# **Traffic Safety Facts**

NHTSA

2007 Data

DOT HS 810 985

## **Alcohol-Impaired Driving**

### Fatal Crashes and Fatalities Involving Alcohol-Impaired Drivers

Drivers are considered to be alcohol-impaired when their blood alcohol concentration (BAC) is .08 grams per deciliter (g/dL) or higher. Thus, any fatality occurring in a crash involving a driver with a BAC of .08 or higher is considered to be an alcohol-impaired-driving fatality. The term "driver" refers to the operator of any motor vehicle, including a motorcycle.

In 2007, 12,998 people were killed in alcohol-impaired-driving crashes. These alcohol-impaired-driving fatalities accounted for 32 percent of the total motor vehicle traffic fatalities in the United States.

Traffic fatalities in alcohol-impaired-driving crashes decreased nearly 4 percent from 13,491 in 2006 to 12,998 in 2007. The alcohol-impaired-driving fatality rate per 100 million VMT decreased to 0.43 in 2007 from 0.45 in 2006.

Estimates of alcohol-impaired driving are generated using BAC values reported to the Fatality Analysis Reporting System (FARS) and imputed BAC values when they are not reported. The term "alcohol-impaired" does not indicate that a crash or a fatality was caused by alcohol impairment.

The 12,998 fatalities in alcohol-impaired-driving crashes during 2007 represent an average of one alcohol-impaired-driving fatality every 40 minutes.

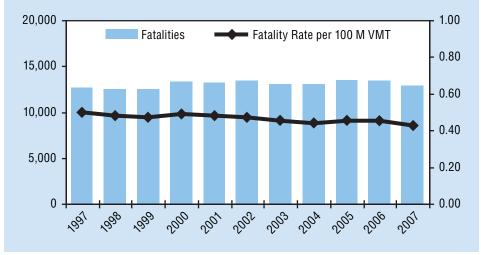
In 2007, all 50 States, the District of Columbia, and Puerto Rico had by law created a threshold making it illegal per se to drive with a BAC of .08 or higher. Of the 12,998 people who died in alcohol-impaired-driving crashes in 2007, 8,644 (67%) were drivers with a BAC of .08 or higher. The remaining fatalities consisted of 3,581 (28%) motor vehicle occupants and 773 (6%) nonoccupants.

"In 2007, there were 12,998 fatalities in crashes involving a driver with a BAC of .08 or higher—32 percent of total traffic fatalities for the year."

Table 1
Fatalities, by Role, in Crashes Involving at Least One Driver With a BAC of .08
Or Higher, 2007

Role	Number	Percent of Total
Driver With BAC=.08+	8,644	66.5%
Passenger Riding w/Driver With BAC=.08+	2,148	16.5%
Subtotal	10,792	83.0%
Occupants of Other Vehicles	1,433	11.0%
Nonoccupants	773	5.9%
Total Fatalities	12,998	100.0%

Figure 1
Fatalities and Fatality Rate per 100 Million VMT in Crashes Involving at Least
One Driver With a BAC of .08 or Higher, 1997-2007



The national rate of alcohol-impaired-driving fatalities in motor vehicle crashes in 2007 was 0.43 per 100 million vehicle miles of travel.

#### Children

In 2007, a total of 1,670 children age 14 and younger were killed in motor vehicle traffic crashes. Of those 1,670 fatalities, 245 (15%) occurred in alcohol-impaired-driving crashes. Out of those 245 deaths, more than half (130) were occupants of a vehicle with a driver who had a BAC level of .08 or higher.

Another 29 children age 14 and younger who were killed in traffic crashes in 2007 were pedestrians or pedalcyclists who were struck by drivers with a BAC of .08 or higher.

"In 2007, 15 percent of child (age 14 and younger) traffic fatalities occurred in alcohol-impaireddriving crashes."

#### For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted on 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 www.nhtsa.gov/portal/site/nhtsa/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 Overview, African American, Bicyclists and Other Cyclists (formerly titled Pedalcyclists), Children, Hispanic, Large Trucks, Motorcycles, Occupant Protection, Older Population, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, and Young Drivers. 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.

#### Time of Day and Day of Week

The rate of alcohol impairment among drivers involved in fatal crashes was four times higher at night than during the day (36% versus 9%).

In 2007, 15 percent of all drivers involved in fatal crashes during the week were alcohol-impaired, compared to 31 percent on weekends.

Table 2 Drivers Involved in Fatal Crashes With a BAC of .08 or Higher, by Time of Day And Day of Week, 1997 and 2007

Total Drivers									
		1997			Change in				
	Total	BAC=	:.08 <b>+</b>	Total	BAC=	<b>08</b> +	Percentage With		
Drivers Involved	Number	Percent		Number		Percent	BAC=.08+		
In Fatal Crashes	of Drivers	Number	of Total	of Drivers	Number	of Total	1997-2007		
Total	56,688	11,579	20%	55,681	12,068	22%	+2%		
Drivers by Crash Type and Time of Day									
Single-Vehicle Crash									
Total	20,689	7,279	35%	21,960	8,182	37%	+2%		
Daytime*	8,149	1,283	16%	8,501	1,492	18%	+2%		
Nighttime**	12,223	5,823	48%	13,167	6,522	50%	+2%		
Multiple-Vehicle Crash									
Total	35,999	4,300	12%	33,721	3,886	12%	0%		
Daytime*	22,830	1,184	5%	20,643	1,033	5%	0%		
Nighttime**	13,145	3,114	24%	13,021	2,843	22%	-2%		
	,	Dr	ivers by Ti	me of Day					
Daytime*	30,979	2,467	8%	29,144	2,525	9%	+1%		
Nighttime**	25,368	8,937	35%	26,188	9,366	36%	+1%		
Drivers by Day of Week and Time of Day									
Weekday***	34,388	4,892	14%	33,062	5,117	15%	+1%		
Daytime*	22,727	1,405	6%	21,051	1,455	7%	+1%		
Nighttime**	11,551	3,429	30%	11,895	3,609	30%	0%		
Weekend****	22,209	6,647	30%	22,528	6,905	31%	+1%		
Daytime*	8,252	1,062	13%	8,093	1,070	13%	0%		
Nighttime**	13,817	5,507	40%	14,293	5,757	40%	0%		

"The rate of alcohol impairment among drivers involved in fatal crashes was four times higher at night than during the day."

<sup>\*6</sup> a.m. to 6 p.m. \*\*6 p.m. to 6 a.m. \*\*\*Monday 6 a.m. to Friday 6 p.m.

<sup>\*\*\*\*</sup>Friday 6 p.m. to Monday 6 a.m.

"The highest percentage of drivers in fatal crashes who had BAC levels of .08 or higher was for drivers ages 21 to 24."

"The percentage of drivers with BAC of .08 or above in fatal crashes was highest for motorcycle operators."

Table 3

Drivers in Fatal Crashes With a BAC of .08 or Higher, by Age, Gender, and Vehicle Type, 1997 and 2007

Total Drivers										
		1997			Change in					
	Total	BAC=	=.08+	Total	BAC=	:.08+	Percentage With			
Drivers Involved In Fatal Crashes	Number of Drivers	Number	Percent of Total	Number of Drivers	Number	Percent of Total	BAC=.08+ 1997-2007			
Total	56,668	11,579	20%	55,681	12,068	22%	+22%			
Drivers by Age Group (Years)										
16-20	7,719	1,321	17%	6,851	1,205	18%	+1%			
21-24	5,705	1,704	30%	6,256	2,160	35%	+5%			
25-34	12,453	3,406	27%	10,692	3,118	29%	+2%			
35-44	10,904	2,787	26%	9,862	2,418	25%	-1%			
45-54	7,522	1,296	17%	8,982	1,829	20%	+3%			
55-64	4,394	479	11%	6,011	734	12%	+1%			
65-74	3,401	259	8%	3,025	227	8%	0%			
75+	3,314	141	4%	2,855	117	4%	0%			
		С	rivers by	Gender						
Male	40,954	9,624	24%	40,804	10,015	25%	+1%			
Female	14,954	1,824	12%	14,099	1,855	13%	+1%			
Drivers by Vehicle Type										
Passenger Cars	29,896	6,460	22%	22,621	5,154	23%	+1%			
Light Trucks	18,502	4,173	23%	21,591	5,033	23%	0%			
Large Trucks	4,859	83	2%	4,551	40	1%	-1%			
Motorcycles	2,159	699	32%	5,286	1,431	27%	-5%			

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 2007 the highest percentage of drivers with a BAC level of .08 or higher was for drivers ages 21 to 24 (35%), followed by ages 25 to 34 (29%) and 35 to 44 (25%).

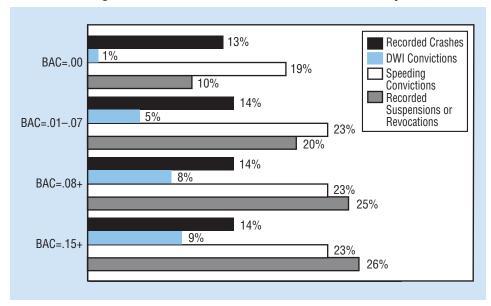
The percentages of drivers involved in fatal crashes with a BAC level of .08 or higher in 2007 were 27 percent for motorcycle operators and 23 percent for both light trucks and passenger cars. The percentage of drivers with BAC levels of .08 or higher in fatal crashes was the lowest for large trucks (1%).

In 2007, 7,058 passenger vehicle drivers killed had a BAC of .08 or higher. Out of those 7,058 driver fatalities, for which restraint use was known, 73 percent were unrestrained.

Drivers with a BAC of .08 or higher involved in fatal crashes were eight times more likely to have a prior conviction for driving while impaired (DWI) than were drivers with no alcohol (8% and 1%, respectively).

Figure 2

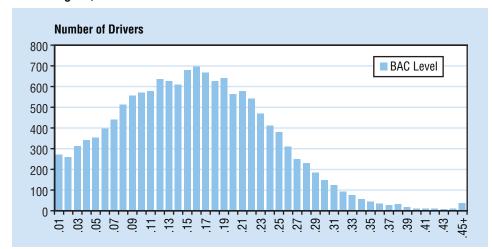
Previous Driving Records of Drivers Involved in Fatal Crashes, by BAC, 2007



"Drivers with a BAC level of .08 or higher in fatal crashes were eight times more likely to have a prior conviction for driving while impaired than were drivers with no alcohol."

In 2007, 84 percent (12,068) of the 14,447 drivers with a BAC of .01 or higher who were involved in fatal crashes had BAC levels at or above .08, and 55 percent (7,974) had BAC levels at or above .15. The most frequently recorded BAC level among drinking drivers in fatal crashes was .16.

Figure 3
Distribution of BAC Levels for Drivers Involved in Fatal Crashes With a BAC of .01 or Higher, 2007



"In 2007, 7,974 (55%) of the drivers involved in fatal crashes who had been drinking had a BAC of .15 or greater."

Table 4
Traffic Fatalities by State and the Highest Driver or Motorcycle Rider BAC in the Crash, 2007

ITAIIIC FALAIILIE	*Total				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,			
	Fatalities	BAC=.00		BAC=.0107		BAC=.08+		BAC=.15+		BAC=.01+	
State	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	1,110	653	59%	67	6%	389	35%	243	22%	456	41%
Alaska	84	49	58%	5	6%	30	36%	21	25%	35	42%
Arizona	1,066	649	61%	61	6%	336	32%	218	20%	396	37%
Arkansas	650	424	65%	44	7%	182	28%	130	20%	226	35%
California	3,974	2,564	65%	251	6%	1,155	29%	751	19%	1,405	35%
Colorado	554	355	64%	29	5%	170	31%	121	22%	199	36%
Connecticut	277	157	57%	18	7%	101	36%	67	24%	119	43%
Delaware	117	59	50%	9	7%	50	43%	29	25%	59	50%
Dist of Columbia	44	26	59%	3	6%	15	35%	5	12%	18	41%
Florida	3,214	2,119	66%	187	6%	890	28%	611	19%	1,078	34%
Georgia	1,641	1,122	68%	78	5%	441	27%	300	18%	519	32%
Hawaii	138	73	53%	21	15%	45	32%	33	24%	66	47%
Idaho	252	161	64%	17	7%	70	28%	52	21%	88	35%
Illinois	1,249	742	59%	73	6%	434	35%	278	22%	507	41%
Indiana	898	631	70%	37	4%	230	26%	161	18%	267	30%
lowa	445 416	307 273	69% 66%	32 27	7% 7%	106 114	24% 27%	74 77	17% 19%	137 142	31% 34%
Kansas	864	614	71%	40	5%	210	24%	136	16%	250	29%
Kentucky Louisiana	985	550	56%	67	7%	368	37%	235	24%	435	44%
Maine	183	108	59%	9	5%	66	36%	47	25%	76	41%
Maryland	614	389	63%	46	8%	179	29%	105	17%	225	37%
Massachusetts	417	240	58%	31	7%	146	35%	86	21%	177	42%
Michigan	1,088	707	65%	72	7%	305	28%	210	19%	377	35%
Minnesota	504	324	64%	23	4%	158	31%	117	23%	180	36%
Mississippi	884	546	62%	36	4%	302	34%	192	22%	338	38%
Missouri	992	595	60%	55	5%	338	34%	220	22%	392	40%
Montana	277	149	54%	18	6%	106	38%	84	30%	124	45%
Nebraska	256	156	61%	21	8%	77	30%	55	21%	97	38%
Nevada	373	230	62%	25	7%	118	32%	79	21%	143	38%
New Hampshire	129	85	66%	11	8%	34	26%	22	17%	45	34%
New Jersey	724	471	65%	54	7%	199	27%	122	17%	253	35%
New Mexico	413	261	63%	19	5%	133	32%	102	25%	152	37%
New York	1,333	860	65%	89	7%	384	29%	232	17%	473	35%
North Carolina	1,675	1,102	66%	83	5%	487	29%	325	19%	570	34%
North Dakota	111	46	42%	5	5%	53	48%	40	36%	59	53%
Ohio	1,257	781	62%	82	7%	391	31%	275	22%	473	38%
Oklahoma	754	511	68%	21	3%	219	29%	153	20%	240	32%
Oregon	455	272	60%	31	7%	150	33%	107	23%	181	40%
Pennsylvania	1,491	909	61%	78	5%	500	34%	356	24%	578	39%
Rhode Island	69	35	50%	8	11%	25	36%	13	19%	32	47%
South Carolina	1,066	541	51%	57	5%	463	43%	327	31%	520	49%
South Dakota	146	90	61%	9	6%	45	31%	34	24%	54	37%
Tennessee	1,210 3,363	763 1,873	63% 56%	54 193	4% 6%	390 1,292	32% 38%	253	21% 25%	1,485	37% 44%
Texas Utah	299	237	79%	11	4%	51	17%	849 30	10%	63	21%
Vermont	66	39	60%	3	5%	22	34%	10	15%	26	39%
Virginia	1,027	629	61%	64	6%	332	32%	225	22%	397	39%
Washington	568	337	59%	34	6%	195	34%	129	23%	230	40%
West Virginia	431	265	62%	24	6%	142	33%	90	21%	166	38%
Wisconsin	756	387	51%	52	7%	313	41%	230	30%	365	48%
Wyoming	150	95	63%	6	4%	49	33%	36	24%	55	37%
National	41,059	25,555	62%	2,388	6%	12,998	32%	8,698	21%	15,387	37%
Puerto Rico	452	266	59%	37	8%	148	33%	86	19%	185	41%

<sup>\*</sup> Total includes fatalities in crashes in which there was no driver or motorcycle rider present.



### Alcohol-Impaired-Driving Fatalities—Q&As

NHTSA recently released the estimated number of alcohol-impaired-driving fatalities for 2007. This document answers questions related to NHTSA's method of reporting fatalities that occur in crashes that involve alcohol-impaired drivers.

#### Q. How does NHTSA define alcohol-impaired-driving fatalities?

**A:** Alcohol-impaired-driving fatalities are fatalities that occur in motor vehicle traffic crashes that involve at least one driver or a motorcycle rider (operator) with a blood alcohol concentration (BAC) of .08 grams per deciliter or above.

#### Q. Is this a new way to measure the drunk driving problem?

**A:** No, NHTSA has reported the number of fatalities in crashes involving drivers or motorcycle riders (operators) with BAC levels of .08 or above for several years. This year, NHTSA has changed the terminology for this measure to "alcohol-impaired-driving fatalities" to avoid confusion with other measures.

### Q. Previously, NHTSA also used the number of "alcohol-related fatalities" as a measure of the problem. Will the agency no longer use this number?

A: To improve clarity and focus attention on the impaired-driving problem, NHTSA will now be using a single number—alcohol-impaired-driving fatalities—in documents that get widespread public distribution. In past years, NHTSA has published both the number of fatalities in crashes involving drivers or motorcycle riders (operators) with BAC levels of .08 or above (now called alcohol-impaired-driving fatalities) and the number of fatalities in crashes in which a driver, motorcycle rider (operator), pedestrian, or bicyclist had a BAC of .01 or higher (called alcohol-related fatalities). That number—for the Nation and for each State—will remain available on our Web site.

### Q. How different are the estimates of alcohol-impaired-driving fatalities from alcohol-related fatalities?

**A:** For the Nation as a whole, NHTSA estimates that in 2007 there were 12,998 alcohol-impaired-driving fatalities as compared to 13,491 alcohol-impaired-driving fatalities in 2006. The corresponding alcohol-related fatalities for 2006 and 2007 were 17,738 and 17,036, respectively.

### Q. Why is the estimate of alcohol-impaired-driving fatalities lower than the estimate of alcohol-related fatalities?

**A:** The new definition—alcohol-impaired-driving fatalities—is a subset of the older definition (alcohol-related fatalities) as it is based on a higher BAC threshold (.08+) and also does not consider the impairment status of nonoccupants involved in fatal crashes, such as pedestrians and pedalcyclists.

#### Q. Why is NHTSA making this change in reporting?

**A:** In documents that get widespread public distribution, NHTSA wants to be as clear and concise as possible in describing the impaired-driving problem. Using a single number to depict the scale of the problem reduces confusion among most readers. The number of alcohol-impaired-driving fatalities, i.e., fatalities in crashes in which a driver or motorcycle rider (operator) had a BAC at or above .08, is the single best way to describe the problem due to the preponderance of evidence indicating serious impairment at this BAC level and the existence of "per se" legislation in every State.

#### Q. Is NHTSA only going to report out estimates of alcohol-impaired-driving fatalities?

- **A:** While NHTSA publications intended for widespread public distribution (Traffic Safety Facts, media campaign material) will place the emphasis solely on alcohol-impaired-driving fatalities, other estimates—including the number of alcohol-related fatalities—will continue to be available on NHTSA's State Traffic Safety Information (STSI) Web site as well as through responses to customized data requests made to NHTSA's Customer Automated Tracking System (CATS).
  - STSI: http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/USA%20WEB%20REPORT.HTM
  - CATS: http://www-nrd.nhtsa.dot.gov/cats/index.aspx

### Q. How about estimates of alcohol-impaired-driving fatalities and fatality rates (per VMT) for prior years?

A: NHTSA has computed historical estimates back to 1982 and can provide estimates of alcohol-impaired-driving fatalities and the fatality rates per 100 million vehicle miles of travel (VMT) for the Nation, States, the District of Columbia, and Puerto Rico, going back to 1982. In addition, NHTSA will continue to generate the estimates of alcohol-related fatalities and make them available on the STSI Web site and through customized data requests.

### Q. How does NHTSA plan to address immediate data needs from States and other stakeholders for trend data on alcohol-impaired-driving fatalities?

A: NHTSA has created data sheets, going back to 1982, including the estimated number, percentage, and rate of alcohol-impaired-driving fatalities, for every State, the District of Columbia, and Puerto Rico. The data sheets also provide a side-by-side comparison of the number, percentage, and rate of alcohol-related fatalities back to 1982. Please submit a request through CATS if you would like a copy of the data sheets (see link in question above).

Additional information about imputation and statistics on alcohol-impaired-driving fatalities can be found at: http://www-nrd.nhtsa.dot.gov/cats/listpublications.aspx?ld=1&ShowBy=Category