

Graduated Driver Licensing Policy Across the Great Lakes Region: Benefits and Future Potential

Timothy E. Corden, Daniel J Tonellato, and Keri Briel Frisch
November 2009, Volume 1, Issue 2

Summary

Graduated Driver Licensing Policy

- GDL is an effective treatment against the number one killer of teenagers in America, motor vehicle crashes.
- Adoption of new evidence-based GDL components will save hundreds of additional lives and avoid thousands of injuries per year.

Background:

Never has our country been more engaged in the issue of health care, and prevention will be a vital component of any future reform. Many public policies support prevention efforts and just as new medical research improves medical treatment, new public health research can enhance our community policies.

Graduated Driver Licensing (GDL) regulations are now active in 47 states and DC. These policies have proven to be an effective treatment directed at the number one killer of teenagers in our country, motor vehicle crashes.¹ GDL outlines a three-phase process intended to adjust for the driving risks teens face as they transition from being novice drivers to intermediate and experienced drivers. Research findings are beginning to indicate how GDL policies can be strengthened to further help safeguard young drivers.²

The components of the various GDL laws across the country are often different. Baker, Chen and Li, in association with the American Automobile Association's Foundation for Traffic Safety, recently published a "National Review of Graduated Driver Licensing" showing which components of GDL are the most effective

at reducing fatal and non-fatal (injury) crashes involving teenage drivers (Table 1).² The National Review also details the benefit of simply having a three-phase GDL in place.

Table 1.
Best-Practice Components
(2002-2006, Great Lake States, subsequent modifications noted)

- Learner's permit, minimum age, 16 years (*none*)
- Minimum 6 month holding period between learner permit and intermediate phase (*MI, MN, OH, WI*)
- Minimum of 30 hrs. supervised driving (*IL, MI, MN, OH, WI*)
- Minimum age of 16.5 yrs to enter intermediate phase (*None*)
- No unsupervised driving after 10 pm – intermediate phase (*IL 2008, IN 2009*)
- No unsupervised driving with more than 1 peer < 20 years old – intermediate phase (*WI, IL 2004, MN 2008, OH 2007, IN 2009*)
- Full licensure, minimum age 17 years (*IN, MI, MN, OH*)

GDL – Great Lakes Region:

All 6 Great Lakes states (IL, IN, MI, MN, OH, WI) currently use a 3-phase GDL program, and most of the states use up to 3 of the best-practice components (Table 1). Using evidence from the National Review, we analyzed 16-year-old driver auto crashes from 2002-2006 across the region and found that current GDL policies helped to avoid an estimated 120 fatal teen crashes and close to 22,000 injury crashes;³ prevention everyone can take pride in.

Evidence from the National Review also indicates more teens could be protected. Figure 1 shows the number of 16-year-old driver fatal and non-fatal injury car crashes that occurred from 2002-2006, along with

the projected reductions in fatal and injury crashes if the states had improved their GDL laws to include 4 or 5 of the evidence-based components. For the region, an additional 309 fatal and close to 28,000 teen injury crashes could have been avoided.³ Untapped prevention potential.

What else about GDL?

Driving an automobile is a complex task, requiring the ability to focus, integrate information, appreciate consequences, demonstrate good judgment, and at times, do it all at once. Most parents can tell us that teens may have a problem doing the above, and recent evidence now explains why. The area of the brain that helps us with many of these actions is still under developed until a young person is in his early 20's.⁴ Many teens just need a little more time for their brain development to catch up to their physical growth and allow them the opportunity to become safe drivers. GDL attempts to give them the time in a safer environment.

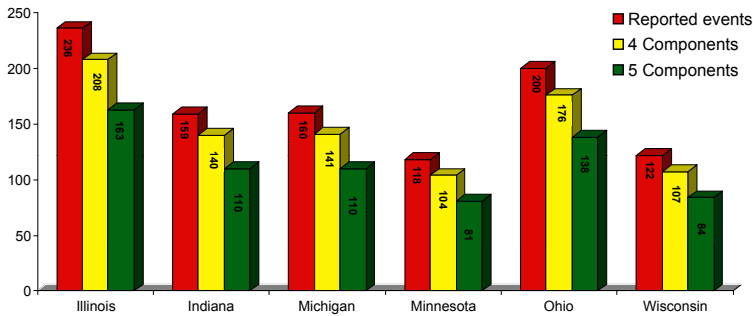
The recent brain development findings also helps explain why reducing a teen driver's distractions, such as limiting the number of peers in the car has proven to lower crash rates. Restricting the use of distracting electronic devices, phones, and texting are supported by this brain development research. The 24 states that restrict device use within their GDL policy should be applauded (MN, IL, IN). Using a cell phone while driving is similar to driving while drunk⁵, and can potentially lead to the same unfortunate outcome.

The age requirements within GDL for obtaining an initial permit, age to advance to the next phase, and age for full licensure are also proving to be important components, and consistent with the brain research; the older the better.⁶

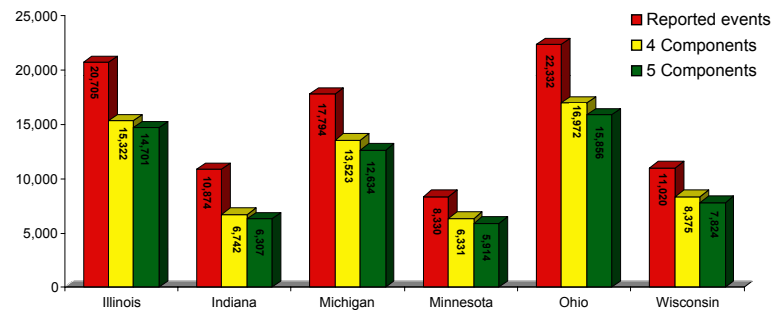
The hours between 9 pm and 6 am are particularly dangerous for teen drivers.

Figure 1

Great Lakes Region 2002-2006, 16 YR Old Driver Fatal Crashes, Reported and Projected Reduction With Modified GDL



Great Lakes Region 2002-2006, 16 YR Old Driver Injury Crashes, Reported and Projected Reduction With Modified GDL



Although few teens are actually on the road during these hours the timeframe accounts for over 30% of the teen driving fatalities. With the majority of deaths occurring before midnight, curfews starting at midnight or later potentially fail to influence over half of the nighttime fatal crashes.⁷ North Carolina's 9 pm curfew is supported by most parents,⁸ indicating that parents appear to value safety over teen mobility.

Parents are key participants in the success of GDL legislation. Not only do the policies allow parents to appreciate the risks teen drivers face, GDL also supports a family's interest in setting limits on risky driving environments and behaviors. The presence of GDL also provides an opportunity for parents to discuss parent-teen driving contracts such as the Checkpoints Program with their young drivers.⁹

Conclusion:

GDL policies have proven to create a successful partnership between policymakers, researchers, parents and teenagers. Emerging evidence now suggests specific changes can be made to further save lives and support a family's effort to protect their children.

- Legislators can be proud of the positive impact three-phase GDL laws have made in our states.
- Many more lives can be saved across the Great Lakes region if current GDL laws were modified to include more of the evidence-based National Review recommended components.

- Pending federal GDL legislation "STANDUP Act, H.R. 1895, should be commended for including current evidence. Policymakers should consider including a specific early nighttime restriction starting time (9 or 10 pm).
- Brain development research and ongoing injury research supports placing limitations on the use of distracting electronic devices while driving such as banning cell phone use.
- GDL affects young citizens, preserving their future.
- GDL works; lets make it work better!

- Strayer DL, Drews FA, Crouch DJ. A comparison of the cell phone driver and drunk driver. *Human Factors*. 2006; 48:381-391
- Williams AF. Licensing age and teenage driver crashes: a review of the evidence. *Traffic Inj Prev*. 2009;10:9-15
- Williams AF. Contributions of the components of graduated licensing to crash reductions. *J Safety Res*. 2007; 38:177-184.
- Foss RD. The North Carolina graduated licensing system: Urban-rural differences. Chapel Hill, NC:University of North Carolina Highway Safety Research Center. 2001. Available at: http://www.hsrrc.unc.edu/pdf/2001/Gdl_02_25.PDF. Accessed July 20, 2009
- Simons-Morton B. Parent involvement in novice teen driving: rationale, evidence of effects, and potential for enhancing graduated driver licensing effectiveness. *J Safety Res*. 2007; 38:193-202.

Acknowledgments: The authors thank the following individuals for their thoughtful editing and enthusiastic support for the injury brief project: Ann Christiansen, MPH, Sally Smaida, MPH, Mary Czinner, Ann Herbst, Drs. Peter Layde and Stephen Hargarten, and the Policy Core at the IRC. We would also like to recognize State Farm, Allstate and AAA auto insurance companies for their public efforts to improve GDL in our communities and to all the public health researchers producing evidence to improve the health of our society; without their work, knowledge transfer briefs and improved policy would not be possible.

References:

- Shope JT. Graduated driver licensing: review of evaluation results since 2002. *J Safety Res*. 2007;38:165-175.
- Baker SP, Chen L, Guohua L. Nationwide review of graduated driver licensing. Prepared for AAA Foundation for Traffic Safety. February 2007. Available at: <http://www.aaafoundation.org/pdf/NationwideReviewOfGDL.pdf>. Accessed July 20, 2009.
- Corden TE, Tonellato DJ, Frisch KB, Purushottam LW. Graduated Driver Licensing Policy in the Great Lakes States: Current Benefits and Future Potential. *Wis Med J*.2009;108:393-397
- Keating DP. Understanding adolescent development: Implications for driving safety. *J Safety Res*. 2007; 38:147-157.

About the Authors:

Timothy E. Corden, MD, is Associate Professor, Department of Pediatrics and Co-Director, Policy Core at the Injury Research Center at the Medical College of Wisconsin
Daniel J Tonellato is an undergraduate at George Washington University and past IRC summer research student.
Keri Briel Frisch, MS is Manager of Policy Initiatives, Injury Research Center at the Medical College of Wisconsin

The Injury Research Center Policy Brief is supported by Centers for Disease Control and Prevention Grant R49/CE001175. The statements included in this brief do not necessarily reflect those of the CDC.