

# **Estimates of Currently Installed Interlocks in the U.S.**

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The purpose of this study is to estimate the number of ignition interlocks currently installed in the U.S. and rates for the number of interlocks per capita and per fatal impaired driving crash for every individual state. For the purpose of this study, a fatal impaired driving crash is a fatal crash that involved a driver or motorcycle rider with a blood alcohol concentration (BAC) of 0.08 or greater.

This work was commissioned by Mothers Against Drunk Driving (MADD) under a cooperative agreement with the National Highway Traffic Safety Administration (NHTSA).

## **Methodology**

Two independent sources were used to estimate the number of interlocks in each state. The fourteen U.S. Interlock distributors comprised one source. The distributors included AlcoAlert Interlock, Alcohol Countermeasure Systems, Alcohol Detection Systems, Autosense, B.E.S.T. Labs, Consumer Safety Technology, Draeger, Guardian Interlock, Interceptor Ignition Interlocks, Lifesafer Interlock, Monitech, National Interlock, Sens-O-Lock of America and Smart Start. Independent contacts in the states comprised the second source. The data were collected in June-July 2010.

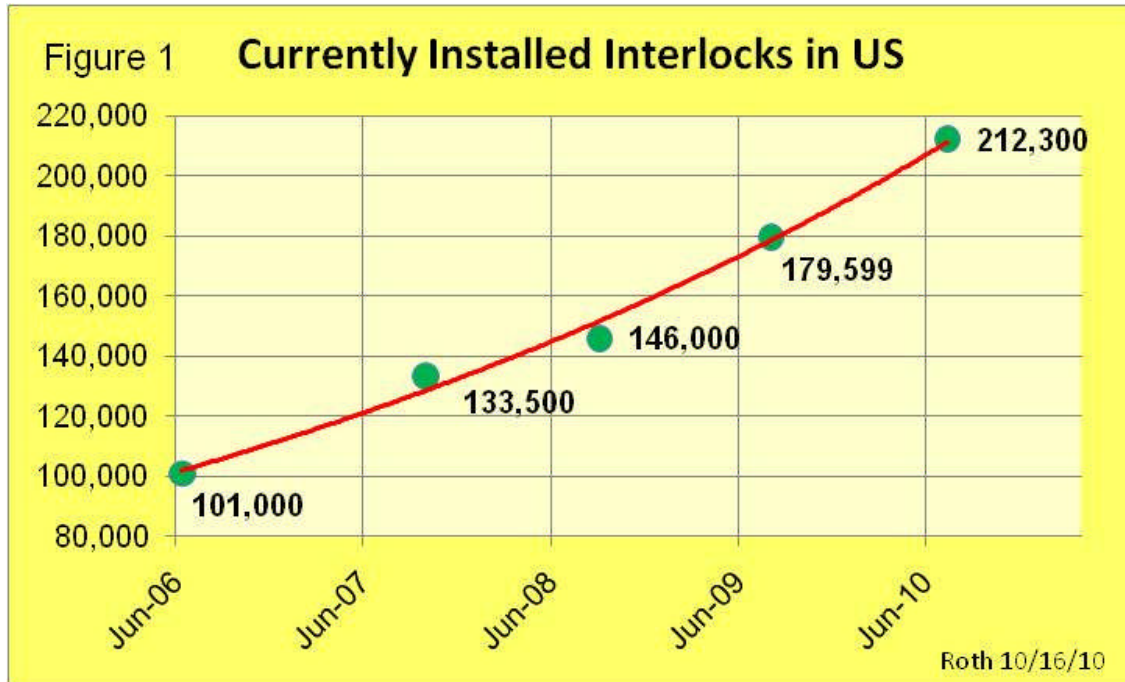
All fourteen ignition interlock distributors provided estimates for the total number of ignition interlocks they produce that were in use in the U.S. as of June 1, 2010. Thirteen of the fourteen distributors (all except Smart Start) also provided state-by-state estimates of their installed interlocks as of that date. Independent state estimates were acquired from forty-two states, based on the number of interlocks currently in use. These data were collected in July 2010. In eight states, either the data were not collected within the state or a source of the data could not be identified. For the forty-two states in which an independent state estimate was available, that value was used. For the eight other states, the sum of values from the thirteen distributors was increased by a percentage equal to the average U.S. market share of Smart Start.

Appendix 1 contains the raw data and computed values used in this report. Column 1 contains 2010 state population estimates. Column 2 contains the state-by-state totals of “interlocks installed as of June 1, 2010” based on estimates from thirteen of the fourteen interlock distributors. The last line of column 2 is the U.S. estimate of installed interlocks as of June 1, 2010, based on data from all fourteen distributors. Column 3 contains independent state estimates of “currently installed interlocks” (collected in July 2010) from 42 states. The author was unable to locate a source of data from eight states (Alabama, California, Indiana, Michigan, Mississippi, Ohio, Rhode Island and South Dakota). There are discrepancies between the estimates in Columns 2 and 3 for some States. These discrepancies may be explained by use of SmartStart interlocks, increases in interlock use between June 1 and July in 2010 or other factors.

Column 4 is the author’s attempt to combine the raw data in columns 2 and 3 to improve the accuracy of the estimates for all states. For the forty-two states in which an independent state estimate was available, that value was used. For each of the eight other states, the sum of values from the thirteen distributors was increased by a percentage equal to the average U.S. market share of Smart Start. The value for the U.S. in column 4 is the actual total of the state values in that column. It is noted that the overall total for column 4 differs from the total for column 2 by about 2000 (approximately 1 percent of the totals). This difference may reflect the timing of the data collection (June 1 – July 2010). The values in column 4 are used in Figures 1 and 2. Column 5 is the preliminary 2009 values for the number of Fatal Alcohol Impaired Driving Crashes for each state. Column 6 is the number of currently installed interlocks (column 4) per million residents (Column 1) for each state and the nation. These values are plotted in Figure 3. Column 7 is the number of currently installed interlocks (column 4) per fatal alcohol impaired driving crash (column 5). The values in column 7 are plotted in Figure 4.

## Results

**Figure 1** shows that the total number of currently installed interlocks in the U.S. in 2010 is approximately 212,000\*. This estimate is based on data supplied by 14 ignition interlock distributors and 42 independent state estimates. That number represents an increase of 18% from the estimate of 180,000 in 2009. Figure 1 also shows estimates of the number of currently installed interlocks for each of the last five years.



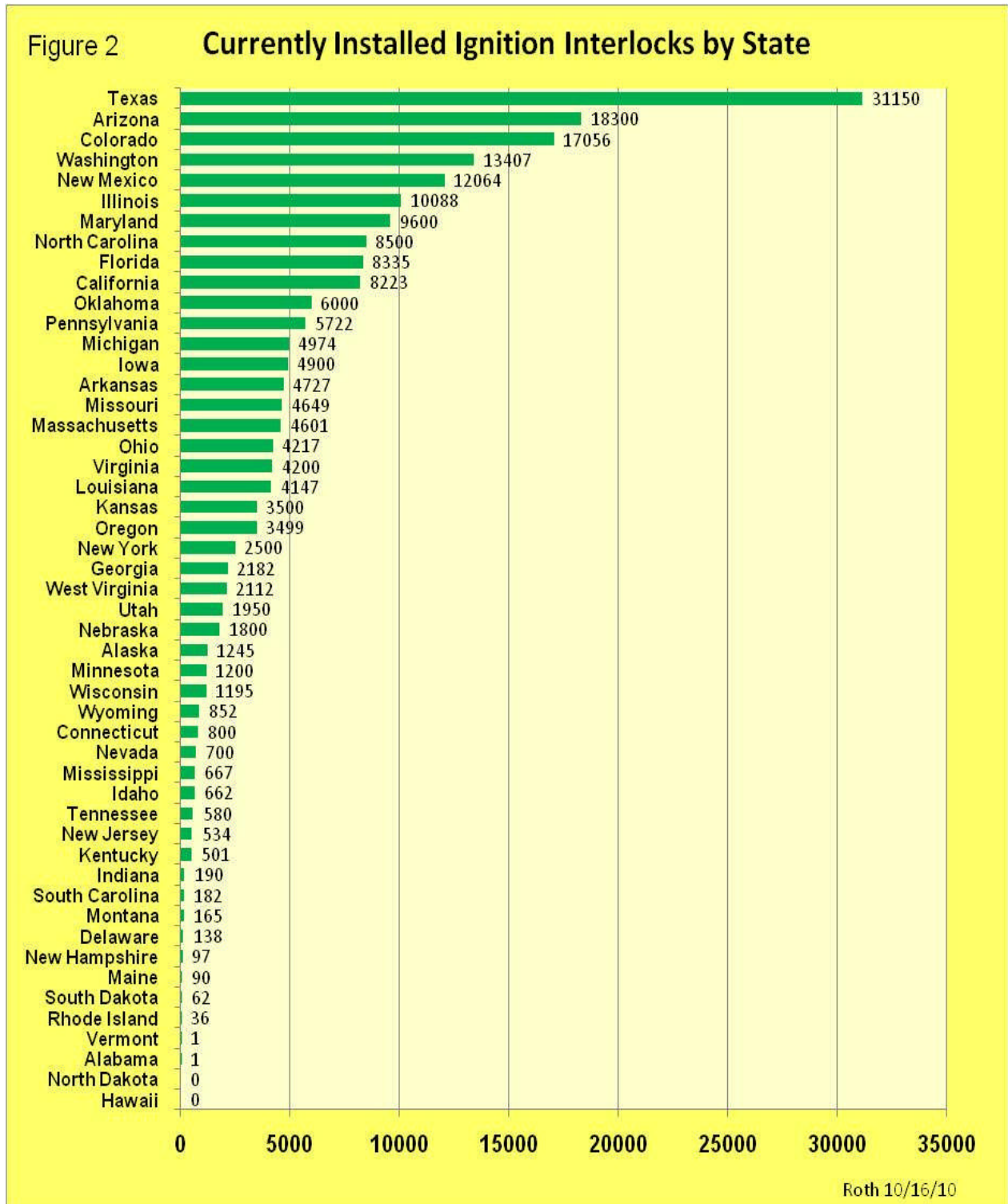
\* The data reported for 2010 are based primarily on reports from State contacts, whereas the data reported in earlier years were based on information from interlock distributors. If interlock distributor data were used in 2010 then the number of currently installed interlocks in the US would have been 210,300 (a 17% increase over 2009.)

There are approximately 1,400,000 impaired driving arrests each year in the U.S. Accordingly, about 15% of those arrested for impaired driving actually install interlocks.

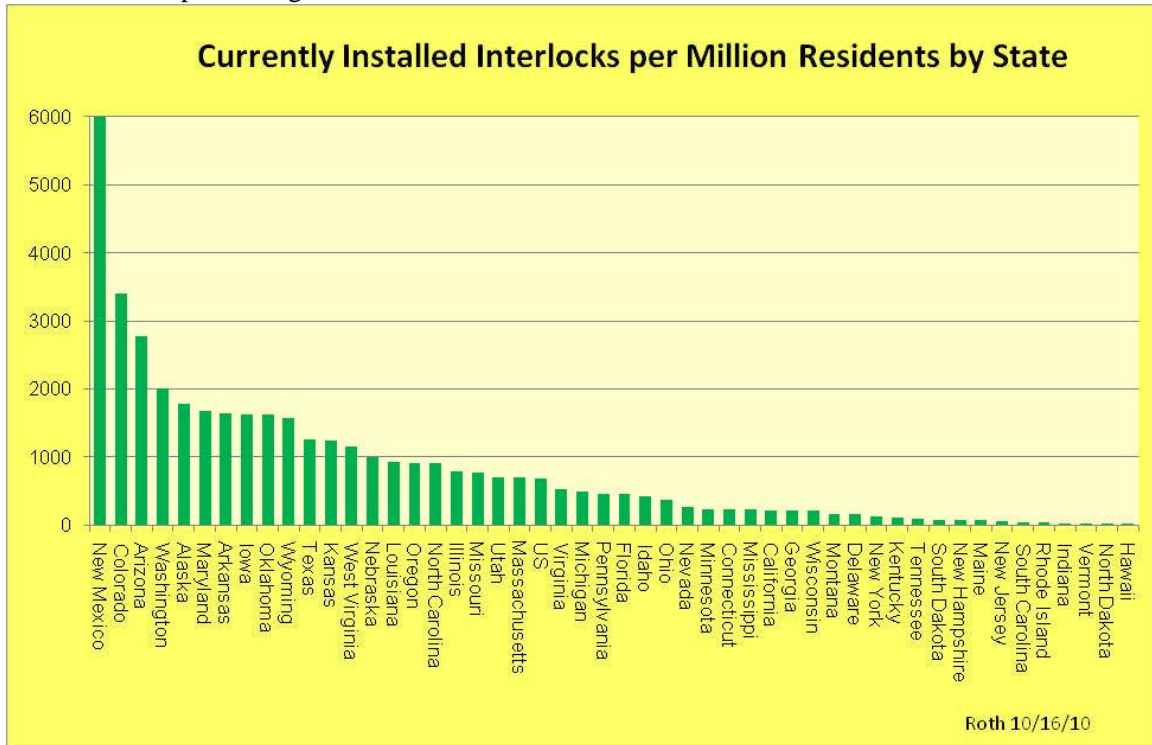
There are approximately 700 currently installed interlocks per million residents in the U.S. (212,000 interlocks divided by 306 million residents).

There are about 22 ignition interlocks per fatal alcohol-impaired-driving crash in the U.S. (212,000 interlocks divided by 9809 fatal alcohol involved driving crashes).

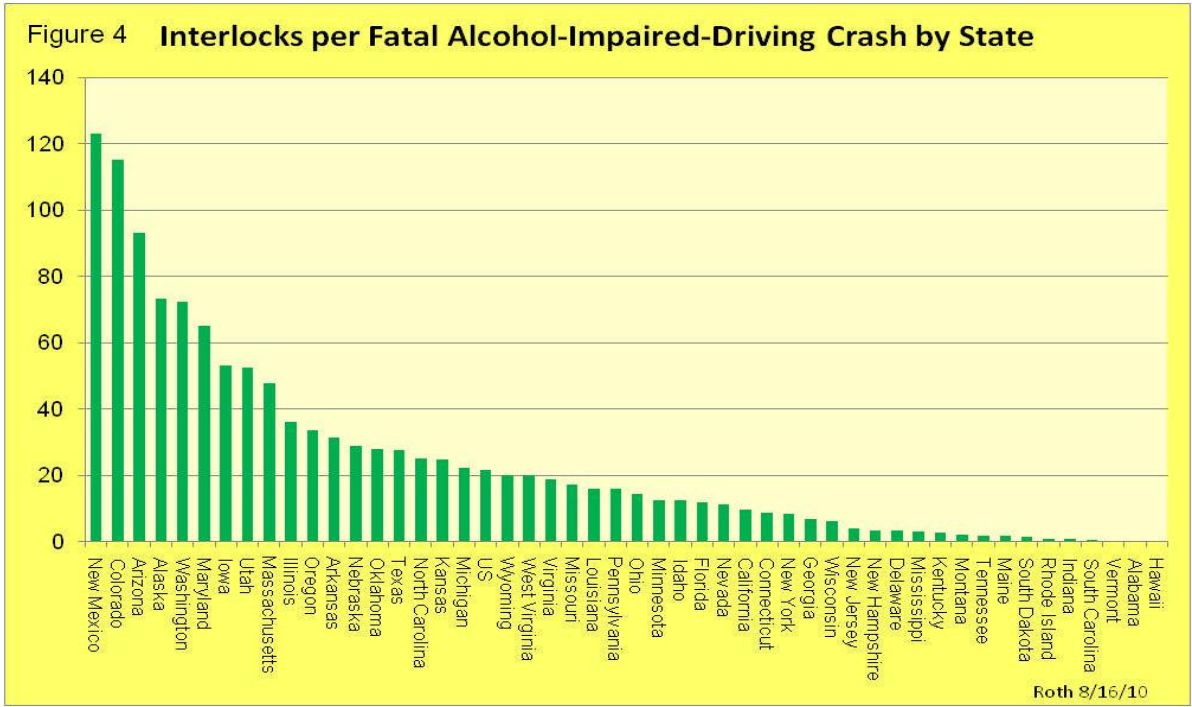
**Figure 2** shows estimates for the number of currently installed ignition interlocks by state. Texas, Arizona, Colorado, Washington, and New Mexico are highest on this measure. These estimates indicate that twelve states have more than 5000 currently installed interlocks; ten states have between 3000 and 5000; eight states have between 1000 and 3000; and the remaining twenty states have a combined total of less than 6300 currently installed interlocks.



**Figure 3** shows currently installed interlocks per capita by state. New Mexico, Colorado, Arizona, and Washington rank highest on this measure. Sanctions can have a general deterrence effect only if members of the public know about them. Therefore the number of interlocks per capita could represent a relative measure of the potential general deterrence effect of interlocks in each state.



**Figure 4** shows the estimated number of currently installed interlocks per fatal alcohol-impaired driving crash by state (2009 NHTSA Fatality Analysis Reporting System). This is one relative measure of the specific deterrent effect of interlock programs in the states. New Mexico, Colorado, Washington, and Arizona rank highest on this measure.



**Appendix 1: A summary of raw data and computed values used in Figures 1-4.**

STATE	2010 Population	IID Estimates by 13/14 Distributors	IID Estimates by State Employee	Combined Estimate of IIDs	2009 Fatal Alcohol Impaired Driving Crashes	IIDs per Million Residents	IIDs per Fatal Alcohol Impaired Driving Crash
Alabama	4,708,708	1		1	255	0	0
Alaska	698,473	920	1,245	1,245	17	1782	73
Arizona	6,595,778	12,810	18,300	18,300	196	2775	93
Arkansas	2,889,450	2,773	4,727	4,727	150	1636	32
California	36,961,664	6,796		8,223	846	222	10
Colorado	5,024,748	11,611	17,056	17,056	148	3394	115
Connecticut	3,518,288	629	800	800	90	227	9
Delaware	885,122	124	138	138	40	156	3
Florida	18,537,969	8,514	8,335	8,335	696	450	12
Georgia	9,829,211	2,007	2,182	2,182	309	222	7
Hawaii	1,295,178	0	0	0	45	1	0
Idaho	1,545,801	671	662	662	53	428	12
Illinois	12,910,409	7,489	10,088	10,088	279	781	36
Indiana	6,423,113	157		190	197	30	1
Iowa	3,007,856	5,342	4,900	4,900	92	1629	53
Kansas	2,818,747	3,164	3,500	3,500	141	1242	25
Kentucky	4,314,113	231	501	501	181	116	3
Louisiana	4,492,076	2,781	4,147	4,147	260	923	16
Maine	1,318,301	77	90	90	47	68	2
Maryland	5,699,478	6,413	9,600	9,600	147	1684	65
Massachusetts	6,593,587	2,719	4,601	4,601	96	698	48
Michigan	9,969,727	4,111		4,974	222	499	22
Minnesota	5,266,214	654	1,200	1,200	95	228	13
Mississippi	2,951,996	551		667	211	226	3
Missouri	5,987,580	4,693	4,649	4,649	267	776	17
Montana	974,989	204	165	165	74	169	2
Nebraska	1,796,619	1,614	1,800	1,800	62	1002	29
Nevada	2,643,085	553	700	700	62	265	11
New Hampshire	1,324,575	206	97	97	27	73	4
New Jersey	8,707,739	519	534	534	135	61	4
New Mexico	2,009,671	10,739	12,064	12,064	98	6003	123
New York	19,541,453	2,124	2,500	2,500	291	128	9
North Carolina	9,380,884	8,500	8,500	8,500	337	906	25
North Dakota	646,844	0	0	0	45	2	0
Ohio	11,542,645	3,485		4,217	291	365	14
Oklahoma	3,687,050	2,256	6,000	6,000	214	1627	28
Oregon	3,825,657	3,275	3,499	3,499	104	915	34
Pennsylvania	12,604,767	3,962	5,722	5,722	359	454	16
Rhode Island	1,053,209	30		36	31	34	1
South Carolina	4,561,242	118	182	182	343	40	1
South Dakota	812,383	51		62	43	76	1
Tennessee	6,296,254	347	580	580	286	92	2
Texas	24,782,302	18,539	31,150	31,150	1,120	1257	28
Utah	2,784,572	1,679	1,950	1,950	37	700	53
Vermont	621,760	1	0	0	23	2	0
Virginia	7,882,590	4,147	4,200	4,200	223	533	19
Washington	6,664,195	14,117	13,407	13,407	185	2012	72
West Virginia	1,819,777	1,851	2,112	2,112	105	1161	20
Wisconsin	5,654,774	970	1,195	1,195	192	211	6
Wyoming	544,270	474	852	852	42	1565	20
US	306,406,893	210,691		212,300	9,809	693	22