

# Traffic Safety Facts

## Research Note

DOT HS 811 250

December 2009

# Fatalities and Fatality Rates in Alcohol-Impaired-Driving Crashes by State, 2007-2008

## Summary

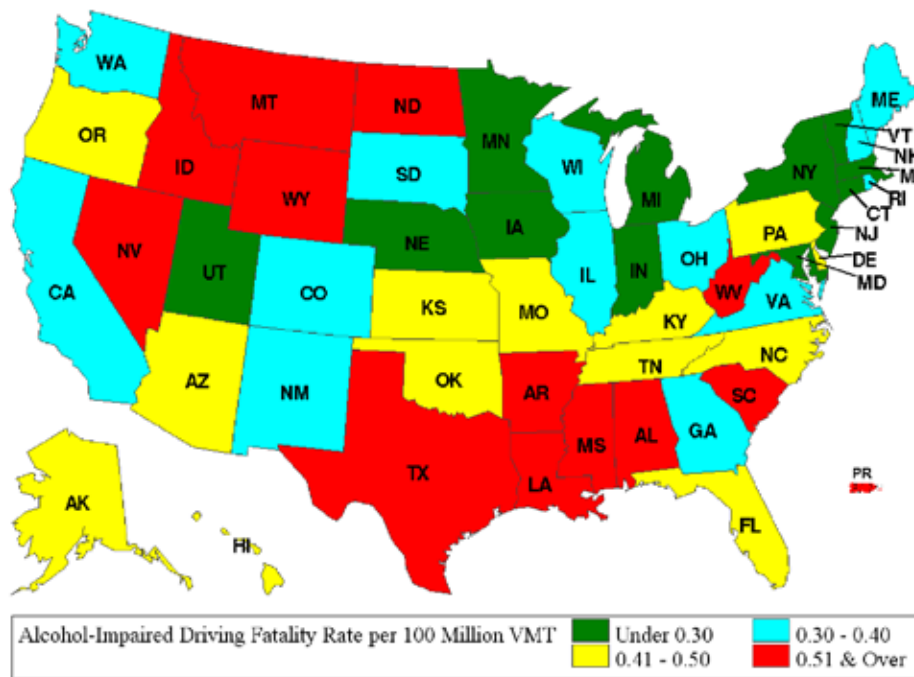
In 2008, as compared to 2007, the overall fatality rate declined from 1.36 to 1.25 fatalities per 100 million vehicle miles of travel (VMT), and the alcohol-impaired driving fatality rate declined from 0.43 to 0.40 fatalities per 100 million VMT. From 2007 to 2008, the alcohol-impaired-driving fatality rate declined in 40 States, the District of Columbia and Puerto Rico and remained the same or increased in the remaining 10 States. An alcohol-impaired-driving crash is defined as a crash involving at least one driver or motorcycle rider (operator) with a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher.

In all 50 States, the District of Columbia, and Puerto Rico, it is illegal per se to drive a vehicle or operate a motorcycle with a BAC of .08 g/dL or above. This research note presents, by State, the fatality rates as well as the number of deaths in alcohol-impaired-driving crashes in those States.

## Results

This research note uses the 2007 Final File and 2008 Annual Report File (ARF) of NHTSA's Fatality Analysis Reporting System (FARS) as well as 2008 State VMT data that were provided to NHTSA by the Federal Highway Administration (FHWA) to compute the fatality rate in alcohol-impaired crashes (alcohol-impaired fatality rate).

Figure 1:  
**Alcohol-Impaired Fatalities per 100 Million VMT by State, 2008**



Source: National Center for Statistics and Analysis, 2008 FARS Annual Report File

Estimates of alcohol involvement are generated using a combination of BAC values that are reported to FARS, and imputed BAC values when they are not reported to FARS. Figure 1 maps the rate of alcohol-impaired-driving fatalities per 100 million VMT for each State in 2008. The States are color-coded as to whether their rates are at or above (yellow, red) the national rate of 0.40, or below the national rate (blue, green). Table 3 depicts the fatalities and fatality rates underlying Figure 1, by State for 2007 and 2008.

Table 1 depicts the proportion of alcohol-impaired-driving fatalities who fall within the four categories of alcohol-impaired fatality rate shown in the map in Figure 1. About 14 percent of all alcohol-impaired fatalities occurred in States with alcohol-impaired fatality rates under 0.30, about 28 percent occurred in States with rates between 0.30 and 0.40, about 30 percent occurred in States with rates between 0.41 and 0.50, and the remaining 28 percent of the alcohol-impaired fatalities occurred in States with rates of 0.51 or above.

Table 1:  
**Alcohol-Impaired Fatalities and Percentage of Total Alcohol-Impaired Fatalities by Alcohol-Impaired Fatality Rate Category, 2008**

Alcohol-Impaired Fatality Rate	Number of States	Alcohol-Impaired Fatalities	Percentage of United States
Under 0.30	12 + DC	1,693	14%
0.30 – 0.40	13	3,272	28%
0.41 – 0.50	13	3,531	30%
0.51 & Over	12	3,278	28%
U.S.	-	11,773	100%

In the 40 States and the District of Columbia that showed a decrease in their alcohol-impaired fatality rates, there were 1,317 fewer alcohol-impaired driving fatalities in 2008, as compared to 2007, as shown in Table 2. This decrease was offset by an increase of 49 fatalities for the 10 States that showed an increase or no change in their alcohol-impaired fatality rates in 2008.

As a comparison, among the 44 States and the District of Columbia that showed a decline in the overall fatality rate from 2007 to 2008, there were 3,938 fewer fatalities. There was a marginal decrease of 60 fatalities in the 6 States where the overall fatality rates increased or remained flat in 2008.



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Table 2:  
**Fatalities and Fatality Rates by Categories of Increasing And Decreasing Rates in 2008 as Compared to 2007**

2008 Rates as Compared to 2007 Rates	Fatalities in All Crashes		Fatalities in Crashes Involving At Least One Driver/Motorcycle Rider With BAC = .08+	
	Number of States	Change in Fatalities	Number of States	Change in Fatalities
States With Higher/Flat Rates	6	-60	10	+49
States With Lower Rates	44 + DC	-3,938	40 + DC	-1,317
U.S.	-	-3,998	-	-1,268

Components may not add to U.S. totals due to independent rounding.

## Alcohol-Impaired Fatality Rates by State

Impaired-driving laws have been enacted in all 50 States and the District of Columbia that make it illegal for a driver or a motorcycle rider with a BAC of .08 or above to drive a vehicle. In 2008, the alcohol-impaired-driving fatality rate declined from 0.43 fatalities per 100 million VMT in 2007 to 0.40 in 2008. In 2008, Montana had the highest alcohol-impaired fatality rate in the Nation – 0.84 fatalities per 100 million VMT while Vermont had the lowest rate in the Nation – 0.16 per 100 million VMT. In 2007, Montana had the highest alcohol-impaired fatality rates in the Nation – 0.93 – and Utah had the lowest alcohol-impaired driving fatality rate – 0.21 fatalities per 100 million VMT. Table 3 tabulates the overall fatalities as well as the alcohol-impaired fatalities and the corresponding fatality rates per 100 million VMT by State for 2007 and 2008 for the 50 States, the District of Columbia, and Puerto Rico. Also presented in Table 3 are the percentage changes in the alcohol-impaired-driving fatality rate from 2007 to 2008.

This research note and other general information on highway traffic safety may be accessed by Internet users at: [www-nrd.nhtsa.dot.gov/CATS/index.aspx](http://www-nrd.nhtsa.dot.gov/CATS/index.aspx)

Table 3:  
**Total Alcohol-Impaired Fatalities and the Corresponding Fatality Rates per 100 Million VMT, 2007-2008**

State	2007				2008				Percentage Change in Alcohol-Impaired-Driving Fatality Rate From 2007 to 2008
	Total		In Alcohol-Impaired Crashes (Involving at Least One Driver /MC Rider With BAC=.08+)		Total		In Alcohol-Impaired Crashes (Involving at Least One Driver /MC Rider With BAC=.08+)		
	Fatalities	Rate	Fatalities	Rate	Fatalities	Rate	Fatalities	Rate	
Alabama	1,110	1.81	377	0.61	966	1.63	315	0.53	-13.1%
Alaska	82	1.59	25	0.49	62	1.27	21	0.43	-12.2%
Arizona	1,071	1.70	337	0.54	937	1.52	266	0.43	-20.4%
Arkansas	649	1.96	181	0.55	600	1.81	171	0.52	-5.5%
California	3,995	1.21	1,132	0.34	3,434	1.05	1,029	0.31	-8.8%
Colorado	554	1.14	167	0.34	548	1.15	173	0.36	5.9%
Connecticut	296	0.92	111	0.35	264	0.83	86	0.27	-22.9%
Delaware	117	1.23	47	0.50	121	1.35	45	0.50	0.0%
Dist of Columbia	44	1.22	16	0.44	34	0.94	9	0.25	-43.2%
Florida	3,213	1.56	917	0.44	2,978	1.50	875	0.44	0.0%
Georgia	1,641	1.46	445	0.40	1,493	1.37	416	0.38	-5.0%
Hawaii	138	1.33	44	0.43	107	1.04	42	0.41	-4.7%
Idaho	252	1.60	71	0.45	232	1.52	78	0.51	13.3%
Illinois	1,248	1.16	439	0.41	1,043	0.98	362	0.34	-17.1%
Indiana	898	1.26	224	0.31	814	1.15	208	0.29	-6.5%
Iowa	446	1.43	108	0.35	412	1.34	89	0.29	-17.1%
Kansas	416	1.38	109	0.36	385	1.30	145	0.49	36.1%
Kentucky	864	1.80	212	0.44	826	1.74	200	0.42	-4.5%
Louisiana	993	2.19	375	0.83	912	2.02	338	0.75	-9.6%
Maine	183	1.22	66	0.44	155	1.06	43	0.30	-31.8%
Maryland	614	1.09	178	0.32	591	1.07	152	0.28	-12.5%
Massachusetts	434	0.79	155	0.28	363	0.67	124	0.23	-17.9%
Michigan	1,087	1.04	304	0.29	980	0.96	282	0.28	-3.4%
Minnesota	510	0.89	173	0.30	456	0.79	135	0.23	-23.3%
Mississippi	884	2.04	316	0.73	783	1.79	266	0.61	-16.4%
Missouri	992	1.43	333	0.48	960	1.41	310	0.45	-6.2%
Montana	277	2.45	105	0.93	229	2.12	91	0.84	-9.7%
Nebraska	256	1.32	77	0.40	208	1.09	55	0.29	-27.5%
Nevada	373	1.68	118	0.53	324	1.56	107	0.51	-3.8%
New Hampshire	129	0.96	34	0.25	139	1.07	45	0.35	40.0%
New Jersey	724	0.95	201	0.26	590	0.80	154	0.21	-19.2%
New Mexico	413	1.54	132	0.49	366	1.39	105	0.40	-18.4%
New York	1,332	0.97	377	0.28	1,231	0.92	341	0.25	-10.7%
North Carolina	1,676	1.62	497	0.48	1,433	1.41	423	0.42	-12.5%
North Dakota	111	1.42	53	0.68	104	1.33	47	0.60	-11.8%
Ohio	1,255	1.13	389	0.35	1,190	1.10	356	0.33	-5.7%
Oklahoma	766	1.61	223	0.47	749	1.54	244	0.50	6.4%
Oregon	455	1.31	148	0.43	416	1.24	136	0.41	-4.7%
Pennsylvania	1,491	1.37	504	0.46	1,468	1.36	496	0.46	0.0%
Rhode Island	69	0.80	22	0.25	65	0.79	25	0.31	24.0%
South Carolina	1,077	2.11	464	0.91	920	1.85	403	0.81	-11.0%
South Dakota	146	1.62	44	0.49	119	1.32	34	0.38	-22.4%
Tennessee	1,211	1.70	377	0.53	1,035	1.49	327	0.47	-11.3%
Texas	3,466	1.42	1,333	0.55	3,382	1.44	1,269	0.54	-1.8%
Utah	299	1.11	56	0.21	275	1.06	46	0.18	-14.3%
Vermont	66	0.86	22	0.29	73	1.00	12	0.16	-44.8%
Virginia	1,027	1.25	303	0.37	824	1.00	294	0.36	-2.7%
Washington	571	1.00	195	0.34	521	0.94	182	0.33	-2.9%
West Virginia	432	2.10	138	0.67	380	1.83	128	0.62	-7.5%
Wisconsin	756	1.27	314	0.53	605	1.05	208	0.36	-32.1%
Wyoming	150	1.60	50	0.53	159	1.68	67	0.71	34.0%
U.S.	41,259	1.36	13,041	0.43	37,261	1.25	11,773	0.40	-7.0%
Puerto Rico	452	2.35	142	0.74	399	2.08	132	0.69	-6.8%

Source: Fatality Analysis Reporting System (FARS) 2007 Final and 2008 ARF Files, FHWA