

## Trends in Young Adult Cannabis Use After Legalization in Washington State

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@cshrb\_uw

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Segawa, Mary (LCB) <mary.segawa@lcb.wa.gov>  
To: Jason R Kilmer  
① You replied to this message on 4/13/2022 8:50 AM.

Good Morning!

Is 10:15 a good time for you to do a 5-10 minute update on your latest research? ☺

Mary

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## Young Adult Health Survey

- Young Adult Health Survey started in 2014
- Funded by Division of Behavioral Health and Recovery within Washington's Health Care Authority (Sarah Mariani has been with us from the start, and our current contract manager is Sandy Salivaras)
- Focus is on 18-25 year olds
  - There was the Healthy Youth Survey to track people under 18
  - There were numerous national surveys that looked at adults in general
  - This is the age group that uses with the highest frequency

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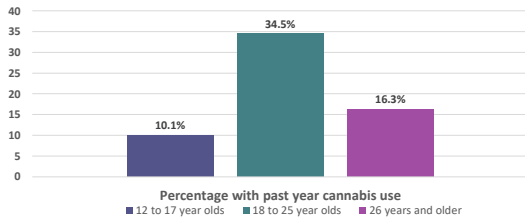
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### Past year cannabis use by age group

Source: SAMHSA 2020 National Survey on Drug Use and Health



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### Young Adult Health Survey

- Each year we collected data from a new cohort of 18-25 year olds
- Each year we followed up with previous cohorts
- About to launch our 9<sup>th</sup> year of data collection (and the cohort we recruited as 18-25 year olds in 2014 is now 26-33)
- Our funding provides FTE to do the work, everything it takes to do the survey, and the ability to report back to key stakeholders
- Dr. Katarina Guttmannova applied for and obtained a secondary data analysis grant that allowed us to consider hypotheses and outcomes not typically examined, and allowed us to focus on dissemination beyond local presentations

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Klimer, J.R., Rhew, I.C., Guttmannova, K., Fleming, C.B., Hultgren, B., Gilson, M.S., Cooper, R.L., Dilley, J., & Larimer, M.E. (2022). Cannabis use among young adults in Washington State after legalization of nonmedical cannabis. *American Journal of Public Health*, 112, 638-645.

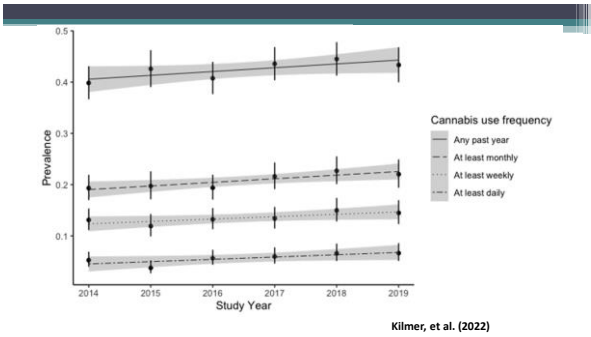
#### Cannabis Use Among Young Adults in Washington State After Legalization of Nonmedical Cannabis

**Abstract**  
Cannabis use among young adults in Washington State has increased since legalization of nonmedical cannabis. This study examined the prevalence of cannabis use among young adults in Washington State after legalization of nonmedical cannabis. Data from the Young Adult Health Survey, a longitudinal survey of young adults in Washington State, were analyzed. The survey included questions about cannabis use, demographic characteristics, and other factors. Results showed that the prevalence of cannabis use among young adults in Washington State increased significantly after legalization of nonmedical cannabis. The study also found that cannabis use was associated with other factors such as demographic characteristics and other factors.

**Objectives**  
The objectives of this study were to examine the prevalence of cannabis use among young adults in Washington State after legalization of nonmedical cannabis, to identify factors associated with cannabis use, and to examine the impact of legalization of nonmedical cannabis on cannabis use among young adults in Washington State.

- n=12,963 young adults in Washington over 6 time points
- Unlike anything we'd done before, we included covariates for:
  - Sex assigned at birth
  - Race
  - Ethnicity
  - Geographic region of the state
  - Age
  - Attending 4 year college
  - Full time employment status
- Computed post-stratification weights to further control for distribution across the samples

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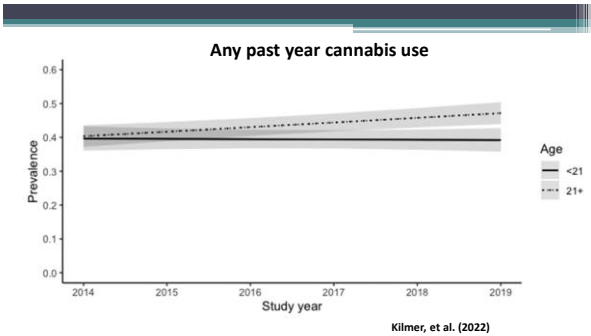
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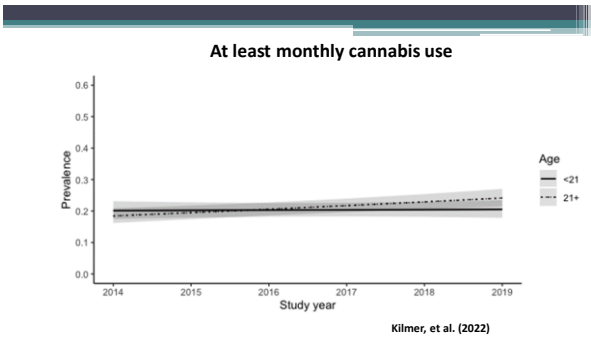
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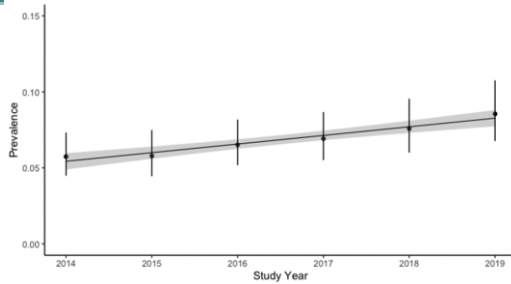
MaCoun (2013), Frontiers in Psychiatry

Criterion	DSM-IV substance dependence	DSM-5 substance use disorder
Tolerance	✓	✓
Withdrawal	✓	✓
Take more/longer than intended	✓	✓
Desire/unsuccessful efforts to quit use	✓	✓
Great deal of time taken by activities involved in use	✓	✓
Use despite knowledge of problems associated with use	✓	✓
Important activities given up because of use	✓	✓
Recurrent use resulting in a failure to fulfill important role obligations		✓
Recurrent use resulting in physically hazardous behavior (e.g., driving)		✓
Continued use despite recurrent social problems associated with use		✓
Craving for the substance		✓



DSM-5 Cannabis Use Disorder Criteria  
 Mild: 2-3 symptoms  
 Moderate: 4-5 symptoms  
 Severe: 6+ symptoms

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Kilmer, et al. (2022)

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the increasing presence of cannabis outlets as well as the effects (e.g., the decreasing prices of cannabis products) and changes in markets over time. Additionally, we saw less change in cannabis use among younger adults (i.e., aged 18-20 years), who may be less affected by the expansion of the retail market. I believe this is because of the inability to chase nonmedical cannabis. In fact, with the clear regulation of the medical market that arrived in 2016, that included a state-licensed system of medical cannabis access to medical cannabis

ical market in 2016.<sup>11</sup>

Additionally, after the legalization of nonmedical cannabis (i.e., Initiative 502) was enacted, coalitions (e.g., the Washington Healthy Youth Coalition), prevention professionals, and state organizations (e.g., Office of Superintendent of Public Instruction) implemented or supported implementation of prevention programs that intended to reduce youth cannabis use. However, these programs incorporated cannabis prevention content with incoming first-year students, and cannabis prevention was the focus of many presentations and trainings statewide. Although we did not assess the impact

of these programs on cannabis use, we observed an increase in symptoms and increased frequency of use. The increases in prevalence of symptoms and increased frequency of use were observed when examined alongside increased prevalence of frequent use. Indeed, it should be noted that prevalence of frequent use (daily or more) was high among both age groups at all time points, and the prevalence of use among those aged 21 years had risen from 6.3% in 2014 to 10.3% in 2019.

Another explanatory factor for the increasing THC (tetrahydrocannabinol, the main psychoactive component in cannabis) potency of cannabis products sold in the legal market,<sup>12</sup>

Kilmer, et al. (2022) (p. 642)

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The authors of I-502 suggested that the regulatory and tax structures of the initiative would, once passed would meet:

- “existing demand through a controlled legal market without promoting increased use (p. 3)” (Roffman, et al., 2013).

Roffman, R., Ishihara, E., Holcomb, A., Cooke, M., Gould, J., Couch, F., Graham-Squire, M., Hothi, G., Weatherly, P., Campbell, J., & Haggerty, K. (2013). *Initiative 502 – Initial draft rules: Comments to Washington State Liquor Control Board, June 10, 2013, Prevention, Treatment, and Public Health Considerations*, 1-12.

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### Young Adult Health Survey

- **Also released:**

- Rhew, I. C., Guttmanova, K., Kilmer, J.R., Fleming, C.B., Hultgren, B.A., Hurvitz, P.M., Dilley, J.A., & Larimer, M. E. (2022). Associations of cannabis retail outlet availability and neighborhood disadvantage with cannabis use and related risk factors among young adults in Washington State. *Drug and Alcohol Dependence*, 232, 109332.
- **Going to be sharing Year 8 data over the next 2-3 months to come (including at WHY Coalition)**
- **Dr. Guttmanova applied for second, secondary data analysis grant to explore differential impact of pandemic effects on substance use**
  - Fingers crossed and knocking on wood that this comes through!

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- **Special thank you to:**

- Mary Segawa
- Martha Williams
- Sarah Mariani
- Sandy Salivaras
- Katarina Guttmanova

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