

## IN 2016:

- 73 fatal alcohol-impaired collisions occurred in the state (10 percent of all fatal collisions), an 18 percent decrease from 2015.
- 83 fatalities (a 14 percent decrease from 2015) and 2,098 non-fatal injuries (a 5 percent increase from 2015) were linked to collisions with at least one alcohol-impaired driver or non-motorist.
- Impaired drivers and/or their passengers represented four of five persons killed in alcohol-impaired collisions.
- In fatal collisions, about 70 percent of surviving drivers were tested for alcohol and/or drugs, in comparison to 47 percent of drivers who were killed.
- Among all age groups, drivers aged 21 to 24 have the highest rates of alcohol-impairment in collisions, and typically had the highest impairment rate in fatal collisions.
- On average from 2006 through 2015, Indiana alcohol-impaired fatalities, as reported in ARIES, are 28 percent less than FARS estimates reported by NHTSA.

In partnership with:

# ALCOHOL 2016

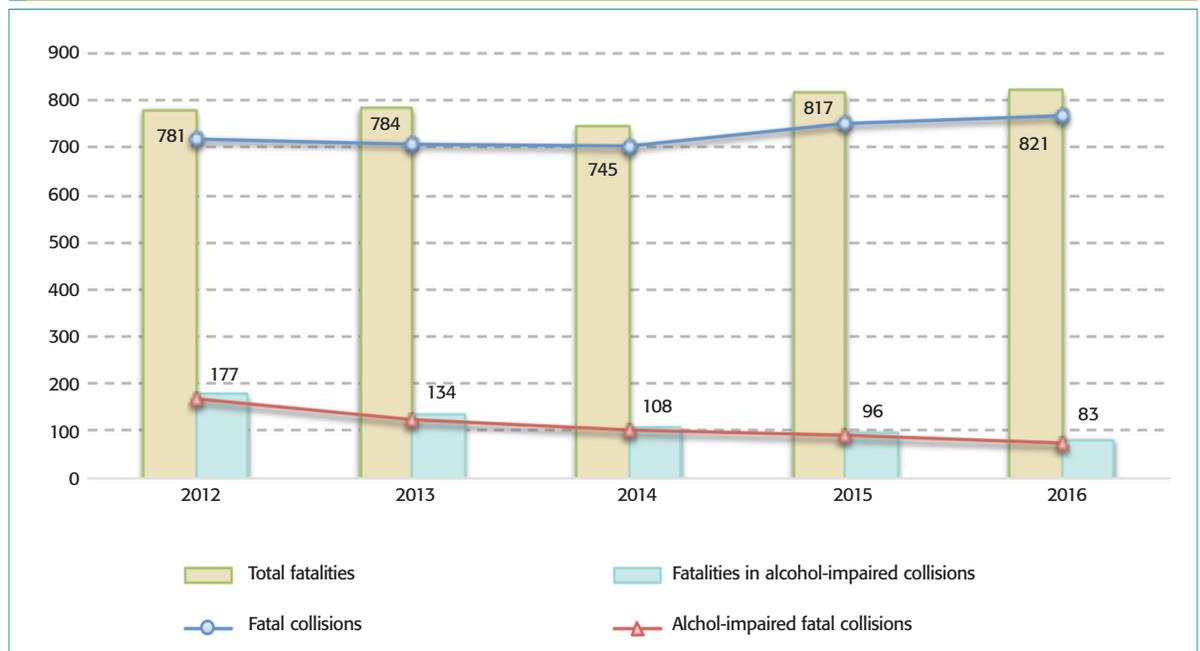
Alcohol-impaired driving (see *Definition*) in the United States in 2015 (latest data available) resulted in 10,265 deaths (a 3 percent increase from 2014), or 29 percent of all motor vehicle traffic fatalities (NHTSA, 2016). This fact sheet presents information on alcohol-impaired traffic collisions in Indiana from 2012 to 2016. 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 16, 2017. A brief comparison of ARIES and the NHTSA Fatality Analysis Reporting System (FARS) counts of alcohol-impaired collisions and fatalities is also presented.

## ALCOHOL-IMPAIRED COLLISIONS, DEATHS, AND INJURIES

From 2012 to 2016, the number of alcohol-impaired collisions and fatalities associated with them declined annually, while total fatal collisions and overall fatalities have generally risen (Figure 1). In 2016, there were 83 persons killed in 73 alcohol-impaired collisions in the state, the lowest numbers over this five-year period. This represented roughly 10 percent of all fatal collisions and fatalities.

**Note: When considering reported changes in 2016 alcohol-impaired crashes and fatalities, please note that these numbers are likely to change once BAC results reported after the March 16, 2017 ARIES data extract are analyzed. For example, in 2016 about 60 percent of drivers involved in fatal collisions were reported in ARIES to have been tested, while of the 1,182 drivers involved in fatal collisions only 33 percent had BAC results reported in ARIES.**

Figure 1. Indiana fatal traffic collisions and fatalities, by alcohol impairment, 2012-2016



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 16, 2017

In 2016, there were 83 fatalities (a 13.5 percent decrease from 2015) and 2,098 non-fatal injuries (a 5 percent increase from 2015) linked to alcohol-impaired collisions in Indiana (Table 1). This has occurred while fatalities and injuries in all other collisions have gone up. Fatalities in alcohol-impaired collisions comprised 10 percent and 4 percent, respectively, of overall Indiana traffic deaths and injuries in 2016.

Given their involvement in fatal alcohol-impaired collisions as driver, passenger, or non-motorist, persons may be more or less likely to be killed or injured from year-to-year. For example, NHTSA estimated 77 percent of victims in alcohol-impaired fatal collisions in 2015 were the impaired driver and passengers riding with that driver (NHTSA, 2016). However, the distribution of Indiana deaths and injuries among persons involved in alcohol-impaired collisions varied during the 2012-2016 period. The occupants of vehicles operated by the impaired driver comprise typically about three of every four persons *involved* in fatal collisions, but routinely account for more than 80 percent of those *killed* (Table 2). However, the impaired unit's proportion of fatalities declined the last two years. This has shifted slightly the pattern of those killed in alcohol-impaired collisions back to occupants of other (non-impaired) vehicles and non-motorists—from around 13-14 percent of dead in 2012-2014 to about 20 percent in 2015-2016 (calculated from Table 2). Of the 2,098 persons *injured* in alcohol-impaired collisions in 2016, about two-thirds were the impaired drivers and their occupants (Figure 2).

**Table 1. Individuals involved in Indiana collisions by collision alcohol-impairment and personal injury group, 2012-2016**

| Individual injury group            | Count of individuals |                |                |                |                | Annual rate of change |              |
|------------------------------------|----------------------|----------------|----------------|----------------|----------------|-----------------------|--------------|
|                                    | 2012                 | 2013           | 2014           | 2015           | 2016           | 2015-16               | 2012-16      |
| <b>Alcohol-impaired collisions</b> | <b>7,393</b>         | <b>6,946</b>   | <b>6,593</b>   | <b>7,108</b>   | <b>7,099</b>   | <b>-0.1%</b>          | <b>-1.0%</b> |
| Fatalities                         | 177                  | 134            | 108            | 96             | 83             | -13.5%                | -17.2%       |
| Injuries                           | 2,152                | 2,086          | 1,893          | 1,995          | 2,098          | 5.2%                  | -0.6%        |
| Not injured                        | 5,064                | 4,726          | 4,592          | 5,017          | 4,918          | -2.0%                 | -0.7%        |
| <b>All other collisions</b>        | <b>298,999</b>       | <b>303,357</b> | <b>324,385</b> | <b>344,158</b> | <b>356,914</b> | <b>3.7%</b>           | <b>4.5%</b>  |
| Fatalities                         | 604                  | 650            | 637            | 721            | 738            | 2.4%                  | 5.1%         |
| Injuries                           | 47,006               | 45,448         | 46,670         | 49,470         | 50,493         | 2.1%                  | 1.8%         |
| Not injured                        | 251,389              | 257,259        | 277,078        | 293,967        | 305,683        | 4.0%                  | 5.0%         |
| <b>Total</b>                       | <b>306,392</b>       | <b>310,303</b> | <b>330,978</b> | <b>351,266</b> | <b>364,013</b> | <b>3.6%</b>           | <b>4.4%</b>  |
| % in impaired collisions           |                      |                |                |                |                |                       |              |
| Fatalities                         | 22.7%                | 17.1%          | 14.5%          | 11.8%          | 10.1%          |                       |              |
| Injuries                           | 4.4%                 | 4.4%           | 3.9%           | 3.9%           | 4.0%           |                       |              |

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017

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

**Table 2. Individuals involved in alcohol-impaired traffic collisions in Indiana, by alcohol impairment and person type, 2012-2016**

| Person type                               | Count of individuals |              |              |              |              | Annual rate of change |               | 2016 % by person type |
|---|----------------------|--------------|--------------|--------------|--------------|-----------------------|---------------|-----------------------|
|   | 2012                 | 2013         | 2014         | 2015         | 2016         | 2015-16               | 2012-16       |                       |
| <b>Total involved</b>                     | <b>7,393</b>         | <b>6,946</b> | <b>6,593</b> | <b>7,108</b> | <b>7,099</b> | <b>-0.1%</b>          | <b>-1.0%</b>  | <b>100.0%</b>         |
| <b>In vehicles with impaired driver</b>   | <b>5,551</b>         | <b>5,141</b> | <b>4,890</b> | <b>5,191</b> | <b>5,134</b> | <b>-1.1%</b>          | <b>-1.9%</b>  | <b>72.3%</b>          |
| Drivers                                   | 5,209                | 4,803        | 4,605        | 4,864        | 4,805        | -1.2%                 | -2.0%         | 67.7%                 |
| Injured occupants                         | 342                  | 338          | 285          | 327          | 329          | 0.6%                  | -1.0%         | 4.6%                  |
| <b>In vehicles with unimpaired driver</b> | <b>1,798</b>         | <b>1,750</b> | <b>1,661</b> | <b>1,860</b> | <b>1,924</b> | <b>3.4%</b>           | <b>1.7%</b>   | <b>27.1%</b>          |
| Drivers                                   | 1,605                | 1,540        | 1,470        | 1,642        | 1,699        | 3.5%                  | 1.4%          | 23.9%                 |
| Injured occupants                         | 193                  | 210          | 191          | 218          | 225          | 3.2%                  | 3.9%          | 3.2%                  |
| <b>Non-motorists</b>                      | <b>44</b>            | <b>55</b>    | <b>42</b>    | <b>57</b>    | <b>41</b>    | <b>-28.1%</b>         | <b>-1.7%</b>  | <b>0.6%</b>           |
| Unimpaired                                | 43                   | 51           | 40           | 56           | 41           | -26.8%                | -1.2%         | 0.6%                  |
| Impaired                                  | 1                    | 4            | 2            | 1            | 0            | -100.0%               | -100.0%       | 0.0%                  |
| <b>Total killed</b>                       | <b>177</b>           | <b>134</b>   | <b>108</b>   | <b>96</b>    | <b>83</b>    | <b>-13.5%</b>         | <b>-17.2%</b> | <b>100%</b>           |
| <b>In vehicles with impaired driver</b>   | <b>153</b>           | <b>116</b>   | <b>94</b>    | <b>74</b>    | <b>67</b>    | <b>-9.5%</b>          | <b>-18.7%</b> | <b>80.7%</b>          |
| Drivers                                   | 133                  | 95           | 75           | 54           | 52           | -3.7%                 | -20.9%        | 62.7%                 |
| Injured occupants                         | 20                   | 21           | 19           | 20           | 15           | -25.0%                | -6.9%         | 18.1%                 |
| <b>In vehicles with unimpaired driver</b> | <b>18</b>            | <b>16</b>    | <b>11</b>    | <b>17</b>    | <b>12</b>    | <b>-29.4%</b>         | <b>-9.6%</b>  | <b>14.5%</b>          |
| Drivers                                   | 15                   | 12           | 8            | 10           | 8            | -20.0%                | -14.5%        | 9.6%                  |
| Injured occupants                         | 3                    | 4            | 3            | 7            | 4            | -42.9%                | 7.5%          | 4.8%                  |
| <b>Non-motorists</b>                      | <b>6</b>             | <b>2</b>     | <b>3</b>     | <b>5</b>     | <b>4</b>     | <b>-20.0%</b>         | <b>-9.6%</b>  | <b>4.8%</b>           |

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017

Notes:

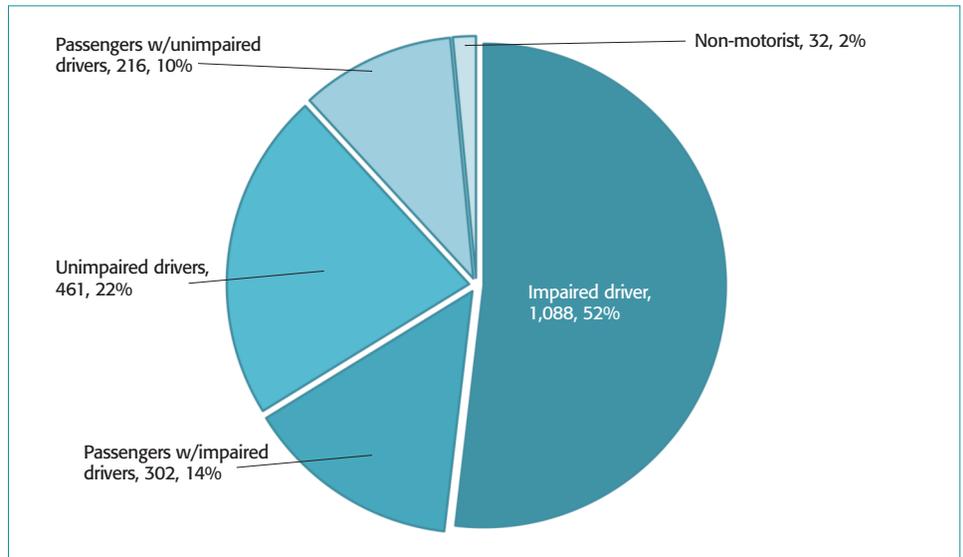
- 1) *Alcohol impaired collisions* include at least one driver or non-motorist with a BAC of 0.08 g/dL or higher.
- 2) *Person type* refers to individuals involved being either a *driver*, *injured occupant*, or a *non-motorist*.
- 3) Non-motorists include *pedestrians*, *pedalcyclists*, and *animal-drawn vehicle operators*.

## ALCOHOL AND DRUG TESTING RATES

Indiana Code 9-30-7-3a states in part that a “law enforcement officer shall offer a portable breath test or chemical test to any person who the officer has reason to believe operated a vehicle that was involved in a fatal accident or an accident involving serious bodily injury.” Elsewhere, *serious bodily injury* is defined in IC 35-31.5-2-292 as “bodily injury that creates a substantial risk of death or that causes: (1) serious permanent disfigurement; (2) unconsciousness; (3) extreme pain; (4) permanent or protracted loss or impairment of the function of a bodily member or organ; or (5) loss of a fetus.” However, ARIES personal injury classifications for drivers do not include an exactly equivalent category (*incapacitating injury* is the closest), so it is difficult to precisely identify collisions resulting in “serious bodily injury.” Therefore, testing rates below are measured only for drivers in fatal collisions.

From 2012 to 2016, substance test rates vary by whether the driver was killed or survived the crash (Table 3). Generally, *surviving* drivers are tested at higher rates than drivers who suffered a fatal injury. In 2016, nearly seven of ten surviving drivers were tested while fewer than half of drivers killed were tested. Overall, during this 5-year period, an average of about 65 percent of drivers involved in fatal collisions were reported by ARIES to have been tested for alcohol and/or drugs, although the test rate has dropped from 73 percent in 2012 to 59 percent in 2016 (calculated from Table 3). Rates of driver alcohol-impairment also varied by survival status, with the surviving drivers having lower impairment rates than the drivers who were killed. Interestingly for the surviving drivers, the rates of ‘positive’ drug test results were higher than alcohol-impairment rates, as reported by ARIES. (Please note that ARIES does not specify the type of drug(s) indicated in a “positive” drug test result; furthermore, alcohol-impaired and drug-positive are not mutually exclusive—drivers can be one or the other or both).

Figure 2. Individuals with non-fatal injuries in collisions involving alcohol-impairment, 2016



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017

Notes:

- 1) N = 2,098 persons with any injury status in *alcohol-impaired collisions*.
- 2) *Alcohol-impaired collisions* involve at least one driver or non-motorist with a BAC of 0.08 g/dL.
- 3) *Injured* includes those with *incapacitating, non-incapacitating, possible, refused, or other injuries*.

Table 3. Drivers involved in Indiana fatal collisions, by substance test given and findings, 2012-2016

|                                    | Surviving    |              |              |              |              | Killed       |              |              |              |              |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                                    | 2012         | 2013         | 2014         | 2015         | 2016         | 2012         | 2013         | 2014         | 2015         | 2016         |
| <b>Drivers in fatal collisions</b> | <b>559</b>   | <b>577</b>   | <b>602</b>   | <b>611</b>   | <b>620</b>   | <b>542</b>   | <b>530</b>   | <b>517</b>   | <b>536</b>   | <b>562</b>   |
| <b>By test type given</b>          |              |              |              |              |              |              |              |              |              |              |
| Alcohol and/or drug                | 411          | 403          | 470          | 439          | 434          | 392          | 304          | 267          | 277          | 267          |
| None                               | 31           | 35           | 21           | 3            | 0            | 47           | 61           | 33           | 7            | 3            |
| Refused                            | 3            | 0            | 1            | 1            | 2            | 0            | 0            | 0            | 0            | 0            |
| Not reported                       | 114          | 139          | 110          | 168          | 184          | 103          | 165          | 217          | 252          | 292          |
| <b>Tested, as % all</b>            | <b>73.5%</b> | <b>69.8%</b> | <b>78.1%</b> | <b>71.8%</b> | <b>70.0%</b> | <b>72.3%</b> | <b>57.4%</b> | <b>51.6%</b> | <b>51.7%</b> | <b>47.5%</b> |
| <b>Alcohol-impaired, as % all</b>  | <b>6.4%</b>  | <b>4.9%</b>  | <b>4.5%</b>  | <b>5.9%</b>  | <b>3.4%</b>  | <b>24.5%</b> | <b>17.9%</b> | <b>14.5%</b> | <b>10.1%</b> | <b>9.3%</b>  |
| <b>Drug-positive, as % all</b>     | <b>10.7%</b> | <b>9.5%</b>  | <b>7.5%</b>  | <b>8.7%</b>  | <b>7.4%</b>  | <b>24.4%</b> | <b>18.1%</b> | <b>14.1%</b> | <b>13.2%</b> | <b>10.1%</b> |

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017

Notes:

- 1) *Alcohol-impaired*: BAC of 0.08 g/dL or higher.
- 2) *Drug-positive*: ARIES reported “positive” under *drug test results*. ARIES does not specify drug(s) type(s).
- 3) *Alcohol-impaired* and *drug-positive* are not mutually exclusive (i.e., drivers can be one or the other or both).

## RATES OF ALCOHOL-IMPAIRMENT

From 2012 to 2016, rates of alcohol-impaired drivers per 100,000 licensed drivers varied by age and gender (Table 4). Certain gender-age categories exhibited comparatively higher impairment rates than others. Males reflected a greater risk of being legally impaired in collisions than females; in each of the five years, males were about three times more likely to be impaired than females in all collisions (calculated from Table 4). The age groups most at risk of alcohol-impairment in collisions were 21 to 24 years and 25 to 34 years. However, considering all collisions, driver impairment rates have been generally decreasing since 2012 among most age groups. Alcohol impairment in fatal collisions was also highest among male drivers aged 21 to 24 and 25 to 34 years. Impairment rates in fatal collisions generally decrease with age.

## BLOOD ALCOHOL CONTENT (BAC) RESULTS

Figure 3 shows the 2016 counts and proportions of drivers with ARIES-reported BAC results in Indiana collisions, based on age and BAC level. The first age category reflects drivers 15-20 years old, for whom any positive BAC level is illegal; about half of these underage drivers had (non-zero) BAC levels. About 75 percent of drivers aged 21 to 24 years had non-zero BAC levels. In terms of legal impairment (i.e., 0.08 BAC or more), the youngest and oldest driver age categories had the lowest rates (38 percent each) in comparison to the middle age groups. For example, 64 percent of drivers aged 21 to 24 years and roughly 60 percent of drivers between 25 and 44 years of age had BACs of 0.08 or greater in 2016 (calculated from Figure 3). Another way of viewing the reported BAC results is that, for all but the youngest and oldest age groups, if a collision-involved driver is found to have been drinking at all (i.e., non-zero BAC), their reported BAC was more likely to be in excess of the legal impairment floor (i.e., 0.08 g/dL and above).

**Table 4. Rates of alcohol-impaired Indiana drivers per 100,000 licensed drivers, by age group and gender, 2012-2016**

| Age group               | Rate of alcohol-impaired drivers per 100,000 licensed drivers |               |              |               |              |               |              |               |              |               |
|-------------------------|---|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
|                         | 2012  |               | 2013         |               | 2014         |               | 2015         |               | 2016         |               |
| <b>All collisions</b>   | <b>Male</b>   | <b>Female</b> | <b>Male</b>  | <b>Female</b> | <b>Male</b>  | <b>Female</b> | <b>Male</b>  | <b>Female</b> | <b>Male</b>  | <b>Female</b> |
| <b>All drivers</b>      | <b>172.3</b>  | <b>60.1</b>   | <b>160.1</b> | <b>52.5</b>   | <b>151.9</b> | <b>48.7</b>   | <b>156.6</b> | <b>54.5</b>   | <b>156.7</b> | <b>51.2</b>   |
| 15-20                   | 164.4   | 60.0          | 146.5        | 46.5          | 143.5        | 36.0          | 114.5        | 39.3          | 109.0        | 40.7          |
| 21-24                   | 438.8   | 159.7         | 420.7        | 130.6         | 399.2        | 130.3         | 433.0        | 134.0         | 396.0        | 130.4         |
| 25-34                   | 295.7   | 104.2         | 274.4        | 100.5         | 258.3        | 90.8          | 260.6        | 94.9          | 262.2        | 98.6          |
| 35-44                   | 194.3   | 80.2          | 184.8        | 65.9          | 170.3        | 64.3          | 171.5        | 72.6          | 192.8        | 67.7          |
| 45-54                   | 142.0   | 55.7          | 139.2        | 45.6          | 130.1        | 44.8          | 144.2        | 58.1          | 143.1        | 44.2          |
| 55-64                   | 82.8  | 20.0          | 71.9         | 20.6          | 73.9         | 16.6          | 81.2         | 23.8          | 90.6         | 23.3          |
| 65 and older            | 29.7  | 3.3           | 22.0         | 6.1           | 25.0         | 5.6           | 29.8         | 5.3           | 26.3         | 5.3           |
| <b>Fatal collisions</b> | <b>Male</b>   | <b>Female</b> | <b>Male</b>  | <b>Female</b> | <b>Male</b>  | <b>Female</b> | <b>Male</b>  | <b>Female</b> | <b>Male</b>  | <b>Female</b> |
| <b>All drivers</b>      | <b>7.0</b>  | <b>0.7</b>    | <b>4.7</b>   | <b>0.8</b>    | <b>3.9</b>   | <b>0.6</b>    | <b>3.3</b>   | <b>0.6</b>    | <b>2.6</b>   | <b>0.6</b>    |
| 15-20                   | 6.7   | 0.0           | 2.3          | 1.2           | 2.3          | 0.0           | 1.7          | 0.6           | 1.1          | 0.0           |
| 21-24                   | 14.2  | 2.5           | 13.6         | 3.2           | 5.5          | 1.3           | 7.4          | 0.6           | 10.1         | 2.6           |
| 25-34                   | 11.8  | 1.4           | 8.7          | 1.3           | 7.1          | 1.3           | 4.7          | 2.3           | 3.6          | 1.0           |
| 35-44                   | 9.1   | 1.4           | 6.3          | 1.1           | 4.4          | 1.3           | 4.7          | 0.5           | 2.8          | 0.8           |
| 45-54                   | 6.4   | 0.5           | 3.0          | 0.2           | 4.8          | 0.7           | 3.0          | 0.2           | 2.3          | 1.0           |
| 55-64                   | 2.4   | 0.0           | 2.1          | 0.3           | 2.3          | 0.0           | 2.6          | 0.2           | 1.5          | 0.0           |
| 65 and older            | 2.0   | 0.0           | 0.8          | 0.2           | 0.8          | 0.0           | 0.8          | 0.0           | 0.3          | 0.0           |

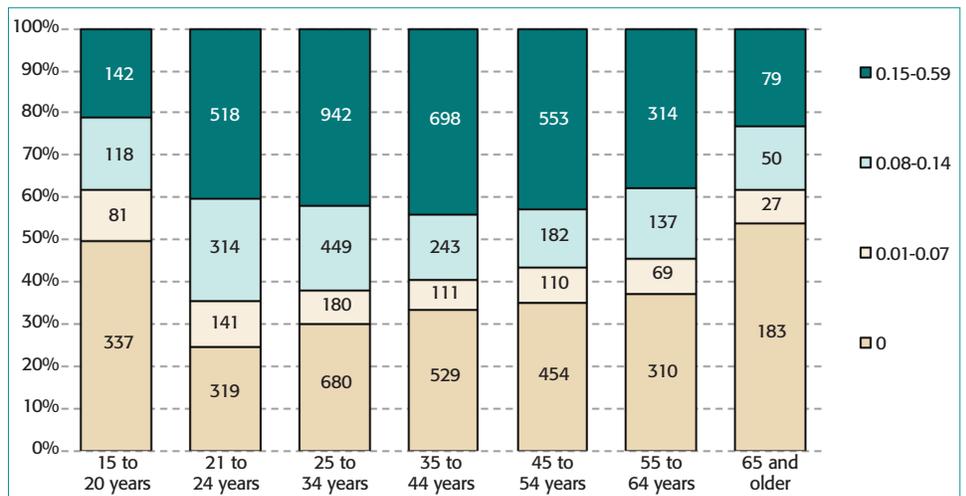


Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017; Indiana Bureau of Motor Vehicles, as of March 7, 2017.

**Notes:**

- 1) Excludes drivers with unknown gender, age, or age under 15 years.
- 2) Conditional formatting applies to a single year within each gender category and is calculated for each impaired driving collision type presented (*all collisions* and *fatal collisions*).
- 3) Due to changes in Indiana BMV-reported licensing counts and ARIES-reported BAC results, rates cannot be compared directly to previous years' exhibits.
- 4) Excludes cases with reported BAC greater than 0.59 g/dL.

**Figure 3. Drivers with reported blood alcohol content (BAC) results in Indiana collisions, by driver age and BAC level (g/dL), 2016**



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017.

**Notes:**

- 1) Excludes cases with unknown age, unreported BAC, or BAC greater than 0.59 g/dL.
- 2) N=8,270 drivers with reported BAC results in Indiana collisions.

## VEHICLES IN ALCOHOL-IMPAIRED COLLISIONS

The incidence of alcohol-impaired collisions involving one or more units operated by an impaired driver varied by vehicle type during 2012 to 2016 (Table 5). From 2015 to 2016, the numbers of persons within collision-involved vehicles driven by alcohol-impaired drivers decreased by about one percent. There was an 18 percent decrease in the number of persons in vans operated by alcohol-impaired persons from 2015 to 2016. Overall, however motorcycles are most likely to be operated by alcohol-impaired individuals, followed by pickup trucks. Based on their involvement in all alcohol-impaired collisions, pickup trucks and motorcycles are overrepresented in *fatal* collisions.

## ARIES UNDERCOUNTS OF ALCOHOL-IMPAIRED COLLISIONS AND FATALITIES

In closing, it should be noted that while ARIES data generally offer accurate and reliable counts of collisions and casualties resulting from those collisions each year, the ARIES counts of collisions with one or more alcohol-impaired operators involved, and the fatalities and injuries linked to impaired driving, are regularly undercounted in comparison with the NHTSA Fatality Analysis Reporting System (FARS). The differences between ARIES and FARS for the ten-years from 2006 through 2015 (latest year of FARS data) are shown in Table 6. For example, measured as a percentage of total FARS fatal alcohol-impaired fatalities, ARIES data has ranged from a low of 16 percent less than FARS (in 2008) to 46 percent less than FARS in 2015. Reasons for these differences include the use of imputation models by NHTSA and delayed or missing test results in ARIES data from year-to-year.

**Table 5. Individuals in Indiana collisions involving alcohol-impaired drivers, by vehicle type, 2012-2016**

|  | Count of individuals |              |              |              |              | Annual rate of change |               | 2016 % by vehicle type |
|--|----------------------|--------------|--------------|--------------|--------------|-----------------------|---------------|------------------------|
|  | 2012                 | 2013         | 2014         | 2015         | 2016         | 2015-16               | 2012-16       |                        |
| <b>All individuals in vehicles:</b>        |                      |              |              |              |              |                       |               |                        |
| <b>Operated by alcohol-impaired driver</b> | <b>5,504</b>         | <b>5,095</b> | <b>4,835</b> | <b>5,139</b> | <b>5,082</b> | <b>-1.1%</b>          | <b>-2.0%</b>  | <b>100%</b>            |
| Passenger car                              | 3,333                | 3,251        | 3,042        | 3,400        | 3,452        | 1.5%                  | 0.9%          | 67.9%                  |
| Pickup truck                               | 1,008                | 876          | 878          | 817          | 794          | -2.8%                 | -5.8%         | 15.6%                  |
| Sport utility vehicle                      | 710                  | 610          | 612          | 634          | 584          | -7.9%                 | -4.8%         | 11.5%                  |
| Van  | 211                  | 186          | 143          | 154          | 126          | -18.2%                | -12.1%        | 2.5%                   |
| Motorcycle                                 | 242                  | 172          | 160          | 134          | 126          | -6.0%                 | -15.1%        | 2.5%                   |
| <b>Individuals killed in vehicles:</b>     |                      |              |              |              |              |                       |               |                        |
| <b>Operated by alcohol-impaired driver</b> | <b>152</b>           | <b>115</b>   | <b>92</b>    | <b>73</b>    | <b>65</b>    | <b>-11.0%</b>         | <b>-19.1%</b> | <b>100%</b>            |
| Passenger car                              | 66                   | 64           | 42           | 40           | 41           | 2.5%                  | -11.2%        | 63.1%                  |
| Pickup truck                               | 23                   | 23           | 20           | 14           | 13           | -7.1%                 | -13.3%        | 20.0%                  |
| Sport utility vehicle                      | 17                   | 10           | 13           | 8            | 5            | -37.5%                | -26.4%        | 7.7%                   |
| Van  | 5                    | 3            | 2            | 0            | 0            | -                     | -             | -                      |
| Motorcycle                                 | 41                   | 15           | 15           | 11           | 6            | -45.5%                | -38.1%        | 9.2%                   |

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017

Notes:

- 1) *Motorcycle* includes *motorcycles*, *class A* and *class B motor-driven cycles*, and *motorized bicycles*.
- 2) Excludes *non-motorists* and *other vehicles* not listed (e.g., *large trucks*).

**Table 6. Comparison of FARS and ARIES reported alcohol-impaired fatalities in Indiana collisions, 2006-2015**

| Year | Fatalities in alcohol-impaired collisions |       |                            |           |
|------|---|-------|----------------------------|-----------|
|      | Fatalities                                |       | ARIES difference from FARS |           |
|      | FARS                                      | ARIES | Count                      | as % FARS |
| 2006 | 245                                       | 198   | -47                        | -19.2%    |
| 2007 | 224                                       | 186   | -38                        | -17.0%    |
| 2008 | 206                                       | 173   | -33                        | -16.0%    |
| 2009 | 207                                       | 127   | -80                        | -38.6%    |
| 2010 | 194                                       | 135   | -59                        | -30.4%    |
| 2011 | 207                                       | 145   | -62                        | -30.0%    |
| 2012 | 230                                       | 177   | -53                        | -23.0%    |
| 2013 | 199                                       | 134   | -65                        | -32.7%    |
| 2014 | 160                                       | 108   | -52                        | -32.5%    |
| 2015 | 178                                       | 96    | -82                        | -46.1%    |

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 16, 2017; Fatality Analysis Reporting System (FARS) data encyclopedia, *Traffic Safety Facts for Indiana, 2011-2015*, <https://cdan.nhtsa.gov/SASStoredProcess/guest>, accessed May 12, 2017.

Notes:

- 1) Includes collisions in which at least one driver had a BAC of 0.08 or more and that resulted in at least one fatality
- 2) 2015 is latest year of FARS data available.

## DEFINITION

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 812 350, 2016, 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.

## REFERENCES

National Highway Traffic Safety Administration (NHTSA). (2016). Alcohol-impaired driving, *Traffic Safety Facts, 2015 Data*, DOT HS 812 350 (December), National Center for Statistics and Analysis.

## DATA SOURCES

Indiana State Police, Automated Reporting Information Exchange System (ARIES), current as of March 16, 2017.

Indiana Bureau of Motor Vehicles (BMV) licensing data, current as of March 7, 2017.

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 publications that 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**

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 collaborates each year with the Indiana Criminal Justice Institute to analyze vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the eleventh year of this partnership. Research findings are summarized in a series of publications on various aspects of traffic collisions, including alcohol-related crashes, commercial vehicles, dangerous driving, child passenger safety, motorcycles, occupant protection, and drivers. An additional publication provides detailed information on county and municipality data. 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. Crash reports for all Indiana collisions are entered electronically through ARIES. Collisions trends 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. 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. 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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