



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 11th grade students at Clinton High School reported current (past-30 day) marijuana useⁱ. 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 oldⁱ. The risks of physical dependence, addiction, and other negative consequences increase with exposure to high concentrations of THCⁱⁱ 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^{iii, iv}. 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^v.

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^{vi}.
- Increased rates of school absence and drop-out, as well as suicide attempts^{vii}

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)

ⁱ 2018, Iowa Youth Survey, Clinton Community School District Results

ⁱⁱ 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

ⁱⁱⁱ 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.

^{iv} 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.

^v 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.

^{vi} 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

^{vii} 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.