

Cannabis, the Teen Brain & Increased Risk of *Mental Illness*

Impacts on youth and families:
increased rates of psychotic illness.

Michelle Bos-Lun
Teacher, Family Member
State Representative
Mental Health Volunteer

Michelle Bos-Lun MA

International Education

- State Representative
- Youth Program Director
- Former Case Manager for youth with Mental Health challenges
- High School Teacher

Volunteer with NAMI Vermont

National Alliance on Mental Illness

- Teacher of Family to Family Class
- Facilitator of Family Support Group
- Teacher of Mental Illness and Recovery Class
- Former Board Member of NAMI VT and HCRS (designated mental health agency for Windham & Windsor County)
- Family member of two individuals who live with serious mental health issues.

Daily Usage of Marijuana by teens, 7x increased incidence of psychotic illness (in those with genetic predisposition)

*“Despite the fact that fewer adolescents believe that regular cannabis use is harmful to their health and increasingly permissive state laws governing the use of medical marijuana, the **medical literature presents clear evidence for a neurotoxic effect of cannabis on the adolescent brain.** These findings highlight the importance of efforts targeting adolescent cannabis use, including policy measures and psychoeducation in the doctor’s office.*

“Adolescence is a particularly vulnerable stage of development in regards to brain functioning and exposure to cannabis. Though it is difficult to prove how much cannabis or what frequency of cannabis use will lead to the onset of psychosis, what we do know is cannabis use during adolescence coupled with genetic vulnerability is correlated with the development of psychosis and schizophrenia.

Data from [six long-term studies in five countries](#) has shown that regular cannabis use predicts an increased risk for schizophrenia and symptoms of psychosis”

<https://www.psychologytoday.com/us/blog/mind-matters-menninger/202005/does-regular-marijuana-use-trigger-psychosis-in-youth> Jonathon

Stevens MD

Teens with a family history of psychotic illness are at risk for developing these conditions.

Know your family history.

The following are signs to watch for if you suspect your teen is experiencing psychosis:

1. Bizarre or eccentric behavior
2. Suicidal or homicidal ideation or behavior (seek help immediately if present)
3. Personality changes
4. Increased agitation or mood swings
5. Abnormal movements or mobility
6. Grandiose thoughts or behavior
7. Poor hygiene
8. Increased paranoia
9. Social withdrawal
10. Delusional thoughts
11. Altered sense of reality (seeing or hearing things that aren't really there)

Intervene early. This may significantly impact the prognosis and course of treatment for your teen. If you notice your teen is beginning to show signs of psychosis, take them to see their pediatrician or primary care physician who may then refer to a psychiatrist for an evaluation.

Center for Disease Control

Marijuana and the teen brain

Unlike adults, the teen brain is actively developing and often will not be fully developed until the mid 20s. Marijuana use during this period may harm the developing teen brain.

Research shows that marijuana use can have permanent effects on the developing brain when use begins in adolescence, especially with regular or heavy use.

<https://www.cdc.gov/marijuana/factsheets/teens.htm>

Marijuana users are significantly more likely than nonusers to develop temporary psychosis and long-lasting mental disorders, including schizophrenia

<https://www.cdc.gov/marijuana/health-effects.html>



Harvard Health Publishing

Harvard Medical School

CHILDREN'S HEALTH

Teens who smoke pot at risk for later schizophrenia, psychosis

March 7, 2011

[Ann MacDonald,](#)

- Early marijuana use could hasten the onset of psychosis by three years. Those most at risk are youths who already have a mother, father, or sibling with schizophrenia or some other psychotic disorder.
- Young people with a parent or sibling affected by psychosis have a roughly one in 10 chance of developing the condition—even if they never use cannabis, but, regular marijuana use, doubles their risk—to a one in five chance of developing psychotic illness.
- Youth in families unaffected by psychosis have a 7 in 1,000 chance of developing it. If they smoke marijuana regularly, the risk doubles, to 14 in 1,000

One of the best-known studies followed nearly 50,000 young Swedish soldiers for 15 years. The heaviest users (who said they used marijuana more than 50 times) were six times as likely to develop schizophrenia as the nonsmokers.

The research shows only an *association* between smoking pot and developing psychosis or schizophrenia later on. That's not the same thing as saying that marijuana *causes* psychosis.

<https://www.health.harvard.edu/blog/teens-who-smoke-pot-at-risk-for-later-schizophrenia-psychosis-201103071676>

Parents and teens
need to understand:

Heavy use of cannabis
by teens (whose
brains are still
developing) can lead
to increased rates of
psychotic illness.

I know many families who have loved ones who have developed bipolar disorder with psychotic features, and schizophrenia after being regular users of marijuana in their teens.

There is a perception by many Vermont parents that the use of marijuana by teens is not something to be concerned about. Yet there is a 10-13% increase in psychotic illness in young people who are heavy users of marijuana in their teens compared with youth who abstain or have very moderate use.

Vermont has an obligation to education parents and teens, that regular use of cannabis in the teen years can have dire consequences: Particularly for families with a history of mental health challenges.

Tips for Parents & others who work closely with teens

- Know your family's mental health history. Having a family history of mental illness increases susceptibility to developing one.
- Educate yourself. [The National Institute on Drug Abuse \(NIDA\)](#) provides excellent resources for parents including drug facts and tips for how to talk with your teen about drug use.
- Educate your teens. Have ongoing conversations about the risks of marijuana use during adolescence. Avoid using scare tactics and provide your teen with factual information. NIDA also provides resources for teens including [teen drug facts sheets](#).
- Know the signs of mental illness & psychosis: if you witness a significant change, seek professional support
- Find a family support group (NAMI, Nar-Anon)

We can all work together to promote healthy youth and young adults in Vermont.

The State of Vermont has a responsibility to educate youth and those who are in close contact with them, about the increased rates of serious mental illness in youth who are heavy users of cannabis. To make cannabis more legally available without providing this information is irresponsible.

Thank you for listening today.