Cannabis Poisonings and Cannabinoid Hyperemesis Syndrome in Vermont June 2025

Cannabis poisonings and cannabinoid hyperemesis syndrome (CHS) have been increasing in Vermont. Awareness of emergency department (ED) and inpatient hospitalization visit trends about cannabis poisoning and CHS is essential for clinicians and partners to inform treatment and intervention.

If you need help accessing or understanding this information, contact <u>ahs.vdhoverdosedatavt@vermont.gov</u>.

Cannabis Poisoning

- Cannabis poisonings are any adverse effects from the consumption or use of cannabis.
 - This analysis includes all ED and inpatient hospitalization visits where cannabis poisoning was diagnosed, not just those as the primary diagnosis.
 - In 2022, there were significantly more ED than inpatient visits for any cannabis poisoning.

Emergency department visits for cannabis poisoning significantly increased between 2016 and 2022, while inpatient visits did not increase in the same period.

Rate per 100,000 Vermonters



Source: Vermont Uniform Hospital Discharge Data Set, 2016-2022

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Cannabinoid Hyperemesis Syndrome (CHS)

- <u>CHS</u> is characterized by <u>chronic, heavy use of cannabis, recurrent episodes of severe</u> <u>nausea and intractable vomiting, and abdominal pain</u>. Defining CHS for analytic purposes poses challenges, especially because there is no standard methodology for identifying CHS cases in hospital discharge data.
 - The difference between inpatient and ED visits for CHS were not statistically significant in 2022.
 - Inpatient and ED visits for CHS significantly increased between 2016 and 2022.
 - ED visits for CHS significantly increased between 2017 and 2018, coinciding with the legalization of cannabis for recreational use in Vermont.

The rate of emergency department and inpatient visits with suspected Cannabinoid Hyperemesis Syndrome significantly increased between 2016 and 2022.



Rate per 100,000 Vermonters

Source: Vermont Uniform Hospital Discharge Data Set, 2016-2022 ~ Data suppressed due to low counts.

Inpatient visits for any cannabis poisonings have stayed steady while ED visits for any cannabis poisonings have increased. Both inpatient and ED visits for CHS have increased.



Data notes

Cannabis poisonings were identified with the International Classification of Diseases (ICD) codes T40.7X1, T40.7X2, T40.7X3, T40.7X4, OR T40.7X5 and only include the 7th character of A or missing (reflects initial encounter, active treatment, or missing encounter). The cannabis poisoning definition was developed by Council of State and Territorial Epidemiologists (CSTE).

Any mention of cannabis poisoning indicates the presence of a cannabis-related ICD code in any of the 20 diagnosis fields. However, in contrast to primary diagnosis, any mention of poisoning does not always mean that cannabis use was the reason the individual was hospitalized or admitted to the ED, and it is possible that they did not receive care for the cannabis-related diagnosis.

CHS was identified with the codes F12.188, F12.288 OR F12, T40.7 AND R11.15. Using the information available from medical records, this definition developed by the Department of Health prioritizes accuracy and precision instead of a broader operationalization of CHS. There is no standard methodology for identifying CHS cases. CHS cases identified in the brief may not fall under the cannabis poisoning umbrella because they may be from chronic or past rather than recent cannabis use. We are unable to identify if a CHS visit is caused by recent or chronic cannabis use.

Difficulty identifying cases stems from misdiagnosis, stigma and other barriers to patient disclosure, paradoxical effect of cannabis regarding nausea, lack of awareness among medical professionals and the public, reliance of patient history and symptoms due to lack of a test for CHS, subjectivity of symptoms, and lack of ICD code for CHS.

2022 is the most recent available year of the Vermont Uniform Hospital Discharge Data Set.

