



## Prevention of Underage Marijuana Use

The Gateway ImpACT Coalition is a group of individuals and agencies working to reduce youth substance abuse and its harmful effects in Clinton. 10% of 11<sup>th</sup> grade students at Clinton High School reported current (past-30 day) marijuana use<sup>i</sup>. Gateway ImpACT Coalition's prevention work is shaped by the following principles:

**Recreational marijuana use/possession is illegal for youth under 21 years old and adults in Iowa**

**Research indicates that marijuana may hurt the developing adolescent brain and lead to addiction**

The average age of first use of marijuana among Clinton youth who smoke marijuana is 13-14 years old<sup>i</sup>. The risks of physical dependence, addiction, and other negative consequences increase with exposure to high concentrations of THC<sup>ii</sup> and the younger the age of initiation. The human brain continues to develop from before birth into the mid-20s and is vulnerable to the effects of addictive substances<sup>iii, iv</sup>. Frequent marijuana use during adolescence is associated with:

- Changes in the areas of the brain involved in attention, memory, decision-making, and motivation. Deficits in attention and memory have been detected in marijuana-using teens even after a month of abstinence<sup>v</sup>.

**Marijuana can lead to negative health and social consequences**

Frequent marijuana use during adolescence is associated with:

- Impaired learning in adolescents. Chronic use is linked to declines in IQ, school performance that jeopardizes professional and social achievements, and life satisfaction<sup>vi</sup>.
- Increased rates of school absence and drop-out, as well as suicide attempts<sup>vii</sup>

### **Gateway ImpACT Coalition will use the following strategies to reduce youth use:**

1. Educate youth, parents, schools, and communities on the negative effects of youth marijuana use
  - Ensure that education strategies are effective and culturally relevant
2. Reduce promotion of marijuana to minors
  - Restrict youth friendly products and marketing to youth
3. Reduce underage access to marijuana
  - Reduce retail availability through price, density, hours of sales, and retailer training
  - Reduce youth access to marijuana from social sources (i.e. family and friends)

<sup>i</sup> 2018, Iowa Youth Survey, Clinton Community School District Results

<sup>ii</sup> Freeman, T. P., & Winstock, A. R. (2015). Examining the profile of high-potency cannabis and its association with severity of cannabis dependence. *Psychological medicine*, 45(15), 3181–3189. doi:10.1017/S0033291715001178

<sup>iii</sup> Pujol, J., Vendrell, P., Junqué, C., Martí-Vilalta, J. L., & Capdevila, A. (1993). When does human brain development end? Evidence of corpus callosum growth up to adulthood. *Annals of Neurology*, 34(1), 71–75. doi:10.1002/ana.410340113.

<sup>iv</sup> Levine, A., Clemenza, K., Rynn, M., & Lieberman, J. (2017). Evidence for the Risks and Consequences of Adolescent Cannabis Exposure. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(3), 214–225. doi:10.1016/j.jaac.2016.12.014.

<sup>v</sup> Meruelo AD, Castro N, Cota CI, Tapert SF. Cannabis and alcohol use, and the developing brain. *Behav Brain Res*. 2017;325(Pt A):44–50. doi:10.1016/j.bbr.2017.02.025.

<sup>vi</sup> Meier M.H., Caspi A., Ambler A., et. al. Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proc Natl Acad Sci USA*., 2012. Oct 2; 109(40) E2657-64 doi 10.1073/pnas.1206820109. Epub 2012 Aug 27

<sup>vii</sup> Silins, E., Horwood, L. J., & Patton, G. C. (2014). Young adult sequelae of adolescent cannabis use: An integrative analysis. *The Lancet Psychiatry*, 1(4), 286-293. doi:10.1016/s2215-0366(14)70307-4.