

Good afternoon, I am Jill Rinehart, a practicing pediatrician with Hagan, Rinehart & Connolly Pediatricians, in Burlington, Vermont. I am the American Academy of Pediatrics Vermont Chapter President and clinical faculty at the Robert Larner, MD School of Medicine at the University of Vermont. I am also the mother of two teenage sons (ages 15 and 17), who attend South Burlington High School.

(I was asked to comment today about prevention efforts to help thwart marijuana use by teenagers in an environment that is legalizing marijuana —normalizing MJ use)

First to clarify: legalizing marijuana has decreased youth's perception of harm associated with marijuana in both Colorado and Washington State.

- 2015 data from Washington DC
(*JAMA Pediatr.* 2017 Feb 1;171(2):142-149. doi: 10.1001/jamapediatrics.2016.3624.)
- Association of State Recreational Marijuana Laws With Adolescent Marijuana Use.
(*Cerdá M1, Wall M2, Feng T3, Keyes KM4, Sarvet A5, Schulenberg J6, O'Malley PM7, Pacula RL8, Galea S9, Hasin DS5.*)

Teen use is linked to their perception of harm, the availability and the cost of the product

CONCLUSIONS AND RELEVANCE:

Among eighth and 10th graders in Washington, perceived harmfulness of marijuana use **decreased** and marijuana use **increased** following legalization of recreational marijuana use. In contrast, Colorado did not exhibit any differential change in perceived harmfulness or past-month adolescent marijuana use following legalization* their teen use rates were incidentally already the highest in the country.

Regardless these authors concluded: “Even a cautious interpretation of the findings suggests an investment in **evidence-based adolescent substance use prevention programs** in any additional states that may legalize recreational marijuana use.”

Industry depends on new users, Dr. Sheryl Ryan AAP adolescent medicine doctor states:

“The budding, multibillion dollar marijuana industry would have us all believe that cannabis/marijuana products are safe and effective for many medical conditions and free of danger for recreational use. This attitude appears to be taking root among young people.” - See more at: <https://www.aap.org/en-us/aap-voices/Pages/Dangers-of-Marijuana.aspx#sthash.IYdP9PKb.dpuf>

Discussing MJ use with adolescents: We “Focus on [the] concern for the adolescent's health. Give key facts, and engage in discussion about why they're choosing to use marijuana and what they gain from it. Explain clearly that for an adolescent, marijuana is just not benign—regardless of current policies and laws—and that it is addictive. They may also need to hear that if they are a regular or heavy user and they try to quit by going "cold turkey," they will most likely experience physical symptoms of withdrawal.” - See more at: <https://www.aap.org/en-us/aap-voices/Pages/Dangers-of-Marijuana.aspx#sthash.IYdP9PKb.dpuf>

- As a Pediatrician my real worries: parents who legally smoke MJ— put their children at risk because MJ affects attention to the most important resource we have— our children —need to add prevention efforts about this
- Safe storage of marijuana— toddlers, and youth access

- Realities: youth just this week— had anxiety disorder— perceives relief when high and when she is high she has no motivation or any reason to do something different—but when she is not high her anxiety is paralyzing (cannot go in to a job to ask for an application).
- This is the definition of substance use disorder— and MJ is addictive. This patient firmly believed that MJ is organic, natural, has receptors in our bodies, etc.
- * Messaging of prevention must focus on the addiction and science behind use
 - * Public service messages, etc..

So any Plan for prevention MUST include:

- Teaching the facts about marijuana— that it is an addictive substance, decreases short term memory, problem solving capacity, motor reflexes are dulled, increases the risk of psychosis, schizophrenia
- Most chronic users (adults began) using under age 21
- Need to be efforts put forth to warn pregnant women of the dangers of marijuana to the developing fetus—NOT a suitable or safe anti-nausea medicine (Dr. Rettew provided those peer reviewed articles from this year House members)
- If Urine OR meconium (first BM of infant) is positive for MJ we are mandated to report to DCF
- Must survey all pregnant mothers about their use
- Include counseling for substance use disorder, anxiety and adolescent programs (still too few and difficult to access in most parts of our state)

Prevention efforts of the American Academy of Pediatrics Vermont Chapter:

We have submitted a grant to the National AAP for Healthy People 2020 that will share concise science reviews of the data on marijuana use (provided by Dr. Rettew, Dr. Porter, Dr. Hughes and myself along with AAP resources) to disseminate to Medical homes who need to “up their game” when working with patients and families on all of the above.