



# Traffic Safety Facts 2001

## 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 0.07g/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 17,448 alcohol-related fatalities in 2001 — 41 percent of the total traffic fatalities for the year.”***

Traffic fatalities in alcohol-related crashes rose slightly (by 0.4 percent) from 17,380 in 2000 to 17,448 in 2001. The 17,448 alcohol-related fatalities in 2001 (41 percent of total traffic fatalities for the year) represent a 13 percent reduction from the 20,159 alcohol-related fatalities reported in 1991 (49 percent of the total).

NHTSA estimates that alcohol was involved in 41 percent of fatal crashes and in 7 percent of all crashes in 2001.

The 17,448 fatalities in alcohol-related crashes during 2001 represent an average of one alcohol-related fatality every 30 minutes.

An estimated 275,000 persons were injured in crashes where police reported that alcohol was present — an average of one person injured approximately every 2 minutes.

Approximately 1.5 million drivers were arrested in 2000 for driving under the influence of alcohol or narcotics. This is an arrest rate of 1 for every 130 licensed drivers in the United States (2001 data not yet available).

In 2001, 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-seven percent of the 14,933 people killed in such crashes were themselves intoxicated. The remaining 33 percent were passengers, nonintoxicated drivers, or nonintoxicated nonoccupants.

**Table 1. Types of Fatalities in Fatal Crashes Involving at Least One Intoxicated Driver or Nonoccupant, 2001**

Type of Fatality	Number	Percent of Total
Intoxicated Drivers	8,308	56
Nonintoxicated Drivers	1,034	7
Passengers	3,253	22
Intoxicated Nonoccupants (Pedestrians and Pedalcyclists)	1,770	12
Nonintoxicated Nonoccupants	569	4
<b>Total Fatalities</b>	<b>14,933</b>	<b>100</b>

**“From 1991 to 2001, intoxication rates decreased for drivers of all age groups involved in fatal crashes.”**

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 2001, 32 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 5 percent during the week and 12 percent during the weekend.

From 1991 to 2001, intoxication rates decreased for drivers of all age groups involved in fatal crashes. Drivers 25 to 34 years old experienced the largest decrease in intoxication rates (22.2 percent), followed by drivers 16 to 20 years old (21.7 percent).

**Figure 1. Intoxicated Drivers in Fatal Crashes by Age Group, 1991-2001**

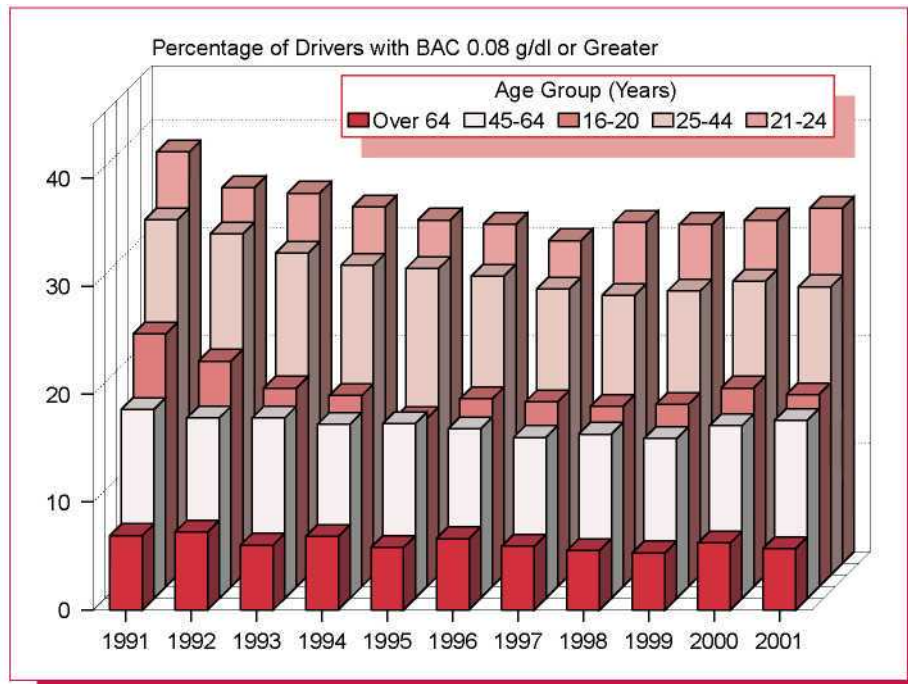
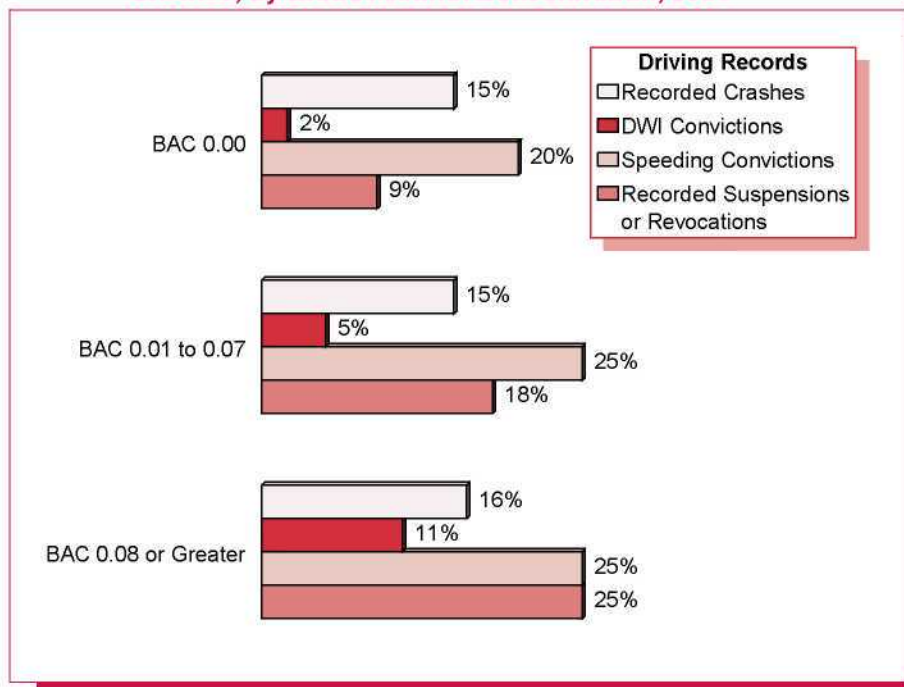


Figure 2. Previous Driving Records of Drivers Killed in Traffic Crashes, by Blood Alcohol Concentration, 2001



The highest intoxication rates in fatal crashes in 2001 were recorded for drivers 21-24 years old (33 percent), followed by ages 25-34 (28 percent) and 35-44 (25 percent).

Intoxication rates for drivers in fatal crashes in 2001 were highest for motorcycle operators (29 percent) and lowest for drivers of large trucks (1 percent). The intoxication rates for drivers of light trucks and passenger car drivers were the same (23 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 33 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 10 times as likely to have a prior conviction for driving while intoxicated compared to fatally injured sober drivers (10 percent and 1 percent, respectively).

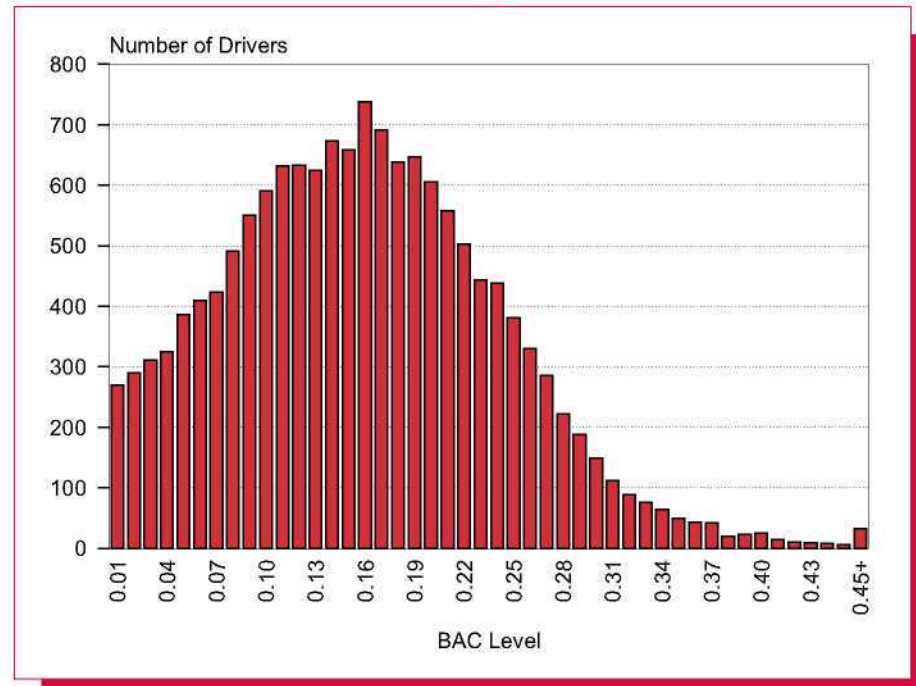
More than one-third (36 percent) of all pedestrians 16 years of age or older killed in traffic crashes in 2001 were intoxicated. By age group, the percentages ranged from a low of 9 percent for pedestrians 65 and over to a high of 52 percent for those 35 to 44 years old.

The driver, pedestrian, or both were intoxicated in 41 percent of all fatal pedestrian crashes in 2001. In these crashes, the intoxication rate for pedestrians was more than double the rate for drivers — 33 percent and 15 percent, respectively. Both the pedestrian and the driver were intoxicated in 6 percent of the crashes that resulted in a pedestrian fatality.

**“More than one-third of all pedestrians 16 years of age or older killed in traffic crashes in 2001 were intoxicated.”**

In 2001, 80 percent (11,802) of the 14,706 drivers who had been drinking (with BAC 0.01 g/dl or higher) and were involved in fatal crashes had BACs 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 2001, 80 percent of the drinking drivers involved in fatal crashes were intoxicated.”**

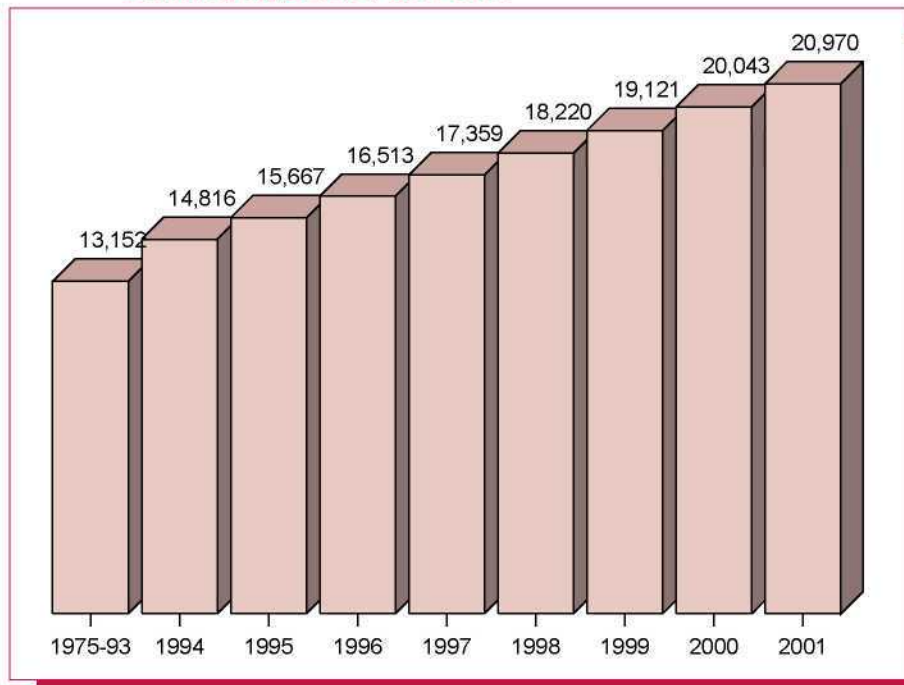
**For more information:**

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/nrsa>. 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 20,970 lives since 1975. In 2001, an estimated 927 lives were saved by minimum drinking age laws.

**Figure 4. Cumulative Estimated Number of Lives Saved by Minimum Drinking Age Laws, 1975-2001**



***“NHTSA estimates that minimum drinking age laws have saved 20,970 lives since 1975.”***

On the following pages, Tables 2, 3, 4, and 5 present summary data on alcohol involvement in fatal crashes in 2001, compared with 1991 data. Table 6 shows alcohol involvement in fatal traffic crashes by state.

Table 2. Alcohol Involvement in Fatal Crashes, 1991 and 2001

	1991		2001		Change in Percentage, 1991-2001
	Number	Percentage with BAC 0.08 g/dl or Greater*	Number	Percentage with BAC 0.08 g/dl or Greater*	
Fatal Crashes	36,937	42	37,795	35	-17%
Total Fatalities	41,508	42	42,116	35	-17%

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

Table 3. Alcohol Involvement for Drivers in Fatal Crashes, 1991 and 2001

Drivers Involved in Fatal Crashes	1991		2001		Change in Percentage, 1991-2001
	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*	54,391	27	57,480	21	-22%
<i>Drivers by Age Group (Years)</i>					
16-20	8,002	23	7,963	18	-22%
21-24	6,748	38	6,016	<b>33</b>	-13%
25-34	14,151	36	11,534	28	-22%
35-44	9,482	28	11,201	<b>25</b>	-11%
45-64	9,153	17	13,005	<b>17</b>	0%
Over 64	5,471	7	6,421	<b>6</b>	-14%
<i>Drivers by Sex</i>					
Male	40,731	<b>30</b>	41,711	<b>24</b>	-20%
Female	12,825	<b>16</b>	14,867	<b>13</b>	-19%
<i>Drivers by Vehicle Type</i>					
Passenger Cars	31,102	<b>27</b>	27,287	<b>23</b>	-15%
Light Trucks	14,702	<b>30</b>	20,595	<b>23</b>	-23%
Large Trucks	4,291	<b>3</b>	4,749	<b>1</b>	-67%
Motorcycles	2,816	<b>44</b>	3,245	29	-34%

\*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, 1991 and 2001

Driver Fatalities	1991		2001		Change in Percentage, 1991-2001
	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	23,930	40	25,840	32	-20%
<i>Driver Fatalities by Crash Type and Time of Day</i>					
Single-Vehicle	12,058	56	12,647	47	-16%
Daytime*	4,087	27	5,030	23	-15%
Nighttime**	7,719	71	7,383	63	-11%
Multiple-Vehicle	11,872	23	13,193	18	-22%
Daytime*	6,965	10	8,498	8	-20%
Nighttime**	4,899	42	4,690	35	-17%
<i>Driver Fatalities by Day of Week</i>					
Weekday***	13,518	30	15,326	24	-20%
Weekend****	10,338	52	10,439	43	-17%
<i>Driver Fatalities by Time of Day</i>					
Daytime*	11,052	16	13,528	14	-13%
Nighttime**	12,618	60	12,073	52	-13%
<i>Driver Fatalities by Day of Week and Time of Day</i>					
Weekday***					
Daytime*	8,001	13	9,728	11	-15%
Nighttime**	5,442	56	5,533	47	-16%
Weekend****					
Daytime*	3,051	25	3,800	20	-20%
Nighttime**	7,176	63	6,540	56	-11%

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

\*\*6:00PMto6:00AM.

\*\*\*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, 1991 and 2001

Nonoccupant Fatalities	1991		2001		Change in Percentage, 1991-2001
	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	366	33	297	29	-12%
21-24	364	53	274	45	-15%
25-34	989	60	563	52	-13%
35-44	816	54	905	52	-4%
45-64	1,248	39	1,248	39	0%
Over 64	1,292	101.0	1,049	9	-10%
<b>Total*</b>	<b>5,801</b>	<b>34</b>	<b>4,882</b>	<b>33</b>	<b>-3%</b>
<i>Pedalcyclist Fatalities</i>					
Total	843	19	728	24	26%

\*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, 2001

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	994	618	62	39	4	336	34	376	38
Alaska	85	42	50	4	4	39	46	43	50
Arizona	1,048	560	53	64	6	424	40	488	47
Arkansas	611	418	68	44	7	150	25	193	32
California	3,956	2,387	60	292	7	1,277	32	1,569	40
Colorado	736	408	55	50	7	278	38	328	45
Connecticut	312	154	49	19	6	139	45	158	51
Delaware	136	71	52	8	6	58	42	65	48
District of Columbia	68	30	45	5	8	32	48	38	55
Florida	3,011	1,748	58	175	6	1,088	36	1,264	42
Georgia	1,615	1,058	65	91	6	466	29	557	35
Hawaii	140	80	57	9	7	51	36	60	43
Idaho	259	162	63	11	4	85	33	97	37
Illinois	1,414	794	56	86	6	535	38	620	44
Indiana	909	572	63	54	6	283	31	337	37
Iowa	447	292	65	29	6	126	28	155	35
Kansas	494	300	61	25	5	169	34	194	39
Kentucky	845	598	71	35	4	213	25	247	29
Louisiana	954	509	53	62	6	383	40	445	47
Maine	192	127	66	5	3	60	31	65	34
Maryland	660	370	56	51	8	239	36	290	44
Massachusetts	477	244	51	28	6	206	43	234	49
Michigan	1,328	810	61	77	6	441	33	518	39
Minnesota	568	342	60	30	5	196	34	226	40
Mississippi	784	502	64	29	4	253	32	282	36
Missouri	1,098	575	52	82	7	441	40	523	48
Montana	230	126	55	8	4	96	42	104	45
Nebraska	246	150	61	17	7	79	32	96	39
Nevada	313	180	58	21	7	112	36	133	42
New Hampshire	142	73	51	15	10	55	39	70	49
New Jersey	747	450	60	53	7	244	33	297	40
New Mexico	463	249	54	35	7	179	39	214	46
New York	1,548	1,050	68	94	6	404	26	498	32
North Carolina	1,530	997	65	77	5	456	30	533	35
North Dakota	105	52	50	8	8	44	42	53	50
Ohio	1,378	774	56	89	6	515	37	604	44
Oklahoma	676	410	61	33	5	233	34	266	39
Oregon	488	298	61	34	7	157	32	190	39
Pennsylvania	1,530	867	57	83	5	580	38	663	43
Rhode Island	81	32	40	9	11	40	49	49	60
South Carolina	1,059	467	44	73	7	519	49	592	56
South Dakota	171	87	51	9	5	75	44	84	49
Tennessee	1,251	714	57	75	6	462	37	537	43
Texas	3,724	1,935	52	205	5	1,584	43	1,789	48
Utah	292	224	77	12	4	56	19	68	23
Vermont	92	57	62	2	2	33	35	35	38
Virginia	935	595	64	54	6	287	31	340	36
Washington	649	368	57	42	6	239	37	281	43
West Virginia	376	241	64	16	4	119	32	135	36
Wisconsin	763	399	52	39	5	325	43	364	48
Wyoming	186	105	56	11	6	71	38	81	44
<b>U.S. Total</b>	<b>42,116</b>	<b>24,668</b>	<b>59</b>	<b>2,515</b>	<b>6</b>	<b>14,933</b>	<b>35</b>	<b>17,448</b>	<b>41</b>
<b>Puerto Rico</b>	<b>481</b>	<b>235</b>	<b>49</b>	<b>36</b>	<b>7</b>	<b>210</b>	<b>44</b>	<b>246</b>	<b>51</b>

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