

# MARIJUANA FACTS FOR YOUTH

## Effects on the brain and development

- If marijuana use starts in adolescence, the chances of addiction are 1 in 6.<sup>1</sup>
- The National Institute on Drug Abuse's December 2012 Marijuana Drug Fact Information states: Research has shown that, in chronic users, marijuana's adverse impact on learning and memory persists after the acute effects of the drug wear off; when marijuana use begins in adolescence, the effects may persist for many years. Research from different areas is converging on the fact that regular marijuana use by young people can have long-lasting negative impact on the structure and function of their brains.
- Science confirms that the adolescent brain, particularly the part of the brain that regulates the planning complex cognitive behavior, personality expression, decision-making and social behavior, is not fully developed until the early to mid-20s. Developing brains are especially susceptible to all of the negative effects of marijuana and other drug use.<sup>2</sup>
- One of the most well designed studies on marijuana and intelligence, released in 2012, found that persistent, heavy use of marijuana by adolescents reduces IQ by as much as eight points, when tested well into adulthood.<sup>3</sup>

## Effects on School Performance

- According to data on marijuana use in youth from the National Survey on Drug Use and Health (2006), teens whose grades averaged "D" were four times more likely to have smoked marijuana in the past year than students whose grades averaged "A".
- Other studies have found that marijuana use is linked with dropping out of school, and subsequent unemployment, social welfare dependence, and a lower self-reported quality of life than non-marijuana abusing people.<sup>4</sup>
- According to May 2013 Missouri State Epidemiological Profile, 6.0% of all Missourians 12 and older reported using marijuana in the past month. This is a number that has remained relatively steady over the past few years and is slightly below the national average (6.9%).
- In Colorado prior to legalization (2011), 10.72% of youth were current marijuana users, compared to 7.64% nationally.<sup>5</sup>
- In Colorado Springs in 2012, positive tests for marijuana made up 57% of total drug screenings of high school students, compared to 33% in 2007.<sup>5</sup>
- "If Denver Public High Schools were considered a state, that state would have the highest past month marijuana use rate in the United States, behind New Hampshire. Denver now has more marijuana dispensaries than liquor stores or licensed pharmacies." – Dr. Christian Thurstone, Denver Health Medical Center

<sup>1</sup> Wagner, F.A. & Anthony, J.C. From first drug use to drug dependence; developmental periods of risk for dependence upon cannabis, cocaine, and alcohol. *Neuropsychopharmacology* 26, 479-488 (2002).

<sup>2</sup> Giedd. J. N. (2004). Structural magnetic resonance imaging of the adolescent brain. *Annals of the New York Academy of Sciences*, 1021, 77-85.

<sup>3</sup> Meier et al. (2012). Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proceedings of the National Academy of Sciences*.

<sup>4</sup> Fergusson, D. M. and Boden, J. M. (2008), Cannabis use and later life outcomes. *Addiction*, 103: 969–976.

<sup>5</sup> Rocky Mountain HIDTA Report: Colorado Youth Marijuana Use