



Distracted Driving in Fatal Crashes, 2017

The National Highway Traffic Safety Administration (NHTSA) works to reduce the occurrence of distracted driving and raise awareness of its dangers. This risky behavior poses a danger to vehicle occupants as well as pedestrians and bicyclists. Driver distraction is a specific type of driver inattention. Distraction occurs when drivers divert their attention from the driving task to focus on some other activity. Often discussions regarding distracted driving center around cell phone use and texting, but distracted driving also includes other activities such as eating, talking to other passengers, or adjusting the radio or climate controls. A distraction-affected crash is any crash in which a driver was identified as distracted at the time of the crash.

- Nine percent of fatal crashes in 2017 were reported as distraction-affected crashes.
- In 2017 there were 3,166 people killed in motor vehicle crashes involving distracted drivers.
- Six percent of all drivers involved in fatal crashes were reported as distracted at the time of the crashes. Eight percent of drivers 15 to 19 years old involved in fatal crashes were reported as distracted. This age group has the largest proportion of drivers who were distracted at the time of the fatal crashes.
- In 2017 there were 599 nonoccupants (pedestrians, bicyclists, and others) killed in distraction-affected crashes.

Methodology

This research note 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.

As defined in the *Overview of the National Highway Traffic Safety Administration's Driver Distraction Program* (Report No. DOT HS 811 299), distraction is a specific type of inattention that occurs when drivers divert their attention from the driving task to focus on some other activity instead. The document describes distraction as a subset of inattention (which also

includes fatigue, and physical and emotional conditions of the driver). However, while NHTSA may define the terms in this manner, inattention and distraction are often used interchangeably or simultaneously in other material, including police crash reports. It is important that NHTSA and NHTSA's data users be aware of these differences in definitions. It is also important to acknowledge the inherent limitations in the data collection for distraction-affected crashes and the resulting injuries and fatalities. The appendix of this document contains a table that describes the coding for distraction-affected crashes for FARS and a discussion regarding limitations in the distracted driving data.

Data

Fatalities in Distraction-Affected Crashes

In 2017, there were 34,247 fatal crashes in the United States involving 52,274 drivers. As a result of those fatal crashes, 37,133 people were killed.

There were 2,935 fatal crashes that occurred on U.S. roadways in 2017 that involved distraction (9% of all fatal crashes). These crashes involved 2,994 distracted drivers, since some crashes involved more than one distracted driver. Distraction was reported for 6 percent (2,994 of 52,274) of the drivers involved in fatal crashes. In these distraction-affected crashes, 3,166 fatalities (9% of overall fatalities) occurred. Table 1 provides information on crashes, drivers, and fatalities involved in fatal distraction-affected crashes in 2017.

Much attention across the country has been focused on the dangers of using cell phones and other electronic devices while driving. In 2017 there were 401 fatal crashes reported to have involved cell phone use as a distraction (14% of all fatal distraction-affected crashes). For these distraction-affected crashes, the police crash report stated that the driver was talking on, listening to, or engaged in some other cell phone activity at the time of the crash. A total of 434 people died in fatal crashes that involved cell-phone-related activities as distractions.

Table 1
Fatal Crashes, Drivers in Fatal Crashes, and Fatalities, 2017

	Crashes	Drivers	Fatalities
Total	34,247	52,274	37,133
Distraction-Affected (D-A)	2,935 (9% of total crashes)	2,994 (6% of total drivers)	3,166 (9% of total fatalities)
Cell Phone in Use	401 (14% of D-A crashes)	404 (13% of distracted drivers)	434 (14% of fatalities in D-A crashes)

Source: FARS 2017 Annual Report File (ARF)

Table 2 presents data on drivers involved in fatal crashes in 2017 by driver age. Eight percent (271 of 3,255) of drivers 15 to 19 years old involved in fatal crashes were distracted at the time of the crashes. This age group has the largest proportion

of drivers within each respective age group who were distracted (column titled “Distracted Drivers: % of Total Drivers in This Age Group”).

Table 2
Drivers Involved in Fatal Crashes by Age, Distraction, and Cell Phone Use, 2017

Age Group	Total Drivers		Distracted Drivers			Drivers Using Cell Phones		
	Number	% of Total Drivers	Number	% of Total Drivers in This Age Group	% of All Distracted Drivers	Number	% of Distracted Drivers	% of Drivers Using Cell Phones
15–19	3,255	6%	271	8%	9%	63	23%	16%
20–29	12,086	23%	816	7%	27%	151	19%	37%
30–39	9,290	18%	557	6%	19%	86	15%	21%
40–49	7,944	15%	431	5%	14%	48	11%	12%
50–59	8,029	15%	360	4%	12%	33	9%	8%
60–69	5,562	11%	224	4%	7%	19	8%	5%
70+	4,911	9%	292	6%	10%	4	1%	1%
Total	52,274	100%	2,994	6%	100%	404	13%	100%

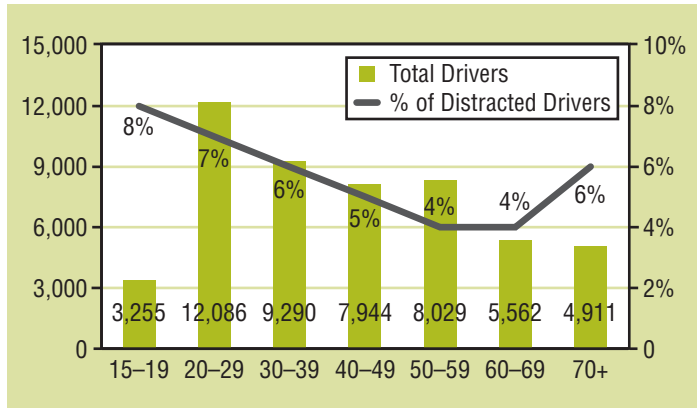
Source: FARS 2017 ARF; Note: The total includes 62 drivers 14 and younger, 3 of whom were noted as distracted. Additionally, the total includes 1,135 of unknown age, 40 of whom were noted as distracted.

Comparing the percentage of drivers of each age involved in fatal crashes to the percentage involved in distraction-affected fatal crashes points to overrepresentation of drivers under 30. This is seen by comparing the columns titled “Total Drivers: Percent of Total Drivers” and “Distracted Drivers: Percent of All Distracted Drivers.” For all fatal crashes, 6 percent of the drivers involved were 15 to 19 years old (3,255 of the 52,274). However, 9 percent of the distracted drivers were 15 to 19 years old (271 of the 2,994 distracted drivers in fatal crashes). Sixteen percent of all the distracted drivers using cell phones were 15 to 19 years old (63 of the 404 cell-phone distracted

drivers in fatal crashes). Similarly, drivers in their 20s make up 23 percent of drivers in fatal crashes, but are 27 percent of the distracted drivers and 37 percent of the distracted drivers who were using cell phones in fatal crashes.

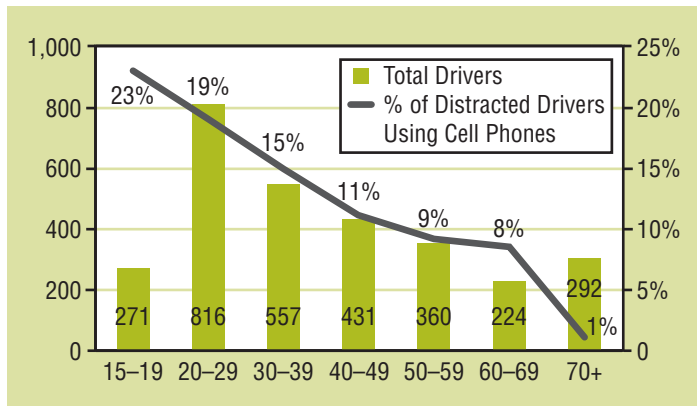
The distributions of drivers by age for total drivers involved in fatal crashes and percentage of distracted drivers involved in fatal crashes, and distracted drivers involved in fatal crashes and percentage of distracted drivers using cell phones during fatal crashes, are shown graphically in Figure 1a and Figure 1b.

Figure 1a
Total Drivers and Percentage of Distracted Drivers, by Age Group, 2017



Source: FARS 2017 ARF

Figure 1b
Distracted Drivers and Percentage of Distracted Drivers Using Cell Phone, by Age Group, 2017



Source: FARS 2017 ARF

Table 3 shows the role of the people killed in distraction-affected crashes in 2017. The large majority of fatalities in distraction-affected crashes (and in all fatal crashes) were motor vehicle occupants (including motorcyclists): 81 percent for both distraction-affected fatal crashes and all fatal crashes. The other victims were nonoccupants – pedestrians, pedalcyclists, and others. Distracted drivers were involved in the deaths of 599 nonoccupants during 2017. It is unknown how many of these nonoccupants were potentially distracted as well. In general, looking at occupant type, the percentage of fatalities in distraction-affected crashes is very similar to that in all fatal crashes.

Table 3
People Killed in All Crashes and Distraction-Affected Crashes, by Person Type, 2017

Person Type	All Fatalities in Crashes	Percentage of All Fatalities	Fatalities in Distraction-Affected Crashes	Percentage of Distraction-Affected Fatalities
Total	37,133	100%	3,166	100%
Occupants				
Driver	23,611	64%	1,832	58%
Passenger	6,534	18%	735	23%
Total Occupants	30,145	81%	2,567	81%
Nonoccupants				
Pedestrian	5,977	16%	497	16%
Pedalcyclist	783	2%	70	2%
Other	228	1%	32	1%
Total Nonoccupants	6,988	19%	599	19%

Source: FARS 2017 ARF

In 2017, 60 percent of the distracted drivers in fatal crashes were male as compared to 72 percent of drivers in all fatal crashes.

Fatal Crashes and Distraction-Affected Crashes, by Year

Table 4 provides information for fatal crashes from 2013 through 2017. During this time period, the percentages of fatal crashes that involved distraction fluctuated very little.

Table 4
Fatal Crashes and Distraction-Affected Crashes by Year, 2013–2017

Year	Overall Crashes	Distraction-Affected Crashes (% of Total Crashes)	D-A Crashes Involving Cell Phone Use (% of D-A Crashes)
2013	30,202	2,923 (10%)	411 (14%)
2014	30,056	2,972 (10%)	387 (13%)
2015	32,538	3,242 (10%)	453 (14%)
2016	34,748	3,197 (9%)	453 (14%)
2017	34,247	2,935 (9%)	401 (14%)

Source: FARS 2013–2016 Final, 2017 ARF

Attribute Selection

As discussed in the Methodology section of this Research Note, FARS was accessed to retrieve distraction-affected crashes. Table A-1 contains every variable attribute available for coding for driver distraction along with examples to illustrate the meaning of the attribute. This is the coding scheme available for FARS. Table A-1 further indicates whether that attribute was included in the analysis for distraction-affected crashes.

In 2012 the variable attributes changed to account for different ways that State Police Accident Reports (PARs) describe general categories of distraction, inattention, and careless driving. These additional attributes provide a more accurate classification of the behavior indicated on the PAR.

If there are no indications of usage for distraction-affected crashes, the attribute was not considered as a type of distraction behavior and therefore not included in the analysis.

Table A-1

Attributes Included in “Driver Distracted by” Element and Indication of Inclusion in Distraction-Affected Definitions, FARS, 2013–2017

Attribute	Examples
Not Included	
Not distracted	Completely attentive to driving; no indication of distraction or noted as Not Distracted
Looked but did not see	Driver paying attention to driving but does not see relevant vehicle, object, etc.
No driver present/unknown if driver present	When no driver is in this vehicle or when it is unknown if there is a driver present in this vehicle at the time of the crash
Not reported	No field available on PAR; field on PAR left blank; no other information available
Unknown if distracted	PAR specified states unknown
Included	
By other occupant	Distracted by occupant in driver’s vehicle; includes conversing with or looking at other occupant
By a moving object in vehicle	Distracted by moving object in driver’s vehicle; includes dropped object, moving pet, insect, cargo.
While talking or listening to cellular phone	Talking or listening on cellular phone; includes talking or listening on a “hands-free” or Bluetooth-enabled phone
While manipulating cellular phone	Dialing or text messaging on cell phone or any wireless e-mail device; any manual button/control actuation on phone qualifies
Other cellular phone-related	Used when the police report indicated the driver is distracted from the driving task due to cellular phone involvement, but none of the specified codes are applicable (e.g., reaching for cellular phone). This code is also applied when specific details regarding cellular phone distraction/usage are not provided.
While adjusting audio and/or climate controls	While adjusting air conditioner, heater, radio, cassette, using the radio, using the cassette or CD mounted into vehicle
While using other component/controls integral to vehicle	Manipulating a control in the vehicle including adjusting headlamps, interior lights, controlling windows, door locks, mirrors, seats, steering wheels, on-board navigational devices, etc.
While using or reaching for device/object brought into vehicle	Radar detector, CDs, razors, music portable CD player, headphones, a navigational device, a laptop or tablet PC, etc.; if unknown if device is brought into vehicle or integral, use Object Brought Into Vehicle.
Distracted by outside person, object, or event	Animals on roadside or previous crash, non-traffic related signs. Do not use when driver has recognized object/event and driver has taken evasive action.
Eating or drinking	Eating or drinking or actively related to these actions
Smoking related	Smoking or activity related to smoking
Distraction/Inattention	Used exclusively when “distraction/inattention” or “inattention/distraction” are noted in case material as one combined attribute
Distraction/Careless	Used exclusively when “distraction/careless” or “careless/distraction” are note in case material as one combined attribute

Data Limitations

NHTSA recognizes that there are limitations to the collection and reporting of FARS data with regard to driver distraction. The data for FARS are based on PARs and information gathered after the crashes have occurred.

One noteworthy challenge for collection of distracted driving data is the PAR itself. Police crash reports vary across jurisdictions, thus creating potential inconsistencies in reporting. Many variables on the police accident report are nearly universal, but distraction is not one of those variables. Some PARs identify distraction as a distinct reporting field, while others do not have such a field and identification of distraction is based upon the narrative portion of the report. The variation in reporting forms contributes to variation in the reported number of distraction-affected crashes. Any national or State count of distraction-affected crashes should be interpreted with this limitation in mind due to potential underreporting in some States and overreporting in others.

Table A-1

Attributes Included in “Driver Distracted by” Element and Indication of Inclusion in Distraction-Affected Definitions, FARS, 2013–2017 (continued)

Attribute	Examples
Careless/inattentive	Used exclusively when “careless/inattentive” or “inattentive/careless” are noted in case material as one combined attribute
Distraction (distracted), details unknown	Used when “distraction” or “distracted” are noted in case material, but specific distraction(s) cannot be identified
Inattention (inattentive), details unknown	Used when “inattention” or “inattentive” are noted in the case material but it cannot be identified if this refers to a distraction
Lost in thought/daydreaming	Used when the driver is not completely attentive to driving because he/she is thinking about items other than the driving task.
Other Distraction	Used when details regarding this driver’s distraction are known but none of the specified codes are applicable.

The following are potential reasons for underreporting of distraction-affected crashes.

- There are negative implications associated with distracted driving—especially in conjunction with a crash. Survey research shows that self-reporting of negative behavior is lower than actual occurrence of that negative behavior. There is no reason to believe that self-reporting of distracted driving to a law enforcement officer would differ. The inference is that the reported driver distraction during crashes is lower than the actual occurrence.
- If a driver fatality occurs in the crash, law enforcement must rely on the crash investigation in order to report on whether driver distraction was involved. Law enforcement may not have information to indicate distraction. These investigations may rely on witness account and oftentimes these accounts may not be available either.

- Technologies are changing at a rapid speed and it is difficult to update the PAR to accommodate these changes. Without broad-sweeping changes to the PAR to incorporate new technologies and features of technologies, it is difficult to capture the data that involve interaction with these devices.

The following is a challenge in quantifying external distractions.

- In the reporting of distraction-affected crashes, oftentimes external distractions are identified as a distinct type of distraction. Some of the scenarios captured under external distractions might actually be related to the task of driving (e.g., looking at a street sign). However, the crash reports may not differentiate these driving-related tasks from other external distractions (looking at previous crash or billboard). Currently, the category of external distractions is included in the counts of distraction-affected crashes.

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 fatal distraction-affected crashes from the 2016 Final file was 3,197, which was updated from 3,157 from the 2016 ARF.

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 fatal distraction-affected crashes from the 2016 Final file was 3,197, which was updated from 3,157 from the 2016 ARF.

Suggested APA Format Citation for this document:

National Center for Statistics and Analysis. (2019, April). *Distracted driving in fatal crashes, 2017*. (Traffic Safety Facts Research Note. Report No. DOT HS 812 700). Washington, DC: National Highway Traffic Safety Administration.

This research note and other general information on highway traffic safety may be found at: <https://crash-stats.nhtsa.dot.gov/#/>.



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