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

TRAFFIC SAFETY FACTS
Research Note

NHTSA

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Distracted Driving 2016

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 2016 were reported as distraction-affected crashes.
- In 2016, there were 3,450 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 crash. Nine 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 2016, there were 562 nonoccupants (pedestrians, bicyclists, and others) killed in distraction-affected crashes.

Methodology

This fact sheet contains information on fatal motor vehicle crashes and fatalities, based on data from the Fatality Analysis Reporting System (FARS). FARS is a census of fatal crashes in the 50 States, the District of Columbia, and Puerto Rico (Puerto Rico is not included in U.S. totals). Crash and injury statistics are based on data from the National Automotive Sampling System (NASS) General Estimates System (GES). The NASS GES is a probability-based sample of police-reported traffic crashes, from 60 locations across the country, from which estimates of national totals for injury and property-damage-only crashes are derived.

NASS GES was discontinued in 2016 and replaced with a new system called the Crash Report Sampling System (CRSS). The 2016 data year is the first data collection year of CRSS. The 2016 CRSS data was released the last week of March 2018. Thus, injury and property-damage-only crash estimates for 2016 will not be presented in this publication. 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.

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 GES as well as a discussion regarding limitations in the distracted driving data.

Data

Fatalities in Distraction-Affected Crashes

In 2016, there was a total of 34,439 fatal crashes in the United States involving 51,914 drivers. As a result of those fatal crashes, 37,461 people were killed.

There were 3,157 fatal crashes that occurred on U.S. roadways in 2016 that involved distraction (9% of all fatal crashes). These crashes involved 3,210 distracted drivers, since some crashes involved more than one distracted driver. Distraction was reported for 6 percent (3,210 of 51,914) of the drivers involved in fatal crashes. In these distraction-affected crashes, 3,450 fatalities (9% of overall fatalities) occurred. Table 1 provides information on crashes, drivers, and fatalities involved in fatal distraction-affected crashes in 2016.

Table 1
Fatal Crashes, Drivers in Fatal Crashes, and Fatalities, 2016

	Crashes	Drivers	Fatalities
Total	**34,439**	**51,914**	**37,461**
Distraction-Affected (D-A)	3,157 (9% of total crashes)	3,210 (6% of total drivers)	3,450 (9% of total fatalities)
Cell Phone in Use	444 (14% of D-A crashes)	457 (14% of distracted drivers)	486 (14% of fatalities in D-A crashes)

Source: FARS 2016 Annual Report File (ARF)

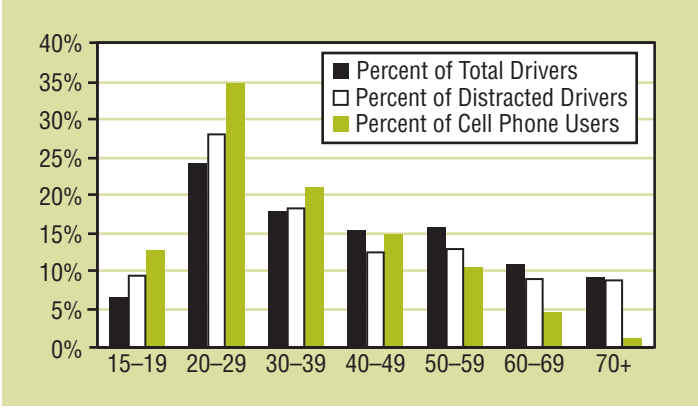
Much attention across the country has been focused on the dangers of using cell phones and other electronic devices while driving. In 2016, there were 444 fatal crashes reported to have involved cell phone use as a distraction (14% of all fatal distraction-affected crashes). For these distraction-affected 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 486 people died in fatal crashes that involved cell-phone-related activities as distractions.

Table 2 presents data on drivers involved in fatal crashes in 2016 by the driver's age. Nine percent (303 of 3,323) of drivers 15 to 19 years old involved in fatal crashes were distracted at the time of the crash. 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").

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: % of Total Drivers" and "Distracted Drivers: % of Distracted Drivers." For all fatal crashes, 6 percent of the drivers involved were 15 to 19 years old (3,323 of the 51,914). However, 9 percent of the distracted drivers were 15 to 19 years old (303 of the 3,210 distracted drivers in fatal crashes). Thirteen percent of all the distracted drivers using cell phones were 15 to 19 years old (58 of the 457 cell-phone distracted drivers in fatal crashes). Similarly, drivers in their 20s make up 24 percent of drivers in fatal crashes, but are 28 percent of the distracted drivers and 35 percent of the distracted drivers who were using cell phones in fatal crashes.

The distributions of drivers by age for all drivers involved in fatal crashes, distracted drivers involved in fatal crashes, and distracted drivers on cell phones during fatal crashes, are shown graphically in Figure 1.

Figure 1
Percent Distribution of Drivers Involved in Fatal Crashes By Age, Distraction, and Cell Phone Use, 2016



Source: FARS 2016 ARF

Table 2
Drivers Involved in Fatal Crashes by Age, Distraction, and Cell Phone Use, 2016

	Total Drivers		Distracted Drivers			Drivers Using Cell Phones		
Age Group	Number	% of Total Drivers	Number	% of Total Drivers in This Age Group	% of All Distracted Drivers	Number	% of Distracted Drivers	% of Cell Phone Drivers
15–19	3,323	6%	303	9%	9%	58	2%	13%
20–29	12,335	24%	898	7%	28%	159	5%	35%
30–39	9,064	17%	586	6%	18%	96	3%	21%
40–49	7,797	15%	400	5%	12%	69	2%	15%
50–59	7,945	15%	415	5%	13%	48	1%	11%
60–69	5,591	11%	288	5%	9%	21	1%	5%
70+	4,628	9%	282	6%	9%	5	0%	1%
Total	51,914	100%	3,210	6%	100%	457	14%	100%

Source: FARS 2016 ARF; Note: The total includes 77 drivers 14 and younger, 8 of whom were noted as distracted. Additionally, the total includes 1,154 of unknown age, 30 of whom were noted as distracted.

Table 3 shows the role of the people killed in distraction-affected crashes in 2016. The large majority of fatalities in distraction-affected crashes (and in all fatal crashes) were motor vehicle occupants (including motorcyclists), 84 percent for distraction-affected fatal crashes and 81 percent for all fatal crashes. The balance of victims were nonoccupants—pedestrians, pedalcyclists, and others. Distracted drivers were involved in the deaths of 562 nonoccupants during 2016. 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, 2016

Person Type	All Fatalities in Crashes	Percentage of All Fatalities	Fatalities in Distraction-Affected Crashes	Percentage of Distraction-Affected Fatalities
Total	37,461	100%	3,450	100%
Occupants				
Driver	23,560	63%	2,025	59%
Passenger	6,822	19%	863	25%
Total Occupants	30,382	81%	2,888	84%
Nonocccupants				
Pedestrian	5,987	16%	462	13%
Pedalcyclist	840	2%	70	2%
Other	252	1%	30	1%
Total Nonoccupants	7,079	19%	562	16%

Source: FARS 2016 ARF

In 2016, 70 percent of the distracted drivers in fatal crashes were male as compared to 74 percent of drivers in all fatal crashes.

Estimates of People Injured in Distraction-Affected Crashes

From 2012 to 2015, the *estimated number* of people injured in distraction-affected crashes showed decreases and increases. The *percentage* of injured people in distraction-affected crashes as a proportion of all injured people remained relatively constant.

Table 4
Estimated Number of People Injured in Crashes and People Injured in Distraction-Affected Crashes, 2012–2016

Year	Total	Distraction	
		Estimated Number of People Injured (% of Total Injured)	Cell Phone Use (% of People Injured in Distraction-Affected Crashes)
2012	2,362,000	421,000 (18%)	28,000 (7%)
2013	2,313,000	424,000 (18%)	34,000 (8%)
2014	2,338,000	431,000 (18%)	33,000 (8%)
2015	2,443,000	391,000 (16%)	30,000 (8%)
2016*	N/A	N/A	N/A

Source: NASS GES 2012–2015
*Not Available

Crashes of All Severity

Table 5 provides information for fatal crashes from 2012 through 2016, and all police-reported injury and property-damage-only (PDO) from 2012 through 2015. During this time period, the percentages of crashes of all severities that involve distractions fluctuated very little.

Table 5
Motor Vehicle Traffic Crashes and Distraction-Affected Crashes by Year, 2012–2016

	Crash Severity	Overall Crashes	Distraction-Affected Crashes (% of Total Crashes)	D-A Crashes Involving Cell Phone Use (% of D-A Crashes)
2012	Fatal Crash	31,006	3,098 (10%)	380 (12%)
	Injury Crash	1,634,000	286,000 (18%)	21,000 (7%)
	PDO* Crash	3,950,000	619,000 (16%)	39,000 (6%)
	Total	**5,615,000**	**908,000 (16%)**	**60,000 (7%)**
2013	Fatal Crash	30,202	2,923 (10%)	411 (14%)
	Injury Crash	1,591,000	284,000 (18%)	24,000 (8%)
	PDO Crash	4,066,000	616,000 (15%)	47,000 (8%)
	Total	**5,687,000**	**904,000 (16%)**	**71,000 (8%)**
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 Crashes	32,539	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 Crashes	34,439	3,157 (9%)	444 (14%)
	Injury Crash	N/A	N/A	N/A
	PDO Crash	N/A	N/A	N/A
	Total	**N/A**	**N/A**	**N/A**

*PDO = Property-Damage-Only; D-A = Distraction-Affected
Sources: NCSA, FARS 2012–2015 Final File, FARS 2016 ARF, GES 2012–2015.

Appendix — Coding of Distraction During Crashes

In keeping with its distraction plan (*Overview of the National Highway Traffic Safety Administration's Driver Distraction Program,* April 2010, Report No. DOT HS 811 299), NHTSA continues to refine collection of information about the role of distracted driving in police-reported crashes. This includes improvements to the coding of distraction in FARS. Prior to 2010, FARS, which contains data about fatal motor vehicle crashes, and the NASS GES, which contains data about a sample of all severities of police-reported crashes, coded distraction information in different formats. FARS was more general and inclusive of generally inattentive behavior, whereas GES identified specific distracted-driving behaviors. In 2010, the two systems' methods of coding distraction were unified. Beginning in 2010 for both systems, when looking at distraction-affected crashes, the driver in both FARS and GES is identified as "Yes-Distracted," "No-Not Distracted," or "Unknown if Distracted." If the driver is identified as distracted, further coding is performed to distinguish the specific activity that was distracting the driver. This was not a change for data coding for GES, but was in FARS. The data collected on the Police Accident Report (PAR) did not change; rather, it is the way the data is classified in FARS to focus the fatal crash data on the set of distractions most likely to affect the crash. Prior to 2010 in FARS, distraction was not first identified in a Yes/No/Unknown manner. Rather, specific behaviors of the driver as coded on the PAR were combined and categorized as "distracted."

Because of this change in data coding in FARS, distraction-affected crash data from FARS beginning in 2010 cannot be compared to distracted-driving-related data from FARS from previous years. With only 7 years of fatal crash information for distraction under the new coding, the reader should take caution in making conclusions of trends in these data. GES data can be compared over the years, as the data coding did not change in this system.

Of additional note is the terminology regarding distraction. For FARS and GES data, beginning with 2010 data, any crash in which a driver was identified as distracted at the time of the crash is referred to as a distraction-affected crash. Discussion of cell phones is also more specific starting with the 2010 data. Starting in 2010, FARS no longer offers "cell phone present in vehicle" as a coding option; thus this code cannot be considered a distraction within the dataset. From discussion with law enforcement officers, this code in years past was used when it was believed that the driver was using a cell phone at the time of the crash and thus contributed to the crash, but proof was not available. The use of a cell phone is more specific with the current coding and if the specific involvement cannot be determined, law enforcement has other options available to discuss the role of the cell phone and thus the coding would reflect such. Because of these changes, the current language referring to cell phones is that the crash involved the *use of a cell phone* as opposed to the generic cell-phone-involvement used previously.

In a continuing effort towards uniformity in data collection among states, the Model Minimum Uniform Crash Criteria (MMUCC) was updated in June 2012. MMUCC is a guideline for collection of crash characteristics in PARs. In this updated edition, *MMUCC Guideline, 4th Edition,* the reporting element for distraction was improved after consultation with law enforcement, safety advocates, first responders, and industry representatives. The States are increasingly becoming compliant with these MMUCC guidelines.

Attribute Selection

As discussed in the Methodology section of this Research Note, FARS and GES 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 and GES. 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 describe general categories of distraction, inattention, and careless driving. These additional attributes provide a more accurate classification of the behavior indicated on the police accident report.

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 and GES data with regard to driver distraction. The data for FARS and GES 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, GES and FARS

Attribute	Examples	Distraction-Affected Crashes 2012–2016
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.	
By other occupant	Distracted by occupant in driver's vehicle; includes conversing with or looking at other occupant	X
By a moving object in vehicle	Distracted by moving object in driver's vehicle; includes dropped object, moving pet, insect, cargo.	X
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	X
While manipulating cellular phone	Dialing or text messaging on cell phone or any wireless email device; any manual button/control actuation on phone qualifies	X
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 (reaching for cellular phone, etc.). This code is also applied when specific details regarding cellular phone distraction/usage are not provided	X
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	X
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.	X
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	X
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	X
Eating or drinking	Eating or drinking or actively related to these actions	X
Smoking related	Smoking or involved in activity related to smoking	X
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	
Distraction/Inattention	Used exclusively when "distraction/inattention" or "inattention/distraction" are noted in case materials as one combined attribute	X
Distraction/Careless	Used exclusively when "distraction/careless" or "careless/distraction" are noted in case materials as one combined attribute	X
Careless/Inattentive	Used exclusively when "careless/inattentive" or "inattentive/careless" are noted in case materials as one combined attribute	X
Distraction (distracted), details unknown	Used when "distraction" or "distracted" are noted in case materials but specific distractions cannot be identified	X
Inattention (inattentive), details unknown	Used when "inattention" or "inattentive" are noted in the case materials but it cannot be identified if this refers to a distraction	X
Not reported	No field available on PAR; field on PAR left blank; no other information available	
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	X
Unknown if distracted	PAR specified states unknown	

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.

Limitations in the data can be seen in a quantifiable manner in a research paper titled *Precrash Data Collection in NHTSA's Databases* by Mark Mynatt and Greg Radja, published in 2013 for the ESV Conference. In this research paper, Mynatt and Radja reviewed crashes that were common in the National Motor Vehicle Crash Causation Survey (NMVCCS), an on- site investigations crash survey; the GES (police report data); and the Crashworthiness Data System (CDS), data from follow-on vehicle and crash scene inspections and driver interviews along with the police report. A total of 379 crashes involving 653 vehicles were determined to be present in all three programs. Mynatt and Radja looked at specific data for distraction in the common cases to quantify the difference in reporting of distracted driving behaviors due to additional sources of information as can be seen in the following excerpt from the paper:

Table A-2 shows the percentage of the common vehicles with a coded Distraction in each of the programs.

Table A-2
Common Vehicles With a Distraction Present (Percentages Rounded)

Distraction	NASS-GES	NASS-CDS	NMVCCS
Yes	11%	14%	28%
No	60%	46%	48%
Unknown	30%	40%	24%

As Table A-2 indicates, in these same vehicles a distraction was coded in the on-scene program twice as often as in the follow-on program; and 2.5 times more often than in the PAR-based program. The on-scene based program also had a lower percentage of Unknown Distraction coding.

While these findings cannot be expanded to quantify the potential underreporting in FARS and GES, they are valuable in understanding the potential underreporting that the FARS and GES data may experience for driver distraction.

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. The 2016 CRSS data was released the last week of March 2018. For more information, 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.

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U.S. Department of Transportation
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This research note and other general information on highway traffic safety may be accessed at: https://crashstats.nhtsa.dot.gov.