

RELATIONSHIP OF CANNABIS USE TO VIOLENT CRIMES AND ASSAULTS

Violent assaults and crimes related to cannabis have been documented for centuries. British army officers recorded putting long term heavy cannabis users, who were confined in mental institution, in jail-like cages in the 1880s to protect their staffs. In section 27 of Initiative 190, written by our state's cannabis industry (which legalized recreational marijuana in Montana) states that marijuana has always, is currently, and will always create harms to our society and economy.

Scientific studies from around the world, written by medical, psychological, and sociological professionals have proven that Tetrahydrocannabinol (THC), the psychoactive and physically harming chemical in marijuana, reduces brain material and functions in critical parts of the human mind. That, in turn, decreases some vital functions in those parts of the brain. Medical science has recently proven that long term, higher potency, and more frequent cannabis use can cause critical arteries to seize up, resulting in tremendously increased demand and function of the heart, and can result in considerably less blood flow to the body and brain.

One of the brain areas most affected by THC is the amygdala located in the prefrontal cortex. One of its mental processes is partial emotional control. People who use higher potency marijuana, more frequently, for longer periods of time, have less brain function in that area and suffer reduced control of their emotions. That problem has been proven to be dose related. The more THC that reaches the human brain, the less emotional control. They tend to be angry more often resulting in greater incidents of physical violence, poorer intimate relationships, greater family dissolution, frequent social function problems (school behavior), lower job success, higher unemployment rates, and more frequent related emergency room and hospital treatments.

Another section of the human brain affected by THC-caused reduced density is the hippocampus section of the prefrontal cortex. This human brain area learns to develop cognitive functions, situational awareness, and detailed thinking and problem-solving. Because of reduced capabilities in this brain area, citizens who use higher potency THC more frequently, and for longer periods of time, have been scientifically proven to be less capable of solving relational difficulties, work-related problems, achieve poorer educational attainment, and lower life satisfaction.

Another human brain area affected by THC is the nucleus accumbens section of the prefrontal cortex. This area is called the "reward section". Through the nucleus accumbens, THC reduces the brain's control of drug highs and often leads to greater temporary deep feelings of personal satisfaction and contentment that is common with THC use. Science has established that those feelings have often led to cannabis dependency and addiction (Cannabis Use Disorder). Because all illegal hard drugs work through this same reward area, psychological researchers are proving that THC can condition the human brain to accept hard drugs more easily.

The scientifically proven THC-caused harms to the amygdala, hippocampus, and nucleus accumbens are proving harmful to tens of thousands of Montanans and thousands of Cascade County residents. The results of current increases in violent crime and assaults our local citizens are currently experiencing are causing the reduction of the health, safety, and welfare (HSW) of many of our county citizens and others living in nearby locations. Sheriff Jesse Slaughter said in a public appearance over a year ago, that Cascade County's violent crime rate has gone up 176% in seven years. He is currently asking for more funds and better personnel policies to keep more experienced staff in place.

Acceleration of costs related to recreational marijuana availability and potency play a major effect on those control and therapy needs. Local professionals who therapize school youth are contending that psychological problems are accelerating so fast that treatment organizations are burning out counselors and are needing more funds. Recent psychological treatment and control costs have in some cases recently sky-rocketed to \$60,000 to \$90,000 per year per serious case making psychological treatment even more difficult to provide.

Increases in marijuana availability and potency as supported by inaccurate popular interpretations of Initiative 190, and the Cascade County Commission's approval of land use policies facilitating available recreational marijuana use in Cascade County, will illegally increase the cannabis-related harms to the health, safety, and welfare (HSW) of many citizens in violation of the existing Cascade County Land Planning Board's bylaws and the related dictates of Montana Code Annotated (MCA) law 76-1-102.

Medical and psychological science has found that THC potency below 1% does not cause the proven harms that are rising so fast in our educational systems, medical treatment facilities, society, economy, and governments. The obviously increasing documented threats to the health, safety, and welfare of numerous citizens in violation of existing laws and legal bylaws, is a major harmful cause of these violations. Because varieties and sources of THC-containing marijuana products exist below the 1% level, use of such marijuana products would be beneficial to HSW improvements, would meet existing state laws, would satisfy land planning bylaws, and the voter approved written concepts of I-190. Cannabis products containing less than 1% THC would eventually reduce the needs for psychological, cardiovascular, kidney, and immunity therapy and their tremendous rising costs.

As with any complex, legal, and beneficial solutions, there will be some foreseeable problems. Because levels of THC below 1% do not create the harmful highs so many users (some times innocently) seek, there will probably be a considerable move of dependent and addicted users to illegal markets to achieve the psychological highs they have learned to desire. Constant and detailed expensive testing of available cannabis products will be required to ensure potency compliance. To prevent reoccurring violation, offenders will need to be heavily fined and incarcerated.

SCIENTIFICALLY ESTABLISHED FINDINGS

Substance use disorders earlier in the life course (by age 16) (often) predicted criminal arrest and incarceration for violent crime and assaults later in life. (Slade et al 2008)

Those with a history of early substance use (multiple times by age 15) had almost 400% more criminal convictions by age 32 than those without a history of early substance use. (Odgers et al 2008)

... there may be a direct effect of substance use and disorders on crime. (Slade et al 2008, and Odgers et al 2008)

...frequent adolescent marijuana users have reduced educational attainment and are more likely to be unemployed in adulthood as a result of cannabis effects on education. (Green et al 2006)

Reduced educational achievement and unemployment have been found to be strong predictors of crime. (Fagen et al 1999, and Thornberry et al 1985)

... heavy adolescent marijuana use reduces the likelihood of school completion... which can reduce future opportunities of successful... employment, which in turn facilitates criminal behavior. (Sampson et al 1992)

... continuity in drug use including escalation to other drugs as well as onset of cannabis disorders, ... have been linked to different types of criminal activity. (Chaiken et al 1990, and Slade et al, 2008)

... transitioning from marijuana to cocaine, crack, heroin, methamphetamine, etc. may increase the risk of violent crime as these drug markets are often violent and weapon carrying is commonplace. (Chaiken et al 1990)

...treatment for narcotics addiction tends to reduce money making crime. (Anglin et al 1998)

Direct psychopharmacological effect of the drug can lead to impaired judgement, as well as irritability from long-term use or withdrawal symptoms, which makes crime more likely. (Brownstein et al 1990)

Data show that most male arrestees test positive for illegal drugs (National Institute of Justice, 2003) and that between a quarter and a third of federal and state inmates reported being under the influence of drugs at the time of their crime. (Mumola et al 2006)

...heavy adolescent marijuana use may increase the likelihood of an onset of a substance disorder or continued substance use which, similar to school dropouts, can reduce future opportunities of successful social adaptation in adulthood and facilitate criminal behavior. (Mumola et al 2006)

A study of 702 adolescents in Chicago, by researchers from the John Hopkins School of Public Health in coordination with the University of Maryland School of Public Health, did a scientifically solid longitudinal study in Chicago that found:

- 1.] ... heavy adolescent marijuana users were much more likely than non-users to have interactions with the criminal justice system.
- 2.]... 58.9% of heavy adolescent marijuana users had other arrest records.
- 3.] ...heavy adolescent marijuana users who were arrested had more arrests on average.
- 4.] ...heavy users were more likely to be arrested at younger ages than light or non-users.
- 5.]...heavy users had 200% to 300% higher arrest records than light or non-users.
- 6.]...35.1% of heavy users had arrests for violent crime.
- 7.] ... 40.5% of heavy users had been arrested at least once for property crime.
- 8.] ... 28.7% of heavy users had an arrest record for drug-related crimes.
- 9.] ... 41.6% of heavy users had been incarcerated compared to 16.6% of light users.
- 10.] Heavy users were more likely to be male, come from female-headed households during their childhood, and began to use cannabis by age 15.
- 11.]Heavy adolescent marijuana users had higher teacher assessments of aggressive behavior, conduct problems, averaged lower math scores, and higher delinquency rates.
- 12.] ... 33% of heavy users developed a drug use disorder in their lifetime compared to 18% of light users.
- 13.]... 35% of heavy users experimented with cocaine and/or heroin before first arrest compared to 16% of light users.
- 14.] Almost 29% of heavy adolescent users dropped out of high school compared to 16% of light users.

Colorado, Washington, Alaska, and Oregon law enforcement officials continue to site concerns about the increases in crime rates due to the rising number of dispensaries. (Kepple et al 2012)

Crime related to marijuana dispensaries may expand to nearby neighborhoods. (Freisthler et al 2016) to marijuana for the general population continues to increase due to legalization. (Pew Research Center 2014)

...concerns around possible deleterious effects of marijuana distribution on communities are magnified as access for the general population continues to increase due to legalization, and more people report being in favor of legalization (54%) than not. (Pew research Center 2014)

...marijuana dispensaries are ... magnets for crime.... (California Police Chief's Association 2009)

...surges in violence, particularly in formerly safe areas, will create adverse effects on businesses in the area. (Greenbaum et al 2004)

... the increased presence of dispensaries becomes the targets for motivated offenders. (California Police Chief's Association 2009)

...having higher densities of medical marijuana dispensaries in adjacent areas was related to higher rates of both violent and property crime.... (Freisthler et al 2017)

Areas of communities with more of these drug market activities have been related to higher rates of assault independent of many other environmental, social and demographic characteristics of communities. (Banerjee et al 2008)

A movement from medical marijuana to recreational marijuana use allows for a larger base of potential users and easier access to marijuana as a user does not have to consult with a physician before using marijuana. (Freisthler et al 2017)

...dispensaries and their patients appear to be a prime target for crime. (Wright et al 2011)

...higher density of marijuana outlets ...are related to higher rates of violent, property, and marijuana specific crimes. (Freisthler et al 2017)

...the density of marijuana outlets in spatially adjacent block groups was positively related to property crime increases. (Freisthler et al 2017).

...higher density of marijuana outlets ...was related to higher rates of marijuana specific crimes. (Freisthler et al 2017)

Outcomes go far beyond crime to include rising levels of marijuana dependence and related hospitalizations. (Mair et al 2015)

The critical measure is availability, where and how easily consumers can obtain cannabis. (Mair et al 2015)

Higher marijuana specific incidents have allowed police departments to advocate for more resources to combat cannabis related crime increases. (Freisthler et al 2017)

Youths who tested positive for marijuana had a significantly higher number of referrals to juvenile court for nondrug felonies than those testing negative for marijuana use. (Dembo et al 1987)

...marijuana dependence was related to a 250% increase in the odds of violence. This association was stronger than the individual effects of manic disorder, alcohol dependence, or schizophrenia. (Arseneault et al 2000)

In a study using data collected from school age adolescents in the Netherlands, those who reported marijuana use tended to report more delinquent and aggressive behaviors. The strength of the relationship increased with higher frequency of marijuana use. (Monshouwer et al. 2006)

... adolescents who reported marijuana use at age 15 were more likely to report violent involvement at age 19. Marijuana use particularly during adolescence may impact violent behavior in young adulthood. The strength of the relationship increased with higher frequency of marijuana use. (Brady et al 2008)

...frequent marijuana use ...was a strong predictor of being involved in intimate partner violence in young adulthood... and consistent marijuana use was associated with an 85% increase in the odds of being the perpetrator of intimate partner violence, independent of alcohol use. (Reingle et al 2012)

...marijuana use is at a minimum correlated with an increase in violent or aggressive behavior. (Reingle et al 2012)

Marijuana use is associated with an increase in illicit drug use. (DeSimone 1998)

Marijuana use is associated with an increase in crime. (Arseneault et al 2000, Brady et al 2008, and Dembo et al 1987)

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DOCUMENTED HARMFUL EFFECTS OF MARIJUANA ON ADOLESCENTS

Worldwide scientific studies have proven that some of the most common negative results of marijuana use, that is so evident in Cascade County, are psychological harms like schizophrenia and major depression (9). Because of the human brain's capability to be harmfully affected by even microscopic amounts of a prominent marijuana chemical called tetrahydrocannabinol (THC), the hippocampus section of the mind's prefrontal cortex shrinks in thickness and dimensions and becomes less functional (11,14). Well established psychological studies have proven such brain reduction is dose dependent... the higher the potency, the earlier age that marijuana is initiated, the longer and more frequently it is used, the more harmful the effect of THC. (1, 9, 11) In adolescent age groups, those harms become evident in increased schizophrenic and depressed behavior, lower IQ scores, less ability to concentrate in school studies, reduced self-discipline leading to disruptive behavior, less success in education, more dysfunctional personal relationships, decreased economic functions, and lower adult quality of life. (2,3,4,5,9,10,16,19) Those are all scientifically established functional problems of a physically reduced prefrontal cortex as the result of the introduction of THC contained in cannabis.(19)

The decision of the Cascade County Commissioners to allow recreational marijuana into their county is not in compliance with Montana Code Annotated Title 76, chapter 1, requirements for health, safety, and welfare of the voter approved Initiative I-190, nor the law-stipulated purpose of the Cascade County Land Planning Board. Because all recreational marijuana currently available in Cascade County has been proven harmful to all users to some degree, the allowance by the Cascade County Commissioners for recreational marijuana to be legal, is harmful, wrong, and contrary to existing laws.

Cannabis related problems are more common in adolescents because medical, social, and psychological sciences have proven that the younger the molecular structure of the human brain, the more susceptible that mind is to marijuana's psychologically damaging chemical-tetrahydrocannabinol (THC) (2). (See attached letter on THCs proven effects on fetuses, breast feeding babies, and young children) Worldwide science, proven state statistics, and local counselors have found that THC leads to greater numbers of psychotic problems including suicide. This is proven in our state by the Montana Crisis Hot Line whose records found that 71% of adolescents who committed suicide are suffering from marijuana related depression and schizophrenia. The Great Falls School District's (GFSD) "Youth Risk Behavior Survey" has determined that while over 50% of high school students in our school district have used marijuana, one in five of the GFSD's seriously stressed students will attempt suicide, and that a quarter of the GFSD's high school students have seriously considered suicide in the past 12 months. That is not conducive to the "health, safety, morals, convenience, and order of the general welfare" required in the legal "purpose" stated in the Cascade County's Land Planning Board's bylaws and approved by the commissioners while passing zoning laws to allow recreational marijuana.

A Montana Department of Health and Human Services publication called the Montana Suicide Mortality Review Team Report finds that our state already has per capita, the third largest number of self-caused adolescent deaths in the nation. In February, a state government financed organization called the Comprehensive School and Community Treatment program complained that there are almost five thousand marijuana-related psychotic high school students in our state that require more therapy than

current staffs and finances can provide. Another state agency, Montana's Center for Children, Families, and Workforce Development, has determined that 38% of our state's students who have attempted suicide in the past 12 months, were more likely to have used marijuana. Scientific studies printed in some of the most respected professional journals in the world have found that marijuana reduces the human brain's control of emotions that are necessary to prevent suicide, and can facilitate the act of suicide to be more painlessly accomplished. (See attached letter on suicide.)

The county commissioner's decision to zone for recreational marijuana creates proven wide-spread mental and physical problems that professional evidence indicates are increasing in Cascade County and are not in compliance with MCA Title 76, Chapter 1; the Cascade County's land Planning Department's stated purpose; the four health, safety, and welfare suggestions of the voter approved Initiative 190; nor the application of MCA Title 16, Chapter 12, Section 101, subsection (2)(j) which the Department of Revenue's attorney's say is applicable to Cascade County.

We are deeply concerned that the more available and the more easily cannabis products can be acquired, as provided by the Cascade County Commissioners decisions to approve zoning for recreational marijuana in Cascade County, the more our county's residents will suffer in violation of the legally stated purpose of the Cascade County's Land Planning Board. The county commissioner's existing policy that was publicly adopted in February allowing minimally-controlled recreational marijuana into Cascade County, violates Montana Code Annotated (MCA) Title 76, Chapter 1; the county's legislatively approved bylaws of the Cascade County Planning Board; the Department of Revenue's attorneys' opinions supporting the use of Title 16, Chapter 12, subsection (2)(j); and the voter approved Initiative I-190 stipulations for the support of the health, safety, and welfare of the citizenry. The commissioners' decision to zone recreational marijuana into Cascade County will create psychological, social and physical harms to many county citizens as already exemplified, and will increase therapy and legal control costs to higher difficult-to-finance levels as has happened in every other state where recreational marijuana has been legalized (examples-Colorado, California, Oregon, Washington, and Alaska).

The Cascade County Commissioner's decision is harmful to numerous county residents; is financially impracticable; and violates some state laws, applicable local laws, and our states constitution which states in its preamble, "We the people...desiring to improve the quality of life...." Moderate to long term, higher potency, and consistent marijuana use allowed by the Cascade County Commissioners acceptance of recreational marijuana has been scientifically, statistically, and professionally identified as not contributing to the health and safety as referred to in Article 1, Section 3 of our state's established constitution; and Article 1, Section 1, which states "All political power... is instituted solely for the good of the whole."

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