



TRAFFIC SAFETY FACTS

YOUNG DRIVERS, 2013

JUNE 2014 • ISSUE 14-C03

Motor vehicle collisions are the leading cause of death for young people (Centers for Disease Control and Prevention, 2010). Nationally in 2011 (most recent data available), 4,347 young drivers (ages 15 to 20) were involved in fatal collisions (NHTSA, April 2013). Per mile driven, young drivers are three times more likely than older drivers to be involved in fatal crashes, a result of less driving experience, lower seat belt use rates, alcohol use, speeding, and passenger distractions (NHTSA, 2006; McCart, Mayhew, Braitman, Ferguson, & Simpson, 2009).

By most measures, young driver (ages 15 to 20) involvement in motor vehicle collisions in Indiana has improved. In 2013 in Indiana, 13.5 percent of all drivers involved in collisions were young drivers (Table 1). In 2009, there were 48,015 young drivers involved in collisions. By 2013, this number decreased to 39,795 young drivers involved -- a 4.6 percent annual decline. There were 101 young drivers involved in fatal collisions in 2013, a 21 percent decrease from the 128 involved in fatal collisions in 2012.

Looking at the rate of involvement in Indiana collisions by individual ages per 100,000 population, the rate for 16 year old young drivers, dropped significantly (a 50 percent decline) from years 2009 to 2011 and then dropped slightly again in 2013 (Figure 1). This downward trend in young driver involvement appears to be at least partially linked to the changes to Indiana's Graduated Driver Licensing (GDL) system, implemented in two phases in 2009 and 2010 and focused primarily on drivers ages 15 to 17.

This fact sheet presents information on young drivers (ages 15 to 20) involved in collisions in 2013, trends from 2009 to 2013, as well as a review of some of the effects of the GDL system as it relates to restraint use, alcohol involvement, speeding, and passenger distractions. The Indiana crash data come from the Indiana State Police Automated Reporting Information Exchange System (ARIES), current as of March 21, 2014. Only known ages are reported, although there were very few missing cases (0.3 percent).

HIGHLIGHTS

In 2013, 13.5 percent of all drivers involved in collisions were young drivers.

The number of fatal collisions involving young drivers has declined from 194 in 2004 to 97 in 2013.

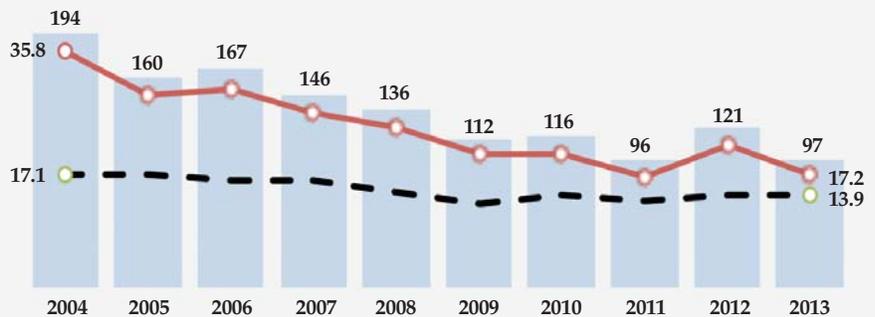
There were 101 young driver fatalities in 2013.

In 2009, there were 1,284 people injured in collisions where the person driving the vehicle was aged 16. In 2013, the number of people injured in collisions declined to 544 where the age of the person driving the vehicle was aged 16. This is one possible effect of the Indiana graduated driver licensing system which took effect in 2009 and 2010.

Nearly six percent of all young drivers who were alcohol impaired were fatally injured.

Approximately half of young drivers killed in 2013 collisions were unrestrained.

There were 97 fatal collisions involving young drivers in Indiana in 2013 or 17.2 per 100,000 population. This rate has dropped sharply since 2004, moving closer to the rate for older drivers (21 and over), which was 13.9 in 2013.



Sources: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014; U.S. Census Bureau





INDIANA TRAFFIC SAFETY FACTS

Table 1. Young drivers (ages 15 to 20) involved in Indiana collisions, by collision severity, 2009-2013

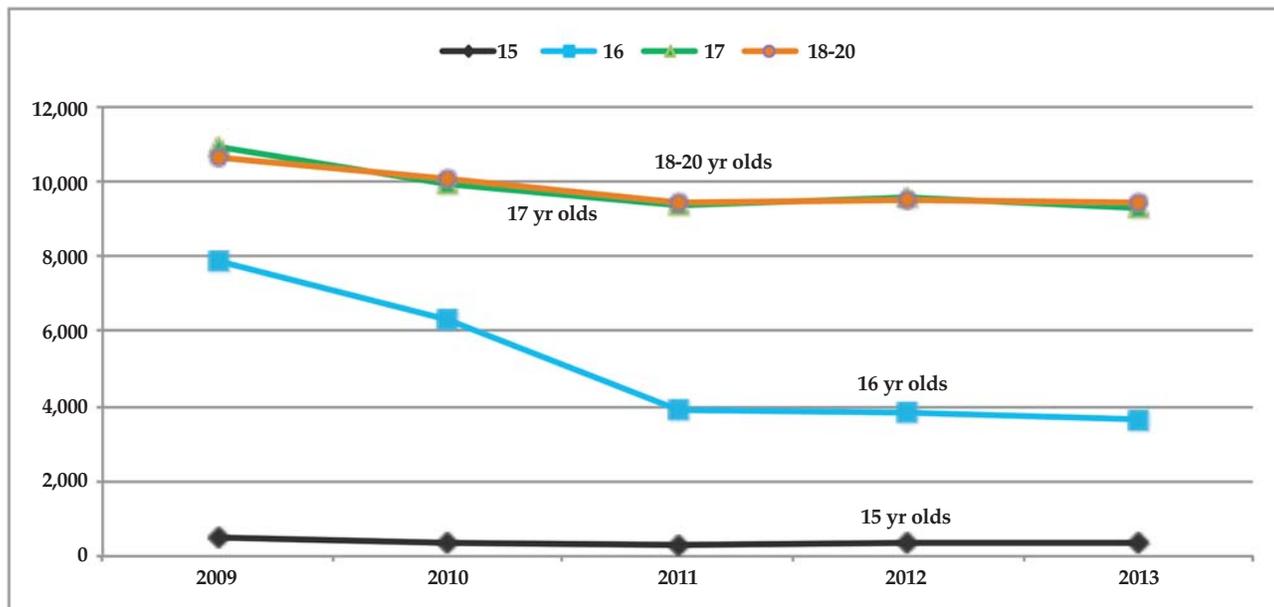
Collision severity	Count of young drivers					Annual rate of change	
	2009	2010	2011	2012	2013	2012-2013	2009-2013
Fatal	116	123	100	128	101	-21.1%	-3.4%
Non-fatal	9,929	9,436	8,153	8,272	7,547	-8.8%	-6.6%
Property damage	37,970	35,817	32,284	32,017	32,147	0.4%	-4.1%
<i>Total</i>	<i>48,015</i>	<i>45,376</i>	<i>40,537</i>	<i>40,417</i>	<i>39,795</i>	<i>-1.5%</i>	<i>-4.6%</i>
Young drivers as % all drivers in:							
Fatal collisions	11.7%	11.4%	9.7%	11.7%	9.2%		
Total collisions	16.7%	15.4%	14.1%	14.0%	13.5%		

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Notes:

- 1) All drivers are those drivers reported with ages 15 to 109.
- 2) Non-fatal collisions include those with *incapacitating, non-incapacitating* and *possible injuries* and no fatal injuries.

Figure 1. Rate of young drivers involved in Indiana collisions per 100,000 population, 2009-2013



Sources: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014; U.S. Census Bureau

Notes:

- 1) Excludes individuals where age is unknown and those with invalid ages.
- 2) 2012 population figures (latest data available) were used for 2013.

INVOLVEMENT AND INJURIES

Young driver involvement in collisions in Indiana declined 1.5 percent from 2012 to 2013, while older driver involvement (ages 21 and over) increased 2.1 percent for the same time frame (Table 2). In addition, 15 and 16 year old drivers had the largest annual decline of involvement from 2009 to 2013 (10.6 and 17.4 percent, respectively). This decline is

likely due to the restrictions placed on these age groups (see the Graduated Driver Licensing system). Young driver involvement in collisions decreased between 2009 and 2013 across all ages, while older driver involvement in crashes in all age groups increased during this same time period. In 2013, 13.5 percent of drivers involved in collisions were young drivers, while 86.5 percent were older drivers.

Table 2. Drivers in Indiana collisions, 2009-2013

Driver age	Count of drivers					Annual rate of change	
	2009	2010	2011	2012	2013	2012-2013	2009-2013
Total drivers	287,738	294,023	287,274	289,281	293,822	1.6%	0.5%
Young (15 to 20)	48,015	45,376	40,537	40,417	39,795	-1.5%	-4.6%
15	450	347	272	344	288	-16.3%	-10.6%
16	7,115	5,821	3,571	3,439	3,307	-3.8%	-17.4%
17	9,966	9,304	8,628	8,787	8,498	-3.3%	-3.9%
18	11,306	10,528	9,773	9,711	9,762	0.5%	-3.6%
19	9,998	9,886	9,236	9,271	9,102	-1.8%	-2.3%
20	9,180	9,490	9,057	8,865	8,838	-0.3%	-0.9%
Older (21 and over)	239,723	248,647	246,737	248,864	254,027	2.1%	1.5%
21-24	30,205	31,171	31,041	31,672	33,079	4.4%	2.3%
25-44	104,314	107,155	105,510	105,236	107,265	1.9%	0.7%
45-64	78,723	82,613	82,627	82,793	83,295	0.6%	1.4%
65 and over	26,481	27,708	27,559	29,163	30,388	4.2%	3.5%
% of all drivers							
Total drivers	100.0%	100.0%	100.0%	100.0%	100.0%		
Young (15 to 20)	16.7%	15.4%	14.1%	14.0%	13.5%		
15	0.2%	0.1%	0.1%	0.1%	0.1%		
16	2.5%	2.0%	1.2%	1.2%	1.1%		
17	3.5%	3.2%	3.0%	3.0%	2.9%		
18	3.9%	3.6%	3.4%	3.4%	3.3%		
19	3.5%	3.4%	3.2%	3.2%	3.1%		
20	3.2%	3.2%	3.2%	3.1%	3.0%		
Older (21 and over)	83.3%	84.6%	85.9%	86.0%	86.5%		
21-24	10.5%	10.6%	10.8%	10.9%	11.3%		
25-44	36.3%	36.4%	36.7%	36.4%	36.5%		
45-64	27.4%	28.1%	28.8%	28.6%	28.3%		
65 and over	9.2%	9.4%	9.6%	10.1%	10.3%		

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Note: Includes drivers ages 15 to 109.



TRAFFIC SAFETY FACTS

In 2013, there were 10,348 injuries to people in collisions involving a young driver – down from 13,643 in 2009 (Table 3). Overall, there was a decline of 16.4 percent for fatal and 17.7 percent for incapacitating injuries from 2012 to 2013. The majority of the injuries in 2013 occurred among

drivers and passengers in the young driver vehicle. Of the 107 fatal injuries that occurred, 65.4 percent (70) involved individuals in the young driver vehicle.

Table 3. Injuries to people in collisions involving a young driver, by person type, and injury severity, 2009-2013

Location	Person type	Injury severity	Count of occupant and non-motorist injuries					Annual rate of change	
			2009	2010	2011	2012	2013	2012-2013	2009-2013
All	All	Fatal	129	128	113	128	107	-16.4%	-4.6%
		Incapacitating	757	779	683	792	652	-17.7%	-3.7%
		Non-incapacitating	12,757	12,189	10,543	10,516	9,589	-8.8%	-6.9%
In young driver vehicle	Young drivers	Fatal	48	56	55	54	44	-18.5%	-2.2%
		Incapacitating	311	289	263	329	258	-21.6%	-4.6%
		Non-incapacitating	5,197	4,911	4,161	4,281	3,922	-8.4%	-6.8%
	Injured occupants	Fatal	40	36	22	28	26	-7.1%	-10.2%
		Incapacitating	152	168	140	169	132	-21.9%	-3.5%
		Non-incapacitating	2,424	2,279	1,938	1,922	1,737	-9.6%	-8.0%
Not in young driver vehicle	Other drivers	Fatal	33	25	22	31	22	-29.0%	-9.6%
		Incapacitating	193	204	184	196	174	-11.2%	-2.6%
		Non-incapacitating	3,415	3,328	2,947	2,874	2,679	-6.8%	-5.9%
	Injured occupants	Fatal	5	8	5	2	8	300.0%	12.5%
		Incapacitating	64	77	55	61	60	-1.6%	-1.6%
		Non-incapacitating	1,464	1,402	1,264	1,269	1,085	-14.5%	-7.2%
	Non-motorists	Fatal	3	3	9	13	7	-46.2%	23.6%
		Incapacitating	37	41	41	37	28	-24.3%	-6.7%
		Non-incapacitating	257	269	233	170	166	-2.4%	-10.4%
% In young driver vehicle	All	Fatal	68.2%	71.9%	68.1%	64.1%	65.4%		
		Incapacitating	61.2%	58.7%	59.0%	62.9%	59.8%		
		Non-incapacitating	59.7%	59.0%	57.8%	59.0%	59.0%		

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Notes:

- 1) *Young driver* is defined as those reported as ages 15 to 20.
- 2) *Other drivers* is defined as those reported as ages 21 to 109.

IMPACT OF GDL

As stated earlier, Indiana’s Graduated Driver Licensing (GDL) system was implemented in two phases – Phase 1 in 2009 and Phase 2 in 2010. The GDL changes reduced teen driver exposure to the

opportunity for involvement in a collision, as many teen drivers that previously qualified for permits and licenses no longer do, and many face restrictions that limit their driving time and activities while driving (see text box at top of page 5).

Indiana graduated driver licensing system

	Existing law	GDL law		Net GDL impact
	Applies to probationary license issued:			
	Before 7/1/2009	After 6/30/2009	After 6/30/2010	
Stage 1: Learner Permit				
Minimum age				
<i>With Driver Ed</i>	15 years		15 years, 180 days	+ 180 days
<i>Without Driver Ed</i>	16 years --			
Minimum holding period	60 days		180 days	+ 120 days
Stage 2: Probationary license				
Minimum age				
<i>With Driver Ed</i>	16 years, 30 days		16 years, 180 days	+ 150 days
<i>Without Driver Ed</i>	16 years, 180 days		16 years, 270 days	+ 90 days
Minimum holding period	60 days		180 days	+ 120 days
Supervised driving	None required		50 hours (10 nighttime)	+ 50 hours
Cell phone use while driving	No restrictions	Prohibited		Total prohibition
Nighttime driving restrictions	Su-Th 11pm-5am	First 180 days: 10pm-5am		More restrictive for first six months
	Sa-Su 1am-5am	After first 180 days: Su-Th 11pm-5am, Sa-Su 1am-5am		
Passengers (see note below for exceptions)	First 90 days: No passengers unless a licensed adult	First 180 days: Prohibited unless licensed adult (age 25 or spouse age 21) After first 180 days: None		+ 90 days
Stage 3: Unrestricted license				
Minimum age				

Sources: IC 9-24-3, IC 9-24-11, IC 31-37-3

Note: Exceptions for passenger restrictions include transporting children, siblings, or spouses and for work, school, or religious functions.

In 2009, there were 1,284 people injured in collisions where the age of the person driving the vehicle was 16 years old (Table 4). In 2010, the number of injuries among drivers involved in collisions in this age group dropped to 1,076, and in 2011, the number declined to 616 – over a 50 percent decrease from the 2009 number of injuries. While injuries declined for older drivers (ages 21 and above) from 2009 to 2013, the

annual rate of decline was much lower compared to younger drivers (6.1 percent for 21 and over drivers compared to 19.3 percent for 16 year olds). This decline is especially significant for the 15 and 16 year old drivers – another indication of the success of the GDL.

Table 4. Injuries to people in collisions involving a young driver, by driver age, and injury severity, 2009-2013

Driver age	Injury severity	Count of occupant injuries					Annual rate of change	
		2009	2010	2011	2012	2013	2012-2013	2009-2013
15	Fatal	3	3	0	0	3	na	0.0%
	Incapacitating	12	12	15	12	11	-8.3%	-2.2%
	Non-incapacitating	130	92	77	104	81	-22.1%	-11.2%
	Total	145	107	92	116	95	-18.1%	-10.0%
16	Fatal	9	9	1	7	4	-42.9%	-18.4%
	Incapacitating	74	67	43	36	31	-13.9%	-19.5%
	Non-incapacitating	1,201	1,000	572	523	509	-2.7%	-19.3%
	Total	1,284	1,076	616	566	544	-3.9%	-19.3%
17	Fatal	15	9	16	14	15	7.1%	0.0%
	Incapacitating	83	89	78	90	71	-21.1%	-3.8%
	Non-incapacitating	1,626	1,519	1,348	1,316	1,176	-10.6%	-7.8%
	Total	1,724	1,617	1,442	1,420	1,262	-11.1%	-7.5%
18-20	Fatal	61	71	60	61	48	-21.3%	-5.8%
	Incapacitating	294	289	267	360	277	-23.1%	-1.5%
	Non-incapacitating	4,664	4,581	4,102	4,262	3,893	-8.7%	-4.4%
	Total	5,019	4,941	4,429	4,683	4,218	-9.9%	-4.3%
21 and over	Fatal	38	33	28	33	30	-9.1%	-5.7%
	Incapacitating	257	281	240	257	234	-8.9%	-2.3%
	Non-incapacitating	4,879	4,735	4,212	4,143	3,765	-9.1%	-6.3%
	Total	5,174	5,049	4,480	4,433	4,029	-9.1%	-6.1%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

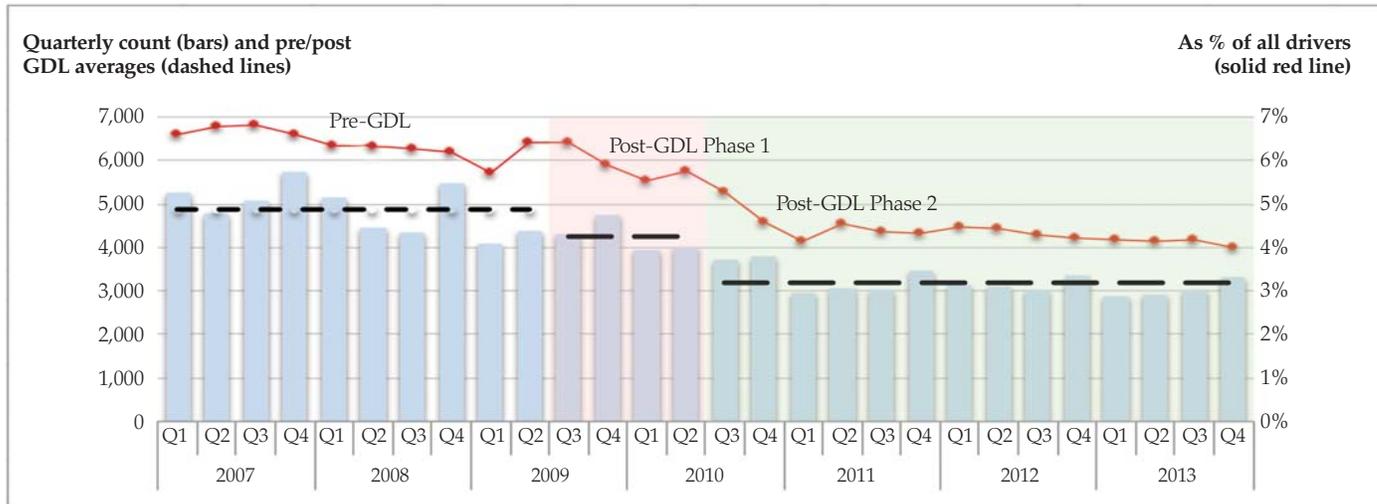


TRAFFIC SAFETY FACTS

Figure 2 compares two-and-a-half years prior to the implementation of Phase 1 of the GDL, the Phase 1 implementation period, and the post Phase 2 implementation period. From January 2007 to June 2009 (pre-Phase 1), the average number of teens involved in collisions was approximately 5,000. After the Phase 1 implementation and prior to Phase 2,

that number declined to just over 4,200, and the number involved after Phase 2 implementation (July 2010 to December 2013) declined again to an average of approximately 3,200 teen drivers. Young drivers as a percent of all drivers (red line) dropped from 6.4 percent in January 2007 to 4 percent in December 2013.

Figure 2. Drivers under age 18 involved in Indiana crashes, 2007-2013



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Notes:

- 1) Phase 1 of Graduated Driver Licensing law began July 1, 2009.
- 2) Phase 2 of Graduated Driver Licensing law began July 1, 2010.

The Indiana GDL was designed to build driving experience under supervised conditions. Restrictions on young passengers were included to minimize the potential for distracted driving. Under the GDL system (after June, 2009), young drivers are prohibited from having passengers under age 25 (with some exceptions) for the first 180 days of receiving their license. Young drivers with passengers are generally more likely to

suffer fatal or incapacitating injuries when passengers are present versus driving alone. There were less than one percent incapacitating injuries when no passenger was present for 16 year old young drivers involved in collisions, compared to 6 percent incapacitating injuries when any age passenger and 7 percent incapacitating injuries when young (age 0 to 20) passengers were present (Table 5).

Table 5. Young drivers (ages 15 to 20) in collisions, by driver age, injury status, and presence of passengers, 2013

	Count of individuals by driver age				Total
	15 yrs.	16 yrs.	17 yrs.	18 to 20 yrs.	
Total young drivers	288	3,307	8,498	27,702	39,795
Young driver injuries when no passengers present					
Fatal	3	1	4	22	30
Incapacitating	4	11	34	150	199
Other	45	276	665	2,476	3,462
Not injured	211	2,871	7,464	24,082	34,628
Total	263	3,159	8,167	26,730	38,319
% fatal	1.1%	0.0%	0.0%	0.1%	0.1%
% incapacitating	1.5%	0.3%	0.4%	0.6%	0.5%
Young driver injuries when any age passenger present					
Fatal	0	0	4	10	14
Incapacitating	3	9	12	35	59
Other	12	85	167	494	758
Not injured	10	54	148	433	645
Total	25	148	331	972	1,476
% fatal	0.0%	0.0%	1.2%	1.0%	0.9%
% incapacitating	12.0%	6.1%	3.6%	3.6%	4.0%
Young driver injuries when young passengers (ages 0 to 20) present					
Fatal	0	0	4	8	12
Incapacitating	3	8	11	25	47
Other	8	71	150	397	626
Not injured	6	43	134	326	509
Total	17	122	299	756	1,194
% fatal	0.0%	0.0%	1.3%	1.1%	1.0%
% incapacitating	17.6%	6.6%	3.7%	3.3%	3.9%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Notes:

- 1) More passengers may have been in vehicles; however, passengers are reported only if an injury occurs.
- 2) Other injury includes injury statuses reported as *non-incapacitating, possible, refused (treatment), and unknown*.
- 3) Not injured includes statuses reported as blank values.



TRAFFIC SAFETY FACTS

GENERAL RISK FACTORS – ALCOHOL USE, SPEEDING, RESTRAINT USE

Alcohol use and speeding are two primary risk factors for young driver crash involvement (Mayhew, Donelson, Beirness, & Simpson, 1986; Peck, Gebers, Voas, & Romano, 2008). The percentage of young drivers with

alcohol impairment increased with age. There were no 15 year-old drivers in collisions who were alcohol impaired, compared with 130 drivers (1.5 percent) age 20 who were alcohol impaired (Table 6). Of the 9,762 drivers age 18, only 0.3 percent was killed; however, 11 percent of those killed were alcohol-impaired. Nearly six percent of all young drivers who were fatally injured were alcohol-impaired.

Table 6. Young drivers involved in collisions, by driver age, collision severity, and alcohol involvement, 2013

Driver age/collision severity	Total drivers	% collision severity	Drivers with positive BAC (0.01 and above)		Driver alcohol-impaired (BAC >=0.08)		% alcohol-impaired
			Yes	No	Yes	No	
15	288		0	288	0	288	0.0%
Fatal	3	1.0%	0	3	0	3	0.0%
Incapacitating	10	3.5%	0	10	0	10	0.0%
Non-incapacitating	81	28.1%	0	81	0	81	0.0%
Property damage	194	67.4%	0	194	0	194	0.0%
16	3,307		17	3,290	10	3,297	0.3%
Fatal	9	0.3%	0	9	0	9	0.0%
Incapacitating	49	1.5%	1	48	0	49	0.0%
Non-incapacitating	596	18.0%	6	590	4	592	0.7%
Property damage	2,653	80.2%	10	2,643	6	2,647	0.2%
17	8,498		40	8,458	26	8,472	0.3%
Fatal	19	0.2%	0	19	0	19	0.0%
Incapacitating	105	1.2%	2	103	2	103	1.9%
Non-incapacitating	1,429	16.8%	9	1,420	6	1,423	0.4%
Property damage	6,945	81.7%	29	6,916	18	6,927	0.3%
18	9,762		97	9,665	64	9,698	0.7%
Fatal	27	0.3%	5	22	3	24	11.1%
Incapacitating	132	1.4%	2	130	2	130	1.5%
Non-incapacitating	1,695	17.4%	22	1,673	16	1,679	0.9%
Property damage	7,908	81.0%	68	7,840	43	7,865	0.5%
19	9,102		135	8,967	110	8,992	1.2%
Fatal	25	0.3%	4	21	2	23	8.0%
Incapacitating	129	1.4%	5	124	5	124	3.9%
Non-incapacitating	1,656	18.2%	25	1,631	20	1,636	1.2%
Property damage	7,292	80.1%	101	7,191	83	7,209	1.1%
20	8,838		159	8,679	130	8,708	1.5%
Fatal	18	0.2%	2	16	1	17	5.6%
Incapacitating	139	1.6%	6	133	5	134	3.6%
Non-incapacitating	1,526	17.3%	43	1,483	38	1,488	2.5%
Property damage	7,155	81.0%	108	7,047	86	7,069	1.2%
All young drivers	39,795		448	39,347	340	39,455	0.9%
Fatal	101	0.3%	11	90	6	95	5.9%
Incapacitating	564	1.4%	16	548	14	550	2.5%
Non-incapacitating	6,983	17.5%	105	6,878	84	6,899	1.2%
Property damage	32,147	80.8%	316	31,831	236	31,911	0.7%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Note: Alcohol impaired is defined as having a blood alcohol concentration (BAC) >= 0.08 grams per deciliter (g/dL).

The share of young drivers in collisions where speeding was determined to be a factor stayed generally consistent from 2009 to 2013 (around 10 percent) (Table 7). In 2013, of the 101 young drivers involved in fatal collisions, 24.8 percent (25) were speeding. There were no drivers determined to be speeding age 15 involved in fatal collisions.

Cell phone use while driving has become more of a concern for all drivers in recent years and is likely under reported due to the logistical difficulties

with enforcement. However given the reported data, it does not appear to be a major issue for young drivers. Only two of the 101 young drivers involved in fatal collisions were determined to have cell phone use as a factor in the collision, while less than one percent of young drivers involved in all collisions had cell phone use as a factor in the collision (Table 8).

Table 7. Young drivers in Indiana collisions, by collision severity and speeding status, 2009-2013

Driver age	2009	2010	2011	2012	2013
Speeding in all collisions					
15	37	42	28	30	27
16	784	635	407	316	365
17	1,044	993	932	969	993
18-20	3,023	3,024	2,736	2,716	2,885
<i>Total speeding</i>	<i>4,888</i>	<i>4,694</i>	<i>4,103</i>	<i>4,031</i>	<i>4,270</i>
Total all collisions: 15-20 yrs	48,013	45,376	40,537	40,417	39,795
<i>% speeding</i>	<i>10.2%</i>	<i>10.3%</i>	<i>10.1%</i>	<i>10.0%</i>	<i>10.7%</i>
Speeding in fatal collisions					
15	0	0	0	0	0
16	3	3	1	3	2
17	3	4	3	7	6
18-20	20	22	16	23	17
Total speeding	26	29	20	33	25
Total fatal collisions: 15-20 yrs	116	123	100	128	101
<i>% speeding</i>	<i>22.4%</i>	<i>23.6%</i>	<i>20.0%</i>	<i>25.8%</i>	<i>24.8%</i>

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

Note: Speeding is identified if any one of the following conditions are met: (1) *unsafe speed or speed too fast for weather conditions* is listed as the primary or contributing factor of the collision; (2) a vehicle driver is issued a speeding citation.

Table 8. Young drivers in Indiana collisions, by collisions severity and cell phone use, 2009-2013

Driver age	2009	2010	2011	2012	2013
Cell phone use in all collisions					
15	0	2	0	0	2
16	41	32	15	15	13
17	68	61	39	53	48
18-20	229	256	202	168	171
<i>Total cell phone use</i>	<i>338</i>	<i>351</i>	<i>256</i>	<i>236</i>	<i>234</i>
Total all collisions: 15-20 yrs	48,013	45,376	40,537	40,417	39,795
<i>% drivers with cell phone use</i>	<i>0.7%</i>	<i>0.8%</i>	<i>0.6%</i>	<i>0.6%</i>	<i>0.6%</i>
Cell phone use in fatal collisions					
15	0	0	0	0	1
16	0	0	0	0	0
17	0	0	0	0	0
18-20	0	1	1	1	1
<i>Total cell phone use</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>2</i>
Total fatal collisions: 15-20 yrs	116	123	100	128	101
<i>% drivers with cell phone use</i>	<i>0.0%</i>	<i>0.8%</i>	<i>1.0%</i>	<i>0.8%</i>	<i>2.0%</i>

Source: Indiana State Police Automated Reporting Information Exchange System as of March 21, 2014

Notes:

- 1) Statewide prohibition on cell phone use for drivers under age 18 took effect July 1, 2009.
- 2) Reliability of data on cell phone usage is uncertain due to the inability of police in some cases to determine usage during a collision.



INDIANA TRAFFIC SAFETY FACTS

Current Indiana law requires all passenger vehicle occupants 16 and older to ride properly restrained in a vehicle. In addition, the current Indiana child passenger restraint law requires all child occupants (ages 15 and younger) to be properly restrained in a child restraint device or seat belt in all seating positions in all vehicles. While restraint use for young drivers in Indiana collisions has generally increased over time, the rate for

15 year olds is considerably less than the other young driver age groups (Figure 3). In 2013, 92 percent of 15 year-old drivers involved in collisions were known to be restrained. This is compared to 98.6 percent for 16 and 18 to 20 year-olds, and 99.1 percent for 17 year-olds (Table 9). More than half (51.4 percent) of the young drivers killed in collisions in 2013 were unrestrained.

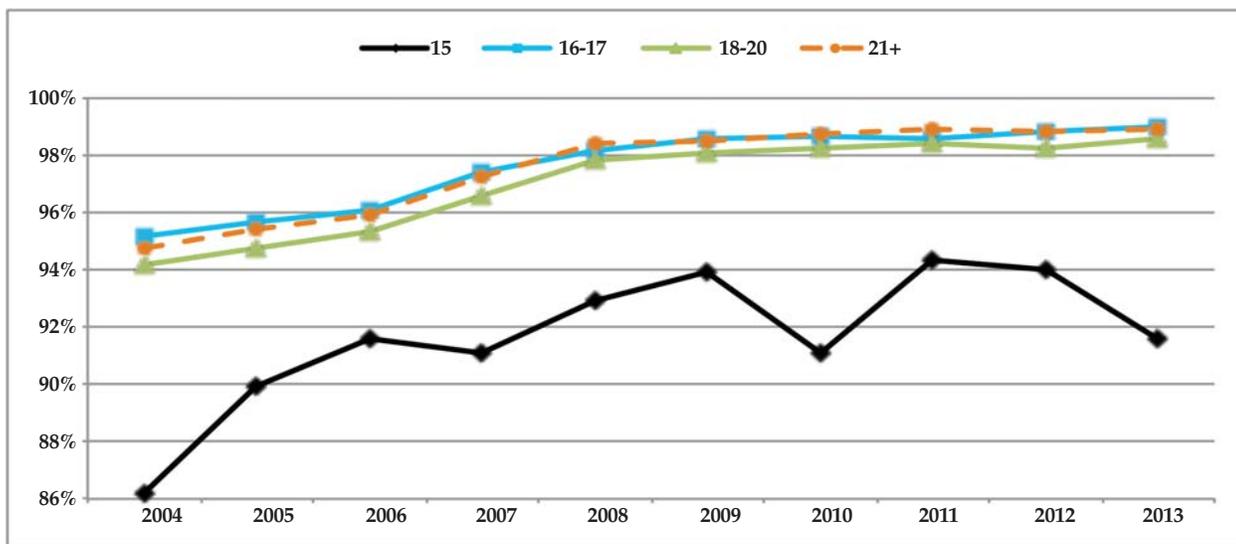
Table 9. Restraint use rates for young drivers in Indiana collisions, by injury status, 2009-2013

Injury severity	Driver age	Percent restrained				
		2009	2010	2011	2012	2013
Fatal	15	na	na	na	na	0.0%
	16	75.0%	100.0%	na	75.0%	100.0%
	17	60.0%	66.7%	42.9%	42.9%	50.0%
	18-20	40.7%	47.5%	31.4%	41.2%	48.0%
	Total	47.2%	52.2%	33.3%	44.4%	48.6%
Incapacitating	15	100.0%	0.0%	0.0%	33.3%	100.0%
	16	85.0%	69.0%	65.0%	89.5%	68.8%
	17	74.4%	78.7%	84.6%	81.6%	86.5%
	18-20	69.3%	77.4%	74.5%	76.1%	78.4%
	Total	72.8%	75.9%	75.1%	77.7%	79.3%
All	15	93.9%	91.1%	94.4%	94.0%	91.6%
	16	98.6%	98.7%	98.5%	98.8%	98.6%
	17	98.6%	98.6%	98.6%	98.8%	99.1%
	18-20	98.1%	98.3%	98.4%	98.2%	98.6%
	Total	98.2%	98.4%	98.4%	98.4%	98.7%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

- Notes:
- 1) Excludes motorcycle, moped, and motor homes/recreational vehicles.
 - 2) Includes only cases where restraint use was known.
 - 3) na = not applicable; no fatalities for that age and year existed.
 - 4) Restraint use is counted as restrained if one of the following categories are identified on the crash report: (1) lap belt only; (2) harness; (3) airbag deployed and harness; (4) child restraint; or (5) lap and harness.

Figure 3. Restraint use rates for young drivers in collisions, by age, 2004-2013



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 21, 2014

- Notes:
- 1) Excludes motorcycle, moped, and motor home/recreational vehicles.
 - 2) Includes only cases where restraint use was known.
 - 3) Restraint use is counted as restrained if one of the following categories are identified on the crash report: (1) lap belt only; (2) harness; (3) airbag deployed and harness; (4) child restraint; or (5) lap and harness.

DEFINITIONS

- **Annual rate of change (ARC)** – The rate that a beginning value must increase/decrease each period (e.g. month, quarter, year) in a time series to arrive at the ending value in the time series. ARC is a “smoothed” rate of change because it measures change in a variable as if the change occurred at a steady rate each period with compounding. For example, to measure change in a variable from 2009 to 2013, it is calculated as $(\text{Value in 2013}/\text{Value in 2009})^{1/4} - 1$.

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DATA SOURCES

Indiana State Police Automated Reporting Information Exchange System (ARIES), current as of March 21, 2014.

U.S. Census Bureau, Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2012.



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), the ICJI website (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 2013 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the eighth 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, 2013, 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 Indiana University Public Policy Institute (PPI) is a collaborative, multidisciplinary research institute within the Indiana University School of Public and Environmental Affairs (SPEA), Indianapolis. PPI 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. PPI also supports 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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