## Cannabis poisonings among older adults have tripled, study finds



One may think young people are the main group enjoying the freedom of legalized weed, but in Canada, the greatest increase in users after legalization was among older adults — and sometimes it's sending them to the hospital, according to new research.

The rate of emergency department visits for cannabis poisoning in older adults during the period of legalization of dried cannabis flower and edibles — October 2018 through December 2022 — in Canada was significantly higher than that of the pre-legalization period, according to a research letter published Monday in the journal JAMA Internal Medicine.

Edibles, which include baked goods, candies and beverages, are increasingly popular, said lead research author Dr. Nathan Stall, a geriatrician and clinician scientist at Sinai Health in Ontario. But some older adults may be unaware of the strength of today's weed, and little is known about the health effects of legalizing edible cannabis on older adults — the age group with the largest growth in overall cannabis use a year after dried cannabis flower was legalized in Canada, Stall said.



Gummies are one form of edible cannabis. - Jamie Grill/Tetra images RF/Getty Images

"There's a bit of an age-related bias that many health care practitioners, and frankly society, hold that older adults are not using drugs. And that's not true," Stall said. "We found that the largest increases in emergency department visits for cannabis poisoning among seniors occurred after edible cannabis became legal for retail sale in January 2020."

The authors used the Ontario Ministry of Health's administrative data to examine the rates of emergency room visits for cannabis poisoning among older adults during the pre-legalization period — January 2015 to September 2018 — and the two legalization periods: October 2018 through December 2019, which permitted the sale of dried cannabis flower only, and January 2020 through December 2022, which marked the legalization of cannabis edibles.

When people have cannabis poisoning, according to Stall, they may experience confusion; psychosis, including hallucinations; anxiety or panic attacks; rapid heartbeat; chest pain; nausea; and vomiting.

During the eight-year study period, there were 2,322 emergency department visits for cannabis poisoning in older adults who were age 69 on average. Nearly 17% of those adults were simultaneously intoxicated with alcohol, about 38% had cancer

and 6.5% had dementia. Compared with pre-legalization, legalization period No. 1 saw a twice higher rate of emergency department visits for cannabis poisoning. The rate during the second legalization period tripled that of pre-legalization.

"This study provides a cautionary tale of legalization of substances without adequate research, education, and counseling of users regarding adverse effects and safe usage, particularly in older adults," said Dr. Lona Mody and Dr. Sharon K. Inouye, who weren't involved in the research, in a commentary on the research.

Mody is the Amanda Sanford Hickey Professor of Internal Medicine at the University of Michigan in Ann Arbor. Inouye is director of the Aging Brain Center at the Hinda and Arthur Marcus Institute for Aging Research in Boston, and a professor of medicine at Harvard Medical School.

## The sneaky effects of edibles

When it comes to explaining the higher rates, both unintentional and intentional use of edible cannabis are worth discussing, experts said.

"Edible cannabis products may be particularly dangerous because they are often indistinguishable from non-cannabis containing foods and may contain high amounts of THC (delta-9-tetrahydrocannabinol), the major active ingredient in both medical and recreational cannabis," Mody and Inouye said.

In his own practice, Stall has seen a common scenario resulting from the lack of distinction, he said: An emergency department doctor is not able to figure out why an older adult patient is neurologically impaired via any typical tests — only for a toxicology screen to come back positive for cannabis, much to the patient's surprise.

"The other thing is that cannabis today is very different than cannabis was as recently as the early '90s and mid '80s," Stall explained. "Today's cannabis extracts contain as much as 30 times more THC. ... Older adults who may not have used

cannabis in decades and are now trying again in this post-legalization era may not be aware."

Additionally, age-related changes in organ function and how the drug is distributed throughout the body — as well as having health conditions or being on prescription drugs, especially psychoactive ones — can make it easier for an older adult to experience cannabis poisoning, Stall added.

Some people who intentionally consume cannabis edibles may not be aware that this form has a more delayed effect than an inhalant, which goes straight to the bloodstream, he said. Thinking the edible isn't working, they take another one too soon and end up getting more than they bargained for.

There are also people whose prescription medications for pain management, insomnia or dementia symptoms aren't effective, so they consume edibles for therapeutic purposes but without consulting a doctor first, Stall said.

## Reducing harm from cannabis use

Abstaining from cannabis use may be "appropriate" for some individuals, but "I would be hesitant to give a blanket recommendation (that) no other adults should be using this because there are people who are going to use it even if that recommendation is given," Stall said.

Therefore, preventing cannabis-related harms in older adults requires a multipronged approach, he added, including storing cannabis edibles in locked locations and in clearly identified packaging.

Products older adults intentionally use should have dosing information with specific guidance for older adults, "recognizing that the amount of drug they may need is a lot less than younger populations," Stall said. "In geriatric medicine, we have a mantra: Start low and go slow. That same mantra applies here."

The amount at which cannabis can become poisonous can depend on multiple personal factors, but some studies have indicated people should wait at least three hours before taking a second dose, Stall said.

Health care providers should also have open and judgment-free conversations with older adults about cannabis use and its benefits and risks, he added.

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