

## LETTER TO THE EDITOR

## Toxicology

# Pediatric cannabis exposures in New Jersey

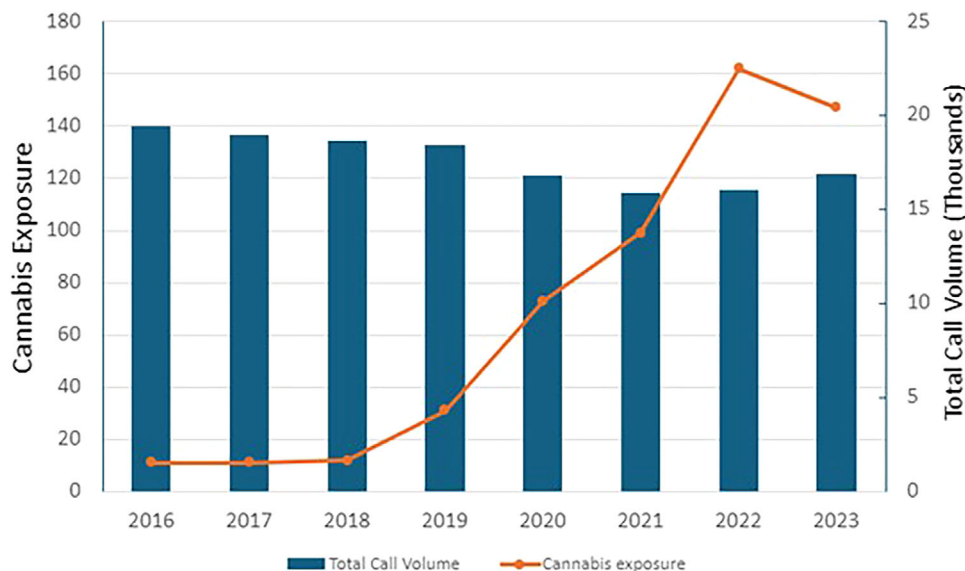
To the Editor,

We read the recent retrospective cohort analysis by Kane et al<sup>1</sup> titled “Trends in cannabis use in New Jersey: Effects of COVID-19 and cannabis legalization.” We commend the authors for their analysis of cannabis-related visits to a single tertiary emergency department in relation to cannabis legalization in NJ and COVID-19. However, at the New Jersey Poison Information and Education system (NJPIES), our statewide surveillance of pediatric cannabis exposures has demonstrated the opposite result. As has been demonstrated in other states after legalization,<sup>2,3</sup> we saw an overall increase in pediatric cannabis exposure reports to the NJPIES when comparing the pre-legalization era to the post-legalization era, and a consistent yearly increase from 2016 to 2022. On February 22, 2021, recreational marijuana was made legal in the state of New Jersey, allowing, with limits, flower, concentrates, oil, and edibles. We searched the NJPIES database from 2016 (5 years prior to legalization) to 2022 (2 years post legislation, including legislation year) and searched for general terms including marijuana, plant, pharmaceutical, edible, capsules/pills, extract, topical, and e-cigarettes. We considered pediatric exposures as under the

age of 5, which differed vastly from the original study’s definition as 21 years and under. Following the recreational legalization of marijuana, we observed an 89.13% increase in total pediatric cannabis exposures, with pre-legalization exposures totaling 138 cases and post-legalization totaling 408 cases. This rise indicates a significant increase in exposure rate from 0.0015% to 0.0084% of total pediatric calls ( $p < 0.001$ ). We depict the number of pediatric cannabis exposures as compared to total call volume in Figure 1.

We previously reported on pediatric cannabis exposures in relation to the COVID-19 pandemic surge. In contrast to Kane’s findings, we found dramatic increases in cannabis exposures in young children in 2020 compared to 2018 and 2019. It is difficult to ascertain the relative contribution of COVID-19 versus increased cannabis access however, as the trend continued past 2020.<sup>4</sup>

The authors concluded that it was “not the legalization period, but rather the COVID-19 pandemic period” that caused more of an increase in cannabis exposures. This illustrates the importance of statewide and regional toxicosurveillance conducted through poison centers. Patterns may not be detected in single institutions but may



**FIGURE 1** Reported number of pediatric cannabis exposures (<5 years old) overlying the total number of calls per year to New Jersey Poison Information and Education System (NJPIES) from 2016 to 2023.


This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Author(s). *Journal of the American College of Emergency Physicians Open* published by Wiley Periodicals LLC on behalf of American College of Emergency Physicians.

be observed and tell a vastly different story when viewed aggregate over a wider area. The increase in pediatric cannabis exposures at the state level has been substantial and is consistent with national data in other States after legalization.<sup>2,3,5,6</sup> While the authors provide the perspective of a single tertiary center, it is essential to view larger epidemiologic trends to determine the impact of COVID-19 and cannabis legalization on pediatric exposures. Increased access to substances predictably causes an increase in poisoning exposures, but prevention efforts are most effective when informed by broad surveillance.

#### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

Ivan Ivanov DO   
Bruce Ruck PharmD  
Howard A. Greller MD  
Diane P. Calello MD  
Danielle R. Bartsche MPH, BS

*New Jersey Poison Information and Education System,  
Division of Medical Toxicology, Department of  
Emergency Medicine, Rutgers University, Newark, New Jersey,  
USA*

#### Correspondence

Danielle R. Bartsche, New Jersey Poison Information and Education System, Division of Medical Toxicology, Department of Emergency Medicine, Rutgers University, Newark, NJ, USA.  
Email: [i.ivanov7951@gmail.com](mailto:i.ivanov7951@gmail.com)

#### ORCID

Ivan Ivanov DO  <https://orcid.org/0000-0003-4753-9612>

#### REFERENCES

1. Kane JP, Ames A, Patel RV, et al. Trends in cannabis use in New Jersey: effects of COVID-19 and cannabis legalization. *JACEP Open*. 2024;5(3). doi:[10.1002/emp2.13163](https://doi.org/10.1002/emp2.13163)
2. Wang GS, Le Lait MC, Deakne SJ, et al. Unintentional pediatric exposures to marijuana in Colorado, 2009–2015. *JAMA Pediatrics*. 2016;170(9):e160971. doi:[10.1001/jamapediatrics.2016.0971](https://doi.org/10.1001/jamapediatrics.2016.0971)
3. Thomas AA, Von Derau K, Bradford MC, et al. Unintentional pediatric marijuana exposures prior to and after legalization and commercial availability of recreational marijuana in Washington State. *J Emer Med*. 2019;56(4):398-404. doi:[10.1016/j.jemermed.2019.01.004](https://doi.org/10.1016/j.jemermed.2019.01.004)
4. Wong KU, Ramdin C, Calello DP. Reply to: edible cannabis exposures among children. *Pediatrics*. 2022;150(1):2017-2019. doi:[10.1542/peds.2022-057635](https://doi.org/10.1542/peds.2022-057635)
5. Myran DT, Cantor N, Finkelstein Y, et al. Unintentional pediatric cannabis exposures after legalization of recreational cannabis in Canada. *JAMA Network Open*. 2022;5(1):e2142521. doi:[10.1001/jamanetworkopen.2021.42521](https://doi.org/10.1001/jamanetworkopen.2021.42521)
6. Tweet MS, Nemanich A, Wahl M. Pediatric edible cannabis exposures and acute toxicity. *Pediatrics*. 2023;151(2):2017-2021. doi:[10.1542/peds.2022-057761](https://doi.org/10.1542/peds.2022-057761)