

Advanced Driver Training improved teen driver vehicle handling skills

Motor vehicle crashes continue to be the leading cause of death among American teenagers aged 16-19. The majority of these crashes are caused by driver error. Young drivers are less likely to notice potential hazards and are less experienced in proper responses to hazards or road conditions. For example, young drivers may drive too fast on curves or in slick conditions or fail to maintain control in a skid.

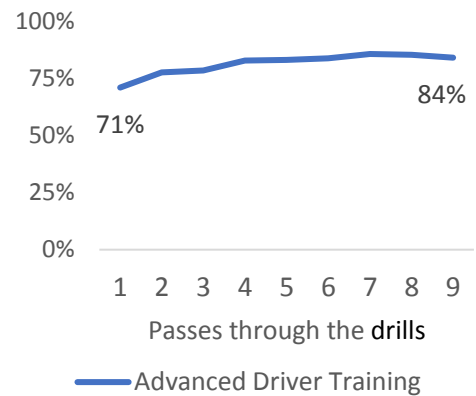


While basic driver education teaches teens how to pass a state licensing exam, these new drivers may also benefit from additional experience in vehicle handling in difficult or emergency situations. Advanced Driver Training (ADT) programs are designed to give teens and others exposure to slippery road conditions, emergency lane changes, and skid control or spin avoidance (pictured left).

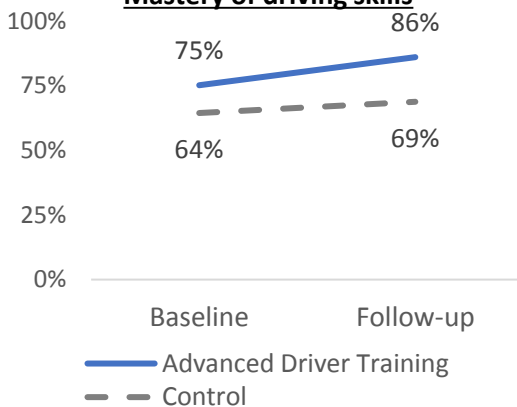
From 2012-2016, hundreds of Ohio teens participated in a study conducted by **OhioHealth** and funded by **Westfield Insurance Foundation** to compare emergency vehicle handling skills with and without ADT from **Better Ohio Teen Drivers** (formerly Bloom School of Driving). Teens were tested in four drills: a slalom course, braking and steering on wet pavement, an emergency lane change and regaining control in a skid. They were evaluated on staying within the drill, maintaining the proper speed, cone strikes and maintaining control of the vehicle.

Teens completed the drills once without feedback (as a baseline) and then completed up to 8 additional passes. **In less than 4 hours of training, teens on average improved their ability to stay within the drill and maintain speed and control from 71% to 84% in the additional passes** (figure on right).

Mastery of skills during training



Mastery of driving skills



The control group teens (who did not receive ADT) completed only the baseline evaluation on the drills. Teens in the ADT group and the control group returned 3-6 months later and completed the drills one more time. Both groups performed better in the drills after additional driving practice, but **the ADT group performed much better than the control group at the 3-6 month follow-up (86% mastery vs. 69% mastery, respectively**, figure on left). Comparing across the drills, ADT improved the ability of teens to regain control in a skid situation (pictured above left) more than the other drills.

Goodman, A. Shoots-Reinhard, B., Opalek, J., & Zhu, M. (2023). Advanced driver training's impact on teen driver skills. *Transportation Research Record*. Available at <https://go.osu.edu/ADT>.