

## Teens with ADHD get more traffic violations for risky driving, have higher crash risk

20 May 2019



Credit: CC0 Public Domain

Teen drivers diagnosed with attention-deficit hyperactivity disorder (ADHD) are significantly more likely to crash, be issued traffic and moving violations, and engage in risky driving behaviors than their peers without ADHD, according to a Children's Hospital of Philadelphia (CHOP) study published today in the journal *Pediatrics*.

The multidisciplinary team of researchers from CHOP's Center for Injury Research and Prevention and Center for Management of ADHD analyzed detailed crash and traffic violation records for newly licensed drivers to conduct the first large-scale longitudinal study on this topic.

By highlighting the specific types of crashes and traffic violations, this study identifies risky driving behaviors that those with ADHD may be more likely to engage in, such as driving while intoxicated, not wearing a seat belt, and speeding. Because these behaviors are amenable to change, these findings suggest that clinicians and families can work with this at-risk group of teens to practice safe driving behaviors and potentially reduce their crash risk.

"What this study suggests is that we have to go beyond current recommendations of medication and delaying the age of getting licensed to decrease crash risk for teens with ADHD," said Allison E. Curry, Ph.D., MPH, lead author of the study and a Senior Scientist and Director of Epidemiology and Biostatistics at the Center for Injury Research and Prevention at CHOP and an Assistant Professor of Pediatrics at the University of Pennsylvania Perelman School of Medicine. "Their higher rate of citations suggest that risky driving behaviors may account for why they crash more. More research is needed to objectively measure if and how these behaviors specifically contribute to crash risk."

According to the Centers for Disease Control and Prevention (CDC), an estimated 6.1 million children ages 2 to 17 living in the United States have been diagnosed with ADHD. Many of these youth with ADHD are potential drivers, and safe transportation is a growing concern. Evidence-based guidance to clinicians and families is urgently needed to protect these drivers, as well as others on the road.

For the retrospective study, researchers reviewed the records of 14,936 adolescents who were patients at six CHOP primary care practices in New Jersey and had obtained an intermediate driver's license between January 2004 and December 2014. The study team linked the adolescents' electronic health data with New Jersey driver licensing records, traffic violations, and policereported crash data. Within this group, the researchers identified 1,769 adolescents with childhood-diagnosed ADHD who obtained an intermediate driver's license during the study period, and compared their crash outcomes with those of the drivers without ADHD.

Although crash risk is elevated for all newly licensed drivers, the study team found it is 62 percent higher for those with ADHD the first month after getting licensed, and 37 percent higher during



the first four years after licensure, regardless of their age when licensed. Drivers with ADHD also experienced higher rates of specific <u>crash</u> types, including driving with passengers, at-fault-, single vehicle-, injury- and alcohol-related crashes, the last risk being 109 percent higher than those without ADHD.

The rates of traffic and moving violations were also significantly higher among young drivers with ADHD as compared to those without ADHD. Among these drivers, nearly 37 percent were issued a traffic violation and nearly 27 percent a moving violation within their first year of driving, compared to 25 percent and 18 percent respectively among their peers without ADHD. Drivers with ADHD had higher rates of alcohol or drug violations and moving violations (including speeding, nonuse of seat belts, and electronic equipment use). Their rate was 3.5 times that of young drivers without ADHD in the first year of driving and 1.5 times that of young drivers without ADHD in the first four years of driving.

"We need additional research to understand the specific mechanisms by which ADHD symptoms influence <u>crash risk</u> so that we can develop skills training and behavioral interventions to reduce the risk for newly licensed <u>drivers</u> with ADHD," said Thomas J. Power, Ph.D., ABPP, study co-author and director of the Center for Management of ADHD at CHOP. "There's not enough research currently being conducted on older adolescents and young adults with ADHD, particularly studies focused on promoting safe driving behavior."

**More information:** Curry et al, "Longitudinal study of traffic crashes, violations, and suspensions among young drivers with ADHD." *Pediatrics*, online May 20, 2019. <u>DOI:</u> 10.1542/peds.2018-2305.

Provided by Children's Hospital of Philadelphia
APA citation: Teens with ADHD get more traffic violations for risky driving, have higher crash risk (2019, May 20) retrieved 4 August 2022 from <a href="https://medicalxpress.com/news/2019-05-teens-adhd-traffic-violations-risky.html">https://medicalxpress.com/news/2019-05-teens-adhd-traffic-violations-risky.html</a>



This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.