

Alcohol, Drugs and Impairment Division – NATIONAL SAFETY COUNCIL

Position Statement

Recreational Cannabis Use by Youth and Young Adults

Position

Given the collective evidence demonstrating an increased risk of adverse health, cognitive, and psychosocial outcomes associated with cannabis use among youth and young adults (YYA), the implementation of evidence-based countermeasures to limit access to cannabis and discourage its use is strongly recommended.

Background

The growing legalization of recreational cannabis use poses increased health and safety risks, particularly to youth (10–17 years) and young adults (18–25 years). The current body of academic research indicates significant detrimental impact of recreational cannabis use for some YYA users on brain development,^{1,2,34,35} cognition,^{3,4} and mental health.⁵ This supports the need for a complementary policy that enforces a prohibition on recreational cannabis use among youth and promotes abstinence among young adults.

When YYA use cannabis, it may physically alter brain development,^{6-13,34,35} changing how critical parts of the brain work, particularly in areas involved in processing sensory information, making decisions, and considering emotions. Such structural changes in a developing brain can affect judgment, emotional regulation, and memory; likely resulting in reduced ability to maintain focus, control impulses, and navigate social situations appropriately.^{3,4,7,14-15,34,35} Cannabis use in YYA can also alter mental health trajectory, involving increased risks from depression,¹⁶⁻¹⁸ anxiety,¹⁹ psychosis,²⁰ and suicidality.¹⁶⁻¹⁸

Abstinence is the most effective way to avoid cannabis health risk,²¹ especially when codified in law and supported by effective law enforcement. Recreational drug use is reduced when promotional marketing to vulnerable users is restricted. Education involving: interactive school-based prevention programs with self-esteem and problem-solving components,²²⁻²⁴ digital learning tools,^{25,26} social support systems especially including positive parental support and family interactions, and programs focused on at-risk YYA appear the most promising in reducing cannabis use in youths. However, many interventions lack independent, peer-reviewed, published replication studies.²² Few cannabis studies strictly focused on young adults and instead are limited to regular users or those at risk of substance use disorders.^{22,27} In addition, the typical harm reduction approach for young adults aims for them to “*make informed and responsible decisions to minimize adverse*” outcomes.²⁹ Recreational cannabis use dynamically changes through personal, social, commercial, and health-related factors and requires evolving research and monitoring to inform policymaking.

Excerpts from Medical/Health Organization Positions

“Risks to children and youth: Generally speaking, studies have consistently found that the earlier cannabis use begins and the more frequently and longer it is used, the greater the risk of potential developmental harms, some of which may be long-lasting or permanent.” (p. 15) . . . Some health experts argued that there was no clear scientific evidence to identify a “safe” age of consumption but agreed that having a minimum age would reduce harm.”³⁰ (p. 17) (Health Canada)

“Cannabis use during adolescence can cause functional and structural changes to the developing brain, leading to damage. Marijuana use in this age group is strongly linked to: cannabis dependence and other substance use disorders; the initiation and maintenance of tobacco smoking; an increased presence of mental illness, including depression, anxiety and psychosis; impaired neurological development and cognitive decline; and diminished school performance and lifetime achievement.” (p. 98) . . . “Governments should: . . . Consider limiting the concentration of THC in cannabis that 18- to 25-year-olds can purchase legally (p. 100).³¹ (Canadian Pediatric Society)

“Marijuana . . . has adverse effects upon the adolescent brain . . . and is associated with both psychiatric illness and negative social outcomes.”³² (American College of Pediatricians)

“Given the lack of scientific support for safe cannabis use, and the known adverse impacts and risk for addiction, APA opposes the use of cannabis by children, adolescents, and young adults up to age 25.”³³ (American Psychiatric Association)

“Marijuana use in teens can lead to long-term consequences. . . . Long-term use of marijuana can lead to: . . . • Lower intelligence; • Mental health problems, such as schizophrenia, depression, anxiety, anger, irritability, moodiness, and risk of suicide . . . delay the age of first use and help protect their brain.”³⁴ (American Academy of Child and Adolescent Psychiatry)

Recommendations

Taken together, the growing body of scientific literature underscores that cannabis use among YYA is not a benign behavior, but one associated with measurable and meaningful risks to physical health, neurocognitive development, academic and occupational functioning, and psychosocial well-being. These risks are amplified by earlier initiation, higher potency products, and more frequent patterns of use during critical periods of brain maturation. As availability and social normalization of cannabis continue to expand, the potential for unintended harms to this vulnerable population likewise increases. In light of the collective evidence, it is both prudent and necessary to move beyond risk characterization toward actionable public health responses, thereby setting the foundation for targeted, evidence-based recommendations aimed at limiting access to cannabis and discouraging its use among YYA.

These recommendations should focus on the following areas:

1. **Law Enforcement:** Comprehensive enforcement to optimize compliance with prohibited cannabis sales and use by youth.
2. **Product Formulation, Labeling, and Marketing:** Prohibit cannabis products designed specifically to appeal to YYA (e.g., flavors, packaging, cartoon mascots).
3. **Educational Campaigns:** Implement widespread public education initiatives that highlight risks of abnormal brain development, decreased cognition, and increased mental health problems; particularly from early, frequent, and/or higher-dose cannabis use.
4. **School and Community-Based Prevention Programs:** Strengthen efforts to eliminate and/or delay use of cannabis by YYA.

5. **Research and Monitoring:** Invest in additional research on trends in use and long-term effects of cannabis on YYA to inform future related policy adjustments.

References

1. Adams, J. (2019). *U.S. Surgeon General's advisory: Marijuana use and the developing brain*. Office of the Surgeon General, U.S. Department of Health and Human Services. <https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html> Accessed July 2026.
2. Albaugh, M. D., Ottino-Gonzalez, J., Sidwell, A., Lepage, C., Juliano, A., Owens, M. M., Chaarani, B., Spechler, P., Fontaine, N., Rioux, P., Lewis, L., Jeon, S., Evans, A., D'Souza, D., Radhakrishnan, R., Banaschewski, T., Bokde, A. L. W., Quinlan, E. B., Conrod, P., Desrivieres, S., Flor, H., Grigis, A., Gowland, P., Heinz, A., Ittermann, B., Martinot, J., Martinot, M. P., Nees, F., Orfanos, D. P., Paus, T., Poustka, L., Millenet, S., Fröhner, J. H., Smolka, M. N., Walter, H., Whelan, R., Schumann, G., Potter, A., & Garavan, H. (2021). Association of cannabis use during adolescence with neurodevelopment. *JAMA Psychiatry*, 78(9), 1031–1040. <https://doi.org/10.1001/jamapsychiatry.2021.1258>
3. Gorey, C., Kuhns, L., Smaragdi, E., Kroon, E. & Cousijn, J. (2019). Age-related differences in the impact of cannabis use on the brain and cognition: A systematic review. *European Archives of Psychiatry and Clinical Neuroscience*, 269, 37–58. <https://doi.org/10.1007/s00406-019-00981-7>
4. Hammond, C. J., Allick, A., Park, G., Rizwan, B., Kim, K., Lebo, R., Nanavati, J., Parvaz, M. A. & Ivanov, I. (2022). A meta-analysis of fMRI studies of youth cannabis use: Alterations in executive control, social cognition/emotion processing, and reward processing in cannabis using youth. *Brain Sciences*, 12, 1281, 1–40. <https://doi.org/10.3390/brainsci12101281>
5. Gerhardt, T. F., Carlson, M., Menendez, K., Moore, K. A. & Rodill, Z. (2025). Parent perspectives on youth cannabis use and mental health: Impacts, challenges, and recommendations. *Journal of Behavioral Health Services & Research*, 52(2), 250–261. <https://doi.org/10.1007/s11414-025-09932-8>
6. Ertl, N., Freeman, T. P., Mokrysz, C., Ofori, S., Borissova, A., Petrilli, K., Curran, V., Lawn, W. & Wall, M. B. (2024). Acute effects of different types of cannabis on young adult and adolescent resting-state brain networks. *Neuropsychopharmacology*, 49, 1640–1651. <https://doi.org/10.1038/s41386-024-01891-6>
7. Scott, J. C., Slomiak, S. T., Jones, J. D., Rosen, A. F. G., Moore, T. M. & Gur, R. C. (2018). Association of cannabis with cognitive functioning in adolescents and young adults: A systematic review and meta-analysis. *JAMA Psychiatry*, 75(6), 585–595. <https://doi.org/10.1001/jamapsychiatry.2018.0335>
8. Camchong, J., Lim, K. O. & Kumra, S. (2017). Adverse effects of cannabis on adolescent brain development: A longitudinal study. *Cerebral Cortex*, 27, 1922–1930. <https://doi.org/10.1093/cercor/bhw015>
9. Churchwell, J. C., Lopez-Larson, M. & Yurgelun-Todd, D. A. (2010). Altered frontal cortical volume and decision making in adolescent cannabis users. *Frontiers in Psychology*, 13(1), 225, 1–8. <https://doi.org/10.3389/fpsyg.2010.00225>
10. Albaugh, M. D., Owens, M. M., Juliano, A., Ottino-Gonzalez, J., Cupertino, R., Cao, Z., Mackey, S., Lepage, C., Rioux, P., Evans, A., Banaschewski, T., Bokde, A. L. W., Conrod, P., Desrivieres, S., Flor, H., Grigis, A., Gowland, P., Heinz, A., Ittermann, B., Martinot, J., Martinot, M. P., Artiges, E., Nees, F., Orfanos, D. P., Paus, T., Poustka, L., Millenet, S., Fröhner, J. H., Smolka, M. N., Walter, H., Whelan, R., Schumann, G., Potter, A., Garavan, H.

- & IMAGEN Consortium (2023). Differential associations of adolescent versus young adult cannabis initiation with longitudinal brain change and behavior. *Molecular Psychiatry*, 28, 5173–5182. <https://doi.org/10.1038/s41380-023-02148-2>
11. Li, W., Cheng, X., Xu, H., Yin, B., Xu, H. & Li, D. (2025). Abnormal cortical thickness development in young adults with heavy cannabis use: A longitudinal study. *Addiction Biology*, 30, e70040, 1–8. <https://doi.org/10.1111/adb.70040>
 12. Gruber, A. A., Sagar, K. A., Dahlgren, M. K., Racine, M. & Lukas, S. E. (2012). Age of onset of marijuana use and executive function. *Psychology of Addictive Behaviors*, 26(3), 496–506. <https://doi.org/10.1037/a0026269>
 13. Weiland, B. J., Thayer, R. E., Depue, B. E., Sabbineni, A., Bryan, A. D. & Hutchison, K. E. (2015). Daily marijuana use is not associated with brain morphometric measures in adolescents or adults. *Journal of Neuroscience*, 35(4), 1505–1512. <https://doi.org/10.1523/jneurosci.2946-14.2015>
 14. Hatchard, T., Byron-Alhassan, A., Mioduszeewski, O., Holshausen, K., Correia, S., Leeming, S., Ayson, G., Chiasson, C., Fried, P., Cameron, I. & Smith, A. (2021). Working overtime: Altered functional connectivity in working memory following regular cannabis use in young adults. *International Journal of Mental Health and Addiction*, 19, 1314–1329. <https://doi.org/10.1007/s11469-020-00226-y>
 15. Meier, M. H., Caspi, A., Ambler, A., Harrington, H., Houts, R., Keefe, R. S. E., McDonald, K., Ward, A., Poulton, R. & Moffitt, T. E. (2012). Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proceedings of the National Academy of Sciences of the United States of America*, 109(40), E2657–64. <https://doi.org/10.1073/pnas.1206820109>
 16. Pedersen, W. (2008). Does cannabis use lead to depression and suicidal behaviours? A population-based longitudinal study. *Acta Psychiatrica Scandinavica*, 118(5), 395–403. <https://doi.org/10.1111/j.1600-0447.2008.01259.x>
 17. Maviel, G. M., Somma, C., DAVISSE-Paturet, C., Airagnes, G. & Melchior, M. (2025). The role of depression in the relationship between cannabis use and suicidal behaviours: A systematic review and meta-analysis. *Drug and Alcohol Dependence*, 273, 112714, 1–9. <https://doi.org/10.1016/j.drugalcdep.2025.112714>
 18. Lynskey, M. T., Glowinski, A. L., Todorov, A. A., Bucholz, K. K., Madden, P. A. F., Nelson, E. C., Statham, D. J., Martin, N. G. & Heath, A. C. (2004). Major depressive disorder, suicidal ideation, and suicide attempt in twins discordant for cannabis dependence and early-onset cannabis use. *Archives of General Psychiatry*, 61, 1026–1032. <https://doi.org/10.1001/archpsyc.61.10.1026>
 19. Shelton, S. K., Mills, E., Saben, J. L., Devivo, M., Williamson, K., Abbott, D., Hall, K. E. & Monte, A. A. (2020). Why do patients come to the emergency department after using cannabis? *Clinical Toxicology*, 58(6), 453–459. <https://doi.org/10.1080/15563650.2019.1657582>
 20. Kuepper, R., van Os, J., Lieb, R., Wittchen, H., Höfler & Henquet, C. (2011). Continued cannabis use and risk of incidence and persistence of psychotic symptoms: 10 year follow-up cohort study. *British Medical Journal*, 342, d738, 1–8. <https://doi.org/10.1136/bmj.d738>
 21. Tirado-Muñoz, J., Mestre-Pintó, J. I., Farre, M., Fonseca, F. & Torrens, M. (2018). Comprehensive interventions for reducing cannabis use. *Current Opinion in Psychiatry*, 31(4), 315–323. <https://doi.org/10.1097/YCO.0000000000000430>
 22. O'Connor, E., Thomas, R., Senger, C. A., Perdue, L., Robalino, S. & Patnode, C. (2020).

Interventions to prevent illicit and nonmedical drug use in children, adolescents, and young adults: Updated evidence report and systematic review for the US preventive services task force. *Journal of the American Medical Association*, 323(20), 2067–2079.
<https://jamanetwork.com/journals/jama/fullarticle/2766429>

23. Hodder, R. K., Freund, M., Wolfenden, L., Bowman, J., Nepal, S., Dray, J., Kingsland, M., Yoong, S. L. & Wiggers, J. (2017). Systematic review of universal school-based 'resilience' interventions targeting adolescent tobacco, alcohol or illicit substance use: A meta-analysis. *Preventive Medicine*, 100, 248–268. <https://doi.org/10.1016/j.ypmed.2017.04.003>
24. Lize, S. E., Iachini, A. L., Tang, W., Tucker, J., Seay, K. D., Clone, S., DeHart, D. & Browne, T. (2017). A meta-analysis of the effectiveness of interactive middle school cannabis prevention programs. *Prevention Science*, 18, 50–60. <https://doi.org/10.1007/s11121-016-0723-7>
25. Olmos, A., Tirado-Muñoz, J., Farré, M. & Torrens, M. (2018). The efficacy of computerized interventions to reduce cannabis use: A systematic review and meta-analysis. *Addictive Behaviors*, 79, 52–60. <https://doi.org/10.1016/j.addbeh.2017.11.045>
26. Colonna, R., Tucker, P., Mandich, A. & Alvarez, L. (2024). Developing a mobile-based brief intervention to reduce cannabis-impaired driving among youth: An intervention mapping approach. *International Journal of Drug Policy*, 134, 104626, 1–11. <https://doi.org/10.1016/j.drugpo.2024.104626>
27. Côté, J., Tessier, S., Gagnon, H., April, N., Rouleau, G. & Chagnon, M. (2018). Efficacy of a web-based tailored intervention to reduce cannabis use among young people attending adult education centers in Quebec. *Telemedicine and e-Health*, 24(11), 853–860. <https://doi.org/10.1089/tmj.2017.0144>
28. Haddad, R., Dagenais, C., Fallu, J., Huynh, C., D'Arcy, L. & Hot, A. (2024). Facilitators of and obstacles to practitioners' adoption of harm reduction in cannabis use: A scoping review. *Harm Reduction Journal*, 21, 178, 1–18. <https://doi.org/10.1186/s12954-024-01093-9>
29. Health Canada (2016). *A framework for the legalization and regulation of cannabis in Canada: The final report of the task force on cannabis legalization and regulation*. <https://publications.gc.ca/site/eng/9.828724/publication.html> Accessed July 2026.
30. Grant, D. N. & Bélanger, R. E. (2017). Canadian Paediatric Society position statement: Cannabis and Canada's children and youth. *Paediatrics & Child Health*, 22(2), 98–102. <https://doi.org/10.1093/pch/pxx017>
31. American College of Pediatricians (2025). *Marijuana use: Detrimental to Youth*. <https://acpeds.org/position-statements/marijuana-use-detrimental-to-youth> Accessed July 2026.
32. American Psychiatric Association (2020). *Position statement on the impact of cannabis on children and adolescents*. <https://www.psychiatry.org/about-apa/policy-finder/position-statement-on-the-impact-of-cannabis-on-ch> Accessed July 2026.
33. American Academy of Child and Adolescent Psychiatry (2023). *Marijuana and teens*. https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Marijuana-and-Teens-106.aspx Accessed July 2026.
34. Orr, C., Spechler, P., Cao, Z., Albaugh M, Chaarani, B., Mackey, S., D'Souza, D., Allgaier, N., Banaschewski, T., Bokde, A. L. W., Bromberg, U., Büchel, C., Quinlan, E. B., Conrod, P., Desrivieres, S., Flor, H., Frouin, V., Gowland, P., Heinz, A., Ittermann, B., Martinot, J., Martinot, M. P., Nees, F., Orfanos, D. P., Paus, T., Poustka, L., Millenet, S., Fröhner, J. H.,

Radhakrishnan, R., Smolka, M. N., Walter, H., Whelan, R., Schumann, G., Potter, A. & Garavan, H. (2019). Grey matter volume differences associated with extremely low levels of cannabis use in adolescence. *Journal of Neuroscience*, 39(10), 1817–1827. <https://doi.org/10.1523/JNEUROSCI.3375-17.2018>

35. Watts, J. J., Navarri, X. & Conrod, P. J. (2026). Independent brain cortical signatures of risk for adolescent cannabis use and consequences of such use are moderated by sex. *Neuropsychopharmacology*, 51(2), 497–505. <https://doi.org/10.1038/s41386-025-02249-2>

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