

Alcohol-impaired driving (see *Definition*) in the United States in 2013 (latest data available) resulted in 10,076 deaths, or 31 percent of all motor vehicle traffic fatalities. This fact sheet presents information on alcohol-impaired traffic collisions in Indiana from 2010 to 2014. It examines different dimensions of alcohol-impaired collisions, the 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 23, 2015.

## ALCOHOL-IMPAIRED COLLISIONS

From 2010 to 2014, the number of alcohol-impaired collisions in Indiana decreased 2 percent annually, with a 5 percent drop between 2013 and 2014.<sup>1</sup> During 2014, there were 94 fatal alcohol-impaired collisions in the state, the lowest number over this five-year period, and represented 13 percent of all fatal collisions (Table 1). The numbers of non-fatal alcohol-impaired incapacitating injury collisions increased over this same period, with incapacitating injury collisions linked to impaired driving increasing 22 percent from 2013 and 3 percent annually since 2010.

In 2014:

- 94 fatal alcohol-impaired collisions occurred in the state (13 percent of all fatal collisions).
- Alcohol-impaired fatal collisions decreased 8 percent from 2013.
- 101 fatalities (a 25 percent decrease from 2013) and 1,880 non-fatal injuries were linked to collisions with at least one alcohol-impaired driver or non-motorist involved.
- 44 percent of all alcohol-impaired collisions occurred on Saturday and Sunday, and 51 percent of all alcohol-impaired collisions occurred from midnight until 4am.
- Impaired drivers represented roughly six out of ten fatalities or injuries that occurred in alcohol-impaired collisions.

*Note: Data discrepancies may exist between the 2014 Indiana traffic safety reports and previous traffic safety publications due to updates to the Indiana State Police ARIES data that have occurred since the original publication dates.*

*The most recent ARIES upgrade added a clarification to reporting officers on the definition of incapacitating injuries criteria to include "transported from scene for treatment"; therefore, 2014 increases in incapacitating injuries should be interpreted with caution.*

Table 1. Indiana traffic collisions, by severity and alcohol impairment, 2010-2014

Collisions, by severity	Count of collisions					Annual rate of change	
	2010	2011	2012	2013	2014	2013-14	2010-14
<b>Alcohol-impaired</b>	<b>5,005</b>	<b>4,961</b>	<b>5,198</b>	<b>4,794</b>	<b>4,574</b>	<b>-4.6%</b>	<b>-2.2%</b>
Fatal	130	138	167	122	94	-23.0%	-7.8%
Incapacitating	217	186	211	201	246	22.4%	3.2%
Non-incapacitating	1,310	1,259	1,317	1,202	1,044	-13.1%	-5.5%
Property damage only	3,348	3,378	3,503	3,269	3,190	-2.4%	-1.2%
<b>Non-impaired</b>	<b>188,374</b>	<b>183,492</b>	<b>183,962</b>	<b>188,411</b>	<b>200,958</b>	<b>6.7%</b>	<b>1.6%</b>
Fatal	570	537	553	588	608	3.4%	1.6%
Incapacitating	2,702	2,680	3,029	2,736	4,172	52.5%	11.5%
Non-incapacitating	29,918	28,664	29,575	28,707	28,361	-1.2%	-1.3%
Property damage only	155,184	151,611	150,805	156,380	167,817	7.3%	2.0%
<b>Percent alcohol-impaired</b>	<b>2.6%</b>	<b>2.6%</b>	<b>2.7%</b>	<b>2.5%</b>	<b>2.2%</b>	<b>-10.3%</b>	<b>-3.7%</b>
Fatal	18.6%	20.4%	23.2%	17.2%	13.4%	-22.1%	-7.9%
Incapacitating	7.4%	6.5%	6.5%	6.8%	5.6%	-18.6%	-7.0%
Non-incapacitating	4.2%	4.2%	4.3%	4.0%	3.6%	-11.7%	-4.1%
Property damage only	2.1%	2.2%	2.3%	2.0%	1.9%	-8.9%	-3.1%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: Impaired collisions involve at least one driver or non-motorist with a BAC of 0.08 g/dL.

<sup>1</sup>When considering the reported decreases in 2014 alcohol-impaired crashes and fatalities, it is important to note that these numbers are likely to increase once BAC results reported



# TRAFFIC SAFETY FACTS

In 2014, there were 101 fatalities (a 25 percent decrease from 2013) and 1,880 non-fatal injuries linked to alcohol-impaired collisions in Indiana (Table 2). The total number of individuals involved in alcohol-impaired collisions decreased 3 percent annually from 2010 to 2014, while fatalities decreased about 7 percent annually. Among all involved persons, 14 percent of total fatalities were in collisions classified as alcohol-impaired.

## TIMES, DAYS, AND PLACES

The incidence of alcohol-impaired collisions in 2014 followed a weekly pattern in which alcohol-impairment increased on Saturdays and Sundays (Figure 1). Considering all collisions occurring on Saturdays, 4

percent were alcohol-impaired, compared to 2 percent of collisions occurring on Mondays. A similar pattern is visible when considering the proportion of annual collisions classified as alcohol-impaired. For example, of all alcohol-impaired collisions in 2014, 44 percent occurred on Saturdays and Sundays.

The incidence of alcohol-impaired collisions relative to all collisions varies by time of day (Figure 2). While the largest numbers of collisions occur between 3pm and 6pm, less than 3 percent of these collisions are classified as alcohol-impaired. From midnight until 4am, 51 percent of alcohol-impaired collisions occurred. From midnight until 1am, 10 percent of all collisions were linked to alcohol.

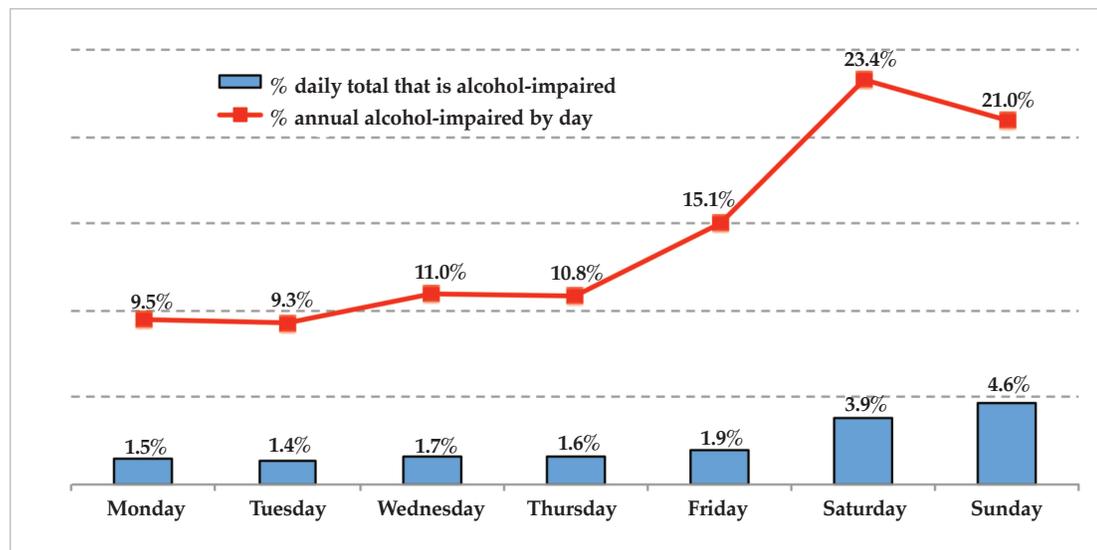
**Table 2. Individuals involved in Indiana collisions by collision alcohol-impairment and injury status, 2010-2014**

	Count of individuals					Annual rate of change	
	2010	2011	2012	2013	2014	2013-14	2010-14
<b>Alcohol-impaired collisions</b>	<b>7,347</b>	<b>7,205</b>	<b>7,393</b>	<b>6,942</b>	<b>6,570</b>	<b>-5.4%</b>	<b>-2.8%</b>
Fatal	135	145	177	134	101	-24.6%	-7.0%
Incapacitating	265	227	253	247	315	27.5%	4.4%
Other injury	1,931	1,872	1,899	1,836	1,565	-14.8%	-5.1%
Not injured	5,016	4,961	5,064	4,725	4,589	-2.9%	-2.2%
<b>Non-impaired collisions</b>	<b>304,621</b>	<b>296,799</b>	<b>298,974</b>	<b>303,321</b>	<b>324,097</b>	<b>6.8%</b>	<b>1.6%</b>
Fatal	618	605	604	650	642	-1.2%	1.0%
Incapacitating	3,184	3,187	3,563	3,194	5,178	62.1%	12.9%
Other injury	44,818	41,944	43,430	42,250	41,461	-1.9%	-1.9%
Not injured	256,001	251,063	251,377	257,227	276,816	7.6%	2.0%
<b>Total</b>	<b>311,968</b>	<b>304,004</b>	<b>306,367</b>	<b>310,263</b>	<b>330,667</b>	<b>6.6%</b>	<b>1.5%</b>
<b>% in impaired collisions</b>							
Fatalities	17.9%	19.3%	22.7%	17.1%	13.6%		
Incapacitating injuries	7.7%	6.6%	6.6%	7.2%	5.7%		
All other	2.3%	2.3%	2.3%	2.1%	1.9%		

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: *Impaired collisions* involve at least one driver or non-motorist with a BAC of 0.08 g/dL.

**Figure 1. Percentage of Indiana collisions classified as alcohol-impaired, by weekday, 2014**



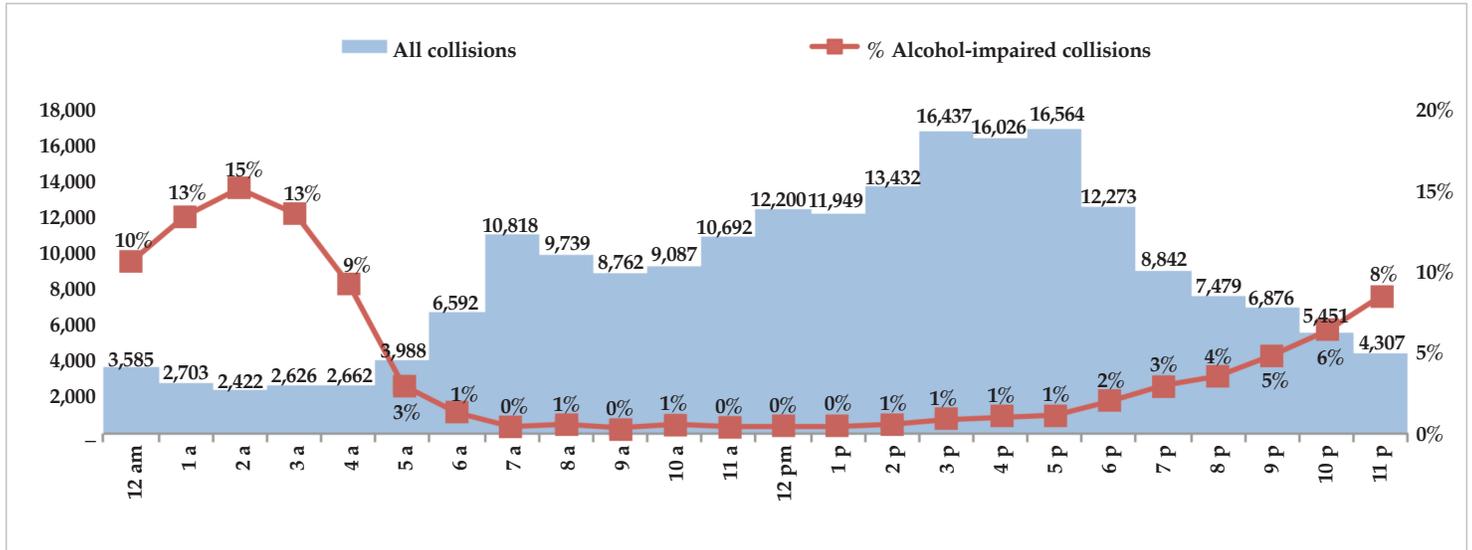
Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

# VEHICLES IN ALCOHOL-IMPAIRED COLLISIONS

The incidence of alcohol-impaired collisions with injuries and fatalities varies by vehicle type (Table 3). From 2013 to 2014, the numbers of persons within vehicles in collisions driven by alcohol-impaired drivers

decreased by 6 percent annually with the number of persons dropping 2 percent from 2010 to 2014. There were decreases from 2013 to 2014 across all vehicle types in the number of individuals in vehicles operated by an impaired driver with a 23 percent decrease in van involvement, a 7 percent decrease in passenger car involvement, and a 6 percent decrease in motorcycle involvement.

Figure 2. Alcohol-impaired collisions and total collisions, by time of day, 2014



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: Percent alcohol-impaired collisions may not sum to 100 percent due to rounding.

Table 3. Individuals in Indiana collisions involving alcohol-impaired drivers, by vehicle type, 2010-2014

	Count of individuals					Annual rate of change	
	2010	2011	2012	2013	2014	2013-14	2010-14
<b>All individuals in vehicles:</b>							
<b>Operated by alcohol-impaired driver</b>	5,309	5,259	5,504	5,092	4,814	-5.5%	-2.4%
Passenger car	3,184	3,187	3,333	3,250	3,030	-6.8%	-1.2%
Pickup truck	984	985	1,008	876	874	-0.2%	-2.9%
Sport utility vehicle	719	674	710	609	607	-0.3%	-4.1%
Van	243	213	211	186	143	-23.1%	-12.4%
Motorcycle	179	200	242	171	160	-6.4%	-2.8%
<b>Individuals killed in vehicles:</b>							
<b>Operated by alcohol-impaired driver</b>	112	129	152	115	85	-26.1%	-6.7%
Passenger car	52	57	66	64	40	-37.5%	-6.3%
Pickup truck	18	16	23	23	17	-26.1%	-1.4%
Sport utility vehicle	11	15	17	10	11	10.0%	0.0%
Van	7	2	5	3	2	-33.3%	-26.9%
Motorcycle	24	39	41	15	15	0.0%	-11.1%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Notes:  
 1) Motorcycles includes units classified as mopeds.  
 2) Excludes non-motorists and other vehicles not listed (e.g., large trucks).



In 2014, roughly six out of ten fatalities and injuries in alcohol-impaired collisions were the impaired drivers (Figure 3). Approximately 70 percent of fatalities and injuries from 2014 alcohol-impaired collisions were suffered by impaired drivers and their passengers, while the non-impaired drivers and passengers comprised 28 percent of those killed or injured in 2013. Non-motorists comprised the remaining 2 percent.

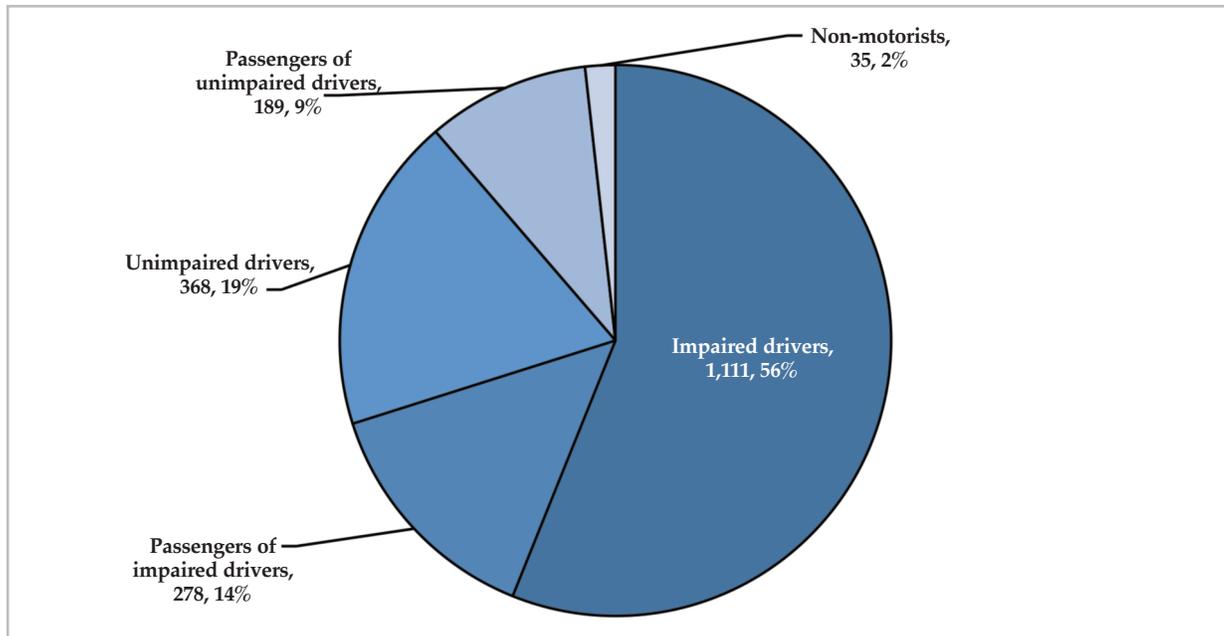
## GENDER, AGE, AND BLOOD ALCOHOL CONTENT (BAC)

From 2010 to 2014, selected age by gender categories exhibited comparatively higher rates of alcohol-impaired drivers per 100,000 licensed drivers. The age groups most at risk of involvement in alcohol-impaired collisions

are 21 to 24 years and 25 to 34 years, with males consistently being at greater risk than females (Table 4). The per capita rates have been consistently decreasing since 2012 among all age groups for the alcohol-impaired collisions; however, among the fatal collisions there were increases in the 45 to 54 and 55 to 64 year categories among male drivers.

Table 5 examines the substance testing rates among drivers (surviving and killed) involved in fatal collisions, tabulated by type of test given. On average across the 2010 to 2014 time period, surviving drivers were tested more often than *killed* drivers (on average, 74 percent and 64 percent, respectively, calculated from Table 5). There was a decrease in the reporting of substance tests given, especially for drivers killed in collisions—from 57 percent testing rate in 2013 to a 52 percent rate in 2014.

Figure 3. Individuals killed or injured in collisions involving alcohol-impairment, 2014



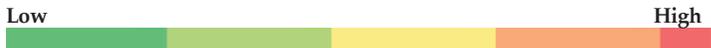
Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Notes:

- 1) n = 1,981 persons with *fatal* or any injury status in alcohol-impaired collisions.
- 2) *Non-motorists* include two unimpaired *animal-drawn vehicle operators* and one impaired *animal-drawn vehicle operator*.

**Table 4. Rates of alcohol-impaired Indiana drivers per 100,000 licensed drivers, by age group and gender, 2010-2014**

Age group	Rate per 100,000 licensed drives									
	2010		2011		2012		2013		2014	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Alcohol-impaired drivers in collisions</b>										
15-20	185.0	52.5	195.3	48.5	169.4	61.2	149.9	48.3	148.1	37.2
21-24	499.6	151.8	450.1	164.7	445.0	163.5	423.8	132.5	402.8	131.6
25-34	282.2	92.7	261.4	94.8	300.3	107.5	277.3	101.6	258.5	90.8
35-44	199.3	66.7	175.2	68.0	195.4	81.5	187.8	66.7	170.9	64.3
45-54	146.1	49.3	143.2	55.0	143.2	56.0	141.2	46.1	130.6	45.5
55-64	84.5	15.9	82.9	20.8	84.1	20.3	71.9	20.6	74.9	16.6
65-74	37.5	6.7	40.9	5.3	37.6	5.0	30.6	6.0	31.4	9.4
75 and older	13.8	1.4	10.1	0.0	16.7	0.7	7.7	6.4	13.4	0.6
<b>Alcohol-impaired drivers in fatal collisions</b>										
15-20	5.0	0.0	4.5	0.6	6.7	0.0	2.3	1.2	2.3	0.0
21-24	14.1	2.1	11.5	2.0	14.2	2.5	13.6	3.2	5.5	1.3
25-34	6.9	1.1	7.7	1.8	11.8	1.4	8.7	1.3	6.3	1.0
35-44	8.1	0.8	8.3	1.1	9.1	1.4	6.3	1.1	3.8	1.1
45-54	6.2	0.5	5.7	0.0	6.4	0.5	3.0	0.2	4.8	0.7
55-64	2.0	0.0	3.3	0.3	2.4	0.0	2.1	0.3	2.3	0.0
65-74	1.1	0.0	0.5	0.0	2.3	0.0	1.3	0.4	1.2	0.0
75 and older	0.0	0.0	0.0	0.0	1.6	1.3	0.0	0.0	0.0	0.0



Sources: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2014; U.S. Census Bureau

**Notes:**

- 1) Excludes drivers with unknown age or age under 15 years.
- 2) Conditional formatting applies to a single year across both gender categories and is calculated for each impaired driving collision type presented (*all collisions and fatal collisions*).

**Table 5. Drivers involved in Indiana fatal collisions, by gender and substance test given, 2010-2014**

	Surviving					Killed				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
<b>Drivers in fatal collisions</b>	<b>565</b>	<b>511</b>	<b>559</b>	<b>577</b>	<b>597</b>	<b>521</b>	<b>524</b>	<b>542</b>	<b>530</b>	<b>517</b>
<b>By test type given</b>										
Alcohol and/or drug	413	379	411	403	468	355	372	392	304	266
None	43	51	31	35	22	56	47	47	62	32
Refused	1	0	3	0	1	0	0	0	0	0
Not reported	108	81	114	139	106	110	105	103	164	219
Tested, as % all	73.1%	74.2%	73.5%	69.8%	78.4%	68.1%	71.0%	72.3%	57.4%	51.5%
<b>Male drivers</b>										
Alcohol and/or drug	307	280	299	293	363	277	290	317	241	211
None	25	37	22	24	17	38	33	36	49	24
Refused	1	0	3	0	1	0	0	0	0	0
Not reported	64	54	82	104	70	79	71	76	124	174
Tested, as % all	77.3%	75.5%	73.6%	69.6%	80.5%	70.3%	73.6%	73.9%	58.2%	51.6%
<b>Female drivers</b>										
Alcohol and/or drug	106	99	112	110	105	78	82	75	63	55
None	18	14	9	11	5	18	14	11	13	8
Not reported	43	25	32	35	35	31	34	27	40	45
Tested, as % all	63.5%	71.7%	73.2%	70.5%	72.4%	61.4%	63.1%	66.4%	54.3%	50.9%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: Male and female subtotals may not add to total drivers in fatal collisions due to missing gender.

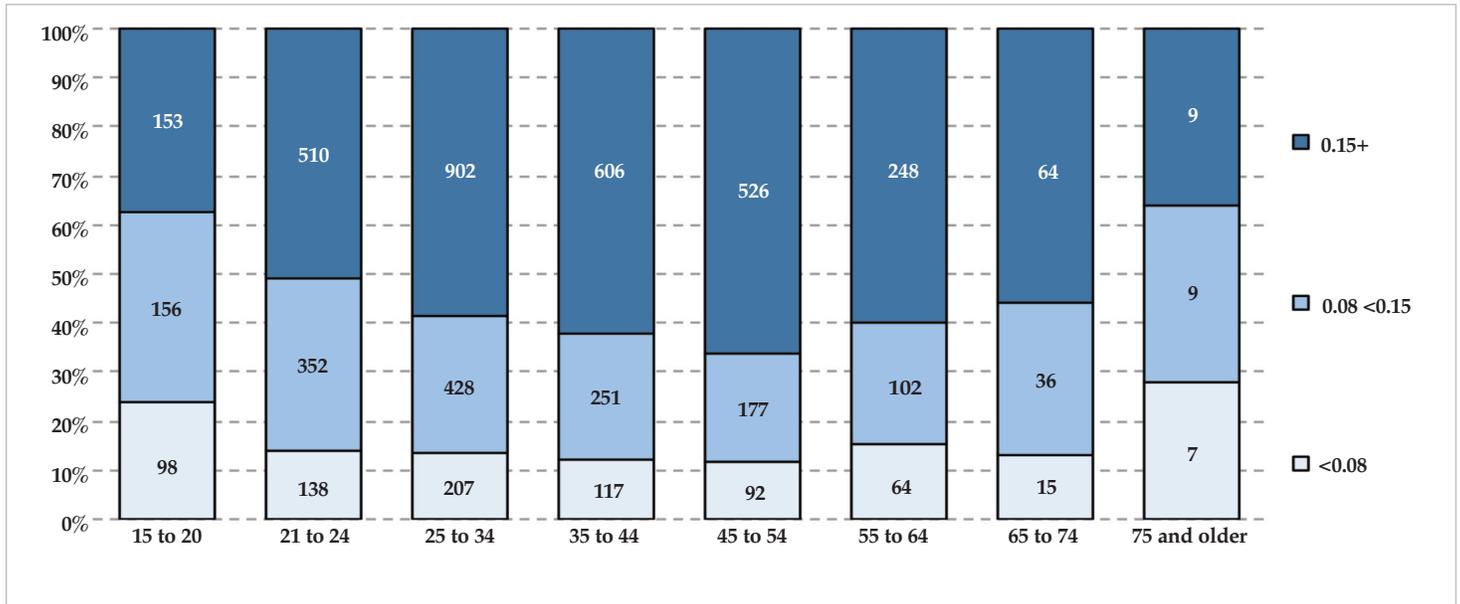


# TRAFFIC SAFETY FACTS

Figure 4 shows the counts and proportions of drivers with positive BAC results in all Indiana collisions, based on age and BAC level for 2014. Note that the first two age categories reflect drivers under 21 years of age, for whom any positive BAC level is illegal; 76 percent of these

underage drinking drivers had BAC levels in excess of 0.08 g/dL (calculated from Figure 4). More than three-quarters of each of the age groups with positive BAC results were found to have BAC levels of 0.08 g/dL or higher.

**Figure 4. Drivers with positive blood alcohol content (BAC) in Indiana crashes, by driver age group and BAC level (g/dL), 2014**



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: Excludes cases with unknown age or unreported BAC.

## DEFINITIONS

- **Alcohol-impaired** — 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 812 102, 2014, p. 1). Indiana 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.
- **Not injured** status includes individuals involved in collisions reported as *null* values in the injury status code field. Reporting officers are instructed to enter only *drivers* in ARIES, if no injury occurs; however, passengers and non-motorists are sometimes mistakenly reported when no injury occurs. For this reason, not injured counts should be interpreted with caution.

## REFERENCES

National Highway Traffic Safety Administration (NHTSA). Alcohol-impaired driving, *Traffic Safety Facts, 2013 Data*, DOT HS 812 102 (December 2014), National Center for Statistics and Analysis.

## DATA SOURCES

Indiana State Police, Automated Reporting Information Exchange System (ARIES), current as of March 23, 2015.

Indiana Bureau of Motor Vehicles (BMV) licensing data, current as of March 24, 2015.



# TRAFFIC SAFETY FACTS

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

An electronic copy of this document can be accessed via the PPI website ([www.policyinstitute.iu.edu](http://www.policyinstitute.iu.edu)), the ICJI website ([www.in.gov/cji/](http://www.in.gov/cji/)), or you may contact the PPI at 317-261-3000.

## 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 Public Policy Institute is collaborating with the Indiana Criminal Justice Institute to analyze 2014 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the ninth year of this partnership. Research findings are summarized in a series of fact sheets on various aspects of traffic collisions, including alcohol-related crashes, trucks, dangerous driving, children, motorcycles, occupant protection, and drivers. An additional publication provides information on county and municipality data, and the final publication produced is 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, 2014, approximately 99 percent of all collisions are entered electronically through ARIES. Trends in collisions incidence as reported in these publications 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 IU Public Policy Institute delivers unbiased research and data-driven, objective, expert analysis to help public, private and nonprofit sectors make important decisions that directly impact quality of life in Indiana. Using the knowledge and expertise of our staff and faculty, we provide research and analysis that is free of political and ideological bias. A multidisciplinary institute within the Indiana University School of Public and Environmental Affairs (SPEA), our efforts also support the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

## 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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