Fact sheet: Marijuana use in Teenagers

Regular cannabis use during adolescence is related to:

- Brain damage in areas that develop during late adolescence and underlie language processing anomalies and psychotic features such as auditory hallucinations in schizophrenia.¹
- Decreased function in the region of the brain associated with internal timing.²
- Stroke. Marijuana exposure causes vasospasms in the cerebellar vessels, especially in infrequent users.³
- Structural abnormalities of the brain, in the core reward structures even in recreational users older than 21 years old.⁴
- Neuropsychological and cognitive decline in adulthood. Cannabis cessation only partially reverses the cognitive decline.⁵
- Increased risk of psychotic symptoms in 14-24 year old young adults.⁶
- Major depressive disorder, alcohol dependence, and substance abuse disorders in the late 20s through adulthood.⁷
- More likely to have suicidal thoughts than non-users; teen girls who use marijuana daily are more likely to develop depression. Likewise, depression is very common in teens and depressed teens are twice as likely to use marijuana and become dependent.⁸

References:

1. Ashtari M et al., Diffusion abnormalities in adolescents and young adults with a history of heavy cannabis use. J Psychiatr Res. 43(3):189-204, 2009
4. Gilman JM et al., Cannabis Use is Quantitatively Associated with Nucleus Accumbens and Amygdala Abnormalities in Young Adult Recreational Users. Neurobiology of Disease. 34(16):5529-5538, 2014

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