



# Traffic Safety Facts 2002

## Alcohol



### ***A Public Information Fact Sheet on Motor Vehicle and Traffic Safety Published by the National Highway Traffic Safety Administration's National Center for Statistics and Analysis***

*In 2001, NHTSA began using a revised method — **multiple imputation** — to estimate missing information about blood alcohol concentration (BAC) levels for persons involved in fatal crashes. The alcohol estimates in this fact sheet are based on the new imputation method. The new method will enable NHTSA to improve the scope of alcohol involvement statistics generated from the Fatality Analysis Reporting System (FARS). NHTSA has also calculated historical estimates of alcohol involvement from 1982 through 2000 using the new method. Instead of estimating alcohol involvement in the three categories used in the past (0.00, 0.01 to 0.09, and 0.10+ grams per deciliter [g/dl]), the new method estimates BAC levels over the entire range of plausible values from 0.00 to 0.94 g/dl. As a result, NHTSA will have the ability to report alcohol involvement at any BAC level. Because many states have adopted 0.08 g/dl as the legal threshold for alcohol intoxication, NHTSA now estimates alcohol involvement in the following three categories: 0.00 g/dl, no alcohol; 0.01 to 0.07 g/dl, impaired; and 0.08+, intoxicated. More information on the new multiple imputation method, including detailed tabulations of alcohol involvement in various categories (age, sex, time of day, etc.), is available in NHTSA Technical Report DOT HS 809 403, Transitioning to Multiple Imputation: A New Method to Estimate Missing Blood Alcohol Concentration (BAC) Values in FARS.*



***“There were 17,419 alcohol-related fatalities in 2002 — 41 percent of the total traffic fatalities for the year.”***

Traffic fatalities in alcohol-related crashes rose slightly (by 0.1 percent) from 17,400 in 2001 to 17,419 in 2002. The 17,419 alcohol-related fatalities in 2002 (41 percent of total traffic fatalities for the year) represent a 5 percent reduction from the 18,290 alcohol-related fatalities reported in 1992 (47 percent of the total).

NHTSA estimates that alcohol was involved in 41 percent of fatal crashes and in 6 percent of all crashes in 2002.

The 17,419 fatalities in alcohol-related crashes during 2002 represent an average of one alcohol-related fatality every 30 minutes.

An estimated 258,000 persons were injured in crashes where police reported that alcohol was present — an average of one person injured approximately every 2 minutes.

Approximately 1.4 million drivers were arrested in 2001 for driving under the influence of alcohol or narcotics. This is an arrest rate of 1 for every 137 licensed drivers in the United States (2002 data not yet available).

In 2002, 35 percent of all traffic fatalities occurred in crashes in which at least one driver or nonoccupant had a BAC of 0.08 g/dl or greater. Sixty-eight percent of the 15,019 people killed in such crashes were themselves intoxicated. The remaining 32 percent were passengers, nonintoxicated drivers, or nonintoxicated nonoccupants.

**Table 1. Types of Fatalities in Fatal Crashes Involving at Least One Intoxicated Driver or Nonoccupant, 2002**

Type of Fatality	Number	Percent of Total
Intoxicated Drivers	8,474	56
Nonintoxicated Drivers	1,054	7
Passengers	3,219	21
Intoxicated Nonoccupants (Pedestrians and Pedalcyclists)	1,761	12
Nonintoxicated Nonoccupants	511	3
<b>Total Fatalities</b>	<b>15,019</b>	<b>100</b>

The rate of alcohol involvement in fatal crashes is more than 3 times as high at night as during the day (63 percent vs. 19 percent). For all crashes, the alcohol involvement rate is 5 times as high at night (15 percent vs. 3 percent).

In 2002, 31 percent of all fatal crashes during the week were alcohol-related, compared to 54 percent on weekends. For all crashes, the alcohol involvement rate was 4 percent during the week and 11 percent during the weekend.

From 1992 to 2002, intoxication rates (BAC of 0.08 g/dl or greater) decreased for drivers of all age groups involved in fatal crashes, except for the group of drivers 45 to 64 years old, which had the same rates in 1992 and 2002. Drivers over 64 years old experienced the largest decrease in intoxication rates (29 percent), followed by drivers 25 to 34 years old (20 percent).

**“From 1992 to 2002, intoxication rates decreased for drivers of all age groups involved in fatal crashes, except for drivers 45 to 64 years old.”**

**Figure 1. Intoxicated Drivers in Fatal Crashes by Age Group, 1992-2002**

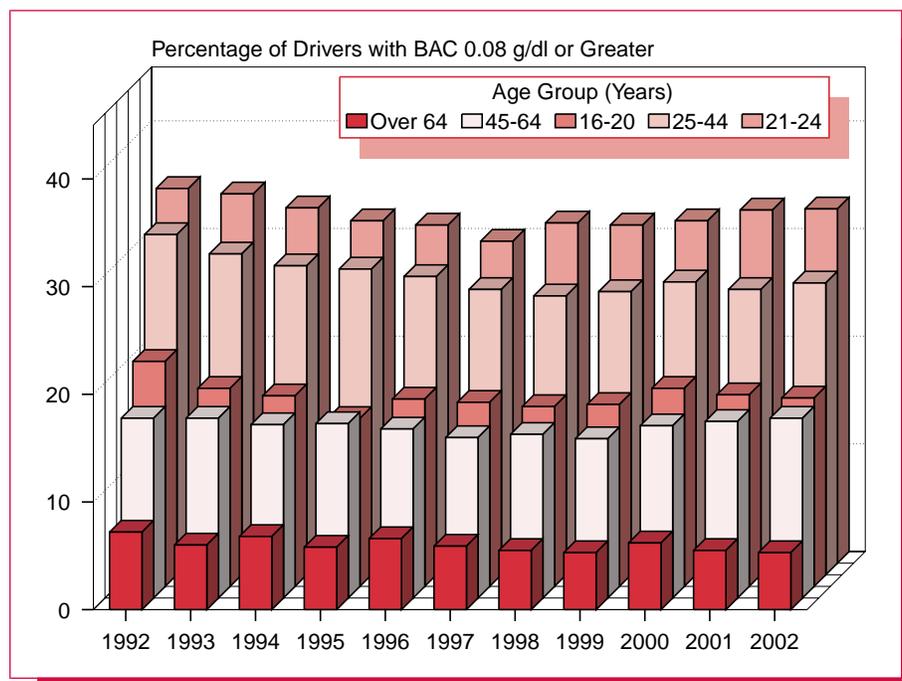
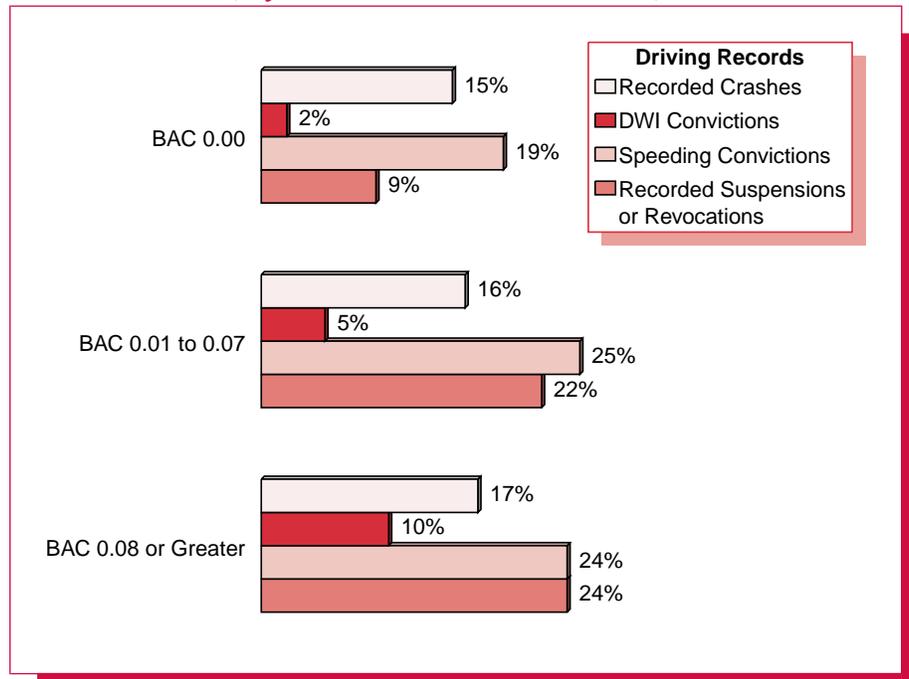


Figure 2. Previous Driving Records of Drivers Killed in Traffic Crashes, by Blood Alcohol Concentration, 2002



**“More than one-third of all pedestrians 16 years of age or older killed in traffic crashes in 2002 were intoxicated.”**

The highest intoxication rates in fatal crashes in 2002 were recorded for drivers 21-24 years old (33 percent), followed by ages 25-34 (28 percent) and 35-44 (26 percent).

Intoxication rates for drivers in fatal crashes in 2002 were highest for motorcycle operators (31 percent) and lowest for drivers of large trucks (2 percent). The intoxication rate for drivers of light trucks (23 percent) was higher than that for passenger car drivers (22 percent).

Safety belts were used by only 23 percent of the fatally injured *intoxicated* drivers (BAC of 0.08 g/dl or greater), compared to 36 percent of fatally injured *impaired* drivers (BAC between 0.01 g/dl and 0.07 g/dl) and 53 percent of fatally injured sober drivers.

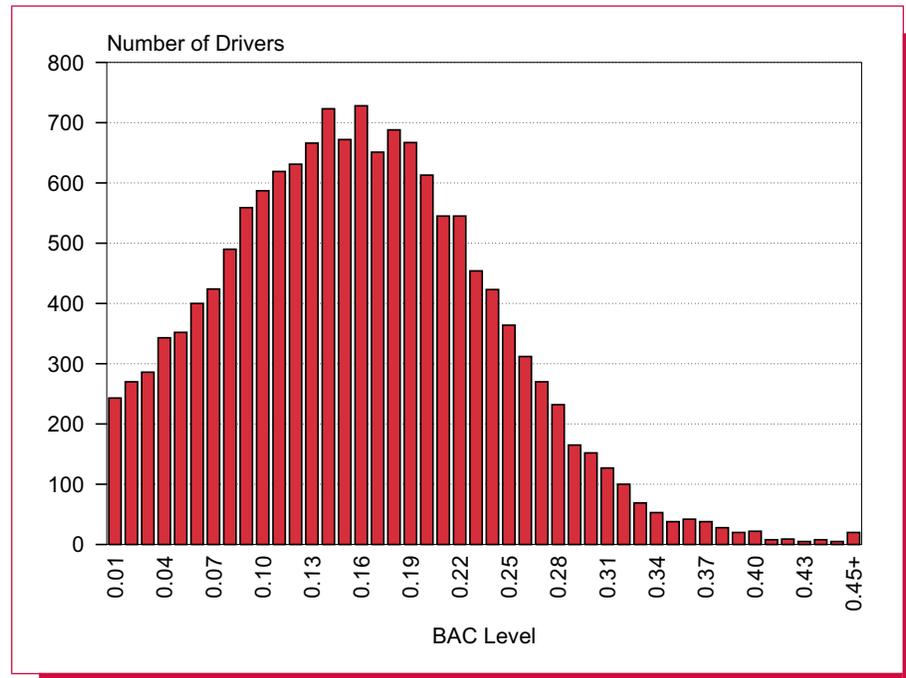
Fatally injured drivers with BAC levels of 0.08 g/dl or greater were 5 times as likely to have a prior conviction for driving while intoxicated compared to fatally injured sober drivers (10 percent and 2 percent, respectively).

More than one-third (36 percent) of all pedestrians 16 years of age or older killed in traffic crashes in 2002 were intoxicated. By age group, the percentages ranged from a low of 10 percent for pedestrians 65 and over to a high of 53 percent for those 35 to 44 years old.

The driver, pedestrian, or both were intoxicated in 41 percent of all fatal pedestrian crashes in 2002. In these crashes, the intoxication rate for pedestrians was nearly triple the rate for drivers — 34 percent and 13 percent, respectively. Both the pedestrian and the driver were intoxicated in 5 percent of the crashes that resulted in a pedestrian fatality.

In 2002, 84 percent (12,344) of the 14,662 drivers who had been drinking (with BAC 0.01 g/dl or higher) and were involved in fatal crashes had BACs at or above the intoxication level (0.08 g/dl).

**Figure 3. Distribution of BAC Levels for Drivers Involved in Fatal Crashes with BAC 0.01 or Higher**



**“In 2002, 84 percent of the drinking drivers involved in fatal crashes were intoxicated.”**

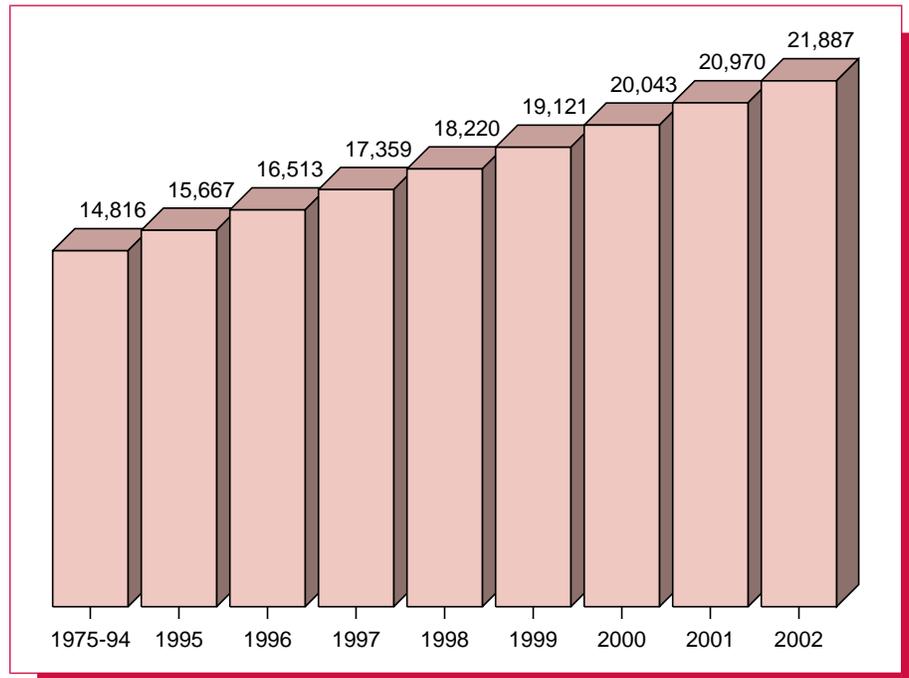
**For more information:**

Information on alcohol involvement in traffic fatalities is available from the National Center for Statistics and Analysis, NPO-121, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-on-demand at 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at <http://www-nrd.nhtsa.dot.gov/people/nca>. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

Other fact sheets available from the National Center for Statistics and Analysis are *Overview, Occupant Protection, Older Population, Speeding, Children, Young Drivers, Pedestrians, Pedalcyclists, Motorcycles, Large Trucks, School Transportation-Related Crashes, State Traffic Data, and State Alcohol Estimates*. 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*.

All states and the District of Columbia now have 21-year-old minimum drinking age laws. NHTSA estimates that these laws have reduced traffic fatalities involving drivers 18 to 20 years old by 13 percent and have saved an estimated 21,887 lives since 1975. In 2002, an estimated 917 lives were saved by minimum drinking age laws.

**Figure 4. Cumulative Estimated Number of Lives Saved by Minimum Drinking Age Laws, 1975-2002**



***“NHTSA estimates that minimum drinking age laws have saved 21,887 lives since 1975.”***

On the following pages, Tables 2, 3, 4, and 5 present summary data on alcohol involvement in fatal crashes in 2002, compared with 1992 data. Table 6 shows alcohol involvement in fatal traffic crashes by state.

Table 2. Alcohol Involvement in Fatal Crashes, 1992 and 2002

	1992		2002		Change in Percentage, 1992-2002
	Number	Percentage with BAC 0.08 g/dl or Greater*	Number	Percentage with BAC 0.08 g/dl or Greater*	
Fatal Crashes	34,942	40	38,309	35	-13%
Total Fatalities	39,250	40	42,815	35	-13%

\*For any person (occupant or nonoccupant) involved in the fatal crash.

Table 3. Alcohol Involvement for Drivers in Fatal Crashes, 1992 and 2002

Drivers Involved in Fatal Crashes	1992		2002		Change in Percentage, 1992-2002
	Number of Drivers	Percentage with BAC 0.08 g/dl or Greater	Number of Drivers	Percentage with BAC 0.08 g/dl or Greater	
<i>Total Drivers</i>					
Total*	51,901	25	57,803	21	-16%
<i>Drivers by Age Group (Years)</i>					
16–20	7,192	21	8,082	17	-19%
21–24	6,323	35	6,285	33	-6%
25–34	13,049	35	11,416	28	-20%
35–44	9,284	27	10,896	26	-4%
45–64	9,360	17	13,580	17	0%
Over 64	5,474	7	6,271	5	-29%
<i>Drivers by Sex</i>					
Male	38,598	28	42,134	25	-11%
Female	12,596	15	14,911	12	-20%
<i>Drivers by Vehicle Type</i>					
Passenger Cars	29,670	25	26,966	22	-12%
Light Trucks	14,540	28	21,373	23	-18%
Large Trucks	3,980	2	4,508	2	0%
Motorcycles	2,435	40	3,337	31	-23%

\*Numbers shown for groups of drivers do not add to the total number of drivers due to unknown or other data not included.

**Table 4. Alcohol Involvement for Drivers Killed in Fatal Crashes, 1992 and 2002**

Driver Fatalities	1992		2002		Change in Percentage, 1992-2002
	Number of Driver Fatalities	Percentage with BAC 0.08 g/dl or Greater	Number of Driver Fatalities	Percentage with BAC 0.08 g/dl or Greater	
<i>Total Driver Fatalities</i>					
Total	22,584	37	26,549	32	-14%
<i>Driver Fatalities by Crash Type and Time of Day</i>					
Single-Vehicle	11,218	54	13,399	46	-15%
Daytime*	3,968	25	5,184	21	-16%
Nighttime**	7,021	69	7,955	62	-10%
Multiple-Vehicle	11,366	21	13,150	17	-19%
Daytime*	6,811	9	8,354	8	-11%
Nighttime**	4,546	40	4,790	34	-15%
<i>Driver Fatalities by Day of Week</i>					
Weekday***	13,056	28	15,772	24	-14%
Weekend****	9,464	50	10,714	44	-12%
<i>Driver Fatalities by Time of Day</i>					
Daytime*	10,779	15	13,538	13	-13%
Nighttime**	11,567	58	12,745	52	-10%
<i>Driver Fatalities by Day of Week and Time of Day</i>					
Weekday***					
Daytime*	7,874	12	9,774	10	-17%
Nighttime**	5,104	52	5,923	46	-12%
Weekend****					
Daytime*	2,905	23	3,764	19	-17%
Nighttime**	6,463	62	6,822	57	-8%

\*6:00 AM to 6:00 PM.  
 \*\*6:00 PM to 6:00 AM.  
 \*\*\*Monday 6:00 AM to Friday 6:00 PM.  
 \*\*\*\*Friday 6:00 PM to Monday 6:00 AM.

**Table 5. Alcohol Involvement for Nonoccupants Killed in Fatal Crashes, 1992 and 2002**

Nonoccupant Fatalities	1992		2002		Change in Percentage, 1992-2002
	Number of Nonoccupant Fatalities	Percentage with BAC 0.08 g/dl or Greater	Number of Nonoccupant Fatalities	Percentage with BAC 0.08 g/dl or Greater	
<i>Pedestrian Fatalities by Age Group (Years)</i>					
16–20	327	31	283	31	0%
21–24	304	54	243	49	-9%
25–34	897	61	597	48	-21%
35–44	863	55	851	53	-4%
45–64	1,071	39	1,291	40	+3%
Over 64	1,272	12	1,051	10	-17%
<b>Total*</b>	5,549	34	4,808	33	-3%
<i>Pedalcyclist Fatalities</i>					
Total	723	16	662	23	44%

\*Includes pedestrians under 16 years old and pedestrians of unknown age.

Table 6. Traffic Fatalities by State and Highest Blood Alcohol Concentration in the Crash, 2002

State	Total Fatalities	No Alcohol (BAC = 0.00 g/dl)		Low Alcohol (BAC = 0.01-0.07 g/dl)		High Alcohol (BAC ≥ 0.08 g/dl)		Any Alcohol (BAC ≥ 0.01 g/dl)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	1,033	620	60	43	4	370	36	413	40
Alaska	87	52	59	2	2	34	39	35	41
Arizona	1,117	640	57	58	5	420	38	477	43
Arkansas	640	398	62	35	5	207	32	242	38
California	4,078	2,466	60	300	7	1,312	32	1,612	40
Colorado	742	435	59	39	5	268	36	307	41
Connecticut	322	182	57	17	5	123	38	140	43
Delaware	124	73	59	8	6	43	34	51	41
District of Columbia	47	22	48	3	5	22	47	25	52
Florida	3,132	1,856	59	177	6	1,099	35	1,276	41
Georgia	1,523	994	65	90	6	439	29	529	35
Hawaii	119	69	58	10	8	41	34	50	42
Idaho	264	173	66	17	7	74	28	91	34
Illinois	1,411	763	54	97	7	552	39	648	46
Indiana	792	523	66	46	6	223	28	269	34
Iowa	404	273	68	24	6	107	27	131	32
Kansas	512	283	55	23	5	205	40	229	45
Kentucky	915	614	67	39	4	263	29	301	33
Louisiana	875	462	53	62	7	351	40	413	47
Maine	216	165	76	4	2	47	22	51	24
Maryland	659	394	60	49	7	216	33	265	40
Massachusetts	459	238	52	30	6	192	42	221	48
Michigan	1,277	787	62	68	5	422	33	490	38
Minnesota	657	402	61	46	7	209	32	255	39
Mississippi	885	553	62	41	5	292	33	332	38
Missouri	1,208	683	57	68	6	457	38	525	43
Montana	270	143	53	21	8	106	39	127	47
Nebraska	307	190	62	21	7	97	31	117	38
Nevada	381	210	55	23	6	148	39	171	45
New Hampshire	127	76	60	5	4	46	36	51	40
New Jersey	773	474	61	45	6	254	33	299	39
New Mexico	449	234	52	27	6	189	42	215	48
New York	1,522	1,044	69	77	5	400	26	478	31
North Carolina	1,575	974	62	67	4	533	34	601	38
North Dakota	97	49	50	8	8	40	41	48	50
Ohio	1,418	856	60	66	5	496	35	562	40
Oklahoma	734	485	66	35	5	215	29	249	34
Oregon	436	257	59	26	6	153	35	179	41
Pennsylvania	1,614	958	59	88	5	568	35	656	41
Rhode Island	84	38	45	8	9	38	45	46	55
South Carolina	1,053	502	48	64	6	487	46	551	52
South Dakota	180	88	49	13	7	80	44	92	51
Tennessee	1,175	704	60	61	5	410	35	471	40
Texas	3,725	1,980	53	194	5	1,551	42	1,745	47
Utah	328	255	78	7	2	67	20	73	22
Vermont	78	51	65	5	6	22	28	27	35
Virginia	914	544	59	48	5	323	35	371	41
Washington	659	361	55	32	5	265	40	298	45
West Virginia	439	259	59	20	5	160	36	180	41
Wisconsin	803	440	55	39	5	325	40	364	45
Wyoming	176	107	61	7	4	62	35	70	39
<b>U.S. Total</b>	<b>42,815</b>	<b>25,396</b>	<b>59</b>	<b>2,401</b>	<b>6</b>	<b>15,019</b>	<b>35</b>	<b>17,419</b>	<b>41</b>
Puerto Rico	510	270	53	42	8	199	39	241	47

Note: Percentages are calculated from unrounded data. Totals may not equal sum of components due to independent rounding.