

Vaping marijuana by teens doubles in last seven years, with potentially harmful consequences, study says

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This teenager almost died from a vaping-related illness 06:36

(CNN) Marijuana vaping by school-aged youth doubled between 2013 and 2020, a new study found, with reported use within the last 30 days rising seven-fold during the same time period.

[A psychologist's advice: How to talk to your kids about social media and drug abuse](#)

The study, [published Monday in JAMA Pediatrics](#), analyzed 17 studies conducted throughout Canada and the United States that involved nearly 200,000 adolescents. The study found that teens in their senior year of high school were most likely to be vaping marijuana compared to younger adolescents. In 2018, for example, one in three grade-12 students reported vaping weed.

In one of the studies, adolescents also reported a preference for vaping cannabis extracts over dried herbs to get the buzz they desired from THC. THC, or tetrahydrocannabinol, is the main psychoactive compound in cannabis, the one that produces the "high" users desire.

Today's "high" is much more intense than in the past, even that of a mere decade ago, [according to the National Institute on Drug Abuse](#), or NIDA. Modern ultra-potent strains of weed can contain over 15% THC, compared to the 4% or so available in the 1990s.

Choosing vaping oils, extracts and resins over dried weed, called "dabbing," is a disturbing and potentially dangerous trend because vape extracts contain "3 to 5 times more THC than the plant itself," noted the NIDA.

"The use of cannabis products with high THC (that are) easily achievable through vaping raises several potential problems," said study author Carmen Lim, a PhD candidate on Health and Behavioural Sciences at the University of Queensland in Australia via email.

"Not only it is linked to poorer cognitive development in adolescents, it could increase risk of dependence, other substance use and many other health, social, and behavioral problems later in life," Lim wrote.

Impact on teen brain

The use of marijuana by teens -- in any form -- is concerning because weed affects the adolescent brain differently, according to the US Centers for Disease Control and Prevention.

"The teen brain is actively developing and often will not be fully developed until the mid 20s," [the CDC stated](#), adding that use during that time "can have permanent effects" such as poor coordination and damage to learning, memory, problem solving skills, and the ability to pay attention.

Marijuana abuse by youth with mood disorders linked to suicide attempts, self-harm and death, study finds

Use of weed by teens is linked to poor school performance and an increased likelihood of dropping out, the CDC stated. In addition, the CDC warns that teen use of marijuana has been "linked to a range of mental health problems in teens such as depression or anxiety," even psychosis.

Heavy use of marijuana by teens and young adults with mood disorders -- such as depression and bipolar disorder -- is linked to an [increased risk of self-harm, suicide attempts and death](#), according to a [study published in January](#).

About one in six teens who use marijuana regularly become addicted, the CDC stated. A person is considered dependent on weed when they feel food cravings or a lack of appetite, irritability, restlessness and mood and sleep difficulties after quitting. Called cannabis use disorder, the problem is on the rise, especially in those who started using as teenagers.

"People who begin using marijuana before the age of 18 are four to seven times more likely to develop a marijuana use disorder than adults," [the NIDA stated](#).

Vaping weed may be worse than vaping nicotine

A study published in March found teens were about twice as likely to report ["wheezing or whistling" in the chest after vaping marijuana](#) compared to when they smoked cigarettes or e-cigarettes.

"Without a doubt, cigarettes and e-cigarettes are unhealthy and not good for lungs. However, vaping marijuana appears even worse," study author Carol Boyd, professor emerita and codirector of the Center for the Study of Drugs, Alcohol, Smoking & Health at the University of Michigan in Ann Arbor told CNN in a prior interview..

Vaping marijuana linked to lung injury in teens, study says

"Since many teens who vape nicotine, also vape cannabis, I recommend parents treat all vaping as a risky behavior (just like alcohol or drug use)," Boyd said.

Vaping weed is associated with a dangerous, newly identified lung disease called EVALI, short for e-cigarette, or vaping, product use-associated lung injury. In most of the cases, young people were using vaping products that contain THC, the main psychoactive compound in marijuana.

"According to the CDC, 84% of the EVALI cases were associated with cannabis-containing products," Boyd told CNN.

As of February 2020, 68 deaths from EVALI have been confirmed in 29 states and the District of Columbia. The CDC believes EVALI may be linked to vitamin E acetate, a sticky oil substance often added to vaping products to either thicken or dilute the oil in cartridges.

What can parents do?

Parents should be on the lookout for behavior that indicates their child is using marijuana, according to the [American Academy of Child and Adolescent Psychiatry](#).

Red eyes and "getting the munchies" are obvious signs, but irritability, moodiness, forgetfulness and acting "silly or out of character" are also typical, the AACAP advised. Some teens may start to use words like "sparking up," "420," "dabbing" and "shatter," as well.

Be on the lookout for vaping paraphernalia. Not all e-cigarettes come in a cigarette-like package. Today's versions can [look like an USB device or a small, refillable pod or case](#) and be hard for a parent to spot.

"The discreet nature of e-cigarettes makes it possible for adolescents to conceal and experiment with drugs such as cannabis," LIm wrote.

Parents are less aware when their kids vape than when they smoke, study says

If you suspect your child may be using, be aware that many teens believe that using weed is safer than drinking alcohol or using other drugs. Prepare yourself for the conversation by knowing "the myths and the facts" about weed, the AACAP said.

"For example, teenagers may say, 'it is harmless because it is natural,' 'it is not addictive,' or 'it does not affect my thinking or my grades,'" the AACAP warned. Or they may say it's OK because people use it "for medical purposes."

Facts about the reality of marijuana use and other tips for parents can be found on the [National Institute for Drug Abuse website](#), the [Partnership to End Addiction](#), and [Healthy Children.org](#), the website of the American Academy of Pediatrics.