



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# Teen Distracted Driver Data



 **NHTSA**

## Teens and Distracted Driving - 2017

People killed in distraction-affected crashes in 2017	3,166
Teens (15 to 19 years old) killed in distraction-affected crashes in 2017	229
Percentage of all distracted-driving fatalities in 2017 who were 15- to 19-year-olds	7%

Seven percent of the people who died in distraction-affected crashes in 2017 were teens 15 to 19 years old.

Teens (15 to 19) killed in all crashes in 2017	2,526
Teens (15 to 19) killed in distraction-affected crashes in 2017	229
Percentage of teens (15 to 19) killed in distraction-affected crashes in 2017	9%

Nine percent of all teen motor vehicle crash fatalities in 2017 involved distracted driving.

Number of distracted drivers (all ages) involved in fatal crashes in 2017	2,994
Teen (15 to 19) distracted drivers involved in fatal crashes in 2017	271
Percentage of distracted drivers involved in fatal crashes who were teens (15 to 19) in 2017	9%

Nine percent of distracted drivers involved in fatal crashes in 2017 were teens 15 to 19 years old.

Teen (15 to 19) drivers involved in fatal crashes in 2017	3,255
Teen (15 to 19) distracted drivers involved in fatal crashes in 2017	271
Percentage of teen (15 to 19) drivers who were distracted at the time of the fatal crashes in 2017	8%

Eight percent of teen (15 to 19) drivers who were involved in fatal crashes in 2017 were distracted at the time of the crashes.

People killed in crashes involving a teen (15 to 19) driver in 2017	3,542
People killed in crashes involving a distracted teen (15 to 19) driver in 2017	297
Percentage of people killed in crashes involving a teen (15 to 19), in which the teen was distracted, in 2017	8%

Eight percent of people killed in crashes involving a teen (15 to 19) in 2017 died when teen drivers were distracted.

People killed in teen (15 to 19) distraction-affected crashes in 2017	297
Teens (15 to 19) killed in teen distraction-affected crashes in 2017	153
Percentage of all people killed in teen distraction-affected crashes who were teens (15 to 19) in 2017	52%

Fifty-two percent of people killed in teen (15 to 19) distraction-affected crashes in 2017 were teens 15 to 19 years old.

In 2017, 297 people died in crashes that involved distracted teen (15 to 19) drivers.

In 2017, 229 teens (15 to 19) were killed in distraction-affected crashes.

In 2017, 271 teen (15 to 19) drivers involved in fatal crashes were distracted.

For additional information on distracted driving, visit [www.nhtsa.gov/risky-driving/distracted-driving](http://www.nhtsa.gov/risky-driving/distracted-driving).

DOT HS 812 667

February 2019

14057-020819-v2

# Traffic Safety Facts

2017 Data

May 2019

DOT HS 812 753



## Key Findings

- In the 15- to 20-year-old age group, driver fatalities declined by 33 percent in the 10-year period from 2008 to 2017, including a 4-percent decrease from 2016 to 2017.
- The number of licensed young drivers decreased by 9.0 percent in the 10-year period from 2008 to 2017 but increased by 0.3 percent from 2016 to 2017.
- In 2017 there were 1,830 young drivers killed in motor vehicle crashes.
- Eight percent of all drivers involved in fatal crashes in 2017 were 15 to 20 years old. Young drivers accounted for 5.4 percent of the total number of licensed drivers in the United States in 2017.
- The rate of drivers involved in fatal crashes per 100,000 licensed drivers for young female drivers was 21.99 in 2017. For young male drivers in 2017, the involvement rate was 49.62, about 2.3 times that of young female drivers.
- During 2017 there were 282 motorcycle riders 15 to 20 years old killed in crashes.
- Of the young drivers killed with known restraint use, 47 percent were unrestrained at the time of the crashes in 2017.
- Twenty-four percent of young drivers 15 to 20 years old who were killed in crashes in 2017 had blood alcohol concentrations (BACs) of .01 g/dL or higher; 82 percent of those young drivers also had BACs of .08 g/dL or higher.
- NHTSA estimates that minimum-drinking-age laws (21 years old) have saved 31,959 lives since 1975.



U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**

1200 New Jersey Avenue SE  
Washington, DC 20590

## Young Drivers

The term *young driver* refers to a person 15 to 20 years old operating a motor vehicle. People in this age group generally obtain their licenses for the first time and many are under a graduated driver licensing program as they learn driving skills. Young, inexperienced drivers have higher crash rates than older, more experienced drivers in the United States.

In this fact sheet for 2017, information on young drivers is presented as follows:

- [Overview](#)
- [Fatalities](#)
- [Driver Involvement](#)
- [Motorcycles](#)
- [Restraint Use](#)
- [Speeding](#)
- [Alcohol](#)
- [Fatalities by State](#)

This fact sheet contains information on fatal motor vehicle crashes and fatalities based on data from the Fatality Analysis Reporting System (FARS). Refer to the end of this publication for more information on FARS. Injury estimates are based on data obtained from a nationally representative sample of police-reported crashes, but at the time of publication, estimates for 2016 and 2017 were not available. For more information, read **Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)** at the end of this publication.

## Overview

In 2017 there were 1,830 young drivers 15 to 20 years old who died in motor vehicle crashes, a 4-percent decrease from the 1,916 young drivers who died in 2016.

Motor vehicle crashes are a leading cause of death for 15- to 20-year-olds, according to the National Center for Health Statistics.<sup>1</sup>

There were 225.3 million licensed drivers in the United States in 2017. Young drivers accounted for 5.4 percent (12.1 million) of the total in 2017, an 9.0-percent decrease from the 13.3 million young drivers in 2008, but a 0.3-percent increase from the 12.1 million young drivers in 2016. Population for this age group decreased by 4.2 percent from 2008 to 2017.<sup>2</sup>

<sup>1</sup> Centers for Disease Control and Prevention's web-based Injury Statistics Query and Reporting System, available at [www.cdc.gov/injury/wisqars/fatal.html](http://www.cdc.gov/injury/wisqars/fatal.html)

<sup>2</sup> Licensed drivers – Federal Highway Administration, Population – Census Bureau.

## Fatalities

Total fatalities in crashes with young drivers decreased steadily over the 10-year period from 6,452 in 2008 to 4,750 in 2017, resulting in a 26-percent decrease in fatalities during that time, as seen in Table 1. In fatal crashes involving young drivers for the 10-year period from 2008 to 2017:

- Fatalities among young drivers decreased by 33 percent.
- Fatalities among the passengers of young drivers decreased by 41 percent.
- Occupant fatalities in other vehicles decreased by 10 percent.
- Nonoccupant fatalities—pedestrians, bicyclists, or other nonoccupants—increased by 8 percent.

In fatal crashes involving young drivers in the most recent year from 2016 to 2017:

- Fatalities among young drivers decreased by 4 percent.

- Fatalities among the passenger of young drivers decreased by 5 percent.
- Occupant fatalities in other vehicles increased by 2 percent.
- Nonoccupant fatalities decreased by 6 percent.

Figure 1 displays the percentage of fatalities in crashes involving young drivers by person type and year.

In 2017:

- Young drivers who were involved in fatal crashes made up 39 percent of the fatalities in those crashes.
- There were more fatalities of occupants in other vehicles than there were passenger fatalities of young drivers; this has been the trend since 2012.
- Of those passengers who died in crashes with young people who were driving, 66 percent (646 of 979 from Table 1) were also 15 to 20 years old.

Table 1

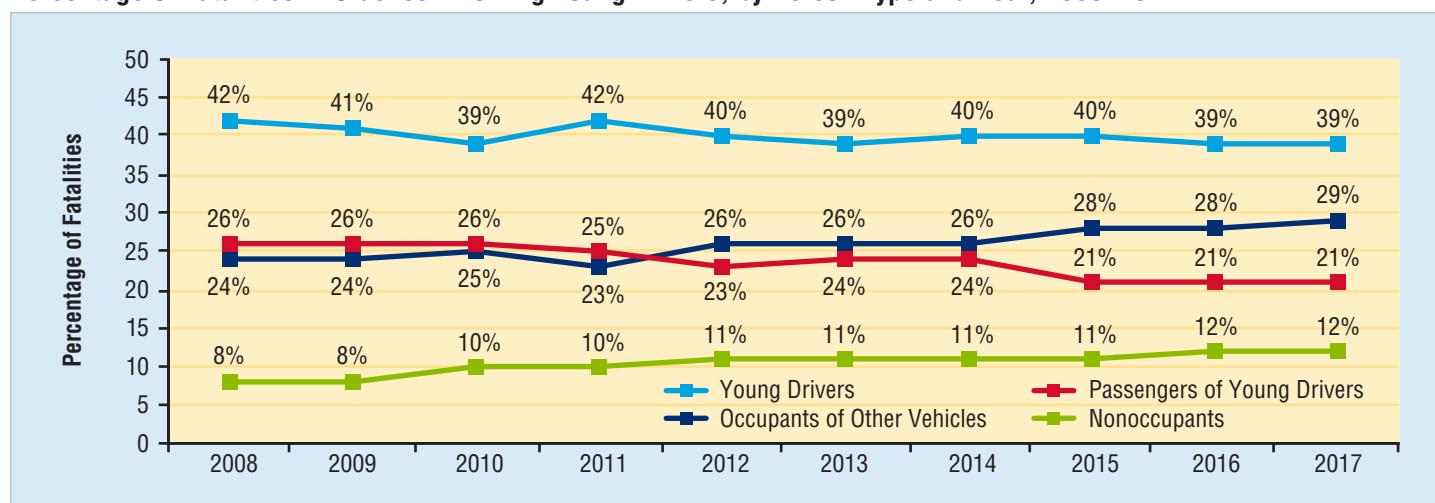
**Fatalities in Crashes Involving Young Drivers, by Person Type and Year, 2008–2017**

Year	Young Drivers (15–20)	Passengers of Young Drivers by Age					Occupants of Other Vehicles	Nonoccupants	Total
		<15	15–20	21+	Unknown	Total			
2008	2,742	170	1,067	421	4	1,662	1,527	521	6,452
2009	2,343	145	958	351	2	1,456	1,381	469	5,649
2010	1,965	130	845	356	2	1,333	1,250	493	5,041
2011	1,993	118	777	298	1	1,194	1,122	473	4,782
2012	1,880	88	682	286	4	1,060	1,230	502	4,672
2013	1,696	120	633	313	3	1,069	1,133	469	4,367
2014	1,723	75	671	268	1	1,015	1,093	454	4,285
2015	1,903	101	622	258	1	982	1,326	533	4,744
2016	1,916	94	665	270	4	1,033	1,348	598	4,895
2017	1,830	96	646	236	1	979	1,378	563	4,750

Source: FARS 2008–2016 Final File, 2017 Annual Report File (ARF)

Figure 1

**Percentage of Fatalities in Crashes Involving Young Drivers, by Person Type and Year, 2008–2017**



Source: FARS 2008–2016 Final File, 2017 ARF

## Driver Involvement

There were 4,361 young drivers involved in fatal crashes in 2017 – a 26-percent decrease from the 5,886 involved in 2008. This 26-percent decrease is different from the 4-percent increase for all drivers involved in fatal crashes in the same time period. Table 2 shows both involvement of young drivers in fatal crashes as well as young driver fatalities in fatal crashes from 2008 to 2017.

In 2017:

- Young drivers involved in fatal crashes decreased from 2008 for both young male and female drivers (27% and 23%, respectively).

- The 2-year comparison of total driver involvement in fatal crashes remained roughly the same from 52,399 in 2016 to 52,274 in 2017. During this same period, young-driver involvement decreased by 4 percent from 4,555 in 2016 to 4,361 in 2017.
- Eight percent (8.3%) of all drivers involved in fatal crashes were young drivers. However, young drivers were only 5.4 percent of all licensed drivers in 2017.

Table 2

### Involvement of 15- to 20-Year-Old and All Drivers in Fatal Crashes, by Gender, 2008 and 2017

Gender	2008			2017			Percentage Change, 2008–2017	
	Total	Ages 15–20	Percentage of Total	Total	Ages 15–20	Percentage of Total	Total	Ages 15–20
Drivers Involved in Fatal Crashes								
Male	37,061	4,192	11.3%	37,654	3,049	8.1%	+2%	-27%
Female	12,627	1,692	13.4%	13,555	1,309	9.7%	+7%	-23%
Total*	50,416	5,886	11.7%	52,274	4,361	8.3%	+4%	-26%
Driver Fatalities								
Male	18,764	2,013	10.7%	18,197	1,341	7.4%	-3%	-33%
Female	5,483	727	13.3%	5,397	487	9.0%	-2%	-33%
Total*	24,254	2,742	11.3%	23,611	1,830	7.8%	-3%	-33%

Source: FARS 2008 Final File, 2017 ARF

\*Total includes unknown gender.

The rate of drivers involved in fatal crashes per 100,000 licensed drivers was higher for young male drivers compared to older male drivers. For young male drivers 15 to 20 years old the driver involvement rate was 49.62 young male drivers involved in fatal crashes in 2017 per 100,000 licensed young male drivers. For female drivers of all ages, the highest involvement rate was 21.99 young

female drivers 15 to 20 years old involved in fatal crashes in 2017 per 100,000 licensed young female drivers.

The 15- to 20-year-old age group accounted for 9.8 percent of all drivers involved in single-vehicle fatal crashes in 2017, compared to 7.8 percent in multiple-vehicle fatal crashes, as shown in Table 3.

Table 3

**Percentage of Population and Drivers Involved in Fatal Crashes, by Age Group, 2017**

	Age Group								
	<15	15–20	21–24	25–34	35–44	45–54	55–64	65–69	70+
Population	18.7%	7.8%	5.5%	13.9%	12.5%	13.0%	12.9%	5.2%	10.4%
Drivers Involved in Fatal Crashes - All Fatal Crashes	0.1%	8.5%	9.8%	21.3%	16.1%	15.9%	14.2%	4.5%	9.6%
- Single-Vehicle	0.2%	9.8%	10.9%	22.1%	15.7%	15.1%	13.7%	4.2%	8.4%
- Multi-Vehicle	0.1%	7.8%	9.1%	20.8%	16.3%	16.3%	14.5%	4.7%	10.3%
2017 Licensed Drivers	0.0%	5.4%	6.4%	17.7%	16.5%	17.4%	17.4%	6.9%	12.4%

Source: FARS 2017 ARF; Population – Census Bureau; Licensed Data – Federal Highway Administration

Note: Individuals with unknown age were removed before calculating percentages.

Among young drivers involved in fatal crashes, 22 percent (157 out of 730) of those who did not have valid operator licenses also

had previous license suspensions or revocations at the time of the crashes in 2017 (Table 4).

Table 4

**15- to 20-Year-Old Drivers Involved in Fatal Crashes, by Previous 5-Year Driving Record and License Compliance, 2017**

Driving Record	License Compliance				Total*	
	Valid		Invalid			
	Number	Percent**	Number	Percent**	Number	Percent**
Total Drivers Involved	3,607	100.0%	730	100.0%	4,361	100.0%
No Previous Driving Record	2,106	58.4%	406	55.6%	2,512	57.6%
Previous Recorded Crashes	501	13.9%	76	10.4%	577	13.2%
Previous Recorded Suspensions or Revocations	203	5.6%	157	21.5%	360	8.3%
Previous DWI Convictions	22	0.6%	22	3.0%	44	1.0%
Previous Speeding Convictions	621	17.2%	99	13.6%	721	16.5%
Previous Other Harmful or Moving Convictions	533	14.8%	136	18.6%	669	15.3%

Source: FARS 2017 ARF

\*Total includes drivers with unknown previous records.

\*\*A driver can have multiple driving records of different types.

## Motorcycles

The term *motorcycle rider* refers to the operator of the motorcycle only and the term *passenger* refers to any occupant not including the rider. The term *motorcyclist* refers to any occupant of a motorcycle, either the rider or the passenger.

In 2017 there were 282 young motorcycle riders 15 to 20 years old killed in crashes, an increase of 11 percent from 255 young motorcycle riders killed in 2016.

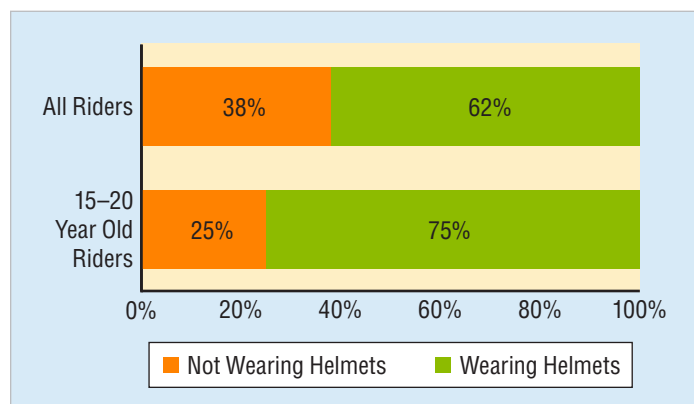
Helmets are estimated to be 37-percent effective in preventing fatalities among motorcycle riders and 41-percent effective among motorcycle passengers. NHTSA estimates that helmets saved the lives of 1,872 motorcyclists of all ages in 2017, and that if all motorcyclists had worn helmets, an additional 749 lives could have been saved.<sup>3</sup>

<sup>3</sup> National Center for Statistics and Analysis. (2019, March). *Lives saved in 2017 by restraint use and minimum-drinking-age laws* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 683). Washington, DC: National Highway Traffic Safety Administration. Available at [crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683](https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683)



Twenty-five percent of the motorcycle riders 15 to 20 years old who were killed in crashes were not wearing helmets (based on known helmet use) compared to 38 percent of all motorcycle riders who were killed in 2017 as shown in Figure 2.

Figure 2  
**Helmet Use\* of Motorcycle Riders Killed in Fatal Crashes, by Age, 2017**

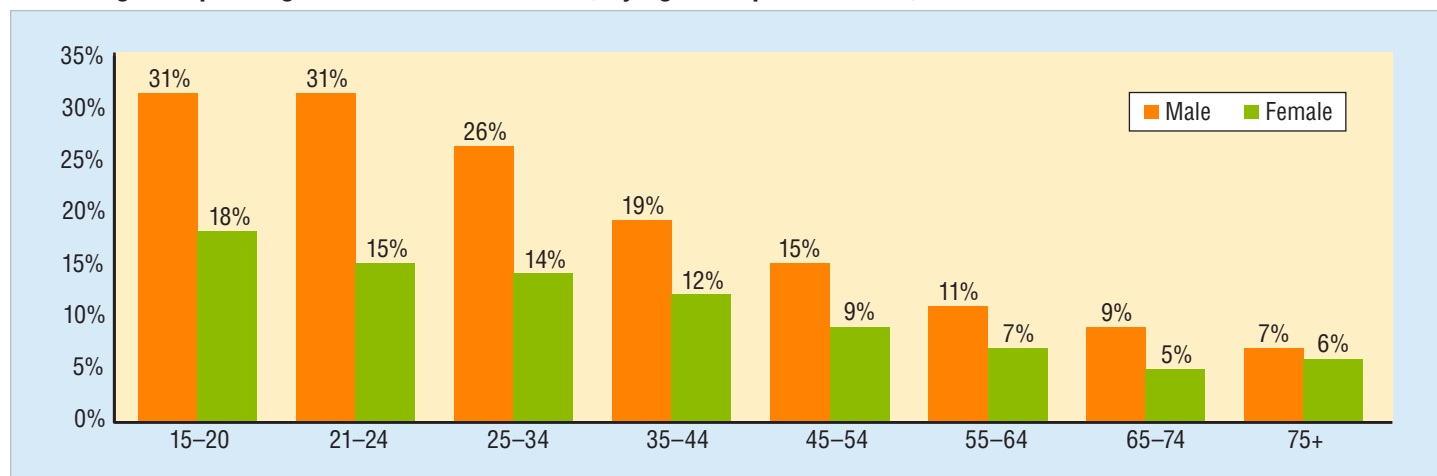


Source: FARS 2017 ARF

\*Based on known helmet use.

Of the young motorcycle riders involved in fatal crashes, 41 percent were either unlicensed or driving with invalid licenses compared to 29 percent of all motorcycle riders involved in 2017.

Figure 3  
**Percentage of Speeding Drivers in Fatal Crashes, by Age Group and Gender, 2017**



Source: FARS 2017 ARF

## Restraint Use

Of the 3,940 young passenger vehicle drivers involved in fatal crashes in 2017, the restraint use of those drivers is known for all but 333 drivers. Passenger vehicles include passenger cars and light trucks such as pickups, SUVs, and vans. Of the young passenger vehicle drivers involved in fatal crashes in 2017 with known restraint use:

- Forty-seven percent of those who died were unrestrained, which is the same percentage for all drivers who died in fatal crashes.
- Thirteen percent of those who survived were unrestrained compared to 9 percent of all drivers who survived fatal crashes.

## Speeding

NHTSA considers a crash to be speeding-related if any driver in the crash was charged with a speeding-related offense or if a police officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash. In 2017 young drivers, male and female, were speeding at the time of the fatal crashes more than the other age groups as shown in Figure 3. Males in general were more likely to be associated with speeding than females in these crashes.

## Alcohol

All States and the District of Columbia have 21-year-old minimum-drinking-age laws. Alcohol involvement includes a fatal crash in which a driver had a BAC of .01 g/dL or higher. A driver is considered to be alcohol-impaired when the driver's BAC is .08 g/dL or higher.

Table 5

### Alcohol Involvement Among Young Drivers Age 15 to 20 Involved in Fatal Crashes, by Year and Driver Status, 2008 and 2017

Driver Status	Number of Drivers	No Alcohol (BAC=.00 g/dL)		BAC=.01+ g/dL		BAC=.08+ g/dL	
		Number	Percent	Number	Percent	Number	Percent
2008							
Survived	3,144	2,669	85%	475	15%	320	10%
Killed	2,742	1,906	70%	836	30%	690	25%
Total	5,886	4,575	78%	1,312	22%	1,010	17%
2017							
Survived	2,531	2,158	85%	373	15%	293	12%
Killed	1,830	1,390	76%	440	24%	362	20%
Total	4,361	3,548	81%	813	19%	655	15%

Source: FARS 2008 Final File, 2017 ARF

The number of young drivers involved in fatal crashes who had BACs of .01 g/dL or higher dropped by 38 percent, from 1,312 in 2008 to 813 in 2017. However, 19 percent of these drivers had alcohol (BACs of .01 g/dL or higher) in their systems in 2017 as compared to 22 percent in 2008.

Table 6 shows alcohol involvement for young drivers who were killed according to their age. Among young drivers killed in fatal crashes in 2017, there were 487 killed at the age of 20—highest among the young drivers; 32 percent of these drivers had alcohol in their systems at the time of the fatal crashes. The table also shows that of those young drivers killed, the percentage that involved alcohol generally increases as age increases (except for 15-year-old drivers).

Table 6

### Young Drivers Killed, by Age and Percentage With BAC=.01 g/dL or Higher, 2017

Age (Years)	Total Number of Drivers Killed	Percentage of Drivers With BAC=.01+ g/dL		Percentage of Drivers With BAC=.08+ g/dL	
		Number	Percent	Number	Percent
15	33	5	15%	2	6%
16	185	20	11%	17	9%
17	235	41	17%	34	15%
18	423	94	22%	71	17%
19	467	123	26%	102	22%
20	487	158	32%	136	28%

Source: FARS 2017 ARF

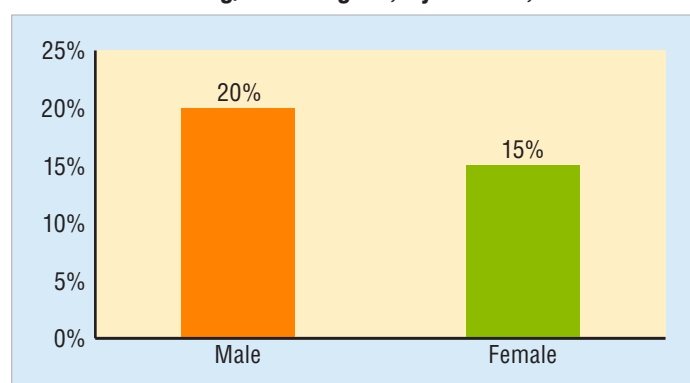
In 2017:

- Twenty-four percent of the young drivers 15 to 20 years old who were killed in crashes had BACs of .01 g/dL or higher; 20 percent had BACs of .08 g/dL or higher, as shown in Table 5.
- Of the 440 young drivers killed who had alcohol in their systems, 362 (82%) were at .08 g/dL or higher (past the legal driving limit for those *legally permitted* to consume alcohol).

For young drivers in fatal crashes, alcohol involvement is higher among males than among females. Twenty percent of the young male drivers involved in fatal crashes in 2017 had some alcohol at the time of the crashes (BACs of .01 g/dL or higher), compared with 15 percent of the young female drivers involved in fatal crashes as shown in Figure 4.

Figure 4

### Percentage of Young Drivers Involved in Fatal Crashes With BACs of .01 g/dL or Higher, by Gender, 2017



Source: FARS 2017 ARF

Drivers involved in fatal crashes are less likely to use restraints when they have been drinking. Forty-two percent of the young drivers of passenger vehicles involved in fatal crashes in 2017 who had been drinking were unrestrained (based on known restraint use). Of the

young drivers who had been drinking and were killed in crashes, 58 percent were unrestrained (based on known restraint use). In comparison, of the non-drinking young drivers killed, 43 percent were unrestrained, as seen in Table 7.

Table 7

**Young Drivers of Passenger Vehicles in Fatal Crashes, by Restraint Use\* and Alcohol, 2017**

Restraint Use*	No Alcohol (BAC=.00 g/dL)		BAC=.01+ g/dL	
	Number	Percent	Number	Percent
<b>Drivers Involved in Fatal Crashes</b>				
Restraint Used	2,275	78%	391	58%
Restraint Not Used	657	22%	284	42%
<b>Driver Fatalities</b>				
Restraint Used	569	57%	151	42%
Restraint Not Used	438	43%	205	58%

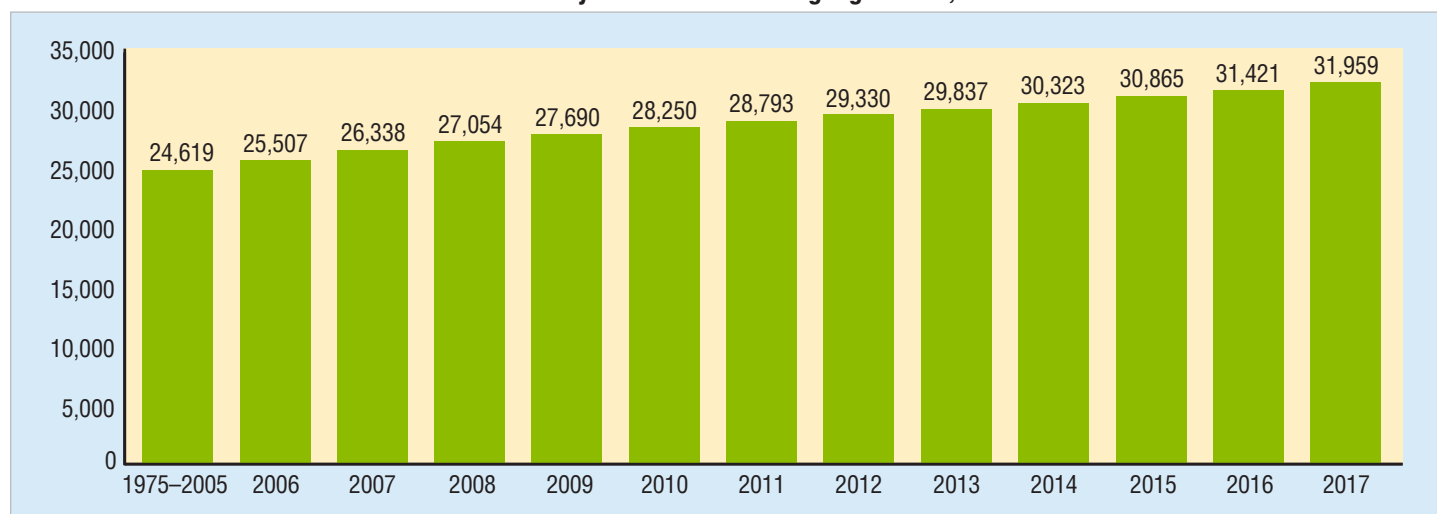
Source: FARS 2017 ARF

\*Based on known restraint use.

NHTSA estimates that the 21-year-old minimum-drinking-age laws have helped reduce alcohol-related traffic fatalities and have saved

31,959 lives since 1975, as shown in Figure 5. In 2017 an estimated 538 lives were saved by minimum-drinking-age laws.<sup>4</sup>

Figure 5

**Cumulative Estimated Number of Lives Saved by Minimum-Drinking-Age Laws,<sup>4</sup> 1975-2017**

<sup>4</sup> National Center for Statistics and Analysis. (2019, March). *Lives saved in 2017 by restraint use and minimum-drinking-age laws* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 683). Washington, DC: National Highway Traffic Safety Administration. Available at [crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683](https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683)



## Fatalities by State

Table 8 presents the number of young drivers killed, as well as the numbers of passengers of young drivers, occupants of other vehicles, and nonoccupants killed in young-driver crashes for each State and the District of Columbia in 2017. Also included in Table 8 is Puerto Rico, which is not included in the U.S. total. Figure 6 shows a heat map of the percentage of fatalities in crashes involving young drivers compared to total fatalities within the State.

In 2017:

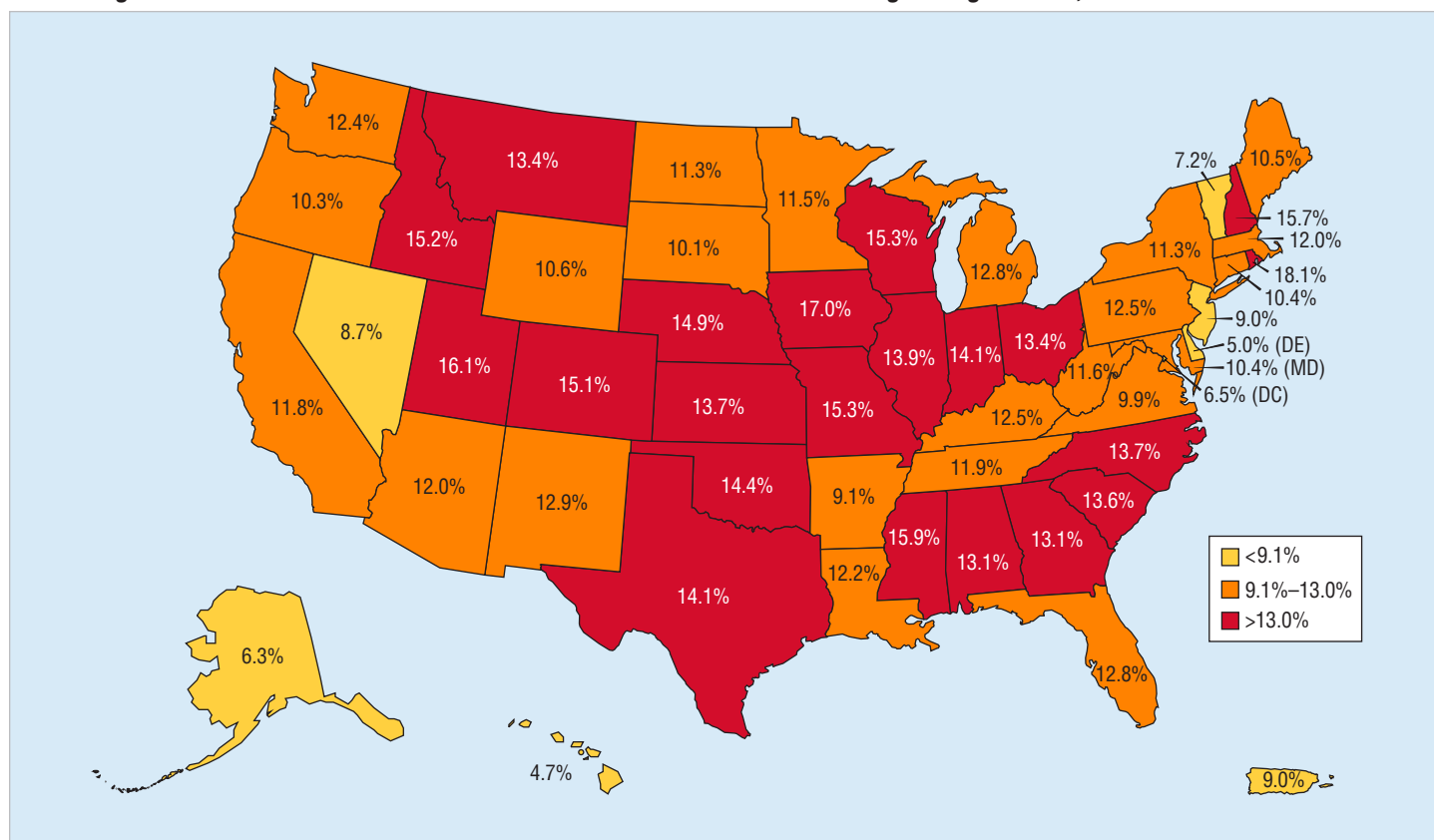
- Traffic fatalities in crashes involving young drivers ranged from 2 in the District of Columbia to 523 in Texas.

- The number of young drivers who died in crashes ranged from 1 in the District of Columbia and Alaska to 201 in Texas.
- The percentages of fatalities in crashes involving young drivers (of State traffic fatalities) in States ranged from a low of 4.7 percent (Hawaii) to 18.1 percent (Rhode Island), compared to the national average of 12.8 percent as shown in Figure 6.

Additional State/county-level data is available at NHTSA's State Traffic Safety Information website at <https://cdan.nhtsa.gov/stsi.htm>

Figure 6

### Percentage of State Traffic Fatalities Who Were Killed in Crashes Involving Young Drivers, 2017



Source: FARS 2017 ARF

Table 8

**Fatalities in Crashes Involving Young Drivers Age 15 to 20, by State and Person Type, 2017**

State	Young Drivers	Passengers in Young Drivers' Vehicles	Occupants of Other Vehicles	Nonoccupants	Total Fatalities in Crashes Involving Young Drivers	Percentage of State Traffic Fatalities Who Were Killed in Crashes Involving Young Drivers
Alabama	57	21	34	12	124	13.1%
Alaska	1	1	3	0	5	6.3%
Arizona	30	21	43	26	120	12.0%
Arkansas	21	9	10	5	45	9.1%
California	143	96	103	84	426	11.8%
Colorado	37	21	28	12	98	15.1%
Connecticut	7	10	4	8	29	10.4%
Delaware	4	0	2	0	6	5.0%
District of Columbia	1	0	0	1	2	6.5%
Florida	148	61	135	55	399	12.8%
Georgia	71	41	66	24	202	13.1%
Hawaii	3	1	1	0	5	4.7%
Idaho	13	9	10	5	37	15.2%
Illinois	61	28	47	17	153	13.9%
Indiana	47	25	44	13	129	14.1%
Iowa	20	17	15	4	56	17.0%
Kansas	28	19	15	1	63	13.7%
Kentucky	38	24	28	8	98	12.5%
Louisiana	49	16	18	10	93	12.2%
Maine	12	3	1	2	18	10.5%
Maryland	26	10	16	5	57	10.4%
Massachusetts	19	11	7	5	42	12.0%
Michigan	45	24	49	14	132	12.8%
Minnesota	16	10	12	3	41	11.5%
Mississippi	51	19	30	10	110	15.9%
Missouri	54	39	40	9	142	15.3%
Montana	14	7	3	1	25	13.4%
Nebraska	16	11	6	1	34	14.9%
Nevada	8	4	9	6	27	8.7%
New Hampshire	8	4	3	1	16	15.7%
New Jersey	18	7	19	12	56	9.0%
New Mexico	18	5	15	11	49	12.9%
New York	43	27	21	22	113	11.3%
North Carolina	56	43	75	19	193	13.7%
North Dakota	6	4	2	1	13	11.3%
Ohio	74	43	31	10	158	13.4%
Oklahoma	41	22	26	5	94	14.4%
Oregon	19	8	14	4	45	10.3%
Pennsylvania	56	27	46	13	142	12.5%
Rhode Island	5	2	6	2	15	18.1%
South Carolina	37	22	53	22	134	13.6%
South Dakota	4	7	2	0	13	10.1%
Tennessee	45	30	40	9	124	11.9%
Texas	201	108	154	60	523	14.1%
Utah	13	9	14	8	44	16.1%
Vermont	2	1	2	0	5	7.2%
Virginia	40	9	26	8	83	9.9%
Washington	34	16	13	7	70	12.4%
West Virginia	22	6	4	3	35	11.6%
Wisconsin	44	17	29	4	94	15.3%
Wyoming	4	4	4	1	13	10.6%
<b>U.S. Total</b>	<b>1,830</b>	<b>979</b>	<b>1,378</b>	<b>563</b>	<b>4,750</b>	<b>12.8%</b>
Puerto Rico	13	6	3	4	26	9.0%

Source: FARS 2017 ARF

## Fatality Analysis Reporting System (FARS)

The Fatality Analysis Reporting System (FARS) contains data on every fatal traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a public trafficway and must result in the death of a vehicle occupant or a nonoccupant within 30 days of the crash. The Annual Report File (ARF) is the FARS data file associated with the most recent available year, which is subject to change when it is finalized about a year later. The final version of the file is aptly known as the Final file. The additional time between the ARF and the Final file provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts.

The updated final counts for a given previous calendar year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2017 ARF, the 2016 Final file was also released to replace the previous year's 2016 ARF. The final fatality count in motor vehicle crashes for 2016 was 37,806, which was updated from 37,461 from the 2016 ARF. The number of fatalities in motor vehicle crashes involving young drivers from the 2016 Final file was 4,895, which was updated from 4,853 from the 2016 ARF.

## Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)

NHTSA's National Center for Statistics and Analysis (NCSA) redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property-damage-only crashes in the United States. The new system, called CRSS, replaced NASS GES in 2016. NCSA released the 2016 CRSS data in March 2018, but is currently reassessing this data, which is subject to change. NCSA

plans to release the updated 2016 and new 2017 CRSS files in 2019. Thus, no CRSS estimates will be presented in this fact sheet. For more information on CRSS, see the Additional Resources section of the CRSS web page at [www.nhtsa.gov/national-center-statistics-and-analysis-ncsa/crash-report-sampling-system-crss](http://www.nhtsa.gov/national-center-statistics-and-analysis-ncsa/crash-report-sampling-system-crss).

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2019, May). *Young drivers: 2017 data*. (Traffic Safety Facts. Report No. DOT HS 812 753). Washington, DC: National Highway Traffic Safety Administration.

## For More Information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NSA-230, 1200 New Jersey Avenue SE, Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at [NCSARequests@dot.gov](mailto:NCSARequests@dot.gov). General information on highway traffic safety can be found at [www.nhtsa.gov/research-data](http://www.nhtsa.gov/research-data). To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Alcohol-Impaired Driving*, *Bicyclists and Other Cyclists*, *Children*, *Large Trucks*, *Motorcycles*, *Occupant Protection in Passenger Vehicles*, *Older Population*, *Passenger Vehicles*, *Pedestrians*, *Rural/Urban Comparison of Traffic Fatalities*, *School-Transportation-Related Crashes*, *Speeding*, *State Alcohol-Impaired-Driving Estimates*, *State Traffic Data*, and *Summary of Motor Vehicle Crashes*. Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data*. The fact sheets and annual Traffic Safety Facts report can be found at <https://crashstats.nhtsa.dot.gov/>.



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

# ★ ★ ★ ★ Teen Driver Safety

## Distracted Driving Among Newly Licensed Teen Drivers

### *The Situation*

- With teen crash rates roughly four times higher than those of adult drivers, traffic crashes remain the leading cause of death for the age group
- To date there has been little concrete information or research available on distracted driving among teens specifically
- Teenage drivers are believed to be at risk for distracted driving-related crashes, as they are avid users of cell phones and other technologies, are inexperienced drivers, and are still undergoing development in areas of the brain responsible for decision-making and risk management

### *The Study*

- Part of an in-depth naturalistic three-phase study of 50 families in North Carolina with a novice teenage driver
- Follows two previous studies which collected in-vehicle video clips while teens progressed through the first two stages of Graduated Driver Licensing (GDL):
  - The [first study](#) looked at how parents supervise their teens during the learner's stage of GDL
  - The [second](#) examined how teen behaviors and driving conditions shift during the transition to unsupervised driving
- The [current study](#) re-analyzed clips from the first six months of unsupervised driving to determine the nature and prevalence of distracted driving behaviors among teenagers and their relation to various aspects of driving performance

### *The Findings: Answers to Six Key Questions*

Which distracted driver behaviors are most common among teenage drivers? **Use of electronic devices was the leading behavior, followed by adjusting controls, personal grooming, and eating or drinking.**

- Use of electronic devices was the most common distracted driving behavior and was found in 7% of the 7,858 clips that were recorded when a pre-determined g-force threshold was exceeded in the vehicle
  - Nearly twice as many teens were observed or suspected of operating an electronic device (e.g., texting) than were seen talking on a hand-held phone
- Excluding electronic device use, teens were observed engaging in distracting behaviors in 15.1% of video clips: adjusting controls was the most common (6.2%), followed by personal grooming (3.8%), and eating or drinking (2.8%)

Teens have the highest crash rate of any group in the United States.



Do males and females differ in how often they engage in distracted behaviors, or the kinds of distractions they experience? **Yes.**

- Females were nearly twice as likely as males to be using an electronic device
- Males were roughly twice as likely to turn their bodies around while driving
- Excluding use of electronic devices, females were slightly more likely to be observed engaging in a distracted behavior (15.6% of clips vs. 13.9% for males), such as reaching for an object in the vehicle

Do distracted driver behaviors vary based on the number of passengers and the characteristics of those passengers (e.g., teens vs. adults vs. young siblings)? **Yes.**

- Electronic device use was most common when drivers carried no passengers, and were least common when a parent or other adult was in the vehicle
- Drivers were 60% less likely to use an electronic device when carrying one teenage peer than when driving alone
- Loud conversation and horseplay were more than twice as likely to occur when teens were carrying multiple teenage peers than when they were only carrying one; these behaviors were significantly less likely in the presence of a sibling or parent

Are distracted driver behaviors more common during certain times of day or week (e.g., weekday vs. weekend), and do these behaviors bear any relation to the amount of traffic or other characteristics of the driving environment? **Not necessarily.**

- No clear pattern emerged in the frequency of distracted driving behaviors on weekdays vs. weekends
- Loud conversation and horseplay were particularly common when teens drove on weekend nights with multiple teen passengers (found in 20.2% and 11.2% of clips, respectively)
- No clear relationship was found between the frequency of distracted driving and the amount of traffic present, suggesting teens were not adapting their behaviors to traffic conditions (though heavy traffic conditions were rarely observed)
- There was some indication that teens limited distracted driving behaviors during periods of rain, but the differences were small

Do drivers who engage in distracted behaviors spend more time looking away from the roadway than drivers who are not distracted? **Yes.**

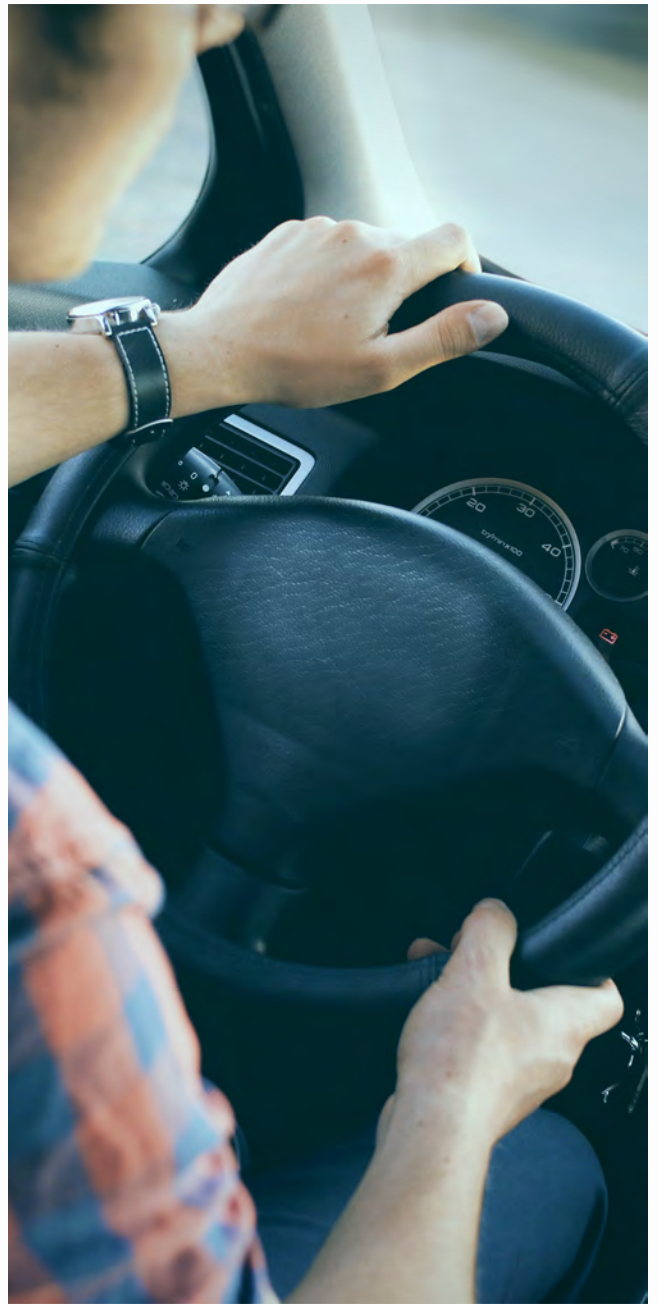
- Drivers were **three times as likely** to look away from the road when using an electronic device, and two-and-a-half times as likely to look away when engaging in other distracted behaviors
- Drivers using an electronic device looked away from the roadway, on average, for a full second longer than drivers not using such a device
- Overall, drivers looked away from the road in 45% of clips; in 10% of these, the longest continuous glance was more than two seconds – enough to cover nearly 2/3 of a football field at 65 mph

Are distracted driver behaviors associated with serious incidents such as near-collisions, or events involving hard braking or swerving? **Yes.**

- Drivers were **six times** as likely to have a serious incident when there was loud conversation in the vehicle, and were more than twice as likely to have a high g-force event when there was horseplay

For more information about teen driver safety and the AAA Foundation's research in this area, please visit [www.AAAFoundation.org](http://www.AAAFoundation.org).





# **BUCKLE UP PHONE DOWN: JOINING THE MOVEMENT**

*Background and Resources for Getting Started*



---

The Missouri Department of Transportation



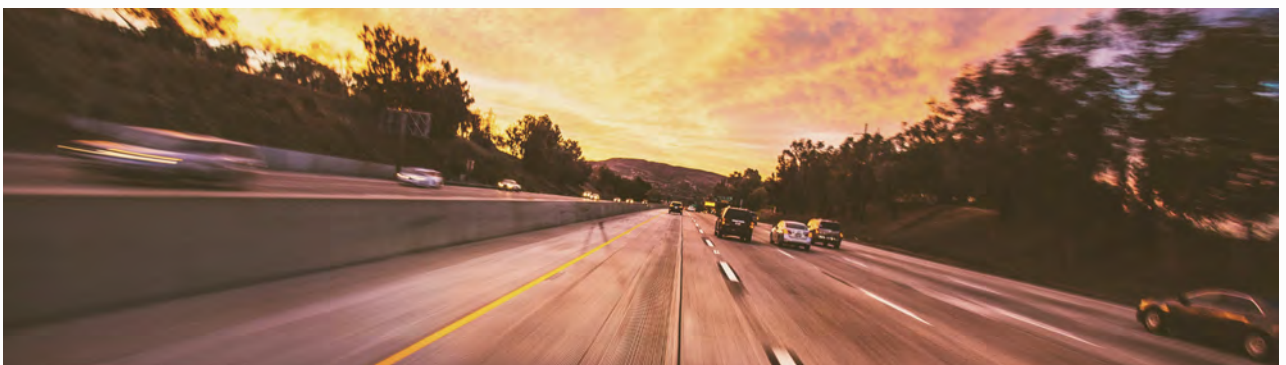
# WHY BUPD?

There is a public health crisis occurring on America's roadways. According to the National Highway Traffic Safety Administration, more than 36,500 people were killed in traffic crashes in 2018. But with most of these crashes being preventable, we know a remedy. The Buckle Up Phone Down movement aims to make this crisis personal, emphasizing the responsibility of each driver to protect themselves and improve the landscape of roadway safety for their loved ones.

BUPD stresses the two most important things drivers can do to move the needle closer to the ultimate goal: zero deaths on our roadways. They're two simple actions with life-saving results.

**Buckle Up:** Taking a few moments to properly secure yourself and loved ones is the single greatest way to increase your likelihood of surviving a crash. Unfortunately, unbuckled occupants make up a disproportionate amount of roadway fatalities. In 2017 alone, seat belts saved an estimated 14,955 lives and could have saved thousands of additional lives if everyone had been wearing a seat belt.

**Phone Down:** In the last five years, perhaps no behavior on our roadways has become more alarming than distracted driving. This dangerous activity claimed at least 2,841 lives in 2018 alone. And with a recent AT&T study revealing nearly nine of every ten drivers admits to engaging in their smartphones while driving, roadways across the country have unnecessarily become a dangerous place to be.



## GOALS

The BUPD challenge is designed to change the culture of roadway safety and make taking action personal. The ultimate desired result is zero fatalities, but there are goals to achieve on that path.

By increasing the exposure and recognition of the movement, we hope to see an increase in BUPD pledges--individuals and businesses promising to buckle up and put their phone down every trip, every time. We hope this increase in drivers dedicated to roadway safety in turn leads to better seat belt usage rates and fewer distracted driving crashes. Improving performance in these areas will reduce the number of fatalities occurring on America's roadways.

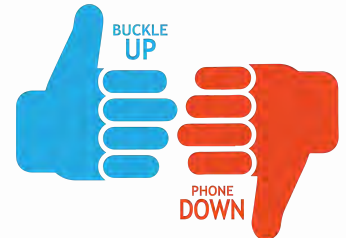
# THE HISTORY OF BUPD

With fatalities on the rise, weak state anti-texting laws and no primary seat belt law, the Missouri Department of Transportation knew it had to take a different approach to driver and passenger safety. Focusing on personal responsibility, the department launched its Buckle Up Phone Down safety campaign in the early months of 2017.

Buckling their seat belt and putting down their cellphone are two of the most effective actions an individual can take to stay safe when getting behind the wheel. In an effort to reach both drivers and passengers with these two messages, the BUPD program was born.

Organizers felt that not only would the challenge encourage safer actions, but it would also recruit those participants to help spread the message and encourage others to take a role in their own safety and, ultimately, the safety of others. Originally inspired by the ALS Ice Bucket Challenge, which challenged people to dump an ice-cold bucket of water over a person's head to spread awareness of Lou Gehrig's disease, the campaign challenged Missouri businesses to adopt policies supporting seat belts and eliminate cellphone use while in company vehicles. Individuals were encouraged to pledge to fasten their seat belt--whether driver or passenger--and put their cellphone down when driving.

MoDOT put a face to the challenge with the "dueling thumbs" hand gesture--one thumb up for "buckle up," and one thumb down for "put your phone down." With this branding gesture, individuals and groups were asked to take photos of the thumbs up/thumbs down pose and upload them to a special MoDOT website.



Businesses were asked to display their commitment by sharing a logo on the MoDOT website that showed their employees they were committed to their safety. It was also a challenge to other companies to join the movement. A letter was sent out explaining the program to hundreds of Missouri businesses. A ready-to-launch communications campaign was shared to make adoption easy. A challenge was born, and the results were swift.





## EXPANDING THE MOVEMENT

The grassroots efforts of dedicated employees and pledges across the state caught on. A mere weeks after the creation of the challenge, hundreds of individuals and businesses had jumped onboard. Corporate safety officers welcomed a chance to share a new safety campaign, and individuals sent their thumbs up/thumbs down photos in droves.

Special promotional displays were set up at the Missouri State Fair so people could take their photos in the familiar pose. And as the movement grew, Missouri's Governor and First Lady became involved with the program. Even Missouri high schools joined in, challenging rival schools and teams to accept the challenge and pass it on.

After that, the push started going beyond Missouri. Members of the Mid America Association of State Highway and Transportation Officials asked for more information on the program, and some states began adopting it to fit their own needs.

A special governor-declared Buckle Up Phone Down Day in October brought businesses together to share the cause. The program was so impactful that in January of 2020 it was awarded the Governor's Quality Award, the highest honor given in Missouri state government.

Today, the BUPD program is poised to go nationwide. With a focus on safety, the American Association of State Highway and Transportation Officials is promoting the effort and encouraging members to take the challenge.



*Kansas City Chiefs mascot KC Wolf shows off his BUPD thumbs outside of Arrowhead Stadium.*



*A Missouri Chick-fil-A restaurant incorporates BUPD messaging on its 'Cell Phone Challenge' boxes.*



*University of Missouri mascot Truman the Tiger shows off a BUPD banner on campus for BUPD Day.*

# BUPD SUCCESSES

The BUPD movement is intended to bring positive change to personal behavior and, ultimately, roadway safety. The successes of the movement are measured twofold: first through vast recognition of the message, and second through clear improvement in driver behavior.

## PLEDGES AND EXPOSURE

To get BUPD up and running relied on some level of recognition in the traveling public. To do so took a team of "champions" located across the state, brainstorming and working out ways to get the message through as many avenues as possible. These champions started small, pushing BUPD through their local communities, and they saw enormous success in the challenge's ability to spread.

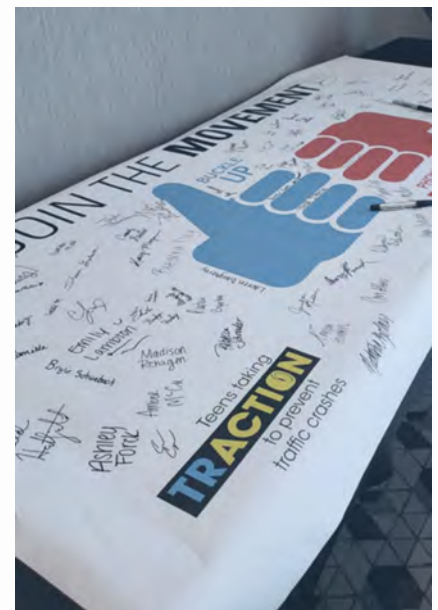
One way to measure this success in recognition is through BUPD pledges. A key component of the challenge is a driver making a promise. To add a physical element to this promise, drivers can take a pledge to BUPD. To keep the momentum going, those who take the pledge receive a card urging them to encourage others to accept the challenge.

As of May 2020, more than 12,600 individuals and 522 businesses have taken the BUPD pledge.

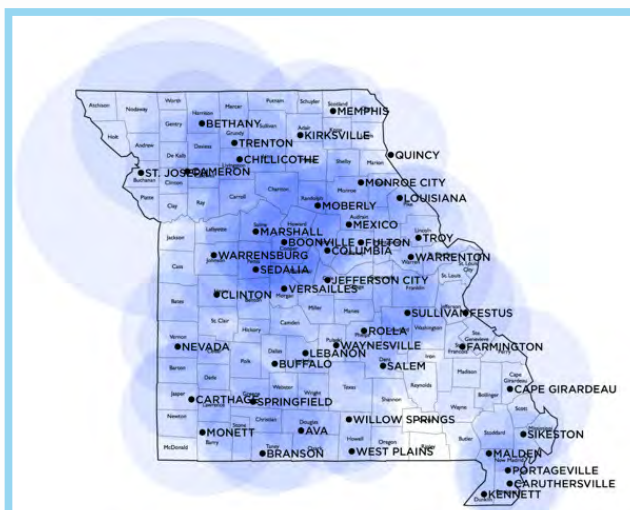
But the movement doesn't rely on word of mouth exclusively for recognition. MoDOT and the Missouri Coalition for Roadway Safety use their various media resources to keep the message alive across the state.

More than 250 dynamic message signs located on heavily-traveled interstates carry BUPD messaging throughout the year. MoDOT and the Coalition's social media pages share the BUPD message frequently to more than 595,000 followers, urging them to take the pledge and pass it on. Advertised BUPD videos and graphics have garnered more than 70 million impressions since 2017.

The work of these BUPD champions, combined with the statewide media pushes, has resulted in massive exposure of the movement, thousands of pledges and valuable recognition.



A BUPD banner collects signatures of high school students promising to buckle up every trip and put the phone down before driving.



A heat map of BUPD messaging exposure via traditional radio from April 20-26, 2020. (Courtesy of MissouriNet)



Crash survivor Jaylen Butner opens the BUPD "Pass It On" PSA, featuring professional sports mascots from across Missouri and the state's governor.



## DRIVER BEHAVIOR

The largest, most important success of the BUPD movement is the positive change in driver behavior. An increase in seat belt usage and a decrease in distracted driving help prevent crashes and protect travelers, the purpose that drives BUPD.

Part of the BUPD challenge to businesses is to enact a policy addressing seat belts, cellphone use in vehicles, or (ideally) both. In a 2020 survey to BUPD pledges, 397 businesses reported having a seat belt policy in place, and 120 reported implementing or strengthening their policy because of the BUPD challenge. Likewise, 303 businesses reported having a cellphone policy in place, and 110 reported implementing or strengthening their policy because of the BUPD challenge.



*A Missouri Wendy's restaurant displays BUPD messaging.*

Aside from enacting policy change for thousands of employees across the state, the BUPD challenge has driven improved results in Missouri seat belt use. In 2019, Missouri's annual seat belt survey reported 88% of Missourians use a seat belt, the highest usage rate in the state's history. This is a 6.3% increase in usage since the campaign's start only three years ago. Similarly, 2019 saw its lowest number of unrestrained occupant fatalities in at least five years.

In a 2020 survey, 100% of BUPD pledges reported buckling up on a regular basis, 633 of them because of the BUPD challenge. And despite Missouri having no primary seat belt law, 65 municipalities have passed their own primary seat belt ordinance.

The BUPD movement is also making headway in the fight against distracted driving. In the 2020 survey, 96% of pledges reported either never using a phone while driving, or using hands-free only. And although distracted driving is widely under reported in traffic crashes, Missouri has seen a decrease in distracted driving fatalities in recent years. In 2015, the state totaled 102 distracted driving fatalities, and in 2019, that number was 73.



*Missouri Governor Mike Parson and First Lady Teresa Parson show off their BUPD thumbs.*

In addition, 10 municipalities have passed an ordinance related to distracted driving.



*St. Louis Blues mascot Louie shows off his BUPD thumbs outside of the Enterprise Center.*



*Harrisonville High School students show off their BUPD thumbs as part of their challenge to rival high schools to take the pledge.*

# ★★★★★ Safety Culture

## Measuring Cognitive Distraction in the Automobile Fact Sheet

### Background

- Distracted driving is a significant highway safety threat, responsible for well over 3,000 fatalities each year.
- There are three main sources of driver distraction:
  - **Visual** (eyes off the road)
  - **Manual** (hands off the wheel)
  - **Cognitive** (mind off the task)
- Of these, *cognitive distraction* has been the hardest to study.
- Prevailing assumptions have held that “hands-free” = safe:
  - 66% of licensed drivers say driver use of hand-held cell phones is **unacceptable**; 56% say hands-free is **acceptable**.
  - New speech-based in-vehicle technologies and infotainment systems have proliferated.
- The AAA Foundation for Traffic Safety set out in 2011 to study this issue and investigate potential sources of cognitive distractions for drivers.

### New Study: Measuring Cognitive Distraction in the Automobile

#### Objectives:

- Isolate the cognitive elements of distracted driving;
- Evaluate the amount of cognitive workload caused by various tasks performed by drivers; and
- Create a rating scale ranking tasks according to how much cognitive distraction they cause.

#### Methods:

Three experiments were performed:

Laboratory



Driving Simulator



Instrumented Vehicle



Several measures were used to assess cognitive workload, such as:

Subjective workload ratings  
(survey)

Brake reaction time and  
following distance

Reaction time & accuracy to  
peripheral light detection test

Brainwave (EEG) activity

Eye and head movements

(Continued)



Car crashes rank among the leading causes of death in the United States.



Six common driver tasks were analyzed in each experiment



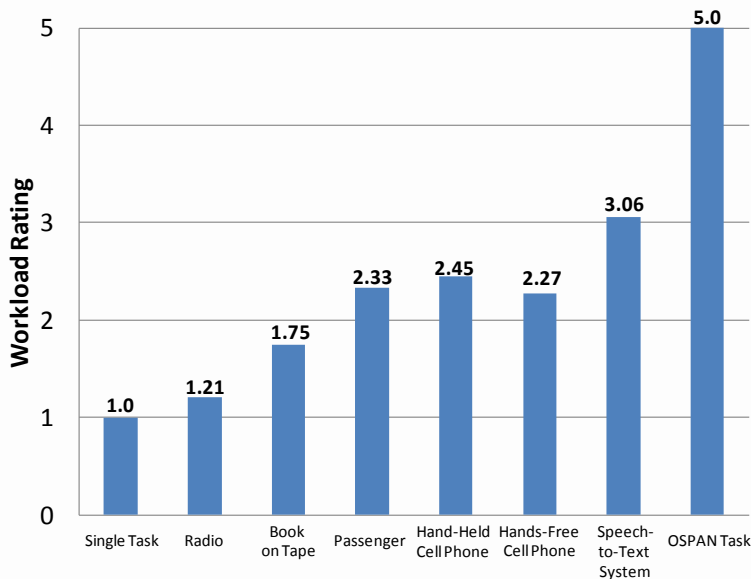
*A seventh and eighth condition – non-distracted driving, and a complex series of math and verbal problems (OSPAN task) – were included to anchor the low and high ends of the rating scale, respectively.*

Measurements from all experiments were standardized to create one rating scale

### **Key Findings**

- Even when a driver's eyes are on the road and hands are on the wheel, sources of *cognitive* distraction cause significant impairments to driving, such as:
  - **Suppressed brain activity** in the areas needed for safe driving;
  - **Increased reaction time** (to peripheral detection test and lead vehicle braking);
  - **Missed cues** and decreased accuracy (to peripheral detection test); and
  - **Decreased visual scanning** of the driving environment (*tunnel vision*, of sorts).
- Driver interactions with in-vehicle speech-to-text systems (such as the infotainment offerings in many new vehicles) create the highest level of cognitive distraction among the tasks assessed.
- Simply put: **“hands-free” does not mean risk free!**

### **Cognitive Distraction Rating Scale**



The scale to the left ranks the six common driver tasks according to the amount of cognitive workload they impose on drivers. The two anchor conditions (single-task non-distracted driving, and the complex OSPAN math and verbal task) represent the low (1) and high (5) ends of the scale, respectively. The other scores are standardized from the three experiments, and demonstrate that while some tasks, like listening to the radio, are not very distracting, others – such as maintaining phone conversations and interacting with speech-to-text systems – place a high cognitive demand on drivers and degrade performance and brain activity necessary for safe driving.

### **For More Information**

For more information about the Foundation's research pertaining to distracted driving and traffic safety culture, please visit [www.AAAFoundation.org/research](http://www.AAAFoundation.org/research).

*Established in 1947 by AAA, the AAA Foundation for Traffic Safety is a not-for-profit, publicly funded, 501(c)(3) charitable research and educational organization. The AAA Foundation's mission is to prevent traffic deaths and injuries by conducting research into their causes and by educating the public about strategies to prevent crashes and reduce injuries when they do occur. This research is used to develop educational materials for drivers, pedestrians, bicyclists and other road users. Visit [www.AAAFoundation.org](http://www.AAAFoundation.org) for more information.*