



Human Factors and Vehicle Safety Research Division

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Young Driver Policy Brief

Teen passengers: Their impact on the safety of Iowa teen drivers

Research shows that teen drivers (ages 14-19) are at a greater risk of injury and death than all other age groups. It also shows that teen passengers are one of the factors that contribute to this increased risk. The CDC has gone so far as to recommend limiting the number of teen passengers for teens driving without adult supervision to zero or one (not including family members).

Such concerns have led to the need for a more in-depth examination of lowa teen drivers.

This policy brief compiles information from the latest research on the topic of teen driving, including Graduated

Driver's Licensing (GDL) and the national data surrounding passenger limits.

In addition, it presents information about lowa families and their attitudes regarding teen driver issues gathered from a statewide survey conducted by the University of Iowa Public Policy Center. Data from 1065 families in lowa were collected using telephone interviews in 2009.

This study represents collaboration between the University of Iowa Public Policy Center and the Center of the Study for Young Drivers at the University of North Carolina Highway Research Center.

Background

Studies examining national highway safety data have found that the risk of drivers age 16 and 17 being involved in a fatal crash increased as the number of passengers in the vehicle increased (Figure 1) (e.g., Chen, Baker, Braver, & Li, 2000). In 2008 NHTSA reported that the crash risk is 3 to 5 times greater for teens driving with teenage passengers than for teens driving alone.

Teens themselves admit dangerous driving behaviors (e.g., drinking and driving, speeding, swerving, running red lights) are more likely to occur when teen passengers are present (Rhodes et al., 2005; Chaudrey et al., 2007).

In 1999, the Insurance Institute for Highway Safety (IIHS) estimated that 38 percent of teen driver fatalities (or

275 deaths a year) could be avoided if teen drivers were limited to driving by themselves.

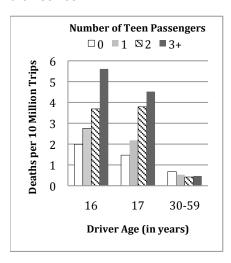


Figure 1. Deaths due to crashes by age and number of passengers

Comprehensive GDL programs have been associated with reductions of almost 20% in teen driver fatalities.

Limiting teenage passengers to no more than one is an optimal GDL provision.

lowa (shown on the map in yellow) is one of only seven states without a passenger limit for new teen drivers.

Impact of GDL & Passenger Limits

The objective of graduated driver licensing (GDL) is to allow young drivers to acquire driving experience before gaining full driving privileges. GDL systems vary from state to state, but generally consist of three phases: driving with a permit and adult supervisor in the vehicle, provisional or intermediate license with some restrictions to limit exposure to situations with increased risk of crashes, and full license without restrictions.

As of 2011, 43 states have introduced some form of passenger limitation during the intermediate license phase. Most limit drivers to one or zero passengers. California introduced a very strong passenger restriction early on. Their limit of zero passengers under the age of 20

was enacted in 1998. Since then several studies have demonstrated the positive effect of this restriction (Cooper et al, 2005; Zwicker et al., 2006). In particular, the average number of teen passengers involved in fatal/injury crashes with 16-year old drivers was reduced by 25 percent (Rice et al., 2004).

Other positive effects are being shown nationally. Morrisey et al. (2006) found that states with GDL programs identified as "good" by the IIHS have been associated with reductions in teen driver fatalities by almost 20 percent. Baker et al. (2007) examined the data from 35 states and found that those states with more comprehensive regulations had 38 percent lower fatal crash rates for 16-year olds than other states.

How does the Iowa GDL compare?

In 2010, US News and World Reports *ranked lowa 49th in the U.S.* when taking into account teen driving safety statistics and overall driving safety conditions.

Currently, the Iowa GDL program has no provisions restricting the number of passengers other than by the number of seatbelts in the vehicle. *Iowa is one of only seven states with no law restricting passengers.*

According to the IIHS (2011), the optimal provisions for young drivers carrying intermediate licenses are:

- Minimum age: 16.5 years
- Unsupervised driving prohibited between 9 or 10pm and 5am
- Passenger limit of no more than one teenage passenger
- Nighttime and passenger restrictions end at age 18

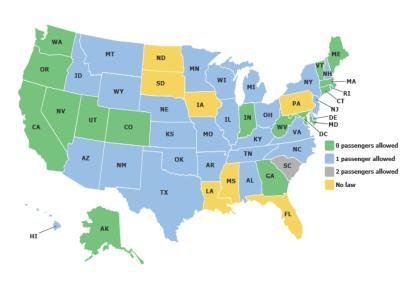


Figure 2. Passenger limits by state (IIHS, 2011)

What Iowa Parents Think

One thousand sixty-five lowa parents of 16 and 17-year olds were surveyed in order to examine their attitudes regarding different elements of lowa's GDL. Parents were evenly divided into one of three groups: rural, medium and largely populated counties in lowa. All were parents of teens who had been driving for about a year and had therefore experienced the different phases of the GDL.

Passenger limits

Parents were asked if they thought lowa should limit newly licensed teen drivers to no more than one teen passenger (with the exemption for family members). Seventy-nine percent replied, "yes." Seventeen percent said "no," and only three percent replied that they "didn't know."

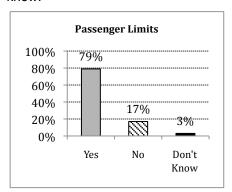


Figure 3. Iowa parents' response to question regarding passenger limits for teen drivers

Urban vs. Rural

These data were then re-examined by county population type (rural, medium, or urban). Results showed that there was no difference in parental attitudes between these populations. Eighty-two percent of parents in urban counties, 78 percent in medium, and 79 percent in rural counties believe that newly licensed teen drivers should be limited to one teen passenger.

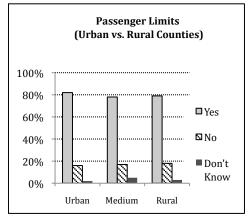


Figure 4. Iowa parents' response to question regarding passenger limits for teen drivers broken out by population type of county residing in

lowa parents strongly support limiting newly licensed drivers to one teen passenger.

There is equal support for passenger limits in rural, medium and largely populated counties.

Conclusions

The crash fatality data show that the risk associated with teen driving is high. In addition, the more teen passengers on board, the higher the crash risk.

Currently, states that have strong GDL programs, specifically nighttime and passenger restrictions for teens in the intermediate phase, are showing nearly 20 percent reductions in teen fatality rates.

lowa is lagging behind when it comes to GDL. Forty-three states have some passenger restrictions, with nearly all of

them allowing zero or one teen passenger. The state of lowa currently has no passenger restrictions in place. And, it ranks 49th out of the 50 states with regard to teen driving safety statistics and conditions.

A survey of 1065 lowa parents across the rural, medium and urban population areas shows strong support for limits on teen passengers. Enhancing lowa's laws to limit passengers could reduce fatalities among teens, their passengers, and other drivers on lowa roadways

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Related reports

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The University of Iowa's Public Policy Center's *Policy Briefs* are designed to succinctly provide our research findings in a manner that is more accessible to policymakers and others. The nature of the Briefs does not allow for extensive explanation of the methods we used in our research however. More information about the specific methodologies used in any particular study can be obtained by contacting researchers at the Center and or by downloading reports with more detailed methods sections. We hope you find these policy briefs helpful to your discourse of some of the most challenging societal issues.

PPC Human Factors and Vehicle Safety

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