Exhibit #33

E-FILED 2016 JAN 01 4:49 PM POLK - CLERK OF DISTRICT COURT

Carl,

ahead and add all of your items to the Board meeting materials for March 9

Lloyd

Lloyd K. Jessen, R.Ph., J.D. Executive Director Iowa Roard of Pharm: 515.281.8630 Direct Lin lloyd.jessen@iowa.gov

From: carl-olsen@mchsl.com [mailto:carl-olsen@mchsl.com]
Sent: Monday, March 02, 2015 10:02 AM
To: Jessen, Lloyd [IBPE]
Cc: Rita Bettis: carl; Jorgenson, Debble [IBPE]
Subject: Re: Documents for Monday, March 9, 2015

Llovd.

It is my understanding that I have already submitted those first two items and I do not have to submit them again.

Carl

----- Original Message ---From: "Lloyd Jessen [IBPE]" <Lloyd Jessen@iowa.gov>
To: carl-olsen@mchsi.com
Cc: "Rita Bettis" <arl...bettis@aclu-i.org>, "carl" <arl@carl-olsen.com>, "Debbie Jorgenson [IBPE]" <Debbie.Jorgenson@iowa.gov>
Sent: Monday, March 2, 2015 9:57:42 AM GMT -06:00 US/Canada Central
Subject: RE: Documents for Monday, March 9, 2015

We have passed our deadline for distributing materials to the Board members. You will need to bring seven (7) copies of your documents to the meeting for the seven board members.

Thanks!

Lloyd K. Jessen, R.Ph., J.D. Iowa Board of Pharmacy 515.281.8630 Direct Line

From: carl-olsen@mchsi.com [mailto:carl-olsen@mchsi.com] Sent: Monday, March 02, 2015 9:55 AM To: Jessen, Lloyd [IBPE] Cc: Rita Bettis; carl Subject: Documents for Monday, March 9, 2015

Hi Llovd.

Here is a list of five documents I would like to have included in my petition for reconsideration of the board's January 5, 2015, ruling on my petition:

1. Position statement of the American Academy of Neurology, December 17, 2014. https://www.aan.com/uploadedFiles/Website_Library_Assets/Documents/6.Public_Policy/1.Stay_Informed/2.Position_Statements/3.PDFs_of_all_Position_Statements/Final%20Medical%20Marijuana%20Position%20Statement.pdf

2. Position statement of the American Academy of Pediatrics, January 20, 2015. http://pediatrics.aappublications.org/content/early/2015/01/20/peds.2014-4146.full.pdf+html

http://coolice.legis.iowa.gov/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&hbill=SSB1005

4. SSB 1205

http://coolice.legis.iowa.gov/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&ga=86&hbill=SSB1205.

 $5. SF\ 282 \\ http://coolice.legis.iowa.gov/Cool-ICE/default.asp?Category=billinfo\&Service=Billbook\&menu=false\&ga=86\&hbill=SF282 \\ http://coolice.legis.iowa.gov/Cool-ICE/default.asp?Category=billinfo\&Service=Billbook&menu=false&ga=86\&hbill=SF282 \\ http://coolice.legis.iowa.gov/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&ga=86\&hbill=SF282 \\ http://coolice.legis.gov/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&ga=86\&hbill=SF282 \\ http://coolice.legis.gov/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&ga=86\&hbill=SF282 \\ http://coolice.legis.gov/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=false&ga=86\&hbill=SF282 \\ http://coolice.legis.gov/Cool-ICE/default.asp.fo$

There may be one more bill filed tomorrow by Senator Bolkcom that I will want to have included in this list, so I'll add that when I have the bill number.

The issue I want to address is that the reasoning the board gave on January 5, 2015, during discussion of my petition, is that marijuana should be in the same schedule as opium plants. Opium plants are in schedule 2, but the board said opium plants are in schedule 1.

Also, SSB 1005, SSB 1205, and SF 282, all seem to suggest that marijuana plants could be prescribed. I suppose that is correct in theory, but opium plants are not prescribed. I think everyone is confused.

The position statements of the American Academy of Neurology and the American Academy of Pediatrics make it crystal clear that we are not moving marijuana to schedule 2 so it can be prescribed for anything. Schedule 1 just makes it impossible to do the level of research we need to be doing now that millions of Americans are using marijuana and marijuana products completely unregulated by the FDA.

I don't think the Legislative Services Agency does an adequate job explaining this, and I feel it's the duty of the board to explain this to our legislators.

I would also like to note that this is the first year that the Office of Drug Control Policy has not filed opposing legislation to rescheduling.

Carl Olsen 130 E. Aurora Ave Des Moines, Iowa 50313-3654 515-343-9933

This email message and its attachments may protein confidential information that is exempt from disclosure under loss. Code chapters 22, 1934, end of their applicable law, Confidential Information is for the sole use of the intended recipient. If you believe that you have received this transmission in error, please reply to the sender, and then delived all compared, of this nucessaries and any authorithment. If you are not the intended the regional value is not the intended to low.

This entail message and its attachments may contain confidential information has it except from disclosure under lows. Code chapters 22, 1934, and the product of the accident information in for the sole use of the intended excipient. If you believe that you have received this transmission in error, please reply to the sender, and then deleted all codes is strictly prohibited by any attachments. By any attachments. By any attachments. By any attachments and excipient, you see hereof, contained any attachments. By any attachments. By any attachments and excipient, you see hereof, used referred inclined any attachments. By any attachments. By any attachments and excipient, you see hereof, and the property of the message and use strictly prohibited by a strictly pr

E-FILED 2016 JAN 01 4:49 PM POLK - CLERK OF DISTRICT COURT

 From:
 Jessen, Lloyd [IBPE]

 To:
 carl-olsen@mchsi.com

 Subject:
 FW: Carl's March BB Materials

Date: Monday, March 2, 2015 10:18:24 AM

Attachments: March marijuana request.pdf

Carl,

Attached is what we already had from you.

We will add your new items.

Thanks, Lloyd

Lloyd K. Jessen, R.Ph., J.D. Executive Director Iowa Board of Pharmacy 515.281.8630 Direct Line Iloyd.jessen@iowa.gov

From: Jorgenson, Debbie [IBPE]

Sent: Monday, March 02, 2015 10:14 AM

To: Jessen, Lloyd [IBPE]

Subject: Carl's March BB Materials

Here is what is on BB for March.

This email message and its attachments may contain confidential information that is exempt from disclosure under lowa Code chapters 22, 139A, and other applicable law. Confidential information is for the sole use of the intended recipient. If you believe that you have received this transmission in error, please reply to the sender, and then delete all copies of this message and any attachments. If you are not the intended recipient, you are hereby notified that any review, use, retention, dissemination, distribution, or copying of this message is strictly prohibited by law.

IOWA BOARD OF PHARMACY

MARIJUANA SCHEDULING) PETITION FOR
) RECONSIDERATION

INTRODUCTION

I would like to thank the board for its discussion on January 5, 2015, at the third hearing on my petition for marijuana scheduling. I also want to thank the subcommittee for the report it prepared for the second hearing on my petition on November 19, 2014. And, I would like to thank the committee for its decision to form the subcommittee to take a closer look during the first hearing on my petition on August 27, 2014.

In particular, I would also like to thank the board for the 4 public hearings it held on this issue in 2009.

I acknowledge this is an unusual request, and I appreciate the time the board has spent on it.

THE SCHEDULING PROCESS

The scheduling of controlled substances in Iowa is not a formal rule making process. See Iowa Code § 124.201 (2014). I would like the board to pay particular attention to the fact that, unlike federal scheduling which is a formal rule making procedure, Iowa law makes scheduling an informal procedure. Please compare the process in 21 U.S.C. § 811 (2014) with the Iowa version. Also, you will find that same difference between the uniform act and Iowa's version of it. Compare § 201 of the uniform act with Iowa's version in Iowa Code § 124.201 (2014).

http://www.uniformlawcommission.com/ http://www.uniformlaws.org/Act.aspx?title=Controlled Substances Act

This should explain why you are "struggling" and "wrestling" with this issue. See Iowa Code § 124.601 (2014) ("This chapter shall be so construed as to effectuate its general purpose to make uniform the law of

those states which enact it"); Iowa Code §124.602 (2014) ("This chapter may be cited as the '*Uniform Controlled Substances Act*"). The Uniform Controlled Substances Act says scheduling should be a formal rule making process. Iowa's scheduling process is not uniform in this regard.

While I acknowledge this difference in Iowa law, the board still has a statutory duty to advise the legislature on the scheduling of controlled substances in Iowa. The eight factor analysis in Iowa Code § 124.201(1)(a)-(h), and the recommendation requirements in sections 201, 203, 205, 207, 209, and 211, make it clear that the legislature intended the board to give its expert advice to the legislature.

Finally, there is no requirement in lowa that requires lowa to adopt federal scheduling. See lowa Code, § 124.201(4). A reasonable interpretation of this section is that lowa will typically adopt federal scheduling, but there is no requirement that lowa must do so. The section clearly gives the board the option not to follow federal scheduling. This is consistent with federalism. See *Gonzales v. Oregon*, 546 U.S. 243, 271 (2006) ("health and safety is 'primarily, and historically, a matter of local concern").

Federal licensing requires compliance with state laws, and state licensing requires compliance with federal laws. So, any appearance of conflict between state and federal scheduling is resolved by the more restrictive of the two.

The question this board must face is, "When is it appropriate not to adopt federal scheduling?" The fact that thirty-four states and two federal jurisdictions (DC and Guam) have enacted medical marijuana laws over the past two decades is the evidence that state scheduling can and must be adjusted to reflect this change in circumstance. Marijuana is also the only substance in schedule 1 that had extensive medical use in the United States before the state and federal controlled substances acts were enacted. *James v. Costa Mesa*, 700 F.3d 394, 409 (9th Cir. 2012) (Berzon, J., dissenting). Marijuana does not belong in schedule 1.

And, finally, less than 30 days ago federal law was amended to prevent the enforcement of federal marijuana laws that conflict with state medical marijuana laws. Federal law now recognizes state medical marijuana laws. And, this new federal law specifically references lowa.

Page 2 of 4

Consolidated and Further Continuing Appropriations Act, 2015 (H.R. 83, Congressional Session 2014-2015), signed into law by the President on December 16, 2014, Section 538.

I know this summary of the scheduling process does not address all of your concerns, but Iowa law does allow you to recommend scheduling of marijuana that differs from federal scheduling. The next question, then, is whether you should recommend the rescheduling marijuana in Iowa.

COMPOUNDS OR CHEMICALS

At the hearing on January 5, 2015, several members of the board brought up the issue of derivatives of marijuana, compounds of marijuana derivatives, and chemicals in the marijuana plant.

The point was made at the hearing that derivative products made from marijuana, Sativex (dronabinol and cannabidiol) and Epidiolex (cannabidiol), are in clinical trials intended to have them approved by the FDA as products in the United States. The point was also made at the hearing that we currently have Marinol (dronabinol) scheduled as a drug product in both the Iowa and federal schedules.

Also, the point was made at the hearing that cannabidiol is in federal schedule 1, and the board has now voted to recommend that lowa reclassify cannabidiol to schedule 2, in spite of the fact there are no federally approved products that contain cannabidiol. The board has affirmatively recognized that lowa is not required to adopt federal scheduling (see the section above).

However, at the hearing the board made a critical error in logic when comparing marijuana to opium. The argument was made by a member of the board that opium is in schedule 1 and the derivative made from it, morphine, is in schedule 2. The argument was then made that marijuana should be in the same schedule as opium. Opium is actually in schedule 2 and has always been in schedule 2. I am requesting that this board recommend the removal of marijuana from schedule 1 because marijuana has at least as much medical value as opium. The board said it wanted these two plants to be in the same schedule, but actually voted to put them in different schedules.

lowa law currently classifies naturally derived dronabinol in state schedule 3. Because we have naturally derived dronabinol in state schedule 3 and because the board just voted to recommend that lowa place naturally derived cannabidiol in state schedule 2 (because state law says it is medicine), marijuana currently has at least as much, if not more, medical value than opium here in the state of lowa. There are no currently approved drug products that contain either naturally derived dronabinol or naturally derived cannabidiol. Both of these substances are in federal schedule 1. Iowa is leading the way on these two substances which are not approved drug products and lowa should be consistent by leading the way on the plant these two substances are made from.

CONCLUSION

The board should not reject the reclassification of marijuana because marijuana hasn't been approved by the FDA for use as a drug product. Plants in state and federal schedule 2 are not FDA approved drug products. Opium is not an FDA approved drug product. Plants such as opium only have medical use as source material for the products that are made from them. Under that same rationale, marijuana belongs in schedule 2 or lower here in Iowa. The principle drug made from opium, morphine, is in Iowa schedule 2, while the principle drug made from marijuana, dronabinol, is in Iowa schedule 3. Opium is in schedule 2 and morphine is in schedule 2, but only morphine is an FDA approved drug product. Marijuana should be reclassified, not for approval as a drug product, but solely because it is the source material for drug products in schedule 2 and 3 in Iowa. I submitted a statement from the American Academy of Neurology from December 17, 2014, explaining their rationale for recommending the rescheduling marijuana and I ask that you adopt their reasoning as your own. Please reconsider your decision not to recommend rescheduling of marijuana this year.

Respectfully Submitted:

Carl Olsen 130 E. Aurora Ave. Des Moines, IA 50313-3654 515-343-9933

Page 4 of 4

E-FILED 2016 JAN augh 2-149 2015 Broad Meeting Recognition STRICT COURT

From: carl-olsen@mchsi.com
To: Jessen, Lloyd [IBPE]

Cc: Jorgenson, Debbie [IBPE]; Witkowski, Terry [IBPE]; Gavin, Meghan [AG]

Subject: Please add this from the American Academy of Pediatrics

 Date:
 Monday, January 26, 2015 10:09:07 AM

 Attachments:
 Pediatrics-2015--peds.2014-4146.pdf

Please include this in the evidence for my petition for reconsideration of the January 5, 2015, ruling denying my petition requesting the board to recommend the rescheduling of marijuana from schedule 1 to some other schedule (or, none at all, whatever is appropriate).

Position Statement 5 on page 3:

The AAP strongly supports research and development of pharmaceutical cannabinoids and supports a review of policies promoting research on the medical use of these compounds. The AAP recommends changing marijuana from a Drug Enforcement Administration schedule I to a schedule II drug to facilitate this research.

See the attached full report.

Carl Olsen 130 E. Aurora Ave. Des Moines, Iowa 50313-3654 515-343-9933 carl-olsen@mchsi.com

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children



The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal **Update**

COMMITTEE ON SUBSTANCE ABUSE and COMMITTEE ON ADOLESCENCE

This policy statement is an update of the American Academy of Pediatrics policy statement "Legalization of Marijuana: Potential Impact on Youth," published in 2004. Pediatricians have special expertise in the care of children and adolescents and may be called on to advise legislators about the potential impact of changes in the legal status of marijuana on adolescents. Parents also may look to pediatricians for advice as they consider whether to support state-level initiatives that propose to legalize the use of marijuana for medical and nonmedical purposes or to decriminalize the possession of small amounts of marijuana. This policy statement provides the position of the American Academy of Pediatrics on the issue of marijuana legalization. The accompanying technical report reviews what is currently known about the relationships of marijuana use with health and the developing brain and the legal status of marijuana and adolescents' use of marijuana to better understand how change in legal status might influence the degree of marijuana use by adolescents in the future.

DEFINITIONS

For the purpose of clarifying terminology, the following are definitions used in this policy statement and the accompanying technical report¹:

Legalization

Allowing cultivation, sale, and use of cannabis (restricted to adults \geq 21 years of age).

Legalization of Medical Marijuana

Allowing the use of marijuana to treat a medical condition or symptom with a recommendation from a physician.

abstract

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication

Policy statements from the American Academy of Pediatrics benefit from expertise and resources of liaisons and internal (AAP) and external reviewers. However, policy statements from the American Academy of Pediatrics may not reflect the views of the liaisons or the organizations or government agencies that they represent

The guidance in this statement does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

www.pediatrics.org/cgi/doi/10.1542/peds.2014-4146

DOI: 10.1542/peds.2014-4146

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2015 by the American Academy of Pediatrics

Decriminalization

Reducing penalties for cannabisrelated offenses to lesser criminal charges or to civil penalties.

INTRODUCTION

Marijuana is the most commonly used illicit substance among adolescents.2 Recreational sale and possession of marijuana by adults remain illegal in most states and remain illegal under federal law. However, a number of states and local jurisdictions have decriminalized the possession of marijuana for recreational use by adults, reducing penalties to misdemeanors or citations. Many states also have legalized medical marijuana for adults who receive recommendations for use by physicians. Almost all states with medical marijuana laws allow access by minors, though often with greater regulation. States in which marijuana is legal prohibit marijuana sales to and use by minors, but changes in the legal status of marijuana, even if limited to adults, may affect the prevalence of use among adolescents. Although the epidemiologic data are not consistent across states and time periods, with the exception of Michigan and New Mexico, in all states where medical marijuana has been legalized, marijuana use by minors has been stable or has decreased.3 Youth substance use rates depend on a number of factors, including legal status, availability and ease of access of the substance, and perception of harm. For example, although tobacco is easily accessible, youth tobacco use rates have decreased substantially since the 1990s, in conjunction with aggressive public health campaigns warning of the medical consequences of smoking. In Colorado, the passage of the amendment to legalize recreational marijuana occurred in November 2012. Although sales of recreational

marijuana did not start in Colorado until January 1, 2014, the postlegalization 2013 rates of youth use increased.4 It is possible that public health campaigns that effectively communicate the harms associated with teen marijuana use could reduce youth use despite legalization. Legalization campaigns that imply that marijuana is a benign substance present a significant challenge for educating the public about its known risks and adverse effects. Therefore, it is unclear what the impact of legalization of marijuana for adults will have on the prevalence of marijuana use by adolescents, especially if the implementation of legalization includes messaging that minimizes the health and behavioral risks.

Substance abuse by adolescents is an ongoing health concern. Marijuana remains classified in the Controlled Substances Act (21 USC §801-971 [2012]) as a schedule I drug. This classification implies that it has a high potential for abuse, has no currently accepted medical use in the United States, and lacks accepted safety for use under supervision by a physician. Despite this classification by the federal government, marijuana has been legalized for medical purposes in a number of states, in direct opposition to federal law. Since the first policy statement from the American Academy of Pediatrics (AAP) on the legalization of marijuana was published in 2004, limited research has been performed to examine the potential therapeutic effects of marijuana for adults, specifically the class of chemicals known as cannabinoids, which are responsible for most of the medicinal effects of marijuana. This research has demonstrated that both the drugs approved by the US Food and Drug Administration and other pharmaceutical cannabinoids, such as cannabidiol, can be helpful for adults with specific conditions, such as increasing appetite and

decreasing nausea and vomiting in patients with cancer and for chronic pain syndromes,^{5,6} although side effects of dizziness and dysphoria may also be experienced. There are no published studies on the use of medicinal marijuana or pharmaceutical cannabinoids in pediatric populations.

EFFECTS OF MARIJUANA

The adverse effects of marijuana have been well documented, and studies have demonstrated the potential negative consequences of short- and long-term recreational use of marijuana in adolescents. These consequences include impaired shortterm memory and decreased concentration, attention span, and problem solving, which clearly interfere with learning. Alterations in motor control, coordination, judgment, reaction time, and tracking ability have also been documented⁷; these may contribute to unintentional deaths and injuries among adolescents (especially those associated with motor vehicles if adolescents drive while intoxicated by marijuana).8 Negative health effects on lung function associated with smoking marijuana have also been documented, and studies linking marijuana use with higher rates of psychosis in patients with a predisposition to schizophrenia have recently been published,9 raising concerns about longer-term psychiatric effects. New research has also demonstrated that the adolescent brain, particularly the prefrontal cortex areas controlling judgment and decision-making, is not fully developed until the mid-20s, raising questions about how any substance use may affect the developing brain. Research has shown that the younger an adolescent begins using drugs, including marijuana, the more likely it is that drug dependence or addiction will develop in adulthood.10 A recent analysis of 4 large epidemiologic

2

trials found that marijuana use during adolescence is associated with reductions in the odds of high school completion and degree attainment and increases in the use of other illicit drugs and suicide attempts in a dose-dependent fashion that suggests that marijuana use is causative.¹¹

DECRIMINALIZATION EFFORTS AND EFFECTS

The illegality of marijuana has resulted in the incarceration of hundreds of thousands of adolescents, with overrepresentation of minority youth.12 A criminal record can have lifelong negative effects on an adolescent who otherwise has had no criminal justice history. These effects can include ineligibility for college loans, housing, financial aid, and certain kinds of jobs. 13 In states that have passed decriminalization laws, marijuana use is still illegal, although the consequences of possession and use are less punitive. Although these laws are not applicable to adolescents in all states, the changes in the law are intended to address and reduce the long-term effects that felony charges can have on youth and young adults.13 Continued efforts to address this problem are based on issues of social justice, given the disparate rate of adjudication for drug offenses for youth of racial minority groups compared with white youth. Advocates of decriminalization have also sought to increase the availability of drug treatment services.14

CONCLUSIONS

Ultimately, the behavioral and health risks associated with marijuana use by youth should be the most salient criteria in determining whether policies that are enacted are effective in minimizing harm. More information, including the legal status of marijuana for both recreational and medical use, the effect of legal status on rates of use by adolescents and young adults, research on

medical marijuana and the adverse effects of marijuana use, the impact of criminal penalties particularly on minority teens and communities, and adolescent brain development related to substance use, is available in the accompanying technical report.¹

RECOMMENDATIONS

- Given the data supporting the negative health and brain development effects of marijuana in children and adolescents, ages 0 through 21 years, the AAP is opposed to marijuana use in this population.
- 2. The AAP opposes "medical marijuana" outside the regulatory process of the US Food and Drug Administration. Notwithstanding this opposition to use, the AAP recognizes that marijuana may currently be an option for cannabinoid administration for children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate.
- 3. The AAP opposes legalization of marijuana because of the potential harms to children and adolescents. The AAP supports studying the effects of recent laws legalizing the use of marijuana to better understand the impact and define best policies to reduce adolescent marijuana use.
- 4. In states that have legalized marijuana for recreational purposes, the AAP strongly recommends strict enforcement of rules and regulations that limit access and marketing and advertising to youth.
- 5. The AAP strongly supports research and development of pharmaceutical cannabinoids and supports a review of policies promoting research on the medical use of these compounds. The AAP recommends changing marijuana from a Drug Enforcement Administration schedule I to

- a schedule II drug to facilitate this research.
- 6. Although the AAP does not condone state laws that allow the sale of marijuana products, in states where recreational marijuana is currently legal, pediatricians should advocate that states regulate the product as closely as possible to tobacco and alcohol, with a minimum age of 21 years for purchase. Revenue from this regulation should be used to support research on the health risks and benefits of marijuana. These regulations should include strict penalties for those who sell marijuana or marijuana products to those younger than 21 years, education and diversion programs for people younger than 21 years who possess marijuana, point-of-sale restrictions, and other marketing restrictions.
- 7. In states where marijuana is sold legally, either for medical or recreational purposes, regulations should be enacted to ensure that marijuana in all forms is distributed in childproof packaging, to prevent accidental ingestion.
- 8. The AAP strongly supports the decriminalization of marijuana use for both minors and young adults and encourages pediatricians to advocate for laws that prevent harsh criminal penalties for possession or use of marijuana. A focus on treatment for adolescents with marijuana use problems should be encouraged, and adolescents with marijuana use problems should be referred to treatment.
- The AAP strongly opposes the use of smoked marijuana because smoking is known to cause lung damage,¹⁵ and the effects of secondhand marijuana smoke are unknown.
- 10. The AAP discourages the use of marijuana by adults in the presence of minors because of the important influence of role modeling by adults on child and adolescent behavior.

LEAD AUTHORS

Seth D. Ammerman, MD, FAAP Sheryl A. Ryan, MD, FAAP *William P. Adelman, MD, FAAP

COMMITTEE ON SUBSTANCE ABUSE, 2014–2015

Sharon Levy, MD, MPH, FAAP, Chairperson Seth D. Ammerman, MD, FAAP Pamela K. Gonzalez, MD, FAAP Sheryl A. Ryan, MD, FAAP Lorena M. Siqueira, MD, MSPH, FAAP Vincent C. Smith, MD, MPH, FAAP

LIAISONS

Vivian B. Faden, PhD — National Institute of Alcohol Abuse and Alcoholism Gregory Tau, MD, PhD — American Academy of Child and Adolescent Psychiatry

STAFE

James Baumberger, MPP Katie Crumley, MPP Renee Jarrett, MPH

COMMITTEE ON ADOLESCENCE, 2014–2015

Paula K. Braverman, MD, FAAP, Chairperson *William P. Adelman, MD, FAAP Elizabeth Meller Alderman, MD, FSAHM, FAAP Cora C. Breuner, MD, MPH, FAAP David A. Levine, MD, FAAP Arik V. Marcell, MD, FAAP Rebecca Flynn O'Brien, MD, FAAP

LIAISONS

Margo Lane, MD, FRCPC — Canadian Pediatric Society
Benjamin Shain, MD, PhD — American Academy of
Child and Adolescent Psychiatry
Julie Strickland, MD — American College of
Obstetricians and Gynecologists
Lauren B. Zapata, MD, PhD, MSPH — Centers for
Disease Control and Prevention

STAFF

James Baumberger, MPP Karen S. Smith

*The views expressed are those of the author and do not necessarily reflect the policy or position of the Department of the Army, Department of Defense, or the US Government.

REFERENCES

 American Academy of Pediatrics, Committee on Substance Abuse and Committee on Adolescence. Technical

- report: the impact of marijuana policies on youth: clinical, research, and legal update. *Pediatrics*. 2015; (in press)
- Monitoring the Future. Trends in 30-day prevalence of use of various drugs in grades 8, 10, and 12. Table 3. Ann Arbor, Ml: University of Michigan; 2013. Available at: www.monitoringthefuture. org/data/10data/pr10t3.pdf
- Lynne-Landsman SD, Livingston MD, Wagenaar AC. Effects of state medical marijuana laws on adolescent marijuana use. Am J Public Health. 2013;103(8): 1500–1506. Available at: www. pubmedcentral.nih.gov/articlerender. fcgi?artid=4007871&tool= pmcentrez&rendertype=abstract. Accessed October 1, 2014
- Substance Abuse and Mental Health Services Administration. Results from the 2013 NSDUH: Summary of National Findings. In: N.S.D.U.H. series H-48, Vol HHS Public. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2014:14–4863. Available at: www.samhsa.gov/data/NSDUH/ 2013SummNatFindDetTables/ NationalFindings/NSDUHresults2013.htm. Accessed October 1, 2014
- Aggarwal SK, Carter GT, Sullivan MD, ZumBrunnen C, Morrill R, Mayer JD. Medicinal use of cannabis in the United States: historical perspectives, current trends, and future directions. *J. Opioid Manag.* 2009;5(3):153–168. Available at: www.ncbi.nlm.nih.gov/pubmed/ 19662925. Accessed October 3, 2014
- Cotter J. Efficacy of crude marijuana and synthetic delta-9-tetrahydrocannabinol as treatment for chemotherapy-induced nausea and vomiting: a systematic literature review. *Oncol Nurs Forum*. 2009;36(3):345–352
- Schweinsburg AD, Nagel BJ, Schweinsburg BC, Park A, Theilmann RJ, Tapert SF. Abstinent adolescent marijuana users show altered fMRI response during spatial working memory. *Psychiatry Res.* 2008;163(1): 40–51
- 8. National Highway Traffic Safety Administration. Marijuana and actual

- driving performance. Publication no. 808–078. Washington, DC: US Department of Transportation; 1993. Available at: http://druglibrary.org/schaffer/misc/driving/driving.htm. Accessed October 3, 2014
- Moore THM, Zammit S, Lingford-Hughes A, et al. Cannabis use and risk of psychotic or affective mental health outcomes: a systematic review. *Lancet*. 2007;370(9584):319–328. Available at: www.ncbi.nlm.nih.gov/pubmed/ 17662880. Accessed October 3, 2014
- Schepis TS, Adinoff B, Rao U.
 Neurobiological processes in adolescent addictive disorders. Am J Addict. 2008;17 (1):6–23. Available at: www. pubmedcentral.nih.gov/articlerender. fcgi?artid=2274940&tool= pmcentrez&rendertype=abstract. Accessed September 3, 2014
- 11. Silins E, Horwood LJ, Patton GC, et al. Young adult sequelae of adolescent cannabis use: an integrative analysis. Lancet Psychiatry. 2014;1(4):286–293. Available at: www.thelancet.com/journals/a/article/PIIS2215-0366(14) 70307-4/fulltext. Accessed September 10, 2014
- 12. Science D. United States marijuana arrests (1982–2008). *Bull Cannabis Reform.* 2009. Available at: www. drugscience.org/States/US/US_total.htm. Accessed October 1, 2014
- Males M, Buchen L. Reforming Marijuana Laws: Which Approach Best Reduces the Harms of Criminalization? San Francisco, CA: Center on Juvenile and Criminal Justice; 2014:1–13. Available at: www.cjcj. org/uploads/cjcj/documents/cjcj_ marijuana_reform_comparison.pdf
- Drug Policy Alliance. Reforming marijuana laws. 2014. Available at: www. drugpolicy.org/reforming-marijuanalaws. Accessed October 1, 2014
- Volkow ND, Baler RD, Compton WM, Weiss SRB. Adverse health effects of marijuana use. N Engl J Med. 2014; 370(23):2219–2227. Available at: www. nejm.org/doi/full/10.1056/ NEJMra1402309?query=featured_ home&. Accessed July 30, 2014

The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update

COMMITTEE ON SUBSTANCE ABUSE and COMMITTEE ON ADOLESCENCE *Pediatrics*; originally published online January 26, 2015;

DOI: 10.1542/peds.2014-4146

Updated Information & Services	including high resolution figures, can be found at: http://pediatrics.aappublications.org/content/early/2015/01/20/peds.2014-4146
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://pediatrics.aappublications.org/site/misc/Permissions.xhtml
Reprints	Information about ordering reprints can be found online: http://pediatrics.aappublications.org/site/misc/reprints.xhtml

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2015 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.



PEDIATRICS

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update

COMMITTEE ON SUBSTANCE ABUSE and COMMITTEE ON ADOLESCENCE *Pediatrics*; originally published online January 26, 2015; DOI: 10.1542/peds.2014-4146

The online version of this article, along with updated information and services, is located on the World Wide Web at:

http://pediatrics.aappublications.org/content/early/2015/01/20/peds.2014-4146

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2015 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

