

# Traffic Safety Facts

## Research Note

DOT HS 811 099

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# Fatalities and Fatality Rates in Alcohol-Impaired Driving Crashes<sup>1</sup> by State, 2006-2007

## Summary

In 2007, as compared to 2006, the overall fatality rate declined from 1.42 to 1.36 fatalities per 100 million vehicle miles of travel (VMT), and the alcohol-impaired driving fatality rate declined from 0.45 to 0.43 fatalities per 100 million VMT. From 2006 to 2007, the alcohol-impaired driving fatality rate declined in 32 States and remained the same or increased in the remaining 18 States, the District of Columbia, and Puerto Rico.

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 blood alcohol concentration (BAC) of .08 or above. This research note presents, by State, fatality rates in all crashes as well as alcohol-impaired driving crashes.

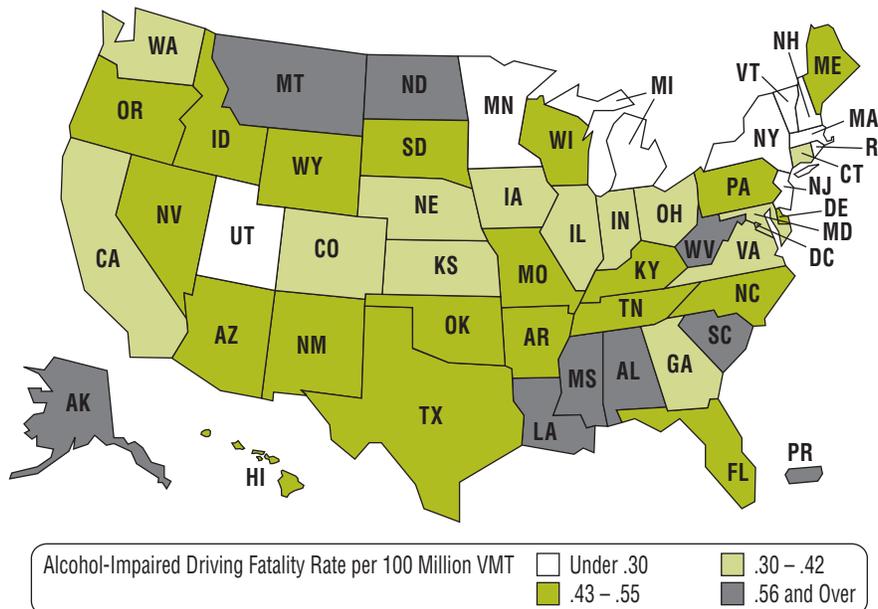
<sup>1</sup> Crashes involving at least one driver or a motorcycle rider (operator) with a blood alcohol concentration (BAC) of .08 or above.

## Results

This research note uses the 2006 Final File and 2007 Annual Report File (ARF) of NHTSA's Fatality Analysis Reporting System (FARS) as well as the VMT data that were released by the Federal Highway Administration (FHWA) in December 2008 to compute the fatality rate in alcohol-impaired crashes (alcohol-impaired fatality rate). 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 2007. The States are color coded as to whether their rates are at or above (dark green, grey) the national rate of 0.43, or below the national rate (light green, white). Table 3 depicts the fatalities and fatality rates underlying Figure 1, by State for 2006 and 2007.

**Figure 1: Alcohol-Impaired Fatalities per 100 Million VMT by State, 2007**



Source: National Center for Statistics and Analysis, 2007 FARS Annual Report File

Table 1 depicts the proportion of alcohol-impaired driving fatalities that fall within the four categories of alcohol-impaired fatality rate shown in the map in Figure 1. About 10 percent of all alcohol-impaired fatalities occurred in States with an alcohol-impaired fatality rate under 0.30, about 30 percent occurred in States with the rate between 0.30 and 0.42, about 45 percent occurred in States with rates between 0.43 and 0.55, and the remaining 14 percent of the alcohol-impaired fatalities occurred in States with rates of 0.56 or above.

As shown in Table 2, in the 32 States that showed a decrease in their alcohol-impaired fatality rates, there were 793 fewer alcohol-related fatalities in 2007, as compared to 2006. This, however, was offset by an increase of 300 fatalities for the 18 States and the District of Columbia that showed an increase or no change in their alcohol-impaired fatality rates in 2006.

**Table 2: Fatalities and Fatality Rates by Categories of Increasing and Decreasing Rates in 2007 as Compared to 2006**

2007 Rates As Compared to 2006 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	17 + DC	+347	18 + DC	+300
States With Lower Rates	33	-1,996	32	-793
U.S.	-	-1,649	-	-493

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, which makes it illegal for a driver or a motorcycle rider with a BAC of .08 or above to drive a vehicle. In 2007, the alcohol-impaired driving fatality rate declined from 0.45 fatalities per 100 million VMT in 2006 to 0.43 in 2007. In 2007, Montana had the highest alcohol-impaired fatality rate in the Nation – 0.94 fatalities per 100 Million VMT while Utah had the

**Table 1: Alcohol-Impaired Fatalities and Percentage of Total Alcohol-Impaired Fatalities by Alcohol-Impaired Fatality Rate Category, 2007**

Alcohol-Impaired Fatality Rate	Number of States	Alcohol-Impaired Fatalities	Percent of United States
Under 0.30	9	1,324	10%
0.30 – 0.42	13 + DC	3,940	30%
0.43 – 0.55	20	5,882	45%
0.56 & Over	8	1,853	14%
U.S.	-	12,998	100%

From 2006 to 2007, among the 33 States that showed a decline in the overall fatality rate, there were 1,996 fewer fatalities. This decline was offset by an increase of 347 fatalities in the 17 States and the District of Columbia where the overall fatality rates increased or remained the same in 2007.

lowest rate in the Nation – 0.19 per 100 million VMT. In 2006, the same States (Montana and Utah) had the highest and lowest alcohol-impaired fatality rates in the Nation – 0.92 and 0.20 fatalities per 100 million VMT, respectively. Table 3 (overleaf) tabulates the overall fatalities as well as the alcohol-impaired fatalities and the corresponding fatality rates per 100 Million VMT by State for 2006 and 2007 for the 50 States, the District of Columbia, and Puerto Rico.



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**Table 3: Total Alcohol-Impaired Fatalities and the Corresponding Fatality Rates per 100 Million VMT, 2006-2007**

State	2006				2007			
	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	1,207	1.99	377	0.62	1,110	1.81	389	0.63
Alaska	74	1.49	19	0.38	84	1.63	30	0.58
Arizona	1,293	2.07	399	0.64	1,066	1.69	336	0.53
Arkansas	665	2.01	200	0.61	650	1.96	182	0.55
California	4,240	1.29	1,272	0.39	3,974	1.21	1,155	0.35
Colorado	535	1.10	179	0.37	554	1.14	170	0.35
Connecticut	311	0.98	113	0.36	277	0.86	101	0.32
Delaware	148	1.57	43	0.46	117	1.23	50	0.53
Dist of Columbia	37	1.02	13	0.36	44	1.22	15	0.42
Florida	3,357	1.65	926	0.45	3,214	1.56	890	0.43
Georgia	1,693	1.49	454	0.40	1,641	1.46	441	0.39
Hawaii	161	1.58	60	0.59	138	1.33	45	0.43
Idaho	267	1.76	86	0.57	252	1.60	70	0.44
Illinois	1,254	1.17	446	0.42	1,249	1.16	434	0.40
Indiana	902	1.27	245	0.34	898	1.26	230	0.32
Iowa	439	1.40	119	0.38	445	1.42	106	0.34
Kansas	468	1.55	125	0.41	416	1.38	114	0.38
Kentucky	913	1.91	216	0.45	864	1.80	210	0.44
Louisiana	987	2.17	371	0.82	985	2.17	368	0.81
Maine	188	1.25	52	0.35	183	1.22	66	0.44
Maryland	652	1.16	189	0.34	614	1.09	179	0.32
Massachusetts	429	0.78	144	0.26	417	0.76	146	0.27
Michigan	1,086	1.04	335	0.32	1,088	1.04	305	0.29
Minnesota	494	0.87	149	0.26	504	0.88	158	0.28
Mississippi	911	2.20	335	0.81	884	2.04	302	0.70
Missouri	1,096	1.59	386	0.56	992	1.43	338	0.49
Montana	264	2.34	104	0.92	277	2.45	106	0.94
Nebraska	269	1.39	71	0.37	256	1.32	77	0.40
Nevada	431	1.97	144	0.66	373	1.68	118	0.53
New Hampshire	127	0.93	46	0.34	129	0.96	34	0.25
New Jersey	771	1.02	218	0.29	724	0.95	199	0.26
New Mexico	484	1.88	136	0.53	413	1.54	133	0.50
New York	1,454	1.03	433	0.31	1,333	0.97	384	0.28
North Carolina	1,554	1.53	421	0.41	1,675	1.62	487	0.47
North Dakota	111	1.41	42	0.53	111	1.42	53	0.68
Ohio	1,238	1.11	386	0.35	1,257	1.14	391	0.35
Oklahoma	765	1.57	199	0.41	754	1.58	219	0.46
Oregon	478	1.35	148	0.42	455	1.31	150	0.43
Pennsylvania	1,525	1.41	492	0.45	1,491	1.37	500	0.46
Rhode Island	81	0.98	30	0.36	69	0.80	25	0.29
South Carolina	1,045	2.08	419	0.83	1,066	2.09	463	0.91
South Dakota	191	2.08	67	0.73	146	1.62	45	0.50
Tennessee	1,284	1.82	414	0.59	1,210	1.70	390	0.55
Texas	3,531	1.48	1,400	0.59	3,363	1.38	1,292	0.53
Utah	287	1.11	53	0.20	299	1.11	51	0.19
Vermont	87	1.11	26	0.33	66	0.86	22	0.29
Virginia	962	1.19	298	0.37	1,027	1.25	332	0.40
Washington	633	1.12	221	0.39	568	1.00	195	0.34
West Virginia	410	1.96	105	0.50	431	2.10	142	0.69
Wisconsin	724	1.22	307	0.52	756	1.27	313	0.53
Wyoming	195	2.07	63	0.67	150	1.60	49	0.52
U.S.	42,708	1.42	13,491	0.45	41,059	1.36	12,998	0.43
Puerto Rico	509	2.59	143	0.73	452	2.35	148	0.77

Source: Fatality Analysis Reporting System (FARS) 2006 Final and 2007 ARF Files, FHWA Traffic Volume Trends VMT Data