



Traffic Safety Facts 1998

State Alcohol Estimates

The following data provide estimates of alcohol involvement in fatal crashes for the United States and individually for the 50 states, the District of Columbia, and Puerto Rico (not included in the national totals). These estimates are based on data from NHTSA's Fatality Analysis Reporting System (FARS). Unfortunately, known BAC test results are not available for all drivers and nonoccupants involved in fatal crashes. Missing data can result for a number of reasons, the most frequent of which is that persons are not always tested for alcohol.

To address the missing data issue, NHTSA has developed and employs a statistical model to estimate the likelihood that a fatal crash-involved driver or nonoccupant was sober (BAC of zero), had some alcohol (BAC of 0.01-0.09), or was intoxicated (BAC of 0.10 or greater) at the time of the crash. The statistical model is based on important characteristics of the crash including crash factors (e.g., time of day, day of week, type of crash, location), vehicle factors (e.g., vehicle type and role in the crash), and person factors (e.g., age, sex, restraint use, previous driving violations), and whether or not the state had a 21-year-old minimum drinking age law.

The statistical model was developed using all available known data in the aggregate (that is, at the national level) and applied to each individual driver and nonoccupant with an unknown BAC test result. The estimates presented include a mix of both known and estimated BACs.

Great caution should be exercised in comparing the levels of alcohol involvement among states.

Differences in alcohol involvement can be due to any number of factors not necessarily directly related to a state's alcohol traffic safety program. Factors affecting alcohol involvement in fatal crashes include:

- Population demographics and the economic environment (older drivers and female drivers exhibit lower levels of alcohol involvement, drivers of older vehicles exhibit higher levels of alcohol involvement, pedestrian fatalities as a group exhibit high levels of alcohol involvement);
- Degree of urbanization (alcohol involvement in single- and multi-vehicle crashes tends to be greater in urban fatal crashes, while alcohol involvement in nonoccupant fatal crashes is higher in rural areas);
- Types of vehicles (motorcycle drivers exhibit high levels of alcohol involvement followed by drivers of light trucks/vans; drivers of medium and heavy trucks exhibit the lowest levels of alcohol involvement).

One of the major differences among states is in the degree of testing for driver and nonoccupant BACs. These differences in testing affect the accuracy and reliability of the estimates presented, and for 1998 range from a low of 15 percent known BACs to a high of 77 percent known BACs. States with higher rates of known BACs yield estimates of fatal crash alcohol involvement with greater accuracy and precision.

For more information:

Information on state alcohol estimates is available from the National Center for Statistics and Analysis, NRD-31, 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 Auto Safety Hotline at 1-800-424-9393.

Estimates of Alcohol-Involved Fatalities

The following tables estimate alcohol involvement for the nation and on a state-by-state basis for 1998 and 1982 using NHTSA's discriminant function model as applied to the FARS data. This model estimates BACs of drivers and nonoccupants when their BAC is not available. The estimates presented represent the combination of known and estimated BACs.

A driver or nonoccupant involved is considered *alcohol-related* if he/she is involved in the fatal crash and exhibits a BAC of 0.01 or greater (the last column on the right in the tables). A fatality is considered *alcohol-related* if any driver or nonoccupant involved in the crash had a positive BAC. Estimates are presented for four categories:

- (1) BAC of 0.00 (no alcohol)
- (2) BAC of 0.01-0.09 (low alcohol)
- (3) BAC of 0.10 or greater (high alcohol)
- (4) BAC of 0.01 or greater (any alcohol, the sum of (2) and (3)).

Nationwide in 1998, alcohol was involved in 38 percent of the traffic fatalities (8 percent low alcohol and 30 percent high alcohol), translating to 15,935 alcohol-related fatalities.

Table 1. Fatalities by Highest Blood Alcohol Concentration (BAC) in the Crash, 1982

State	Total Fatalities	No Alcohol (BAC = 0.00 g/dl)		Low Alcohol (BAC = 0.01-0.09 g/dl)		High Alcohol (BAC ≥ 0.10 g/dl)		Any Alcohol (BAC ≥ 0.01 g/dl)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	839	372	44	89	11	379	45	467	56
Alaska	105	48	45	3	3	54	52	57	55
Arizona	724	317	44	73	10	334	46	407	56
Arkansas	550	214	39	66	12	270	49	336	61
California	4,615	1,894	41	498	11	2,223	48	2,721	59
Colorado	668	252	38	75	11	342	51	416	62
Connecticut	515	163	32	66	13	286	56	352	68
Delaware	122	42	34	11	9	70	57	80	66
District of Columbia	35	14	40	6	17	15	43	21	60
Florida	2,653	1,418	53	252	10	983	37	1,235	47
Georgia	1,229	509	41	145	12	575	47	720	59
Hawaii	163	63	39	18	11	82	50	100	61
Idaho	256	143	56	26	10	87	34	113	44
Illinois	1,651	683	41	202	12	766	46	968	59
Indiana	961	495	52	91	9	375	39	466	48
Iowa	480	255	53	47	10	179	37	225	47
Kansas	498	274	55	41	8	183	37	224	45
Kentucky	822	379	46	99	12	344	42	443	54
Louisiana	1,091	496	45	139	13	457	42	595	55
Maine	166	84	50	18	11	64	39	82	50
Maryland	640	292	46	61	10	288	45	348	54
Massachusetts	659	266	40	79	12	314	48	393	60
Michigan	1,392	562	40	136	10	693	50	830	60
Minnesota	571	260	46	47	8	265	46	311	55
Mississippi	730	319	44	79	11	332	46	411	56
Missouri	890	444	50	96	11	350	39	446	50
Montana	254	87	34	32	13	135	53	167	66
Nebraska	261	136	52	24	9	101	39	125	48
Nevada	280	93	33	34	12	152	55	187	67
New Hampshire	173	72	42	20	12	81	47	101	58
New Jersey	1,061	467	44	145	14	449	42	594	56
New Mexico	577	210	36	67	12	300	52	367	64
New York	2,162	1,143	53	241	11	777	36	1,019	47
North Carolina	1,303	520	40	137	11	646	50	783	60
North Dakota	148	53	36	15	10	80	54	95	64
Ohio	1,607	699	44	159	10	749	47	908	56
Oklahoma	1,054	463	44	121	11	471	45	591	56
Oregon	518	193	37	55	11	270	52	325	63
Pennsylvania	1,819	756	42	219	12	845	46	1,063	58
Rhode Island	105	36	34	20	19	49	47	69	66
South Carolina	730	300	41	69	9	361	50	430	59
South Dakota	148	59	40	11	7	78	53	89	60
Tennessee	1,055	397	38	112	11	546	52	658	62
Texas	4,213	1,325	32	553	13	2,335	55	2,888	69
Utah	295	182	62	18	6	95	32	113	38
Vermont	107	38	36	20	19	48	45	69	64
Virginia	881	416	47	87	10	378	43	465	53
Washington	748	273	37	73	10	402	54	475	63
West Virginia	450	221	49	33	7	196	44	229	51
Wisconsin	770	295	38	67	9	408	53	475	62
Wyoming	201	90	45	17	8	95	47	111	55
U.S. Total	43,945	18,780	43	4,809	11	20,356	46	25,165	57
Puerto Rico	480	245	51	40	8	195	41	235	49

Table 2. Fatalities by Highest Blood Alcohol Concentration (BAC) in the Crash, 1998

State	Total Fatalities	No Alcohol (BAC = 0.00 g/dl)		Low Alcohol (BAC = 0.01-0.09 g/dl)		High Alcohol (BAC ≥ 0.10 g/dl)		Any Alcohol (BAC ≥ 0.01 g/dl)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	1,071	665	62	77	7	329	31	406	38
Alaska	71	40	56	3	4	28	39	31	44
Arizona	980	557	57	89	9	334	34	423	43
Arkansas	625	432	69	48	8	146	23	193	31
California	3,494	2,170	62	315	9	1,009	29	1,324	38
Colorado	628	396	63	43	7	189	30	232	37
Connecticut	329	187	57	29	9	112	34	142	43
Delaware	115	70	61	7	6	37	33	45	39
District of Columbia	54	27	49	8	16	19	35	27	51
Florida	2,824	1,899	67	210	7	715	25	925	33
Georgia	1,569	1,060	68	130	8	380	24	509	32
Hawaii	120	64	53	14	12	42	35	56	47
Idaho	265	175	66	15	6	75	28	90	34
Illinois	1,393	794	57	122	9	477	34	599	43
Indiana	978	599	61	72	7	307	31	379	39
Iowa	449	285	64	43	9	121	27	164	36
Kansas	493	319	65	42	8	132	27	174	35
Kentucky	858	573	67	60	7	225	26	285	33
Louisiana	922	496	54	103	11	323	35	426	46
Maine	192	138	72	8	4	45	24	54	28
Maryland	606	403	66	59	10	144	24	203	34
Massachusetts	406	214	53	59	15	134	33	192	47
Michigan	1,367	831	61	120	9	416	30	536	39
Minnesota	650	370	57	64	10	216	33	280	43
Mississippi	948	597	63	57	6	294	31	351	37
Missouri	1,169	644	55	139	12	386	33	525	45
Montana	237	133	56	23	10	81	34	104	44
Nebraska	315	196	62	31	10	88	28	119	38
Nevada	361	184	51	49	14	127	35	177	49
New Hampshire	128	67	53	25	20	36	28	61	47
New Jersey	743	472	64	77	10	194	26	271	36
New Mexico	424	231	55	41	10	152	36	193	45
New York	1,498	1,133	76	115	8	250	17	365	24
North Carolina	1,596	1,083	68	91	6	422	26	513	32
North Dakota	92	48	53	4	4	40	43	44	47
Ohio	1,422	958	67	83	6	381	27	464	33
Oklahoma	755	503	67	44	6	208	28	252	33
Oregon	538	305	57	50	9	183	34	233	43
Pennsylvania	1,481	862	58	103	7	516	35	619	42
Rhode Island	74	39	52	9	13	26	35	35	48
South Carolina	1,002	698	70	50	5	254	25	304	30
South Dakota	165	98	59	13	8	54	33	67	41
Tennessee	1,216	717	59	105	9	394	32	499	41
Texas	3,577	1,785	50	383	11	1,408	39	1,792	50
Utah	350	300	86	12	3	39	11	50	14
Vermont	104	66	63	7	7	31	30	38	37
Virginia	935	592	63	76	8	267	29	343	37
Washington	660	353	54	62	9	244	37	307	46
West Virginia	354	209	59	17	5	128	36	145	41
Wisconsin	714	412	58	58	8	244	34	302	42
Wyoming	154	86	56	13	8	55	36	68	44
U.S. Total	41,471	25,536	62	3,479	8	12,456	30	15,935	38
Puerto Rico	558	271	49	78	14	209	37	287	51

Estimates of Alcohol-Involved Drivers

The following tables estimate alcohol involvement for the nation and on a state-by-state basis for 1998 and 1982 using NHTSA's discriminant function model as applied to the FARS data. This model estimates BACs of drivers and nonoccupants when their BAC is not available. The estimates presented represent the combination of known and estimated BACs.

A driver or nonoccupant involved is considered *alcohol-related* if he/she is involved in the fatal crash and exhibits a BAC of 0.01 or greater (the last column on the right in the tables). Estimates are presented for four categories:

- (1) BAC of 0.00 (no alcohol),
- (2) BAC of 0.01-0.09 (low alcohol),
- (3) BAC of 0.10 or greater (high alcohol), and
- (4) BAC of 0.01 or greater (any alcohol, the sum of (2) and (3)).

Nationwide in 1998, alcohol was present in 23 percent of the drivers involved in fatal crashes (6 percent low alcohol and 18 percent high alcohol).

Table 3. Drivers Involved in Fatal Crashes by Blood Alcohol Concentration (BAC) of the Driver, 1982

State	Total Drivers Involved	No Alcohol (BAC = 0.00 g/dl)		Low Alcohol (BAC = 0.01-0.09 g/dl)		High Alcohol (BAC ≥ 0.10 g/dl)		Any Alcohol (BAC ≥ 0.01 g/dl)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	1,046	647	62	87	8	312	30	399	38
Alaska	143	83	58	9	6	51	36	60	42
Arizona	.915	597	65	73	8	245	27	318	35
Arkansas	682	377	55	77	11	228	33	305	45
California	5,914	3,586	61	499	8	1,829	31	2,328	39
Colorado	817	450	55	78	10	288	35	367	45
Connecticut	678	343	51	81	12	254	37	335	49
Delaware	171	93	54	17	10	61	36	78	46
District of Columbia	.50	31	63	6	13	12	25	19	37
Florida	3,564	2,506	70	255	7	803	23	1,058	30
Georgia	1,614	985	61	153	10	476	29	629	39
Hawaii	200	115	57	18	9	67	33	85	43
Idaho	287	188	66	25	9	74	26	99	34
Illinois	2,131	1,333	63	189	9	609	29	798	38
Indiana	1,269	851	67	90	7	328	26	418	33
Iowa	622	427	69	43	7	152	24	195	31
Kansas	646	456	71	37	6	153	24	190	29
Kentucky	1,015	662	65	80	8	273	27	353	35
Louisiana	1,407	891	63	159	11	357	25	516	37
Maine	208	139	67	13	6	56	27	69	33
Maryland	832	540	65	62	8	230	28	292	35
Massachusetts	831	482	58	83	10	267	32	349	42
Michigan	1,879	1,122	60	165	9	592	32	757	40
Minnesota	759	486	64	49	6	224	30	273	36
Mississippi	892	545	61	80	9	267	30	347	39
Missouri	1,141	765	67	81	7	295	26	376	33
Montana	299	152	51	35	12	112	37	147	49
Nebraska	342	232	68	23	7	86	25	110	32
Nevada	335	186	56	28	8	121	36	149	44
New Hampshire	223	133	60	19	9	70	32	90	40
New Jersey	1,369	875	64	141	10	352	26	494	36
New Mexico	660	371	56	63	10	226	34	289	44
New York	2,687	1,899	71	196	7	591	22	788	29
North Carolina	1,655	1,018	62	136	8	501	30	637	39
North Dakota	192	100	52	19	10	72	38	92	48
Ohio	2,045	1,238	61	169	8	637	31	807	40
Oklahoma	1,402	901	64	115	8	386	28	501	36
Oregon	653	360	55	65	10	228	35	293	45
Pennsylvania	2,368	1,420	60	239	10	708	30	948	40
Rhode Island	128	67	52	16	13	45	35	61	48
South Carolina	937	586	63	73	8	278	30	351	38
South Dakota	180	100	55	16	9	64	36	80	45
Tennessee	1,336	734	55	130	10	472	35	602	45
Texas	5,177	2,546	49	662	13	1,969	38	2,631	51
Utah	371	272	73	23	6	76	21	99	27
Vermont	121	67	55	17	14	37	31	54	45
Virginia	1,114	723	65	85	8	306	27	391	35
Washington	950	518	55	78	8	354	37	432	46
West Virginia	547	355	65	29	5	162	30	192	35
Wisconsin	991	549	55	83	8	359	36	442	45
Wyoming	234	144	62	16	7	73	31	90	38
U.S. Total	56,029	34,250	61	4,987	9	16,793	30	21,779	39
Puerto Rico	578	411	71	40	7	127	22	167	29

Table 4. Drivers Involved in Fatal Crashes by Blood Alcohol Concentration (BAC) of the Driver, 1998

State	Total Drivers Involved	No Alcohol (BAC = 0.00 g/dl)		Low Alcohol (BAC = 0.01-0.09 g/dl)		High Alcohol (BAC ≥ 0.10 g/dl)		Any Alcohol (BAC ≥ 0.01 g/dl)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	1,458	1,104	76	67	5	287	20	354	24
Alaska	86	60	70	3	4	22	26	26	30
Arizona	1,266	961	76	77	6	227	18	305	24
Arkansas	832	670	81	39	5	123	15	162	19
California	4,725	3,744	79	265	6	716	15	981	21
Colorado	845	651	77	41	5	153	18	194	23
Connecticut	453	324	71	29	6	100	22	129	29
Delaware	170	136	80	9	5	25	14	34	20
District of Columbia	77	53	68	10	13	15	19	24	32
Florida	4,100	3,400	83	191	5	509	12	700	17
Georgia	2,180	1,764	81	112	5	304	14	416	19
Hawaii	177	126	71	14	8	37	21	51	29
Idaho	324	253	78	14	4	57	17	71	22
Illinois	1,937	1,450	75	100	5	387	20	487	25
Indiana	1,367	1,033	76	78	6	255	19	334	24
Iowa	643	498	77	41	6	104	16	145	23
Kansas	663	506	76	41	6	116	18	157	24
Kentucky	1,188	952	80	50	4	186	16	236	20
Louisiana	1,255	897	71	99	8	259	21	358	29
Maine	253	205	81	9	4	39	15	48	19
Maryland	864	706	82	50	6	108	12	158	18
Massachusetts	558	386	69	60	11	111	20	172	31
Michigan	2,010	1,546	77	122	6	342	17	464	23
Minnesota	891	656	74	62	7	173	19	235	26
Mississippi	1,251	926	74	61	5	264	21	325	26
Missouri	1,563	1,120	72	130	8	313	20	443	28
Montana	274	187	68	18	7	69	25	87	32
Nebraska	399	292	73	31	8	76	19	107	27
Nevada	478	332	70	55	12	90	19	146	30
New Hampshire	170	123	72	21	12	26	16	47	28
New Jersey	1,019	793	78	76	7	150	15	226	22
New Mexico	508	361	71	38	8	109	21	147	29
New York	2,033	1,743	86	85	4	205	10	290	14
North Carolina	2,208	1,842	83	73	3	293	13	366	17
North Dakota	109	71	65	5	5	33	30	38	35
Ohio	1,971	1,570	80	78	4	323	16	401	20
Oklahoma	986	774	78	42	4	171	17	212	22
Oregon	715	522	73	47	7	145	20	193	27
Pennsylvania	2,041	1,503	74	95	5	443	22	538	26
Rhode Island	96	65	68	6	7	24	25	31	32
South Carolina	1,351	1,114	82	43	3	195	14	237	18
South Dakota	212	154	73	13	6	46	22	58	27
Tennessee	1,699	1,264	74	96	6	339	20	435	26
Texas	4,849	3,276	68	417	9	1,156	24	1,573	32
Utah	443	402	91	10	2	31	7	41	9
Vermont	123	91	74	6	5	26	21	32	26
Virginia	1,224	946	77	70	6	207	17	278	23
Washington	903	649	72	57	6	197	22	254	28
West Virginia	466	344	74	16	3	105	23	122	26
Wisconsin	958	697	73	60	6	201	21	261	27
Wyoming	172	114	66	10	6	48	28	58	34
U.S. Total	56,543	43,358	77	3,244	6	9,942	18	13,185	23
Puerto Rico	713	494	69	74	10	145	20	219	31

Availability of Known BAC Test Results

The following tables present the percentage of drivers and nonoccupants involved in fatal crashes where a BAC test was given and the results were in the FARS file. Individual tables are presented for all drivers/nonoccupants, fatally injured drivers and surviving drivers.

Nationwide in 1998, a total of 15,515 fatally injured drivers had BAC test results out of a total of 24,729, or 63 percent. For surviving drivers, BAC test results were known on 8,015 out of 31,814 drivers, or 25 percent. Overall in 1998, FARS contained BAC test results on a total of 23,530 drivers out of 56,543 involved in fatal crashes, or 42 percent. Statistics for the base year 1982 are also presented. Any individual state proportion greater than the national percentage is considered good. The higher the proportion of drivers with known BAC test results, the more reliable the state estimate.

Table 5. Driver Fatalities by State and Blood Alcohol Concentration (BAC) Test Status, 1982

State	Total Driver Fatalities	With Known Results		With Unknown Results		Not Tested		Unknown If Tested	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	510	89	18	202	40	215	42	4	1
Alaska	63	27	43	2	3	28	44	6	10
Arizona	353	187	53	49	14	78	22	39	11
Arkansas	324	37	11	1	0	228	70	58	18
California	2,604	2,279	88	2	0	321	12	2	0
Colorado	369	314	85	6	2	49	13	0	0
Connecticut	311	212	68	19	6	80	26	0	0
Delaware	75	69	92	0	0	6	8	0	0
District of Columbia	16	14	88	0	0	1	6	1	6
Florida	1,304	423	32	208	16	662	51	11	1
Georgia	734	467	64	34	5	233	32	0	0
Hawaii	87	79	91	0	0	8	9	0	0
Idaho	131	29	22	18	14	68	52	16	12
Illinois	901	639	71	66	7	172	19	24	3
Indiana	599	285	48	102	17	185	31	27	5
Iowa	317	133	42	56	18	117	37	11	4
Kansas	315	59	19	29	9	209	66	18	6
Kentucky	502	365	73	23	5	113	23	1	0
Louisiana	591	128	22	249	42	209	35	5	1
Maine	99	50	51	5	5	43	43	1	1
Maryland	350	291	83	1	0	58	17	0	0
Massachusetts	370	44	12	239	65	19	5	68	18
Michigan	778	472	61	32	4	270	35	4	1
Minnesota	319	250	78	11	3	38	12	20	6
Mississippi	437	38	9	12	3	58	13	329	75
Missouri	534	144	27	12	2	153	29	225	42
Montana	148	79	53	0	0	34	23	35	24
Nebraska	161	89	55	13	8	33	21	26	16
Nevada	165	149	90	0	0	16	10	0	0
New Hampshire	107	51	48	9	8	47	44	0	0
New Jersey	524	453	87	3	1	68	13	0	0
New Mexico	305	253	83	21	7	27	9	4	1
New York	994	618	62	8	1	111	11	257	26
North Carolina	726	327	45	112	15	284	39	3	0
North Dakota	105	4	4	32	31	62	59	7	7
Ohio	899	390	43	128	14	277	31	104	12
Oklahoma	652	467	72	0	0	185	28	0	0
Oregon	293	269	92	2	1	22	8	0	0
Pennsylvania	1,061	734	69	80	8	247	23	0	0
Rhode Island	53	50	94	0	0	2	4	1	2
South Carolina	413	205	50	54	13	151	37	3	1
South Dakota	85	61	72	0	0	24	28	0	0
Tennessee	646	466	72	2	0	177	27	1	0
Texas	2,378	42	2	669	28	1,667	70	0	0
Utah	157	126	80	7	5	23	15	1	1
Vermont	59	51	86	1	2	5	9	2	3
Virginia	489	358	73	99	20	31	6	1	0
Washington	441	358	81	14	3	1	0	68	15
West Virginia	260	195	75	6	2	58	22	1	0
Wisconsin	459	390	85	6	1	58	13	5	1
Wyoming	117	87	74	10	9	20	17	0	0
U.S. Total	24,690	13,396	54	2,654	11	7,251	29	1,389	6
Puerto Rico	162	94	58	0	0	67	41	1	1

Table 6. Driver Fatalities by State and Blood Alcohol Concentration (BAC) Test Status, 1998

State	Total Driver Fatalities	With Known Results		With Unknown Results		Not Tested		Unknown If Tested	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	726	189	26	266	37	265	37	6	1
Alaska	39	14	36	0	0	20	51	5	13
Arizona	472	207	44	150	32	5	1	110	23
Arkansas	398	279	70	0	0	119	30	0	0
California	1,707	1,561	91	17	1	128	7	1	0
Colorado	370	317	86	1	0	52	14	0	0
Connecticut	220	199	90	1	0	16	7	4	2
Delaware	79	65	82	0	0	14	18	0	0
District of Columbia	24	5	21	3	13	16	67	0	0
Florida	1,552	876	56	0	0	623	40	53	3
Georgia	1,000	773	77	44	4	128	13	55	6
Hawaii	71	59	83	1	1	2	3	9	13
Idaho	160	87	54	7	4	66	41	0	0
Illinois	831	741	89	1	0	89	11	0	0
Indiana	658	238	36	168	26	237	36	15	2
Iowa	290	161	56	6	2	123	42	0	0
Kansas	336	131	39	2	1	154	46	49	15
Kentucky	566	356	63	26	5	184	33	0	0
Louisiana	543	263	48	178	33	93	17	9	2
Maine	127	112	88	2	2	13	10	0	0
Maryland	334	250	75	60	18	5	1	19	6
Massachusetts	226	200	88	0	0	18	8	8	4
Michigan	833	651	78	20	2	162	19	0	0
Minnesota	403	364	90	6	1	31	8	2	0
Mississippi	633	392	62	0	0	238	38	3	0
Missouri	732	539	74	4	1	81	11	108	15
Montana	154	82	53	0	0	24	16	48	31
Nebraska	192	169	88	0	0	23	12	0	0
Nevada	189	153	81	3	2	33	17	0	0
New Hampshire	90	72	80	4	4	10	11	4	4
New Jersey	407	210	52	10	2	145	36	42	10
New Mexico	214	181	85	1	0	17	8	15	7
New York	763	305	40	4	1	31	4	423	55
North Carolina	980	348	36	0	0	377	38	255	26
North Dakota	55	40	73	0	0	15	27	0	0
Ohio	920	395	43	239	26	259	28	27	3
Oklahoma	481	307	64	0	0	165	34	9	2
Oregon	307	282	92	0	0	25	8	0	0
Pennsylvania	952	613	64	166	17	102	11	71	7
Rhode Island	43	42	98	0	0	1	2	0	0
South Carolina	638	166	26	59	9	413	65	0	0
South Dakota	105	90	86	1	1	9	9	5	5
Tennessee	831	599	72	0	0	213	26	19	2
Texas	2,077	850	41	347	17	878	42	2	0
Utah	178	94	53	3	2	81	46	0	0
Vermont	58	49	84	0	0	8	14	1	2
Virginia	593	392	66	26	4	57	10	118	20
Washington	397	363	91	0	0	32	8	2	1
West Virginia	227	201	89	3	1	23	10	0	0
Wisconsin	452	400	88	2	0	50	11	0	0
Wyoming	96	83	86	0	0	13	14	0	0
U.S. Total	24,729	15,515	63	1,831	7	5,886	24	1,497	6
Puerto Rico	231	185	80	1	0	45	19	0	0

Table 7. Surviving Drivers by State and Blood Alcohol Concentration (BAC) Test Status, 1982

State	Total Surviving Drivers	With Known Results		With Unknown Results		Not Tested		Unknown If Tested	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	536	10	2	108	20	415	77	3	1
Alaska	80	26	33	0	0	48	60	6	8
Arizona	562	64	11	20	4	399	71	79	14
Arkansas	358	41	12	0	0	281	79	36	10
California	3,310	684	21	65	2	2,413	73	148	5
Colorado	448	206	46	0	0	240	54	2	0
Connecticut	367	80	22	19	5	268	73	0	0
Delaware	96	72	75	0	0	23	24	1	1
District of Columbia	34	10	29	0	0	23	68	1	3
Florida	2,260	467	21	199	9	1,477	65	117	5
Georgia	880	325	37	15	17	539	61	1	0
Hawaii	113	17	15	1	1	95	84	0	0
Idaho	156	22	14	22	14	108	69	4	3
Illinois	1,230	54	4	30	2	1,094	89	52	4
Indiana	670	154	23	40	6	440	66	36	5
Iowa	305	36	12	13	4	244	80	12	4
Kansas	331	26	8	17	5	277	84	11	3
Kentucky	513	100	20	18	4	394	77	1	0
Louisiana	816	236	29	140	17	420	52	20	3
Maine	109	15	14	3	3	90	83	1	1
Maryland	482	25	5	32	7	423	88	2	0
Massachusetts	461	19	4	4	1	202	44	236	51
Michigan	1,101	219	20	13	1	861	78	8	1
Minnesota	440	120	27	103	23	150	34	67	15
Mississippi	455	35	8	4	1	162	36	254	56
Missouri	607	31	5	15	3	467	77	94	16
Montana	151	40	27	2	1	83	55	26	17
Nebraska	181	101	56	7	4	50	28	23	13
Nevada	170	79	47	1	1	90	53	0	0
New Hampshire	116	28	24	5	4	83	72	0	0
New Jersey	845	237	28	3	0	603	71	2	0
New Mexico	355	29	8	64	18	232	65	30	9
New York	1,693	45	3	23	1	933	55	692	41
North Carolina	929	5	1	157	17	744	80	23	3
North Dakota	87	10	12	20	23	55	63	2	2
Ohio	1,146	186	16	52	5	828	72	80	7
Oklahoma	750	41	6	42	6	665	89	2	0
Oregon	360	94	26	3	1	263	73	0	0
Pennsylvania	1,307	163	13	30	2	1,114	85	0	0
Rhode Island	75	8	11	6	8	54	72	7	9
South Carolina	524	24	5	85	16	390	74	25	5
South Dakota	95	49	52	0	0	46	48	0	0
Tennessee	690	304	44	2	0	377	55	7	1
Texas	2,799	78	3	195	7	2,524	90	2	0
Utah	214	130	61	8	4	76	36	0	0
Vermont	62	41	66	1	2	15	24	5	8
Virginia	625	7	1	34	5	582	93	2	0
Washington	509	137	27	33	7	307	60	32	6
West Virginia	287	50	17	5	2	230	80	2	1
Wisconsin	532	91	17	28	5	410	77	3	1
Wyoming	117	22	19	7	6	86	74	2	2
U.S. Total	31,339	5,093	16	1,694	5	22,393	72	2,159	7
Puerto Rico	416	65	16	5	1	343	83	3	1

Table 8. Surviving Drivers by State and Blood Alcohol Concentration (BAC) Test Status, 1998

State	Total Surviving Drivers	With Known Results		With Unknown Results		Not Tested		Unknown If Tested	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	732	92	13	140	19	496	68	4	1
Alaska	47	32	68	0	0	14	30	1	2
Arizona	794	53	7	56	7	493	62	192	24
Arkansas	434	177	41	0	0	257	59	0	0
California	3,018	723	24	17	1	2,273	75	5	0
Colorado	475	155	33	0	0	320	67	0	0
Connecticut	233	52	22	12	5	139	60	30	13
Delaware	91	45	49	0	0	46	51	0	0
District of Columbia	53	18	34	4	8	29	55	2	4
Florida	2,548	444	17	0	0	1,981	78	123	5
Georgia	1,180	851	72	34	3	280	24	15	1
Hawaii	106	28	26	0	0	72	68	6	6
Idaho	164	45	27	16	10	101	62	2	1
Illinois	1,106	179	16	0	0	924	84	3	0
Indiana	709	350	49	71	10	281	40	7	1
Iowa	353	129	37	0	0	224	63	0	0
Kansas	327	86	26	2	1	210	64	29	9
Kentucky	622	215	35	19	3	387	62	1	0
Louisiana	712	406	57	90	13	210	29	6	1
Maine	126	73	58	0	0	53	42	0	0
Maryland	530	38	7	55	10	415	78	22	4
Massachusetts	332	2	1	1	0	311	94	18	5
Michigan	1,177	377	32	57	5	742	63	1	0
Minnesota	488	285	58	4	1	139	28	60	12
Mississippi	618	347	56	0	0	271	44	0	0
Missouri	831	78	9	5	1	734	88	14	2
Montana	120	49	41	0	0	24	20	47	39
Nebraska	207	154	74	0	0	53	26	0	0
Nevada	289	110	38	2	1	177	61	0	0
New Hampshire	80	28	35	6	8	44	55	2	3
New Jersey	612	127	21	30	5	376	61	79	13
New Mexico	294	24	8	23	8	216	73	31	11
New York	1,270	33	3	8	1	6	0	1,223	96
North Carolina	1,228	0	0	2	0	1,056	86	170	14
North Dakota	54	12	22	0	0	41	76	1	2
Ohio	1,051	197	19	131	12	695	66	28	3
Oklahoma	505	10	2	10	2	426	84	59	12
Oregon	408	189	46	0	0	218	53	1	0
Pennsylvania	1,089	162	15	64	6	793	73	70	6
Rhode Island	53	5	9	5	9	43	81	0	0
South Carolina	713	19	3	37	5	647	91	10	1
South Dakota	107	72	67	2	2	25	23	8	7
Tennessee	868	415	48	0	0	444	51	9	1
Texas	2,772	613	22	261	9	1,898	68	0	0
Utah	265	130	49	4	2	131	49	0	0
Vermont	65	24	37	0	0	39	60	2	3
Virginia	631	0	0	14	2	541	86	76	12
Washington	506	74	15	4	1	398	79	30	6
West Virginia	239	56	23	3	1	180	75	0	0
Wisconsin	506	198	39	3	1	305	60	0	0
Wyoming	76	34	45	0	0	40	53	2	3
U.S. Total	31,814	8,015	25	1,192	4	20,218	64	2,389	8
Puerto Rico	482	247	51	15	3	220	46	0	0

Table 9. Blood Alcohol Concentration (BAC) Test Status for Drivers, Pedestrians, and Pedalcyclists Involved in Fatal Traffic Crashes, 1982 and 1998

State	1982			1998		
	Total Involved	Tested With Known Results		Total Involved	Tested With Known Results	
		Number	Percent		Number	Percent
Alabama	1,161	110	10	1,551	295	19
Alaska	159	58	37	98	52	53
Arizona	1,093	315	29	1,462	335	23
Arkansas	765	80	11	891	479	54
California	6,896	3,575	52	5,590	2,938	53
Colorado	925	596	64	926	530	57
Connecticut	773	332	43	506	288	57
Delaware	201	169	84	189	125	66
District of Columbia	64	33	52	94	23	24
Florida	4,420	1,067	24	4,763	1,622	34
Georgia	1,808	869	48	2,384	1,762	74
Hawaii	240	126	53	201	105	52
Idaho	315	52	17	334	137	41
Illinois	2,524	883	35	2,187	1,094	50
Indiana	1,405	470	34	1,455	612	42
Iowa	675	173	26	679	300	44
Kansas	703	88	13	710	231	33
Kentucky	1,143	523	46	1,263	593	47
Louisiana	1,681	397	24	1,399	721	52
Maine	237	70	30	273	196	72
Maryland	975	423	43	980	361	37
Massachusetts	996	72	7	657	285	43
Michigan	2,177	796	37	2,229	1,156	52
Minnesota	847	413	49	970	699	72
Mississippi	980	90	9	1,319	775	59
Missouri	1,263	201	16	1,687	688	41
Montana	322	125	39	288	136	47
Nebraska	376	200	53	431	341	79
Nevada	392	272	69	531	306	58
New Hampshire	249	89	36	184	107	58
New Jersey	1,686	889	53	1,196	406	34
New Mexico	773	369	48	572	258	45
New York	3,430	951	28	2,470	454	18
North Carolina	1,932	427	22	2,465	422	17
North Dakota	203	14	7	113	56	50
Ohio	2,353	650	28	2,137	628	29
Oklahoma	1,538	592	39	1,038	354	34
Oregon	732	410	56	795	530	67
Pennsylvania	2,728	1,063	39	2,246	874	39
Rhode Island	159	80	50	111	58	52
South Carolina	1,093	294	27	1,482	220	15
South Dakota	197	126	64	222	171	77
Tennessee	1,464	836	57	1,812	1,071	59
Texas	6,028	125	2	5,406	1,579	29
Utah	425	278	65	498	247	50
Vermont	141	104	74	135	81	60
Virginia	1,284	454	35	1,349	472	35
Washington	1,068	561	53	994	505	51
West Virginia	605	267	44	506	287	57
Wisconsin	1,114	554	50	1,037	649	63
Wyoming	257	121	47	178	120	67
U.S. Total	64,975	21,832	34	62,993	26,734	42
Puerto Rico	818	256	31	955	588	62

State-Level Estimates on a Regional Basis

For the states in the various NHTSA regions, the following graphics summarize the estimated percentages of fatalities that were alcohol related (BAC of 0.01 or greater) in 1982 and 1998 and the estimated percentage of drivers involved in fatal crashes with BAC of 0.10 or greater (high alcohol).

Table 10. Estimated Percent Alcohol-Related Fatalities and Drivers With High Alcohol in Fatal Crashes by Region and State, 1982 and 1998

Region and State	Estimated Percent of Alcohol-Related Fatalities (Driver or Nonoccupant with BAC ≥ 0.01 g/dl)		Estimated Percent of Drivers With High Alcohol in Fatal Crashes (BAC ≥ 0.10 g/dl)	
	1982	1998	1982	1998
Region I				
Connecticut	68%	43%	37%	22%
Maine	50%	28%	27%	15%
Massachusetts	60%	47%	32%	20%
New Hampshire	58%	47%	32%	16%
Rhode Island	66%	48%	35%	25%
Vermont	64%	37%	31%	21%
Region II				
New Jersey	56%	36%	26%	15%
New York	47%	24%	22%	10%
*Puerto Rico	49%	51%	22%	20%
Region III				
Delaware	66%	39%	36%	14%
District of Columbia	60%	51%	25%	19%
Maryland	54%	34%	28%	12%
Pennsylvania	58%	42%	30%	22%
Virginia	53%	37%	27%	17%
West Virginia	51%	41%	30%	23%
Region IV				
Alabama	56%	38%	30%	20%
Florida	47%	33%	23%	12%
Georgia	59%	32%	29%	14%
Kentucky	54%	33%	27%	16%
Mississippi	56%	37%	30%	21%
North Carolina	60%	32%	30%	13%
South Carolina	59%	30%	30%	14%
Tennessee	62%	41%	35%	20%
Region V				
Illinois	59%	43%	29%	20%
Indiana	48%	39%	26%	19%
Michigan	60%	39%	32%	17%
Minnesota	55%	43%	30%	19%
Ohio	56%	33%	31%	16%
Wisconsin	62%	42%	36%	21%
Region VI				
Arkansas	61%	31%	33%	15%
Louisiana	55%	46%	25%	21%
New Mexico	64%	45%	34%	21%
Oklahoma	56%	33%	28%	17%
Texas	69%	50%	38%	24%
Region VII				
Iowa	47%	36%	24%	16%
Kansas	45%	35%	24%	18%
Missouri	50%	45%	26%	20%
Nebraska	48%	38%	25%	19%
Region VIII				
Colorado	62%	37%	35%	18%
Montana	66%	44%	37%	25%
North Dakota	64%	47%	38%	30%
South Dakota	60%	41%	36%	22%
Utah	38%	14%	21%	7%
Wyoming	55%	44%	31%	28%
Region IX				
Arizona	56%	43%	27%	18%
California	59%	38%	31%	15%
Hawaii	61%	47%	33%	21%
Nevada	67%	49%	36%	19%
Region X				
Alaska	55%	44%	36%	26%
Idaho	44%	34%	26%	17%
Oregon	63%	43%	35%	20%
Washington	63%	46%	37%	22%
U.S. Total	57%	38%	30%	18%

* Not included in U.S. total.