RESPONSE TO POTENTIAL HARMS OF LEGALIZATION OF MARIJUANA IN MONTANA

The price good men pay for ignoring truth is to be ruled by evil men

Plato

INTRODUCTION-

This paper is a sincere effort to provide substantiated information that is critical to making the best decisions about marijuana for the most beneficial health, safety, and welfare of Montana's citizens and their future. It is based upon proven facts from scientific research and statistics from the governments of other states that have passed laws similar to Montana's Initiative I-190. Because of the similarity of recreational marijuana laws in Colorado, California, Oregon, Washington, and Alaska to Montana's I-190, we have studied the proven social, psychological, economic, educational, criminal, and governmental problems and their costs those laws created in those states. Since the voter approved I-190 illegally stipulates where most of Montana's marijuana tax income is to be spent, very little of it will be used to pay for the costly "pot" created problems and expenses we found in those other states that are already starting to occur here. Because marijuana availability and increased potency produces more of those problems as has occurred in other states, more taxes will have to be levied in Montana to cover the expenses to mediate those proven harms to citizens, institutions, government functions, and environment resulting from legalization. We feel the marijuana industry should pay enough taxes to cover those expenses because that industry is massively benefiting financially from the use of I-190 cannabis laws that create numerous serious suffering, problems, inconveniences, and related expenses suffered by thousands of Montana's citizens.

We now have about six to ten years of data from states that have legalized marijuana that provides real-world evidence of the negative impacts of recreational marijuana legalization laws on families, communities, education, emergency medicine, economies, governments, and the environment. That information proves that legalization laws in legalized states are failing to protect the health, safety, and welfare of the general population as required in Montana's Initiative-190. (OIHIDTA, 2018; RMHIDTA, 2018; NWHIDTA, 2016; WSOFM, 2017; OPHD, 2016; AST, 2017; CDPS, 2016; OSP-DES, 2017)

We relied heavily on documentation from Colorado because that state has produced the most complete factually-established information about the effects of legalized cannabis of any other jurisdiction.

INFORMATION SOURCES:

Alaska State Troopers [AST]

The American Heart Association [AHA]

The Centennial Institute of Lakeside, Colorado [CI]

The City and County of Denver [CCD]

The Colorado Bureau of Investigation [CBI]

The Colorado Department of Education [CDE]

The Colorado Department of Human Services [CDHS], Office of Behavioral Health

The Colorado Department of Local Affairs [CDLA]

The Colorado Department of Natural Resources [CDNR]

The Colorado Department of Public Health & Environment [CDPHE]

The Colorado Department of Public Safety [CDPS]

The Colorado Department of Revenue [CDR]

The Colorado Department of Transportation [CDT]

The Colorado governor's Office of Budget and Planning [OBP]

Colorado Health Institute [CHI]

Colorado State Patrol [CSP]

Colorado Tourism Office [CTO]

The Denver Open Data Catalogue [DODC]

Desert Research Institute [DRI]

Great Falls School District

The Highway Loss Data Institute [HLDI]

The Institute of Educational Sciences [IES]

The Insurance Institute for Highway Safety [IIHS]

The Metro Denver Homeless Initiative [MDHI]

The National Center for Educational Statistics [NCES]

The National Institute on Drug Abuse [NIDA]

National Inpatient Sample [NIS]

The National Center on Drug Use and Health [NCUDH]

The Oregon-Idaho High Intensity Drug Trafficking Area [OIHIDTA]

Oregon State Police- Drug Enforcement Section [OSP]

Oregon Public Health Division [OPHD]

Quest Diagnostics

The Rocky Mountain High Intensity Drug Trafficking Area [RMHIDTA]

The Retail Marijuana Public Health Advisory Committee

The Rocky Mountain Insurance Information Association

The Substance Abuse and Mental Health Services Administration [SAMHSA]

The U.S. Department of Justice, Drug Enforcement Agency [DEA]

The U.S. Department of Transportation

The Washington D.C. Metropolitan Police Department [WDCMPD]

Washington State Office of Financial Management [WSOFM]

Colorado"s Womens's Infants and Children's Program [WIC]

As described in "The COMPLETE TEXT OF INITIATIVE NO.190 that supported the ballot approved by Montana voters on November 3, 2020, parts of that initiative are dedicated to serving the health, safety, and welfare of the citizens of our state [Section 1 (2)(k), and Section 18(1) (a)], and is presented as a fundamental basis for the initiative [Section 19 (8)]. The citizens obviously passed that initiative with those stated understandings. The initiative the citizens voted on was not explicit in its description of all the foreseeable methods required to accomplish the many details necessary to develop legalized recreational marijuana in our state in ways that serve that document's stated interests in the health, safety, and welfare of the citizens. As dictated by the Montana constitution, and has happened for more than 130 years of precedent, the legislature and its many departments and local governments must now create the laws, rules, and regulations [Sec. 18(1)(a), and Section 19(8)] necessary to facilitate the requirements described in writing in I-190 that the citizens approved. Per I-190, that effort and primary goal must be to serve the health, safety, and welfare of the citizens while carrying out the initiative-stipulated efforts to control functionalized recreational marijuana in our state.

To meet the requirements of I-190, it is essential for the state legislature, some of the state government departments, and local governments, to create laws, rules, and regulations to provide for the health, safety, and welfare of Montana citizens as stipulated in I-190. The laws of the state legislature will be instituted through the various departments of state government with their regulations and rules as stipulated in I-190 [Section 18(1)(a) and Section [Section 19(8)].

At no place in its 67 pages and 57 sections does I-190 approach the obvious necessity to (1) regulate the harmful potency levels of the cannabis industry's many THC infused products, (2) legalize all the steps to reduce the well-documented harms to the citizens, (3) promote specific efforts to protect the environment, or (4) totally pay for the massive expenses needed to mitigate numerous other problems created by that initiative's implementation. Those necessary functions are obviously left up to the state legislature and its departments as well as local governments, in order to ensure the health, safety, and welfare of the people as presented in I-190.

Certain harms that documentation proves was created by marijuana legalization in Colorado, California, Oregon, Washington, and Alaska must be recognized, prepared for, and paid for when establishing the dictates of I-190 in Montana. Statistics from other states have proven that jurisdictions with legalized recreational marijuana have more product available to the general public, higher rates of harmful cannabis use, continuously rising rates of brain damaging potency, more increases of negative incidences related to that use, and greater expenses to mitigate those problems. Those proven negative increases cast considerable doubt on the very function of I-190 and its stated need to provide for the health, safety, and welfare of the people it says it serves.

CONSIDERATIONS FOR IMPLIMENTING I-190

TAXES-

Evidence-

1.] Since the third year after legalization, a professional statistical institute [CI] and various Colorado state agencies [CDR & OBP] have determined that for every dollar gained in annual marijuana tax revenue, Coloradan's spent approximately $4.50 yearly to deal with the harmful effects legal "pot" created for their governments and citizens. Similar deficits have occurred in other legalized states. In the Voter Information Pamphlet that proceeded our November election, the marijuana industry guaranteed Montanans almost $48,000,000.00 in new tax income (new to our state government, but still paid for by Montana taxpayers to purchase legal cannabis and to mitigate the greater harms caused by legalization. If the monetary rate of Colorado's experiences to pay for "pot" harms are applied to Montana's promised $48,000,000.00, legalized marijuana will cost our citizens and governments about $216,000,000.00 over what I-190 has promised us in tax payments. While the industry would pay approximately $25,000,000.00 as wages and benefits into the local economy, that would still leave about $191,000,000.00 to be made up by local governments and citizen to handle Colorado-type identifiable problems that would be created by marijuana legalization in Montana over and above the promised $48,000,000.00.

2. Colorado's marijuana black market has grown to a 2019 estimated size that is 700% larger than that states total legal marijuana production and sales efforts. Similar figures have been established in all other legalized cannabis states. Because the illegal operations do not have to comply with health, safety, and welfare regulations; use safer and more expensive chemicals; use legal labor; nor pay any taxes, those illegal operations are reducing legal growing, production, and sales operations through cheaper street-level competition. That fact has reduced the total amount of legal sales and yearly taxes based on those sales, to various Colorado governments by legal operations. In Oregon, California, and Colorado, the legal marijuana industry is paying about half the taxes promised before their state's legalization vote. In Colorado, a state-wide "pot" organization has put out feelers to determine if their initiative-promised tax rates can be reduced. That means Colorado governments and citizens may end up paying more to mediate costly proven cannabis problems that the "oh-so-great" highs of "pot" users and the tremendous profits of the marijuana industry have helped to create but have not paid for.

Solutions-

1.Our recommendation is for the Montana legislature to pass bills that would add taxes to our state's cannabis industry tax obligation to pay for any shortfalls of tax money the state's "pot" industry has not paid below their promised $48,000,000.00. If there is no shortfall, then the marijuana businesses would only pay their promised $48,000,000.00 plus the guaranteed 20% tax on additional marijuana sales, plus other taxes the legislature might decide upon over and above the guaranteed $48,000,000.00.

2. Montana laws, rules, and regulations should provide for the computations to be made yearly for the proven harms and their total costs, over I-190 taxes, and those amounts should be added on to their annual tax bill. On October 19, 2020, a Montana organization opposed to I-190 filed a lawsuit against the initiative and its backers. Dave Lewis, a policy advisor to a major organization backing the initiative stated that "...it's up to the legislature to appropriate tax money. Only the legislature can appropriate (tax money)". The court ruled in favor of the marijuana supporters, but established the validity of the legislature to appropriate tax money expenditures.

3'The Montana Department of Revenue might set up a separate office to create the complicated tabulations to facilitate marijuana tax charges over those specified in I-190, and to document the proven harms and accompanying expenses and related tax money calculations. The costs of that office and its personnel may be covered by the tax money already promised to the general fund by I-190. If those new costs exceeded the amount provided by the initiative [10.5% of total marijuana taxes], the additional amounts should be added on to the total annual marijuana tax bill.

4.The total tax bill could then be divided up among the various growing, processing, and retail operations based upon the percentage of marijuana products that office's records indicate each operation handled. Those records that track growing, production, and sales efforts are already stipulated by I-190. The total cost of those state administrative functions might have to also be added on to the cannabis industry's tax bills if the designated general fund allocation of 10.5% would not cover all that office's expenses. There are several professional national statistical analysis and tax calculating companies that might do this job cheaper than establishing a large Montana government office. One is called OMAR and has some useful data already computed for Montana for other clients.

CRIME-

Every state that legalized recreational marijuana has seen greater increases in various crime categories than non-legalized states. Seldom documented marijuana related expenses necessary to guarantee citizen health, safety, and welfare, such as additional police staffing, training, and equipment; necessary related judicial functions; and incarceration, always create rising costs for legalized states that are often not covered by recreational marijuana taxes like those stipulated in I-190.

Evidence-

> Illegal use of marijuana by 12-17 year olds in legal recretional "pot" states is increasing significantly even though the minimum age stipulated by law is 21 years. It is declining in most non-legal states. (NSDUH, 2017)

> Peer reviewed research has revealed that marijuana use in young people more than doubles the likely hood of illegal drug use later in life. (Olfson, 2017)

> In the 3-years following cannabis legalization in Colorado and Washington state, positive oral fluid tests for THC in newly arrested jail prisoners increased almost 75%. That rate only averaged an increase of about 4% in non-legal states. (Quest Diagnostics, 2017)

> Colorado's crime rate in 2016 [two years after legalization] increased 11 times faster than the average crime rate in the 30 largest cities in America. (Mitchell, 2017)

> Denver, Colorado low-income neighborhoods containing legal marijuana retail shops averaged 84.8% more property crime in each of the first two years after legalization than similar neighborhoods without legal retail shops. (Freisthler, et al., 2017)

> The Colorado Department of Public Health and Environment [CDPHE] found in 2019 that 22.4% of adolescent suicide victims tested positive for marijuana compared with only 9.3% for alcohol.

> In Washington, D.C., in the first three years after recreational legalization, illegal distribution arrests more than tripled annually, and juvenile arrests for illegal possession went up 114% per year. [WDC MPD, 2018]

> By 2017, the number of Colorado's court filings related to organized crime black market marijuana operations had increased 284% in the five years since legalization. (CDPS, 2018)

> A state-wide report from Colorado in 2017 noted an average 8.2% increase in violent crime and a 5.3% increase in property crime per year after legalization. (CBI) In that same year, aggravated assault rates had increased about 25% per year and murder rates went up 35%.

> A 2019 study in California found that excess black-market cannabis is illegally smuggled to other states that do not have cannabis legalization, because its product can be illegally sold there for much higher prices and still be lower than the price of locally grown cannabis products. (DEA)

> Police seizures of cannabis being illegally shipped out of Colorado, have risen 900% since legalization. (RMHIDTA- Strategic Intelligence Unit, 2018)

> "The risk of cannabis use was mostly confined to patients with substance abuse... of whom 27.6% had committed a violent Crime." (Fazel, 2009)

> In February, 2020, Jess Slaughter, Montana's Cascade County Sheriff, commented in a public meeting that violent crime in his county had risen 176% in seven years. Several professionals who attended that meeting told me that is about the same rate of increase they have seen for marijuana use in the same time period. In 2017, the Boulder, Colorado police department reported the third year after legalization, a 176% (Same figure as found locally, but achieved in 3 years instead of 7) increase in illegal public consumption crimes per year by the third year after legalization.

Solutions-

1. The legislature should pass a law that if marijuana is found in an arrestee's saliva, blood, or urine, a report should be filed by the involved government agency to the proper state office giving the arrestee's name, days of incarceration, test findings and the reason for arrest or treatment.

2.All law enforcement agencies and medical organizations operating in Montana should-

a. Submit to the designated state office each year a per-day cost estimate of jail time, food expenses, supervision, treatment and other costs related to each type of offense or problem for which arrestees or patients had tested positive for the presence of THC.

b. Prepare to give every arrestee a urine or blood test to determine if THC has been consumed in the last thirty days. That test does not tell if the arrestee has used THC in the last few hours, but only that it has been used in the last thirty days. Follow-on interrogations should explain to the suspect that THC was found in their saliva, blood or urine and ask when they used it last. If a reasonable answer is received, that information should be included in the report to the state office. If the arrestee does not admit recent use, the report should also contain any observed cannabis -related symptoms such as lack of coordination, weak eye focus, stumbling language, extreme agitation, or mumbling that might be related to recent cannabis use.

c. The proper state office can then keep a running total of all such expenses and apply them to each applicable crime related incident to create a documented grand total to be added onto the marijuana industry's tax totals. That increased tax money could then be returned to the proper law enforcement or government agencies as a reimbursement for their expenses related to marijuana use and that crime. Various other government expenditures relating to marijuana by other state, county, and city agencies may be reimbursed in the same manor.

3. A report to the proper state agency should also create a yearly total of the type of marijuana and its potency received from each laboratory analysis to present totals in a yearly report to the legislature. The total state-wide costs associated with all tests and reporting should be added to the industry's tax total.

POTENCY-

Delta9tetrahydrocannabinol (THC) is the harmful psychoactive drug in marijuana. Whenever it is used improperly it can cause serious problems factually linked to the cannabis plant. To protect Montana citizens, and establish the health, safety, and welfare benefits of marijuana, as referred to by I-190, the percent of THC in the state's marijuana industry's products must be controlled to levels that are less harmful than seen in other states that have legalized recreational marijuana use. Above a minimal intake, the earlier in age a mind is when exposed to cannabis, the higher the frequency of use, and the greater the THC dose of the product used, and the longer it is used, the more those proven psychological, social, educational, medical, economic, and political harms become prevalent. The I-190 initiative does not define beneficial potency levels, or frequency of use rates that would be essential to meeting its concepts of serving the health, safety, and welfare of the people . Therefore, to be in congruence with the preamble of our state's constitution, it becomes the legitimate job of the legislature and several levels of state/local governments and departments [Section 1(2)(k), Section 18(1)(a), and Section 19(8)) to regulate the percentage of THC in the industry's products and to establish healthy rules for frequency of use.

Current marijuana products are very different than those of sixty years ago. Cannabis now available in Montana can be legally 1,000% stronger than the 1%-2% THC available in the 60's and 70's. While potency can vary between the more than 600 varieties of cannabis available, we can find none less than 20%-25% THC that is currently sold here in Montana. Unless controlled, I-190 will make legally available condensed cannabis products that contain a brain deteriorating 85%-95% THC (skunk, super pot, or hashish). The user's proven desire for a greater high has driven the growth of potency and profit of the marijuana industry. Research has proven that the more marijuana becomes available as I-190 will provide, the more frequently it is used, and the higher its potency, and the more dangerous it is proven to be for psychological, social, medical, economic, educational, and other problems. (McGrath, 2010; Smith, 2009; Zammit, 2002; Van Os, 2002; Di Forti, 2009). Those problems are contradictory to the health, safety, and welfare concepts referred to in I-190.

Evidence-

> "Likelihood of individual schizotypal features increased significantly with increased extent of cannabis use in a dose-dependent manner." (Davis, et al., 2013)

> "Longer duration since first cannabis use was associated with multiple psychosis-related outcomes in young adults." (McGrath, et al., 2010)

> "Cannabis potency is one direct cause of later schizophrenia." (Giordano et al. 2014)

> "The odds ratio for violence was significantly greater for marijuana dependence plus schizophrenia." (Arseneault, 2000)

> "THC significantly increased the severity of psychotic symptoms compared with a placebo." (Bhattacharyya, 2012)

> "THC has now been proven to cause many different types of mental and physiological health problems- especially in young children and youth." (Pierre, et al., 2016 & Fischer, et al., 2017)

> "...regular use of marijuana correlated with a significantly increased risk of depressive symptoms in users between the ages of 16-20..... Those who met the criteria for a cannabis use disorder (CUD) had a high risk of all mental health symptoms across all ages." (Leadbeater, et al., 2018)

> Administration with a high-fat meal significantly increases the consumption of orally induced THC and may exacerbate its effects. (Health Cannada, 2018; Van Dolah, 2019; and Ebert, 2018)

> "The differences in frequency of daily cannabis use and in use of high-potency cannabis contribute to the incidence of psychotic disorder." (Di Forti, 2019)

> "Patients with a first psychotic episode onset were significantly more likely than healthy controls to use high-potency cannabis." (Di Forti, 2009)

> "Tolerance to the effects of cannabis develops rapidly after only a day or two of repeated exposure. Less consistent use takes longer." (Goval, 2017)

> "...the dose required to achieve therapeutic effects and to avoid adverse effects is influenced by the potency of the product." (Health Canada, 2018)

>Fentanyl is a very addictive synthetic opioid drug that was invented in Holland in the 1960's. Thanks to chemicals produced almost exclusively in China and smuggled and processed through Mexico, the United States began to be flooded with fentanyl in 2015. It's very strong mental and physical appeal has made it perhaps the most addictive widely available hard drug currently popular in many parts of our country. Fentanyl is always at least fifty times stronger than the average dose of heroin and has sometimes tested to be one hundred times stronger. It is often called the "killer drug". Very small amounts of fentanyl can be deadly. It is beginning to find its way into Montana as a hard -to-see powder that, when minor amounts are sprinkled onto "pot", can add a faster and higher high that lasts longer- characteristics that moderate to heavy marijuana users relish. It is estimated that 30,000 Americans died in 2019 because of fentanyl. Not controlling cannabis to the greatest extent possible, will allow "pot" laced with fentanyl an easier introduction to our citizens, resulting in more numerous deadly results.

Solutions-

Thousands of empirical, scientific studies have proven that higher marijuana potency is more harmful in many ways to the users. To make marijuana in Montana conform to the concepts of health, safety, and welfare of citizens (as referred to in I-190), the percentage of THC in all cannabis products commercially grown, produced, and sold in our state must be controlled to standards that meet the health, safety, and welfare presented in the initiative, and commonly understood by Montana law. Initiative I-190 does not define Health, safety, or welfare, and does not address THC potency. There are several methods the legislature, departments of the state government, and other government entities may use to establish agreement with the safe use of cannabis and still meet the will of the people as presented in I-190.

1.) They can outlaw marijuana growing, production, and sales operations altogether. This is not an easy solution as it is not within the will of the people as was passed in I-190. Such a move would obviously end up as court decisions and would be very difficult to achieve.
2.) They could reduce THC potency limits to about 5% which is the scientifically proven maximum limit that good medical results can be achieved through medical marijuana, without the harms that more THC is proven to create in the minds and bodies of users. If legislatively adopted, that concept could temporarily reduce follow-on harms to schools, medical facilities, families, governments, and the economy. Although the 5% level of THC can produce the maximum medical benefits when combined with equal amounts of cannabidiol (CBD), that strength can still create the tolerance and tremendous mental need for stronger stimulating THC that has been so readily observed in the current marijuana crisis. In the long run, such tolerance problems would stimulate the black market growing, production, and sales of "pot" and we could be back to current problems in a short period of time.
3.) There is another achievable legal THC limit that has been established in federal government regulations that could apply to marijuana because it has been used to regulate the THC content of hemp crops in Montana. Our farmers have benefited substantially through a U.S. government ruling allowing hemp to be grown legally with only a third of a tenth of one percent THC (.03%). Using that limit of THC, would allow the Montana legislature to stipulate a non- damaging .03% of delta9tetrahydrocannabinol while technically meeting the dictates of I-190 and the will of the people as expressed through that document. It would allow THC in such small quantities that it would create weaker and less known harmful effects. It might eliminate some of the complicated controls and add-on taxes stipulated above. It would be almost impossible for users to legally create the detrimental problems of current THC levels but could still meet the written dictates of initiative I-190.
4.) A strain of marijuana called cannabis ruderalis has such naturally low THC content that it could meet without chemical alteration, a .3% THC level (AHA) if dictated by the Montana Legislature. The legislature should then consider legalizing only that strain balanced with an equal dose of cannabidiol (CBD). That effort would still respect the will of the people expressed through the dictates of I-190 and nearly meet the THC limitations the federal government has imposed on hemp. Science has proven such a combination of THC and CBD chemicals at that level of dosage will eliminate all known harms, but it would not completely eliminate the desire for greater potency.
    a. The legislature should pass laws making a third of one percent cannabis ruderalis the only legal form of recreational marijuana. They should stipulate that unaltered, natural cannabis ruderalis is the only strain of marijuana to be used in all THC products grown, produced, and sold in Montana. Enforcement methodology should be aware that recently created hybrid strains of cannabis ruderalis can contain as much as 27% THC and should be guarded against.
    b. All marijuana products must be certified by a registered laboratory as containing only ruderalis .3% THC concentration before they can be sold.
    c. A fine for the first violation of such laws by any person, group of persons, or organization growing, producing, or selling cannabis, or cannabis infused products, should have a lower limit of $500. And all persons involved must attend a four-hour therapy session that stresses the proven harms of "pot". Considering the

possibility of the tremendous problems improper use of THC can create, later violations should require a minimum $1000.00 fine and possibly a jail sentence.

d. Science and the medical field have also classified Marijuana products based on their ratio of THC to CBD.
    1.) Chemotype I- has a high ratio of THC and a very small (natural) level of CBD roughly 10% of the THC strength. That chemotype is basically what is currently available on the streets of Montana today and is responsible for many of the harms local users are experiencing. Chemotype I also includes the proven brain damaging condensed "pot" of the 85%-95% variety mentioned in I-190 but not regulated for potency in that document.
    2.) Chemotype II- has an equally balanced ratio of THC and CBD (1% THC to 1% CBD) and is proven to be basically a harmless level of THC balanced with a beneficial level of CBD. In this ratio, CBD can counter or eliminate many of the proven harms of THC.
    3.) Chemotype III- has a balanced lower THC/CBD ratio that is less than the .03% THC allowed by federal law for hemp. It contains the least harms of THC but also the least benefits of CBD.
e. If the legislature should use this type of categorization, they should use Chemotype II. However, some of these categories do not specifically identify THC levels as other solutions listed above.
f. The above laws and restrictions would not apply to federally approved cannabis containing medications like Sativex (available only in Canada), Marinol (dronabinol), and Cesamet (nabilone). They would also not apply to Epidiolex which is pure CBD.

5. The legislature should include in its legislation, heavy fines and/or imprisonment for any owner of 10% or more of any marijuana operation, proven to be involved in any operation that adds in any manner any potentially addictive substance to a marijuana product.

6. During the processing of hemp for legal agricultural purposes, Producers all over the country have, as suspected in Montana, condensed the legal .03% THC content into a much stronger potency. Production facilities in Montana should be regularly inspected to prevent that from happening. No product should be produced or sold in Montana that is above the THC content stipulated by these laws. Each of the owners of 10% or more of the offending business should be fined a minimum of $500.00 per incident and required to attend a four hour therapy session that emphasizes the proven harms of THC.

With the power of tremendous financial backing the cannabis industry has demonstrated, there would be numerous obvious legal challenges to such laws and accompanying rules and regulations, but, in the opinion of several attorney's, the position of the legislature would be legally very strong and in the best interests of the health, safety, and welfare of the average citizen as declared by the state constitution and noted byI-190. The black market, selling stronger THC, would still exist and would probably increase in demand. More police presence on the local, state, and national levels would be required, but laws as stated herein would give the police a better position to handle their law enforcement duties and would provide more financial support for adequate prosecution while reducing harms.

PSYCHOSIS-

Although many marijuana users who use "pot" often, with more than minimal potency, or started exposure earlier in life, will not be able to mentally conceive that the most common THC caused harm is deterioration of the density of brain material in the amygdala, nucleus accumbens, and hypocampus sections of the prefrontal cortex. Related to dosage, those parts of the mind cannot function as well, as speedily, or as clearly as minds of nonusers. Individuals who use cannabis have more trouble controlling anger, emotions, or understanding the harms of THC and will deny complicated scientific findings- often using emotion and anger. The longer they use marijuana and the more potent its THC, the greater the problems they experience.

Evidence-

> Doses of 10-20 mg of THC in any combination of uses is sufficient to achieve at least temporary psychological effects. (AHA,2020; and Health Canada, 2018) "The average 1/8th ounce of marijuana in one THC laced 'joint' holds 20-40 mg of THC and is associated with increased risk of psychotic disorder. (Di Forti, 2019)

> "Cannabis has adverse effects on the adolescent brain such as poorer attention and executive function (decision making and use of complicated details), heightened emotions and less control, and greater tolerance problems resulting in lower highs." (Kuepper, 2011)

> "Cannabis use is a risk factor for the development of incident psychotic symptoms. Continued cannabis use might increase the risk for psychotic disorder by impacting the persistence of symptoms. (Kuepper, 2011)

> "...delta9tetrahydrocannabinol (THC) can illicit acute psychotic reactions in healthy individuals and precipitate relapse in schizophrenic patients." (Morrison, 2011)

>" Given the fact that cannabis use seemed to be a specific risk factor for future psychotic symptoms, prevention against cannabis use may prohibit the onset of psychotic symptoms in vulnerable individuals. (Selton, 2005)

> "Controls (non-users) were more likely to have pursued higher education and to be employed...." (Di Forti, 2019)

> "We found a correlation between adjusted incidence rates for psychotic disorder and the prevalence of use of high-potency cannabis. (Di Forti, 2019)

> "The most common physical and mental health problems experienced by 22% of cannabis users were acute anxiety and panic attacks following cannabis use." (Thomas, 1996)

> "Cannabis users reported the highest prevalence of psychotic problems." (Smith, 2009)

> "Among all users of abused substances , cannabis users reported the highest prevalence of psychotic symptoms." (Smith, 2009)

> Even in lower doses, research has found that cannabis can create some paranoia and psychosis. In higher and/or more frequent doses, cannabis consumption can produce psychomotor and

coordination difficulties that do effect driving. (Health Canada, 2018; Nat, Academy of Sciences, 2017; Volkow, 2018; and Monte, 2019)

>" The psychometric effects of delta9tetrahydrocannabinal in healthy individuals (1) produced schizophrenic-like symptoms; (2) altered perception; (3) increased anxiety; (4) produced unnatural euphoria; disrupted immediate and delayed word recall; and (6) impaired performance on distraction tests." (D'Souza, 2004)

> "The results revealed that the pro-psychotic effects of THC are related to impaired network dynamics with impaired communication...." (Morrison, 2011)

> "... regular use of marijuana correlated with significant increased risk of depressive symptoms in users between the ages of 16-20.... Those who met the criteria for a cannabis use disorder (CUD) had a high risk of all mental health symptoms across all ages." (leadbeater, et at, 2018)

> "...Cannabis use increased the cumulative incidence of psychotic symptoms at follow up four years later." (Henquet, 2005)

> "...there are strong motives in these individuals to seek short term reward (getting high). Data to support the beneficial effects of cannabis use in psychiatric populations is limited, and potential harms in patients with psychotic and mood disorders have been increasingly documented." (Darby, 2018)

> "The mental health condition... is worse in dependent frequent cannabis users." (Van Der Pol, 2013)

> "Young people meeting ...criteria for cannabis dependence had elevated rates of psychotic symptoms at age 18." (Fergusson, 2003)

> Subjects with cannabis abuse were almost 500% more likely to transition to a psychotic disorder. Greater severity of cannabis abuse also predicted transition to psychosis. (McHugh, 2017)

> "Cannabidiol (CBD), a non-intoxicating cannabinoid found in some forms of cannabis, may offset some of these acute effects. Heavy repeated cannabis use, particularly during adolescence, has been associated with adverse effects on these systems, which increase the risk of mental illness including addiction and psychosis." (Bloomfield, 2019)

> (1326 cases studied) "Ever use of cannabis was associated with a 43% increase in the risk of schizophrenia or related disorders." (Vaucher, 2017)

> "Marijuana significantly effects the brain, specifically, the brains structure, function, and connectivity... it is often perceived in society as harmless." (Wadieh, 2017)

> "Use of cannabis results in significant disruption of hippocampus and prefrontal cortex brain waves, which are vital for memory and decision-making... young people may not even notice the memory losses." (Collingwood, 2017(

> "...relatively small doses (5-I0 mg), even in an experienced cannabis user, produces difficulty concentrating, and an inability to execute complex tasks...." (Iverson, 2003)

> "...marijuana use, particularly prior to age 16, could have long-term effects on cognition, anxiety, stress related behaviors, mood disorders, and substance abuse." (Ashton, 2001)

> "Cannabis produces...significant neurological alterations that can impact one's mental health and hence, one's life-long functioning. (Ashton, 2001)

> "The detrimental impact of cannabis on the human brain far outweighs the medical advantages." (Wadieh, 2017)

> "There is now sufficient evidence to warn young people that using cannabis could increase their risk of developing a psychotic illness later in life." (Moore, 2007)

> "90% of respondents with cannabis dependence had a ... mental disorder.... Alcohol dependence, antisocial personality disorder, and conduct disorder had the strongest associations with cannabis dependence, followed by anxiety and mood disorders." (Agosti, 2002)

> "Cannabis use is associated with an approximately 3-fold increased risk for the new onset of manic symptoms." (Gibbs, 2015)

> "Continued cannabis use can increase the risk for psychotic disorder by impacting on the persistence of symptoms." (Kuepper, 2011)

> 8%-12% of all marijuana users will develop moderate to severe cannabis use disorders (CUD) and dependency. (Monitoring The Future Study, 2016)

Solutions-

1. An agency of the state government should:
   a. Create a registry listing the names, psychological diagnosis, treatment methods number of treatment sessions, and costs to the state administrative agency or department which handles marijuana information.
   b. Provide an annual report to the state legislature on the number of psychotic patients testing positive for THC and the total cost of their treatment. The report should summarize the total dollar amount required to provide annual medical and therapeutic treatment to patients across the state who have psychological problems and have THC in their bodies.
   c. The legislature should pass a bill that taxes the marijuana industry for the state-wide total cost of medical and therapeutic treatment of citizens with a psychosis diagnosis who have THC in their bodies. The tax should be levied yearly. If less than 100 marijuana related psychosis patients present for therapy in each year, no add-on tax should be levied.
   d. That total cost could be divided up among all the marijuana businesses (growers, producers, and retailers) based upon the total income of the products each created and/or sold plus the administrative costs of the marijuana tax effort.
2. The legislature should require all registered therapists and medical facilities who treat psychotic patients to test patients for the presence of THC in their blood, urine, or saliva and report THC results (if found) along with the patient's name to an administrative department in the state government. That agency should purchase and distribute test equipment, report

forms, and other communications as needed and add those expenses to the marijuana industry's tax bill.

3. State laws should allow the legal purchase of only 1 ounce per week of marijuana from any legal outlet. Consumers should not be allowed to purchase from more than one legal outlet in that one week.
    a. The state should create a computer accessible registration with the purchaser's name and date of each purchase. Before a legal outlet can make the sale to any person, it should reference that registry to ensure the purchase meets the 1 ounce per week criteria.
    b. When making the purchase, each individual customer should present a legal picture ID to verify their name, age, and legality of that one purchaser. No ID, no sale.
    c. Purchasers and sellers who buy more than the 1 ounce of cannabis allotment per week, should be fined a minimum of $100.00 and be sentenced to a four hour, professionally run, therapy session that emphasizes the proven harms of "pot".
    d. Any expenses incurred in the operation of this law should be tacked on to the marijuana industry's tax bill, each year this law is enforced.

HEART-

There are no well-documented cardiovascular benefits of cannabis use. (Health Canada, 2018; Volkow, 2014; Klein, 2017; and Segura, 2019;) In the short term, more serious cannabis consumption has been associated with cardiovascular difficulties- tachycardia, ventricular contractions, atrial fibrillation, and ventricular arrhythemia; bronchitis, blurred vision, psychological harms (altered judgement, dysphoria, and anxiety. (Health Canada, 2018; National Academies of Science, 2017; Volkow, 2014; and Monte, 2019)

Evidence-

> Edible consumption is more likely to result in adverse effects, particularly psychiatric and cardiovascular, prompting acute medical care. (Health Canada, 2018)

> Delta9tetrahydrocannabinol increases heart rate, myocardial oxygen demand, supine blood pressure, platelet activation, endothelial dysfunction, and oxidative stress. (DeFilippis, 2020; Pacher, 2018; Rezkalla, 2019; and Goval, 2017)

> In contrast, CBD will reduce heart rate, blood pressure, vasodilation, and inflammation. (DeFilippis, 2020; Pacher, 2018; & Rezkalla, 2019)

> Smoked THC has shown a 3-fold increase in heart damaging tar over tobacco smoking. (Wu, 1988) Note, this research was done before the wider popularity of stronger THC potency Montana is currently experiencing.

> Carbon monoxide from cannabis smoke inhalation and consequential breath holding, predict long term development of acute myocardial infarction (heart attack). (Kaya,2016)

> Cardiac death rates averaged an increase of 2.3% in men and 1.3%in women after legalization in states that allow recreational marijuana. (Adegbala, 2018)

> "One of the most consistent effects of cannabis smoking on the heart is a 20% to 100% increase in heart rate which can last up to 2-3 hours.... Recent use of cannabis is associated with an increase in heart rate occurring in young individuals and potentially increasing the risk of sudden death." (Goval, 2017)

> "Any cannabis use was associated with a cardiovascular hazard ratio of 1.9 (almost double). (Goval, 2017)

> "...cannabis use was found to be independently associated with an 18% increased likelihood of development of aneurysmal subarachnoid hemorrhage." (NIS)

> "Cannabis use was associated with multifocalangiopathy resulting in ischemic stroke in young people." (Wolff, 2011)

> "Cannabis use was found to be associated with stroke, myocardial infarction (heart attack), and arterial disease especially in young men." (Desbois, 2013)

> "Increasing number of reports have associated cannabis use with serious cardiovascular complications." (Manolis, 2019)

> "The most probable adverse effects include a dependence syndrome, increased risk of motor vehicle crashes, impaired respiratory function, cardiovascular disease, and adverse effects of regular use on adolescent psychological development and mental health." (Hall,2009)

> "...marijuana is a trigger for adverse cardiovascular events, including tachyarrhythmias, acute coronary syndrome, vascular complications, and even congenital heart defects." (Aryana, 2007)

> Hospitalized patients ... "also had longer lengths of stays, higher hospitalization costs, and higher levels of morbidity due to arterial myocardial infarction (heart attack) following hospitalization than non-cannabis users."(Patel, 2018)

> "Smoking marijuana is associated with a nearly 5-fold increase in blood carboxyhemoglobin levels, (and) a 3-fold increase in (heart damaging) inhaled tar.... Evidence shows that marijuana is associated with... increased mortality." (Kaufman, 2019)

> "Temporal associations between marijuana use and serious adverse events including myocardial infarction (heart attack), sudden cardiac death, cardiomyopathy, stroke, transient ischemic attack, and cannabis arteritis have been scientifically identified with cannabis use." (Thomas, 2014)

Solutions_

1. The legislature should pass laws that place into existence an add-on taxation system that would tax the marijuana industry for the costs the governments, insurance companies, and citizens must pay to treat the serious cardiovascular harms created by that industry.
    a. Create a form for medical facilities to fill out that would give the name, date, description of treatment, and costs for a patient presenting with a cardiovascular ailment who tests positive for the presence of THC in their bodies.
    b. Such a form should be sent in for each procedure, hospital stay, or therapy session necessary to treat the patient.
2. A designated state agency with administrative responsibility for analyzing the effects of cannabis should create a report to the legislature giving the number of such patients, and the grand total of the costs of their treatment for marijuana related cardiovascular problems. The legislature should then create an add-on tax for the cannabis industry to pay for the documented cardiovascular harms associated with their products in the bodies of the presenting patients.

ENVIRONMENT-

Depending on where it is located and what preparations have been made, marijuana plants have proven to foul the air, contaminate soil, ruin water purity, poison wildlife, flood neighborhoods with harsh lighting, damage other farm crops, promote massive water theft, and spoil scenic outdoor views. The greater the number of plants in one location, the more these problems can be experienced. This burgeoning plant empire legalized by I-190 comes with a significant environmental cost. Several levels of Montana governments must increase their regulatory capabilities to guarantee compliance with local, state, and federal air, water, and soil regulations, and plant and animal health.

Evidence-

Chemicals-

> In A study of four major marijuana indoor growing facilities, The Desert Research Institute found "record high levels of biogenic volatile organic compounds" (BVOCs) that can produce pollutants that are harmful to animals, fish, and humans. (DRI)

> If grown outdoors, or grown indoors with ventilating systems that do not exhaust the pollutants high into the air, BVOCs can produce ground level ozone that is "harmful for humans to breath". (DRI) Scientific calculations applied to just California indicates that the cannabis industry there average current vehicles produce in a year. (DRI)

> "Each cannabis plant can produce pollutants at a rate of about 2.6 grams per plant per day." (Samburova, 2019) Initiative I-190 established ten different sizes of canopies (growing spaces). The biggest legal canopy space allowed by I-190 is 30,000 square feet with about 15,000 legal plants that could generate 350,000 grams of harmful pollution per day in just that one facility.

> Ecologist Mourad Gabriel who works for the U.S. Forest Service in California estimates that illegal grow sites there contain 41 times more harmful fertilizers, 80 times more liquid pesticides, and 200,000 more ounces of super toxic pesticides than they did four years ago. Some toxic sites cost as much as $100,000.00 to clean up and the soil can still contain 50% of the toxic chemicals the black-market criminals used.

> "Pollution from illegal marijuana plantings on federally controlled land in California, has turned thousands of acres into waste dumps so toxic that simply touching plants in them has landed law enforcement officers in the hospital." (Bernstein, 2017)

> "Outdoor illegal growers use cheaper chemicals long restricted in the United States, including carbofuran, zinc phosphide, bromethalin (rat poison), botrytis , budworm and mite preventers, salmonella removers, enterbacter chemicals, streptococcus preventers, klebsiella and mycotoxin-producing strains of aspergillus. Pesticides have killed sensitive species and very strong fertilizers have caused unnatural, damaging algae blooms." (Bernsein, 2017) Such bad batches of marijuana with dangerous chemicals have hospitalized tens-of-dozens of people in 2018 in San Francisco in a few hours, and in 2016, killed 17 users in Pittsburg in one day.

> "Mule deer, gray foxes, northern spotted owls, and ravens have been proven victims of poisoning linked to illegal cannabis cultivation. Several species of fish, including trout and salmon, have been deeply affected." (Helmer, 2019)

> "When you have thousands of unlicensed grows and only a handful of rangers and biologists, we are deeply concerned that there aren't sufficient protective measures in place." (Dumbacher, 2018)

> "These places aren't safe to go into." California state assemblyman Jim Wood.

> "After a year or two, illegal growers often abandon sites, leaving containers of chemicals so toxic a quarter-teaspoon can kill a 600 lb. bear. (Bernstein, 2017)

> "The effects of these toxicants can move through the ecological food chain. Every species that eats another animal that has absorbed these dangerous chemicals is at risk of ingesting the dangerous chemicals as well. (Michelson, 2019)

> Hemp, a very close cousin of cannabis, is becoming a valuable new agricultural crop in Montana. Last year about 227,000 acres of hemp were grown in our state, with each acre paying farmers about double the profit of an acre of wheat. Montana is becoming the largest hemp producing state in the U.S., and the health of that crop is becoming essential to the local economy. Outdoor marijuana grows are a threat to hemp production because cannabis plants can produce male seeds that can travel miles on the wind and contaminate the more productive female hemp plants. (Jensen, 2019). By state law, such tainted crops must be burned. That can damage the hemp crop and hurt Montana's economy.

> "Although marijuana has been praised as a naturally healthy substance, contamination of pesticides and heavy metals have been discovered in the cannabis products of retail shops in Denver, Colorado. (CDPS)

Solutions-

The state legislature should pass laws and regulations ensuring that:

1. Only clean organic soil should be used to produce marijuana. Soil tests that show harmful or illegal soils or chemicals should draw at least a $500.00 fine and a four hour therapy session that emphasizes "pot" harms for each owner of 10% or more of the business. Additional occurrences should carry a $1000.00 fine and time in jail.
2. Positive tests of cannabis soils, plants, or products for any illegal, poisonous, or harmful chemicals to animals or humans (directly or indirectly) should be penalized with similar penalties.

Water-

Evidence-

New research has linked production of the cannabis plant to a host of issues ranging from water theft and degradation of public lands to wildlife deaths and potential ozone hazards. (Van Bustic, 2019)

> Cannabis is a water hungry plant that often requires about 22 liters of water (more than 5 gallons) per day. An I-190 approved "canopy-10" indoor growing site with about 15,000 plants would require about 75,000 gallons of water each day during a typical 120-150 day growing cycle. That can become 9 million to 12 million gallons per growing cycle per facility of that size. A large indoor "canopy-10" growing facility could have three growing cycles a year needing about 27 million to 36 million gallons per year.... That is just one growing canopy. Outdoor (often black market) growing facilities require even greater amounts of water per growing cycle, but in our state, outdoor grows will probably be limited to just one cycle per year by temperature and sunlight. Indoor growth totals should be multiplied by dozens, if not hundreds of grows.

> During the low-flow summer period, illegal grows hidden in Montana's mountains or isolated areas can exceed the amount of water flowing in most of Montana's rivers leaving shortages of water to sustain aquatic life and human needs. (Carah, 2019)

> Black market grows in Colorado have illegally diverted and dammed streams, ponded water

they did not own, and piped water more than a mile from natural water sources to get it where they can use it. (CDNR)

> "Illegal grow sites that are uphill from fresh-water streams risk poisoning those streams. (Michelson, 2019)

Solutions-

1. The state legislature should pass laws requesting that all marijuana grows above an I-190 defined micro tier canopy must provide their own water by contract or water-rights purchase without taking from other sources of water that would threaten agricultural, domestic users, or currently used water sources.
2. Any grow operation, no mater its legitimacy, should be find at least $1,000.00 per day of each violation.
3. Proven water thefts should also be harshly prosecuted.

Smells-

Tiny hairs on marijuana plants are called terpenes and they create most of the ozone that comes from the cannabis plant. They also create horrible odors that can be smelled for hundreds of yards from even a single plant. There are over 600 types of marijuana plants and each of them can have a slightly different odor. The most obnoxious smells come from the most common marijuana plants that are valued for producing the largest amount of THC. Those smells are often compared by neighbors to a dead skunk. Most obnoxious smells are created by the cannabis plants when they are in their flowering stage. If grows are not controlled in cities and towns, neighbors can sense them blocks away. (Mills, 2004)

Evidence-

> The Desert Research Institute has found that smells from some cannabis plants can be sensed a mile away under the right wind and humidity conditions.

> Medford Oregon had such a bad smell problem they passed a zoning law eliminating all outdoor grows within the city limits and required even very small personal indoor grows to be air-tight with expensive carbon filtering exhaust systems that push exhausts high into the air.

> A police captain in Miami, Florida says his units can often locate illegal grows by rolling down patrol-car windows and driving down some streets. (Private conversation, 6/10/2020)

Solutions-

1. The legislature should pass a law that all growing operations, no matter the size, should be in doors in a sealed air-tight room with ventilation provided by an adequately sized ventilation system through an activated charcoal filter.
2. Any obnoxious smells related to marijuana plants detected near the exterior of a growing facility should be investigated by proper authorities and, if the grower is found guilty, a fine of $500.00 per incident should be levied along with a four-hour therapy session (for each owner of 10% or more) stipulating the proven harms of marijuana.
3. Because of the numerous environmental problems of outdoor grows that are often difficult to detect, and are harmful to air quality, soil, water, and other natural resources, outdoor marijuana growing operations should not be legalized anywhere in the state. This would greatly reduce black-market growing opportunities. All cannabis production should be indoors no matter the size of operations and annually inspected for air tightness.

Electricity Consumption and Air Quality-

Evidence-

Indoor cannabis production utilizes intensive amounts of electrical energy because all indoor marijuana plants require 6-12 hours per day of electricity-demanding special grow lights that generate the most THC. To maximize THC production, indoor growing also requires considerable energy intensive air conditioning and heating (to control temperature) and dehumidifiers (to eliminate plant damaging grey mold and mildew). It has been scientifically established that the average kilogram (½ lb) of THC laced product has produced 4600 kg(2300lb) of carbon dioxide emissions to the atmosphere (Mills, 2012). That is equivalent to the admissions of 3 million U.S. cars per year (Mills, 2012). Strategies for reducing illumination levels result in lower THC yields and, because of longer resulting growing times, does not reduce the ultimate energy use per produced unit weight. A common perception of cannabis users is that product potency produced indoors exceeds that of product produced outdoors. All of these facts relate to the concept that indoor cannabis growing greatly increases the carbon footprint that ecologists are so concerned about.

> "The practice of indoor cannabis cultivation is driven by the desire for greater growing process efficiency and yields. (Mills, 2012)

> Humboldt County California experienced a 50% per-capita increase in electricity use due to cannabis production. (Lehman and Johnstone, 2010).

> Driving the large energy requirements of indoor production facilities are necessary lighting levels 500-times greater than recommended for reading, and 60 times greater than the modern home. (Plecas, 2010 and Caulkins, 2010)

> The production of a "... a single cannabis cigarette is the result of a growing process that has created 3 pounds of Co2 emissions, an amount equal to driving a 44mpg hybrid car 22 miles or using a 100-watt light bulb for 25 hours. This average electricity used to create one marijuana cigarette in an indoor grow is equivalent to running about 30 refrigerators for one hour." (Lehman and Johnstone, 2010)

> Energy costs represent 50% of the U.S. cannabis wholesale prices, compared to 1% of pharmaceutical commercial products. (Galitsky, 2008)

> "The average commercial cannabis indoor production facility requires 8-times more energy per square foot than a typical U.S. commercial building- 4x that of a hospital, 20x that of a church, and 18x that of an average U.S. home." (Galinsky, 2008)

> Northwestern Energy, the largest electricity and natural gas provider in Montana, is currently strained to provide the power demanded by the electrical and gas users in our state. (www.northwesternenergy.com)

a. Because of the shutdown of coal-fired generation, and more reliance upon carbon-free resources, our state is producing much less power (Electricity and natural gas) than it uses. The addition of the increased demand needed to facilitate the higher needs of indoor marijuana productivity as allowed in I-190, will increase that deficit and drive up the cost of power to all Montanans.

b. The increased power demand resulting from I-190's implementation will obviously result in a decrease of the financial benefits Montanan's receive from buying power locally. Currently, residential electric bills in our state average 10.5% less than the national average, and natural gas residential bills are 28.1% lower than the national average. (www.northwestern energy.com) Because out-of-state electricity and gas sources are more expensive than local sources which are already in short supply, increased buying of needed power from elsewhere, will probably drive prices up and industry profits down.

c. Montana's electrical companies will have less profit they can use to benefit Montanans in other ways. For example, Northwestern Energy has annually made millions of dollars of donations, sponsorships, low-income power assistance, and economic development contributions. (www.northwestern energy.com) The profit that pay those benefits to our citizens will likely decrease dollars available for donations.

d. Montana's current power companies provide millions of dollars for public recreation improvement projects, taken from their profits. Loss or reduction of that funding because of more expensive kilowatt hours of consumption could reduce the effects of the marijuana industry's tax contributions (as stated in I-190) to those same facilities.

> "Placing expensive carbon filters of the correct size on indoor grow houses, combined with the mechanical means to adequately move the air, could capture up to 98% of volatile emissions." (Morgan Fox of the National Cannabis Industry Association. Washington, D.C.)

Solutions-

1.The legislature could pass bills requiring indoor commercial related cannabis production facilities (growing, processing, and/or sales) above a micro canopy level, to provide their own electricity- probably using solar, gas, or mechanical sources.

2. Each Violator who owns 10% or more of the errant facility, should be fined at least $500.00 per day of proven violation and be subjected to at least four hours of therapy primarily based upon the scientifically proven harms of cannabis misuse.

THE VERY YOUNG AND ADOLESCENTS-

Psychological Science has clearly established that the younger a human mind is, the softer and more absorbent is the brain material, and the higher is its susceptibility to THC. Science has found that fetuses can suffer most permanent problems with less input of THC, and such exposure can affect them for a longer period of time. THC creates such great damage in fetus brains, it can affect them the rest of their lives. The severity of those problems are dose dependent. The younger the exposed brain, the stronger the THC potency, the longer a child is exposed, and greater frequency of exposure all result in increased harms. The more a fetus or very-young child is exposed to THC from any source, the more severe the brain damage. "Children are collateral victims of changing trends in cannabis use and increasing THC concentrations." (Claudet, 2017)

Evidence-

>In France, there was a statistical link between the increased incidents of comas in children brought to emergency rooms and the marijuana industry's increase in resin potency. In France, annual hospital admissions increased 1,300% in three years in children under 18 months of age. Of those patients, 72% had been exposed to powerful, brain altering hashish resin. In that study, cannabis-caused admissions were greater than any other intoxication source for that age group. (Claudet, 2017)

> "The main place of intoxication was the parental home (72%). Parental cannabis consumption was indicated in 62% of cases with child cannabis exposure problems presenting at emergency rooms in Colorado. (Wang, 2016) Parental cannabis consumption was indicated in statistics that showed 72% of parents who verbally admitted regular use, smoked at home. (Claudet, 2017)

> Marijuana exposure can affect pediatric patients at every stage in childhood... Concerns exist about short-term and long-term consequences in a child's physical and mental health. (Wang, 2016)

> A survey of women in Colorado's largest local health department (WIC), found that 35.8% said they used "pot" at some point during pregnancy, 41% since the baby was Born, and 18% while breast feeding.

>Maternal use of marijuana that exposes fetuses prenatally can cause rapid THC penetration of the human placenta. (Lee, 1985)

>THC in the umbilical cord blood had greater and faster transfer to the fetus during early pregnancy than other maternal blood sources. (Blackard and Tennes, 1984)

>THC concentrates in breast milk do to its high lipophilicity. (Atkinson, 1988 & Perez-Reyes, 1982)

> "Prenatal (cannabis) exposure has "negative outcomes to a child's future cognitive development and leads to decreased IQ, cognitive dysfunction, and lack of attention in three year-olds; hyperactivity, impulsivity, and inattention symptoms in 2-10 year-olds; and deficits in motor coordination, mental processing speed, visual memory, and reduced vital interhemispheric transfer progress up into adolescent ages." (Day, 1994; Goldshmidt, 2000: Willford, 2010; & Fried, 2003)

> Evidence exists of a significant association between prenatal and/or breast feeding marijuana exposure for children, and a higher risk of stillbirth, sudden Infant death syndrome, development of depression, delinquent behavior, congenital heart lesions, psychosis, and future heavy marijuana use. (Cornelius, 2002; Fried, 2001; Porath, 2005; Gray, 2005; Day, 2011; Klonoff-Cohen, 2001; Varner, 2001; Linn, 1983; Day, 1991; Forrester, 2007; & Williams, 2004)

> Evidence also indicates preterm low birth weight. (Fergusson, 2002; Dekker, 2012; Bada, 2005; Shiono, 1995; Saurel-Cubizolles, 2010; El Marroun, 2009; Fried, 1987; English, 1997; Hingson, 1982; Gray, 2010; & Janisse, 2014.)

> More severe effects and increased hospital admissions are due to availability of higher concentration of THC in marijuana products where commercialization of recreational cannabis has occurred. (Wang, 2016)

> In children less than 6 years of age, the rate of harmful marijuana exposure was 2.8 times higher (almost 300%) in states where marijuana was legalized. (Wang, 2016)

> In several studies, adolescents who reported marijuana use were more likely to have impaired cognitive and academic abilities despite 28 days of abstinence. (Pope, 2003; Bolla, 2002; Medina, 2007; & Hooper, 2014)

> Adolescent users "...are less likely to graduate from high school and attain a college degree." (Fergusson, 2003; & Sillins, 2015)

> Adolescent Marijuana users are more likely to be addicted to other drugs after adolescence, including tobacco, alcohol, and opioids. (Brooks, (1999)

> A survey of retail marijuana shops in Denver in 2018, found over a third sold "pot" to adolescents and allowed them into restricted areas in their buildings. (Wang, 2016)

> A survey by the National Institute of Drug Abuse (NIDA) in Colorado in 2016 found that 76% of retail marijuana shops sold THC products to pregnant mothers to treat morning sickness, intestinal discomfort, and depression. (NIDA)

> The authors of one study found an association between breast milk and decreased motor development in children exposed to lactating marijuana users at one year of age. (Astley, 1990)

> The American College Of Obstetrics And Gynecology recommend that breastfeeding mothers refrain from marijuana use. (Committee On Obstetrics, 2017)Solutions-

Solutions-

The legislature should pass laws:

1. Penalizing anyone proven to have provided in any manner, any product containing THC to any person under 21 years of age. Although that restriction is already written into I-190, the seriousness of this problem requires constant vigilance and heavy penalties that are stipulated into laws. The only exceptions should be either (1) a very minimal (.5% or less) tightly controlled use of cannabis for a scientifically diagnosed medical condition and prescribed by a doctor under carefully controlled conditions; or a child who uses CBD under a doctor's supervision with competent oversight and a properly written and filed prescription or consent. It would be very important if all such authorizations were filled by a professional pharmacist who would guarantee chemical purity.
2. Penalties should consist of at least a $2,000.00 fine and at least four hours of a professional therapy class covering all known cannabis harms for each owner of 10% or more of the business being punished. A second offense should include a greater fine and possible jail time. Ninety days of community service may be requested and substituted for the jail time.
3. The American Academy of Pediatrics policy statement on substance use and prevention suggests that pediatricians use substance abuse testing and screening. (Pediatrics, 2016) The legislature should legislate that all medical facilities, emergency rooms and doctor visits provide oral, blood, or urine test for THC presence in all patients 0-21 years of age. That information should be reported on a standard form provided by the appropriate state agency and should indicate the patient's name, age, date and test results. Based upon a standard cost study, the marijuana industry should then be taxed for the total state-wide cost for testing and /or treating cannabis related problems that have been documented in this manner.

CONCLUSION

In thousands of highly qualified, scientific, factual, and professional studies, marijuana is proven to be harmful to fetuses, young children, adolescents, young adults, and middle aged and older citizens in states that have, in any way, legalized the growth, processing, sales, and use of delta9tetrahydrocannabinol. The citizens of those states that have not legalized "pot" have not seen the proliferation of those problems and their accompanying massive expenses as much as states with laws like our recently voter-approved I-190. Official, proven state statistics have established that marijuana in legalized states is mostly available in quantity laws that can easily be circumvented, and increased potencies that are legal under I-190. Those statistics have proven to contribute to social, psychological, medical, and governmental difficulties that lay a foundation in their states for the deterioration of their culture, security, and way of life. That is not in compliance with the health, safety, and welfare implications of I-190. While a majority of our citizens appreciate changes in our culture and governments that produce better health, safety, and welfare, we are concerned with changes like marijuana availability and increased legal potency that bring on so many harms and massive, unneeded expenses as has been proven with wide availability of delta9tetrahydrocannabinol.

Even though a majority of citizens approved Initiative I-190, the Montana state legislature should eliminate it because of its more than 80 unconstitutional issues, vagueness, contradictions, and its obvious inability to meet its basic principles of improving the health, safety, and welfare of the citizens. It would then be in the best interests of the citizens and to the benefits of higher public acceptance to establish the better health, safety, and welfare of those citizens by legalizing a much less harmful variety of marijuana (cannabis ruderalis) and the laws herein delineated.

PLEASE CONSIDER THE ENCLOSED SUGGESTIONS.

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