# Traffic Safety Facts



nhtsa.dot.aov

# Alcohol

"There were 17,013 alcohol-related fatalities in 2003 – 40 percent of the total traffic fatalities for the year."

#### **Alcohol-Related Crashes and Fatalities**

A motor vehicle crash is considered to be *alcohol-related* if at least one driver or nonoccupant (such as a pedestrian or pedalcyclist) involved in the crash is determined to have had a Blood Alcohol Concentration (BAC) of 0.01 gram per deciliter (g/dl) or higher. Thus, any fatality that occurs in an alcohol-related crash is considered an alcohol-related fatality. The term "alcohol-related" does not indicate that a crash or fatality was caused by the presence of alcohol.

Traffic fatalities in alcohol-related crashes fell by 2.9 percent, from 17,524 in 2002 to 17,013 in 2003. The 17,013 alcohol-related fatalities in 2003 (40 percent of total traffic fatalities for the year) represent a 5 percent reduction from the 17,908 alcohol-related fatalities reported in 1993 (45 percent of the total).

The 17,013 fatalities in alcohol-related crashes during 2003 represent an average of one alcohol-related fatality every 31 minutes.

In 2003, 45 states, the District of Columbia and Puerto Rico had by law created a threshold making it illegal to drive with a BAC of 0.08 g/dl or higher. Of the 17,013 people who died in alcohol-related crashes in 2003, 14,630 (86 percent) were killed in crashes where at least one driver or nonoccupant had a BAC of 0.08 g/dl or higher. Of the 14,630 people killed in such crashes, 69 percent were drivers or nonoccupants with BAC levels at or above 0.08 g/dl. The remaining 31 percent were drivers or nonoccupants with either no BAC or BAC below 0.08 g/dl, or were passengers.

#### Table 1

Fatalities by Person Type in Crashes Involving at Least One Driver or Nonoccupant with BAC 0.08 g/dl or Higher, 2003

Person Type	Number	Percent of Total
Drivers with BAC 0.08 g/dl or Higher	8,341	57
All Other Drivers	1,016	7
Nonoccupants (Pedestrians and Pedalcyclists) with BAC 0.08 g/dl or Higher	1,742	12
All Other Nonoccupants	516	4
Passengers	3,016	21
Total Fatalities	14,630	100

NHTSA estimates that alcohol was involved in 40 percent of fatal crashes and in 7 percent of all crashes in 2003. The national rate of alcohol-related fatalities in motor vehicle crashes in 2003 was 0.59 per 100 million vehicle miles traveled.



"In 2003, 21 percent of the children 0 to 14 years old who were killed in motor vehicle crashes were killed in alcoholrelated crashes."

#### **Injuries and Arrests**

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 2002 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 (2003 data not yet available).

Table 2

#### Traffic Fatalities by Age and Highest BAC in the Crash, 2003

	Highest BAC in Crash												
Age of Person Killed (Years)	0.00	g/dl	0.01-0.07 g/dl			g/dl igher	0.01 and H	Total Number					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Killed				
0-3	396	80	13	3	85	17	98	20	494				
4-7	385	82	17	4	70	15	87	18	472				
8-12	539	80	27	4	107	16	134	20	673				
13-15	698	75	48	5	186	20	234	25	931				
16-20	3,720	62	437	7	1,845	31	2,282	38	6,002				
21-24	1,932	44	318	7	2,109	48	2,428	56	4,360				
25-34	3,115	46	434	6	3,155	47	3,588	54	6,703				
35-44	3,212	48	385	6	3,125	46	3,509	52	6,721				
45-54	3,290	57	324	6	2,174	38	2,498	43	5,788				
55-64	2,638	70	167	4	947	25	1,114	30	3,752				
65-74	2,186	80	110	4	421	15	530	20	2,716				
75+	3,457	88	99	3	358	9	457	12	3,914				
Unknown	62	53	6	5	49	42	55	47	117				
Total	25,630	60	2,383	6	14,630	34	17,013	40	42,643				

Table 3

Fatal Crashes Involving at Least One Driver or Nonoccupant with BAC 0.08 g/dl or Higher and Total Fatalities in Those Crashes, 1993 and 2003

		1993					
		BAC 0.08 g/dl or Higher*			BAC 0. or Hig	-	Change in
	Percent		Percent of Total	Total	Number	Percent of Total	Percentage, 1993-2003
Fatal Crashes	35,780	13,864	39	38,252	13,136	34	-13
Fatalities	40,150	15,547	39	42,643	14,630	34	-13

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

#### **Child Endangerment**

In 2003, 21 percent of the children 0 to 14 years old who were killed in motor vehicle crashes were killed in alcohol-related crashes.

Of the children 0 to 14 years old who were killed in alcohol-related crashes during 2003, 47 percent (209) were passengers in vehicles with drivers who had BAC levels of 0.01 g/dl or higher. An additional 118 children were killed as passengers in vehicles with drivers who had not been drinking but that were involved in crashes with vehicles that had drivers with BAC levels 0.01 g/dl or higher.

Another 59 children 0 to 14 years old who were killed in traffic crashes in 2003 were pedestrians or pedalcyclists who were struck by drivers with BAC 0.01 g/dl or higher.

#### Nonoccupants

More than one-third (36 percent) of all pedestrians 16 years of age or older killed in traffic crashes in 2003 had BAC levels 0.08 g/dl or higher. By age group, the percentages ranged from a low of 10 percent for pedestrians 65 and over to a high of 54 percent for those 21 to 24 years old.

#### Table 4

## Nonoccupants With BAC 0.08 g/dl or Higher Killed in Motor Vehicle Crashes by Age Group, 1993 and 2003

		1993			2003				
		BAC 0.08 g/dl or Higher			BAC 0.08 g/dl or High		r Change in		
Nonoccupant	Total Number		Percent	Total Number		Percent	Percentage,		
Fatalities	of Fatalities	Number	of Total	of Fatalities	Number	of Total	1993-2003		
	Pede	ıp (Years	5)						
16–20	284	91	32	298	86	29	-9		
21–24	292	160	55	263	143	54	-2		
25–34	944	541	57	565	269	48	-16		
35–44	908	500	55	844	451	53	-4		
45–64	1,053	399	38	1,319	504	38	0		
65+	1,259	165	13	974	98	10	-23		
Total*	5,649	1,919	34	4,749	1,579	33	-3		
		Pe	dalcyclis	t Fatalities					
Total	816	147	18	622	147	24	33		

\*Includes pedestrians 0 to 15 years old and pedestrians of unknown age.

Alcohol involvement — either for the driver or the pedestrian — was reported in 46 percent of the traffic crashes that resulted in pedestrian fatalities. Of the pedestrians involved, 34 percent had BAC levels 0.08 g/dl or higher. Of the drivers involved, only 13 percent had BAC levels 0.08 g/dl or higher. In 6 percent of the crashes, both the driver and the pedestrian had BAC levels 0.08 g/dl or higher.

#### Time of Day and Day of Week

The rate of alcohol involvement in fatal crashes is more than 3 times as high at night as during the day (61 percent vs. 18 percent). For all crashes, the alcohol involvement rate is 5 times as high at night (16 percent vs. 3 percent).

In 2003, 30 percent of all fatal crashes during the week were alcohol-related, compared to 53 percent on weekends. For all crashes, the alcohol involvement rate was 5 percent during the week and 12 percent during the weekend.

#### For more information:

Information on alcohol involvement in traffic fatalities is available from the National Center for Statistics and Analysis, NPO-101, 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.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the DOT Vehicle Safety Hotline at 1-888-327-4236.

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. The fact sheets and annual Traffic Safety Facts report can be accessed online at http://www.nhtsa.dot.gov/people/ncsa. "More than one-third of all pedestrians 16 years of age or older killed in traffic crashes in 2003 had BAC levels 0.08 g/dl or higher."

#### Table 5

Percentage of Drivers with BAC 0.08 g/dl or Higher Killed in Motor Vehicle Crashes by Time of Day and Day of Week, 1993 and 2003

	1993			2003							
	Total	BAC 0.08 g/	dl or Higher	Total	BAC 0.08 g/	dl or Higher	Change in				
Driver Fatalities	Number of Driver Fatalities	Number	Percent of Total	ercent of Driver		Percent of Total	Percentage with BAC 0.08 g/dl or Higher, 1993-2003				
Total Driver Fatalities											
Total	23,142	8,322	36	26,640	8,341	31	-14				
Driver Fatalities by Crash Type and Time of Day											
Single-Vehicle Daytime* Nighttime** Multiple-Vehicle Daytime* Nighttime** Weekday*** Weekend****	11,144 4,054 6,878 11,998 7,307 4,676 13,498 9,582	3,645 4,639	53 25 68 20 8 39 Fatalities 27 48	15,638 10,906 <b>by Time</b>	3,594 4,699 e of Day	46 21 63 17 7 34 23 43	-13 -16 -7 -15 -13 -13 -13 -15 -10				
Daytime* Nighttime**	11,361 11,554	1,636 6,543	14 57	13,764 12,543	1,736 6,416	13 51	-7 -11				
	Driver F	atalities	by Day o	of Week a	and Time	e of Day					
Weekday*** Daytime* Nighttime** Weekend**** Daytime* Nighttime**	8,303 5,125 3,058 6,429	974 2,627 662 3,916	12 51 22 61	9,779 5,766 3,985 6,777	976 2,575 760 3,841	10 45 19 57	-17 -12 -14 -7				

\*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.

#### Figure 1

### Drivers Involved in Fatal Crashes with BAC Levels 0.08 g/dl or Higher by Age Group, 2003



"The highest percentage of drivers in fatal crashes who had BAC levels 0.08 g/dl or higher was for drivers 21 to 24 years old."

#### Table 6

Drivers in Fatal Crashes with BAC 0.08 g/dl or Higher by Age, Gender, and Vehicle Type, 1993 and 2003

	1993									
		BAC 0.08 g/	dl or Higher/		BAC 0.08 g/	Change in				
Drivers Involved in Fatal Crashes	Total Number of Drivers	Number	Percent of Total	Total Number of Drivers	Number	Percent of Total	Percentage, 1993-2003			
			Total Dr							
Total*	53,401	12,576	24	58,156	11,996	21	-13			
Drivers by Age Group (Years)										
16–20	7,256	1,336	18	7,693	1,446	19	6			
21–24	6,406	2,199	34	6,234	2,010	32	-6			
25–34	13,038	4,193	32	11,218	2,983	27	-16			
35–44	9,738	2,587	27	10,967	2,611	24	-11			
45–54	5,970	1,101	18	8,972	1,696	19	6			
55–64	3,824	534	14	5,407	628	12	-14			
65–74	3,031	232	8	3,094	234	8	0			
75+	2,817	120	4	3,294	166	5	25			
			Drivers	by Sex						
Male	39,556	10,578	27	42,314	10,074	24	-11			
Female	13,082	1,797	14	15,091	1,783	12	-14			
	-	۵	)rivers by \	/ehicle Type						
Passenger Cars	30,060	7,160	24	26,030	5,749	22	-8			
Light Trucks	15,207	4,080	27	21,944	4,764	22	-19			
Large Trucks	4,271	100	2	4,608	64	1	-50			
Motorcycles	2,471	932	38	3,749	1,077	29	-24			

"The percentages of drivers with BAC 0.08 or above in fatal crashes were highest for motorcycle operators."

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

#### Drivers

In fatal crashes in 2003, the highest percentage of drivers with BAC levels 0.08 g/dl or higher was for drivers 21-24 years old (32 percent), followed by ages 25-34 (27 percent) and 35-44 (24 percent).

The percentages of drivers with BAC levels 0.08 g/dl or higher in fatal crashes in 2003 were highest for motorcycle operators (29 percent) and lowest for drivers of large trucks (1 percent). The percentage of drivers with BAC levels 0.08 g/dl or higher in fatal crashes was the same for drivers of light trucks and passenger cars (22 percent).

Safety belts were used by only 25 percent of fatally injured drivers with BAC levels 0.08 g/dl or higher, compared to 40 percent of fatally injured with BAC levels between 0.01 g/dl and 0.07 g/dl and 56 percent of fatally injured drivers with no alcohol (BAC = 0.00 g/dl).

Drivers with BAC levels 0.08 g/dl or higher involved in fatal crashes were 9 times more likely to have a prior conviction for Driving While Impaired (DWI) than were drivers with no alcohol (BAC = 0.00 g/dl) (9 percent and 1 percent, respectively).

In 2003, 84 percent (11,996) of the 14,260 drivers with BAC 0.01 g/dl or higher who were involved in fatal crashes had BAC levels at or above 0.08 g/dl, and 51 percent had BAC levels at or above 0.16 g/dl. The most frequently recorded BAC level among drinking drivers involved in fatal crashes was 0.14 g/dl.

#### Figure 2

#### Previous Driving Records of Drivers Involved in Fatal Crashes, by Blood Alcohol Concentration, 2003

"In 2003, more than half of the drivers involved in fatal crashes who had been drinking had BAC 0.16 or above."



#### Figure 3

Distribution of BAC Levels for Drivers Involved in Fatal Crashes with BAC 0.01 or Higher



# Table 7Traffic Fatalities by State and Highest Blood Alcohol Concentration in the Crash, 2003

		No Alcohol (BAC 0.00 g/dl)			Low Alcohol (BAC 0.01-0.07 g/dl)		High Alcohol (BAC $\geq$ 0.08 g/dl)		h Alcohol .16 g/dl)	$\begin{array}{c c} \text{Any Alcohol} \\ \text{(BAC} \geq 0.01 \text{ g/dl)} \end{array}$	
State	Total Fatalities	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	1,001	586	59	40	4	376	38	228	23	415	41
Alaska	95	60	63	3	4	31	33	26	27	35	37
Arizona	1,120	650	58	63	6	408	36	246	22	470	42
Arkansas	627	373	59	51	8	203	32	136	22	254	41
California	4,215	2,589	61	249	6	1,378	33	853	20	1,626	39
	632	2,389	61	249		221	35		20 24	246	
Colorado Connecticut	294			17	4	114		152 73	24		39
		163	55		6		39			131	45
Delaware	142	82	58	9	6	51	36	39	27	60	42
District of Columbia	67	33	50	4	6	29	44	21	31	34	50
Florida	3,169	1,895	60	185	6	1,089	34	736	23	1,274	40
Georgia	1,603	1,115	70	68	4	420	26	259	16	488	30
Hawaii	135	63	47	18	14	54	40	28	21	72	53
Idaho	293	186	63	18	6	90	31	66	22	107	37
Illinois	1,453	814	56	99	7	539	37	343	24	639	44
Indiana	834	572	69	40	5	223	27	149	18	262	31
lowa	441	296	67	26	6	119	27	81	18	145	33
Kansas	471	265	56	24	5	182	39	112	24	206	44
Kentucky	928	652	70	36	4	240	26	149	16	276	30
Louisiana	894	488	55	44	5	363	41	226	25	406	45
Maine	207	132	64	6	3	69	33	47	23	75	36
Maryland	649	368	57	73	11	208	32	116	18	281	43
Massachusetts	462	255	55	37	8	170	37	109	24	207	45
Michigan	1,283	802	63	86	7	395	31	247	19	481	37
Minnesota	657	390	59	36	5	231	35	145	22	267	41
Mississippi	871	551	63	32	4	288	33	174	20	320	37
Missouri	1,232	728	59	80	6	425	34	262	21	504	41
Montana	262	134	51	20	8	108	41	69	26	128	49
Nebraska	293	172	59	22	8	99	34	57	19	121	41
Nevada	368	186	50	24	6	159	43	100	27	182	50
New Hampshire	127	75	59	8	7	43	34	29	22	52	41
New Jersey	747	472	63	35	5	240	32	136	18	275	37
New Mexico	439	241	55	28	6	170	39	116	26	198	45
New York	1,491	962	65	71	5	458	31	282	19	529	35
North Carolina	1,531	977	64	80	5	474	31	300	20	554	36
North Dakota	105	53	50	6	5	47	44	32	31	52	50
Ohio	1,277	810	63	66	5	402	31	279	22	467	37
Oklahoma	668	413	62	35	5	220	33	141	21	255	38
	512	305	60	32	6	175	34	101	20	207	40
Oregon Pennsylvania	1,577	959	61	52 77	5	542	34 34	355	20	618	40 39
Rhode Island	104	939 47	45	5	5	52	50	355	35	57	55
	968										
South Carolina		480	50	64	7	423	44	275	28	488	50
South Dakota	203	105	52	8	4	90	44	61	30	98	48
Tennessee	1,193	746	63	43	4	404	34	253	21	447	37
Texas	3,675	1,966	53	209	6	1,500	41	954	26	1,709	47
Utah	309	263	85	8	2	39	12	12	4	46	15
Vermont	69	41	59	8	11	21	30	15	22	29	41
Virginia	943	580	61	55	6	309	33	189	20	364	39
Washington	600	341	57	31	5	228	38	156	26	259	43
West Virginia	394	246	63	22	6	126	32	85	21	148	37
Wisconsin	848	461	54	47	6	340	40	237	28	387	46
Wyoming	165	103	62	12	7	50	30	34	21	62	38
U.S. Total	42,643	25,630	60	2,383	6	14,630	34	9,324	22	17,013	40
Puerto Rico	493	260	53	50	10	183	37	121	25	233	47

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

#### Table 8

8

#### Traffic Fatalities by State and Highest Driver Blood Alcohol Concentration in the Crash, 2003

			lcohol ).00 g/dl)	Low Alcoh 0.01-0.0		$\begin{array}{c c} \text{High A} \\ \text{(BAC} \geq 0 \end{array}$	lcohol ).08 g/dl)	Very High (BAC $\ge$ 0		-	Any Alcohol (BAC $\geq$ 0.01 g/dl)	
State	Total Fatalities	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Alabama	999	608	61	39	4	. 352	35	208	21	. 391	39	
Alaska	95	64	68	3	3	28	29	21	22	31	32	
Arizona	1,083	684	63	58	5	340	31	190	18	399	37	
Arkansas	624	385	62	49	8	190	31	124	20	239	38	
California	4,208	2,834	67	230	5	1,145	27	653	16	1,374	33	
Colorado	629	408	65	25	4	196	31	128	20	221	35	
Connecticut	292	166	57	16	6	110	38	67	23	126	43	
Delaware	142	89	62	8	6	45	32	32	23	53	38	
District of Columbia	67	38	57	5	7	40 24	36	17	25	29	43	
Florida	3,167	2,104	66	168	5	895	28	569	18	1,063	34	
Georgia	1,598	1,175	74	66	4	358	20	207	13	423	26	
Hawaii	135	67	50	18	14	50	37	207	19	68	20 50	
Idaho	290	190	66	16	6	83	29	62	21	100	34	
Illinois	1,452	872	60	93	6	487	29 34	298	20	580	34 40	
Indiana	834	591	71	39	5	205	25	135	16	243	29	
lowa	439	300	68	25	6	114	26	76	17	139	32	
Kansas	470	269	57	23	5	177	38	108	23	201	43	
Kentucky	925	667	72	36	4	222	24	136	15	258	28	
Louisiana	893	518	58	45	5	331	37	199	22	376	42	
Maine	207	136	65	7	3	65	31	43	21	72	35	
Maryland	649	407	63	63	10	179	28	88	14	242	37	
Massachusetts	460	274	60	33	7	154	33	96	21	186	40	
Michigan	1,281	861	67	81	6	340	27	196	15	420	33	
Minnesota	652	397	61	36	6	219	34	135	21	255	39	
Mississippi	871	563	65	31	4	277	32	165	19	308	35	
Missouri	1,226	745	61	78	6	403	33	242	20	481	39	
Montana	262	140	53	20	8	102	39	65	25	122	47	
Nebraska	292	176	60	22	8	94	32	54	19	117	40	
Nevada	368	220	60	25	7	124	34	74	20	148	40	
New Hampshire	126	80	63	10	8	37	29	23	18	46	37	
New Jersey	747	511	68	34	5	202	27	107	14	236	32	
New Mexico	433	266	61	27	6	140	32	92	21	167	39	
New York	1,489	1,041	70	64	4	384	26	219	15	448	30	
North Carolina	1,527	1,034	68	79	5	414	27	251	16	493	32	
North Dakota	105	53	51	6	5	46	44	32	31	52	49	
Ohio	1,275	838	66	68	5	370	29	251	20	437	34	
Oklahoma	668	426	64	34	5	209	31	134	20	243	36	
Oregon	511	324	63	31	6	157	31	86	17	187	37	
Pennsylvania	1,574	1,003	64	74	5	497	32	319	20	571	36	
Rhode Island	104	52	50	5	5	48	46	34	33	52	50	
South Carolina	968	517	53	64	7	388	40	249	26	452	47	
South Dakota	194	105	54	8	4	82	42	54	28	90	46	
Tennessee	1,191	773	65	42	4	376	32	231	19	418	35	
Texas	3,669	2,096	57	210	6	1,363	37	832	23	1,573	43	
Utah	309	266	86	8	2	36	12	10	3	43	14	
Vermont	69	42	61	6	9	21	30	15	22	27	39	
Virginia	942	612	65	52	5	278	30	163	17	330	35	
Washington	598	367	61	27	4	204	34	136	23	231	39	
West Virginia	392	254	65	21	5	117	30	78	20	138	35	
Wisconsin	843	476	56	46	5	321	38	222	26	367	44	
Wyoming	165	107	65	12	7	46	28	31	18	58	35	
U.S. Total	42,509	27,187	64	2,281	5	13,041	31	7,980	19	15,322	36	
Puerto Rico	493	292	59	46	9	155	31	92	19	201	41	

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