

# Why do teenage drivers face higher risks of being involved in motor vehicle crashes?

There are two prevailing reasons teenage drivers are at increased risk of being involved in motor vehicle-related crashes that result in injury or death.



## 1. Lack of driving experience.

Lack of experience means the teenage driver is less able to detect and respond to traffic hazards, causing the driver to have less control of the vehicle.

## 2. Risk behavior of teenagers.

Teenagers tend to take more risks as they are influenced by their emotions, stress, and peer pressure. In addition, experimenting with alcohol and drugs can impair the teenager's driving ability. Also teenage drivers tend to not use their seat belts, increasing their risk of injury in a crash.

While learning to drive is a big step toward becoming an adult, keep in mind that teens are not yet adults.

New teen drivers need time and practice to be safe behind the wheel. We can protect teens and others on the road by guiding teens through a step-by-step approach to safer driving. Arkansas has a graduated driver licensing (GDL) law that limits nighttime driving, restricts cell phone use and limits the number of passengers allowed for teen drivers.





# Graduated Driver Licensing Law

Applies to those applying for or receiving learners or intermediate license after July 31, 2009.

## Know the Facts

In Arkansas teens die in car crashes at rate two times that of the United States. The Graduated Driver's Licensing law allows teens more time to learn how to drive while limiting risks.

**Effective July 31, 2009**, the new law applies to young drivers and includes restrictions on cell phone use, passengers and nighttime driving.

An acknowledgement will be signed by the applicant and parent for a learner's or an intermediate license stating that they understand the new restrictions on cell phone use, passengers and nighttime driving.

	<b>Hardship License</b> Additional restrictions apply until driver is age 18.	<b>Learner's License</b> Must pass vision and knowledge test.	<b>Intermediate License</b> Must already have a learner's license.*	<b>Unrestricted License</b> Must already have an intermediate license.
<b>Minimum Age</b>	14	14 - 15	16 - 17	18
<b>Supervision:</b> Driver accompanied by someone <b>at least 21 years of age or older at all times.</b>		✓	✓ For 6 months if first licensure	
<b>Seat Belts:</b> Use required.	✓	✓	✓	✓
<b>Violations:</b> No serious accident or traffic violation within six months of licensure. If violation occurs, an unrestricted license could be delayed.	✓	✓	✓	
<b>Violations:</b> No serious accident or traffic violation for at least 12 months prior to application.				✓
<b>Cell Phone:</b> No cell phone or other interactive wireless communication device use while driving.	✓	✓	✓	✓ Can use hands free if 18-21 years of age
<b>Passengers:</b> No more than one unrelated minor passenger allowed unless there is an adult 21 years of age or older in the front passenger seat of the car.  Unrelated minor passenger is a person under 21 years old who is not a sibling, step-sibling, or a child who lives in the same household as the driver.	✓		✓	
<b>Nighttime:</b> No driving between 11 p.m. and 4 a.m. unless accompanied by a passenger 21 years of age or older, driving to or from a school activity, church-related activity, or a job.	✓		✓	

\*Mandatory holding period of 6 months.



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# CREATE A TEEN DRIVING CONTRACT

**Teens need adults to set an example and help lay down some rules.** Rules work better when both sides agree on what they are and what happens if the rules get broken. Sit down with your teen and talk about the dangers listed in the first column. In the second column, write down the agreement you make. In the third column, write down what will happen if the rule gets broken.

Condition	Agreement	Consequence for Violation
<b>Seat Belts:</b> Using lap/shoulder belts cuts the risk of dying in a crash nearly in half.		
<b>Cell Phones:</b> The risk of having a crash is four times higher when the driver is on a cell phone.		
<b>Speeding:</b> Speeding makes it harder to steer or stop your car. It also gives you less time to react to danger.		
<b>Impaired Driving:</b> Drunk driving is the cause in one of every four fatal teen crashes.		
<b>Distractions:</b> Eating and drinking, adjusting the radio, or texting while driving can cause anyone to crash. For teens, the risk is even higher.		
<b>Teen Passengers:</b> Just one passenger increases the risk of crash by 40 percent; two passengers double that risk and three passengers quadruple the risk.		
<b>Nighttime:</b> Four out of every ten crash deaths occur at night.		

Teen's Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent's Signature \_\_\_\_\_ Date \_\_\_\_\_



# TEEN DRIVING

## Stay Safe Behind the Wheel

To a teenager, driving means more freedom. Learning to drive is a big step toward becoming an adult, but teens are not adults. Teens need extra driving rules and supervised practice to protect themselves and others on the road with them.

## Know the Risks and Laws for Being on the Road

**Age – Fact:** Arkansas teens have rates of motor vehicle death that are nearly twice as high as the US overall. **Risk:** Teens are involved in three times as many fatal crashes as all other drivers. **Arkansas Law:** A teen may obtain a learner's license at ages 14-15, an intermediate license at ages 16-17, and a full license at age 18.

**Seat Belt Use – Fact:** States with primary safety belt laws have higher belt use rates and lower fatality rates. **Risk:** In 2008, more than half of the teens killed in motor vehicle crashes were not wearing their seat belt. **Arkansas Law:** The primary seat belt law states that **any** driver and front seat passenger can be ticketed for not wearing a seat belt. All passengers must wear a seat belt when riding with a teen driver with a learner's or intermediate license.

**Cell Phone Use – Fact:** The risk of having a crash is four times higher when cell phones are in use. **Risk:** Using a phone while driving is a serious risk for teen drivers, forcing them to take their eyes off the road and at least one hand off the steering wheel. **Arkansas Law:** Teen drivers ages 14-17 are restricted from using cell phones except for emergency purposes. **Texting and driving is illegal for all drivers.**

**Nighttime Driving – Fact:** 64% of Arkansas fatal motor vehicle crashes in 2009 occurred between the hours of 3 p.m. and 6 a.m. **Risk:** Four out of every ten crash deaths occur at night. **Arkansas Law:** Teen drivers with an intermediate license are prohibited from driving between the hours of 11 p.m. and 4 a.m. unless accompanied by a licensed adult age 21 or older, or if driving to or from a school activity, church-related activity, or job.

**Passengers – Fact:** Just one passenger increases the risk of a crash by 40%. **Risk:** Teen drivers with two or more teen passengers increase the chance of a fatal crash by five times. **Arkansas Law:** Teen drivers with an intermediate license are prohibited from having more than one unrelated minor passenger unless accompanied by a licensed adult age 21 or older.

**Underage Drinking – Fact:** Nearly 25% of car crashes resulting in teen deaths also involved alcohol. **Risk:** Each year thousands of teens are killed or injured in crashes as a result of underage drinking. **Arkansas Law:** Teens driving with a Blood Alcohol Concentration (BAC) between .02 and .07 can be ticketed for Driving Under the Influence (DUI). Teens driving with a BAC of .08 or greater can be ticketed for Driving While Intoxicated (DWI). It is also illegal for adults to provide alcohol to minors or allow minors to drink alcohol on their property.



# DISTRACTED DRIVING

## Stay Focused on the Road

Distracted driving is a factor in 80% of all motor vehicle crashes in the United States, of which 18% resulted in injury. Drivers may become distracted by many things when on the road, but cell phones are the biggest problem. Drivers talking or texting on their phones contribute to thousands of motor vehicle crash deaths each year.

## Types of Distractions

Distractions may cause drivers to take their eyes off the road, take their hands off the wheel or take their mind off what they are doing. Each is dangerous.

Examples of driving distractions include:

- Talking on a cell phone
- Texting
- Eating and drinking
- Talking to passengers
- Grooming (putting on makeup or brushing hair)
- Reading, including maps
- Using a PDA or navigation system
- Watching a video
- Changing the radio station, CD or Mp3 player

## Distracted Driving = Less Safe

- One third of all drivers feel less safe on the road today than they did five years ago. Many of those drivers said distracted driving was a main reason for that feeling.
- In 2010, 3,092 people in the United States died in crashes involving a distracted driver. That same year, more than 416,000 people were injured.

## Prevent Crashes

- Turn off cell phones or wait to check your messages until you are parked.
- Adjust the air conditioning or heat and radio while parked.
- Don't let your passengers distract you.



## Know the Law!

**It is illegal for:**

- Any driver to text while driving,
- Any driver to use a cell phone in a school zone or construction zone,
- Teen drivers ages 14 - 17 to use a cell phone for any purpose other than an emergency,
- Bus drivers to use a cell phone for any purpose other than an emergency, and
- Young adult drivers ages 18 - 20 to talk on a cell phone unless they are using a hands-free device.



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Sources: National Highway Traffic Safety Administration, National Safety Council

ACHI is a nonpartisan, independent, health policy center that serves as a catalyst for improving the health of Arkansans.

## Evaluation of the Arkansas Graduated Driver License

### Purpose of this Evaluation

The Graduated Driver License (GDL) law was expanded for Arkansas teens in 2009 to help provide a safe environment for young drivers by placing strategic restrictions on when and with whom they may drive. The purpose of this evaluation was to determine if there is evidence of reductions in vehicle crashes and related fatalities for teen drivers since this law was enacted. The following research brief will provide a general overview of the GDL provisions, a description of the datasets and methods used for the evaluation, and a summary of the results.

### Overview of the Arkansas Graduated Driver License

The Graduated Driver License (GDL) program was developed to allow teens to gain driving experience through the use of restrictions for optimal risk reduction (Act 394, 2009). This law provides for teen driver's licenses in three levels: learner's license, intermediate license and unrestricted/regular license. A learner's license permits teens that are 14-15 years old to drive only while accompanied by an adult 21 years of age or older. Eligibility for an intermediate license is contingent on a teen driver having no serious traffic violations or accidents on record during the previous six months. While teens with an intermediate license are allowed to drive without an adult, they are restricted from having more than one unrelated passenger under the age of 21. Drivers with this license are further prohibited from operating a vehicle between 11:00 pm and 4:00 am, unless they are traveling to or from a school or church-related activity, work or in emergency situations. At 18 years-of-age teens are eligible to apply for a regular, unrestricted, driver's license, contingent on a clean driving record (i.e., there must be no major traffic violations on the applicant's record in the previous 12 months).

### Method

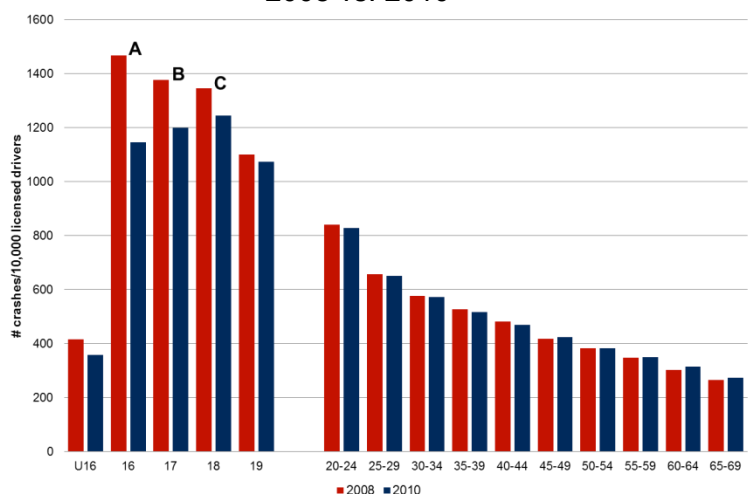
Data for this evaluation were pulled from two sources and integrated by calendar year. Arkansas State Police Motor Vehicle Crash Data were aggregated at the person level and crash level to create the following

variables for analysis: age of the driver, number of occupants, time of crash, location of crash, and incident of fatality resulting from the crash. Information about the number of licensed drivers by age was extracted from the U.S. Department of Transportation's Federal Highway Administration. These data were used to create crash rates per 10,000 licensed drivers during each calendar year. The evaluation compared rates of crashes and fatalities for 2008 (pre-GDL) and 2010 (first full year after GDL was passed). Analyses were conducted for each age group. Analyses were also conducted to determine if the number of crashes and related fatalities were reduced for teen drivers with more than two total occupants. Chi-square tests were used to compare crash and fatality rates from 2008 and 2010.

### Findings

There was a significant decrease in the rate of vehicle crashes for all teen driver groups between 2008 and 2010 (<sup>A</sup>16 year-olds  $X^2 [1, N = 31,989] = 72.90, p < .01$ ; <sup>B</sup>17 year olds  $X^2 [1, N = 46,187] = 32.27, p < .01$ ; <sup>C</sup>18 year olds  $X^2 [1, N = 58,141] = 13.28, p < .01$ ) (see Figure 1). The largest decrease was found among 16-year-old drivers who evidenced a reduction in crashes of 22 percent (from 1,467 per 10,000 drivers in 2008 to 1,145 in 2010). In contrast, there was no significant reduction in crashes for any group above 20 years old.

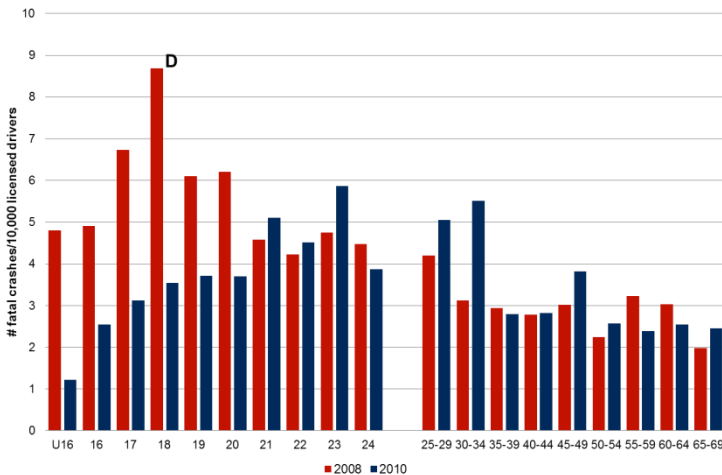
**Figure 1: Average Annual Number of Crashes by Age of Driver (Per 10,000 Licensed Drivers) 2008 vs. 2010**



In fact, some older age groups experienced an increase in crashes during this time.

Similar patterns were found when examining the number of fatal crashes involving teen drivers (see Figure 2). All age groups subject to restrictions under the GDL saw a decrease in the number of fatal crashes between 2008 and 2010. Though difficult to detect significant differences with such small sample sizes, analysis revealed a statistically significant decrease for the 18-year-old drivers ( $\chi^2 [1, N = 58,141] = 6.22, p < .05$ ). Overall, fatalities involving teen drivers in all age groups were reduced by 59 percent (from approximately 25 fatal crashes per 10,000 drivers in 2008 to 10 in 2010). This translates into an estimated 32 lives that were saved. In contrast, most age groups 20 years and older saw an increase or no change in the number of fatal crashes.

**Figure 2: Number of Fatal Crashes by Age of Driver**  
(Per 10,000 Licensed Drivers)  
2008 vs. 2010



Additional findings suggest an impact of the GDL for specific times of the day and for crashes involving cars with more than two passengers. One of the major provisions of the law was to restrict teen driving between the hours of 11:00 p.m. and 4:00 a.m. Findings from this study indicate that between 2008 and 2010 fatal crashes involving teen drivers during this time of day were reduced by 76 percent (from 21 fatal crashes in 2008 to 5 in 2010).

Findings also indicate a decrease in crashes by the number of occupants. With a 20 percent decrease from 2008 to 2010 (107 in 2008 to 86 in 2010), the most significant difference was recognized for cars

carrying five or more passengers. Teens were also less likely to be involved in single vehicle crashes; teens between 16- and 18-years-of-age experienced a 19 percent reduction in single vehicle crashes and a 52 percent reduction in single vehicle fatal crashes.

## Summary and Conclusions

The purpose of this evaluation was to determine if there is evidence to support the protective benefit of the Graduated Driver License law for Arkansas teens. The analyses reported in this brief demonstrated the rates of teen driver crashes and crash-related fatalities during the year prior to GDL (2008) compared to the year after GDL was passed (2010). Findings indicate that significant reductions in crashes and crash-related fatalities were found. This is especially true for the youngest drivers who obtained their intermediate license to drive for the first time without an adult. Similar reductions in crashes or fatalities were not found for the adult population during this same time frame. These findings provide strong support for proponents of the GDL for Arkansas teen drivers.

## Acknowledgements

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