



EDITORIAL

## Adolescent Health: Is it Time to Direct our Attention to Youth in Ohio?

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Welcome to the third issue of the *Ohio Journal of Public Health (OJPH)*, with which we celebrate our one-year anniversary. In this issue, you will find 5 research articles, 1 research brief, and 1 public health practice article. Four of the manuscripts present findings from studies on adolescents, a group that is seldom the focus of conversations about priority populations and issues in Ohio. Yet adolescents represent nearly 14% of the population (over 1.5 million) and while they are a generally healthy group, there are risks unique to them. Moreover, adolescence is critically important from a developmental perspective, because at this time puberty occurs and individuals learn how to be independent.<sup>1</sup> One current concern regarding adolescents is electronic cigarette (e-cigarette) use, as past 30-day use has surged to 27.5% among high school students in the United States.<sup>2</sup> This rate is alarming because we still do not know the long-term health effects of e-cigarettes. A related concern is that most longitudinal studies show that adolescents who use e-cigarettes are at high risk of transitioning to cigarettes, which indubitably cause harm to human health.<sup>3</sup> Another public health issue facing adolescents is poor mental health, as adolescence is a time when several serious mental illnesses manifest. In Ohio, approximately 14% of adolescents aged 12 to 17 years have been diagnosed as having a major depressive episode, and this prevalence is slightly higher than the national average of 13%.<sup>4</sup>

Ohio is taking several steps that have the potential to improve the health of adolescents. One of Governor Mike DeWine's early decisions was to create the Office of Children's Initiatives. While focus is not entirely on adolescents, some of the Office's programs are relevant, specifically those designed to improve the foster care system, create drug abuse prevention programs, and increase the number of mental health professionals in schools.<sup>5</sup> The DeWine administration also advanced Tobacco 21 legislation, which is now the law in Ohio.<sup>6</sup> By raising the legal age to purchase tobacco to 21, these laws are designed to reduce tobacco initiation rates during adolescence, which is the time when most users begin. These initiatives, along with other ongoing programs administered by the Ohio Department of Health, have the potential to improve the health of adolescents in the state.

In this issue, Gray et al report on the prevalence of *Trichomonas vaginalis* (TV) in a sample of incarcerated adolescents in Central Ohio. They detected TV in 10% of females. They conclude that TV should be part of routine screening in juvenile detention facilities. The second article, by Bader et al, is focused on dental health among adolescent males from an urban county and 9 Appalachian counties who were enrolled in a longitudinal cohort study. They report that disparities in dental health are largely driven by behaviors such as tobacco use and diet, which differed between participants in the 2 regions. Using the same cohort of adolescent males, Teferra et al found that less than half of the participants had received a vaccine to prevent human papillomavirus (HPV) at the baseline interview, and among those not vaccinated only about one-third received the HPV vaccine series during the 2-year follow-up period. They conclude with a call for developing strategies to promote HPV vaccination. The fourth piece on adolescents in Ohio is the research brief by Kauffman and Durkin in which they report on the relationship between emotional distress and opioid misuse among adolescents who were involved with the juvenile drug court system in Northwest Ohio. They found that these factors are positively related, despite the fact that, over the reporting period, opioid misuse decreased and emotional distress increased. The paper concludes with a call to address emotional problems among adolescents, as they may lead to substance use.

The other highlights of this issue include an article that reports on the association between American Human Development Index (AHD) scores and substance prescribing at the county level in Ohio. Factor et al report negative



associations between AHDI scores and opioid and benzodiazepine prescribing but a positive association with stimulant prescribing. They call for more work to understand the mechanisms underlying these relationships. The other research paper in this issue reports on perfluoroalkyl substances, which are found in consumer products and are linked to a number of chronic conditions. Heinle et al examined whether these compounds were related to lung function in a national sample and found no association. Nonetheless, given their relationship with other diseases it is important for cleanup efforts to continue. The last paper, a public health practice article by Ulrich et al, describes a multidisciplinary effort to engage human and animal health groups to address harmful algal blooms in freshwater sources in Ohio. The Centers for Disease Control and Prevention and multiple academic partners rolled out 3 different initiatives to inform Lake Erie area communities of this public health problem. The paper describes the initiatives and the outcomes.

I am very grateful to the scholars who contributed to this latest issue for their dedication to public health in Ohio. The *Ohio Journal of Public Health* continues to be a resource for researchers, practitioners, and educators in Ohio, and it is indeed allowing the Ohio Public Health Association to be the “voice” of public health in Ohio.

#### REFERENCES

1. Sawyer SM, Bearinger LH, Blakemore SJ, Dick B, Ezech A, Patton GC. Adolescence: A foundation for future health. *Lancet*. 2012;379:1630–40. Available from: [http://www.thelancet.com/journals/lancet/issue/vol379no9826/PIIS0140-6736\(12\)X6017-3](http://www.thelancet.com/journals/lancet/issue/vol379no9826/PIIS0140-6736(12)X6017-3). Accessed November 21, 2019.
2. Cullen KA, Gentzke AS, Sawdey MD, Chang JT, Anic GM, Wang TW, Creamer MR, Jamal A, Ambrose BK, King BA. E-Cigarette Use Among Youth in the United States, 2019. *JAMA*. Published online November 5, 2019. Available from: [https://jamanetwork.com/journals/jama/article-abstract/2755265?utm\\_campaign=articlePDF%26utm\\_medium%3darticlePDFlink%26utm\\_source%3darticlePDF%26utm\\_content%3djama.2019.18387](https://jamanetwork.com/journals/jama/article-abstract/2755265?utm_campaign=articlePDF%26utm_medium%3darticlePDFlink%26utm_source%3darticlePDF%26utm_content%3djama.2019.18387). Accessed November 21, 2019.
3. Glantz SA, Bareham DW. E-Cigarettes: Use, Effects on Smoking, Risks, and Policy Implications. *Annu Rev Public Health*, 2018;39:215-235.
4. Department of Health and Human Services, Office of Population Affairs. Ohio Adolescent Mental Health Facts. Available from: <https://www.hhs.gov/ash/oah/facts-and-stats/national-and-state-data-sheets/adolescent-mental-health-fact-sheets/ohio/index.html>. Accessed November 21, 2019.
5. Chow A. Mike DeWine: Advancing Campaign Promise To Serve Ohio Children. Statehouse News Bureau. January 4, 2019. Available from: <https://www.stateneews.org/post/mike-dewine-advancing-campaign-promise-serve-ohio-children>. Accessed November 21, 2019.
6. Ohio Department of Health. Tobacco Age of Sale Only 21+. November 21, 2019. Available from: <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/tobacco-use-prevention-and-cessation/tobacco-21>. Accessed November 22, 2019.