From: Herschel Baker

Sent: Wednesday, 2 January 2019 8:50 AM

To: Health, Communities, Disability Services and Domestic and Family Violence

Prevention Committee

**Subject:** Could medical cannabis be the new THALIDOMIDE?

**Subject:** Could medical marijuana be the new THALIDOMIDE?

Health and Other Legislation Amendment Bill 2018

HCDSDFVPC
Parliament House
George Street
Brisbane Qld 4000

#### **Good Morning**

Could medical cannabis be the new THALIDOMIDE? Fears of a crisis as doctors consider doling marijuana-based medicines out to pregnant mothers despite evidence the drug can damage fetuses.

https://drugfree.org.au/images/Could medical cannabis be the new THALIDOMI DE Fears of a crisis .pdf

GUY ADAMS FOR THE DAILY MAIL PUBLISHED: 10:31 AEDT, 24 November 2018 | UPDATED: 12:36 AEDT, 24 November 2018

https://www.dailymail.co.uk/news/article-6423269/Could-medical-cannabis-newthalidomide.html

The British Medical Journal (BMJ) recently published an article arguing that the widespread use of medical cannabis could eventually lead to a public health crisis bearing comparison with the thalidomide disaster.

William McBride: alerted the world to the dangers of thalidomide in fetal development

**Ned Stafford** 

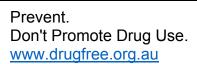
BMJ 2018; 362: k3415 (Published 06 Aug 2018)

...thalidomide during pregnancy.1 He concluded his letter by asking: Have any of your readers seen similar abnormalities in babies delivered of women who have taken this drug during pregnancy? The letter, thought to be the first published suggestion from a doctor of teratogenicity of thalidomide in humans ~~~

https://www.bmj.com/content/362/bmj.k3415

## **Kind Regards**

Herschel Baker International Liaison Director, Drug Free Australia



From: Herschel Baker

Sent: Wednesday, 2 January 2019 8:59 AM

To: Health, Communities, Disability Services and Domestic and Family Violence

Prevention Committee

**Subject:** Dr. Mohr warns that use among pregnant women will increase, causing social,

health, and economic consequences for both the exposed and society at large.

**Attachments:** Prenatal-marijuana-exposure-in-the-state-of-Florida\_SBMohr.pdf

**Subject:** Dr. Mohr warns that use among pregnant women will increase, causing social, health, and economic consequences for both the exposed and society at large.

#### Health and Other Legislation Amendment Bill 2018

HCDSDFVPC
Parliament House
George Street
Brisbane Qld 4000

**Good Morning** 

Please look at the big Picture

Drug Free America Foundation's Epidemiologist, Dr. Sharif Mohr, has analyzed prenatal marijuana exposure data in two Florida counties. As more states loosen restrictions on marijuana, Dr. Mohr warns that use among pregnant women will increase, causing social, health, and economic consequences for both the exposed and society at large.

#### **Key Points**

- Marijuana is the most commonly used illicit substance among pregnant women in the US and abroad.
- Prevalence of marijuana use among pregnant women in the US increased by 60% from 2002-2014; use among pregnant women in Florida increased by 150% across a similar time period.
- In a Pinellas County birthing hospital with universal drug screening, approximately 15% of women who delivered during a six month period in 2016 were found to have used marijuana during their pregnancy.
- Previous research has shown that infants exposed to THC in utero suffer a wide array of neurocognitive and neurobehavioral deficits that cascade throughout childhood and adolescence, resulting in potentially adverse social, health and economic consequences.

#### Kind Regards

Herschel Baker International Liaison Director, Drug Free Australia



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#### Prenatal marijuana exposure: Implications for Florida

Marijuana remains the most frequently used illicit substance in the United States (1). According to data from the National Study on Drug Use and Health (NSDUH), marijuana use among adults has doubled over the past 15 years amidst an increasingly permissive regulatory environment (2). Since 1996, a total of 31 states have legalized the use of marijuana for medical purposes with 9 of those states going on to legalize recreational use of marijuana. At the population level, the presence of medical marijuana laws (MML) is thought to reduce the perceived risk of marijuana use, contributing to increased use among adolescents (3), adults (3), and pregnant women.

Marijuana is also the most commonly used illicit substance among pregnant women in the US. Prevalence of self-reported marijuana use among pregnant women in the US increased 1.6 fold from 2.4% in 2002 to 3.9% in 2014, with the greatest increase occurring in women 18 -25 years of age (2). These findings likely underestimate prevalence as a result of underreporting among study participants due to social desirability bias (4). A similar study in California, the first state to legalize medical marijuana in 1996, found that use among pregnant women increased 1.8 fold from 2009-2016, with the greatest increase occurring in women < 25 years of age (5). Not surprisingly, rates of use among pregnant women in Colorado, one of two states to first legalize recreational marijuana in 2012, are also on the rise. One birthing hospital in Pueblo, CO reported that nearly half of all newborns delivered over a single month in 2016 tested positive for THC (6).

Although marijuana is broadly perceived as innocuous, no amount of the drug has been proven safe for use during pregnancy. Previous research has shown that prenatal exposure to marijuana

results in a wide array of neurocognitive and neurobehavioral deficits across developmental stages (7) **(Table 1)**. Furthermore, the American College of Obstetricians and Gynecologists recommends that women who are pregnant or considering pregnancy discontinue marijuana use completely (8).

Table 1. Negative effects of prenatal marijuana exposure by developmental stage

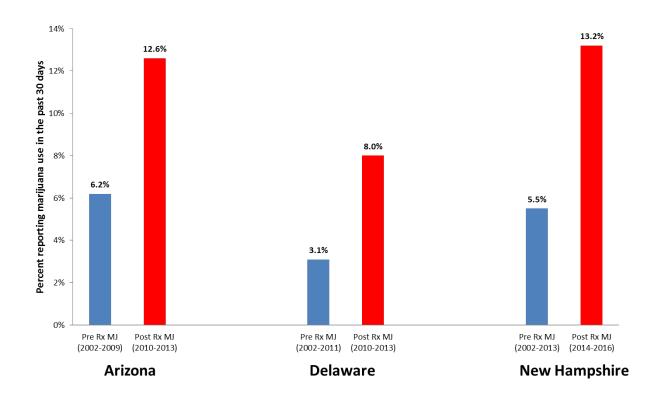
		infancy through early childhood	
Fetus	Neonate (≤ 2 months)	(2 mos - 9 years)	Adolescence (10 - 18 yrs)
Lowered gestational age	Decreased response to light	Impaired memory and concentration	Decreased visual perception
Decreased brith length	Increased startle response	Impaired verbal ability	Decreased visual reasoning and memory
Decreased birth weight	Increased tremors	Increased hyperactivity and impulsivity	Increased impulsivity
Immune system suppression	Decreased body length	Decreased verbal reasoning ability	Diminished capacity for abstract reasoning
		Decreased quantitative reasoning	Decreased verbal reasoning ability
		Difficulties with sleep	Impaired learning
		Increased aggression in females	Impaired concentration and memory
		Decreased IQ	Decreased IQ
		Increase in delinquency	Increased hyperactivity and impulsivity
			Increased risk of depression
			Increase in delinquency
			Decreased fine motor coordination

Infana, thuaileh aarli ahilahaad

Since the legalization of medical marijuana in 1996, attitudes toward use have become increasingly permissive and tolerant, with more and more states legalizing marijuana for medical and eventually recreational use. Compared to non-MML states, passage of medical marijuana laws was associated with higher adolescent use of marijuana and increased numbers of arrests among adult males for marijuana possession (9,10). However, it is not clear what effect passage of MMLs may have on use of marijuana among pregnant women. No study has systematically examined the effect of MML specifically on prevalence of marijuana use among pregnant women. To that end, data from the NSDUH were used to compare rates of marijuana use among pregnant women for the time period before and after legalization of medical marijuana in states for which data were available. Due to disclosure limitations designed to protect respondent

information, only data from Arizona, Delaware, and New Hampshire could be analyzed (Figure 1).

Figure 1. Prevalence of marijuana use among pregnant women before and after legalization of medical marijuana in Arizona, Delaware, and New Hampshire.



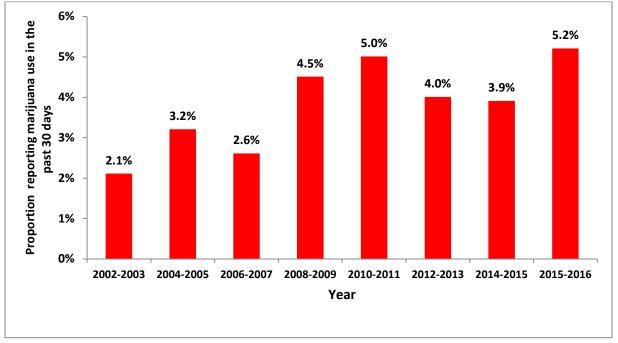
In the three states for which data were available, prevalence of marijuana use among pregnant women more than doubled after the legalization of medical marijuana. Therefore, it is reasonable to infer that similar increases will occur in other states with newly passed MML such as Florida, where voters passed an amendment legalizing use of medical marijuana in November of 2016.

According to data from the NSDUH, marijuana use among pregnant women in Florida grew from 2.1% in 2002, to 5.2% in 2016, an overall 2.5 fold increase (**Figure 2**). This was in contrast

to the 1.6 fold increase observed in the US population and the 1.8 fold increase in CA over a similar time period (2, 4). State level NSDUH data were only available through 2016. Therefore, it was not possible to empirically demonstrate the effect of passage of medical marijuana legislation on illicit use of marijuana among pregnant women in Florida.



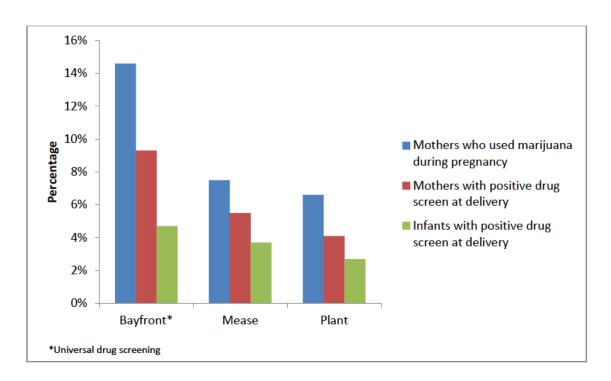
Figure 2. Self-reported marijuana use among pregnant women in Florida, 2002-2016.



The American College of Obstetricians and Gynecologists recommends universal screening for all maternal drug use, illicit or otherwise (4). Yet in the state of Florida, healthcare providers are not required to universally screen pregnant women or newborns for drug exposure. Only pregnant women suspected of drug use or who self-report drug use are screened. This is problematic from an epidemiological perspective because under current guidelines, these data are only collected on what is essentially a high-risk population. Furthermore, women identified through such screening tend to be poly-substance abusers, making it extremely difficult to directly assess any health effects solely attributable to prenatal THC exposure. Nevertheless, data collected at the local level by county agencies may be able to provide a rough estimation of the popularity of marijuana among young pregnant women in Florida.

In three birthing hospitals in Pinellas County (Bayfront Baby Place, Mease, and Morton Plant), approximately 13.3% (858/6431) of all newborns tested positive for one or more drugs at time of delivery over a nine month period from 2016-2017 (11). After stratifying the data by hospital, Bayfront Baby Place, the only hospital with a universal screening policy in place, had the highest proportion of mothers that used marijuana during their pregnancy and the highest proportion of women who tested positive for any drug at time of delivery (**Figure 3**). Bayfront also had the highest proportion of infants testing positive for any drug at time of delivery (**Figure 3**).

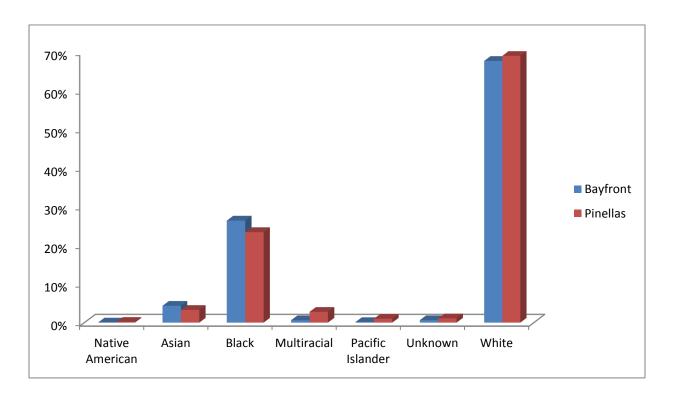
Figure 3. Substance exposure among pregnant women and newborns at Bayfront Baby Place, Mease, and Plant Hospitals; October 2017 thru June 2018.



It is important to note that Mease and Morton Plant Hospitals only screen for drugs if the mother is suspected of drug use or self-reports drug use during pregnancy. For research purposes this introduces a selection bias that would artificially increase the number of positive drug screens since only the most high-risk individuals would be tested. On the other hand, it would also tend to underestimate the true prevalence of marijuana use among pregnant women in Pinellas County because marijuana use tends to be widely underreported among pregnant women due to social desirability bias (4). Moreover, marijuana use may lack the biopsychosocial markers that typify hard drug use, making it more difficult for healthcare providers to detect. Therefore, in the absence of universal screening, data on prenatal drug use, especially marijuana, should be interpreted with caution.

Bayfront Baby Place has a universal drug screening policy for mothers and newborns at time of delivery which may allow for a more reliable estimate of the true prevalence of marijuana use among pregnant women in Pinellas County. Examination of the racial distribution of Bayfront Baby Place's patient population from October 2017 thru June 2018 reveals that it closely approximates that of Pinellas County (**Figure 4**) (11,12). Therefore, the inferences gleaned from these data may be generalizable to the wider population of pregnant women in Pinellas County.

Figure 4. Racial distribution of Bayfront Baby Place patient population from October 2017 thru June 2018 and Pinellas County in 2016.



As previously noted, 439 (14.6%) of the 3,008 women delivering at Bayfront Baby Place from October 2017 thru June 2018, were found to have used marijuana during their pregnancy, with 280 (9.3%) of those cases being confirmed by a positive drug screen at time of delivery (11). Of the 3,067 live births at Baby Place during the same period, 145 (4.7%) newborns tested positive for one or more drugs, including THC (11). Among women delivering at Bayfront Baby Place, women who gave birth to a substance exposed newborn were more likely to be unemployed, unmarried, and less educated compared to women who did not give birth to a substance exposed baby (11) **(Table 2)**.

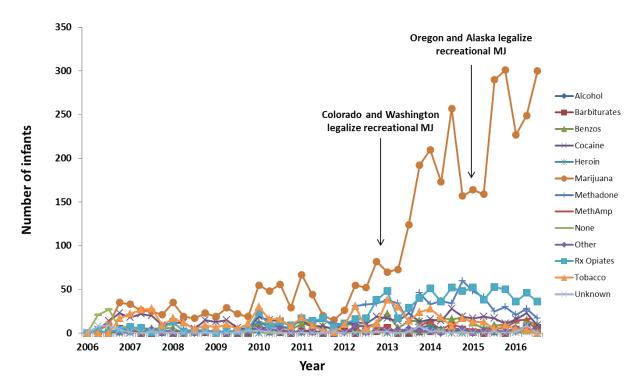
Table 2. Demographic characteristics of mothers who gave birth to substance exposed newborns (SEN).

Variable	SEN	Non-SEN
Employed	32%	56%
Married	13%	47%
Associate degree or higher	10%	25%
Mean age (yrs)	27.2	29.1

In another survey of five birthing hospitals in Hillsborough county, marijuana was the most commonly detected drug in substance-exposed newborns from 2006-2016 (13) (Figure 5). Interestingly, large increases in the proportion of substance exposed newborns testing positive for THC were observed at the end of 2012 and 2014, which coincided with the legalization of recreational marijuana in Colorado and Washington, and Oregon and Alaska, respectively.

According to a report published by the Drug Enforcement Agency, Florida continues to be one of the principal destinations for black market diversion of marijuana grown in Colorado (6). Florida was the 5th most popular destination for diverted Colorado marijuana seized by the DEA and US Postal Service in 2016 (6). This may help explain the large increase in THC exposed newborns born in Hillsborough County during this time period. As more states legalize recreational marijuana, it is likely that use among pregnant women will increase as criminal organizations seek to capitalize on the substantial profits to be made through black market diversion from states with more permissive laws to states with more restrictive laws such as Florida. Future research should aim to quantify the relationship between availability of diverted marijuana from recreational use states such as Colorado and increased use among pregnant women in Florida.

Figure 5. Number of substance exposed infants born in Hillsborough County according to substance, 2006 – 2016.



Source: Healthy Start Coalition of Hillsborough County; Substance Exposed Newborn Taskforce. Data obtained from Brandon, Florida, South Florida, St. Joseph's Women's, and Tampa General Hospitals

#### **Conclusions**

Marijuana is the most commonly used illicit substance among pregnant women. As more states loosen restrictions on the use of marijuana, it is likely that use among pregnant women will only increase, initiating a cascade of deficits for the remainder of the lives of the exposed, with potentially far-reaching social, health, and economic consequences for both the exposed and society at large. Future intervention efforts should include educating pregnant women on the

wide array of neurocognitive deficits produced by prenatal THC exposure. In addition, birthing hospitals should implement universal drug screening at time of delivery so that interventions can be appropriately targeted to those most at-risk for adverse developmental outcomes. Further research is needed on the factors driving the increase in marijuana use among pregnant women in Florida and to quantify the long-term social, health, and economic consequences of prenatal marijuana exposure.

#### **REFERENCES**

- 1. Fischer B, Russell C, Sabioni P, van den Brink W, Le Foll B, Hall W, et al. Lower-Risk Cannabis Use Guidelines: A Comprehensive Update of Evidence and Recommendations.

  Am J Public Health [Internet]. 2017;107(8):e1–12. Available from:

  http://www.ncbi.nlm.nih.gov/pubmed/28644037
- Brown QL, Sarvet AL, Shmulewitz D, Martins SS, Wall MM, Hasin DS. Trends in Marijuana Use Among Pregnant and Nonpregnant Reproductive-Aged Women, 2002-2014. JAMA [Internet]. 2017;317(2):207–9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/27992619
- 3. Jones J. The Association Between Medical Marijuana Laws and Maternal Marijuana Use [Internet]. 2017. Available from: https://scholarworks.waldenu.edu/dissertations/3530/
- 4. Jaques SC, Kingsbury A, Henshcke P, Chomchai C, Clews S, Falconer J, et al. Cannabis, the pregnant woman and her child: weeding out the myths. J Perinatol [Internet]. 2014

- Jun;34(6):417–24. Available from: http://www.ncbi.nlm.nih.gov/pubmed/24457255
- 5. Young-Wolff KC, Tucker LY, Alexeeff S, Armstrong MA, Conway A, Weisner C, et al. Trends in self-reported and biochemically tested Marijuana use among pregnant females in California from 2009-2016. JAMA J Am Med Assoc. 2017;318(24):2490–1.
- 6. Drug Enforcement Agency Rocky Mountain High Intensity Drug Trafficking Area. The legalization of marijuana in Colorado: The impact [Internet]. 2017. Available from: http://www.rmhidta.org/html/FINAL 2017 Legalization of Marijuana in Colorado The Impact.pdf
- 7. Zumbrun EE, Sido JM, Nagarkatti PS, Nagarkatti M. Epigenetic Regulation of Immunological Alterations Following Prenatal Exposure to Marijuana Cannabinoids and its Long Term Consequences in Offspring. J Neuroimmune Pharmacol [Internet]. 2015 Jun 25;10(2):245–54. Available from: http://link.springer.com/10.1007/s11481-015-9586-0
- 8. Practice C on O. Marijuana Use During Pregnancy and Lactation. Vol. 130, The American College of Obstetricians and Gynecologists. 2017.
- 9. Wall MM, Poh E, Cerdá M, Keyes KM, Galea S, Hasin DS. Adolescent marijuana use from 2002 to 2008: higher in states with medical marijuana laws, cause still unclear. Ann Epidemiol [Internet]. 2011 Sep;21(9):714–6. Available from: http://www.ncbi.nlm.nih.gov/pubmed/21820632
- 10. Chu Y-WL. The effects of medical marijuana laws on illegal marijuana use. J Health Econ [Internet]. 2014 Dec;38:43–61. Available from:

- http://www.ncbi.nlm.nih.gov/pubmed/25205609
- SEN Taskforce. Pinellas County Substance Exposed Newborns Snapshot. Pinel Cty
   Opioid Task Force Meet.
- 12. Government SPC. Data and Demogrphics of St. Petersburg [Internet]. Available from: http://www.stpete.org/economic development/data demographics/index.php
- 13. Colen L. Substance Exposed Newborns in Hillsborough County. Pers Commun.

From: Herschel Baker

Sent: Wednesday, 2 January 2019 9:03 AM

**To:** Health, Communities, Disability Services and Domestic and Family Violence

**Prevention Committee** 

**Subject:** Please look at the big picture.

Attachments: Dr. McCance-Katz's Slides for SAMHSA Prevention Day 020517.pdf

Categories: Submission

**Subject:** Please look at the big picture.

Health and Other Legislation Amendment Bill 2018

HCDSDFVPC
Parliament House
George Street
Brisbane Qld 4000

**Good Morning** 

Please look at the big Picture Dr. McCance-Katz's SAMHSA Prevention Day.

### **Kind Regards**

Herschel Baker International Liaison Director, Drug Free Australia



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Health and Other Legislation Amendment Bill 2018	Submission No 01

From: Herschel Baker

Sent: Wednesday, 2 January 2019 11:39 AM

To: Health, Communities, Disability Services and Domestic and Family Violence

Prevention Committee

Cc: Health, Communities, Disability Services and Domestic and Family Violence

**Prevention Committee** 

**Subject:** RECOMMAND to the Queensland Health and Other Legislation Amendment Bill

2018

Categories: Submission

#### Health and Other Legislation Amendment Bill 2018

HCDSDFVPC
Parliament House
George Street
Brisbane Old 4000

#### Good Morning

The Health and other legislation amendment Bill 2018 (the Bill) introduced to Parliament by the Honorable Dr. Stephen Miles MP Minister for Health and Minister for Ambulance Services on 13 November 2018. This Bill proposed to repeal the Medicinal Cannabis Act and make consequential amendments to the Health Act 1937 to allow Medical Cannabis to be controlled, just like any other schedule 4 or schedule 8 drug under the Health (Drugs and Poison) regulation 1996 (HDPR) proposed amendments to the HDRR. Drug Free Australia strongly recommends that the present Queensland Medicinal Cannabis Act has served all of the Queensland community very well and no changes should be made to the Drug Misuse Act 1986 (DMA), the Drugs Misuse Regulation 1987 or the Health Act 1937.

#### Kind Regards

Herschel Baker International Liaison Director, Drug Free Australia

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From: Sent:

To:

Herschel Baker Monday, 7 January 2019 8:25 AM

Attachments:

USA Surgeon General Report on Addiction

USA Surgeon General's Report on Addiction 2016.doc; USA Surgeon General's

Report on Addiction 2016.doc

Hi All

Please take time to read the USA Surgeon General Report on Addiction attached.

In the report his statement Random Student Drug Testing (RSDT) developed by ONDCP during the Bush II administration, and the documentation of its effectiveness in reducing drug use and related harms among schoolchildren.

Here in Australia, Drug Free Australia tried very hard over a number of years to trial Pill testing in schools with a number of submissions to both State and Federal Governments but the Drug and Alcohol Elite here in Australia started crying to Government and the media that it wouldn't work. Now Australia has that same group strongly pushing for pill testing?

The 2009 IOM describes... the development of more than four dozen research-tested prevention interventions that can be delivered in households, schools... First, science has shown that adolescence and young adulthood are major "at risk" periods for substance misuse and related harms... several community-delivered prevention programs and policies have been shown to significantly reduce rates of substance-use initiation and misuse-related harms. Parents, schools, health care systems, faith communities, and social service organizations

This Report describes... the development of more than four dozen research-tested prevention interventions that can be delivered in households, schools... First, science has shown that adolescence and young adulthood are major "at risk" periods for substance misuse and related harms... several community-delivered prevention programs and policies have been shown to significantly reduce rates of substance-use initiation and misuse-related harms. Parents, schools, health care systems, faith communities, and social service organizations should be involved in delivering comprehensive, evidence-based community prevention programs... As with other chronic illnesses, the earlier treatment begins, the better the outcomes are likely to be.

Schools represent one of the most effective channels for influencing youth substance use. Many highly effective evidence-based programs are available that provide a strong return on investment, both in the

well-being of the children they reach and in reducing long-term societal costs. Prevention programs for adolescents should target improving academic as well as social and emotional learning to address risk factors for substance misuse, such as early aggression, academic failure, and school dropout.

NICAP comment: This report completely ignored Random Student Drug Testing (RSDT) developed by ONDCP during the Bush II administration, and the documentation of its effectiveness in reducing drug use and related harms among schoolchildren.

## **Kind Regards**

Herschel Baker International Liaison Director, Drug Free Australia

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# Surgeon General's Report on Addiction, Nov. 2016

**Excerpts and Highlighting Follow; Full Report Available at Link:** 

https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf

## Marijuana: A Changing Legal and Research Environment

None of the permitted uses under state laws alters the status of marijuana and its constituent compounds as illicit drugs under Schedule I of the federal

Controlled Substances Act. It should also be noted that use for recreational purposes has not been legalized by any jurisdiction for people under age 21, and few jurisdictions have legalized medical marijuana for young people. While laws are changing, so too is the drug itself with average potency more than doubling over the past decade (1998 to 2008). The ways marijuana is used are also changing – in addition to smoking, consuming edible forms like baked goods and candies, using vaporizing devices, and using high-potency extracts and oils (e.g., "dabbing") are becoming increasingly common. Because these products and methods are unregulated even in states that have legalized marijuana use, users may not have accurate information about dosage or potency, which can lead and has led to serious consequences such as hospitalizations for psychosis and other overdose-related symptoms. Marijuana use can also impair driving skills and, while estimates vary, is linked to a roughly two-fold increase in accident risk. The risk is compounded when marijuana is used with alcohol.

Marijuana has more than 100 constituent cannabinoid compounds, with cannabidiol (CBD) and tetrahydrocannabinol (THC, the chemical responsible for most of marijuana's intoxicating effects) being the most well-studied. Evidence collected so far in clinical investigations of the marijuana plant is still insufficient to meet FDA standards for a finding of safety and efficacy for any therapeutic indications. However, the FDA has approved three medications containing synthetically derived cannabinoids: Marinol capsules and Syndros oral solution (both containing dronabinol, which is identical in chemical structure to THC), and Cesamet capsules (containing nabilone, which is similar in structure to THC) for severe nausea and wasting in certain circumstances, for instance in AIDS patients.... However, further exploration of these issues always requires consideration of the serious health and safety risks associated with marijuana use. Research shows that risks can include respiratory illnesses, dependence, mental health-related problems, and other issues affecting public health such as impaired driving.

Chapter 2. This chapter describes the neurobiological framework underlying substance use and why some people transition from using or misusing alcohol or drugs to a substance use disorder—including its most severe form, addiction. The chapter explains how these substances produce changes in brain structure and function that promote and sustain addiction and contribute to relapse.

• Well-supported scientific evidence shows that addiction to alcohol or drugs is a chronic brain disease that has potential for recurrence and recovery. • Well-supported evidence suggests that the addiction process involves a three-stage cycle: binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation. This cycle becomes more severe as a person continues substance use and as it produces dramatic changes in brain function that reduce a person's ability to control his or her substance use. • Well-supported scientific evidence shows that disruptions in three areas of the brain are particularly important in the onset, development, and maintenance of substance use disorders: the basal ganglia, the extended amygdala, and the prefrontal cortex. These disruptions: (1) enable substanceassociated cues to trigger substance seeking (i.e., they increase incentive salience); (2) reduce sensitivity of brain systems involved in the experience of pleasure or reward, and heighten activation of brain stress systems; and (3) reduce functioning of brain executive control systems, which are involved in the ability to make decisions and regulate one's actions, emotions, and impulses. • Supported scientific evidence shows that these changes in the brain persist long after substance use stops. It is not yet known how much these changes may be reversed or how long that process may take. • Well-supported scientific evidence shows that adolescence is a critical "at-risk period" for substance use and addiction. All addictive drugs, including alcohol and marijuana, have especially harmful effects on the adolescent brain, which is still undergoing significant development.

All addictive substances have powerful effects on the brain. These effects account for the euphoric or intensely pleasurable feelings that people experience during their initial use of alcohol or other substances, and these feelings motivate people to use those substances again and again, despite the risks for significant harms.

As individuals continue to misuse alcohol or other substances, progressive changes, called neuroadaptations, occur in the structure and function of the brain. These neuroadaptations compromise brain function and also drive the transition from controlled, occasional substance use to chronic misuse, which can be difficult to control. Moreover, these brain changes endure long after an individual stops using substances. They may produce continued, periodic craving for the substance that can lead to relapse: More than 60 percent of people treated for a substance use disorder experience relapse within the first year after they are discharged from treatment, and a person can remain at increased risk of relapse for many years.

Substance misuse is also associated with a wide range of health and social problems, including heart disease, stroke, high blood pressure, various cancers (e.g., breast cancer), mental disorders, neonatal abstinence syndrome (NAS), driving under the influence (DUI) and other transportation-related injuries, sexual assault and rape, unintended pregnancy, sexually transmitted infections, intentional and unintentional injuries, and property crimes.

Nonetheless, substance misuse can put individual users and others around them at risk of harm, whether or not they have a disorder. Also, early initiation, substance misuse, and substance use disorders are associated with a variety of negative consequences, including deteriorating relationships, poor school performance, loss of employment, diminished mental health, and increases in sickness and death (e.g., motor vehicle crashes, poisoning, violence, or accidents).

## Raising the Minimum Legal Drinking Age—

Before 1984, only 22 states had a MLDA of 21. To reduce DUIs, Congress passed the National Minimum Drinking Age Act, which threatened to withhold a portion of states' federal highway construction funds if states made the purchase or public possession of alcoholic beverages legal for those under the age of 21. By 1988, all states had adopted age 21 as the MLDA... An extensive review concluded that raising the MLDA to 21 has been directly associated with less frequent drinking, less heavy drinking, and fewer alcohol-related traffic fatalities in the age groups targeted by the law.178 More specifically, NHTSA estimates that raising the MLDA to 21 may have prevented 30,323 traffic deaths since 1975.230

## **Adolescent Use of Marijuana**

Marijuana use, in adolescents in particular, can cause negative neurological effects. Long-term, regular use starting in the young adult years may impair brain development and functioning. The main chemical in marijuana is delta-9-tetrahydrocannabinol (THC), which, when smoked, quickly passes from the lungs into the bloodstream, which then carries it to organs throughout the body, including the brain. THC disrupts the brain's normal functioning and can lead to problems studying, learning new things, and recalling recent events. One study followed people from age 13 to 38 and found that those who began marijuana use in their teens and developed a persistent cannabis use disorder had up to an eight point drop in IQ, even if they stopped using in adulthood. Frequent marijuana use has also been linked to increased risk of psychosis in individuals with specific pre-existing genetic vulnerabilities. And marijuana use—particularly long-term, chronic use or use starting at a young age—can also lead to dependence and addiction.

Research shows that the most effective way to help someone with a substance use problem who may be at risk for developing a substance use disorder is to intervene early, before the condition can progress. With this recognition, screening for substance misuse is increasingly being provided in general health care settings, so that emerging problems can be detected and early intervention provided if necessary.

Regardless of the substance, the first step to early intervention is screening to identify behaviors that put the individual at risk for harm or for developing a substance use disorder. Positive screening results should then be followed by brief advice or counseling tailored to the

specific problems and interests of the individual and delivered in a non-judgmental manner, emphasizing both the importance of reducing substance use and the individual's ability to accomplish this goal.

## **Drug Courts**

Drug courts provide treatment and other services, overseen by a judge, in lieu of being processed through the traditional justice system... Drug court programs require random drug tests and other monitoring measures. Required abstinence involves making sanctions certain and immediate... For many individuals, regular monitoring, alongside the adverse consequences of a failed urine test, provide powerful motivation to abstain... the great majority of patients with substance use disorders do not receive any form of treatment.

Nonetheless, many of these individuals do access primary or general medical care in community clinics or school settings...

The current failure to acknowledge and address substance use disorders in these settings has reduced the quality and increased the costs of health care.

Screening and brief intervention for substance misuse is also consistent with the prevention activities recommended in the 2009 IOM report Preventing Mental, Emotional, and Behavioral Disorders Among Youth: Progress and Possibilities. Yet screening is seldom addressed according to guidelines... However, SBIRT can be effectively implemented, both for adults and adolescents, and it is likely that many more systems will do so to comply with new requirements by The Joint Commission and in the Affordable Care Act.

Because substance use disorders often first come to light in the context of school, law enforcement, and employment, communities have many opportunities to expand the delivery of prevention and treatment services to include schools and school-based health care clinics...

Implementation of evidence-based interventions (EBIs) can have a benefit of more than \$58 for every dollar spent; and studies show that every dollar spent on substance use disorder treatment saves \$4 in health care costs and \$7 in criminal justice costs. Yet, effective prevention interventions are highly underused. For example, only 8 to 10 percent of school administrators report using EBIs to prevent substance misuse, and only about 11 percent of youth (aged 12 to 17) report participating in a substance use prevention program outside of school.

This Report describes... the development of more than four dozen research-tested prevention interventions that can be delivered in households, schools... First, science has shown that adolescence and young adulthood are major "at risk" periods for substance misuse and related harms... several community-delivered prevention programs and policies have been shown to significantly reduce rates of substance-use initiation and misuse-related harms. Parents, schools, health care systems, faith communities, and social service organizations

should be involved in delivering comprehensive, evidence-based community prevention programs... As with other chronic illnesses, the earlier treatment begins, the better the outcomes are likely to be.

Schools represent one of the most effective channels for influencing youth substance use.

Many highly effective evidence-based programs are available that provide a strong return on investment, both in the well-being of the children they reach and in reducing long-term societal costs. Prevention programs for adolescents should target improving academic as well as social and emotional learning to address risk factors for substance misuse, such as early aggression, academic failure, and school dropout.

NICAP comment: This report completely ignored Random Student Drug Testing (RSDT) developed by ONDCP during the Bush II administration, and the documentation of its effectiveness in reducing drug use and related harms among schoolchildren.

NICAP 11/18/16

From: Herschel Baker

Sent: To: Tuesday, 8 January 2019 5:09 AM

Subject: Sub 016 RE: USA Surgeon General Report on Addiction

Follow Up Flag: Follow up Flag Status: Completed

Subject: USA Surgeon General Report on Addiction

Hi All

Very sorry but Drug Free Australia didn't make the meaning between Pill Testing and the very successful drug prevention strategy called 'Random Student Drug Testing (RSDT) in schools' clear.

pill testing represents testing drugs to determine their content; the pro drug lobby argue that this would make it safer for those who want to use drugs. We argue that this neglects to take into account the allergic reaction to substances such as MDMA, where one pill can kill. The (RSDT) Drug testing in schools is about determining if students are using drugs, as would be shown, if they are in their systems. They would then be referred to treatment to help with early intervene and strategies to help stop this practice.

Colliss Parrett comments below outlines some of DFA concerns regarding 'PILL TESTING A REAL AND PRESENT DANGER'

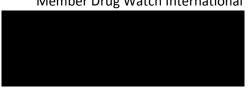
Information being given to our kids on pill testing puts them in danger (Canberra Times, Pill testing does save lives, Forum, p12, Jan 5). After saying "No drug is safe and the only way to truly protect yourself is not to take it in the first place" the article then comments unbelievably "Should you still want to imbibe only take half [a pill]" That is a totally uninformed and highly dangerous statement. In the Canberra Times of the same day (Promoters in new rush for pill testing, p2) Gino Vumbaca of the new Pill Testing Australia consortium stated "... they know what we're offering will reduce harm, it certainly won't increase harm".

But neither is credible because a Daily Telegraph article (Pill test death waiver revealed, Jan 5, p 7) reported "The testing capabilities are so limited that revellers would be required to sign a death waiver which includes a warning that tests cannot accurately determine drug purity levels or give any indication of safety." Infrared spectroscopy testing equipment is about as accurate as a guided missile system - without the system.

Later the article reports "Mr Vumbaca said he had been given extensive legal advice to include the warnings on the waiver because of the limitations of testing information......we are not a laboratory and we have one piece of equipment... the test gives you an indication of purity but you can't tell the exact amount." Then it states that the waiver would release everyone in testing from "any liability for personal injury or death suffered.....in any way from the services." Does the word everyone include promoters? Would such waivers withstand litigation from any

responsibility for loss of young lives in a pre-acknowledged life risking situation. And Is there a Prime Minister, Premier, member of any political party or parent that could even conceive of accepting such a deadly concept?

Colliss Parrett Member Drug Watch International



#### **Kind Regards**

Herschel Baker International Liaison Director, Drug Free Australia

Prevent.
Don't Promote Drug Use.
www.drugfree.org.au

drugfreeaust@drugfree.org.au

Please take time to read the USA Surgeon General Report on Addiction attached.

In the report his statement Random Student Drug Testing (RSDT) developed by ONDCP during the Bush II administration, and the documentation of its effectiveness in reducing drug use and related harms among schoolchildren.

Here in Australia, Drug Free Australia tried very hard over a number of years to trial Pill testing in schools with a number of submissions to both State and Federal Governments but the Drug and Alcohol Elite here in Australia started crying to Government and the media that it wouldn't work. Now Australia has that same group strongly pushing for pill testing?

The 2009 IOM describes... the development of more than four dozen research-tested prevention interventions that can be delivered in households, schools... First, science has shown that adolescence and young adulthood are major "at risk" periods for substance misuse and related harms... several community-delivered prevention programs and policies have been shown to significantly reduce rates of substance-use initiation and misuse-related harms. Parents, schools, health care systems, faith communities, and social service organizations

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Herschel Baker International Liaison Director, Drug Free Australia

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