Fatalities.**

Kolko JD. *The BE Journal of Economic Analysis & Policy Contributions*. 2009

### Abstract

The researcher examined whether cellphone ownership rates and all-driver hand-held cellphone bans were associated with monthly annual crash deaths per billion vehicle miles traveled across the 48 contiguous states and the District of Columbia during 1997–2005. Cellphone ownership was

positively associated with the monthly annual fatality rate, and hand-held cellphone bans were negatively associated. Higher mobile phone ownership was significantly associated with higher fatality rates in bad weather or wet road conditions, and hand-held cellphone bans were significantly associated with lower fatality rates in these same conditions.

## **Cellphone Bans and Fatal Motor Vehicle Crash Rates in the United States**

Lim SH / Chi J. *Journal of Public Health Policy*. 2013

### Abstract

The researchers used state-level annual fatal crash data during 2000–10 to study the effects of all-driver hand-held cellphone bans with primary enforcement on fatality rates per miles traveled, fatality rates per capita, and the total number of drivers and number of drivers in different age groups in fatal crashes. All-driver hand-held cellphone bans allowing primary enforcement were associated with a significant reduction in the total number of drivers and the number of drivers in the age groups younger than 55 involved in fatal crashes.

## **Estimating the Impact of Cell Phone Laws on Car Accident Fatalities**

Anyanwu O. *Pepperdine Police Review*. 2012

### Abstract

The researcher used state-level annual fatal crash data during 2000–2009 to study the effects on crash fatalities of all-driver hand-held cellphone bans, all-driver texting bans, bans that prohibit drivers younger than 20 from using cellphones, and bans that restrict intermediate license holders from using cellphones. States with all-driver hand-held cellphone bans had significantly fewer fatalities than states without bans after controlling for the overall licensed driver population, licensed teenage population, the ratio of male to female licensed drivers, state personal income, and state and year fixed effects.

## **Bans on Cellphone Use While Driving and Traffic Fatalities in the United States**

Matao Jue / Sijun Shen / Donald A Redelmeier / Li Li / Lai Wei / Robert Foss. Center for Injury Research and Policy at Nationwide Children's Hospital. *Epidemiology*. September, 2021.

### Abstract

This study found that hands-free cellphone laws were associated with fewer driver deaths, but calling-only, texting-only, and texting plus phone manipulation were not. This could be due to greater compliance; hands-free cellphone laws clearly convey that cell phones should not be handled at all while driving. In addition, drivers may be more likely to believe that enforcement is possible when laws broadly govern cellphone use.

## **Distracted Driving Laws and Motor Vehicle Crash Fatalities**

Michael R. Flaherty / Alexander M. Kim / Michael D. Salt / Lois K. Lee. *American Academy of Pediatrics*. June 2020.

### Abstract

From 2007 to 2017, there were 38,215 drivers 16 to 19 years old involved in fatal motor vehicle crashes in the United States. Researchers concluded that primarily enforced distracted driving laws are associated with a lower incidence of fatal motor vehicle crashes involving 16- to 19-year-old drivers. Bans on all hand-held device use and texting bans for all drivers are associated with the greatest decrease in fatal motor vehicle crashes.

## **The Association Between Strengthened Cellphone Laws and Police-Reported Rear-End Crash Rates**

Reagan, Ian J. / Cicchino, Jessica B. / Teoh, Eric R. / Cox, Aimee E. *Journal of Safety Research*. September 2023.

### Abstract

Law changes in Oregon and Washington were associated with significant reductions of 8.8% and 10.9%, respectively, in the rates of monthly rear-end crashes with injury relative to the controls. (Note: Rear-end crashes were chosen because past research has shown that cellphone use is associated with a much larger increase in the odds of those crashes than any other type).

## **Hand-Held Bans = Reduction in Phone Use when Driving**

### **Driver Cellphone and Texting Bans in the United States: Evidence of Effectiveness**

McCartt, Anne T. / Kidd, David G. / Teoh, Eric R. *Annals of Advances in Automotive Medicine*. March 2014

### Abstract

Almost all U.S. states have laws limiting drivers' cell phone use. The evidence suggests that all-driver bans on hand-held phone conversations have resulted in long-term reductions in hand-held phone use, and drivers in states with a ban reported higher rates of hands-free phone use and lower overall phone use compared with drivers in non-ban states.

### **Effects of Washington, D.C. Law on Drivers' Hand-Held Cell Phone Use**

Anne T McCartt / Laurie A Hellinga / Lori L Geary. March 2006.

### Abstract

Researchers collected 36,091 daytime observations of drivers at signalized intersections in D.C. in March 2004, several months before the law took effect on July 1, 2004, and again in October 2004, and 25,151 observations in Maryland, and 28,483 in Virginia, states that placed no limitations on drivers' phone use. Phone use in D.C. declined by 50%.

### **Do Cell Phone Bans Change Driver Behavior?**

Chen. November 2014.

### Abstract

The researcher used individual-level data on drivers' visible cell phone usage (National Occupant Protection Use Survey - NOPUS) in 23 states adopting a hand-held ban. The researcher concluded hand-held bans reduced texting and talking when driving by about 60 to 50 percent, respectively.

## **The Impact of Illinois' Comprehensive Hand-Held Phone Ban**

Marco H Benedetti / Bo Lu / Neale Kinnear / Li Li / M Kit Delgado / Motao Zhu. February 2023.

### Abstract

In 2014, Illinois banned using hand-held mobile electronic devices when driving. Researchers concluded that “the pre-to-post intervention decrease in the drivers’s probability of self-reporting talking on a hand-held phone was significantly more extreme than that of drivers in control states.”

## **Crash Statistics from the National Highway Traffic Safety Administration (NHTSA)**

### Traffic Safety Report

NHTSA conducted two pilots on enforcement campaigns in Hartford, CT and Syracuse, NY. The NHTSA actively observed cell phone use and conducted public awareness surveys at driver licensing offices in the two cities, which found: In Syracuse, New York, both handheld cell phone use and texting behind the wheel have declined by one-third. In Hartford, Connecticut, there was a 57% drop in handheld use and texting behind the wheel.

## **Short-Term Impacts of All-Driver Hand-Held Cellphone Bans on High-Schoolers’ Texting While Driving**

Marco H Benedetti / David D Schwebel / Toni Mo Rudisill / Gary A Smith / Motao Zhu. *National Library of Medicine*. February 2023.

### Abstract

Teen drivers are more likely than their older counterparts to engage in distracted driving. A number of states prohibit cellphone use for teen drivers but only prohibit texting for all drivers. Evidence that these laws have been effective is mixed. Analyzing youth behavior in Georgia, Illinois, and control states North Carolina and Michigan, researchers studied the impact of universal bans on using hand-held cell phones when driving on teen texting. In Illinois, 45.4% of high school drivers texted while driving in 2013. After a 2014 policy to ban hand-held use of phones for all drivers, the percentage decreased in 2015 to 41.8% and decreased further in 2017 to 37.7%. In Georgia, the percentage decreased from 37.5% before the law to 30.8% after.

## **Hand-Held Ban = Reduction in Insurance Premiums**

### **The Effect of Distracted Driving Laws on Automobile Liability Insurance Claims**

J. Bradley Karl / Charles Nyce. *North American Actuarial Journal*. January 23, 3020.

### Abstract

This study estimated that primary hand-held bans for all drivers lead to a reduction in injury liability claims of approximately 9.2% in any given year during the post-ban period. This reduction in claims leads to a 7.7% annual savings in the insurance industry. Only the strongest distracted driving laws have a statistically meaningful impact on injury liability loss costs. Finally, this study calculated that, on average, 4.7% of insurance premium savings are attributable to distracted driving bans.