

Negative Health Impacts of High-THC Products

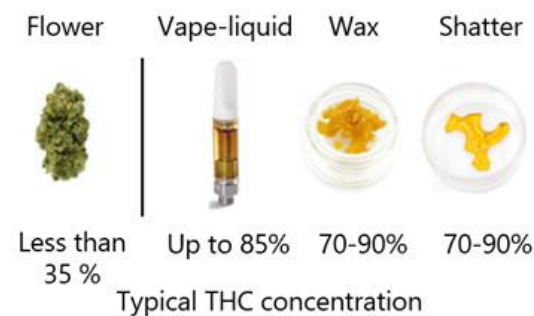
Issue summary

As the concentration of THC has increased over time, so too has the associated risk and potential severity of negative health outcomes related to cannabis use.^{1,2} High-THC use increases consumer risk for negative health outcomes, including psychosis and cannabis use disorder (CUD).^{3,4} This risk is greater for groups already at-risk for negative outcomes from cannabis use, such as people under the age of 25, those with mental health conditions, people who use cannabis frequently, and individuals with a personal or family history of psychosis.⁵

Defining high-THC products

Public health policy experts in Washington State define **high-THC products as a cannabis product with a THC concentration of 35% or higher.**⁵ Consuming cannabis products above 10% THC increases the risks of negative health consequences.²⁻⁷ However, given that products below 10% THC are now rare in the regulated market, public health policy experts consider 35% as a pragmatic threshold to mitigate the harms associated with high-THC products.⁵

Examples: flower vs. high-THC products⁸



All cannabis flower without additives is below 35% THC, whereas most highly processed THC products are above this threshold.⁸ Chemicals and additives often used in this processing can pose additional risks.

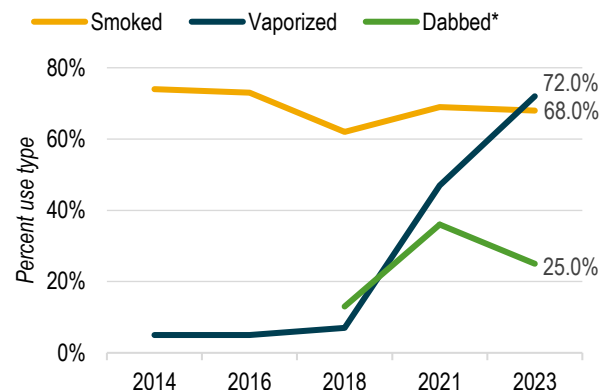
How did we get here?

Market innovation has contributed to increased availability and consumption of high-THC products.⁹

- Average THC concentration of cannabis flower has increased from 3% in 1995 to 21% in 2017.^{1,10}
- Sales of concentrates (including products like wax and shatter, typically 60-90% THC) quadrupled since the regulated market opened in 2014.⁵

Cannabis vaping (including consuming high-THC vape-liquid) among 10th graders has increased by 1,340% since 2014.^{1,11} Vaping is now the most common way for youth to use cannabis.¹¹

Cannabis Use Type Among 10th Graders Who Use Cannabis¹¹



*Dabbed option added to survey in 2018

Frequent use, which also magnifies health risks, is now common.

- People who consume high-THC products are more likely to use frequently.^{2,4}
- Daily, non-medical use of cannabis among 21–25-year-olds specifically is at its highest rate (10.4%) since tracking began in 2014.¹²
- Seventeen percent of all Washington adults and more than half of current adult consumers use daily or almost daily.¹³

High-THC use increases risk for negative health outcomes:

Cannabis use disorder (CUD)

CUD is a condition in which cannabis use leads to substantial impairment or distress. Symptoms include difficulty controlling use, continued use despite negative consequences, development of tolerance, among other factors.¹⁴

- 10-30% of people who use cannabis develop CUD.^{15,16} Rates for youth are higher than for adults.^{17,18}
- People who consume high-THC are more likely to experience tolerance and experience negative consequences of use; this is especially true for young people.^{18,3}

Psychosis and schizophrenia spectrum disorders

Psychosis is characterized by a disconnection from reality. Symptoms may include hallucinations, delusions, disordered thinking.¹⁴

Schizophrenia spectrum disorders (SSDs) are defined by persistent psychosis that may be accompanied by cognitive or emotional dysfunction.¹⁴

These disorders are associated with shorter lifespan and lower self-reported quality of life.¹⁹

Use of high-THC products increases risk for SSDs. The evidence is substantial and goes beyond simple association.²⁰

- High-THC use is associated with a 2-5 times increased risk of psychotic disorders like schizophrenia.^{4,6}
- Risk of developing a psychotic disorder is highest for those who use high-THC products daily.^{4,6}
- Psychosis induced by cannabis is among the most common forms of substance-induced psychosis.^{21,22}

- Those who continue to use cannabis following cannabis-induced psychosis are more likely to develop schizophrenia than those who stop.²¹

Other potential outcomes

High-THC products may also increase risk for mental health disorders and cannabinoid hyperemesis syndrome, a condition of recurrent vomiting that resolves with cessation of cannabis use.^{5,23,24} The chemical processing and additives commonly used for high-THC products may also increase consumers' risk for toxic effects.^{5,8}

Groups at higher risk:

These groups are at higher risk for negative health impacts of high-THC product use:

- People under age 25. Brain development continues until around age 25²⁵. Use before this age, especially frequent use of high-THC products, can impair brain development in ways that it would not in adults.^{5,26}
- People with mental health disorders (depression, anxiety, post-traumatic stress disorder, substance use disorder) or childhood trauma.^{26,27}
- People with a personal or family history of psychotic disorders.²⁸
- People who use cannabis often (daily or near-daily).^{1,4-6,29}

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