# **Traffic Safety Facts**

2013 Data

October 2015





#### **Key Findings**

- In the 15- to 20-year-old age group, driver fatalities declined by 53 percent from 2004 to 2013.
- In 2013, there were 1,691 young drivers who died and an estimated 177,000 who were injured in motor vehicle crashes.
- In 2013, 9 percent of all drivers involved in fatal crashes were 15 to 20 years old. Young drivers accounted for 6 percent of the total number of licensed drivers in the United States in 2013.
- The rate of drivers involved in fatal crashes per 100,000 licensed drivers for young female drivers was 19.32 per 100,000 licensed young female drivers. For young male drivers, the involvement rate was 44.64.
- During 2013, there were 233
  motorcycle riders 15 to 20 years old
  who were killed in crashes and an
  additional 6,000 were injured.
- Of the young drivers with known restraint use, 50 percent of those who died in crashes in 2013 were restrained at the time of the crashes.
- In 2013, 29 percent of young drivers 15 to 20 years old who were killed in crashes had blood alcohol concentrations (BACs) of .01 g/dL or higher; 82 percent of those young drivers had BACs of .08 g/dL or higher.
- NHTSA estimates that minimumdrinking-age laws (21 years old) have saved 29,834 lives



U.S. Department of Transportation

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# **Young Drivers**

For the purposes of this fact sheet, the term *young driver* refers to a person 15 to 20 years old operating a motor vehicle involved in a crash. This age group is generally just getting their licenses and many are under a graduated drivers licensing program as they learn driving skills. In all motorized jurisdictions around the world, young, inexperienced drivers have much higher crash rates than older, more experienced drivers.

In this fact sheet, the 2013 young driver information is presented in the following order.

- Overview
- Fatalities
- Driver Involvement
- Motorcycles

- Restraint Use
- Alcohol
- Fatalities by State

#### **Overview**

In 2013, there were 1,691 young drivers 15 to 20 years old who died in motor vehicle crashes, a decrease of 10 percent from 1,880 in 2012. Additionally, 177,000 young drivers were injured in motor vehicle crashes in 2013, a decrease of 4 percent from 184,000 in 2012.

Motor vehicle crashes are the leading cause of death for 15- to 20-year olds, according to the most recent data available (2013) from the National Center for Health Statistics.

There were 212.2 million licensed drivers in the United States in 2013. Young drivers accounted for 6 percent (12.3 million) of the total, a 1.9-percent decrease from the 12.5 million young drivers in 2004. Population for this age group increased from 2004 to 2013 by 1.5 percent.

#### **Fatalities**

Total fatalities in crashes with young drivers has decreased steadily over the 10-year period from 2004 to 2013, resulting in a 51-percent decrease in fatalities during that time, as seen in Table 1. Fatalities among young drivers, the passengers of young drivers, and occupants of other vehicles all declined by approximately half (53%, 56%, and 47%, respectively). However, nonoccupant fatalities in young-driver-related crashes decreased by only 27 percent during the 10-year period.

Table 1

Fatalities in Crashes Involving a Young Driver, by Person Type and Year, 2004–2013

	Young Driver		Passenger of Young Driver		Occupants of			
Year	(15–20)	<15	15–20	21+	Unknown	Other Vehicles	Nonoccupants	Total
2004	3,634	317	1,530	548	7	2,113	633	8,782
2005	3,474	229	1,429	533	6	1,946	624	8,241
2006	3,490	235	1,387	550	5	1,912	632	8,211
2007	3,190	223	1,371	443	7	1,829	631	7,694
2008	2,742	170	1,067	421	4	1,527	521	6,452
2009	2,343	145	958	351	2	1,381	469	5,649
2010	1,965	130	845	356	2	1,250	493	5,041
2011	1,993	118	777	298	1	1,122	473	4,782
2012	1,880	88	682	286	4	1,230	502	4,672
2013	1,691	120	623	307	1	1,128	463	4,333

Source: Fatalilty Analysis Reporting System (FARS) 2004–2012 Final File, 2013 Annual Report File (ARF).

In 2013, when young drivers were involved in fatal crashes they themselves made up 39 percent of the fatalities in the crashes. Of those passengers who died in crashes where young drivers were driving, 59 percent (623 of 1,051) were also 15 to 20 years old. In 2013 there were more fatalities of occupants in other vehicles during the crashes than there were fatalities of passengers of the young drivers, which could be a result of graduated drivers licensing programs. This is the second occurrence of that in the 10-year period; the first occurrence was in 2012.

#### **Driver Involvement**

The two-year comparison of total driver involvement in fatal crashes showed a 2-percent decrease from 45,664 in 2012 to 44,574 in 2013. During this same period, young-driver involvement decreased 8 percent from 4,313 in 2012 to 3,966 in 2013.

In 2013,

- There were 3,966 drivers involved in fatal crashes a 50-percent decrease from the 7,942 involved in 2004. Table 2 shows both involvement of young drivers in fatal crashes as well as young driver fatalities in fatal crashes.
- Young drivers involved in fatal crashes decreased from 2004 for both young male drivers and female drivers (50 percent and 51 percent, respectively).
- Nine percent of all drivers involved in fatal crashes and 13 percent of all drivers involved in police-reported crashes were young drivers.
- Total drivers involved in police-reported crashes increased by 2 percent to 10,043,000 from 9,882,000 in 2012. This compares to the number of young drivers involved in police-reported crashes, which increased by 1 percent to 1,273,000 from 1,258,000 in 2012.

Table 2 Involvement of 15- to 20-Year-Old Drivers in Fatal Crashes, by Gender, 2004 and 2013

	2004				2013			Percentage Change, 2004–2013	
Gender	Total	Ages 15–20	Percentage of Total	Total	Ages 15–20	Percentage of Total	Total	Ages 15–20	
Drivers Involved in Fatal Crashes									
Male	42,250	5,564	13.2%	32,442	2,807	8.7%	-23	-50	
Female	15,384	2,378	15.5%	11,364	1,157	10.2%	-26	-51	
Total	58,395	7,942	13.6%	44,574	3,966	8.9%	-24	-50	
				Driver Fataliti	es				
Male	20,089	2,600	12.9%	16,039	1,252	7.8%	-20	-52	
Female	6,780	1,034	15.3%	4,829	438	9.1%	-29	-58	
Total	26,871	3,634	13.5%	20,871	1,691	8.1%	-22	-53	

Source: FARS 2004 Final File, 2013 ARF. Note: Total includes unknown gender.

The rate of drivers involved in fatal crashes per 100,000 licensed drivers is highest for male drivers. For young male drivers 15 to 20 years old, the driver involvement rate is 44.64 young male drivers involved in fatal crashes per 100,000 licensed young male drivers. For young female drivers the highest rate is 19.32 involved in fatal crashes in 2013 per 100,000 licensed young female drivers.

The 15- to 20-year-old age group accounted for 11 percent of all drivers involved in single-vehicle fatal crashes, compared to 8 percent in multivehicle fatal crashes.

Table 3

Percentage of Population and Drivers Involved in Fatal Crashes, by Age Group, 2013

		Age Group (Years)								
	<15	15-20	21-24	25-34	35-44	45-54	55-64	65-69	70+	
Population (Percent)	19.3%	8.1%	5.8%	13.6%	12.8%	13.8%	12.4%	4.6%	9.5%	
Drivers Involved in Fatal Crashes (Percent)	Drivers Involved in Fatal Crashes (Percent)									
- All Fatal Crashes	0.1%	9.1%	10.5%	20.0%	16.4%	16.8%	13.5%	4.5%	9.0%	
- Single-Vehicle	0.2%	10.6%	12.7%	21.4%	15.6%	15.5%	12.5%	4.1%	7.4%	
- Multi-Vehicle	0.1%	8.1%	9.1%	19.1%	17.0%	17.7%	14.2%	4.8%	10.1%	
Licensed Drivers (Percent)	0%	5.8%	6.8%	17.3%	17.0%	18.8%	17.0%	6.2%	11.1%	

Source: FARS 2013 ARF.

Note: Percentages are based on known age groups only.

Among young drivers involved in fatal crashes in 2013, 28 percent (172 out of 619) of those who did not have valid operator's licenses

also had previous license suspensions or revocations at the time of the crashes (Table 4).

Table 4

15- to 20-Year Old Drivers Involved in Fatal Crashes, by Previous Driving Record and License Compliance, 2013

		License C					
	Va	Valid		Invalid		Total	
Driving Record	Number	Percent	Number	Percent	Number	Percent	
Total Drivers Involved	3,316	_	619	_	3,966*	_	
Previous Recorded Crashes	433	13.1%	53	8.6%	486	12.3%	
Previous Recorded Suspensions or Revocations	232	7.0%	172	27.8%	404	10.2%	
Previous DWI Convictions	23	0.7%	20	3.2%	43	1.1%	
Previous Speeding Convictions	559	16.9%	92	14.9%	651	16.4%	
Previous Other Harmful or Moving Convictions	454	13.7%	108	17.4%	562	14.2%	

Source: FARS 2013 ARF.

## **Motorcycles**

The term motorcycle *rider* refers to the operator of the motorcycle only and the term passenger refers to any occupant not including the rider. The term *motorcyclist* refers to any occupant of a motorcycle, either the rider or the passenger.

During 2013, there were 233 young motorcycle riders 15 to 20 years old killed in crashes, an increase of 19 percent from 2012 (196 young motorcycle riders killed in 2012). An additional estimated 6,000 young riders were injured in 2013, approximately the same as in 2012.

Helmets are estimated to be 37-percent effective in preventing fatalities among motorcycle riders and 41-percent effective among motorcycle passengers. NHTSA estimates that helmets saved the lives of 1,630 motorcyclists of all ages in 2013, and that if all motorcyclists had worn helmets, an additional 715 lives could have been saved.

During 2013, 35 percent of the motorcycle riders 15 to 20 years old who were fatally injured in crashes were not wearing helmets (based on known helmet use).

Of the young motorcycle riders involved in fatal crashes in 2012, 38 percent were either unlicensed or driving with invalid licenses.

<sup>\*</sup>Total includes drivers with unknown previous records.

#### **Restraint Use**

Of the 3,966 young drivers involved in fatal crashes in 2013, the restraint use of those drivers is known for all but 319 drivers. For young drivers with known restraint use, 50 percent of those who died in the crash were restrained at the time of the crash. For those young drivers who survived the fatal crash, 85 percent were restained.

#### Alcohol

All States and the District of Columbia have 21-year-old minimumdrinking-age laws. Alcohol involvement includes a fatal crash in which a driver had a BAC of .01 g/dL or higher. A driver is considered to be alcohol-impaired when the driver's BAC is .08 g/dL or higher. In 2013, 29 percent of the young drivers 15 to 20 years old who were killed in crashes had BACs of .01 g/dL or higher; 24 percent had BACs of .08 g/dL or higher, as shown in Table 5. Thus, of the 492 young drivers killed who had alcohol in their systems, 405 (82%) were at .08 g/dL or higher (past the legal driving limit for those *legally permitted* to consume alcohol).

Table 5
Alcohol Involvement Among Young Drivers (Age 15 to 20) Involved in Fatal Crashes, by Year and Driver Status, 2004 and 2013

		BAC .00 g/dL		BAC .0	BAC .01+ g/dL		8+ g/dL		
<b>Driver Status</b>	Number of Drivers	Number	%	Number	%	Number	%		
	2004								
Survived	4,308	3,581	83%	727	17%	540	13%		
Killed	3,634	2,560	70%	1,074	30%	881	24%		
Total	7,942	6,141	77%	1,801	23%	1,421	18%		
			201	3					
Survived	2,275	1,904	84%	371	16%	269	12%		
Killed	1,691	1,199	71%	492	29%	405	24%		
Total	3,966	3,103	78%	863	22%	674	17%		

Source: FARS 2004 Final File, 2013 ARF.

The number of young drivers involved in fatal crashes who had BACs of .01 g/dL or higher dropped by 52 percent, from 1,801 in 2004 to 863 in 2013.

In 2013, 22 percent of the young drivers involved in fatal crashes had alcohol in their systems as reported through FARS. This compares to 3 percent of young drivers who were reported by police to have alcohol in their systems during injury crashes and 1 percent of young drivers during property-damage-only crashes, as reported through the General Estimates System (GES).

Among young drivers, 527 were killed at the age of 20 – highest among the young drivers; 38 percent of these drivers had alcohol in their systems at the time of the fatal crashes. Table 6 shows alcohol involvement for young drivers who were killed, according to their age. The table clearly shows that of those young drivers killed, the percentage that involved alcohol increases as age increases.

Table 6
Young Drivers Killed, by Age and Percentage with BAC=.01 or Higher, 2013

Age (Years)	Total Number of Drivers Killed	Percentage of Drivers With BAC .01+ g/dL	Percentage of Drivers With BAC .08+ g/dL
15	40	10%	7%
16	127	15%	10%
17	208	19%	14%
18	357	25%	21%
19	432	32%	26%
20	527	38%	33%

Source: FARS 2013 ARF.

For young drivers in fatal crashes, alcohol involvement is higher among males than among females. In 2013, 24 percent of the young male drivers involved in fatal crashes had been drinking at the time of the crashes (BAC of .01 g/dL or higher), compared with 16 percent of the young female drivers involved in fatal crashes.

In general, drivers are less likely to use restraints when they have been drinking. In 2013, 49 percent of the young drivers of passenger

vehicles involved in fatal crashes who had been drinking were unrestrained. Of the young drivers who had been drinking and were killed in crashes, 65 percent were unrestrained (based on known restraint use). In comparison, of the non-drinking young drivers killed, 44 percent were unrestrained, as seen in Table 7.

Table 7

Young Drivers of Passenger Vehicles in Fatal Crashes, by Restraint Use and BAC, 2013

	BAC .0	0 g/dL	BAC .01+ g/dL					
Restraint Use	Number	%	Number	%				
Drivers Involved in Fatal Crashes								
Restraint Used	2,003	78%	364	51%				
Restraint Not Used	574	22%	354	49%				
	Driver Fatalities							
Restraint Used	487	56%	143	35%				
Restraint Not Used	388	44%	267	65%				

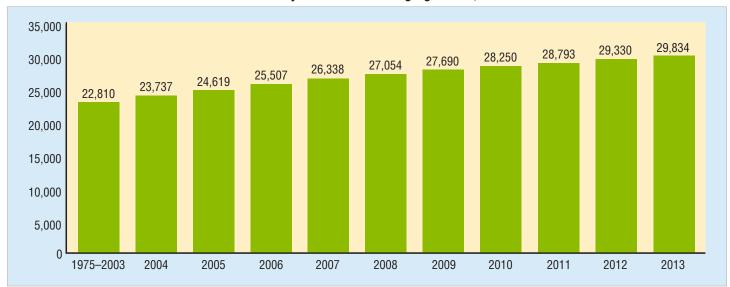
Source: FARS 2013 ARF Note: Based on known restraint use.

NHTSA estimates that the 21-year-old minimum-drinking-age laws have aided in reducing alcohol traffic fatalities and have saved an

estimated 29,834 lives since 1975. In 2013, an estimated 504 lives were saved by minimum-drinking-age laws, as can be seen in Figure 1.

Figure 1

Cumulative Estimated Number of Lives Saved by Minimum Drinking Age Laws, 1975–2013



## **Fatalities by State**

Table 8 presents the number of young drivers killed, as well as the numbers of passengers of young drivers, occupants of other vehicles, and nonoccupants killed in young-driver crashes for each State and the District of Columbia in 2013. Also included in Table 8 is Puerto

Rico, which is not included in the overall U.S. total. Among all States in 2013:

- Traffic fatalities in crashes involving young drivers ranged from 1 in DC to 502 in Texas.
- The number of young drivers who died in crashes was lowest in DC (0) and highest in Texas (181).

Table 8

Fatalities in Crashes Involving Young Drivers (Ages 15 to 20), by State and Person type 2013

State	Young Drivers	Passengers in Young Drivers' Vehicles	Occupants of Other Vehicles	Nonoccupants	Total
Alabama	56	24	28	4	112
Alaska	5	1	1	0	7
Arizona	41	25	35	17	118
Arkansas	21	20	18	7	66
California	110	96	101	82	389
Colorado	28	18	12	5	63
Connecticut	20	11	4	3	38
Delaware	1	1	9	1	12
Dist of Columbia	0	0	1	0	1
Florida	95	53	74	53	275
Georgia	62	53	40	20	175
Hawaii	5	4	1	1	11
Idaho	16	13	7	0	36
Illinois	55	28	51	13	147
Indiana	45	25	29	10	109
Iowa	18	9	13	0	40
Kansas	22	14	12	4	52
Kentucky	31	21	22	10	84
Louisiana	39	16	23	9	87
Maine	12	4	2	0	18
Maryland	19	10	13	3	45
Massachusetts	13	7	9	7	36
Michigan	53	24	45	17	139
Minnesota	20	12	12	7	51
Mississippi	39	14	27	4	84
Missouri	56	29	31	4	120
Montana	8	11	7	0	26
Nebraska	19	18	8	0	45
Nevada	13	5	8	4	30
New Hampshire	9	1	2	6	18
New Jersey	16	15	17	6	54
New Mexico	9	26	8	3	46
New York	62	40	21	22	145
North Carolina	60	36	55	12	163
North Dakota	9	5	6	0	20
Ohio	61	26	27	10	124
Oklahoma	32	22	24	7	85
Oregon	16	7	10	6	39
Pennsylvania	70	38	32	9	149
Rhode Island	2	3	1	2	8
South Carolina	45	16	22	13	96
South Dakota	9	0	3	2	14
Tennessee	53	28	38	4	123
Texas	181	122	147	52	502
Utah	11	6	11	6	34
Vermont	5	4	1	0	10
Virginia	36	27	24	7	94
Washington	28	34	14	5	81
West Virginia	19	13	6	0	38
Wisconsin	27	11	16	5	59
Wyoming	9	5	0	1	15
U.S. Total	1,691	1,051	1,128	463	4,333
Puerto Rico	20	15	13	6	54

Source: FARS 2013 ARF.

This fact sheet contains information on motor vehicle fatalities and fatal crashes 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 (although 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 crashes, from 60 locations across the country, from which estimates of national totals for injury and property-damage-only crashes are derived.

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#### For More Information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at ncsaweb@dot.gov. General information on highway traffic safety is online at www.nhtsa.gov/NCSA. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Large Trucks, Motorcycles, Occupant Protection, Older Population, Passenger Vehicles, Pedestrians, Rural/Urban Comparison, School-Transportation-Related Crashes, Speeding, State Alcohol Estimates, and State Traffic Data,. Detailed data on motor vehicle traffic crashes are published annually in Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System. The fact sheets and annual Traffic Safety Facts report can be accessed online at www-nrd.nhtsa.dot.gov/CATS/index.aspx.

