

Traffic Safety Facts

Research Note

DOT HS 810 686

December 2006

Alcohol-Related Fatalities and Fatality Rates by State, 2004-2005

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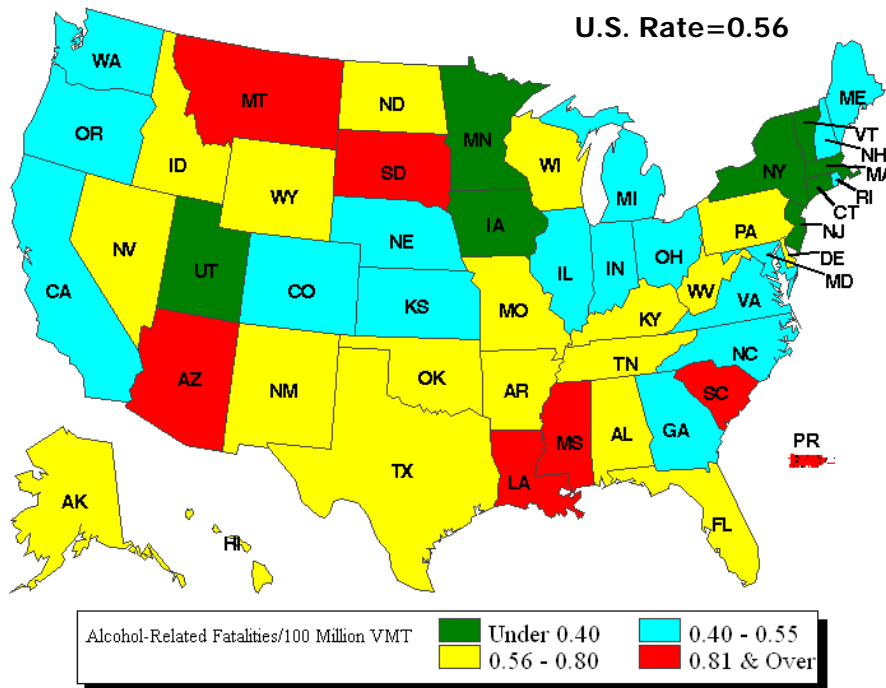
Summary

In 2005, while the overall fatality rate increased marginally to 1.45 from 1.44 fatalities per 100 million vehicle miles of travel (VMT) in 2004, the alcohol-related fatality rate declined to 0.56 from 0.57 fatalities per 100 million VMT. The fatality rate in crashes involving at least one driver or motorcycle operator who had a blood alcohol concentration (BAC) of .08 or above – the illegal per se level in all States -- declined to 0.43 in 2005 from 0.44 fatalities per 100 million VMT in 2004. In 2005, the alcohol-related fatality rate per 100 million VMT declined from 2004 in a total of 25 States and Puerto Rico and remained flat or increased in 25 States and the District of Columbia. The fatality rate in crashes involving at least one driver or motorcycle operator who had a BAC of .08 or above declined in 23 States and Puerto Rico, and remained flat or increased in 27 States and the District of Columbia.

Results

The note uses the 2004 Final and 2005 Annual Report File (ARF) of NHTSA's Fatality Analysis Reporting System (FARS) as well as the VMT data that were released by the FHWA in November 2006 to compute the rate of alcohol-related fatalities. Estimates of alcohol involvement are generated using BAC values reported to FARS and imputed BAC values when they are not reported. Fatalities are alcohol-related if they occur in crashes involving at least one driver, motorcycle operator, pedestrian, or pedalcyclist with a BAC of .01 or above. Also, since most impaired-driving laws target drivers and motorcycle operators, fatalities that occur in crashes that involve at least one driver or motorcycle operator with a BAC of .08 or above are also presented. Figure 1 maps the rate of alcohol-related fatalities per 100 million VMT for each State in 2005. The States are color coded as to whether their rates are at or above (yellow, red) the national rate of 0.56 or below (blue, green).

Figure 1: Alcohol-Related Fatalities Per 100 Million VMT by State, 2005

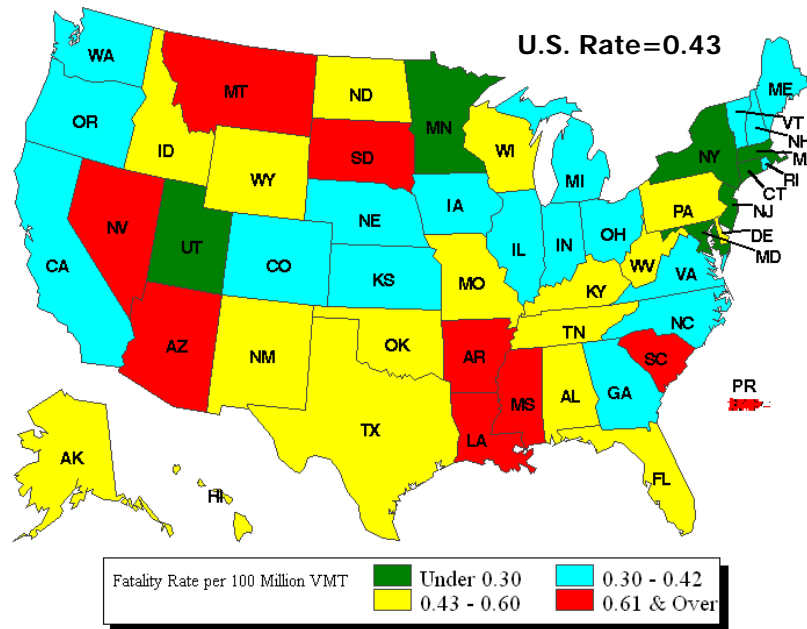


Source: National Center for Statistics and Analysis, 2005 FARS Annual Report File

Figure 2 maps the rate of fatalities in crashes that involved at least one driver or motorcycle operator with a BAC of .08 or above.

The States are color coded as to whether their rates are at or above (yellow, red) the national rate of 0.43 or below (blue, green).

Figure 2: Fatalities Per 100 Million VMT in Crashes Involving at Least One Driver or Motorcycle Operator With a BAC of .08 or Above, by State, 2005



Source: National Center for Statistics and Analysis, 2005 FARS Annual Report File

As shown in the Table 1, in the 25 States that showed a decrease in their alcohol-related fatality rates, there were 642 fewer alcohol-related fatalities in 2005. This however, was offset by an increase of 609 fatalities for the 25 States and the District of Columbia that showed an increase in their alcohol-

related fatality rate in 2005. In crashes involving at least one driver or motorcycle operator with a BAC of .08 or above, the 23 States had 593 fewer fatalities which were offset by an increase of 439 fatalities in the 27 States and the District of Columbia where the rate was flat or higher in 2005 as compared to 2004.

Table 1: Fatalities and Fatality Rates by Categories of Increasing and Decreasing Rates in 2005 As Compared to 2004				
2005 Rates as compared to 2004 Rates	Alcohol-Related Fatalities		Fatalities in Crashes Involving at Least One Driver/Motorcycle Operator with BAC=.08+	
	Number of States	Change in Fatalities	Number of States	Change in Fatalities
States with Higher/Flat Rates	25 + D.C.	+609	27 + D.C.	+439
States with Lower Rates	25	-642	23	-593
U.S.	-	-34	-	-154

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

Table 2 (overleaf) depicts the number and rate of fatalities per 100 Million VMT in all crashes, alcohol-related crashes and

crashes that involved at least one driver or motorcycle operator had a BAC of .08 or above.

Table 2: Total, Alcohol-Related Fatalities, Fatalities in Crashes Involving at Least One Driver/Motorcycle Operator with a BAC of .08 or Above and the Corresponding Fatality Rates per 100 Million VMT, 2004-2005

State	2004						2005					
	Total		Alcohol-Related		In Crashes Involving at least one Driver /MC Operator with BAC=.08+		Total		Alcohol-Related		In Crashes Involving at least one Driver /MC Operator with BAC=.08+	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Alabama	1,154	1.95	432	0.73	360	0.61	1,131	1.90	423	0.71	358	0.60
Alaska	101	2.02	31	0.62	27	0.54	72	1.43	35	0.70	27	0.54
Arizona	1,151	2.01	446	0.78	334	0.58	1,177	1.97	492	0.82	362	0.61
Arkansas	703	2.22	264	0.83	201	0.64	648	2.03	233	0.73	195	0.61
California	4,120	1.25	1,667	0.51	1,179	0.36	4,329	1.31	1,719	0.52	1,250	0.38
Colorado	667	1.45	265	0.58	200	0.44	606	1.26	244	0.51	198	0.41
Connecticut	294	0.93	131	0.41	112	0.35	274	0.87	120	0.38	91	0.29
Delaware	134	1.44	51	0.55	39	0.42	134	1.41	66	0.69	53	0.56
District of Columbia	43	1.15	19	0.51	13	0.35	48	1.29	26	0.70	17	0.46
Florida	3,244	1.65	1,244	0.63	886	0.45	3,543	1.76	1,471	0.73	1,023	0.51
Georgia	1,634	1.44	536	0.47	403	0.35	1,729	1.52	545	0.48	413	0.36
Hawaii	142	1.46	64	0.66	44	0.45	140	1.39	71	0.70	53	0.53
Idaho	260	1.77	93	0.63	76	0.52	275	1.85	89	0.60	82	0.55
Illinois	1,355	1.24	613	0.56	475	0.44	1,361	1.26	580	0.54	440	0.41
Indiana	947	1.30	304	0.42	241	0.33	938	1.31	320	0.45	253	0.35
Iowa	388	1.23	111	0.35	87	0.28	450	1.45	118	0.38	96	0.31
Kansas	459	1.57	139	0.48	113	0.39	428	1.44	151	0.51	115	0.39
Kentucky	964	2.04	307	0.65	256	0.54	985	2.08	313	0.66	246	0.52
Louisiana	927	2.08	424	0.95	315	0.71	955	2.12	394	0.88	309	0.69
Maine	194	1.30	70	0.47	57	0.38	169	1.13	59	0.40	49	0.33
Maryland	643	1.16	286	0.52	211	0.38	614	1.09	235	0.42	161	0.29
Massachusetts	476	0.87	207	0.38	169	0.31	442	0.80	171	0.31	134	0.24
Michigan	1,159	1.12	431	0.42	329	0.32	1,129	1.09	421	0.40	312	0.30
Minnesota	567	1.00	191	0.34	156	0.28	559	0.98	201	0.35	163	0.29
Mississippi	900	2.28	352	0.89	312	0.79	931	2.21	371	0.88	302	0.72
Missouri	1,130	1.64	460	0.67	369	0.53	1,257	1.83	515	0.75	398	0.58
Montana	229	2.04	105	0.94	97	0.87	251	2.26	124	1.11	105	0.94
Nebraska	254	1.32	92	0.48	74	0.39	276	1.43	91	0.47	76	0.39
Nevada	395	1.95	154	0.76	112	0.55	427	2.06	159	0.77	126	0.61
New Hampshire	171	1.26	59	0.44	51	0.38	166	1.24	60	0.45	54	0.40
New Jersey	723	0.99	270	0.37	185	0.25	748	1.01	263	0.36	180	0.24
New Mexico	521	2.18	213	0.89	157	0.66	488	2.04	189	0.79	143	0.60
New York	1,495	1.08	594	0.43	435	0.32	1,429	1.04	524	0.38	358	0.26
North Carolina	1,573	1.64	549	0.57	423	0.44	1,534	1.51	549	0.54	414	0.41
North Dakota	100	1.32	39	0.51	34	0.45	123	1.62	58	0.77	45	0.59
Ohio	1,286	1.15	492	0.44	392	0.35	1,323	1.20	505	0.46	385	0.35
Oklahoma	774	1.67	282	0.61	225	0.48	802	1.71	283	0.60	231	0.49
Oregon	456	1.28	204	0.57	150	0.42	488	1.38	177	0.50	121	0.34
Pennsylvania	1,490	1.38	616	0.57	517	0.48	1,616	1.50	636	0.59	523	0.48
Rhode Island	83	0.98	43	0.51	38	0.45	87	1.05	43	0.52	29	0.35
South Carolina	1,046	2.11	463	0.93	368	0.74	1,093	2.21	464	0.94	359	0.73
South Dakota	197	2.24	83	0.94	71	0.81	186	2.22	80	0.95	69	0.82
Tennessee	1,339	1.89	542	0.76	439	0.62	1,270	1.79	464	0.66	371	0.52
Texas	3,699	1.60	1,704	0.74	1,336	0.58	3,504	1.49	1,569	0.67	1,224	0.52
Utah	296	1.20	75	0.3	67	0.27	282	1.12	37	0.15	33	0.13
Vermont	98	1.25	32	0.41	20	0.25	73	0.95	29	0.38	28	0.36
Virginia	922	1.17	363	0.46	288	0.37	947	1.18	347	0.43	263	0.33
Washington	567	1.02	247	0.44	202	0.36	647	1.17	294	0.53	235	0.42
West Virginia	410	2.02	142	0.7	108	0.53	374	1.82	126	0.61	108	0.53
Wisconsin	792	1.31	358	0.59	297	0.49	815	1.36	369	0.61	313	0.52
Wyoming	164	1.77	59	0.64	51	0.55	170	1.88	65	0.72	54	0.60
U.S.	42,836	1.44	16,919	0.57	13,099	0.44	43,443	1.45	16,885	0.56	12,945	0.43
Puerto Rico	495	2.54	250	1.28	174	0.89	453	2.33	217	1.12	145	0.75

Source: NHTSA's NCSA FARS 2004 (Final), 2005 (ARF) Files, FHWA

2005 Rates for New York are based on 2004 VMT and are subject to change.

Conclusions

In 2005, the alcohol-related fatality rate declined to 0.56 fatalities per 100 million VMT from 0.57 fatalities per 100 Million VMT in 2004. 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 operator with a BAC of .08 or above to drive a vehicle. The fatality rate in crashes that involved at least one driver or motorcycle operator with a BAC of .08 or above also declined from 0.44 fatalities per 100 million VMT in 2004 to 0.43 fatalities per 100 million VMT in 2005. In 2005, Montana had the highest alcohol-related fatality rate in the Nation – 1.11 per 100 Million VMT while Utah had the lowest rate in the Nation – 0.15 per 100 million VMT. In 2004, Louisiana had the highest rate of alcohol-related fatalities in the Nation – 0.95 fatalities per 100 million VMT; while Utah had the lowest rate – 0.30 fatalities per 100 million VMT. In crashes involving at least one driver or motorcycle operator with a BAC of .08 or above in 2005, Montana had the highest fatality rate -- 0.94 fatalities per 100 million VMT; while Utah had the lowest fatality rate – 0.13 fatalities per 100 million VMT. Correspondingly, in 2004, Montana had the highest rate – 0.87 per 100 million VMT; while New Jersey and Vermont had the lowest rate – 0.25 fatalities per 100 million VMT.