

# INDIANA 2011 TRAFFIC SAFETY FACTS

## ALCOHOL, 2011

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The National Highway Traffic Safety Administration (NHTSA) defines drivers as alcohol-impaired “when their blood alcohol concentration (BAC) is 0.08 grams per deciliter (g/dL) or higher [and] any fatal crash involving a driver with a BAC of 0.08 or higher is considered to be an alcohol-impaired-driving crash, and fatalities occurring in those crashes are considered to be alcohol-impaired-driving fatalities” (NHTSA DOT HS 811 606, 2012, p. 1). Alcohol-impaired driving in the United States in 2010 (latest data available) resulted in 10,228 fatalities, or 31 percent of all motor vehicle traffic fatalities.

In 2011, alcohol-impaired driving in Indiana was linked to 140 fatalities (increase from 135 fatalities in 2010) and more than 2,000 injuries (decrease from 2,183 injuries in 2010). Alcohol-impaired collisions were less than 3 percent of all Indiana crashes, but accounted for 19 percent of Indiana’s 749 traffic fatalities in 2011. Among NHTSA Region V (Great Lakes) states from 2001 to 2011, Indiana had comparatively lower rates of alcohol-impaired collisions per vehicle mile travelled, but comparatively higher rates per capita.

By 2011, the fastest annual growth was in alcohol-impaired collisions resulting in incapacitating injuries. About 20 percent of fatal collisions in Indiana are typically classified as alcohol-impaired. Alcohol-impaired collisions occur disproportionately during late night and early morning hours, especially on Saturdays and Sundays. Although the largest counts of alcohol-impaired collisions are within urban places, alcohol-impaired fatalities are more likely to occur in less densely populated exurban and rural areas. Drivers of motorcycles and pickup trucks are most likely to be involved in alcohol-impaired collisions.

The numbers of individuals involved in alcohol-impaired crashes grew about five percent annually from 2007 to 2011. During this period, the

persons most seriously injured or killed in alcohol-impaired collisions were disproportionately the impaired drivers and their passengers—impaired drivers in 2011 were 15 times more likely to be killed than the drivers in non-impaired crashes. Males are more likely to be alcohol-impaired than females, and tend to have higher reported BAC levels than females. In alcohol-impaired collisions, drivers killed have substantially higher BAC levels than drivers who survive. The age groups most at risk of involvement in alcohol-impaired collisions are 21 to 24 years and 25 to 34 years. Considering all collisions, when drivers were found to have positive BAC levels, the majority of individuals tend to have BAC levels of 0.15 g/dL or more, which is the legal threshold for per se and felony alcohol violations in Indiana.

This fact sheet presents information on alcohol-impaired traffic collisions in Indiana. It examines Indiana’s comparative status among other Great Lakes states, different dimensions of alcohol-impaired collisions, the general incidence of alcohol testing, the BAC test results for involved drivers, and other attributes of alcohol-impaired collisions, injuries, and fatalities reported in the Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 20, 2012.

### Great Lakes (NHTSA Region V) comparisons

From 2001 to 2010, rates of alcohol-impaired crashes (i.e., when at least one driver has a BAC level of 0.08 g/dL or more) declined in Indiana and the other five NHTSA Region V states, whether measured per vehicle mile travelled (VMT) or by population. Indiana’s rate of alcohol-impaired crash fatalities per 100 million VMT declined from 0.34 in 2001 to 0.26 in 2010, an average annual decline of 3.1 percent (Table 1). During this same period, Indiana’s rate of alcohol-impaired crash fatalities per 100,000 population decreased from four in 2001 to three in 2010, an average decrease of 3.2 percent annually (Table 2).

**Table 1. Fatalities in alcohol-impaired crashes per 100 million vehicle miles travelled, by NHTSA District V (Great Lakes) states, 2001-2010**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average	Annual rate of change (2001-10)
Great Lakes total	0.43	0.41	0.38	0.37	0.38	0.37	0.36	0.31	0.28	0.28	0.36	-4.8%
Wisconsin	0.54	0.53	0.54	0.49	0.54	0.52	0.53	0.36	0.37	0.35	0.48	-4.8%
Illinois	0.47	0.48	0.46	0.44	0.43	0.42	0.41	0.34	0.30	0.28	0.40	-5.6%
Ohio	0.45	0.43	0.34	0.35	0.36	0.35	0.35	0.32	0.29	0.30	0.35	-4.2%
Michigan	0.40	0.36	0.34	0.32	0.31	0.32	0.29	0.28	0.25	0.24	0.31	-5.7%
Indiana	0.34	0.29	0.28	0.33	0.35	0.34	0.31	0.29	0.27	0.26	0.31	-3.1%
Minnesota	0.34	0.36	0.38	0.28	0.29	0.26	0.30	0.23	0.19	0.22	0.29	-4.7%

Sources: FARS; Federal Highway Administration; 2010 fatalities from NHTSA DOT HS 811 612



**Table 2. Fatalities in alcohol-impaired crashes per 100,000 population by NHTSA District V (Great Lakes) states, 2001-2010**

District 5 state	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average	Annual rate of change (2001-10)
Great Lakes total	4.2	4.1	3.8	3.7	3.8	3.6	3.6	3.0	2.7	2.7	3.5	-4.7%
Wisconsin	5.7	5.7	5.9	5.4	5.8	5.5	5.6	3.6	3.8	3.6	5.1	-5.0%
Indiana	4.0	3.4	3.3	3.9	4.0	3.9	3.5	3.2	3.3	3.0	3.5	-3.2%
Ohio	4.2	4.1	3.2	3.4	3.4	3.4	3.4	3.0	2.8	3.0	3.4	-3.8%
Illinois	3.9	4.0	3.9	3.8	3.6	3.5	3.5	2.8	2.5	2.3	3.4	-5.6%
Minnesota	3.7	3.9	4.2	3.1	3.2	2.9	3.3	2.5	2.0	2.4	3.1	-4.7%
Michigan	4.0	3.6	3.4	3.3	3.3	3.3	3.0	2.9	2.5	2.3	3.2	-5.7%

Sources: FARS; US Census Bureau; 2010 fatalities from NHTSA DOT HS 811 612

### Alcohol-impaired collisions

From 2007 to 2011, while the numbers of non-alcohol-impaired collisions in Indiana declined on average 2.3 percent per year, alcohol-impaired collisions increased 5.4 percent annually. During 2011, there were 133 fatal alcohol-impaired collisions in the state (19.7 percent of all fatal collisions) (Table 3). Alcohol-impaired fatal collisions from 2007 to 2011 declined annually an average rate of 5.8 percent, although there was a 2.3 percent increase from 2010 to 2011. The numbers of non-fatal alcohol-impaired collisions generally increased over this five-year period, with incapacitat-

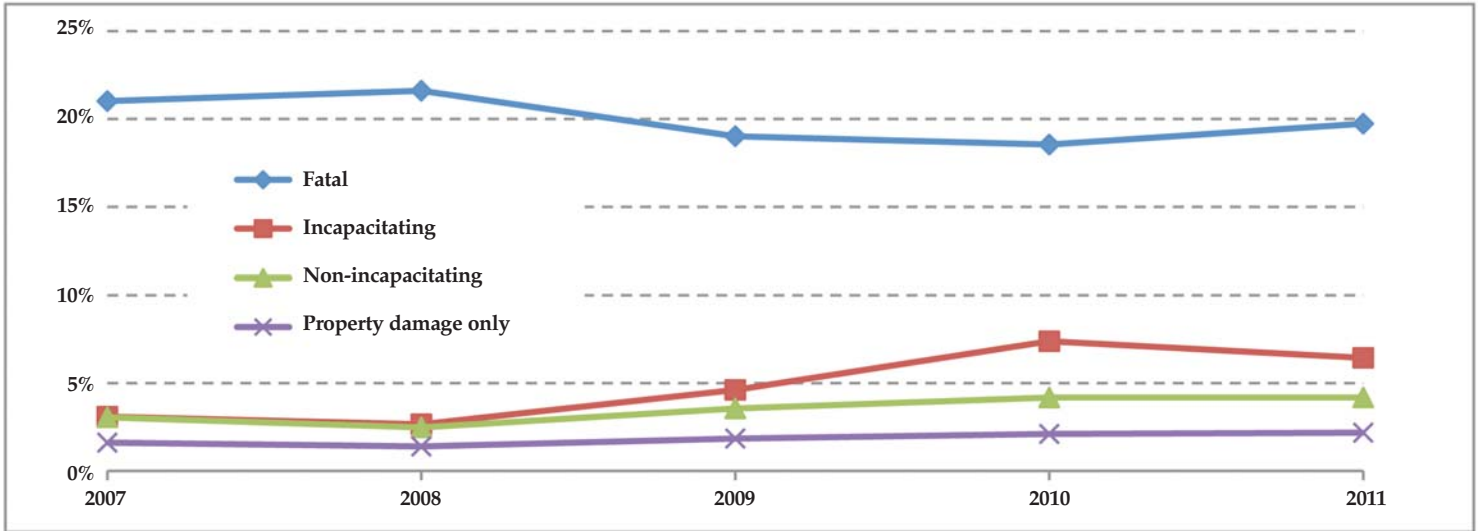
ing injury collisions linked to impaired driving showing the steepest average annual increase (18 percent). The proportions of Indiana fatal collisions classified as alcohol-impaired were relatively stable since 2007, averaging 20 percent annually (Figure 1). Since 2008, however, the percent of alcohol-impaired collisions with incapacitating injuries more than doubled, from 2.7 percent to 6.4 percent. However, one reason non-fatal collision alcohol-impairment rates are lower is that law enforcement officers are required by law to test drivers involved in fatal or serious bodily injury collisions (IC 9-30-7-3).

**Table 3. Indiana traffic collisions, by severity and alcohol-impairment, 2007-2011**

Collisions, by severity	2007	2008	2009	2010	2011	Annual rate of change	
						'07-'11	'10-'11
<b>Alcohol-impaired</b>	<b>4,000</b>	<b>3,399</b>	<b>4,207</b>	<b>4,978</b>	<b>4,938</b>	<b>5.4%</b>	<b>-0.8%</b>
Fatal	169	156	120	130	133	-5.8%	2.3%
Incapacitating	95	77	126	215	184	18.0%	-14.4%
Non-incapacitating	1,048	804	1,091	1,302	1,250	4.5%	-4.0%
Property damage only	2,688	2,362	2,870	3,331	3,371	5.8%	1.2%
<b>Not alcohol-impaired</b>	<b>200,999</b>	<b>202,053</b>	<b>185,454</b>	<b>187,908</b>	<b>183,194</b>	<b>-2.3%</b>	<b>-2.5%</b>
Fatal	635	566	511	571	541	-3.9%	-5.3%
Incapacitating	2,980	2,821	2,606	2,697	2,674	-2.7%	-0.9%
Non-incapacitating	33,293	31,656	29,587	29,869	28,626	-3.7%	-4.2%
Property damage only	164,091	167,010	152,750	154,771	151,353	-2.0%	-2.2%

Source: Indiana State Police

Figure 1. Percent of Indiana collisions classified as alcohol-impaired by collision severity, 2007-2011



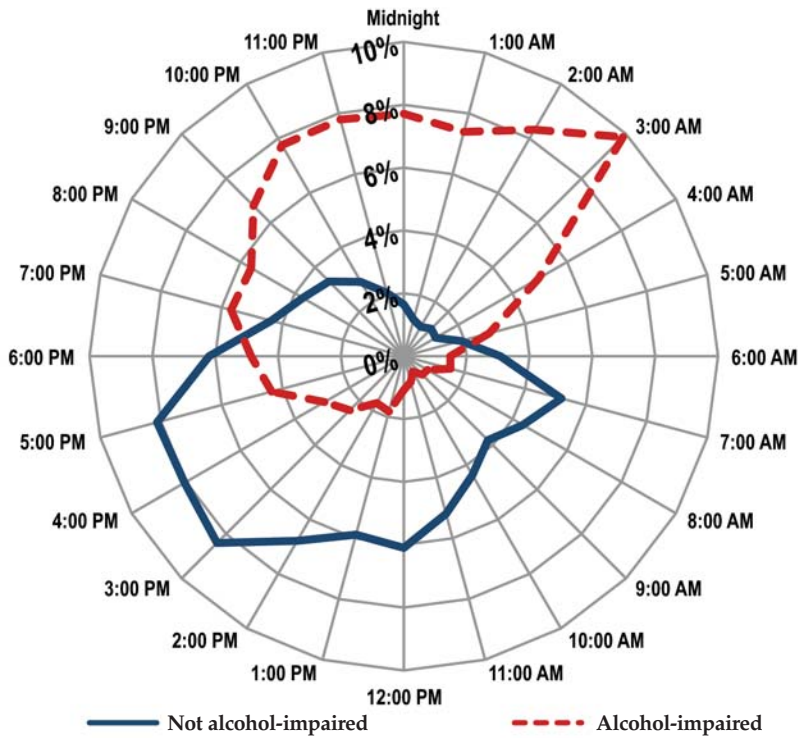
Source: Indiana State Police

**Times, days, and places**

Alcohol-impaired collisions occur in a different time pattern than non-alcohol-impaired crashes. Figure 2 depicts the percentage of total crashes in 2011 occurring by hour of the day and by alcohol impairment. As it

shows, the largest hourly proportions of total alcohol-impaired collisions begin to climb after 6 pm, peaking during the 11 pm to 3 am period and dropping sharply thereafter. Indiana law requires establishments to quit selling alcohol at 3 am (IC 7.1-3-1-14).

Figure 2. Indiana collision distribution, by time of day and alcohol-impairment, 2011



Source: Indiana State Police

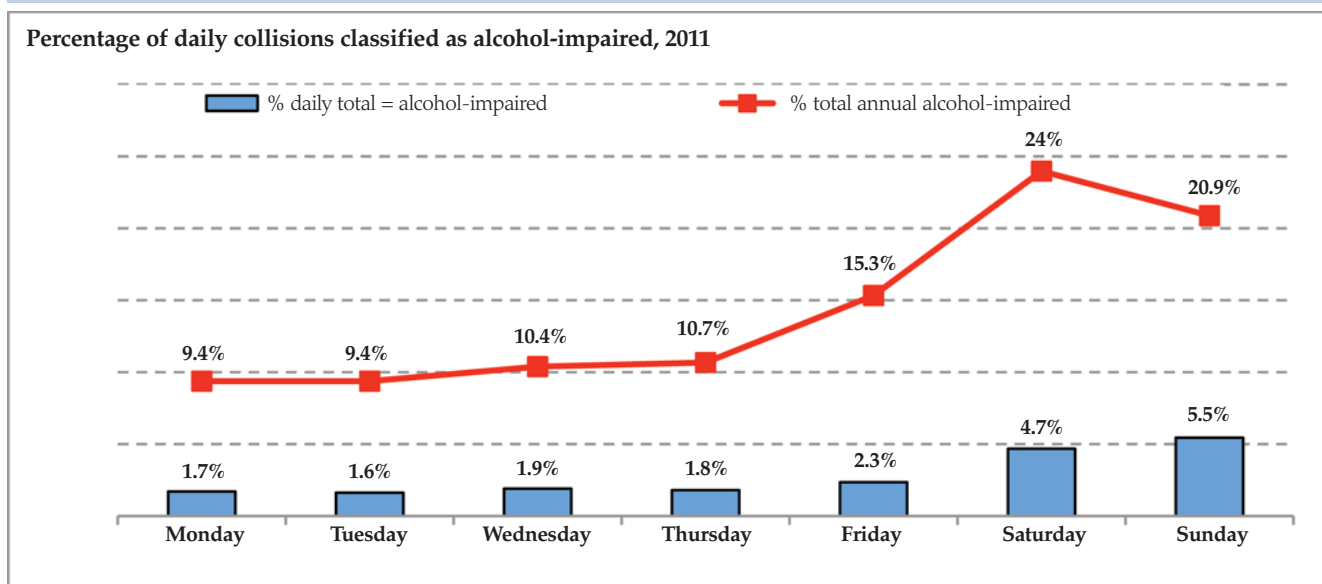
Notes:  
Percentages are hourly collisions as a proportion of total daily collisions (by type).  
Excludes collisions with unknown hour.

## Times, days, and places (continued)

The incidence of alcohol-impaired collisions in 2011 followed a weekly pattern in which the percentage of total collisions classified as alcohol-impaired remained approximately steady from Monday through Thursday, then increased on Friday, and escalated sharply on Saturdays and Sundays (Figure 3). A similar pattern is visible when considering the proportion of annual collisions classified as alcohol-impaired: 45 percent of alcohol-impaired collisions occurred on Saturdays and Sundays in 2011. More precisely, two day/time periods (Friday 9 pm to Saturday 3 am, and Saturday 9 pm to Sunday 3 am) comprised 28 percent of all alcohol-impaired collisions in 2011 (calculated from data not shown).

In 2011, the largest share of alcohol-impaired collisions occurred in urban places (65 percent), similar to the proportion of non-alcohol-impaired collisions in urban places. Thus, alcohol-impaired crashes are not more common than all collisions in one census locality compared to others (Figure 4). However, fatal collisions were more likely to occur in exurban and rural locales. For alcohol-impaired fatal collisions, the likelihood of these collisions remained greatest in less densely populated areas (Figure 5). In the lower population density exurban and rural localities, about 23 percent of fatal collisions were alcohol-impaired, whereas urban and suburban places had fatal proportions of, respectively, 17 and 19 percent.

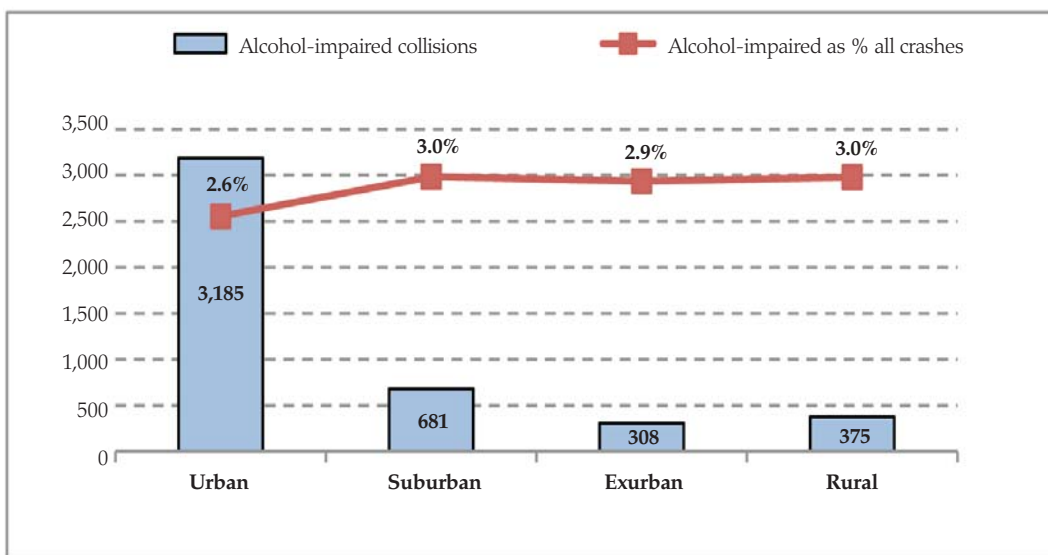
**Figure 3. Percentage of Indiana collisions classified as alcohol-impaired by day of week, 2011**



Source: Indiana State Police

Note: Percentages in line graph sum to 100 percent.

**Figure 4. Total alcohol-impaired collisions by US census locality, 2011**



Sources: Indiana State Police; US Bureau of the Census

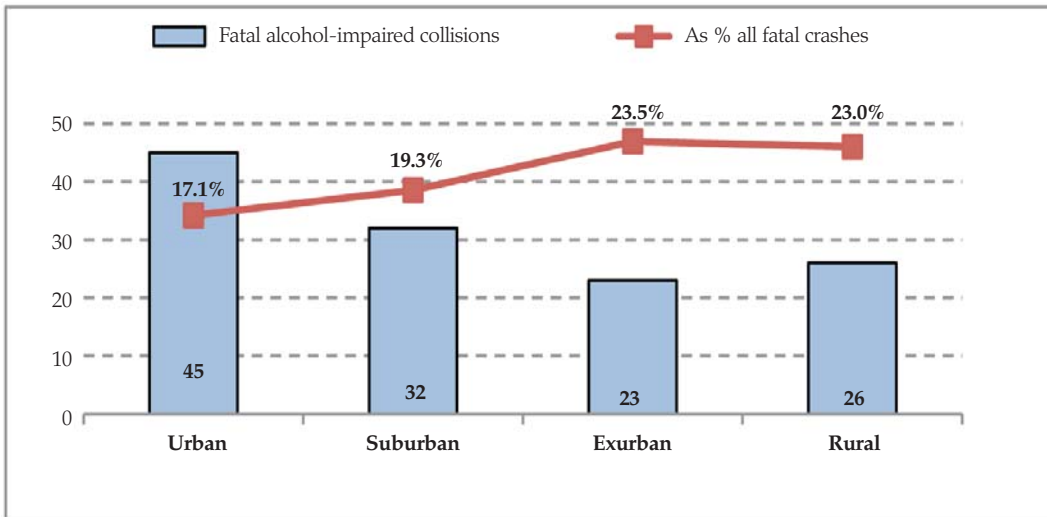
**Notes:**

Because of changes to urban place boundary definitions in 2010, comparisons to previous years should be made with caution.

Excludes collisions with unknown census locality.

Percentages pertain to collisions within the respective census locality.

**Figure 5. Fatal alcohol-impaired collisions by US census locality, 2011**



Sources: Indiana State Police; US Bureau of the Census

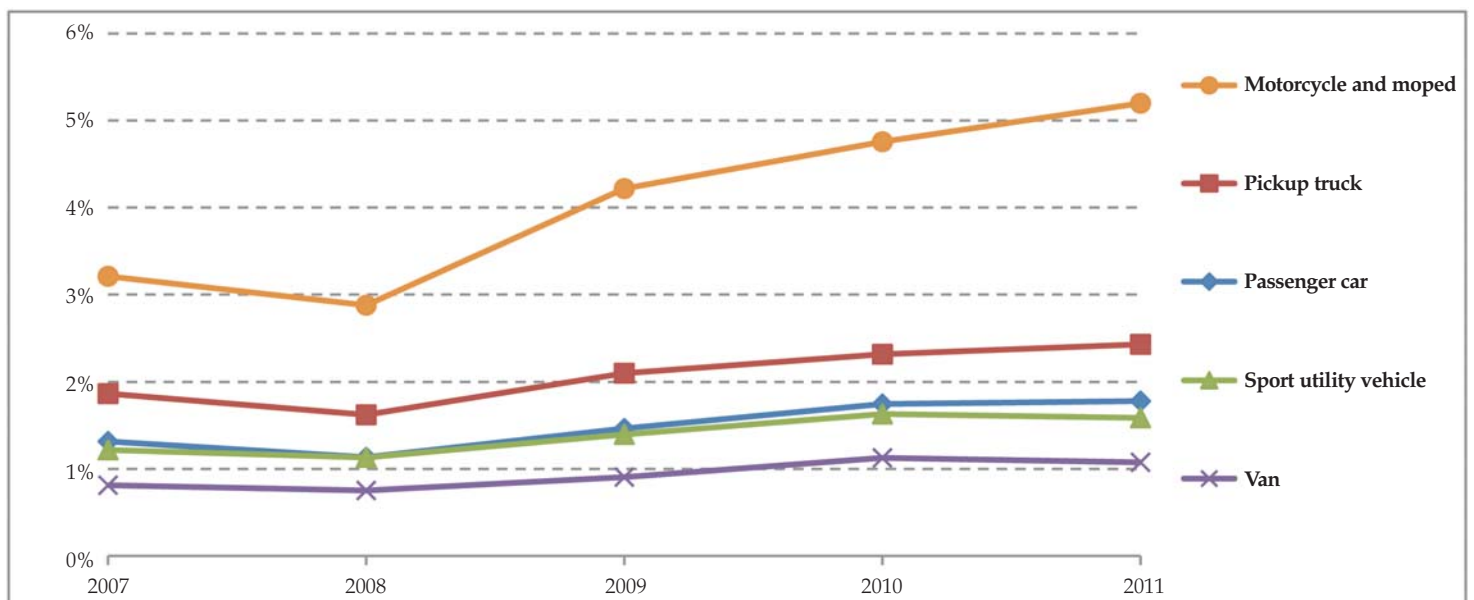
Notes:  
 Because of changes to *urban place* boundary definitions in 2010, comparisons to previous years should be made with caution.  
 Excludes collisions with *unknown* census locality.  
 Percentages pertain to collisions within the respective census locality.

### Vehicles

The incidence of alcohol-impaired collisions producing injuries and fatalities varies by vehicle type. Across the 2007 to 2011 period, the proportion of injured occupants in vehicles with an impaired driver, as a share of total injuries, was consistently highest in pickup trucks, motorcycles, and sport utility vehicles (SUV). In 2011, more than five percent of injuries to

motorcycle and moped riders were linked to alcohol-impairment; this was more than two times the rate of injury to pickup truck occupants, the next highest alcohol-impaired unit (Figure 6). One-third of motorcycle fatalities were from alcohol-impaired crashes in 2011, while about one-fifth of pickup truck and SUV fatalities were from alcohol-impaired crashes (Figure 7).

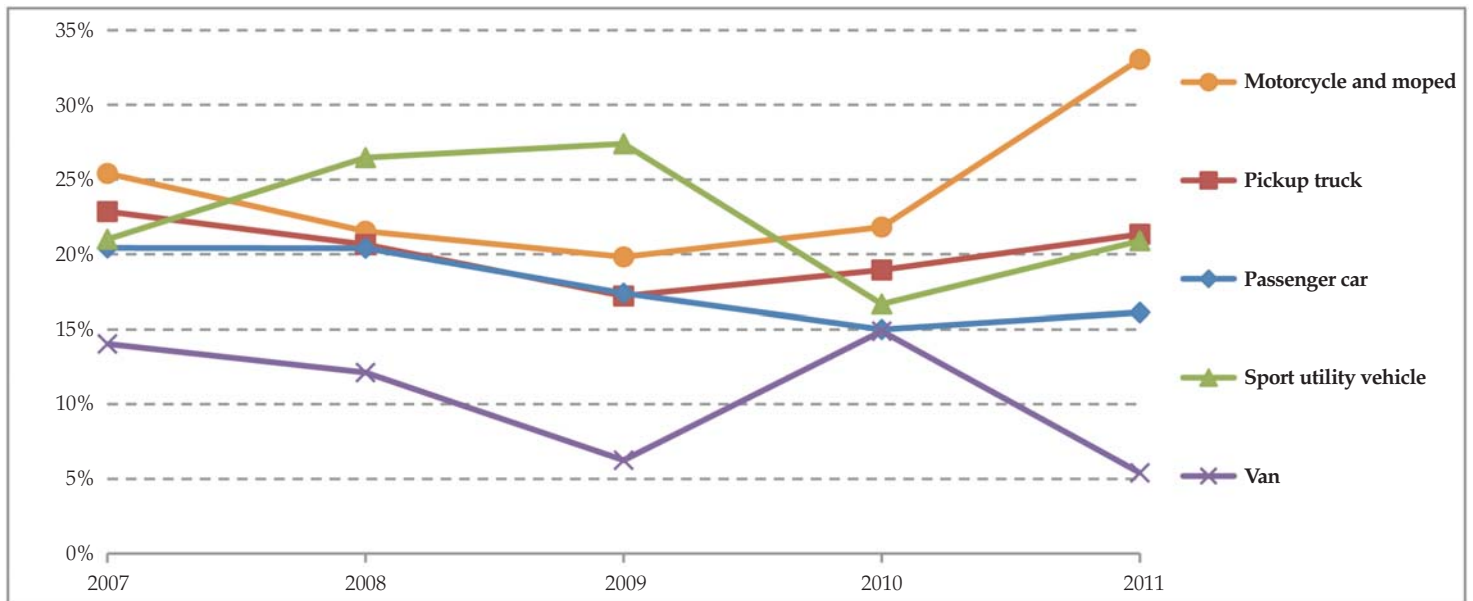
**Figure 6. Percentage of individual injuries in alcohol-impaired vehicles by vehicle type, 2007-2011**



Source: Indiana State Police



Figure 7. Percentage of individual fatalities in alcohol-impaired vehicles by vehicle type, 2007-2011



Source: Indiana State Police

## Individuals

In 2011, there were 140 fatalities and 2,077 non-fatal injuries linked to alcohol-impaired collisions in Indiana (Table 4). While the number of persons involved in non-alcohol-impaired collisions has been decreasing, the total number of individuals involved in alcohol-impaired collisions grew 4.8 percent annually from 2007 to 2011. Because the number of alcohol-impaired fatalities generally decreased during this period

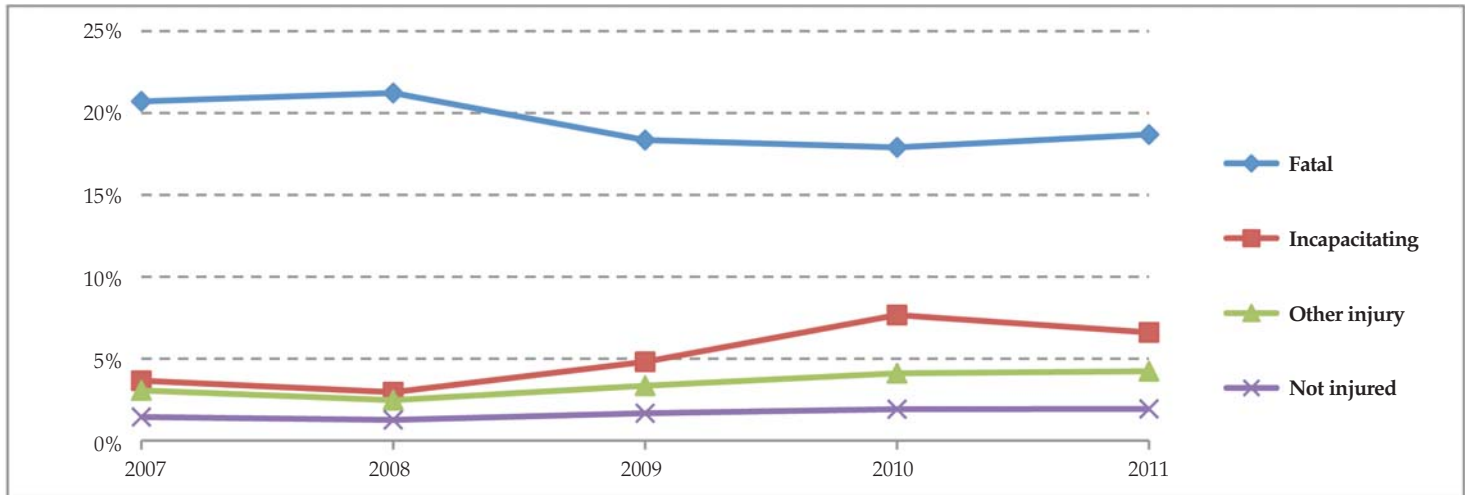
(although alcohol-impaired fatalities did increase 3.7 percent from 2010 to 2011), most of this growth is attributable to increases in incapacitating injuries. After slowly decreasing from 2007 (20.7 percent) to 2010 (17.9 percent), the percentage of persons killed in fatal collisions classified as alcohol-impaired increased to 18.7 percent in 2011 (Figure 8). The percent of Indiana incapacitating injuries linked to alcohol-impaired collisions increased from 3.0 percent in 2008 to 6.6 percent in 2011.

Table 4. Individuals involved in Indiana traffic collisions by alcohol-impairment and injury status, 2007-2011

Type of collision and individual injury status	2007	2008	2009	2010	2011	Annual rate of change	
						'07-'11	'10-'11
<b>Alcohol-impaired</b>	<b>5,945</b>	<b>4,955</b>	<b>6,104</b>	<b>7,315</b>	<b>7,165</b>	<b>4.8%</b>	<b>-2.1%</b>
Fatal	186	173	127	135	140	-6.9%	3.7%
Incapacitating	134	100	153	264	225	13.8%	-14.8%
Other injury	1,757	1,269	1,594	1,919	1,852	1.3%	-3.5%
Not injured	3,868	3,413	4,230	4,997	4,948	6.3%	-1.0%
<b>Not alcohol-impaired</b>	<b>324,184</b>	<b>320,820</b>	<b>298,285</b>	<b>303,916</b>	<b>296,364</b>	<b>-2.2%</b>	<b>-2.5%</b>
Fatal	712	642	565	619	609	-3.8%	-1.6%
Incapacitating	3,527	3,282	3,026	3,179	3,180	-2.6%	0.0%
Other injury	55,588	50,105	45,969	44,754	41,884	-6.8%	-6.4%
Not injured	264,357	266,791	248,725	255,364	250,691	-1.3%	-1.8%

Source: Indiana State Police

**Figure 8. Percent of Indiana collision injuries classified as alcohol-impaired by injury severity, 2007-2011**



Source: Indiana State Police

**Individuals** (continued)

Considering all persons involved in alcohol-impaired collisions in Indiana from 2007 to 2011, the impaired drivers typically comprised the majority of individuals within different injury categories. Roughly seven out of ten fatalities in alcohol-impaired collisions were the impaired drivers (Table 5). The count of impaired drivers killed increased 16.3 percent from 2010 to 2011, although the numbers of impaired drivers killed have generally declined from the 2007-2008 levels. The non-impaired drivers in alcohol-impaired collisions have generally comprised from 5 to 8 percent of those killed. Overall, approximately 80 percent of serious bodily injuries (fatal

and incapacitating) from alcohol-impaired collisions were suffered by impaired drivers and their passengers (calculated from Table 5).

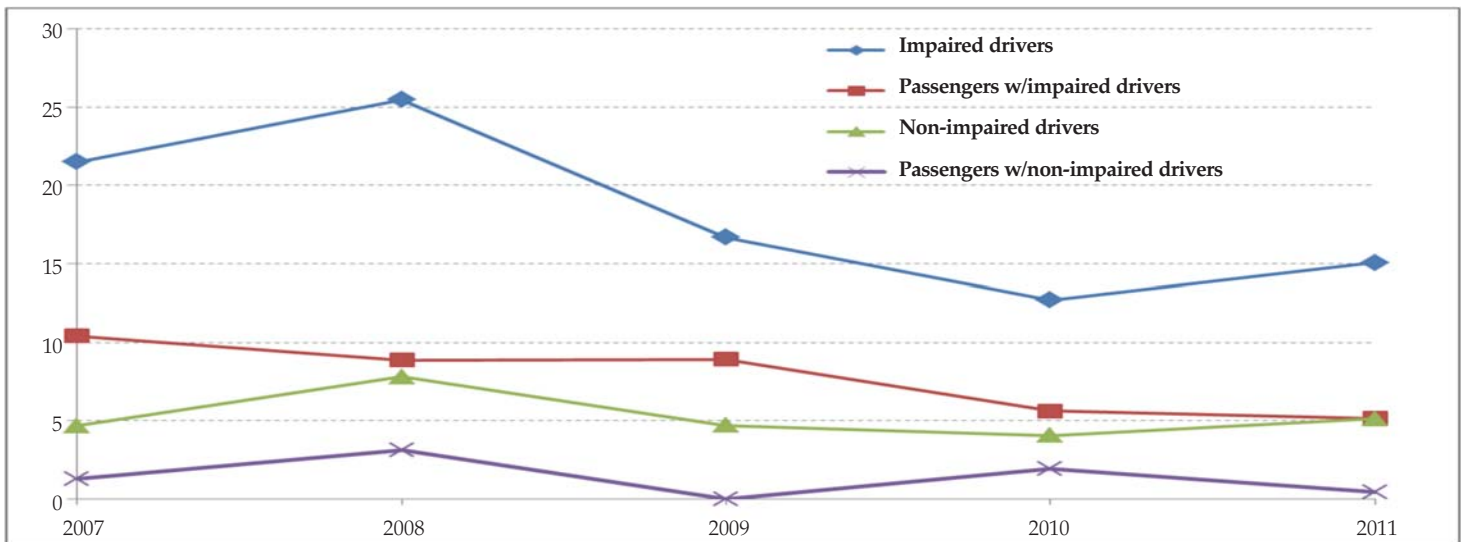
In comparison to the drivers and passengers of vehicles in non-impaired collisions, this translates into substantially larger relative risks of injury for impaired drivers and their passengers (Figure 9). For instance, in 2007 and 2008, impaired drivers in collisions were 22 to 26 times more likely to be killed than drivers in unimpaired collisions. While this relative risk has dropped, impaired drivers were still 15 times more likely to be killed than drivers in unimpaired collisions in 2011. The relative risk of death for the passengers of impaired drivers (compared to passengers in unimpaired collisions) has dropped from a factor of 10 in 2007 to 5 in 2011.

**Table 5. Individuals injured in crashes involving alcohol-impaired drivers by person type and injury severity, 2007-2011**

	2007	2008	2009	2010	2011	Annual rate of change	
						'07-'11	'10-'11
<b>Individuals in alcohol-impaired collisions</b>	<b>5,945</b>	<b>4,955</b>	<b>6,104</b>	<b>7,315</b>	<b>7,165</b>	<b>4.8%</b>	<b>-2.1%</b>
<b>Fatal</b>	<b>186</b>	<b>173</b>	<b>127</b>	<b>135</b>	<b>140</b>	<b>-6.9%</b>	<b>3.7%</b>
Impaired drivers	135	120	96	92	107	-5.6%	16.3%
Passengers w/ impaired drivers	34	29	20	19	18	-14.7%	-5.3%
Non-impaired drivers	10	12	9	10	12	4.7%	20.0%
Passengers w/ non-impaired drivers	4	5	-	5	1	-29.3%	-80.0%
Non-motorists	3	7	2	9	2	-9.6%	-77.8%
<b>Incapacitating</b>	<b>134</b>	<b>100</b>	<b>153</b>	<b>264</b>	<b>225</b>	<b>13.8%</b>	<b>-14.8%</b>
Impaired drivers	56	30	91	152	134	24.4%	-11.8%
Passengers w/ impaired drivers	31	30	25	49	44	9.1%	-10.2%
Non-impaired drivers	27	20	19	27	23	-3.9%	-14.8%
Passengers w/ non-impaired drivers	16	9	14	19	9	-13.4%	-52.6%
Non-motorists	4	11	4	17	15	39.2%	-11.8%
<b>Other injury</b>	<b>1,757</b>	<b>1,269</b>	<b>1,594</b>	<b>1,919</b>	<b>1,852</b>	<b>1.3%</b>	<b>-3.5%</b>
Impaired drivers	928	675	864	1054	992	1.7%	-5.9%
Passengers w/ impaired drivers	205	204	182	240	246	4.7%	2.5%
Non-impaired drivers	369	264	332	385	394	1.7%	2.3%
Passengers w/ non-impaired drivers	239	116	191	212	191	-5.5%	-9.9%
Non-motorists	16	10	25	28	29	16.0%	3.6%

Source: Indiana State Police

**Figure 9. Relative risk of fatal injury to individuals in alcohol-impaired collisions, compared to similar person type in non-impaired collisions, 2007-2011**



Source: Indiana State Police

**Notes:**

Relative risk is the ratio of the percentage of individuals killed in alcohol-impaired collisions compared to the percentage of individuals killed in non-impaired collisions. Ratios greater than 1 show a higher risk for individuals in alcohol-impaired collisions. For example, in 2008, impaired drivers in alcohol-impaired collisions were 25 times more likely to be killed than drivers in non-impaired collisions.

All relative risk estimates for all years for impaired drivers, passengers w/ impaired driver, and non-impaired drivers are significantly different from 1.0 (where a relative risk of 1.0 signifies no difference in risk). The relative risk estimates for passengers of non-impaired drivers in impaired collisions are not significantly different from 1.0, with the exception of 2008.

### Gender, age, and blood alcohol content

Male drivers were more likely than female drivers to be involved in fatal alcohol-impaired collisions during the 2007 to 2011 period in Indiana (Table 6). On average, about 16 percent of male drivers and 6 percent of female drivers involved in fatal collisions were linked to alcohol-impaired-

ment (this includes all drivers in fatal collisions, not just alcohol-impaired drivers). In terms of the drivers in fatal collisions for whom blood alcohol content (BAC) results were reported by ARIES, about one-quarter of male drivers and 11 percent of female drivers had BAC levels of 0.08 g/dL and above in 2011 (Table 7).

**Table 6. Drivers involved in Indiana fatal collisions by gender and alcohol-impairment, 2007-2011**

Drivers/collision type	2007	2008	2009	2010	2011	Annual rate of change	
						'07-'11	'10-'11
Male	945	821	737	790	764	-5.2%	-3.3%
Not alcohol-impaired	793	684	629	669	645	-5.0%	-3.6%
Alcohol-impaired	152	137	108	121	119	-5.9%	-1.7%
Female	291	293	252	292	267	-2.1%	-8.6%
Not alcohol-impaired	274	272	237	280	251	-2.2%	-10.4%
Alcohol-impaired	17	21	15	12	16	-1.5%	33.3%
<b>% alcohol-impaired</b>							
Male	16.1%	16.7%	14.7%	15.3%	15.6%	-0.8%	1.7%
Female	5.8%	7.2%	6.0%	4.1%	6.0%	0.6%	45.8%

Source: Indiana State Police

Note: Excludes cases with unknown gender.



**Table 7. Drivers involved in Indiana fatal collisions by gender and blood alcohol content (BAC) results, 2007-2011**

Drivers/BAC result (g/dL)	2007	2008	2009	2010	2011	Annual rate of change	
						'07-'11	'10-'11
Male	945	821	737	790	764	-5.2%	-3.3%
0	396	413	254	337	336	-4.0%	-0.3%
< 0.08	24	28	23	17	16	-9.6%	-5.9%
0.08 < 0.15	37	44	33	32	34	-2.1%	6.3%
>= 0.15	115	93	74	89	85	-7.3%	-4.5%
Not reported	373	243	353	315	293	-5.9%	-7.0%
Female	291	293	252	292	267	-2.1%	-8.6%
0	138	153	96	131	125	-2.4%	-4.6%
< 0.08	6	2	6	3	6	0.0%	100.0%
0.08 < 0.15	4	7	5	6	4	0.0%	-33.3%
>= 0.15	13	14	10	6	12	-2.0%	100.0%
Not reported	130	117	135	146	120	-2.0%	-17.8%
% of reported							
Male							
> 0	30.8%	28.5%	33.9%	29.1%	28.7%	-1.8%	-1.3%
>= 0.08 +	26.6%	23.7%	27.9%	25.5%	25.3%	-1.3%	-0.8%
>= 0.15	20.1%	16.1%	19.3%	18.7%	18.0%	-2.7%	-3.7%
Female							
> 0	14.3%	13.1%	17.9%	10.3%	15.0%	1.2%	45.7%
>= 0.08 +	10.6%	11.9%	12.8%	8.2%	10.9%	0.8%	32.4%
>= 0.15	8.1%	8.0%	8.5%	4.1%	8.2%	0.3%	98.6%

Source: Indiana State Police

Note: Excludes cases with unknown gender.

**Gender, age, and blood alcohol content** (continued)

Table 8 examines the counts of drivers (surviving and killed) involved in fatal crashes, tabulated by type of substance test given and BAC results. Roughly 70 percent of drivers in fatal crashes were given substance tests across the 2007 to 2011 time period. Surviving drivers were tested slightly more often than killed drivers. Drivers who survived fatal collisions were less likely to have higher BAC levels than drivers who were killed. For example, looking only at drivers for whom BAC results were reported in 2011, about 35 percent of those killed were legally impaired, versus about 9 percent of drivers who survived alcohol-impaired collisions.

During the 2003 to 2011 period, certain age categories exhibited comparatively higher rates of alcohol-impaired drivers per 100,000 population. The 21 to 24 and 25 to 34 age cohorts consistently had the highest per capita rates of alcohol-impairment (Figure 10). Per capita rates of alcohol-impairment in all Indiana collisions generally decline with age. The exception to this is the under 21 age group, for which any alcohol-involvement is contrary to Indiana law: this youngest cohort generally followed the same 2003 to 2011 impairment rate pattern as the 55 years and older group. Similar patterns hold among driver impairment rates in fatal collisions during this nine-year period, although there was greater year-to-year variation in rates within age groups (Figure 11).

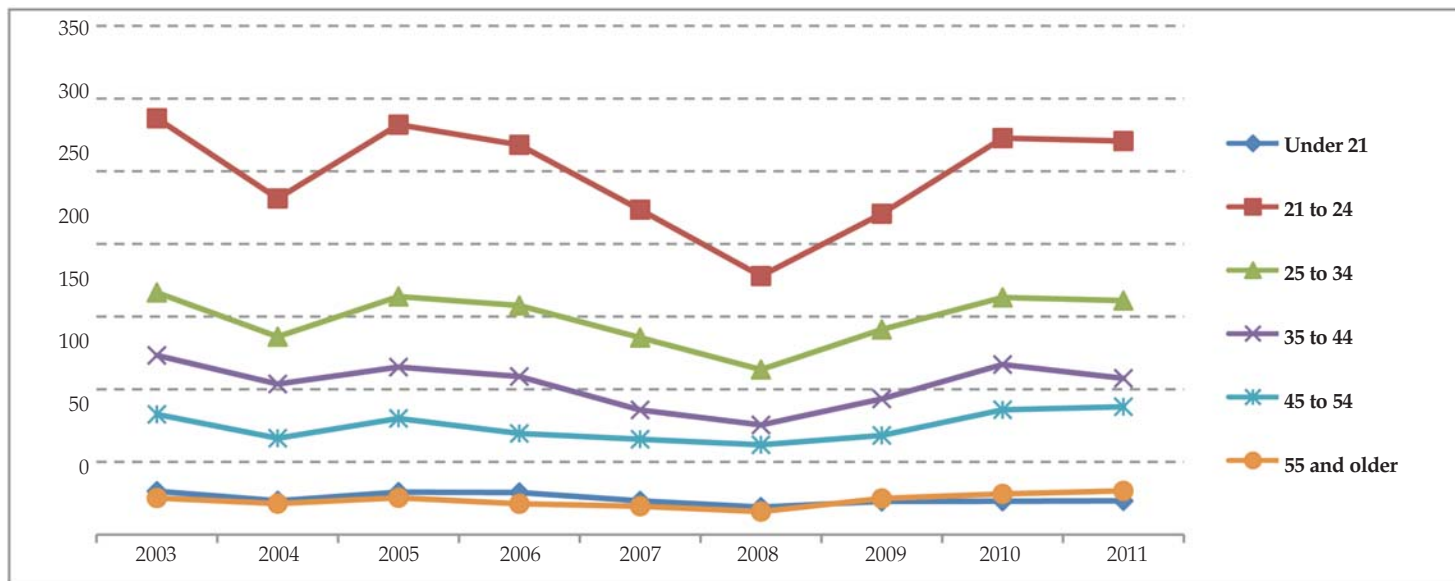
**Table 8. Drivers involved in Indiana fatal collisions by substance test given and blood alcohol content (BAC) results, 2007-2011**

	Surviving					Killed				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Drivers in fatal crashes	610	561	500	563	510	626	554	491	520	523
<b>By test type given</b>										
Alcohol/drug	422	417	316	410	378	435	390	315	341	371
None	99	101	94	47	51	92	112	124	62	48
Refused	-	-	-	1	-	-	-	-	-	-
Not reported	89	43	90	105	81	99	52	52	117	104
Tested, as % all	69.2%	74.3%	63.2%	72.8%	74.1%	69.5%	70.4%	64.2%	65.6%	70.9%
<b>By BAC result (g/dL)</b>										
0	305	337	215	292	275	229	229	136	176	186
< 0.08	13	14	9	6	10	17	16	20	14	12
0.08 < 0.15	12	14	9	10	9	29	37	29	28	29
>= 0.15	22	24	17	31	19	106	83	67	64	78
Not reported	258	172	250	224	197	245	189	239	238	218
<b>Percent of reported</b>										
> 0	13.4%	13.4%	14.0%	13.9%	12.1%	39.9%	37.3%	46.0%	37.6%	39.0%
>= 0.08	9.7%	9.8%	10.4%	12.1%	8.9%	35.4%	32.9%	38.1%	32.6%	35.1%
>= 0.15	6.3%	6.2%	6.8%	9.1%	6.1%	27.8%	22.7%	26.6%	22.7%	25.6%

Source: Indiana State Police

Notes:  
 Among drivers killed in 2007 and 2008, not reported includes 2 invalid BAC results.  
 g/dL = grams per deciliter

Figure 10. Rates of alcohol-impaired drivers in Indiana collisions per 100,000 population by age cohort, 2003-2011



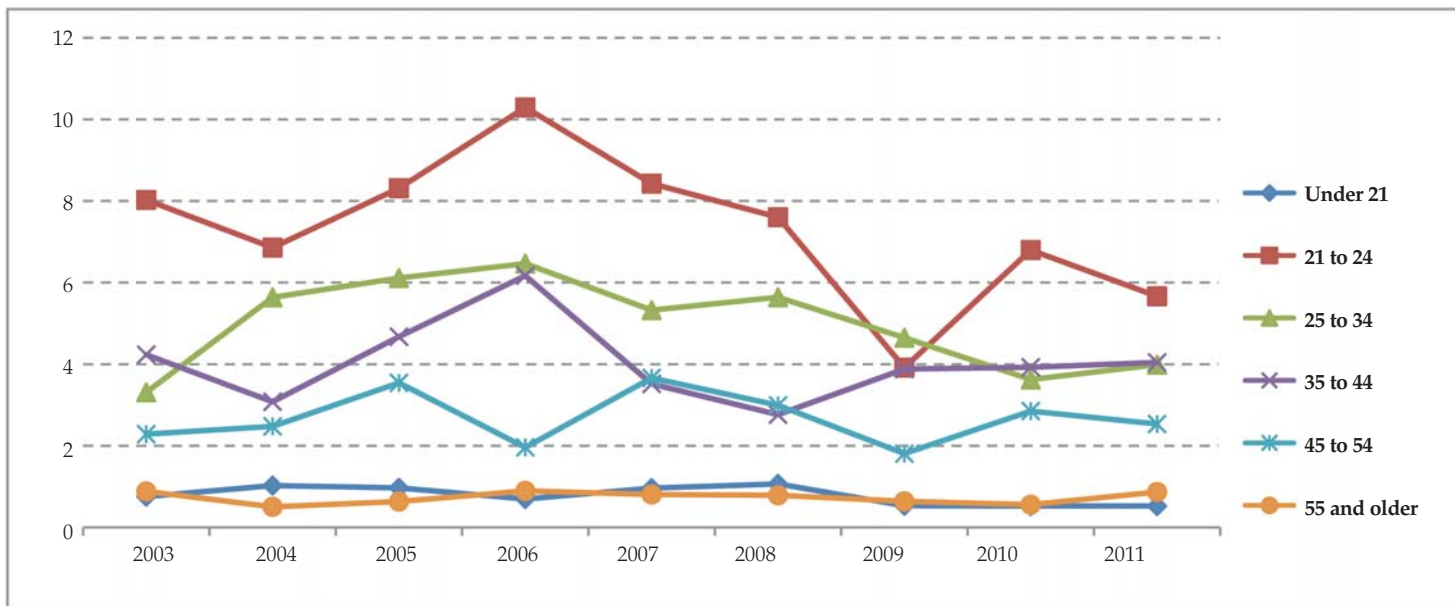
Sources: Indiana State Police; Bureau of the Census

Note: 2011 population estimates by age were not available for Indiana. The 2010 estimates were used for 2011.

Figure 12 shows the counts and proportions of drivers with positive BAC results in Indiana crashes, based on age and BAC level for 2011. Note that the first two age categories reflect drivers under 21 years of age, for whom any positive BAC level is illegal; nearly 80 percent of these under-

age drinking drivers had BAC levels in excess of 0.08. More than one-half of each of the six age cohorts from 21 years to 74 years with positive BAC results were found to have BAC levels of 0.15 or more.

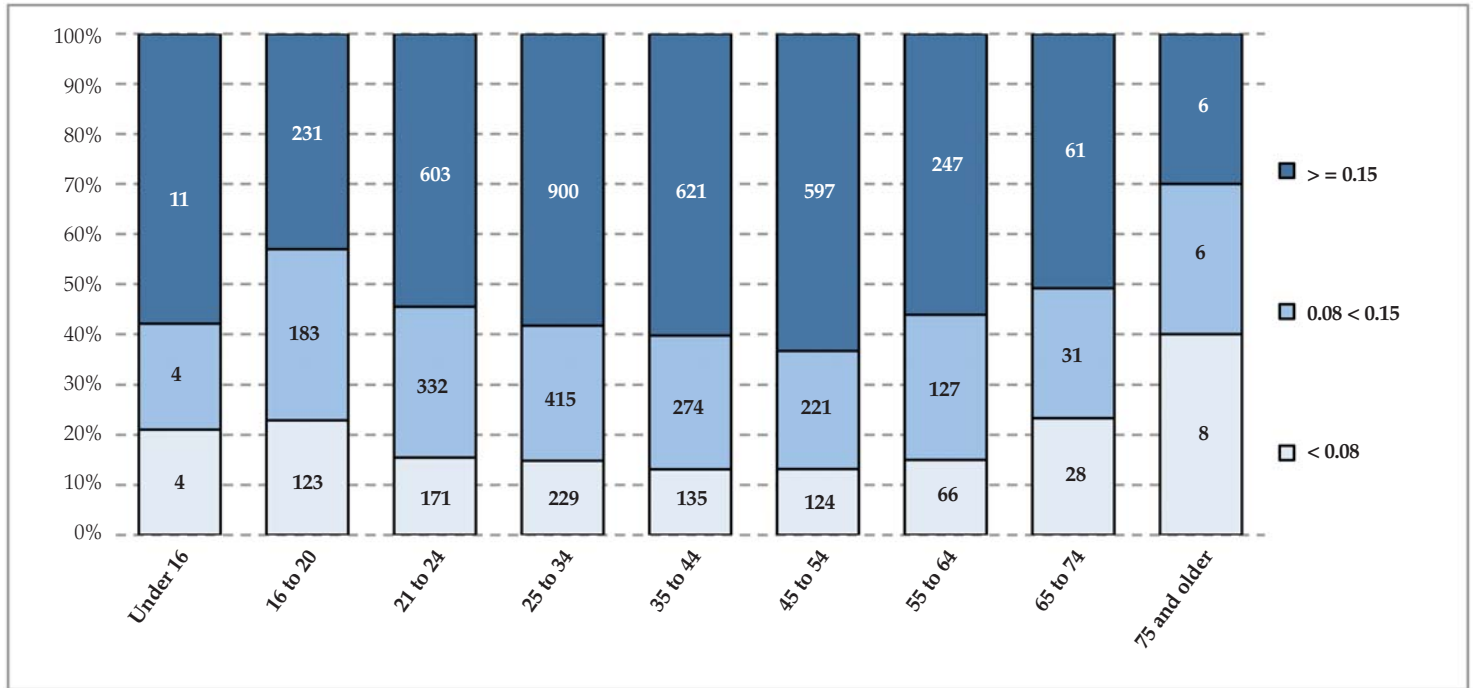
Figure 11. Rates of alcohol-impaired drivers in Indiana fatal collisions per 100,000 population by age cohort, 2003-2011



Sources: Indiana State Police; Bureau of the Census

Note: 2011 population estimates by age were not available for Indiana. The 2010 estimates were used for 2011.

**Figure 12. Drivers in Indiana crashes with positive blood alcohol content (BAC), by driver age and BAC level (g/dL), 2011**



Source: Indiana State Police

## DEFINITIONS

For the purposes of this fact sheet, a driver is considered *alcohol-impaired* when the driver has a BAC test result at or above 0.08 g/dL. Drivers meeting this criterion should have at least received a Class C misdemeanor pursuant to IC 9-30-5-1. Drivers with BAC = 0.15 g/dL or greater 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.

## REFERENCE

National Highway Traffic Safety Administration (NHTSA). (2012). Alcohol-impaired driving, *Traffic Safety Facts, 2010 Data*, DOT HS 811 606 (April), National Center for Statistics and Analysis.

## DATA SOURCES

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This publication was prepared on behalf of the Indiana Criminal Justice Institute (ICJI) 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 ICJI and the National Highway Traffic Safety Administration.

An electronic copy of this document can be accessed via the CCJR website ([www.ccjr.iupui.edu](http://www.ccjr.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.



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## Traffic Safety Project

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 collisions. 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 2011 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the sixth 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, 2011, approximately 99 percent of all collisions are entered electronically through 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.

## The Indiana Criminal Justice Institute

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 and the Center for Criminal Justice Research. The Institute also supports the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

## The Center for Criminal Justice Research

The Center for Criminal Justice Research, one of two 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.

**Author:** Samuel Nunn