

# **Pennsylvania Chapter**

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**Testimony on behalf of the**

**Pennsylvania Chapter, American Academy of Pediatrics**

**To the Pennsylvania State Senate  
Aging & Youth Committee**

**Public Hearing on the Potential Effect of Legalization of Adult-Use Marijuana  
on Children and Youth**

**April 12, 2022**

Good morning, Chairwoman Ward, Chairwoman Collett and the members of the Senate Aging & Youth Committee. Thank you to those whose testimony preceded my own; it is a pleasure to learn from each of you and hear your unique perspectives on a key issue impacting children's health.

I am Dr. Sheryl Ryan, present today to offer my expertise on the implications of the legalization of adult-use marijuana for the pediatric population. I join the hearing this morning on behalf of the Pennsylvania Chapter of the American Academy of Pediatrics (PA AAP) and its more than 2,300 pediatrician members from across the Commonwealth. I currently serve as the Division Chief within the Division of Adolescent Medicine at Penn State Hershey Children's Hospital as well as Professor of Pediatrics at the Penn State College of Medicine. Over the course of my career, I have sat on or been involved with committees and national societies pertinent to pediatric and adolescent high-risk behaviors, focusing on substance use, abuse and prevention. This includes but is not limited to my recent tenure as the Chair of the National American Academy of Pediatrics' Committee on Substance Use and Prevention. While chairing that Committee, I authored and co-authored numerous clinical and technical reports on substance use and abuse, focused largely on marijuana and alcohol use. I often have the opportunity to connect with my physician colleagues on this topic. These conversations with colleagues in conjunction with extensive research have informed my position on this issue. I am eager to share with each of you the context and results of such conversations and research. The subject of this morning's hearing is close to my practice and my heart; I hope we can work together to secure a policy that best protects the health and well-being of children and adolescents.

First, I would like to recognize and applaud the Aging & Youth Committee for prioritizing this issue and calling a hearing to address critical considerations related to pediatric health and adult-use of marijuana. In tackling this issue, you signal to Pennsylvanians that the health of their children is of paramount importance for the success of our state and communities. As a pediatrician, child advocate and parent, thank you.

On behalf of the PA AAP, Pennsylvania's largest organized body of pediatric providers, I am here to express our support for the decriminalization, but not legalization, of adult-use marijuana in our keystone state. As an organization, we oppose the legalization of marijuana and support the decriminalization of possession of small amounts of marijuana, reflecting the policy statement of the national American Academy of Pediatrics (AAP). This position is rooted in a concern for the health, safety and well-being of youth who come into contact with marijuana.

The developing brains of children and adolescents are incredibly pliable. Studies show that the brain, particularly the prefrontal cortex – which is mainly responsible for executive functioning and decision-making - continues to mature through adolescence and up to the middle-20's and so for all of the patients I see, none of their brains are fully developed. While this pliability can make the adolescent brain a rich medium by which to absorb information, build skills and develop critical thinking tools, it can be a vulnerability, and can leave adolescents much more susceptible than adults to certain experiences and environmental factors.

We now know that many substances, such as alcohol and nicotine, impact youth in a very different way than adults. Such implications can be long-lasting and cause adverse health outcomes. This is also the case with the tetrahydrocannabinol, or THC found in marijuana. THC is the main psychoactive compound in marijuana and it is what is responsible for the symptoms and feelings of intoxication, or “being high.” While we are still learning much about the short-term and long-term effects of THC and marijuana use, we do know that it can have significant health effects on infants exposed in utero, on children who ingest marijuana accidentally, and on adolescents who smoke marijuana regularly. For example, we do know that marijuana-use by pregnant women is common and is one of the most widely used substances during pregnancy in the U.S., and can impact gestational and fetal neurobehavioral development. We also know that with the increased availability of both recreational and medicinal marijuana products across the U.S., increasing numbers of toddlers and younger children are being seen in our emergency departments with life-threatening accidental ingestions, particularly of edible products that look like regular cookies, gummies, and other food items that are not packaged in child-proof packaging.

As is the case for many substances, the adolescent experience and resulting impacts are distinct from what we see in adults. For example, we know that for those adolescents who use marijuana regularly, 1 in 6 will develop dependence or addiction, and will experience withdrawal if they attempt to quit, and many will require treatment for this addiction. Beyond the known short-term effects of impaired motor coordination and memory deficits, we also know that longer-term, heavy use results in higher rates of mental health conditions such as anxiety, and psychosis. We also know that marijuana smoke and vapor inhalation can result in chronic bronchitis and impaired lung function. Studies have also shown that adolescent marijuana use can result in significant effects on both brain structure and function. For example, certain key areas of the brain have been found to be reduced with chronic marijuana use and neurological studies looking at brain function has found significant deficits in short-term memory, visual-spatial functioning, and learning abilities. Many of these effects have been found to be permanent, persisting into adulthood. These indicators are incredibly important in assessing the developmental health of children and adolescents and when we see any declining developmental indicator in our youth, it is cause for concern.

It must also be noted that marijuana remains the most prevalent illicit drug detected in fatal car accidents in the U.S. In addition, driving intoxicated, by either marijuana or alcohol, is the leading cause of death among adolescents and young adults; when alcohol and marijuana are combined, the risk increases more than 50-90%. With no commercially available test to detect the degree of marijuana-related insobriety and with the possibility that cognitive impairment from marijuana can last up to hours and even days, the risk to children in cars as drivers or passengers will be even greater when marijuana becomes more widely available and legal. This has already been seen in states where adult-use marijuana has been legalized.

We can reasonably expect that, with its legalization, the prevalence of marijuana use among both adults and adolescents will increase in our state, and will be present in households both in greater amounts or for the first time. We also know that legalization has reduced adolescent’s

perceptions of marijuana being harmful and this has resulted in an increase in youth using marijuana. We have no reason to suspect that youth in Pennsylvania will react any differently from those in other states. Thus, greater use in adults, assures greater exposure of children and teens to marijuana, with the possibility of more accidental ingestions and greater use by teens, especially with lower perceived risk of marijuana use being harmful. Let us not forget that what we do as parents – and not what we say – has a strong influence on what our teens do. So, with a parent or a role-model - smoking marijuana or consuming a cannabis-infused product, we can be assured that this will signal to our youth that marijuana-use is acceptable and safe.

It is the position of the PA AAP that, if we can better protect and foster children's behavioral and developmental health by limiting their exposure to marijuana, we must do so; however, we must do so in a way that does not disadvantage children's behavioral and developmental health in other ways. Great injustice has been wrought from marijuana-related convictions including among adolescents. This has disproportionately impacted communities of color within which many individuals, particularly young Black men, have been traumatized by undergoing arrest, court proceedings and imprisonment. While it is my professional opinion as well as the position of the PA AAP to advise both adult and adolescents alike to avoid smoking or vaporizing any substance, we do not believe that criminal convictions for possession of small amounts positively affects any health or social outcome.

The question of whether or not to legalize marijuana for adult-use is difficult and needs to consider many factors as well as the acknowledgement that there has traditionally been few public health and educational resources to address marijuana's many effects. For me, what is simple is the need to advocate for policies that benefit the health and well-being of my pediatric patients and those of my colleagues across the state.

In concluding, let me state that my clinical and research experiences have impressed upon me the certainty that marijuana-use and exposure in children and adolescents do not improve their health and well-being, but are far more likely to lead to negative health outcomes. The decriminalization, but not legalization, of marijuana use and possession addresses the concerns that I've laid out for you today through its limiting exposure and usage and by addressing the racial and socioeconomic disadvantages that permeate marijuana-related criminal convictions.

If you have any questions about what I've shared, I am more than happy to answer questions now, or in follow-up communications.

Thank you, again, to Chairwoman Ward, Chairwoman Collett and the members of the Senate Aging & Youth Committee for your time and attention. My colleagues and I at the PA AAP are grateful for the opportunity to have addressed you all today.