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NHTSA

# **Traffic Safety Facts** RESEARCH NOTE

DOT HS 813 559

Summary of Statistical Findings

April 2024

## **Distracted Driving in 2022**

The National Highway Traffic Safety Administration works to reduce the occurrence of distracted driving and raise awareness of its dangers. This risky driving behavior poses a danger not only to vehicle occupants but pedestrians and pedalcyclists as well. Driver distraction is a specific type of driver inattention that occurs when drivers divert attention from the driving task to focus on some other activity. Often discussions regarding distracted driving center around cellphone use and texting, but distracted driving also includes things such as eating, talking to passengers, adjusting the radio/climate controls, or adjusting other vehicle controls. A distraction-affected traffic crash is any traffic crash in which a driver was identified as distracted at the time of the crash.

- Eight percent of fatal crashes, 12 percent of injury crashes, and 11 percent of all police-reported motor vehicle traffic crashes in 2022 were reported as distraction-affected traffic crashes.
- In 2022 there were 3,308 people killed and an estimated additional 289,310 people injured in motor vehicle traffic crashes involving distracted drivers.
- Five percent of all drivers involved in fatal traffic crashes in 2022 were reported as distracted at the time of the crashes. Six percent of drivers 15 to 20 years old, 21 to 24 years old, 25 to 34 years old, and 75+ years old involved in fatal crashes were reported as distracted. Each of these age groups have the larger proportions of drivers who were distracted at the time of the fatal crashes.
- In 2022 there were 621 nonoccupants (pedestrians, pedalcyclists, and others) killed in distraction-affected traffic 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). Results from FARS, such as fatal crashes and fatalities, are actual counts, while results from CRSS, such as non-fatal crashes and people injured, are estimates. Refer to the end of this publication for more information on FARS and CRSS. In this note the terms "motor vehicle traffic crashes" and "traffic crashes" are used interchangeably. Also "cellphones" and "mobile phones" are used interchangeably.

The national estimates produced from CRSS data are subject to sampling errors. The CRSS Analytic User's Manual 2016-2022 (NCSA, 2024) contains information on sampling errors and generalized variance function standard errors for 2016-2022 CRSS estimates.

As defined in the *Overview of the National Highway Traffic Safety Administration's Driver Distraction Program* (NHTSA, 2010), distraction is a specific type of inattention that occurs when drivers divert their attention from the driving task to focus on some other activity. It describes distraction as a subset of inattention (which 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 users of NHTSA data be aware of these differences in definitions. It is also important to acknowledge the inherent limitations in the data collection for distraction-

affected traffic crashes and the resulting injuries and fatalities. This report's appendix has a table describing the coding for distraction-affected traffic crashes for FARS and CRSS and discusses limitations in the distracted driving data.

#### Data

#### Economic Cost for All Traffic Crashes

The estimated economic cost of all motor vehicle traffic crashes in the United States in 2019 (the most recent year for which cost data is available) was \$340 billion, of which \$98 billion resulted from distracted-driving traffic crashes. Included in the economic costs are:

- Lost productivity;
- Workplace costs;
- Legal and court costs;
- Medical costs;
- Emergency medical services;
- Insurance administration costs;
- Congestion impacts; and
- Property damage.

These costs represent the tangible losses that result from motor vehicle traffic crashes. However, in cases of serious injury or death, such costs fail to capture the relatively intangible value of lost quality-of-life that results from these injuries. When quality-of-life valuations are considered, the total value of societal harm from motor vehicle traffic crashes in the United States in 2019 was an estimated \$1.37 trillion, of which \$395 billion resulted from distracted-driving crashes.

For further information on cost estimates, see *The Economic and Societal Impact of Motor Vehicle Crashes, 2019 (Revised)* (Blincoe et al., 2023). This report estimated distraction from a naturalistic observation study and found that distraction was involved in 29 percent of all crashes, resulting in 10,546 fatalities, 1.3 million nonfatal injuries, and \$98.2 billion in economic costs in 2019. These estimates are different from FARS/CRSS numbers used in this research note.

#### Fatalities in Distraction-Affected Traffic Crashes

In 2022 there were 3,047 fatal motor vehicle traffic crashes that involved distraction (8% of 39,221 fatal crashes) nationwide. These crashes involved 3,124 distracted drivers since some crashes involved more than one distracted driver. Five percent (3,124 of 60,048) of drivers involved in fatal crashes were distracted. In distraction-affected traffic crashes, 3,308 fatalities (8% of 42,514 fatalities) occurred. Table 1 provides information on fatal traffic crashes, drivers involved in these crashes, and fatalities in distraction-affected crashes from 2018 to 2022.

Much attention has been focused on the dangers of using cellphones and other electronic devices while driving. In 2022 there were 368 fatal traffic crashes reported as having cellphone use as a distraction (12% of all distraction-affected fatal traffic crashes). For these distraction-affected crashes, the PCRs each stated that at least one of the involved drivers was talking on, listening to, or engaged in some other cellphone activity at the time of the crash. In 2022 a total of 402 people died in crashes involving at least one driver who was engaged in cellphone-related activities.

			Distraction-Affected (D-A)	Cellph	one in Use
Year	Total	Number	Percentage of Total	Number	Percentage of D-A
		· · ·	Fatal Traffic Crashes		
2018	33,919	2,645	8%	356	13%
2019	33,487	2,872	9%	395	14%
2020	35,935	2,889	8%	355	12%
2021	39,785	3,214	8%	390	12%
2022	39,221	3,047	8%	368	12%
			Drivers Involved in Fatal Crashes		
2018	51,905	2,704	5%	361	13%
2019	51,302	2,979	6%	399	13%
2020	54,165	2,977	5%	357	12%
2021	61,379	3,348	5%	395	12%
2022	60,048	3,124	5%	375	12%
			Fatalities		
2018	36,835	2,858	8%	393	14%
2019	36,355	3,119	9%	430	14%
2020	39,007	3,154	8%	397	13%
2021	43,230	3,521	8%	423	12%
2022	42,514	3,308	8%	402	12%

## Table 1. Fatal Traffic Crashes, Drivers Involved in Fatal Crashes, and Fatalities in Distraction Affected Crashes, and Cellphone Use by Distracted Drivers, 2018–2022

Source: FARS 2018-2021 Final File, 2022 Annual Report File (ARF)

Table 2 presents data on drivers involved in fatal traffic crashes in 2022 by age group. Six percent of drivers 15 to 20 years old (296 of 4,856), 21 to 24 years old (314 of 5,279), 25 to 34 years old (729 of 12,611), and 75+ years old (198 of 3,445) involved in fatal traffic crashes were distracted at the time of the crashes. Each of these age groups have the larger proportions of drivers who were distracted (column titled "All Distracted Drivers: Percentage of Total Drivers in This Age Group").

## Table 2. Drivers Involved in Fatal Traffic Crashes, by Age Group, Distraction, and CellphoneUse, 2022

	Total Drivers			All Distracted Driv	vers	[	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 Cellphones
15–20	4,856	8%	296	6%	9%	41	14%	11%
21–24	5,279	9%	314	6%	10%	44	14%	12%
25–34	12,611	21%	729	6%	23%	105	14%	28%
35–44	10,344	17%	561	5%	18%	69	12%	18%
45–54	8,619	14%	380	4%	12%	55	14%	15%
55–64	7,899	13%	330	4%	11%	40	12%	11%
65–74	5,053	8%	225	4%	7%	13	6%	3%
75+	3,445	6%	198	6%	6%	7	4%	2%
Total	60,048	100%	3,124	5%	100%	375	12%	100%

Source: FARS 2022 ARF

Notes: The total includes 87 drivers 14 and younger, 10 of whom were noted as distracted. Additionally, the total includes 1,855 of unknown age, 81 of whom were noted as distracted.

Comparing the percentages of drivers of each age group involved in fatal traffic crashes to the percentages involved in distraction-affected fatal traffic crashes points to overrepresentation of distraction in drivers under 44. This is seen by comparing the columns titled "Total Drivers: Percentage of Total Drivers" and "All Distracted Drivers: Percentage of All Distracted Drivers." In summary:

- Drivers in the 15-to-20 age group made up 8 percent of drivers in fatal traffic crashes but were 9 percent of all distracted drivers and 11 percent of drivers distracted by cellphones in fatal crashes.
- Drivers in the 21-to-24 age group made up 9 percent of drivers in fatal traffic crashes but were 10 percent of all distracted drivers and 12 percent of drivers distracted by cellphones in fatal crashes.
- Drivers in the 25-to-34 age group made up 21 percent of drivers in fatal traffic crashes but were 23 percent of all distracted drivers and 28 percent of drivers distracted by cellphones in fatal crashes.
- Drivers in the 35-to-44 age group made up 17 percent of drivers in fatal traffic crashes but were 18 percent of all distracted drivers and 18 percent of drivers distracted by cellphones in fatal crashes.

Looking at the "All Distracted Drivers: Percentage of Total Drivers in This Age Group" column, the percentages gradually declined from 6 percent for the 15-to-20 age group to 4 percent for the 45-to-54 age group, and then increased to 6 percent for the 75+ age group.

The distributions of drivers by age group for total drivers involved in fatal traffic crashes and percentage of distracted drivers involved in these crashes, and distracted drivers involved in fatal traffic crashes and percentage of distracted drivers using cellphones during these crashes, are shown in Figures 1a and 1b.





Source: FARS 2022 ARF





Source: FARS 2022 ARF

Table 3 shows the role of the people killed in distraction-affected crashes in 2022. Most fatalities in distraction-affected traffic crashes (and in all fatal traffic crashes) were motor vehicle occupants (including motorcyclists): 79 percent for all traffic fatalities and 81 percent for distraction-affected traffic fatalities. The other victims were nonoccupants – pedestrians, pedalcyclists, and others. Distracted drivers were involved in the deaths of 621 nonoccupants in 2022. In general, looking at person type, the proportion of traffic fatalities in distraction-affected fatal crashes is very similar to that in all fatal crashes.

Table 3. Fatalities in All Traffic Crashes and Distraction-Affected C	Crashes, by Person Type, 2022
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	Total Fatalities		Distraction-Affected Fatalities			
Person Type	Number	Percent	Number	Percent		
Total	42,514	100%	3,308	100%		
		Occupants				
Driver	26,842	63%	2,006	61%		
Passenger	6,720	16%	681	21%		
Total Occupants	33,562	79%	2,687	81%		
	Nonoccupants					
Pedestrian	7,522	18%	498	15%		
Pedalcyclist	1,105	3%	87	3%		
Other/Unknown	325	1%	36	1%		
Total Nonoccupants	8,952	21%	621	19%		

Source: FARS 2022 ARF

Note: Percentages may not add up to 100 percent due to independent rounding.

Seventy percent of the distracted drivers involved in fatal traffic crashes were males as compared to 73 percent of drivers in all fatal traffic crashes in 2022.

#### Estimates of People Injured in Distraction-Affected Traffic Crashes

In 2022 an estimated 2,382,771 people were injured in police-reported traffic crashes (Table 4). The number of people injured in distraction-affected traffic crashes in 2022 was estimated at 289,310 (12% of all people injured).

An estimated 26,151 people were injured in 2022 in traffic crashes involving cellphone use or other cellphone-related activities (9% of all people injured in distraction-affected traffic crashes).

		Distracted-Affected (D-A) Crashes				
				Cellphone Use		
Year	Total	Number	Percentage of Total	Number	Percentage of D-A	
2018	2,710,059	400,303	15%	32,632	8%	
2019	2,740,141	423,847	15%	28,300	7%	
2020	2,282,209	324,663	14%	30,000	9%	
2021	2,497,869	362,405	15%	29,000	8%	
2022	2,382,771	289,310	12%	26,151	9%	

Sources: FARS 2018–2021 Final File, 2022 ARF; CRSS 2018–2022

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

#### Traffic Crashes of All Severity

Table 5 provides information for all police-reported traffic crashes from 2018 through 2022 including fatal crashes, injury crashes, and property-damage-only (PDO) crashes for the year. During this period, the percentages of traffic crashes of all severities that involve distractions fluctuated very little.

In 2022 there were an estimated 198,563 distraction-affected injury crashes (12% of all injury crashes). In these crashes, an estimated 202,879 drivers (7% of all drivers in injury crashes) were distracted at the time of the crashes.

			Distracted-Affected (D-A) Crashes			
				Percentage of	Cellphone Use	
Year	Crash Severity	Total	Number	Total	Number	Percentage of D-A
	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%
2019	PDO Crash	4,806,253	696,339	14%	40,166	6%
	Total	6,756,084	986,204	15%	61,088	6%
	Fatal Crash	35,935	2,889	8%	355	12%
2020	Injury Crash	1,593,390	215,310	14%	19,660	9%
2020	PDO Crash	3,621,681	462,106	13%	39,084	8%
	Total	5,251,006	680,305	13%	59,099	9%
	Fatal Crash	39,785	3,214	8%	390	12%
2021	Injury Crash	1,727,608	248,327	14%	20,015	8%
2021	PDO Crash	4,335,820	553,389	13%	44,518	8%
	Total	6,103,213	804,931	13%	64,923	8%

 Table 5. Traffic Crashes and Distraction-Affected Crashes, by Crash Severity, 2018–2022

Distracted-Affected (D				cted (D-A) Cras	D-A) Crashes	
				Percentage of	Cellphone Use	
Year	Crash Severity	Total	Number	Total	Number	Percentage of D-A
2022	Fatal Crash	39,221	3,047	8%	368	12%
	Injury Crash	1,664,598	198,563	12%	18,780	9%
	PDO Crash	4,226,677	450,432	11%	43,327	10%
	Total	5,930,496	652,042	11%	62,475	10%

Sources: FARS 2018–2021 Final File, 2022 ARF; CRSS 2018–2022

#### Attribute Selection

As discussed in the Methodology section of this Research Note, FARS and CRSS were accessed to retrieve data on distraction-affected traffic 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 traffic 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 regarding 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. PCRs vary across jurisdictions, creating inconsistencies in reporting. Many variables on the PCR 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 traffic crashes. Any national or State count of distraction-affected traffic 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, 2018–2022

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 Occupants	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					

Attribute	Description
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 Cellphone	Used when the driver was talking or listening on a mobile phone; includes talking or listening on a "hands-free" or Bluetooth-enabled phone
While Manipulating Mobile Phone	Used when the driver was dialing or text messaging (texting) on a mobile phone; any manual button/control actuation on the phone qualifies
Other Mobile-Phone-Related	Used when the case material indicates the driver was distracted from the driving task due to mobile phone involvement, but none of the specified codes are applicable (reaching for mobile phone, etc.). This attribute is also applied when specific details regarding mobile 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, razor, music portable CD player, headphones, a navigational device, laptop, 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 (advertisement, electronic billboard, etc.). 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)
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 distractions 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 traffic crashes.

- 1. 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.
- 2. If a driver fatality occurs in the crash, law enforcement must rely on the crash investigation 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.
- 3. 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.

1. In the reporting of distraction-affected traffic crashes, oftentimes an external distraction is identified as a distinct type of distraction. Some scenarios captured under external distractions might 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 traffic crashes.

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

#### References

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#### 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 trafficway customarily open to the public 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 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 <u>www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system</u>.

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 2022 ARF, the 2021 Final File was released to replace the 2021 ARF. The final fatality count in motor vehicle traffic crashes for 2021 was 43,230, which was updated from 42,939 in the 2021 ARF.

#### **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. CRSS replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at <u>www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss</u>.

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