

Cannabis Use and Public Health: Protecting Workers and Communities

Smoke-free laws protect the public and workers from the health hazards of secondhand smoke, and those protections must extend to cannabis smoke. Smoking cannabis (often referred to as marijuana) in public places unnecessarily exposes individuals who don't use cannabis to secondhand smoke, posing potential health risks. **Permitting cannabis smoking or e-cigarette use in public places compromises highly effective smoke-free laws.** Comprehensive smoke-free laws improve indoor air quality, reduce secondhand smoke exposure, change social norms regarding the acceptability of smoking, prevent youth and young adult smoking initiation, reduce asthma hospitalizations among people who don't smoke, and promote cessation.^{1,2} Prohibiting cannabis smoking including the use of e-cigarettes should be a part of a comprehensive smoke-free law.

Research on the Health Impact of Cannabis Smoke

Cannabis smoke, like tobacco smoke, is a lung irritant and can pose significant risks to both people who use it and those exposed to it. **Smoked cannabis, regardless of how it is smoked, can harm lung tissues and contribute to respiratory symptoms such as cough, wheezing, and bronchitis.**³ Combustible cannabis products contain many of the same toxic chemicals found in tobacco smoke.³

- Studies measuring particulate matter from **cannabis smoke have found concentrations comparable to or exceeding those seen with tobacco smoke**, indicating the potential for harmful cardiovascular effects.^{4,5,6}
- Large-scale cardiovascular studies indicate that people under age 50 who use cannabis regularly are **significantly more likely to experience heart attacks compared with non-users**, with some analyses reporting multiple-fold higher risk among younger adults.⁷
- Cannabis smoke contains **many of the cancer-causing substances found in tobacco smoke**, and studies have found an association between regular cannabis use and an increased risk of testicular cancer.⁸
- Though the cancer risk of cannabis exposure continues to be understudied, **evidence is emerging of an increased risk of other types of cancer** (e.g., lung squamous cell carcinoma, head and neck squamous cell carcinoma, and oral, breast, liver, cervical, laryngeal, pancreatic, thyroid, and childhood cancer).⁹

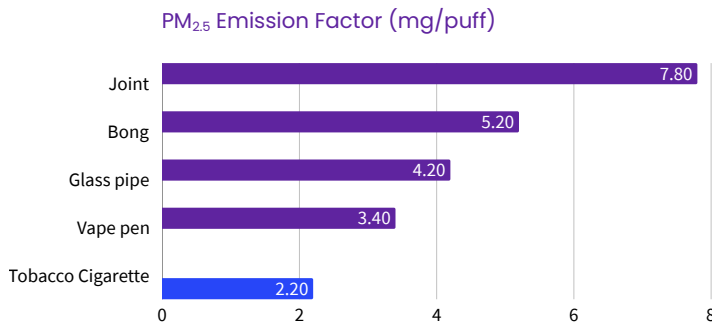
Cannabis Smoke Threatens Worker and Public Health

- **All smoke is harmful.** Whether from tobacco or cannabis, secondhand smoke exposure poses serious health risks, including respiratory disease, heart disease, and increased risk of certain cancers.³
- **Cannabis smoke contains fine particulate matter (PM) at levels comparable to—and in some cases exceeding—those found in tobacco smoke.**^{4,5,6}
- **Workers deserve to work in smoke-free workplaces.** Exemptions for cannabis businesses puts workers and patrons at risk.
- **Ventilation and air-cleaning systems do not eliminate exposure to the carcinogens in secondhand smoke.** The only proven way to fully protect people is to eliminate smoking in indoor public spaces.²⁴
- Allowing smoking in cannabis businesses **sacrifices worker health, exposes patrons to toxic smoke, complicates enforcement of smoke-free laws, and re-normalizes indoor smoking.**

What is Cannabis?

Cannabis, commonly known as marijuana, is derived from the dried leaves, flowers, stems, and seeds of the cannabis plant and is the most commonly used federally illegal drug.¹¹ The primary psychoactive compound in cannabis is the cannabinoid delta-9 tetrahydrocannabinol (THC). Cannabis can be consumed in several ways, including smoking (in a joint, blunt, or pipe); heating or aerosolizing (such as through vaping devices or e-cigarettes); ingestion (mixed into foods or beverages, including edibles or gummies); infusion into alcohol or oils (tinctures); or topical application to the skin through lotions or balms.¹²

Emissions from Cannabis vs. Tobacco¹⁰



Source: Ott et al. (2021), *Measuring indoor fine particle concentrations, emission rates, and decay rates from cannabis use in a residence*, *Atmospheric Environment*, Vol 10.

Rise in Cannabis Use

Over the past several decades, **cannabis products have become significantly more potent**, increasing both the intensity of exposure for users and the potential risks to non-smokers.¹³ The University of Michigan’s Monitoring the Future Panel Study, which examines substance use among adults ages 19 to 65, found that **cannabis use remains at or near the highest levels ever recorded**, with significant increases over the past five and ten years across multiple age groups. Among adults ages 19–30, past-year, past-month, and daily cannabis use in 2024 remained near historic highs, while among adults ages 35–50, the prevalence of cannabis use has more than doubled over the past decade.¹⁴ The study also found that cannabis use disorder has increased over the past five years among adults ages 40–50.¹⁴ **CDC estimates that about 3 in 10 people who use cannabis develop cannabis use disorder**, with higher risk among those who start during adolescence or use cannabis more frequently.¹²

Cannabis use among U.S. teens remained stable in 2025, with 8% of 8th graders, 16% of 10th graders, and 26% of 12th graders reporting past-year use, continuing the low levels observed since the pandemic-related decline in 2021.¹⁵ Among eighth graders who used e-cigarettes to consume cannabis, flavored use rose from 47% to 63%, with similar increases among 10th graders (41% to 53%) and 12th graders (36% to 50%), highlighting growing concern about the appeal of flavored products to youth.¹⁶

Cannabis Regulation

Cannabis regulations in the United States is complex. At the federal level, cannabis is currently classified as a Schedule I substance under the Controlled Substances Act, meaning it is considered to have a high potential for abuse and no accepted medical use, and unauthorized manufacture, distribution, or possession remains illegal.¹⁷ In December 2025, President Trump signed an executive order directing the Department of Justice to complete the rulemaking process to reschedule cannabis to Schedule III, which includes substances with moderate to low potential for physical or psychological dependence.¹⁸ Rescheduling would not legalize cannabis federally, but it could reduce regulatory barriers to research, ease certain federal tax burdens, and could signal a shift in federal enforcement priorities. However, broader legalization would still require congressional and additional regulatory action.¹⁸

The majority of states have enacted laws to regulate cannabis sales and use.¹⁹ Cannabis remains illegal under federal law, which supersedes conflicting state laws.¹⁸

For teens who use e-cigarettes, use of **flavored cannabis products delivered through electronic devices** increased sharply between 2021 and 2024 and now represent the most common form of cannabis consumption in this group.¹⁶

Clinical Use of Cannabis

There has been clinical interest in using cannabis-related medications to treat cancer-related symptoms, particularly chemotherapy-induced nausea and vomiting. To date, the U.S. Food and Drug Administration has approved two synthetic cannabinoid drugs — dronabinol and nabilone — for the treatment of nausea and vomiting associated with cancer chemotherapy after other antiemetics have failed; dronabinol is also approved to treat anorexia with weight loss in HIV/AIDS. Another cannabis-derived drug (cannabidiol or CBD) is approved for treating seizures. It is important to note that none of these FDA-approved drugs require smoking or aerosolization, and the FDA has not approved the cannabis plant itself as a medical treatment.²⁰

Rolling Back Smoke-free Protections: Cannabis Undermines Indoor Smoking Exemptions

As cannabis laws have liberalized, the public's perception of the negative health effects from cannabis smoke has declined.²¹ The cannabis industry, which has documented ties to the tobacco industry, is capitalizing on the false belief that secondhand cannabis smoke is less dangerous in order to push for exemptions to longstanding smoke-free laws.

The rise of cannabis businesses (also known as consumption lounges or social use venues) poses an increasing threat to both public and worker health. These venues often allow customers to smoke on site, sometimes alongside food and drinks. Taking a page from the cigar and hookah bar playbook, the industry frames these venues as “experiences,” “social spaces,” and tourism amenities, while discounting the health risks to workers and patrons.²² The industry also promotes ventilation systems as a solution, despite clear evidence that ventilation does not eliminate exposure to the carcinogens in secondhand smoke. **Cannabis businesses risk recreating the same failed policy model as tobacco retailers and cigar bars by carving out exemptions that sacrifice worker health, expose patrons to toxic smoke, complicate enforcement, and re-normalize indoor smoking.**

ACS CAN's Position

ACS CAN supports the prohibition of the smoking or aerosolizing of cannabis and other cannabinoids in public places because the cancer-causing substances found in cannabis smoke pose numerous health hazards to the individual using and others in their presence. Allowing the smoking or aerosolizing of cannabis in public places also undermines the effectiveness of 100% smoke-free laws.

1. US Department of Health and Human Services. [The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General](#). Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014.
2. US Department of Health and Human Services. [The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General](#). Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006.
3. Centers for Disease Control and Prevention. (2024, February 15). Cannabis and lung health. U.S. Department of Health and Human Services. <https://www.cdc.gov/cannabis/health-effects/lung-health.html>
4. Janssen F, Braun M, Dröge J, Brüggmann D, Groneberg DA. Comparison Between Smoked Tobacco and Medical Cannabis Cigarettes Concerning Particulate Matter. *Cannabis Cannabinoid Res.* 2024 Dec;9(6):1492-1499. doi: 10.1089/can.2023.0201. Epub 2024 Jan 31. PMID: 38294845; PMCID: PMC11685293.
5. 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>.
6. Zhao, T., Cheng, K.-C., Ott, W. R., Wallace, L. A., & Hildemann, L. M. (2020). Characteristics of secondhand cannabis smoke from common smoking methods: Calibration factor, emission rate, and particle removal rate. *Atmospheric Environment*, 242, 117731. <https://doi.org/10.1016/j.atmosenv.2020.117731>
7. Kamel, I., Mahmoud, A. K., Twayana, A. R., Younes, A. M., Horn, B., & Dietzius, H. (2025). Myocardial infarction and cardiovascular risks associated with cannabis use: A multicenter retrospective study. *JACC: Advances*, 4(5), 101698.
8. Ghasemiesfe, M., Barrow, B., Leonard, S., Keyhani, S., & Korenstein, D. (2019). Association between marijuana use and risk of cancer: A systematic review and meta-analysis. *JAMA Network Open*, 2(11), e1916318. <https://doi.org/10.1001/jamanetworkopen.2019.16318>
9. Nargis, N., et al. (2025). [Cancer risk and legalisation of access to cannabis in the USA: Overview of the evidence](#). *The Lancet Public Health*, 10(2), e160–e164.
10. Ott et al. (2021), [Measuring indoor fine particle concentrations, emission rates, and decay rates from cannabis use in a residence](#), *Atmospheric Environment*, Vol 10.
11. Centers for Disease Control and Prevention. Cannabis Health Effects. https://www.cdc.gov/cannabis/health-effects/?CDC_AAref_Val=https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know
12. National Center for Complementary and Integrative Health. (2025, January 31). Cannabis (marijuana) and cannabinoids: What you need to know. <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know> (nccih.nih.gov)
13. Cinnamon Bidwell L, York Williams SL, Mueller RL, Bryan AD, Hutchison KE. Exploring cannabis concentrates on the legal market: User profiles, product strength, and health-related outcomes. *Addict Behav Rep.* 2018 Aug 17;8:102-106. doi: 10.1016/j.abrep.2018.08.004. PMID: 30167450; PMCID: PMC6111049.
14. Patrick, M. E., Miech, R. A., Johnston, L. D., & O'Malley, P. M. (2024). Monitoring the Future Panel Study annual report: National data on substance use among adults ages 19 to 65, 1976-2023. *Monitoring the Future Monograph Series*. Ann Arbor, MI: Institute for Social Research, University of Michigan. doi: 10.7826/ISR-UM.06.585140.002.07.0003.2024
15. Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025, December 17). National Press Release, “[Reported use of most drugs remains low among US teens](#)” University of Michigan News Service: Ann Arbor, MI.
16. Miech, Richard et al. [Trends in U.S. Adolescent Use of Vaping and Flavored Solutions for Marijuana Consumption, 2021–2024](#). *Journal of Adolescent Health*, Volume 77, Issue 5, 924 - 930.
17. Trump, D. J. (2025, December 18). Executive Order: Increasing medical marijuana and cannabidiol research [Fact sheet]. The White House. <https://www.whitehouse.gov/presidential-actions/2025/12/increasing-medical-marijuana-and-cannabidiol-research/>
18. Lampe, J. R. (2025, December 22). Legal consequences of rescheduling marijuana (CRS Legal Sidebar LSB11105). Congressional Research Service.
19. National Conference of State Legislatures. (2024). Cannabis overview. <https://www.ncsl.org/civil-and-criminal-justice/cannabis-overview>
20. U.S. Food and Drug Administration. (2023). [FDA and cannabis: Research and drug approval process](#). FDA.
21. Osika Tripathi, Humberto Parada, Sandy Liles, Yuyan Shi, Georg E. Matt, Penelope J.E. Quintana, Jason Ferris, Adam Winstock, John Bellettiere. Clearing the air: Heightened perception of harm from secondhand cannabis smoke exposure is associated with no in-home cannabis smoking in a 21-country convenience sample. *Preventive Medicine*, Volume 189, 2024, 108178. ISSN 0091-7435. <https://doi.org/10.1016/j.ypmed.2024.108178>.
22. Jackson, M. (2025, December 5). Are consumption lounges the ‘next frontier’ for legal cannabis? *MJBizDaily*. <https://mjbizdaily.com/news/are-consumption-lounges-the-next-frontier-for-legal-cannabis/613108/>
23. American Nonsmokers’ Rights Foundation. (2025). [Protecting nonsmokers from secondhand marijuana smoke](#) [PDF]. Americans for Nonsmokers’ Rights. <https://no-smoke.org/wp-content/uploads/pdf/Protecting-Nonsmokers-from-Secondhand-Marijuana-Smoke.pdf>
24. Centers for Disease Control and Prevention. (2021, November 30). [Ventilation does not effectively protect people who don’t smoke from secondhand smoke](#) (Archived page).