

American College of Emergency Physicians
Resolution passed. On October 24, 2021

Title: Complications of Marijuana Use

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WHEREAS, several studies have shown that emergency department (ED) visits with a cannabis related diagnosis have increased¹²³; and

WHEREAS, the National Poison Data System reported 28,630 exposures from 2017 – 2019 due to cannabis exposure and 27% of the calls were for children under 10-year-old⁴; and

WHEREAS, youth access to cannabis has significant long-term and short-term negative effects on cognitive ability and can induce devastating mental health issues; and

WHEREAS, Cannabis induced psychosis is common, especially with current availability of high potency smoked and ingested THC products and daily cannabis use has a 5

¹ Monte AA, et al. Acute Illness Associated with Cannabis Use by Route of Exposure: An Observational Study. *Annals of Internal Medicine*, 2019. <https://www.acpjournals.org/doi/10.7326/M18-2809>

² San Diego Marijuana Prevention Initiative 2020 Report. <https://www.ccrconsulting.org/media/attachments/2020/05/04/mpi-report-5.4.2020-corrections.pdf>

³ Shen JJ, et al. Trends and Related Factors of Cannabis Associated Emergency Department Visits in the United States 2006-2014. *J Addict Med*, 2019.

⁴ Dilley JA, Graves JM, Brooks-Russell A, Whitehill JM, Liebelt EL. Trends and Characteristics of Manufactured Cannabis Product and Cannabis Plant Product Exposures Reported to US Poison Control Centers, 2017-2019. *JAMA Netw Open*. 2021;4(5):e2110925. doi:10.1001/jamanetworkopen.2021.10925

times increased odds ratio of developing a psychotic disorder when using high potency cannabis⁵⁶⁷⁸⁹¹⁰; and

WHEREAS, ED boarding of psychiatric patients remains a major concern in emergency department across the country, and a percentage of patients with psychosis related ED boarding is due to cannabis related psychosis; and

WHEREAS, Cannabis Hyperemesis syndrome can be a frequent ED diagnosis¹¹; and

WHEREAS, increased use of cannabis leads to increased trauma including motor vehicle fatalities and workplace injuries; and

WHEREAS, smoking and vaping cannabis is associated with lung injury such as reactive airway disease, pneumothorax, and cancer risk¹²¹³¹⁴; and

⁵ Mustonen A, Niemelä S, Nordström T, Murray GK, Mäki P, Jääskeläinen E, Miettunen J. Adolescent cannabis use, baseline prodromal symptoms and the risk of psychosis. *Br J Psychiatry*. 2018 Apr;212(4):227-233. doi: 10.1192/bjp.2017.52. PMID: 29557758.

⁶ Bourque J, Afzali MH, Conrod PJ. Association of Cannabis Use With Adolescent Psychotic Symptoms. *JAMA Psychiatry*. 2018;75(8):864–866. doi:10.1001/jamapsychiatry.2018.1330

⁷ Carney, R et al. “Cannabis use and symptom severity in individuals at ultra high risk for psychosis: a meta-analysis.” *Acta psychiatrica Scandinavica* vol. 136,1 (2017): 5-15. doi:10.1111/acps.12699

⁸ Arianna Marconi, Marta Di Forti, Cathryn M. Lewis, Robin M. Murray, Evangelos Vassos, Meta-analysis of the Association Between the Level of Cannabis Use and Risk of Psychosis, *Schizophrenia Bulletin*, Volume 42, Issue 5, September 2016, Pages 1262–1269, <https://doi.org/10.1093/schbul/sbw003>

⁹ Moore THM, et al. Cannabis use and risk of psychosis or affective mental health outcomes: a systemic review. *The Lancet*, 2007.

¹⁰ Forti MD, et al. The contribution of cannabis use to variation in the incidence of psychotic disorder across Europe: a multicentre case-control study. *The Lancet*, 2019.

¹¹ Monte AA, Shelton SK, Mills E, Saben J, Hopkinson A, Sonn B, Devivo M, Chang T, Fox J, Brevik C, Williamson K, Abbott D. Acute Illness Associated With Cannabis Use, by Route of Exposure: An Observational Study. *Ann Intern Med*. 2019 Apr 16;170(8):531-537. doi: 10.7326/M18-2809. Epub 2019 Mar 26. PMID: 30909297; PMCID: PMC6788289.

¹² Callaghan, R.C., Allebeck, P. & Sidorchuk, A. Marijuana use and risk of lung cancer: a 40-year cohort study. *Cancer Causes Control* **24**, 1811–1820 (2013). <https://doi.org/10.1007/s10552-013-0259-0>

¹³Boyd CJ, McCabe SE, Evans-Polce RJ, Veliz PT. Cannabis, Vaping, and Respiratory Symptoms in a Probability Sample of U.S. Youth. *J Adolesc Health*. 2021 Feb 22:S1054-139X(21)00047-1. doi: 10.1016/j.jadohealth.2021.01.019. Epub ahead of print. PMID: 33676824.

¹⁴ Wayne R. Ott, Tongke Zhao, Kai-Chung Cheng, Lance A. Wallace, Lynn M. Hildemann, Measuring indoor fine particle concentrations, emission rates, and decay rates from cannabis use in a residence, *Atmospheric Environment: X*, Volume 10, 2021, 100106, ISSN 2590-1621, <https://doi.org/10.1016/j.aeaoa.2021.100106>.

WHEREAS, patients may present to the ED with seizures that are exacerbated by cannabis use¹⁵¹⁶; and

WHEREAS, patients have presented to the ED with bleeding complications due to drug interactions of anti-coagulants and cannabis use¹⁷; and

WHEREAS, many medical organizations have published position statements on cannabis harms related to their specific specialty such as the American Academy of Pediatrics, American College of Obstetrics and Gynecology, American Glaucoma Foundation, American Heart Association, American Lung Association, and International Association for the Study of Pain; and

WHEREAS, ACEP has a public health and education duty for disease prevention, including the harms of marijuana that present to the ED; and

WHEREAS, some emergency physicians may not be aware of associated cannabis related harms and drugs interactions, thereby under reporting the incidence of cannabis related ED visits; therefore, be it

RESOLVED, That ACEP develop practice guidelines on the treatment and complications of marijuana use as seen in emergency department presentations; and be it further

RESOLVED, That ACEP provide education and guidance to emergency physicians in relationship to documentation and overall awareness of cannabis related ED diagnoses.

RESOLVED, That ACEP develop and disseminate public facing information on the complications of marijuana use as seen in the emergency department.

¹⁵ de Havenon, Adam et al. "The secret "spice": an undetectable toxic cause of seizure." *The Neurohospitalist* vol. 1,4 (2011): 182-6. doi:10.1177/1941874411417977

¹⁶ Malyshevskaya, O., Aritake, K., Kaushik, M.K. et al. Natural (Δ^9 -THC) and synthetic (JWH-018) cannabinoids induce seizures by acting through the cannabinoid CB₁receptor. *Sci Rep* **7**, 10516 (2017). <https://doi.org/10.1038/s41598-017-10447-2>

¹⁷ Drugs.com drug interaction checker with cannabis and cannabidiol