



Distracted Driving 2018

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 pedalcyclists. 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.

- Eight percent of fatal crashes, 15 percent of injury crashes, and 14 percent of all police-reported motor vehicle traffic crashes in 2018 were reported as distraction-affected crashes.
- In 2018 there were 2,841 people killed and an estimated additional 400,000 people injured in motor vehicle crashes involving distracted drivers.
- Five 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 2018 there were 506 nonoccupants (pedestrians, pedalcyclists, 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 report for more information on FARS. This research note also contains injury and property-damage-only crash estimates. These estimates are based on data obtained from a nationally representative sample of police-reported crashes from the General Estimates System and the Crash Report Sampling System. The methodology for estimating people injured has changed. For more information, read **Crash Report Sampling System**

(CRSS) Replaced the National Automotive Sampling System (NASS) General Estimates System (GES) at the end of this report. Take caution that GES estimates and CRSS estimates are not comparable due to different sampling designs. The national estimates produced from GES and CRSS data are subject to sampling errors. The NASS GES Analytic User's Manual 1988–2015 (Report No. DOT HS 812 320) and the CRSS Analytic User's Manual 2016–2018 (Report No. DOT HS 812 846) contain information on sampling errors.

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, GES, and CRSS, and a discussion regarding limitations in the distracted driving data.

Data

Fatalities in Distraction-Affected Crashes

In 2018 there were 33,654 fatal crashes in the United States involving 51,490 drivers. As a result of those fatal crashes, 36,560 people were killed.

There were 2,628 fatal crashes that occurred on U.S. roadways in 2018 that involved distraction (8% of all fatal crashes). These crashes involved 2,688 distracted drivers, since some crashes involved more than one distracted driver. Distraction was reported for 5 percent (2,688 of 51,490) of the drivers involved in fatal crashes. In these distraction-affected crashes, 2,841 fatalities (8% of overall fatalities) occurred. Table 1 provides

information on crashes, drivers, and fatalities involved in distraction-affected crashes in 2018.

Much attention across the country has been focused on the dangers of using cell phones and other electronic devices while driving. In 2018 there were 349 fatal crashes reported to have involved cell phone use as a distraction (13% 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 385 people died in fatal crashes that involved cell-phone-related activities as distractions.

Table 1

Fatal Crashes, Drivers in Fatal Crashes, and Fatalities in Distraction-Affected Crashes, and Cell Phone Use by Distracted Drivers, 2018

	Total	Distraction-Affected (D-A)		Cell Phone in Use	
		Number	Percentage of Total	Number	Percentage of D-A
Crashes	33,654	2,628	8%	349	13%
Drivers	51,490	2,688	5%	354	13%
Fatalities	36,560	2,841	8%	385	14%

Source: FARS 2018 Annual Report File (ARF)

Table 2 presents data on drivers involved in fatal crashes in 2018 by age group. Eight percent (237 of 3,070) 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: Percentage of Total Drivers in This Age Group”).

Table 2

Drivers Involved in Fatal Crashes, by Age Group, Distraction, and Cell Phone Use, 2018

Age Group	Total Drivers		Distracted Drivers			Drivers Using Cell Phones		
	Number	Percentage of Total Drivers	Number	Percentage of Total Drivers in This Age Group	Percentage of All Distracted Drivers	Number	Percentage of All Distracted Drivers	Percentage of Drivers Using Cell Phones
15–19	3,070	6%	237	8%	9%	40	17%	11%
20–29	11,629	23%	680	6%	25%	120	18%	34%
30–39	9,264	18%	506	5%	19%	86	17%	24%
40–49	7,809	15%	389	5%	14%	44	11%	12%
50–59	7,883	15%	342	4%	13%	36	11%	10%
60–69	5,635	11%	251	4%	9%	21	8%	6%
70+	4,919	10%	256	5%	10%	6	2%	2%
Total	51,490	100%	2,688	5%	100%	354	13%	100%

Source: FARS 2018 ARF

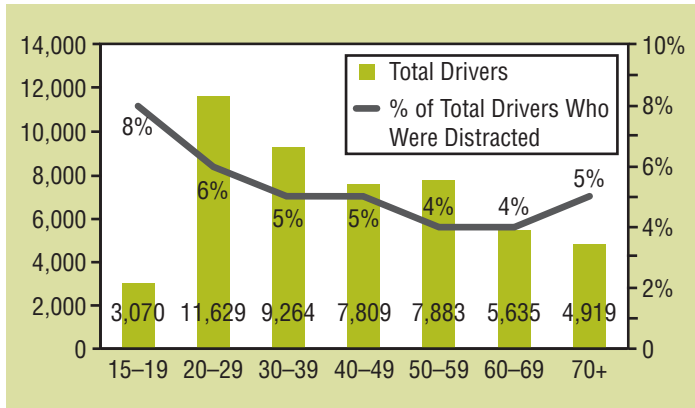
Note: The total includes 43 drivers 14 and younger, 2 of whom were noted as distracted. Additionally, the total includes 1,238 of unknown age, 25 of whom were noted as distracted.

Comparing the percentage of drivers of each age group 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: Percentage of Total Drivers” and “Distracted Drivers: Percentage of All Distracted Drivers.” For all fatal crashes, 6 percent of the drivers involved were 15 to 19 years old (3,070 of the 51,490 drivers involved in fatal crashes). However, 9 percent of the distracted drivers were 15 to 19 years old (237 of the 2,688 distracted drivers in fatal crashes). Eleven percent of all the distracted drivers using cell phones were 15 to 19 years old (40 of the 354 cell-phone

distracted drivers in fatal crashes). Similarly, drivers in their 20s make up 23 percent of drivers in fatal crashes, but are 25 percent of all distracted drivers and 34 percent of cell-phone distracted drivers in fatal crashes.

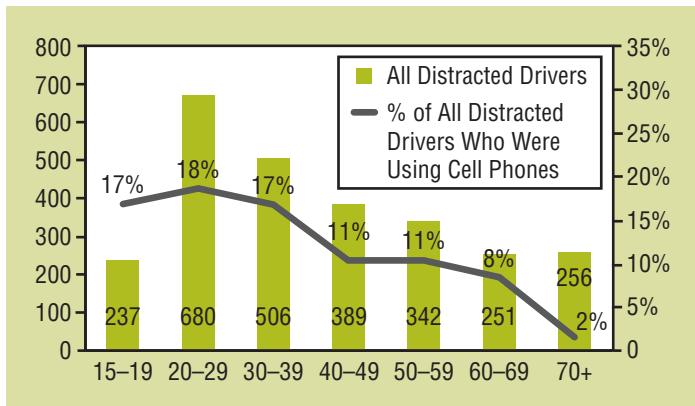
The distributions of drivers by age group for total drivers involved in fatal crashes and percentage of distracted drivers involved in fatal crashes, and distracted drivers involved in fatal crashes and percentage of distracted drivers using cell phones during fatal crashes, are shown graphically in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

Figure 1a
Total Drivers and Percentage of Total Drivers Who Were Distracted, by Age Group, 2018



Source: FARS 2018 ARF

Figure 1b
Distracted Drivers and Percentage of Distracted Drivers Who Were Using Cell Phones, by Age Group, 2018



Source: FARS 2018 ARF

Table 3 shows the role of the people killed in distraction-affected crashes in 2018. The large majority of fatalities in distraction-affected crashes (and in all fatal crashes) were motor vehicle occupants (including motorcyclists): 80 percent for all fatal crashes and 82 percent for distraction-affected fatal crashes. The other victims were nonoccupants – pedestrians, pedalcyclists, and others. Distracted drivers were involved in the deaths of 506 nonoccupants in 2018. 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
Fatalities in All Crashes and Distraction-Affected Crashes, By Person Type, 2018

Person Type	Total Fatalities		Distraction-Affected (D-A) Fatalities	
	Number	Percent	Number	Percent
Total	36,560	100%	2,841	100%
Occupants				
Driver	22,925	63%	1,730	61%
Passenger	6,281	17%	605	21%
Total Occupants	29,206	80%	2,335	82%
Nonoccupants				
Pedestrian	6,283	17%	400	14%
Pedalcyclist	857	2%	77	3%
Other/Unknown	214	1%	29	1%
Total Nonoccupants	7,354	20%	506	18%

Source: FARS 2018 ARF

Sixty-nine percent of the distracted drivers in fatal crashes were male as compared to 72 percent of drivers in all fatal crashes in 2018.

Estimates of People Injured in Distraction-Affected Crashes

In 2018 an estimated 2,710,000 people were injured in traffic crashes (Table 4). The number of people injured in distraction-affected crashes in 2018 was estimated at 400,000 (15% of all the injured people). An estimated 33,000 people were injured in 2018 in crashes involving cell phone use or other cell-phone-related activities (8% of all people injured in distraction-affected crashes).

Table 4
People Injured in All Crashes and Distraction-Affected Crashes, 2014–2018

Year	Total	Distraction-Affected (D-A) Crashes			
		Number	Percentage of Total	Cell Phone Use	
				Number	Percentage of D-A
2014	2,343,000	430,000	18%	34,000	8%
2015	2,455,000	393,000	16%	30,000	8%
2016*	3,062,000	445,000	15%	34,000	8%
2017*	2,745,000	435,000	16%	31,000	7%
2018*	2,710,000	400,000	15%	33,000	8%

Sources: FARS 2014–2017 Final File, 2018 ARF; NASS GES 2014–2015; CRSS 2016–2018

*CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

Over the past 5 years, the *estimated number* of people injured in distraction-affected crashes has shown decreases and increases. The *percentage* of injured people in distraction-affected crashes as a portion of all injured people has remained relatively constant.

Crashes of All Severity

Table 5 provides information for all police-reported crashes from 2014 through 2018 including fatal crashes, injury crashes,

and property-damage-only (PDO) crashes for the year. During this time period, the percentages of crashes of all severities that involved distractions fluctuated very little.

In 2018 there were an estimated 276,000 distraction-affected injury crashes (15 percent of all injury crashes). In these crashes, an estimated 284,000 drivers (8 percent of all drivers in injury crashes) were distracted at the time of the crashes

Table 5

Traffic Crashes and Distraction-Affected Crashes, by Crash Severity, 2014–2018

Year	Crash Severity	Total	Distraction-Affected (D-A) Crashes			
			Number	Percentage of Total	Cell Phone Use	
					Number	Percentage of D-A
2014	Fatal Crash	30,056	2,972	10%	387	13%
	Injury Crash	1,648,000	297,000	18%	22,000	8%
	PDO Crash	4,387,000	667,000	15%	46,000	7%
	Total	6,064,000	967,000	16%	69,000	7%
2015	Fatal Crash	32,538	3,242	10%	453	14%
	Injury Crash	1,715,000	265,000	15%	21,000	8%
	PDO Crash	4,548,000	617,000	14%	48,000	8%
	Total	6,296,000	885,000	14%	69,000	8%
2016*	Fatal Crash	34,748	3,197	9%	453	14%
	Injury Crash	2,116,000	295,000	14%	23,000	8%
	PDO Crash	4,670,000	606,000	13%	42,000	7%
	Total	6,821,000	905,000	13%	66,000	7%
2017*	Fatal Crash	34,560	3,003	9%	418	14%
	Injury Crash	1,889,000	285,000	15%	21,000	7%
	PDO Crash	4,530,000	624,000	14%	50,000	8%
	Total	6,453,000	912,000	14%	71,000	8%
2018*	Fatal Crash	33,654	2,628	8%	349	13%
	Injury Crash	1,894,000	276,000	15%	21,000	8%
	PDO Crash	4,807,000	659,000	14%	38,000	6%
	Total	6,734,000	938,000	14%	60,000	6%

Sources: FARS 2014–2017 Final File, 2018 ARF; NASS GES 2014–2015; CRSS 2016–2018

*CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

Attribute Selection

As discussed in the Methodology section of this Research Note, FARS, GES, and CRSS were 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, GES, and CRSS. 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 police crash reports (PCRs) from States describe general categories of distraction, inattention, and careless driving. These additional attributes provide a more accurate classification of the behavior indicated on the PCR.

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.

Data Limitations

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

One noteworthy challenge for collection of distracted driving data is the PCR itself. Police crash reports vary across jurisdictions, thus creating potential inconsistencies in reporting. Many variables on the police crash report are nearly univer-

sal, but distraction is not one of those variables. Some PCRs 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, GES, and CRSS, 2014–2018

Attribute	Description
Not Included	
Not Distracted	Completely attentive to driving; no indication of distraction or noted as “Not Distracted”
Looked But Did Not See (deleted in 2018)	Used when the driver was paying attention to driving (not distracted), but did not see the relevant vehicle, object, etc.
No Driver Present/Unknown if Driver Present	Used 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 PCR; field on PCR left blank; no other information available
Reported as Unknown if Distracted	Used when the case materials specifically indicate unknown
Included	
By Other Occupant(s)	Used when the driver was distracted by another occupant in this driver’s vehicle prior to realization of impending danger; includes conversing with or looking at another occupant
By a Moving Object in Vehicle	Used when the driver was distracted by a moving object in this driver’s vehicle prior to realization of impending danger; includes a dropped object, a moving pet, insect, or cargo
While Talking or Listening to Cellular Phone	Used when the driver was talking or listening on a cellular phone; includes talking or listening on a “hands-free” or Bluetooth-enabled phone
While Manipulating Cellular Phone	Used when the driver was dialing or text messaging (texting) on a cellular phone; any manual button/control actuation on the phone qualifies
Other Cellular Phone Related	Used when the case material indicates the driver was 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 attribute is also applied when specific details regarding cellular phone distraction/usage are not provided.
Adjusting Audio or Climate Controls	Used when the driver was distracted from the driving task while adjusting the air conditioner, heater, radio, cassette, using the radio, using the cassette, or CD that are mounted in the vehicle
While Using Other Component/Controls Integral to Vehicle	Used when the driver was distracted while manipulating a control in the vehicle including adjusting headlamps or interior lights, controlling windows (power or manual), manipulating door locks (power or manual), adjusting side view mirrors (power or manual), adjusting rear view mirror, adjusting seat (power or manual), adjusting steering wheel, adjusting seat belt, on-board navigational devices, etc.
While Using or Reaching for Device/Object Brought into Vehicle	Used when the driver was distracted while using or reaching for a device in the vehicle including a radar detector, CDs, razors, music portable CD player, headphones, a navigational device, laptop or tablet PC, etc.
Distracted by Outside Person, Object, or Event	Used when the driver was distracted by an outside person, object, or event prior to realization of impending danger; includes animals on the roadside, a previous crash, or non-traffic related signs (e.g., advertisements, electronic billboards). Do not use this attribute for a person, object, or event that the driver has recognized and for which the driver has taken some action (e.g., avoiding a pedestrian on the roadway).
Eating or Drinking	Used when the driver was eating or drinking or involved in an activity related to these actions (e.g., picking food from carton placed on passenger seat, reaching to throw out used food wrapper)

Table A-1

Attributes Included in “Driver Distracted by” Element and Indication of Inclusion in Distraction-Affected Definitions, FARS, GES, and CRSS, 2014–2018(continued)

Attribute	Description
Smoking Related	Used when the driver was smoking or involved in an activity related to smoking, such as lighting a cigarette, putting ashes in the ash tray, etc.
Distraction/Inattention	Used exclusively when “Distraction/Inattention” or “Inattention/Distraction” are noted in the case material as one combined attribute
Distraction/Careless	Used exclusively when “Distraction/Careless” or “Careless/Distraction” are noted in the case material as one combined attribute
Careless/Inattentive	Used exclusively when “Careless/Inattentive” or “Inattentive/Careless” are noted in the case material as one combined attribute
Distraction (Distracted), Details Unknown	Used when “distraction” or “distracted” are noted in the 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(s)
Lost in Thought/Day Dreaming	Used when the driver was not completely attentive to driving because he/she was 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 PCR to accommodate these changes. Without broad-sweeping changes to the PCR 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 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.

The most current information on distracted-driving laws by State is available on the Governors Highway Safety Association website at <https://ghsa.org/state-laws/issues/distracted%20driving>.

Fatality Analysis Reporting System

The FARS contains data on every fatal motor vehicle 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 2018 ARF, the 2017 Final file was also released to replace the previous year's 2017 ARF. The final fatality count in motor vehicle crashes for 2017 was 37,473, which was updated from 37,133 from the 2017 ARF. The number of fatal distraction-affected crashes from the 2017 Final file was 3,003, which was updated from 2,935 from the 2017 ARF.

Crash Report Sampling System (CRSS) Replaced 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. For more information on CRSS, see the Additional Resources section of the CRSS web page at www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss.

Methodology Change for Estimating People Injured

NCSA has changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach is to combine people nonfatally injured from both FARS and NASS GES/CRSS. This is done by extracting people nonfatally injured in fatal crashes from FARS with people nonfatally injured in non-fatal injury crashes from NASS GES/CRSS. The old approach was to extract people injured from only NASS GES/CRSS by selecting people nonfatally injured in all crashes, regardless of crash severity. This change in methodology caused some estimates of people injured to change for some prior years.

Suggested APA Format Citation for this document:

National Center for Statistics and Analysis. (2020, April). *Distracted driving 2018* (Research Note. Report No. DOT HS 812 926). National Highway Traffic Safety Administration.

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



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**National Highway Traffic Safety
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