

# INDIANA 2009 TRAFFIC SAFETY FACTS

June 2009

A collision produces three levels of data: collision, unit (vehicles), and individual. For this reason, readers should pay particular attention to the wording of statements about the data to avoid misinterpretations.

Designing and implementing effective traffic safety policies requires data-driven analysis of traffic accidents. To help in the policy-making process, the Indiana University Center for Criminal Justice Research is collaborating with the Indiana Criminal Justice Institute to analyze 2008 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the third year of this partnership. Research findings will be summarized in a series of Fact Sheets on various aspects of traffic collisions, including alcohol-related crashes, light and large trucks, dangerous driving, children, motorcycles, occupant protection, and drivers. An additional publication will provide information on county and municipality data and the final publication will be the annual Indiana Crash Fact Book. These publications serve as the analytical foundation of traffic safety program planning and design in Indiana.

Indiana collision data are obtained from Indiana Crash Reports, as completed by law enforcement officers. As of December 31, 2008, approximately 98 percent of all collisions are entered electronically through the ARIES. Trends in collisions incidence as reported in these publications could incorporate the effects of changes to data elements on the Crash Report, agency-specific enforcement policy changes, re-engineered roadways, driver safety education programs and other unspecified effects. If you have questions regarding trends or unexpected results, please contact the Indiana Criminal Justice Institute, Traffic Safety Division for more information.



## ALCOHOL<sub>2008</sub>

### INTRODUCTION

In 2008, 218 of 721 fatal collisions and 246 of 814 fatalities in Indiana involved alcohol. Nationally in 2007, 12,998 people were killed in traffic collisions where at least one driver involved had a blood alcohol content (BAC) result that qualified as *impaired driving*, defined as 0.08 grams per deciliter (g/dL), or higher.<sup>1</sup> Per 100 million vehicle miles travelled (100m VMT), alcohol-related fatalities decreased 31.6 percent from 1998 to 2007 in Indiana, compared to a 10.5 percent decrease nationally. As a proportion of all traffic fatalities, alcohol-related traffic fatalities in Indiana dropped from 38.3 percent in 1998 to 29.7 percent in 2007.

This fact sheet provides summary data on Indiana traffic collisions involving alcohol. Included are general trends in collision outcomes, the incidence of alcohol-related driving by vehicle type and driver age, county level statistics, and economic cost estimates. Data are supplied by the Indiana State Police Automated Reporting Information Exchange System (ARIES), the Indiana Bureau of Motor Vehicles, and the Indiana Department of Transportation.

### DEFINITIONS

For the purposes of data analysis in this fact sheet, the following definitions and categorical labels are used:

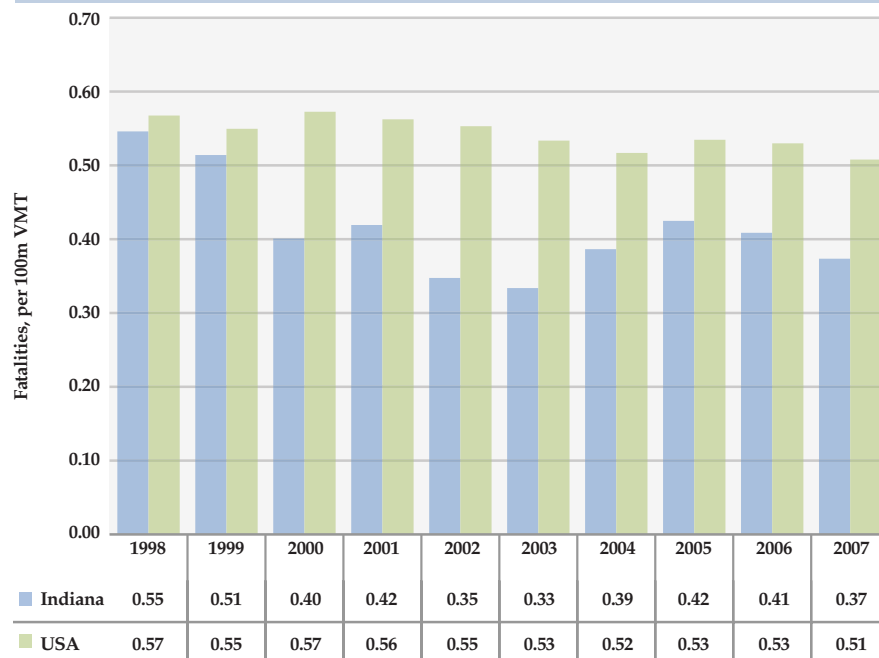
*Alcohol-related* applies to a collision in which any of the following are true: (1) *alcoholic beverages* is listed as the primary factor or as a contributing circumstance to the occurrence of the collision; (2) any vehicle driver or non-motorist involved has a reported BAC test result of 0.01 g/dL or higher; (3) the apparent physical condition of any vehicle driver or non-motorist involved is listed as *had been drinking* by the investigating officer; or (4) a vehicle driver is issued an Operating While Intoxicated (OWI) citation.

*BAC = 0.08+* applies to a collision in which any vehicle driver involved has a BAC test result at or above 0.08 g/dL. Drivers meeting this criterion should have received a Class C misdemeanor pursuant to IC 9-30-5-1. This category is new to the *Traffic Safety Facts* series and follows the definition used by NHTSA in reporting alcohol results. Note that this definition is limited to vehicle drivers, whereas the BAC levels of any driver or non-motorist are included in *alcohol-related*.

*BAC = 0.15+* applies to a collision in which any vehicle driver involved has a BAC test result at or above 0.15 g/dL. Drivers meeting this criterion should have received a Class A misdemeanor pursuant to IC 9-30-5-1. If the driver had a passenger under the age of 18 in the vehicle, a Class D felony could have been imposed. This fact sheet does not explicitly consider these cases but does include them in summary statistics.

The BAC-specific definitions are subsets of *alcohol-related*. Any collision listed as *BAC = 0.08+* qualifies as *alcohol-related*; similarly, any collision listed as *BAC = 0.15+* also qualifies as *BAC = 0.08+*. Also, note that the Fatality Analysis Reporting System (FARS)

**Figure 1: Alcohol-related traffic fatalities per 100 million vehicle miles travelled, 1998-2007**



Sources: Fatality Analysis Reporting System (FARS), retrieved from <http://www-fars.nhtsa.dot.gov/Trends/TrendsAlcohol.aspx>, May 1, 2009.  
Federal Highway Administration, *Highway Statistics*, Series: Vehicle-miles of travel, by functional system (Table VM2), retrieved May 1, 2009.

**Table 1: Indiana traffic collisions, by alcohol involvement and collision severity, 2004-2008**

Alcohol involvement/ Collision severity	Count of collisions					As % 2008 alcohol category	As % 2008 collision severity
	2004	2005	2006	2007	2008		
<b>TOTAL COLLISIONS</b>	<b>208,682</b>	<b>208,359</b>	<b>192,721</b>	<b>204,999</b>	<b>205,281</b>	--	--
<b>Not alcohol-related</b>	<b>195,246</b>	<b>194,675</b>	<b>180,866</b>	<b>195,056</b>	<b>195,874</b>	<b>100%</b>	<b>95.4%</b>
Fatal	597	593	567	571	503	0.3%	69.8%
Non-fatal injury	38,627	37,065	34,649	33,859	32,103	16.4%	90.9%
Property damage	156,022	157,017	145,650	160,626	163,268	83.4%	96.5%
<b>Alcohol-related</b>	<b>13,436</b>	<b>13,684</b>	<b>11,855</b>	<b>9,943</b>	<b>9,407</b>	<b>100%</b>	<b>4.6%</b>
Fatal	260	262	250	233	218	2.3%	30.2%
Non-fatal injury	4,676	4,696	4,200	3,557	3,224	34.3%	9.1%
Property damage	8,500	8,726	7,405	6,153	5,965	63.4%	3.5%
<b>BAC = 0.08+</b>	<b>4,211</b>	<b>5,014</b>	<b>4,703</b>	<b>4,000</b>	<b>3,390</b>	<b>100%</b>	<b>1.7%</b>
Fatal	146	179	183	169	155	4.6%	21.5%
Non-fatal injury	1,568	1,651	1,433	1,143	877	25.9%	2.5%
Property damage	2,497	3,184	3,087	2,688	2,358	69.6%	1.4%
<b>BAC = 0.15+</b>	<b>2,816</b>	<b>3,290</b>	<b>2,971</b>	<b>2,498</b>	<b>2,052</b>	<b>100%</b>	<b>1.0%</b>
Fatal	101	119	125	128	104	5.1%	14.4%
Non-fatal injury	1,068	1,109	923	701	511	24.9%	1.4%
Property damage	1,647	2,062	1,923	1,669	1,437	70.0%	0.8%
	<b>Relative risk of fatal collision</b>						
Alcohol-related	6.3	6.3	6.7	8.0	9.0	--	--
BAC = 0.08+	11.3	11.7	12.4	14.4	17.8	--	--
BAC = 0.15+	11.7	11.9	13.4	17.5	19.7	--	--

Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Notes:**

*Non-fatal injury* applies to collisions with no fatalities and at least one *incapacitating, non-incapacitating, or possible injury*.

*Relative risk of fatal collision* defined as ratio of alcohol involvement fatality rate (fatal, as % total) to *not alcohol-related* fatality rate.

imputes BAC values not reported by state agencies. Indiana data from the ARIES repository are not imputed for this fact sheet.

**GENERAL TRENDS**

As shown in Figure 1, per 100m VMT Indiana alcohol-related traffic fatalities decreased 31.6 percent from 1998 to 2007 and 3.5 percent on average annually (2008 data not yet available from FARS). Compared to the national fatality rate, Indiana alcohol-related traffic fatalities decreased three times as fast over the past ten years. The Indiana alcohol-related traffic fatality rate in 2007 (0.37) was at its lowest since 2003.

Indiana data show a direct relationship between the risk of fatalities in the collision and driver intoxication levels (Table 1). In 2008, 30.2 percent of all fatal traffic collisions in Indiana were alcohol-related. The probability of a collision involving fatalities was nine times greater when alcohol was involved (2.3 percent alcohol-related versus 0.3 percent not alcohol-related). Collisions in 2008 involving a driver with BAC = 0.15+ were 19.7 times more likely to have resulted in a fatality, relative to collisions not involving alcohol. Similarly, collisions involving drivers with BAC = 0.08+ were 17.8 times more likely to have resulted in a fatality, relative to collisions with no alcohol involvement.

Injury data corroborate findings at the collision level on the relationship between injury risk and intoxication levels (Table 2). In 2008, individuals involved in collisions were 21.1 times and 19.1 times more likely to have died when a driver involved had a BAC result = 0.15+ and BAC result = 0.08+, respectively. Over 30 percent of traffic fatalities (246 of 814) were alcohol-related, compared to only 4.3 percent of all individuals involved (13,894 of 325,560) in 2008.

**Table 2: Individuals involved in Indiana traffic collisions, by alcohol involvement and injury status, 2004-2008**

Alcohol involvement/ injury status	Count of individuals					As % 2008 alcohol category	As % 2008 injury severity
	2004	2005	2006	2007	2008		
<b>TOTAL INDIVIDUALS</b>	<b>350,527</b>	<b>344,609</b>	<b>315,894</b>	<b>330,129</b>	<b>325,560</b>	--	--
<b>Not alcohol-related</b>	<b>328,417</b>	<b>322,240</b>	<b>297,354</b>	<b>315,218</b>	<b>311,666</b>	<b>100%</b>	<b>95.7%</b>
Fatal	663	645	625	644	568	0.2%	69.8%
Incapacitating	3,241	3,119	3,087	3,015	2,797	0.9%	82.8%
Non-incapacitating	51,818	49,504	46,231	44,463	41,507	13.3%	91.4%
Other injury status	272,695	268,972	247,411	267,096	266,794	85.6%	96.7%
<b>Alcohol-related</b>	<b>22,110</b>	<b>22,369</b>	<b>18,540</b>	<b>14,911</b>	<b>13,894</b>	<b>100%</b>	<b>4.3%</b>
Fatal	284	293	274	254	246	1.8%	30.2%
Incapacitating	720	704	720	646	582	4.2%	17.2%
Non-incapacitating	5,873	5,923	5,158	4,341	3,906	28.1%	8.6%
Other injury status	15,233	15,449	12,388	9,670	9,160	65.9%	3.3%
<b>BAC = 0.08+</b>	<b>6,563</b>	<b>7,702</b>	<b>6,967</b>	<b>5,945</b>	<b>4,943</b>	<b>100%</b>	<b>1.5%</b>
Fatal	163	199	198	186	172	3.5%	21.1%
Incapacitating	241	248	189	134	100	2.0%	3.0%
Non-incapacitating	1,962	2,114	1,825	1,534	1,166	23.6%	2.6%
Other injury status	4,197	5,141	4,755	4,091	3,505	70.9%	1.3%
<b>BAC = 0.15+</b>	<b>4,382</b>	<b>5,058</b>	<b>4,387</b>	<b>3,749</b>	<b>2,993</b>	<b>100%</b>	<b>0.9%</b>
Fatal	113	132	136	137	115	3.8%	14.1%
Incapacitating	181	170	119	86	51	1.7%	1.5%
Non-incapacitating	1,318	1,391	1,143	962	684	22.9%	1.5%
Other injury status	2,770	3,365	2,989	2,564	2,143	71.6%	0.8%
	<b>Relative risk of fatal collision</b>						
Alcohol-related	6.4	6.5	7.0	8.3	9.7	--	--
BAC = 0.08+	12.3	12.9	13.5	15.3	19.1	--	--
BAC = 0.15+	12.8	13.0	14.7	17.9	21.1	--	--

Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Notes:**

*Non-incapacitating* includes individuals with *non-incapacitating* or *possible* injuries, as reported by the investigating officer.

*Other injury status* includes individuals with *not reported, refused (treatment), unknown, invalid, and missing injury status codes.*

*Relative risk of fatality* defined as ratio of alcohol involvement fatality rate (fatal, as % total) to *not alcohol-related* fatality rate.

**Table 3: Indiana collision outcome rates, by alcohol involvement, 2004-2008**

Outcome/Alcohol involvement	Count, per 100m vehicle miles travelled (VMT)					As % 2008 alcohol category	As % 2008 injury severity
	2004	2005	2006	2007	2008		
<b>Total collisions</b>	<b>279.96</b>	<b>280.61</b>	<b>259.82</b>	<b>276.68</b>	<b>277.62</b>	<b>0.94</b>	<b>-0.59</b>
Alcohol-related	18.03	18.43	15.98	13.42	12.72	-0.70	-1.33
BAC = 0.08+	5.65	6.75	6.34	5.40	4.58	-0.81	-0.27
BAC = 0.15+	3.78	4.43	4.01	3.37	2.78	-0.60	-0.25
<b>Fatal collisions</b>	<b>1.15</b>	<b>1.15</b>	<b>1.10</b>	<b>1.09</b>	<b>0.98</b>	<b>-0.11</b>	<b>-0.04</b>
Alcohol-related	0.35	0.35	0.34	0.31	0.29	-0.02	-0.01
BAC = 0.08+	0.20	0.24	0.25	0.23	0.21	-0.02	< 0.01
BAC = 0.15+	0.14	0.16	0.17	0.17	0.14	-0.03	< 0.01
<b>Fatalities</b>	<b>1.27</b>	<b>1.26</b>	<b>1.21</b>	<b>1.21</b>	<b>1.10</b>	<b>-0.11</b>	<b>-0.04</b>
Alcohol-related	0.38	0.39	0.37	0.34	0.33	-0.01	-0.01
BAC = 0.08+	0.22	0.27	0.27	0.25	0.23	-0.02	< 0.01
BAC = 0.15+	0.15	0.18	0.18	0.18	0.16	-0.03	< 0.01
VMT (millions)	74,539	74,252	74,173	74,092	73,944		-

Sources: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009. Indiana Department of Transportation, as of April 15, 2009.

**Note:**

*Vehicle miles travelled* not available for 2008; value imputed from average annual percent change in series from 2004 to 2007.

Alcohol-related collisions and fatalities per 100m VMT have generally declined since 2004 (Table 3). In 2008, fatality and fatal collision rates involving alcohol were the lowest since at least 2004. Fatality rates in collisions involving drivers with higher intoxication levels (i.e., BAC = 0.08+ and BAC = 0.15+) have remained relatively constant since 2004.

When normalized by vehicle registrations, motorcycle operators (including moped operators) were most likely to have been operating under the influence of alcohol. In 2008, the involvement rate of motorcycle operators with BAC = 0.08+ (1.4 per 10,000 registrations) was over four times greater than any other vehicle type (Table 4). Similarly, the involvement rate for motorcycle operators with BAC = 0.15+ (0.75 per 10,000 registrations) was three times greater than any other vehicle type. From 2007 to 2008, the involvement rate of light truck drivers and motorcycle operators had the most significant decreases in involvement rates across intoxication levels.

Figure 2 shows that, when adjusted by licensing statistics, driver age and intoxication levels in traffic collisions have an inverse relationship. The 15 to 20 and 21 to 24 year old age groups had the highest involvement rate in collisions per 10,000 licensed drivers in 2008. The data show a general decline in involvement as driver age increases, with the exception of the 45 to 54 year old age group.

**SUBSTANCE TESTING**

In 2008, among drivers involved in fatal collisions, 74.3 percent of surviving drivers and 70.3 percent of killed drivers were administered tests for alcohol and/or drugs (Table 5). These testing rates increased 5.2 and 0.9 percentage points, respectively, from 2007 to 2008. The data show a higher inci-

**Table 4: Drivers in Indiana fatal collisions, by driver alcohol involvement and vehicle type, 2004-2008**

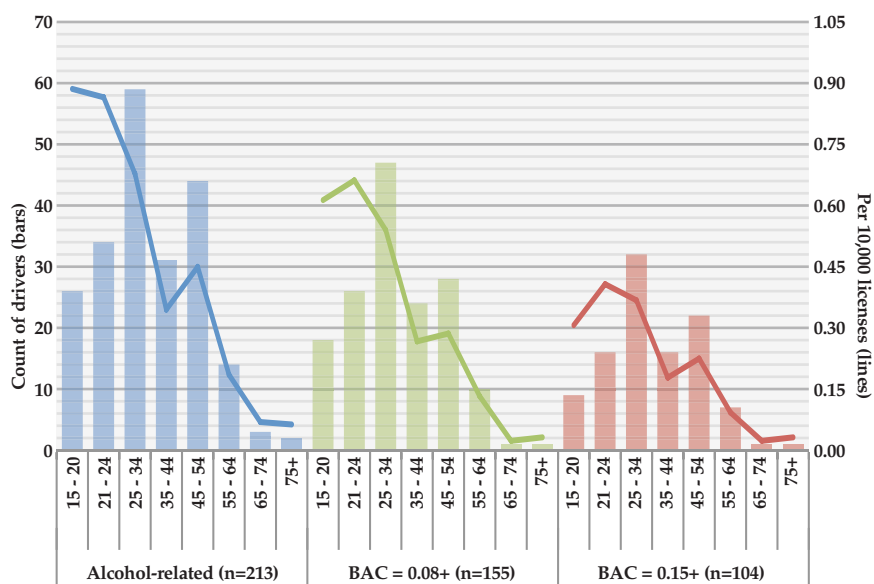
Alcohol involvement/ vehicle type	Count of drivers in fatal collisions					Per 10,000 vehicle registration		
	2004	2005	2006	2007	2008	2007	2008	Change
<b>Not alcohol-related</b>	<b>1,076</b>	<b>1,034</b>	<b>992</b>	<b>1,005</b>	<b>899</b>	<b>1.55</b>	<b>1.41</b>	<b>-0.14</b>
Passenger car	454	411	420	381	388	0.96	0.98	0.02
Light truck	356	391	341	378	281	2.42	1.89	-0.54
Large truck	171	139	136	143	123	2.10	1.86	-0.23
Motorcycle, moped	76	76	79	80	89	4.32	4.44	0.12
<b>Alcohol-related</b>	<b>262</b>	<b>271</b>	<b>248</b>	<b>231</b>	<b>215</b>	<b>0.36</b>	<b>0.34</b>	<b>-0.02</b>
Passenger car	131	110	124	101	110	0.25	0.28	0.02
Light truck	95	118	85	88	64	0.56	0.43	-0.13
Large truck	3	2	2	0	2	0.00	0.03	0.03
Motorcycle, moped	29	38	34	41	38	2.22	1.90	-0.32
<b>BAC = 0.08+</b>	<b>147</b>	<b>181</b>	<b>189</b>	<b>169</b>	<b>157</b>	<b>0.26</b>	<b>0.25</b>	<b>-0.01</b>
Passenger car	74	70	94	74	82	0.19	0.21	0.02
Light truck	58	81	68	64	46	0.41	0.31	-0.10
Large truck	0	0	1	0	1	0.00	0.02	0.02
Motorcycle, moped	14	28	25	31	28	1.68	1.40	-0.28
<b>BAC = 0.15+</b>	<b>101</b>	<b>119</b>	<b>126</b>	<b>128</b>	<b>106</b>	<b>0.20</b>	<b>0.17</b>	<b>-0.03</b>
Passenger car	50	46	59	57	53	0.14	0.13	-0.01
Light truck	41	56	49	51	37	0.33	0.25	-0.08
Large truck	0	0	1	0	1	0.00	0.02	0.02
Motorcycle, moped	9	17	17	20	15	1.08	0.75	-0.33

Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Note:**

Alcohol-categorical totals include other vehicle types, such as *bus* and *recreational vehicle*. Consequently, the sum of presented vehicle types may not equal categorical totals.

**Figure 2: Drivers involved in Indiana fatal collisions, by driver alcohol involvement and age cohort, 2008**



Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Note:**

Data limited to drivers with valid age reported.

dence of intoxicated driving among killed drivers, relative to surviving drivers. Among drivers killed in fatal collisions, 37 percent of those for whom BAC results were reported had a positive result (0.01+), compared to 13.4 percent for surviving drivers. Relative to drivers with positive BAC results, 73.1 percent of surviving drivers and 88.1 percent of killed drivers had a BAC result = 0.08+.

### ECONOMIC COSTS

The estimated economic costs of alcohol-related traffic collisions in Indiana decreased from 2004 to 2008 both nominally and as a percent share of total economic costs (Figure 3). Estimated costs of alcohol-related collisions were \$514 million in 2008 and have decreased 6.6 percent annually on average since 2004. In 2008, \$170 million of economic costs were associated with collisions involving a driver with BAC = 0.15+. Costs associated with collisions with a driver with BAC = 0.08+ were \$263 million. Alcohol-related collisions constituted between 11.5 percent (2008) and 13.0 percent (2004) of costs for all collisions from 2004 to 2008.

### COUNTY COMPARISONS

In 2008, five counties had alcohol-related fatality rates greater than one per 100m VMT (Newton, Pulaski, Starke, Sullivan, and Warren) (See Table 6). On average, county fatality rates were 0.35 per 100m VMT. The average county proportion of traffic fatalities that involved a driver with BAC = 0.08+ and BAC = 0.15+ was 18.3 percent and 12.1 percent, respectively (not shown in table). Statewide, 72.4 percent (806 of 1,114) of drivers involved in fatal collisions were tested for alcohol/drugs. Seventy-eight counties in Indiana tested at least one-half of drivers involved and 39 tested at least three-fourths of drivers. Two counties tested no drivers involved in fatal collisions (Perry and Wells).

**Table 5: Drivers involved in Indiana fatal collisions, by injury status and alcohol test results, 2004-2008**

	Count of drivers SURVIVING					Count of drivers KILLED				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
<b>ALL DRIVERS</b>	694	644	631	610	561	644	661	609	626	553
<i>By test type given</i>										
Alcohol / drug (tested)	497	419	422	422	417	480	452	394	435	389
Refused test	1	0	2	0	0	--	--	--	--	--
Not tested	135	166	190	99	101	116	137	202	92	112
Test type not reported	61	59	17	89	43	48	72	13	99	52
Tested, as % all	71.6%	65.1%	66.9%	69.2%	74.3%	74.5%	68.4%	64.7%	69.5%	70.3%
<i>By BAC result (g/dL)</i>										
Not reported	312	287	257	258	174	247	260	262	244	188
Reported	382	357	374	352	387	397	401	347	382	365
0.00	327	279	315	305	335	262	252	185	229	229
0.01+ (positive)	51	77	59	47	52	129	146	161	152	135
0.08+	39	59	49	34	38	108	122	140	135	119
0.15+	25	33	25	22	24	76	86	101	106	82
Reported, as % all	55.0%	55.4%	59.3%	57.7%	69.0%	61.6%	60.7%	57.0%	61.0%	66.0%
0.01+, as % reported	13.4%	21.6%	15.8%	13.4%	13.4%	32.5%	36.4%	46.4%	39.8%	37.0%
0.08+, as % positive	76.5%	76.6%	83.1%	72.3%	73.1%	83.7%	83.6%	87.0%	88.8%	88.1%
0.15+, as % positive	49.0%	42.9%	42.4%	46.8%	46.2%	58.9%	58.9%	62.7%	69.7%	60.7%

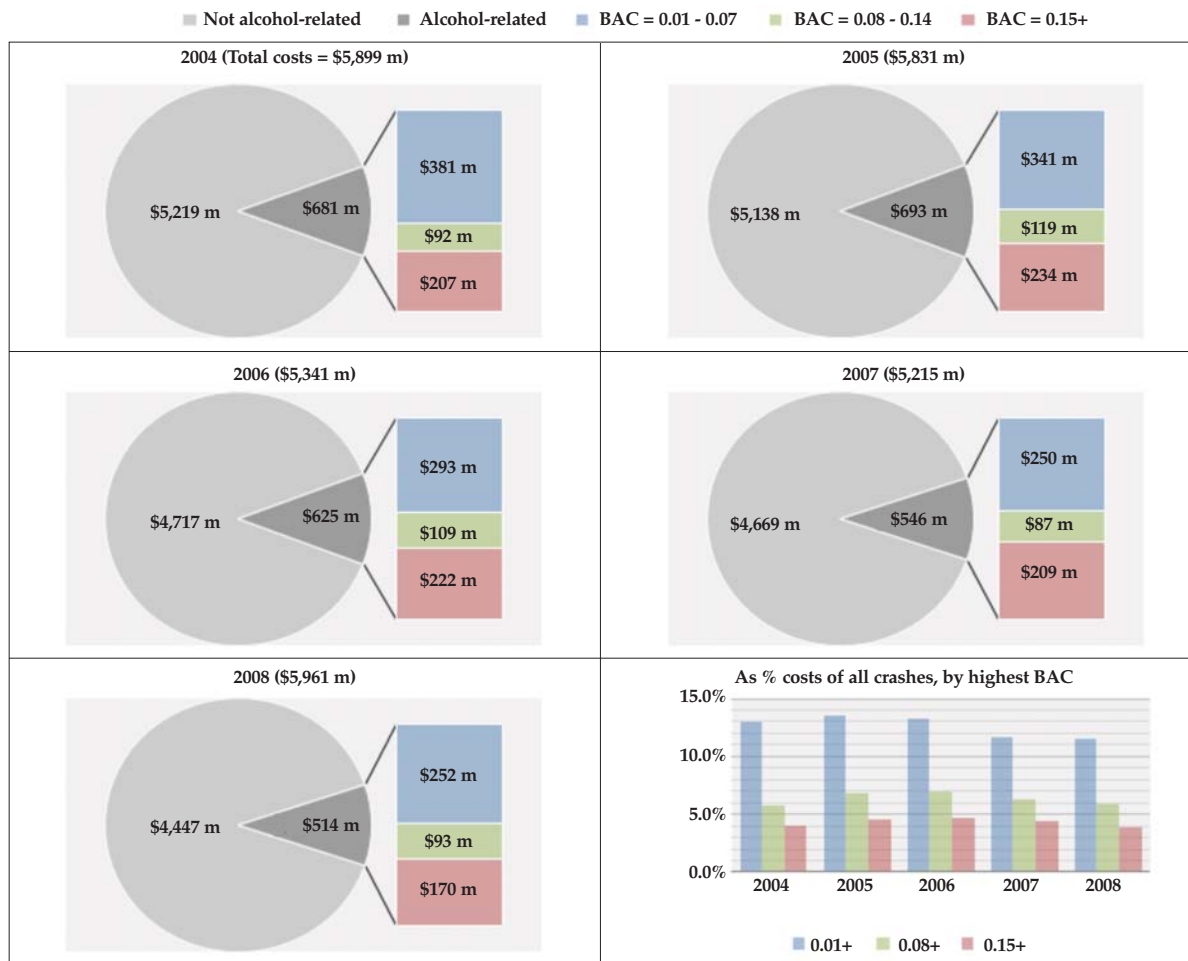
Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Notes:**

*Surviving* drivers includes all drivers with non-fatal injury status or no injury status reported.

*Reported* BAC totals include cases where BAC result was invalid (non-numeric or greater than 0.59 g/dL).

**Figure 3: Estimated economic costs of Indiana traffic collisions, by highest BAC result in collision, 2004-2008**



Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Notes:**

All costs in 2007 USD.

Costs computed by multiplying aggregate costs by the proportion of collisions involving alcohol.

See 2007 *Indiana Crash Facts* for details on cost sources and methodology, available at [http://www.in.gov/cji/files/CrashFactBook\\_08\\_FINAL.pdf](http://www.in.gov/cji/files/CrashFactBook_08_FINAL.pdf).

BAC = 0.01 - 0.07 includes collisions defined as alcohol-related but without a valid BAC reported; in the bar graph 0.01+ includes these cases as well.

**Table 6: Fatalities in Indiana collisions, by county and alcohol test results, 2008**

County	Total fatalities	Fatalities by highest driver BAC in collision				Fatality rate			Driver alcohol/drug tests		
		0.00	0.01+	0.08+	0.15+	Alcohol-related fatalities	Vehicle miles (millions)	Alcohol-related, per 100m VMT	Total drivers involved	Drivers tested	% Tested
<b>INDIANA</b>	<b>814</b>	<b>424</b>	<b>204</b>	<b>172</b>	<b>115</b>	<b>246</b>	<b>73,944</b>	<b>0.33</b>	<b>1,114</b>	<b>806</b>	<b>72.4%</b>
Mean	9	5	2	2	1	3	804	0.35	12	9	68.9%
Median	6	3	1	1	0	2	506	0.31	8	6	71.4%
Low	1	0	0	0	0	0	57	0.00	1	0	0.0%
High	91	37	33	28	18	40	9,651	1.93	120	93	100.0%
Adams	3	2	0	0	0	1	328	0.30	4	2	50.0%
Allen	22	17	3	3	1	4	3,691	0.11	27	24	88.9%
Bartholomew	11	4	1	1	0	1	908	0.11	14	6	42.9%
Benton	3	2	1	1	0	1	162	0.62	7	4	57.1%
Blackford	3	0	1	1	1	1	160	0.62	2	1	50.0%
Boone	10	3	3	3	0	3	1,120	0.27	14	9	64.3%
Brown	3	1	0	0	0	0	155	0.00	4	1	25.0%
Carroll	6	4	1	0	0	1	274	0.36	6	5	83.3%
Cass	8	8	0	0	0	0	434	0.00	7	6	85.7%
Clark	12	8	2	1	1	2	1,337	0.15	20	13	65.0%
Clay	5	3	1	1	1	2	437	0.46	5	3	60.0%
Clinton	10	7	1	1	0	1	562	0.18	14	10	71.4%
Crawford	3	0	2	2	2	2	222	0.90	3	2	66.7%
Daviess	10	8	1	1	1	2	336	0.60	11	8	72.7%
Dearborn	3	0	0	0	0	0	612	0.00	4	1	25.0%
Decatur	7	4	2	2	0	2	506	0.40	8	6	75.0%
DeKalb	5	2	2	2	2	2	626	0.32	7	5	71.4%
Delaware	7	3	2	2	2	3	1,628	0.18	9	5	55.6%
Dubois	5	3	2	1	0	2	506	0.40	9	8	88.9%
Elkhart	28	20	7	6	4	8	1,910	0.42	41	38	92.7%
Fayette	4	2	2	2	1	2	228	0.88	4	4	100.0%
Floyd	11	8	2	2	0	2	871	0.23	18	13	72.2%
Fountain	3	1	0	0	0	0	266	0.00	4	2	50.0%
Franklin	7	4	2	2	2	2	298	0.67	12	11	91.7%
Fulton	4	4	0	0	0	0	270	0.00	7	5	71.4%
Gibson	5	2	3	2	0	4	522	0.77	8	6	75.0%
Grant	6	2	1	1	1	2	926	0.22	9	6	66.7%
Greene	3	3	0	0	0	0	409	0.00	4	4	100.0%
Hamilton	14	10	3	3	3	3	2,429	0.12	29	26	89.7%
Hancock	8	3	5	5	5	5	1,063	0.47	8	8	100.0%
Harrison	7	2	3	2	2	4	524	0.76	8	7	87.5%
Hendricks	14	10	3	3	3	4	1,185	0.34	26	21	80.8%
Henry	8	4	0	0	0	0	748	0.00	6	4	66.7%
Howard	10	4	5	4	2	6	800	0.75	11	10	90.9%
Huntington	4	1	1	1	1	1	660	0.15	6	3	50.0%
Jackson	6	4	1	1	1	1	678	0.15	10	7	70.0%
Jasper	7	5	0	0	0	0	865	0.00	10	4	40.0%
Jay	4	0	1	0	0	1	284	0.35	5	1	20.0%
Jefferson	3	2	1	1	0	1	321	0.31	4	4	100.0%
Jennings	9	5	2	2	2	2	300	0.67	12	10	83.3%
Johnson	15	10	4	3	0	4	1,087	0.37	21	14	66.7%
Knox	1	1	0	0	0	0	507	0.00	2	2	100.0%
Kosciusko	7	6	1	0	0	4	815	0.49	10	10	100.0%
LaGrange	6	5	0	0	0	0	583	0.00	11	9	81.8%
Lake	52	22	20	19	14	23	4,884	0.47	63	47	74.6%
LaPorte	22	7	8	5	5	11	1,508	0.73	28	19	67.9%
Lawrence	8	3	3	1	0	3	506	0.59	9	6	66.7%
Madison	13	8	3	2	2	4	1,341	0.30	20	14	70.0%
Marion	91	37	33	28	18	40	9,651	0.41	120	93	77.5%
Marshall	7	3	1	1	1	1	620	0.16	12	7	58.3%
Martin	2	1	0	0	0	0	134	0.00	4	3	75.0%
Miami	4	2	0	0	0	0	403	0.00	7	3	42.9%
Monroe	11	4	5	5	3	5	1,027	0.49	13	10	76.9%
Montgomery	7	6	0	0	0	0	609	0.00	13	8	61.5%
Morgan	9	5	2	2	2	2	839	0.24	15	7	46.7%
Newton	8	4	3	3	2	3	262	1.15	7	5	71.4%
Noble	6	2	3	3	2	4	540	0.74	7	6	85.7%
Ohio	1	1	0	0	0	0	57	0.00	1	1	100.0%
Orange	3	1	0	0	0	0	205	0.00	4	1	25.0%
Owen	9	4	1	0	0	2	210	0.95	14	7	50.0%
Parke	5	3	0	0	0	2	250	0.80	6	6	100.0%
Perry	1	0	0	0	0	0	253	0.00	1	0	0.0%
Pike	3	2	0	0	0	1	204	0.49	3	2	66.7%
Porter	27	16	8	8	5	9	1,812	0.50	47	39	83.0%
Posey	3	2	0	0	0	0	408	0.00	4	3	75.0%
Pulaski	2	0	2	2	2	2	196	1.02	1	1	100.0%
Putnam	8	2	0	0	0	0	599	0.00	12	2	16.7%
Randolph	2	0	1	1	0	1	312	0.32	3	1	33.3%
Ripley	3	3	0	0	0	0	387	0.00	3	3	100.0%

(continued on the next page)

**Table 6:** (continued from the previous page)

County	Total fatalities	Fatalities by highest driver BAC in collision				Fatality rate			Driver alcohol/drug tests		
		0.00	0.01+	0.08+	0.15+	Alcohol-related fatalities	Vehicle miles (millions)	Alcohol-related, per 100m VMT	Total drivers involved	Drivers tested	% Tested
Rush	4	3	1	1	0	1	250	0.40	5	5	100.0%
Saint Joseph	26	16	4	3	2	5	2,361	0.21	31	23	74.2%
Scott	6	3	0	0	0	0	317	0.00	13	6	46.2%
Shelby	6	4	1	1	0	1	719	0.14	9	8	88.9%
Spencer	8	5	2	2	2	2	399	0.50	11	10	90.9%
Starke	8	2	4	1	0	5	260	1.93	8	4	50.0%
Steuben	8	4	2	1	0	2	708	0.28	7	7	100.0%
Sullivan	5	1	2	2	2	3	290	1.04	6	3	50.0%
Switzerland	2	2	0	0	0	0	94	0.00	2	2	100.0%
Tippecanoe	17	6	5	4	3	5	1,506	0.33	20	16	80.0%
Tipton	3	1	1	1	0	1	314	0.32	7	4	57.1%
Union	1	1	0	0	0	0	89	0.00	2	1	50.0%
Vanderburgh	15	9	4	3	2	5	1,513	0.33	21	18	85.7%
Vermillion	5	4	0	0	0	0	297	0.00	9	6	66.7%
Vigo	17	8	2	2	2	5	1,167	0.43	25	13	52.0%
Wabash	5	2	1	1	1	1	436	0.23	8	4	50.0%
Warren	4	0	2	1	1	2	197	1.02	5	2	40.0%
Warrick	11	7	1	1	0	2	601	0.33	13	9	69.2%
Washington	7	5	0	0	0	0	304	0.00	10	7	70.0%
Wayne	6	0	4	4	4	4	1,041	0.38	6	5	83.3%
Wells	2	0	0	0	0	0	334	0.00	2	0	0.0%
White	3	2	1	1	1	1	551	0.18	3	3	100.0%
Whitley	8	4	2	1	1	2	454	0.44	13	8	61.5%

Source: Indiana State Police Automated Reporting Information Exchange System, as of May 5, 2009.

**Notes:**

Alcohol-related fatalities may not equal fatalities with driver BAC = 0.01+ result since the definition alcohol-related includes data elements other than BAC result. Vehicle miles not available for 2008; values imputed from average annual percent change in series from 2004 to 2007.

**SUMMARY**

Indiana collision data show that individuals are at a greater risk for being killed when the intoxication level of drivers involved increases. Alcohol-related collision and fatality rates have generally declined over the past five years and were at five-year lows in 2008. Motorcycle/moped operators were most likely to have been intoxicated when in a collision, relative to other vehicle types. Also, younger drivers were most likely to have

been intoxicated when in collisions, relative to other age groups. Alcohol/drug testing on drivers involved in fatal collisions has generally been around 70 percent annually since 2004; among this same group, drivers killed in fatal collisions were more likely to have had BAC results above legal limits for intoxication compared to surviving drivers. Among all drivers involved in fatal traffic collisions in 2008, approximately 72 percent were tested for alcohol and/or drugs.

**Endnote:**

<sup>1</sup>National Center for Statistics and Analysis, National Highway Traffic Safety Administration, (2008). *Traffic Safety Facts, 2007: Alcohol Impaired Driving*. DOT HS 810 985.

This publication was prepared on behalf of the Indiana Criminal Justice Institute by the Indiana University Center for Criminal Justice Research (CCJR). Please direct any questions concerning data in this document to ICJI at 317-232-1233.

This publication is one of a series of Fact Sheets that, along with the annual Indiana Crash Fact Book, form the analytical foundation of traffic safety program planning and design in the state of Indiana. Funding for these publications is provided by the Indiana Criminal Justice Institute and the National Highway Traffic Safety Administration.

An electronic copy of this document can be accessed via the CCJR website ([www.criminaljustice.iupui.edu](http://www.criminaljustice.iupui.edu)), the ICJI website ([www.in.gov/cji/](http://www.in.gov/cji/)), or you may contact the Center for Criminal Justice Research at 317-261-3000.

### **The Indiana Criminal Justice Institute (ICJI)**

Guided by a Board of Trustees representing all components of Indiana's criminal and juvenile justice systems, the Indiana Criminal Justice Institute serves as the state's planning agency for criminal justice, juvenile justice, traffic safety, and victim services. ICJI develops long-range strategies for the effective administration of Indiana's criminal and juvenile justice systems and administers federal and state funds to carry out these strategies.

### **The Governor's Council on Impaired & Dangerous Driving**

The Governor's Council on Impaired & Dangerous Driving, a division of the Indiana Criminal Justice Institute, serves as the public opinion catalyst and the implementing body for statewide action to reduce death and injury on Indiana roadways. The Council provides grant funding, training, coordination and ongoing support to state and local traffic safety advocates.

### **Indiana University Public Policy Institute**

The Indiana University (IU) Public Policy Institute is a collaborative, multidisciplinary research institute within the Indiana University School of Public and Environmental Affairs (SPEA), Indianapolis. The Institute serves as an umbrella organization for research centers affiliated with SPEA, including the Center for Urban Policy and the Environment, the Center for Health Policy, and the Center for Criminal Justice Research. The Institute also supports the Office of International Community Development and the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

### **The Center for Criminal Justice Research (CCJR)**

The Center for Criminal Justice Research, one of three applied research centers currently affiliated with the Indiana University Public Policy Institute, works with public safety agencies and social services organizations to provide impartial applied research on criminal justice and public safety issues. CCJR provides analysis, evaluation, and assistance to criminal justice agencies; and community information and education on public safety questions. CCJR research topics include traffic safety, crime prevention, criminal justice systems, drugs and alcohol, policing, violence and victimization, and youth.

### **The National Highway Traffic Safety Administration (NHTSA)**

NHTSA provides leadership to the motor vehicle and highway safety community through the development of innovative approaches to reducing motor vehicle crashes and injuries. The mission of NHTSA is to save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity.

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