Kansas Bureau of Investigation

Kirk D. Thompson
Director

Derek Schmidt
Attorney General

Testimony in Opposition of HB2282
Before the Kansas House Standing Committee on Health and Human Services
Kirk D. Thompson, Director
Kansas Bureau of Investigation
February 17, 2015

Mister Chairman and Members of the Committee,

My name is Kirk Thompson and I serve as the Director of the Kansas Bureau of Investigation (KBI). Thank you for the opportunity to present written testimony in opposition to House Bill 2282 which purports to legalize the use of hemp treatments for those suffering from debilitating seizure disorders. However, the details of the bill make it much broader in application.

I have had the opportunity to review House Bill 2282 and contemplate many of the possible law enforcement, public health, regulatory and public policy related implications that could result from passage of the measure. The act attempts to create a legal path for the use of regulated amounts of cannabis substances under the guise of a legitimate medical treatment.

The complexity of the act does not lend itself well to a line by line discussion of the individual merits and concerns in the amount of time allotted, and I will make no attempt to do that today. What I would hope to do, however, is clearly convey to the committee the overall position of the agency and what we believe to be the position of the vast majority of Kansas law enforcement agencies. The passage of this bill that would authorize medicinal marijuana treatments is not good for our state.

In support of that position I would like to review a couple of main points:

- As the lead state criminal investigative agency, our personnel have witnessed, firsthand, the crime, abuse and personal harm that results from the use of illegal drugs. State supported or sanctioned drug dispensaries, operating outside of the current structure for regulating and determining the safety of substances used as medicine, would, in our opinion, have the potential to exacerbate those negative outcomes.
- Marijuana continues to be illegal under federal law. The United States Food and Drug Administration (FDA) as well as the United States Drug Enforcement Administration (DEA) have consistently and repeatedly rejected marijuana for medicinal use. Marijuana is classified as a Schedule I drug, which means it has a high potential for

1620 S.W. Tyler / Topeka, Kansas 66612-1837 / (785) 296-8200 FAX (785) 296-0915

abuse and lacks any accepted medical use in the United States. This bill would bypass the safeguards established by the FDA to protect the public from dangerous or ineffective drugs.

- As written, the bill provides the possibility for broadening the legal definition of hemp preparations as well as the applicability for treatment of any medical disorder beyond that which is currently stated.
- Marinol, a synthetic Tetrahydrocannabinol (THC), the main psychoactive ingredient in marijuana, has been approved by the FDA for treatment of some of the conditions potentially addressed in the proposed statute. Marinol has undergone rigorous review by the FDA and is distributed to patients through well-established and well accepted mechanisms.
- The provisions of this act create a level of conflict with the enforcement of other state and federal laws regarding the possession, distribution and cultivation of marijuana. The potential for a "gray market" for marijuana sales would appear to be significant as a result. The regulatory provisions of the act would also appear to be very costly to implement and may increase the cost to the ultimate consumer to a level far above the price for marijuana purchased on the black market or for the prescription drug Marinol.

There are many arguments both pro and con for legalizing the medicinal use of cannabis and cannabis substances. Those arguments could fill days of testimony and pages of well researched documents. In the end, however, we recognize this is a public policy decision. As you give due deliberation to that important decision, please consider the experience and perspective of the KBI and the Kansas law enforcement community, along with the experience and perspective of the FDA and other health professionals. Marijuana (cannabis) has a high potential for abuse and lacks any accepted medical use in the United States. Marijuana is illegal and should remain illegal in our state.

Thank you.

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Public Health and Human Services Committee

Written Testimony on HB 2282

Eric A. Voth, M.D., FACP

February 17, 2015

Chairman Hawkins and Committee Members,

I am sorry I am unable to provide oral testimony today as I am out of the state today. This written testimony is in opposition to HB 2282. For background purposes, I currently serve as the Chairman of the Institute on Global Drug Policy, an international drug policy think-tank that contains some of the top world experts on marijuana and drug policy. I have personally worked over thirty-five years for healthy drug policy that, among other things, advocates against the legalization or normalization of marijuana. I have spent ten years as the medical director of a chemical dependence unit, and have spent thirty years in practice as an Internal Medicine, Addiction Medicine, and Pain Medicine physician. I have served as an advisor on alcohol and drug abuse issues to the Kansas State Board of Healing Arts, am a former member of the National Advisory Committee for the Center for Substance Abuse Treatment of HHS, and am a Clinical Associate Professor of Internal Medicine at the University of Kansas School of Medicine.

I have also advised the Reagan, Clinton, both Bush, and Obama administrations, and have advised or testified for numerous Congressional offices on drug related issues. Additionally I have lectured internationally and have appeared on or consulted to, numerous other radio media, and have been quoted by numerous international print media.

Along with representing the Institute on Global Drug Policy, I have been asked to represent the views of the Kansas Medical Society on HB 2282.

To fully understand the implications of passing any legislation that involves the use of marijuana or hemp, as this bill does, it is critical to have a full understanding of marijuana. Marijuana itself is not a benign recreational drug as it is often portrayed to be. It contains over 500 substances of which 66 resemble the main active ingredient, Delta-9-THC. Instead of being a stable and predictable compound like we would demand with true medication, the THC content of marijuana varies from an average of 12% to around 30% and even as high as 80% with hash oil variants. This is at least five to ten times as powerful as the marijuana of the 1960's and 70's. It is so powerful, in fact, that it is often hallucinogenic and toxic. It is true that marijuana has generally not caused overdose

deaths because of the specific areas of the brain that it affects. Overdose deaths do, however, appear in the literature.

Marijuana has serious toxic and long term effects. It creates problems with memory, concentration, cognitive function, executive functioning, school performance, and intellectual skills. Recent research has demonstrated numerous structural brain changes as well as actual reductions in IQ of between 6-9% over twenty years of use. As a smoked drug, it damages the lungs. Its use is associated with violence and spousal/domestic/dating abuse. More recent research has demonstrated that one of its espoused medical applications, PTSD, is actually worsened with increased violent behavior. Its use is associated with birth and developmental abnormalities. Marijuana is now also associated with acute psychotic episodes, initiation of bipolar illness, depression, and anxiety.

The states allowing medicinal or legal recreational marijuana have experienced huge rises in marijuana use, doubling of marijuana-related traffic fatalities, increases in crime, and most importantly increases in adolescent marijuana use. Adolescent marijuana use in the states that allow medicinal use is consistently higher than in other states. Just since the passage of marijuana legalization but prior to its implementation in Colorado, marijuana use in adolescents is 72% higher than the national average. Colorado, having legalized marijuana for recreational and medicinal use, has experienced massive increases in homeless marijuana users moving into the state, and has seen drastic increases in child poisonings from edible forms of marijuana.

I am strongly opposed to the medicinal or recreational uses of marijuana. Making marijuana available as a medicine to the public by a legislative vote, bypasses the Food and Drug Administration requirements that demand careful research on the effectiveness of a drug as well as effective and toxic doses. This position is shared by the Kansas Medical Society, numerous national medical groups, and other state medical and law enforcement groups.

The support for marijuana as medicine is largely driven by emotional anecdotes and unscientific individual observations that are <u>not</u> borne out in research. In fact, current research suggests its medical effects are marginal if not actually negative. Some specifics will appear in my PowerPoint presentation.

To date, there is no evidence of any medical disorder or group of suffering patients for which marijuana is the only alternative or is superior to the available medicines. Investigational New Drug Trials (INDs) already exist through the FDA to study marijuana and its derivatives in closely supervised research environments. Currently there are approximately 20 physician-sponsored INDs involving over 400 patients and

another five states that are in various stages of opening state-initiated INDs. (Investigative New Drug Trials).

The current state of marijuana for medicinal purposes (hemp treatments, etc.) does not include predictable dosing like you would have with a normal medication trial. It is not hemp. It is marijuana. Currently individual marijuana-like substances can be identified, isolated, or synthesized and developed for medical uses. THC is already available as a prescription medicine (Marinol), and there are other medicines based on marijuana being developed (Sativex and Epidiolex). New Drug Trials have the potential to provide the research needed to provide patients reliable, standardized doses of cannabidiols, not "hemp treatments" is a safe, standardized method based on evidence through these trials.

This bill is a complete smokescreen under the guise of a "hemp" bill, but instead they are trying to approve of a specific variant of marijuana. This bill puts tremendous responsibility for the proof of that substance on the state. Furthermore, it is extremely important to understand that this still bypasses the FDA.

There are at least 20 different clinical trials under way to identify and study CBD and variants of CBD containing oil. These studies are necessary to identify correct therapeutic dose ranges, as well as to validate that it even really works. Preliminary studies have suggested only about one third of patients respond somewhat to CBD treatments.

This bill is really a way for the marijuana advocates to again get their nose under the tent, and then broaden the wording and indications to allow use of marijuana. Let there be no mistake, this bill is about marijuana not hemp. HB 2282 is a medical marijuana bill with all of the short comings of allowing "hemp treatments" for epilepsy disorders with a relatively easy process to expand the "qualifying conditions" that also will not be based on research and not go through a formal process to provide safe, standardized medicine that the public expects for any other medicine.

In summary, please oppose legislation that would in any way legalize marijuana or make it available to be used as medicine. Such a move would jeopardize the public and create **medicine by popular vote** which is a dangerous medical precedent.

Thank you for your consideration and I will be happy to provide additional information to any committee members at their request.

Eric A. Voth, M.D. F.A.C.P
eavmdtop@gmail.com

KANSAS HEALTH INSTITUTE

For additional information contact:

Tatiana Y. Lin, M.A.
Kansas Health Institute
212 SW Eighth Avenue, Suite 300
Topeka, Kansas 66603-3936
Tel. 785.233.5443 Fax 785.233.1168
Email: tlin@khi.org
Website: www.khi.org

House Committee on Health and Human Services
February 17, 2015

A Health Impact Assessment on Legalization of Medical Marijuana in Kansas (in progress)

House Bill 2282

Tatiana Y. Lin, M.A.,
Senior Analyst & Strategy Team Leader
Kansas Health Institute

To improve the health of all Kansans by supporting effective policymaking, engaging at the state and community levels, and providing nonpartisan, actionable and evidence-based information.

Informing Policy. Improving Health.

Chairman Hawkins and Members of the Committee:

My name is Tatiana Lin and I am a senior analyst and strategy team leader at the Kansas Health Institute, where I lead work on community health improvement. KHI is a nonprofit, nonpartisan health policy and research organization based here in Topeka, founded in 1995 with a multiyear grant from the Kansas Health Foundation.

Thank you for the opportunity to make a brief presentation and provide information on the ongoing health impact assessment – or HIA – surrounding the issue of legalization of medical marijuana in Kansas. The Kansas Health Institute does not take positions on legislation, and therefore we are not here to speak either for or against HB 2282. Rather, we want to inform the decision-making process by providing evidence-based findings in order to maximize the potential positive health effects of a policy decision, while mitigating the potential negative health impacts.

The HIA study assesses how the legalization of medical marijuana in Kansas could affect access to and consumption of marijuana, property and violent crimes, driving under the influence, traffic accidents, accidental ingestion and associated health outcomes (e.g., injury, mortality, mental health, quality of life). To date, the HIA has included a review of existing literature, data analysis for Kansas and states that have legalized medical marijuana, and interviews with stakeholders around the state.

The ongoing study assesses potential health effects associated with the legalization of medical cannabis as proposed in SB 9 and its House version (HB 2011). As such, our analysis has primarily focused on the states that legalized all forms of medical marijuana.

As we understand it, the intent of HB 2282 is to legalize cannabis oil for seizure disorders in Kansas. In 2014, 10 states passed legislation specific to the use of cannabis oil for seizure disorders. Because these laws were passed within the last year, to the best of our knowledge, there hasn't been any published research about the impacts associated with the passage of these laws. Therefore, our HIA findings might not fully apply to HB 2282, as potential health impacts associated with legalization of cannabis oil might be somewhat different from health impacts associated with legalization of other forms of medical marijuana.

We have reviewed laws similar to HB 2282 and would like to offer the following information about states with similar laws, which are considered "restrictive" for medical marijuana.

States with Restrictive Laws:

- Some states have passed more restrictive laws, including placing requirements on the type of marijuana allowed for medical purposes (e.g. oils only) and for the types of conditions or symptoms patients must have (e.g. epilepsy only).
- These include the following 10 states: Alabama, Florida, Iowa, Kentucky, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, Utah and Wisconsin.
- Most of the states define cannabidiol or "cannabis oil" (CBD) as a (nonpsychoactive) cannabinoid found in the plant Cannabis sativa L. or any other preparation thereof that is essentially free from plant material, and has a THC[1] level of no more than 3 percent.
- Most of these states limit the dispensing of marijuana for medical use to university medical centers or allow a small number of dispensaries to operate.
- All 10 of these states approve medical use of marijuana for either epilepsy or seizures.
- All 10 of these states limit the content of marijuana that can be used for medical purposes, ranging from requiring zero to less than three percent THC in the product.
- Seven out of 10 states have minimum requirements (between 5 and 98 percent CBD) for the amount of cannabidiol (CBD) concentration[2].
- All 10 of these states allow use of cannabis oil by minors.

Now I would like to discuss some preliminary findings from our health impact assessment to help inform your discussion on this issue. The findings presented in **Table 1** primarily focus on health impacts associated with the legalization of medical marijuana in all forms. Please note, if HB 2282 passes, positive and negative health impacts may be different due to the forms and conditions allowed under the proposed legislation.

Table 1 in your materials includes findings regarding consumption, crime, driving under the influence, traffic accidents and ingestion/overdose. At this time, the table does not describe the related health impacts. We plan to share the projected health impacts (and associated recommendations) for these findings and additional results early next month.

[1] Two of the principal chemicals found in cannabis are cannabidiol (CBD) and tetrahydrocannabinol (THC). Different preparations of cannabis materials may contain these chemicals in different concentrations. The levels of CBD and THC present in a cannabis preparation can change the drug's effects upon consumption. THC is the main psychoactive component of cannabis and causes the 'high' often associated with recreational use. Limiting the amount of THC present in cannabis preparations can limit its psychoactive effects. However, clinical studies also suggest that THC also has therapeutic effects and may alleviate chronic pain and effects of multiple sclerosis.

[2] CBD has also been studied for its therapeutic potential and, in contrast to THC, is non-psychoactive.

Table 1. Preliminary findings

Preliminary HIA findings: February 17, 2015	
Question 1: How many people with qualifying conditions could be eligible to receive access to medical marijuana? How many people with qualifying conditions would be eligible to receive access to cannabis oil?	
Data	Approximately 50,000[3] Kansans could be eligible to apply and receive a medical marijuana card based on the approved medical conditions in SB 9 and its House version. These conditions include: cancer, glaucoma, HIV/AIDS, Hepatitis C, ALS, Crohn's disease, agitation of Alzheimer's disease and nail patella. Additionally, SB 9 lists a number of approved symptoms, including cachexia/wasting syndrome, severe pain, severe nausea, seizures/muscle spasms. Due to the lack of data, we were not able to estimate the total number of people in Kansas with these symptoms. Under the HB 2282, the qualifying medical condition listed is "a condition causing seizures, including those characteristic of epilepsy." Based on estimates from the national Epilepsy Foundation there are, between 14,000 and 24,000 people in Kansas with some form of epilepsy. These estimates do not capture people with seizure disorders other than epilepsy. The bill also allows for adding conditions through a public petition to the Kansas Department of Health and Environment's Advisory Council.
Question 2: What would be the impact of medical marijuana legalization on consumption of marijuana for the general population and youth?	
Literature review	Overall, the majority of reviewed literature found mixed results as to whether or not legalizing medical marijuana would have an impact on consumption of marijuana for the general population. Legalization of medical marijuana may impact illegal consumption among at-risk youth and people with allowed medical conditions. It is important to note that change in youth consumption would also depend on regulation policies and other state-level factors, such as cultural norms and law enforcement practices. Additionally, findings from the literature review suggest that the medical marijuana distribution model (e.g., self-grow, compassion centers) could impact consumption of marijuana.
Data	The data show that states with medical marijuana laws generally have higher marijuana consumption rates than states that didn't pass such laws. However, the trend data indicate that these states had higher marijuana consumption rates before the passage of these laws. As a result, legalization of medical marijuana might not have impacted consumption. Additionally, there was no increase in youth consumption (as measured by lifetime or past-month marijuana use) or age of initiation for any of the states that have legalized marijuana, with the exception of Colorado, where a significant increase in youth (past-month) use was found. However, Kansas county-level regression results show that a perception of easy access to marijuana is highly correlated with youth consumption. Two states of five (CO and MI) saw a statistically significant increase in adult consumption (measured by lifetime use) after medical marijuana was legalized.

[3] Estimates of the number of Kansans with qualifying medical conditions were made based on the following sources: Centers for Disease Control (CDC) for prevalence information on HIV/AIDS, Hepatitis C, ALS, and Crohn's Disease; Kansas Department of Health and Environment (KDHE) for information on Cancer and Alzheimer's disease; Visionproblemsus.org for glaucoma; and Medscape.com for nail patella.

Preliminary HIA findings: February 17, 2015	
Findings	Based on data and literature reviewed, the legalization of medical marijuana may result in little to no impact on consumption of marijuana among the general population in Kansas. However, some increase in marijuana consumption for at-risk youth and individuals with approved medical condition may occur, but the level of change in youth consumption would depend on regulation and law enforcement practices.
<u>Question 3</u>: What would be the impact of medical marijuana legalization on violent crime and property crime?	
Literature review	The association between legalization of medical marijuana and violent and property crime are usually discussed in the following context: 1) individuals who do not have a medical marijuana card trying to acquire marijuana for their own use by engaging in property and violent crime; 2) individuals who consume marijuana may commit crimes due to being under the influence. However, some argue that being under the influence of marijuana may make a person less prone to violence. The literature review found mixed results as to whether or not legalizing medical marijuana would have an impact on property and violent crime. The literature review did not indicate that medical marijuana itself was associated with criminal activities. However, the review also showed that in some cases, dispensary location was correlated with increased crime. This could be due to the fact that dispensaries may be more likely to open in areas with higher crime.
Data	In almost all cases, rates of violent and property crimes remained unchanged or decreased after medical marijuana was legalized. Only one state of the 14 studied, Vermont, saw an increase in violent crimes after legalization. It is important to note that decreases in property and violent crimes might be attributed to other factors (e.g., economic conditions).
Findings	Based on data and reviewed literature, the legalization of medical marijuana may have no impact on violent and property crime. However, areas that are located in close proximity to dispensaries (compassion centers) might experience increases in crime.
<u>Question 4</u>: What would be the impact of medical marijuana legalization on driving under the influence and traffic accidents?	
Literature review	Studies consistently show that marijuana use could impair driving. Literature that examined whether legalization of medical marijuana would increase or decrease driving under the influence and/or traffic accidents showed mixed results. However, studies leaned toward an increase, particularly in states with dispensaries.
Data	Nationally, the rate of marijuana-related traffic fatalities has increased over time. In more than half of the states studied (7 out of 13), the increase was significant post-legalization. However, some literature suggests that the legalization of medical marijuana may prompt law enforcement to test for marijuana in crash victims more frequently.
Findings	Based on data and reviewed literature, the legalization of medical marijuana may result in an increase in driving under the influence of marijuana and related traffic accidents.

Preliminary HIA findings: February 17, 2015	
Question 5: What would be the impact of medical marijuana legalization on accidental ingestion?	
Literature review	The literature suggests that accidental exposure could increase. Specifically, children could be at increased risk of accidental ingestion. States with medical marijuana laws experienced slight increases in accidental exposures among children, prompting Colorado to establish child-proof packaging for marijuana. Observed increases could be due to several factors such as individuals are more likely to seek treatment for accidental ingestion and health care providers are more likely testing patients for cannabinoids. Literature findings for adults are mixed. Additionally, one study suggested that states with medical marijuana laws observed a decrease in opioid analgesic overdose age-adjusted mortality.
Findings	Due to limited research in this area, it is unclear how Kansans could be impacted if medical marijuana was legalized.

Note: Comparison of these measures across states and examination of patterns of correlation between various indicators may be useful in identification of possible relationships. However, these analyses do not control other factors and cannot conclusively determine whether changes are caused by legalization of medical marijuana.

Literature Review: Searches of PubMed, PsychINFO, and Google Scholar were conducted in September of 2014 using keywords "medical marijuana" and "medical cannabis." Searches were limited to journal articles, dissertation, theses, research institute (e.g., RAND) reports, documents published in English, focused on human populations, studies conducted in the United States (U.S.), and published in the past ten years or 2004 through 2014. A total of 67 articles were identified for literature review.

Data Analyses: T-tests were conducted to test the equality of the means of indicators before and after the legalization of medical marijuana in states that legalized prior to 2012. Where possible, data for five years before and five years after legalization were used. Years of data analyzed for Colorado didn't overlap with the passage of recreational marijuana in the state.

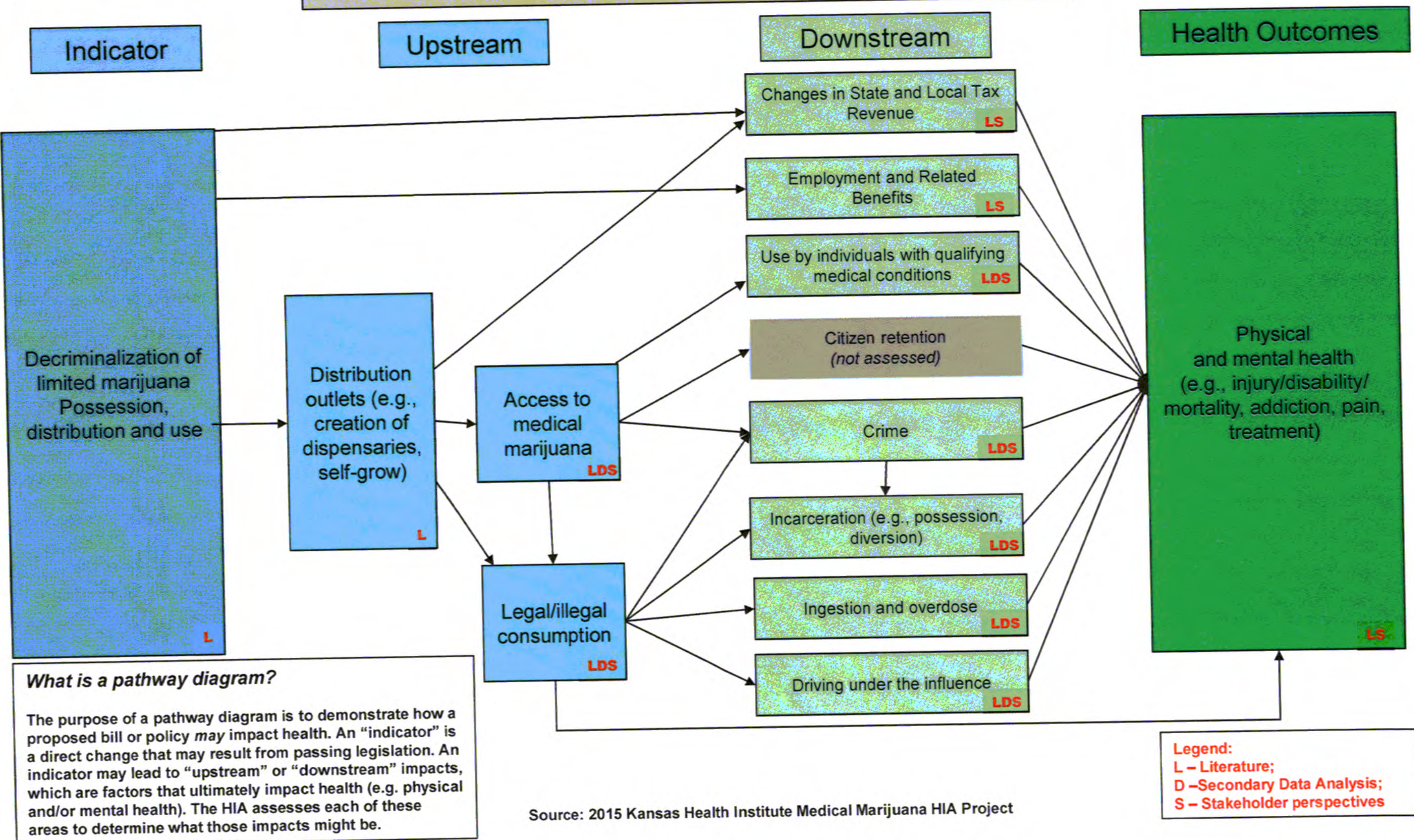
Data Sources: Youth Behavioral Risk Survey (1995-2013), National Survey on Drug Use and Health (2002-2011), Uniform Crime Reporting Statistics (1995-2013), Fatal Accident Reporting System (1990-2013), Kansas Department of Transportation (2000-2012).

Source: *KHI HIA Medical Marijuana Project.*

If you have any questions regarding today's information or the health impact assessment, please contact Tatiana Lin at (785) 233-5443 or tlin@khi.org

Enclosures: Attachment 1: KHI Medical Marijuana HIA Study Pathway Diagram

ATTACHMENT 1



What is a pathway diagram?

The purpose of a pathway diagram is to demonstrate how a proposed bill or policy _may_ impact health. An "indicator" is a direct change that may result from passing legislation. An indicator may lead to "upstream" or "downstream" impacts, which are factors that ultimately impact health (e.g. physical and/or mental health). The HIA assesses each of these areas to determine what those impacts might be.

Source: 2015 Kansas Health Institute Medical Marijuana HIA Project

Legend:
L – Literature;
D – Secondary Data Analysis;
S – Stakeholder perspectives