

Technical Brief 2 – November 6, 2020

Initial Findings of the Effect of COVID-19 on Young Drivers in North Carolina

The Issue

Motor vehicle crashes are a leading cause of death for teenagers in the United States. During 2018, 2,649 young people between the ages of 15 and 20 were killed as drivers or passengers in crashes.¹ Research shows the primary factor contributing to novice driver crashes is inexperience.² A number of studies have demonstrated a clear “learning curve” for novice drivers. Beginning drivers have very high crash rates that decline sharply during the first 6-12 months of independent driving (see the figure 1).^{3,4}

Despite their high crash rates, teenage driver and passenger fatalities in motor vehicle crashes have declined substantially over the past two decades. Between 2004 and 2018, fatalities among 15- to 20-year-old passenger vehicle occupants dropped 56%.⁵ One major contributor to this decrease was the widespread adoption of graduated driver licensing (GDL).⁶ GDL is a three-stage licensing system that places progressively fewer restrictions on novice drivers as they gain practical driving experience.

- The initial stage requires an extended period of supervised practice, usually lasting 6-12 months.
- The second stage allows unsupervised driving but prohibits driving in high-risk conditions such as carrying multiple teenage passengers and driving at nighttime.
- In the third stage, a teen can receive a full provisional license once they have successfully completed the second stage.

Extensive research has documented the effectiveness of GDL in reducing young driver crashes and fatalities.⁵

Due to the perceived burden of COVID-19 on young drivers and their families, several states, including North Carolina, have introduced or passed legislation to relax the licensing requirements currently in place for new teenage drivers. The major concern prompting this legislation is the assumption that teens’ mobility is restricted because they cannot get a license due to closures and/or restrictions at licensing offices and decreased access to driver education classes.

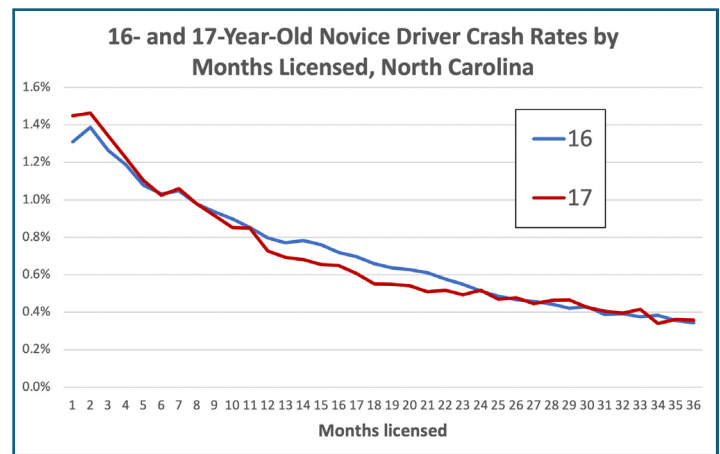


Figure 1

However, it is important to consider the potential safety implications of these policy changes. In North Carolina, new drivers are required to get 60 hours of supervised practice prior to licensure. Research shows that most of this driving practice occurs during routine trips to school, extracurricular activities.⁷ With schools closed and most activities canceled, opportunities for driving practice likely have been curtailed, potentially reducing the amount of driving practice teens receive during the learner period. In addition, several states, including North Carolina, have waived the road-test requirement for new drivers in an effort to fight the spread of the coronavirus (since physical distancing is not possible during a road test). Consequently, teenagers can become licensed without proving their driving competence in a real-world setting. The combination of fewer practice opportunities and no road test requirement could result in greater numbers of unqualified, inexperienced new drivers.

In response to COVID-19, North Carolina declared a state of emergency on March 10, 2020. Public schools were closed beginning March 14, and a statewide stay-at-home order took effect on March 30. To assess the effect of these actions on teenagers’ mobility and safety, we examined driver licensing data and crash data for young drivers in North Carolina. Specifically, we compared data from January 1 to August 30, 2020 with historical averages.

COVID-19 and Young Driver Licensing

Figure 2 shows licenses issued in North Carolina from January 2016 through August 2020 to young drivers ages 16 and 17. Prior to 2020, the number and pattern of licenses issued was very stable. Each year, approximately 96,000 learner permits and 73,000 intermediate licenses are issued by the state, peaking during the summer months. Permits and licenses began dropping off in March of 2020, with intermediate licenses falling to near zero in April and May. Intermediate licenses rebounded in July, when DMV offices no longer required the road test for new drivers. New learner permits rose more slowly during this period. Driver education courses were still not offered at full capacity by July.

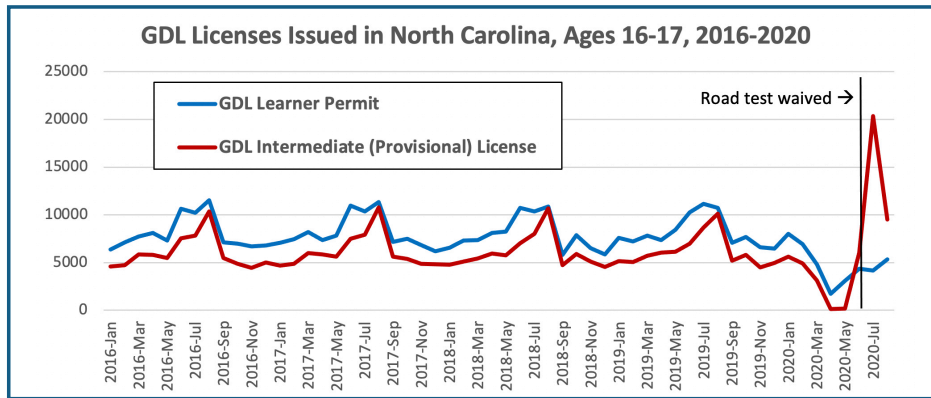


Figure 2

COVID-19 and Young Driver Crashes

Figure 3 shows young drivers ages 16 and 17 involved in crashes in North Carolina. Specifically, it compares weekly crashes beginning January 1, 2020 with crashes occurring during the same time period in 2019. Crashes were relatively stable during 2019, with approximately 400 16- and 17-year-olds involved in crashes each week. By comparison, crashes dropped sharply during March 2020 and remained very low for the next several months. Overall, young driver crashes in the 16-week period beginning March 1 were 54% lower during 2020 than 2019.

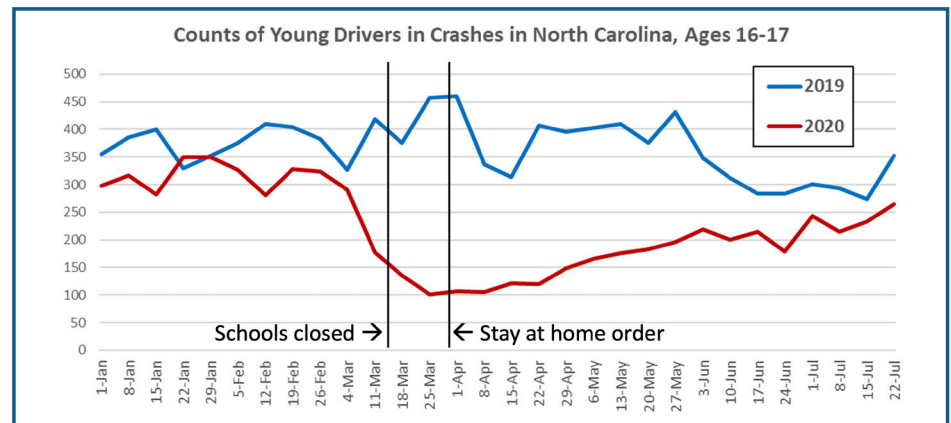
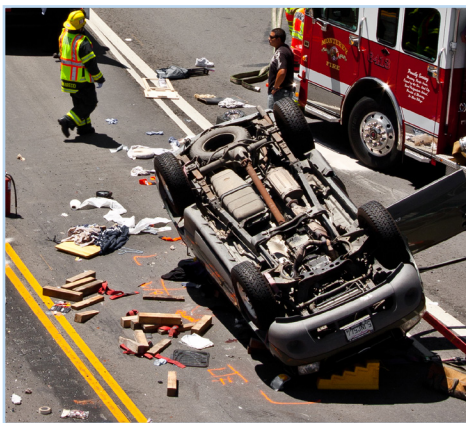


Figure 3

Implications and Next Steps

The closure of schools and the statewide stay-at-home order clearly had a substantial effect on young drivers in North Carolina. New permits and licenses dropped off sharply beginning March 2020. Crashes also decreased, likely reflecting fewer trips by young drivers since schools and other activities were cancelled. Provisional license applications rebounded quickly when North Carolina waived the road test requirement. The effect of this action on crashes is not yet known. We will continue tracking licens-

ing and crashes during the second half of 2020 to assess the longer-term effect of COVID-19 and legislative actions on young driver safety and mobility in North Carolina.

Additionally, we are conducting online surveys and focus groups with parents of new drivers in North Carolina to learn how COVID-19 has impacted supervised driving and to gauge parents' support for legislative efforts to address the problem. We anticipate the results will be available in December, 2020.

Citations

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About the Project

The NC COVID-19 Mobility and Health Impacts Study is investigating COVID-19 data trends in NC. Led by the [UNC Highway Safety Research Center](#), this project brings together an impressive team of multidisciplinary research partners from across the UNC System, including UNC-CH's Cecil G. Sheps Center for Health Services Research, Gillings School of Global Public Health, Odum Institute for Research in Social Science, and the NC State University Department of Statistics, to research the interrelationships of public health policies, mobility changes, and the transmission of COVID-19 to inform policy decisions in North Carolina. This project is supported by the North Carolina Policy Collaboratory at the University of North Carolina at Chapel Hill with funding from the North Carolina Coronavirus Relief Fund established and appropriated by the North Carolina General Assembly.



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