2017 Epidemiological Profile: Marijuana

CPES
Center for Prevention
Evaluation and Statistics

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Consumption

Marijuana remains the most commonly used illicit drug both locally in Connecticut and nationally in the United States. In Connecticut, the rates for marijuana usage have been generally higher than the national average. According to the Monitoring the Future survey, rates of marijuana use among middle and high school students have dropped or levelled off in the past few years after several years of increase. However, the number of young people who believe marijuana is risky continues to decrease, indicating risk of future use.[1]

Marijuana use is widespread among young adults and adolescents in Connecticut. The 2015 National Survey of Drug Use and Health (NSDUH) showed that 25% of adults ages 18-25 used marijuana within the last 30 days and 42.1% used within the last year, which are both over the national average (19.7% and 32.1%, respectively). Amongst youth ages 12-17 in Connecticut, 8.3% have used marijuana in the past month and 15.6% have used in the past year. Again, rates above the national average for this age group.

Perception of great risk from smoking marijuana once a month has decreased 21.3% among Connecticut youth since 2003 and 35% among young adults ages 18-25. In 2014, 22% of youth ages 12-17 perceived great risk of harm from smoking marijuana once a month, while only 12% of those ages 18-25 perceived great risk of harm from smoking once a month.

The 2015 Connecticut High School Youth Risk Behavior Surveillance Survey (YRBSS) results demonstrate that while fewer students report use of marijuana compared to alcohol, there is still a significant number of students who have tried marijuana in their lifetime. Overall, 35.4% of students between 9th and 12th grade have used marijuana. Hispanic/Latino students report the highest rate of ever use (39.6%), followed by Black students (36.6%) and White students (34.5%). For 12th graders, nearly 1 in 2 (49.7%) have used marijuana. Rates for initial use before age 13 were highest for Black students (8.0%) and Hispanic/Latino students (8.0%), and lower for White (4.7%) and Other students (5.0%).

In 2015, the YRBSS showed that 21% of female and 19.7% of male Connecticut high school students currently used marijuana. Current marijuana use was reported by 21.7% of Hispanic, 20.2% of White and 19.2% of Black students.

To avoid inhaling smoke, some people are using vaporizers. These devices pull the active ingredients (including THC) from the marijuana and collect the vapor in a storage unit, usually a cartridge that is heated by a battery. A person then inhales the vapor and not the smoke. Some vaporizers use a marijuana liquid extract.[2]

At-Risk Populations

Risk factors for marijuana use:
- Tobacco smoking[3]
- Poor academic performance[4]
- Having friends that smoke marijuana
- Social media influences
- Easy availability
- Co-occurring anxiety, depression, PTSD, or other mental health issues.

[1] Johnston L, O'Malley P, Miech R, Bachman J, Schulenberg J. *Monitoring the Future National Survey Results on Drug Use: 1975-2015: Overview: Key Findings on Adolescent Drug Use.* Ann Arbor, MI: Institute for Social Research, The University of Michigan; 2015.
[2] https://www.drugabuse.gov/publications/drugfacts/marijuana
[3] Moore BA, Augustson EM, Moser RP, Budney AJ. Respiratory Effects of Marijuana and Tobacco Use in a U.S. Sample. *Journal of General Internal Medicine.* 2005;20(1):33-37. doi:10.1111/j.1525-1497.2004.40081.x.
[4] Tu, A.W., Ratner, P.A., & Johnson, J.L. (2008). Gender differences in the correlates of **adolescents**' cannabis use. *Substance Use and Misuse, 43*(10), 1438-1463.

Consequences

- Smoking marijuana frequently has been associated with increased reporting of health problems and more days of missed employment than nonsmokers.[7]
- Marijuana use is also highly correlated with other risk behaviors, such as violence, delinquency, suicide, and unprotected sex.[5]
- In the short-term marijuana use may cause adverse physical, mental, emotional, and behavioral changes such as problems with memory and learning, distorted perception, difficulty in thinking and problem solving, loss of coordination, and increased heart rate.[7]
- Longer term adverse health effects include respiratory illnesses, memory impairment, and weakening of the immune system. Long-term marijuana use causes changes in the brain similar to those seen after long-term use of other major drugs of abuse.[7]
- Risk of heart attack more than quadruples in the first hour after smoking marijuana.
- In children, ingestion of marijuana can lead drowsiness, loss of control of body movements, eye twitching, hypothermia, and poor muscle tone. [6]
- Studies suggest that children of mothers who used marijuana while pregnant may have subtle brain changes that can lead to the children having difficulties with problem-solving skills, memory, and attention.[7]
- In 2016, the total number of treatment admissions in Connecticut for marijuana use were 7,569 (11.3% of all admissions). Of all marijuana treatment admissions, 72.6% were male and half (50.6%)were ages 21-30 years old.[8]
- Treatment admissions were evenly distributed among white, black, and Hispanic clients.[8]
- Although marijuana abusers generally do not commit violent crimes, the distribution of marijuana has been associated with violent crime in Connecticut, usually involving rival gangs.[9]
- Marijuana use has been associated with reduced educational attainment, including lower school performance,[10] reduced chances of graduating,[11] and a higher likelihood of dropping out of school.[12]
- Several studies have linked heavy marijuana use to lower income, unemployment, criminal behavior, and lower life satisfaction.[13]
- Studies have also suggested specific links between marijuana use and adverse consequences in the workplace, such as increased risk for injury or accidents[14] and higher rates of absenteeism.[15]

[5] Ali MM, Amialchuk A, Dwyer DS (2011) The Social Contagion Effect of Marijuana Use among Adolescents. PLoS ONE 6(1): e16183. doi:10.1371/journal.pone.0016183

[6] **The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update** Seth Ammerman, Sheryl Ryan, William P. Adelman and THE COMMITTEE ON SUBSTANCE ABUSE, THE COMMITTEE ON ADOLESCENCE *Pediatrics* 2015;135;e769; originally published online January 26, 2015; DOI: 10.1542/peds.2014-4147

[7] https://www.drugabuse.gov/publications/marijuana-facts-teens/want-to-know-more-some-faqs-about-marijuana

[8] TEDS Treatment Admission Data https://wwwdasis.samhsa.gov/webt/quicklink/CT16.htm

[9] http://www.dpsdata.ct.gov/dps/ucr/data/2015/Crime%20in%20Connecticut%202015.pdf

[10] https://www.cdc.gov/healthyyouth/health_and_academics/pdf/alcohol_other_drug.pdf

[11] Macleod J, Oakes R, Copello A, et al. Psychological and social sequelae of cannabis and other illicit drug use by young people: a systematic review of longitudinal, general population studies. *Lancet Lond Engl*. 2004;363(9421):1579-1588. doi:10.1016/S0140-6736(04)16200-4

[12] McCaffrey DF, Pacula RL, Han B, Ellickson P. Marijuana Use and High School Dropout: The Influence of Unobservables. *Health Econ*. 2010;19(11):1281-1299. doi:10.1002/hec.1561

[13] Fergusson DM, Boden JM. Cannabis use and later life outcomes. *Addict Abingdon Engl*. 2008;103(6):969-976; discussion 977-978. doi:10.1111/j.1360-0443.2008.02221.x

[14] Macdonald S, Hall W, Roman P, Stockwell T, Coghlan M, Nesvaag S. Testing for cannabis in the work-place: a review of the evidence. *Addict Abingdon Engl*. 2010;105(3):408-416. doi:10.1111/j.1360-0443.2009.02808.x

[15] Zwerling C, Ryan J, Orav EJ. The efficacy of preemployment drug screening for marijuana and cocaine in predicting employment outcome. *JAMA*. 1990;264(20):2639-2643

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Selected Indicators

- NSDUH
- Drug-related Arrests
- Drug-related School Suspensions and Expulsions
- School Drop-out Rate
- Illicit Drug Use Death Rate
- Connecticut School Health Survey (YRBSS)
- Marijuana Treatment Admissions (TEDS)
- Adolescent Substance Use Treatment Admissions (DCF)