

U.S. Department of Transportation

National Highway Traffic Safety Administration

DOT HS 813 309

# TRAFFIC SAFETY FACTS

Research Note

Summary of Statistical Findings

May 2022

## **Distracted Driving 2020**

The National Highway Traffic Safety Administration 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, 14 percent of injury crashes, and 13 percent of all police-reported motor vehicle traffic crashes in 2020 were reported as distraction-affected crashes.
- In 2020 there were 3,142 people killed and an estimated additional 324,652 people injured in motor vehicle crashes involving distracted drivers.
- Six percent of all drivers involved in fatal crashes in 2020 were reported as distracted at the time of the crashes. Seven percent of drivers 15 to 20 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 2020 there were 587 nonoccupants (pedestrians, pedalcyclists, and others) killed in distraction-affected crashes.

#### Methodology

This research note contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS) and non-fatal motor vehicle traffic crashes from the Crash Report Sampling System (CRSS). A change instituted with the release of 2020 data is rounding estimates to the nearest whole number instead of the nearest thousand for all police-reported crashes, including injury estimates. Refer to the

end of this publication for more information on FARS and CRSS.

The national estimates produced from CRSS data are subject to sampling errors. The CRSS Analytic User's Manual 2016-2020 (Report No. DOT HS 813 236) documents information on sampling errors and generalized variance function standard errors for 2016-2020 CRSS estimates.

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. 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 (PCRs). 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 distractionaffected crashes for FARS and CRSS, and a discussion regarding limitations in the distracted driving data.

#### Data

#### Fatalities in Distraction-Affected Crashes

In 2020 there were 2,880 fatal crashes that involved distraction (8% of 35,766 fatal crashes) nationwide. These crashes involved 2,968 distracted drivers, since some crashes involved multiple distracted drivers. Six percent (2,968 of 53,890) of the drivers involved in fatal crashes were distracted. In distraction-affected crashes, 3,142 fatalities (8% of 38,824 fatalities) occurred. Table 1 provides information on fatal crashes, drivers involved in fatal crashes, and fatalities in distraction-affected crashes from 2016 to 2020.

Much attention across the country has been focused on the dangers of using cell phones and other electronic devices while driving. In 2020 there were 354 fatal crashes reported as having cell phone use as a distraction (12% of all distraction-affected fatal crashes). For these distraction-affected crashes, the PCR stated that at least one of the involved drivers was talking on, listening to, or engaged in some other cell-phone-related activity at the time of the crash. A total of 396 people died in fatal crashes involving cell-phone-related activities as distractions.

Table 1
Fatal Crashes, Drivers Involved in Fatal Crashes, and Fatalities in Distraction-Affected Crashes, and Cell Phone Use by Distracted Drivers, 2016–2020

		Distraction-Affected (D-A)		Cell Phone in Use		
	Total	Number	Percentage of Total	Number	Percentage of D-A	
Fatal Crashes						
2016	34,748	3,197	9%	453	14%	
2017	34,560	3,003	9%	418	14%	
2018	33,919	2,645	8%	356	13%	
2019	33,487	2,872	9%	395	14%	
2020	35,766	2,880	8%	354	12%	
<b>Drivers Involved in Fatal</b>	Crashes					
2016	52,399	3,252	6%	467	14%	
2017	52,752	3,065	6%	421	14%	
2018	51,905	2,704	5%	361	13%	
2019	51,302	2,979	6%	399	13%	
2020	53,890	2,968	6%	356	12%	
Fatalities						
2016	37,806	3,490	9%	496	14%	
2017	37,473	3,242	9%	450	14%	
2018	36,835	2,858	8%	393	14%	
2019	36,355	3,119	9%	430	14%	
2020	38,824	3,142	8%	396	13%	

Source: FARS 2016-2019 Final File, 2020 Annual Report File (ARF)

Table 2 presents data on drivers involved in fatal crashes in 2020 by age group. Seven percent (321 of 4,561) of drivers 15 to 20 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 "All 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, 2020

	Total Drivers		All Distracted Drivers			Drivers Using Cell Phones		
Age Group	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 In This Age Group	Percentage of Drivers Using Cell Phones
15–20	4,561	8%	321	7%	11%	54	17%	15%
21–24	4,884	9%	317	6%	11%	52	16%	15%
25–34	11,933	22%	729	6%	25%	106	15%	30%
35–44	8,896	17%	474	5%	16%	61	13%	17%
45–54	7,731	14%	368	5%	12%	35	10%	10%
55–64	7,294	14%	329	5%	11%	27	8%	8%
65–74	4,116	8%	192	5%	6%	16	8%	4%
75+	2,810	5%	156	6%	5%	2	1%	1%
Total	53,890	100%	2,968	6%	100%	356	12%	100%

Source: FARS 2020 ARF

Notes: The total includes 88 drivers 14 and younger, 6 of whom were noted as distracted. Additionally, the total includes 1,577 of unknown age, 76 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 distraction in drivers under 35. This is seen by comparing the columns titled "Total Drivers: Percentage of Total Drivers" and "All Distracted Drivers: Percentage of All Distracted Drivers." For all fatal crashes, 8 percent of the drivers involved were 15 to 20 years old (4,561 of the 53,890 drivers involved in fatal crashes). However, 11 percent of the distracted drivers were 15 to 20 years old (321 of the 2,968 distracted drivers involved in fatal crashes). Fifteen percent of all the distracted drivers using cell phones were 15 to 20 years old (54 of the 356 drivers involved in fatal crashes distracted by cell phones). Using the same comparisons as for the 15-20 age group:

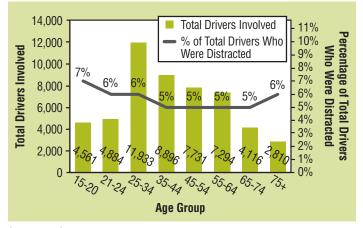
- Drivers in the 21-24 age group made up 9 percent of drivers in fatal crashes, but were 11 percent of all distracted drivers and 15 percent of drivers distracted by cell phones in fatal crashes.
- Drivers in the 25-34 age group made up 22 percent of drivers in fatal crashes, but were 25 percent of all distracted drivers and 30 percent of drivers distracted by cell phones 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 in Figures 1a and 1b.

Figure 1a

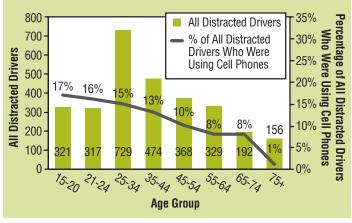
Drivers Involved and Percentage of Drivers Involved in

Fatal Crashes Who Were Distracted, by Age Group, 2020



Source: FARS 2020 ARF

Figure 1b
Distracted Drivers and Percentage of Distracted Drivers
Involved in Fatal Crashes Who Were Using Cell Phones,
By Age Group, 2020



Source: FARS 2020 ARF

Table 3 shows the role of the people killed in distraction-affected crashes in 2020. 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 81 percent for distraction-affected fatal crashes. The proportion of passenger fatalities is larger for distraction-affected fatal crashes (22%) than for all fatal crashes (16%). The other victims were nonoccupants – pedestrians, pedalcyclists, and others. Distracted drivers were involved in the deaths of 587 nonoccupants in 2020. In general, looking at person type, the proportion of fatalities in distraction-affected fatal crashes is very similar to that in all fatal crashes.

Table 3
Fatalities in All Crashes and Distraction-Affected Crashes,
By Person Type, 2020

	Total Fa	atalities	Distraction-Affected (D-A) Fatalities		
Person Type	Number	Percent	Number	Percent	
Total	38,824	100%	3,142	100%	
		Occupants			
Driver	24,787	64%	1,851	59%	
Passenger	6,328	16%	704	22%	
Total Occupants	31,115	80%	2,555	81%	
Nonocccupants					
Pedestrian	6,516	17%	480	15%	
Pedalcyclist	938	2%	83	3%	
Other/Unknown	255	1%	24	1%	
Total Nonoccupants	7,709	20%	587	19%	

Source: FARS 2020 ARF

Seventy-two percent of the distracted drivers involved in fatal crashes were males as compared to 73 percent of drivers in all fatal crashes in 2020.

Estimates of People Injured in Distraction-Affected Crashes

In 2020 an estimated 2,282,015 people were injured in police-reported traffic crashes (Table 4). The number of people injured in distraction-affected crashes in 2020 was estimated at 324,652 (14% of all people injured). An estimated 29,999 people were injured in 2020 in crashes involving cell phone use or other cell-phone-related activities (9% of all people injured in distraction-affected crashes).

Table 4 **People Injured in All Crashes and Distraction-Affected Crashes, 2016–2020** 

		Distracted-Affected (D-A) Crashes				
				Cell Phone Use		
			Percentage		Percentage	
Year	Total	Number	of Total	Number	of D-A	
2016	3,061,885	444,623	15%	33,864	8%	
2017	2,745,268	434,733	16%	31,076	7%	
2018	2,710,059	400,303	15%	32,632	8%	
2019	2,740,141	423,847	15%	28,300	7%	
2020	2,282,015	324,652	14%	29,999	9%	

Sources: FARS 2016-2019 Final File, 2020 ARF; CRSS 2016-2020

Over the past 5 years, the *estimated number* of people injured in distraction-affected crashes has shown decreases overall, with the exception of an increase in 2019. The *percentage* of injured people in distraction-affected crashes as a portion of all people injured has remained relatively constant.

#### Crashes of All Severity

Table 5 provides information for all police-reported crashes from 2016 to 2020 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 involve distractions fluctuated very little.

In 2020 there were an estimated 215,310 distraction-affected injury crashes (14% of all injury crashes). In these crashes an estimated 219,985 drivers (8% 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, 2016–2020

			Distracted-Affected (D-A) Crashes			
			Cell			ione Use
Year	Crash Severity	Total	Number	Percentage of Total	Number	Percentage of D-A
	Fatal Crash	34,748	3,197	9%	453	14%
2016	Injury Crash	2,116,308	295,358	14%	23,290	8%
2010	PDO Crash	4,670,073	606,067	13%	42,467	7%
	Total	6,821,129	904,622	13%	66,210	7%
	Fatal Crash	34,560	3,003	9%	418	14%
2017	Injury Crash	1,888,525	285,416	15%	20,539	7%
2017	PDO Crash	4,529,513	623,963	14%	49,929	8%
	Total	6,452,598	912,382	14%	70,886	8%
	Fatal Crash	33,919	2,645	8%	356	13%
2018	Injury Crash	1,893,704	276,553	15%	21,191	8%
2010	PDO Crash	4,807,058	659,615	14%	37,991	6%
	Total	6,734,681	938,812	14%	59,537	6%
	Fatal Crash	33,487	2,872	9%	395	14%
2019	Injury Crash	1,916,344	286,993	15%	20,527	7%
	PD0 Crash	4,806,253	696,339	14%	40,166	6%
	Total	6,756,084	986,204	15%	61,088	6%
2020	Fatal Crash	35,766	2,880	8%	354	12%
	Injury Crash	1,593,390	215,310	14%	19,660	9%
2020	PD0 Crash	3,621,681	462,106	13%	39,084	8%
	Total	5,250,837	680,296	13%	59,098	9%

Sources: FARS 2016-2019 Final File, 2020 ARF; CRSS 2016-2020

#### Attribute Selection

As discussed in the Methodology section of this Research Note, FARS 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 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 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.

#### Data Limitations

NHTSA recognizes that there are limitations to the collection and reporting of FARS and CRSS data with

regard to driver distraction. The data collections for FARS 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 universal, 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. This 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 and CRSS, 2016–2020

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 was 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 material specifically indicates 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 Cell Phone	Used when the driver was talking or listening on a cell phone; includes talking or listening on a "hands-free" or Bluetooth-enabled phone				
While Manipulating Cell Phone	Used when the driver was dialing or text messaging (texting) on a cell phone; any manual button/control actuation on the phone qualifies				
Other Cell Phone Related	Used when the case material indicates the driver was distracted from the driving task due to cell phone involvement, but none of the specified codes are applicable (e.g., reaching for cell phone). This attribute is also applied when specific details regarding cell 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				

Continued on next page.

Table A-1 (continued)

### Attributes Included in "Driver Distracted by" Element and Indication of Inclusion in Distraction-Affected Definitions, FARS and CRSS, 2016–2020

Attribute	Description
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, razor, 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 sign (e.g., advertisement, electronic billboard). 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 up food from carton placed on passenger seat, reaching to throw out used food wrapper)
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" is noted in the case material as one combined attribute
Distraction/Careless	Used exclusively when "Distraction/Careless" or "Careless/Distraction" is noted in the case material as one combined attribute
Careless/Inattentive	Used exclusively when "Careless/Inattentive" or "Inattentive/Careless" is noted in the case material as one combined attribute
Distraction (Distracted), Details Unknown	Used when "distraction" or "distracted" is noted in the case material, but specific distraction(s) cannot be identified
Inattention (inattentive), Details Unknown	Used when "inattention" or "inattentive" is noted in the case material, but it cannot be identified if this refers to a distraction
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
Distracted Driver of a Non-Contact Vehicle (new in 2018 from Related Factors - Crash Level Element)	Used for situations where the investigating officer indicates that the driver of a non-contact vehicle ("phantom vehicle") was distracted.

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

- Self-reported data elements, such as admitting to texting while driving, are always subject to bias (underreporting or false reporting). In some cases, the only source of distraction information for an investigating police officer may be the surviving driver's account of the crash, and the likelihood that the driver might admit to a negative behavior such as texting while driving might be small.
- 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 PCRs to accommodate these changes. Without broad-sweeping changes to PCRs to incorporate new technologies and features of technologies, it is difficult to capture the data that involves driver interaction with these devices.

The following is a challenge in quantifying external distractions.

■ In the reporting of distraction-affected crashes, oftentimes an external distraction is 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 drivingrelated 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 <a href="https://ghsa.org/state-laws/issues/distracted%20driving">https://ghsa.org/state-laws/issues/distracted%20driving</a>.

#### **Fatality Analysis Reporting System**

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 traffic crash must involve a motor vehicle traveling on a public trafficway that results 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 the following year to the final version 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. More information on FARS can be found at <a href="https://www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system">www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system</a>.

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2020 ARF, the 2019 Final File was released to replace the 2019 ARF. The final fatality count in motor vehicle traffic crashes for 2019 was 36,355, which was updated from 36,096 in the 2019 ARF.

The 2017 and 2018 Final Files have been amended, but this amendment did not change the overall number of fatal crashes or fatalities.

#### **Crash Report Sampling System**

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 the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at <a href="https://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss">www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss</a>.

In calendar year 2020, NCSA changed the methodology of estimating people nonfatally injured in motor vehicle traf-

fic crashes. The new approach combines 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 police-reported injury crashes from NASS GES/CRSS. The old approach extracted people nonfatally injured from only NASS GES/CRSS, regardless of crash severity. This change in methodology caused some estimates of people injured to change for prior years.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2022, May). *Distracted driving* 2020 (Research Note. Report No. DOT HS 813 309). National Highway Traffic Safety Administration.

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

