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## Adolescent THC Usage in Virginia: Post-Legalization Challenges and Strategies for Schools

David Naff

Virginia Commonwealth University, naffdb@vcu.edu

Meg Sheriff

Virginia Commonwealth University, SHERIFFMM@vcu.edu

Jill Flynn

Virginia Commonwealth University, FLYNNJM2@vcu.edu

*See next page for additional authors*

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**Authors**

David Naff, Meg Sheriff, Jill Flynn, Marzia Farhana, Kris Herakovich-Curtis, Gerron Scott, Fred Gatty, Priyadarshini Pattath, Diane Williams, Kiana Bradford, Reena Desai, Lauren Powell, and Lisa Gwyn



**VCU**

School of Education



**ADOLESCENT THC  
USAGE IN VIRGINIA:  
POST-LEGALIZATION  
CHALLENGES AND  
STRATEGIES FOR SCHOOLS**

*a MERC research and policy brief*

# ADOLESCENT THC USAGE IN VIRGINIA: POST-LEGALIZATION CHALLENGES AND STRATEGIES FOR SCHOOLS

## A MERC RESEARCH AND POLICY BRIEF

David Naff, Meg Sheriff, Jill Flynn, Marzia Farhana, Kris Herakovich Curtis,  
Gerron Scott, Fred Gatty, Priyadarshini Pattath, Diane Williams,  
Kiana Bradford, Reena Desai, Lauren Powell, Lisa Gwyn

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Tetrahydrocannabinol (THC) is a chemical derived from the plant *Cannabis sativa*, and parts of cannabis products that contain substantial amounts of THC are commonly referred to as marijuana.<sup>1</sup> **Marijuana is the most commonly used “illicit” drug in the United States,<sup>2</sup> including among youth under the age of 18.<sup>3</sup>** Recreational marijuana use has been legalized in [25 US states and territories](#), and medical marijuana use is legal in [41 US states and territories](#). As marijuana has been increasingly legalized, access has increased to new products containing THC, including vaporizing concentrates ([vaping](#) and [dabbing](#)) and [edibles](#) or [drinkables](#).

The US Surgeon General states that **there is no safe amount of cannabis for adolescents to consume.**<sup>4</sup> Adolescence is a time of rapid structural changes in the brain (particularly in the cerebral cortex) that correspond with significant shifts in cognitive development.<sup>5</sup> Correspondingly, THC usage during this time period may be associated with several negative impacts, such as compromised physical growth in the brain associated with executive functions<sup>6</sup> as well as cognitive defects,<sup>7</sup> including underdeveloped working memory,<sup>8</sup> increases in attentional impulsiveness,<sup>9</sup> and problems with memory and learning.<sup>10</sup> Perhaps correspondingly, adolescent marijuana usage is connected with a variety of [negative academic outcomes](#). Use of marijuana before age 18 is also associated with a significantly higher likelihood of developing neuropsychological disorders like anxiety, depression, and schizophrenia.<sup>11</sup> Adolescent marijuana usage is also associated with

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<sup>1</sup> National Center for Complementary and Integrative Health

<sup>2</sup> King et al. (2022)

<sup>3</sup> Morean et al. (2021)

<sup>4</sup> Donnelly et al. (2022)

<sup>5</sup> Albaugh et al. (2021)

<sup>6</sup> Albaugh et al. (2021)

<sup>7</sup> Kaliamurthy & Camenga (2022)

<sup>8</sup> Murray et al. (2022); Pintori et al. (2023)

<sup>9</sup> Albaugh et al. (2021); Rapparport & Collings (2023)

<sup>10</sup> Lin et al. (2022)

<sup>11</sup> Pintori et al. (2023)

significantly higher rates of suicidality,<sup>12</sup> particularly among females.<sup>13</sup> THC usage prior to adulthood is also associated with a higher likelihood of adult drug dependency,<sup>14</sup> as well as increased emergency room visits and motor vehicle accidents.<sup>15</sup> Recent research related to manufactured THC products (e.g., concentrates in the form of edibles or vapes) has linked its usage to a higher likelihood of anxiety and panic attacks.<sup>16</sup>

Despite these concerns, THC usage has also become increasingly normalized among adolescents,<sup>17</sup> even though the [legal age for recreational use](#) is 21. However, **it is unclear whether legalization efforts are directly to blame for the rise in youth marijuana use.** Analyses of changes in THC usage among youth in states where it has been legalized for recreational use sometimes show that it has increased,<sup>18</sup> and other times show that it has not changed significantly,<sup>19</sup> or even decreased.<sup>20</sup> However, **research suggests that synthetic marijuana use (e.g., vaping) among youth may be more prevalent in states that have legalized it.**<sup>21</sup> A key challenge with clearly understanding the impact of THC usage on adolescents is that most states passed the legalization of marijuana in close proximity to the COVID-19 pandemic. During this time, it was increasingly difficult to collect consistent data, due to the stay at home orders.<sup>22</sup>

Recreational marijuana usage became [legal in Virginia in 2021](#) for individuals over 21. The purpose of this research and policy brief is to explore how THC usage among youth has changed in Virginia since legalization and specifically what the implications are for PK-12 schools, including strategies for intervention. The information in this brief comes from peer-reviewed research literature as well as publicly available data on youth marijuana usage in the US and Virginia and corresponding school disciplinary outcomes in the state and [MERC region](#). It also includes an analysis of federal and Virginia state policies related to THC usage, as well as school board policies and codes of conduct in MERC divisions related to this topic. The brief begins by exploring [recent trends in THC usage among PK-12 aged youth](#), followed by a discussion of [how school systems can effectively address THC usage](#) in a post-legalization policy context. It then offers an [analysis of relevant policies](#) and concludes with a series of [key takeaways and recommendations](#). Throughout the brief, “marijuana,” “cannabis,” and “THC” are referenced depending on how it is referred to in the cited information, but it is most commonly described in its chemical form of THC that is present in all of its iterations, including synthetic versions (e.g. vapes, edibles, and drinkables).

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<sup>12</sup> [Ball et al. \(2023\)](#)

<sup>13</sup> [Pintori et al. \(2023\)](#)

<sup>14</sup> [Ball et al. \(2023\)](#)

<sup>15</sup> [Donnelly et al. \(2022\)](#)

<sup>16</sup> [Firth et al. \(2022\)](#)

<sup>17</sup> [Padon et al. \(2022\)](#)

<sup>18</sup> [Harrell et al. \(2022\); Lin et al. \(2022\)](#)

<sup>19</sup> [Donnelly et al. \(2022\)](#)

<sup>20</sup> [Cyrus et al. \(2021\)](#)

<sup>21</sup> [Harrell et al. \(2022\)](#)

<sup>22</sup> [Donnelly et al. \(2022\)](#)

## WHAT ARE THE RECENT TRENDS IN MARIJUANA USAGE AMONG PK-12 AGED YOUTH?

Cannabis use among adolescents has continued to increase over the past five years, even as the use of cigarettes, alcohol, and most illicit drugs has decreased during that time period.<sup>23</sup> This suggests that **marijuana is experiencing a uniquely persistent surge in usage relative to other substances among PK-12 age youth**. A steadily growing market share of marijuana usage among adolescents, in particular, comes in the form of edibles and concentrates for dabbing and vaping,<sup>24</sup> likely attributable to these products being increasingly promoted after the legalization of recreational usage over the age of 21.<sup>25</sup> This is also potentially due to THC edibles and concentrates being easier to conceal than smoking marijuana.<sup>26</sup> This section details recent trends in marijuana usage nationally as well as in the Commonwealth of Virginia. It also provides trends in school disciplinary outcomes related to marijuana possession, usage, and distribution in its various forms in schools.

### National Trends

[Monitoring the Future](#) collects annual survey data about marijuana usage within the previous year from 8th, 10th, and 12th grade students. According to their data, **lifetime marijuana usage among youth has declined over the past 20 years**, as depicted in the following table.

*Table 1. Youth Lifetime Marijuana Usage (2002-2022)*

	Marijuana Usage (any form)		
	2002	2022	% Difference
8th Grade	19.2%	11.0%	-8.2%
10th Grade	38.7%	24.2%	<b>-14.5%</b>
12th Grade	<b>47.8%</b>	<b>38.3%</b>	-9.5%

While 12th grade students have remained the most likely to report lifetime marijuana usage, 10th grade students have shown the greatest decrease over the past two decades. The following figure depicts reported marijuana usage within the previous year from 2019-2022.

<sup>23</sup> [Clements-Nolle et al. \(2022\)](#)

<sup>24</sup> [Firth et al. \(2022\)](#)

<sup>25</sup> [Roth et al. \(2022\)](#)

<sup>26</sup> [Clements-Nolle et al. \(2022\)](#)

Figure 1. Youth Marijuana Usage (Any Form) Within the Previous Year (2019-2022)



**All grades showed a slight decline in reported yearly marijuana usage over the four years.** Still, some of that decline may be related to disrupted data collection due to the pandemic.

The [National Survey on Drug Use and Health \(NSDUH\)](#) is an annual survey from the Substance Abuse and Mental Health Services Administration (SAMSHA), and uses a probability sample to represent the nation as a whole and the 50 individual states, including the District of Columbia. According to the [2021 SAMASHA report](#) from survey findings, **an estimated 1.5 million youth ages 12 to 17 used marijuana within the previous month, and 40% did so via vaping.** According to the report, adolescents aged 12 to 17 had the highest percentage of marijuana vaping among marijuana users of any age group within the previous month and most commonly consumed it unflavored in combination with nicotine. The following table depicts data from Monitoring the Future on reported daily marijuana usage in various forms among adolescents in 2022.

Table 2. Youth Daily Marijuana Usage (2022)

	Marijuana (any form)	Vaping Marijuana
8th Grade	0.7%	0.6%
10th Grade	2.1%	1.3%
12th Grade	<b>6.3%</b>	<b>2.1%</b>

These data show that 12th grade students were 3.5 times as likely to report vaping marijuana daily than 8th grade students, and nine times as likely to report daily marijuana usage in any form. Overall, these data indicate that **adolescent marijuana usage has declined over the past 20 years but that vaping has been an increasingly popular way of consuming it in the past few years.**

### Virginia and MERC Region Trends

Data from the [2022 Virginia Young Adult Survey](#) by the [Virginia Department of Health](#) (VDH) showed that **45% of 18-20 year olds in Virginia have used cannabis at some point in their lives.** Of all survey respondents who had used cannabis, **14% reported first use between the ages of 12-14 and 39% between the ages of 15-17.** Only 2% reported first use before the age of 11. Approximately 75% of young adult cannabis users in Virginia considered it reasonably easy to get. The following table depicts findings from the [2021 VDH Youth Risk Behavior Survey](#)<sup>27</sup> about youth usage of marijuana and vaping within the past 30 days in Virginia.

*Table 3. Virginia Youth Marijuana Usage and Vaping Over the Past Month (2021)*

	Marijuana	Vaping <sup>28</sup>
Age 15 or younger	8%	10.5%
Age 16-17	<b>16.5%</b>	<b>17.0%</b>

The rate of **reported marijuana usage among Virginia youth roughly doubled after the age of 16,** and of the youth who reported vaping, approximately 2% purchased products in a convenience store, gas station, or supermarket.

[Discipline, Crime, and Violence \(DCV\)](#) data from the Virginia Department of Education (VDOE) offers insights into how often marijuana usage, possession, and distribution is detected in schools. DCV data is indicative of when incidents led to some sort of disciplinary consequence, such as suspension or expulsion. Within the data, several codes could be related to marijuana, including: *Schedule I and II Drug Use, Schedule I and II Drug Possession, Schedule I and II Drug Sale/Distribution, Possession and Use of Synthetic Marijuana, Sale or distribution of Synthetic Marijuana, Marijuana Use, Marijuana Possession, Marijuana Sale/Distribution, Drug Violations Schedule I and II Anabolic Steroid, Marijuana--Sale/Dist.* The most recent data available is from the 2020-21 academic year, but the numbers were artificially deflated by disrupted data collection during the COVID-19 pandemic. Additionally, not all MERC divisions routinely include infraction codes specific to marijuana usage, possession, or distribution. Thus, the following table combines all schedule I drug and marijuana usage infractions and focuses on the 2018-19 school year (the last complete year of data available).

<sup>27</sup> Most recently available data, n = 3,015

<sup>28</sup> Includes marijuana as well as non-marijuana-based vaping



Table 4. DCV Schedule I or Marijuana Infractions in VA and the MERC Region (2018-19)

Type of infraction	VA	MERC Region
Schedule I drug or marijuana	1,669	153
% of all DCV infractions	0.66%	0.45%

Overall, these numbers suggest that **drug-related infractions involving marijuana make up a slightly smaller percentage of overall infractions than they do at the state level.** Additionally, the VDOE makes [Student Behavior Administrator Response \(SBAR\)](#) data publicly available, which depicts how administrators responded to any incidents that occurred on school property, buses, or at school events. These may or may not have resulted in exclusionary disciplinary actions. The only data currently available is from 2021-22, and the following table depicts all drug-related student behaviors that led to administrative response in Virginia and the MERC region that year.

Table 5. SBAR Drug-Related Incidents in VA and the MERC Region (2021-2022)

Type of infraction	VA	MERC Region
All drug-related incidents	6,053	809
% of all SBAR incidents	1.47%	<b>1.56%</b>

These data indicate that drug-related incidents make up a slightly larger percentage of all SBAR incidents in the MERC region than they do in the state. Taken together with DCV data, this suggests that **drug-related incidents may be slightly more prevalent in the MERC region than at the state level, but they are less likely to result in disciplinary action.**

## WHAT ARE THE IMPACTS OF YOUTH THC USAGE IN SCHOOLS, PARTICULARLY AFTER LEGALIZATION?

Although PK-12 schools primarily serve youth under the legal age to partake in recreational use of marijuana, they are still impacted by it. This often includes synthetic THC usage in the form of [edibles](#) or [vapes](#), and this section details the corresponding challenges that surface in school settings as well as [which student groups are particularly impacted](#).

## Edible Usage

- Brownies and cookies are currently the most common forms of edibles, making them more attractive and convenient for adolescents.<sup>29</sup>
- Because of legalization, the market for edibles is expanding,<sup>30</sup> and PK-12 age youth may gain easy access through the use of social media to learn where they are provided (commercially or by peers).<sup>31</sup>
- Edible versions of marijuana are also much more difficult to detect in school settings than when it is consumed through smoking or vaping, as there is often no detectable smoke, vapor, or odor.<sup>32</sup> A 2022 study by Firth and colleagues found that **when edible use is more common in their school, students are twice as likely to join their peers in usage.**<sup>33</sup>

## Vaping

- Like edibles, vaporizing concentrates are often flavored, potentially increasing their appeal to youth.<sup>34</sup> In fact, [successful lawsuits](#) have accused companies that prominently produce vaporizing products (like Juul) of introducing sweet flavors in order to specifically market to teenagers, a population that has largely helped to drive their profits.
- Vaping is increasingly occurring in school settings, most often in bathrooms.<sup>35</sup> In a 2022 study, Cole and colleagues surveyed school staff and found that **32% had seen a student vaping at school within the past 30 days and over 90% of the schools included in the sample reported recent occurrences of vaping.**

## Exposure to Advertising and Proximity to Distributors

- There are documented concerns that the presence of nearby cannabis retail outlets may influence youth by normalizing cannabis use, exposing them to pro-use messages, and increasing the availability and variety of cannabis products.<sup>16</sup>
- High school **proximity to cannabis retailers is associated with significant increases in student use of edibles, smoking, and dabbing** (but the connections are less pronounced for middle school students).<sup>36</sup> Proximity is also associated with increased dropout rates among high school students.<sup>37</sup>
- Additionally, **exposure to advertising about recreational cannabis products is associated with adolescents perceiving them as less harmful** and using them more

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<sup>29</sup> Lin et al. (2022)

<sup>30</sup> Paschall et al. (2021)

<sup>31</sup> Madson (2023)

<sup>32</sup> Morean et al. (2021)

<sup>33</sup> Firth et al. (2022)

<sup>34</sup> Gaiha et al. (2022)

<sup>35</sup> Dai et al. (2021); Liu, Roberts et al. (2023)

<sup>36</sup> Firth et al. (2022)

<sup>37</sup> Jarrold-Grapes, 2023

frequently.<sup>38</sup> Conversely, exposure to advertising about the harms of vaping is associated with lower risk among adolescents.<sup>39</sup>

## Academic Impacts

- There are a number of negative academic impacts associated specifically with the legalization of recreational marijuana. In a [2023 report](#) for the Federal Trade Commission, Jarold–Grapes found that after legalization in Oregon, there were increases in chronic absenteeism, as well as decreases in academic achievement and increases in dropout for high school students in the state.
- This is consistent with other research documenting **potential academic impacts of marijuana usage under the age of 18, which is associated with a lower likelihood of on-time graduation.**<sup>40</sup>

## Particularly Impacted Student Groups

There is evidence that certain student groups may be particularly prone to THC usage, in and out of school settings. This section details how this varies based on [age](#), [grade](#), [gender](#), [race and ethnicity](#), and [socioeconomic status](#) (SES).

### *Age and Grade*

- Data from the [2021 VDH Youth Risk Behavior \(YRB\) Survey](#) shows that Virginia youth aged 15 and younger are less likely to use vape products and about half as likely to use marijuana overall as youth 16 or older. Correspondingly, **marijuana usage tends to increase by grade level**, with 9th grade students reporting usage of vapor products at less than half the rate of 12th grade students and about a third of the rate of reported marijuana usage in the past 30 days.
- The vast majority of research summarized in this brief focused specifically on the usage of marijuana in its various forms by high school students, with some studies finding that middle school students tend to be less susceptible.<sup>41</sup> Even in research focused on middle school student marijuana usage, it tended to be more prevalent in higher grades.<sup>42</sup>

### *Gender*

- VDH YRB Survey data from 2021 shows that male and female students were roughly equally as likely to have tried marijuana for the first time before the age of 13, and females were slightly more likely to have used marijuana within the past 30 days (14.7%) than males (12.1%), although male marijuana usage tended to increase more

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<sup>38</sup> [Firth et al. \(2022\)](#)

<sup>39</sup> [Hair et al. \(2023\)](#); [Madson \(2023\)](#); [Struik et al. \(2023\)](#)

<sup>40</sup> [Hinckley et al. \(2022\)](#)

<sup>41</sup> e.g. [Cole et al. \(2022\)](#); [Firth et al. \(2022\)](#)

<sup>42</sup> [Clements–Nolle et al. \(2022\)](#)

rapidly with age. Females were much more likely to have used a vapor product in the last 30 days (18.2%) than males (10.6%), and this disparity tended to persist with age.

- **Research tends to show relatively similar cannabis usage among male and female students,**<sup>43</sup> and suggested that while male usage has traditionally been higher, it has increasingly converged with female usage in recent years.<sup>44</sup> Additionally, there is evidence that males are more likely to perceive minimal risk associated with marijuana,<sup>45</sup> and females are more likely to experience adverse psychosocial impacts of usage (e.g., anxiety).<sup>46</sup>

### *Race and Ethnicity*

- VDH YRB Survey data from 2021 shows that Black students are the most likely to have tried marijuana before the age of 13 (4.6%), while White students are the most likely to have used marijuana (15.6%) or vape (16.1%) in the past 30 days. White students are also the most likely to report vaping daily (5.3%).
- Similarly, [Morean and colleagues \(2021\)](#) found that White male adolescents were the most likely to vape cannabis products, and [Banks and colleagues \(2021\)](#) found that Black adolescents were less likely to use marijuana overall than their White peers, although the rates of marijuana usage has been more rapidly increasing for Black adolescents than for other racial groups.<sup>47</sup>
- Publicly available DCV and SBAR data in Virginia is not disaggregated by race. However, research persistently shows that Black students are disproportionately disciplined for marijuana-related offenses.<sup>48</sup> Taken together with evidence from the VDH YRB Survey, this suggests that **Black students are less likely to use marijuana than their White peers, but are more likely to be disciplined for it.**

### *Socioeconomic Status*

- The VBH YRB Survey does not provide comparisons based on student SES. However, research shows that **low-SES students are more likely to use marijuana from an early age than their higher-SES peers.**<sup>49</sup>
- One potential explanation for higher marijuana usage in low-SES youth is that it tends to be more readily available in higher-poverty neighborhoods.<sup>50</sup> However, the legalization of recreational marijuana and the availability of products containing THC has expanded to other socioeconomic contexts.

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<sup>43</sup> e.g. [Albaugh et al. \(2021\)](#)

<sup>44</sup> [Paschall et al. \(2021\)](#)

<sup>45</sup> [Katapally \(2022\)](#)

<sup>46</sup> [Katapally \(2022\)](#); [Rappaport & Collings \(2023\)](#); [Stiles-Shields et al. \(2021\)](#)

<sup>47</sup> [Banks et al. \(2021\)](#); [Paschall et al. \(2021\)](#)

<sup>48</sup> [Parker et al. \(2021\)](#)

<sup>49</sup> [Ball et al. \(2023\)](#)

<sup>50</sup> [Ball et al. \(2023\)](#)

## HOW CAN SCHOOLS AND SCHOOL SYSTEMS EFFECTIVELY RESPOND TO THC USAGE?

The complexities around how youth access and use marijuana in various forms raise questions about how schools and school systems can best intervene. Some common barriers to intervention may include:

- 1) limited time or resources for introducing preventative programming
- 2) concerns about public image within a school or district that is overtly working to address THC usage among its students
- 3) limited knowledge about synthetic marijuana among faculty and staff and lack of coordination with parents
- 4) educational materials becoming quickly outdated due to rapid changes in how youth consume THC
- 5) easy access to synthetic marijuana in the form of edibles or vapes, whether it is distributed within a school or not.<sup>51</sup>

With these challenges in mind, this section offers proposed [policy](#) and [practice solutions](#) based on peer-reviewed research.

### Policy Solutions

- Regulation of alcohol use is part of US culture. Using this model, states and school districts may develop similar policies for cannabis use. For example, studies show that **strong policies regarding the location of cannabis and e-cigarette retail stores help to curb adolescent usage.**<sup>52</sup> State-wide regulations in California, such as restrictions on cannabis retailers needing to maintain a minimum distance from school properties, possession on school property, advertising to minors, and the legal age for purchasing and possession, are also helpful.<sup>53</sup> Other suggestions include regulation of packaging size, increased price of THC products, and improved public health notices.
- The American Academy of Pediatrics (AAP) recommends beginning universal screening for substances at age 11.<sup>54</sup> Taken together with [previously discussed evidence](#) of how marijuana usage tends to increase after age 15, this emphasizes the importance of taking a preventative rather than reactionary policy approach to cannabis use prevention in adolescents.
- School board policies, which govern policy applications at the school level, may reflect broader, community-level concerns that do not always attend to the individual school contexts they serve. Because of this, it is important for school

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<sup>51</sup> Dai et al. (2021)

<sup>52</sup> Bostean et al. (2023)

<sup>53</sup> Kalamurthy & Camenga (2022)

<sup>54</sup> Butler et al. (2022)

boards to offer guidance on how schools can effectively apply stated policies while adapting them to the specific needs and experiences of the students and families that they serve.<sup>55</sup>

- As medical cannabis increasingly becomes legalized, schools need to develop policies that clearly articulate when and how it is appropriate for their students to use these products during the school day.<sup>56</sup> For example, they may need to only be administered under the supervision of a school nurse.

## Practice Solutions

This section explores practical strategies that schools can use to curb THC usage among their students in a post-legalization context, including [curricular solutions](#), [faculty and staff professional development](#), [parent and student outreach](#), [alternative discipline solutions](#), [student-led programs](#), and [specific programs or interventions](#).

### Curricular Solutions

- In June 2021, the Virginia Board of Education approved Curriculum Guidelines for Instruction on the Safe Use of and Risks of Abuse of Prescription Drugs. **Virginia's curricula highlight the role of families and teachers in prevention**, with recommendations for collaboration and evidence-based, high-quality instruction aligned with the [Health Education Standards of Learning \(SOLs\)](#) and the [EVERFI curriculum](#). [Health Smart Virginia](#) has additional resources for students, providing equal access.
- Education on substance use in schools can have a positive impact on reducing THC use among youth.<sup>57</sup> However, several barriers exist within the teen culture, creating unique challenges in helping youth understand the dangers. Many adolescents feel marijuana use is safe; they may have witnessed use among their peers without consequence and may have heard messaging about the health benefits of THC.<sup>58</sup> **Helping students understand how the new legalization of THC affects their future, the variety of uses such as vaping and edibles, and the consequences of use are essential curricula** in supporting the mental and physical health of youth.<sup>59</sup>
- Adolescents use cannabis more than any other drug, but schools do not always require cannabis-specific instruction.<sup>60</sup> **Schools must establish comprehensive curricula that differentiate the impact of each THC delivery method, including smoking, vaping, dabbing, and edibles or drinkables.**<sup>61</sup> As the legalization of marijuana is new in most states and schools work to improve their substance abuse

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<sup>55</sup> Butler et al. (2022)

<sup>56</sup> Jochen & Holben (2022)

<sup>57</sup> Katapally (2022)

<sup>58</sup> Lin et al. (2022)

<sup>59</sup> Katapally (2022)

<sup>60</sup> Padon et al. (2022)

<sup>61</sup> Katapally (2022)

instruction, they could **use an example instruction guide on the health risks of alcohol and tobacco as a model.**<sup>62</sup>

### *Faculty and Staff Professional Development*

- For the safety of the youth and adults in our schools, implementing a required staff training program is paramount. **School personnel need to learn how to identify the warning signs of vaping and edible usage** and monitor what is occurring on school grounds, particularly in bathrooms.<sup>63</sup>
- In addition, educators need training to be able to instruct their students on the adverse effects of vaping, edibles, and dabbing, as well as how to seek support from a trusted adult when needed.<sup>64</sup>
- It is also important to provide professional learning opportunities that help develop data literacy in faculty and staff so they can be appropriately versed in recent trends in youth THC usage, including which student groups are particularly susceptible<sup>65</sup> (which may be contrary to what exclusionary disciplinary outcomes indicate).<sup>66</sup>

### *Student-Led Programs*

- Programs intended to curb THC usage among their students may consider implementing student-led programs, as adolescents in particular are often more likely to listen to their peers than adults.<sup>67</sup>
- Research shows that **THC-related programs that actively involve students in their facilitation tend to be more effective** and engaging than those more didactic or exclusively led by adults.<sup>68</sup>

### *Parent Outreach*

- Research shows that **lack of parental monitoring is a significant predictor of THC usage among adolescents.**<sup>69</sup>
- There are several challenges associated with engaging parents related to curbing THC usage, including lack of participation in parent nights addressing the topic, parental unawareness of synthetic marijuana use in the form of vaping, dabbing, or edibles, or even defensiveness due to parents similarly smoking or vaping cannabis.<sup>70</sup>
- Just as **public information campaigns about the potential dangers of marijuana in its different forms can prove impactful** in curbing usage among youth, research

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<sup>62</sup> Katapally (2022)

<sup>63</sup> Liu, Roberts et al. (2023)

<sup>64</sup> Donnelly et al. (2022)

<sup>65</sup> Butler et al. (2022)

<sup>66</sup> Parker et al. (2021)

<sup>67</sup> Dai et al. (2021)

<sup>68</sup> Parker et al. (2021)

<sup>69</sup> Ball et al. (2023)

<sup>70</sup> Dai et al. (2021)

suggests that they also prove informative for parents and can help them feel more prepared to provide necessary oversight.<sup>71</sup>

- Once again, considering the legalization of medical marijuana, it may be necessary for schools to collaborate with parents to aid in administration with their children, for example, when school nurses are unavailable to do so.<sup>72</sup>
- One evidence-based program cited in the literature<sup>73</sup> for parent education related to curbing adolescent marijuana usage is [Keep a Clear Mind](#), a take-home program for drug and alcohol-related education for parents to engage in with their children.

### *Alternative Discipline Solutions*

- Because marijuana usage, possession, and distribution (in its various forms) within schools often lead to disciplinary actions, schools must review their codes of conduct and other discipline policies to ensure that they are addressing THC usage in a post-legalization context.<sup>74</sup>
- The use of zero tolerance policies, in particular, has been called into question because they tend to focus on punishment rather than correction and disproportionately impact Black and Latinx students. Consequently, several states have moved away from their use.<sup>75</sup>
- Alternative discipline approaches tend to move away from punitive measures and instead focus on interventions with caring adults at multiple levels within a school, including teachers, school-based mental health providers (e.g., counselors), and administrators.<sup>76</sup>
- **Restorative practices** related to curbing marijuana usage could focus on educating students about its potential harms and may be implemented by a teacher, counselor, or other trained professional in the school. In a [2023 study](#), Liu, Butler, and colleagues surveyed educators about which interventions proved most effective in preventing marijuana usage, and they tended to rate restorative practices as higher than punishment. However, participants tended to rate most interventions as relatively ineffective, suggesting a need for identifying new and innovative methods for curbing adolescent THC usage in schools.
- Rather than criminalizing marijuana possession, usage, and distribution when it occurs in schools, one alternative is **juvenile diversion programs**.<sup>77</sup> These programs provide mental health and substance abuse disorder screening to reduce recidivism in youth. Such programs are often supported through state funding and may require routine urine testing to monitor potential ongoing THC usage after the initial infraction.

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<sup>71</sup> [Struik et al. \(2023\)](#)

<sup>72</sup> [Jochen & Holben \(2022\)](#)

<sup>73</sup> [Donnelly et al. \(2022\)](#)

<sup>74</sup> [Parker et al. \(2021\)](#)

<sup>75</sup> [Parker et al. \(2021\)](#)

<sup>76</sup> [Liu, Roberts et al. \(2023\)](#)

<sup>77</sup> [Hinckley et al. \(2022\)](#)



### Specific Programs or Interventions

There are several evidence-based programs related to the prevention of marijuana usage among youth that schools could consider implementing. When implementing these programs, it is important for schools to remain focused on intervening with students who are particularly susceptible to marijuana usage.

- **Drug Abuse Resistance Education (DARE)** was established in 1981 and, at one point, was implemented in over 90% of US schools.<sup>78</sup> While it is less prominent now, it is still the most common school-based drug use prevention program. In Virginia, it is implemented through a partnership between the Virginia Departments of Education and State Police and local law enforcement agencies collaborating with their community school divisions. The program focuses on helping students effectively resist peer pressure while also educating them about the potential harms of marijuana and other drugs. It is typically delivered in late elementary or early middle school.
- The Virginia Department of Criminal Justice Services offers a workshop entitled **High in Plain Sight** that provides training about some of the common ways that people engage in marijuana usage without detection, including in its synthetic forms. It is offered at no cost to all K-12 and university educators.

## WHAT ARE RELEVANT FEDERAL, STATE, AND SCHOOL DIVISION POLICIES THAT GUIDE RESPONSES TO YOUTH THC USAGE IN THE MERC REGION?

### Federal Policies

- The **Controlled Substances Act of 1970** establishes criminal penalties for using, possessing, and distributing cannabis on the federal level. It is classified as a “Schedule I” drug, meaning it has no federally accepted medical usage. While marijuana remains federally illegal, its medical use is legal in most states, and its recreational use is legal in roughly half of the US.
- With the increasing legalization of marijuana at the state level, federal and state policies related to THC usage are **increasingly incongruent**.
- Public schools are required to provide prevention education on alcohol, tobacco, and illicit drug use according to the federal **Safe and Drug-Free Schools and Communities Act**, passed in 1994.

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<sup>78</sup> Donnelly et al. (2022)

## Virginia Policies

- Recreational marijuana became legal in Virginia on July 1, 2021, under [Chapter 11 of the Code of Virginia](#). Since then, anyone older than 21 may buy up to an ounce of marijuana. It is currently a Class 3 misdemeanor punishable by a \$500 fine if someone is found in possession of more than four ounces but less than one pound. Subsequent offenses entail a \$1,000 fine and up to six months in jail. Anyone under 21 caught in possession of marijuana could be fined up to \$25 and made to enroll in a program for substance abuse education or treatment.
- Additionally, Virginia state code [§ 18.2-251.1](#) permits the possession and distribution of marijuana for medical purposes in the state. This also protected doctors and pharmacists from prosecution due to marijuana distribution under state codes [§ 18.2-248](#) or [§ 18.2-248.1](#).
- Under Virginia state code [§ 4.1-1109](#), it remains illegal to consume or possess marijuana or marijuana products in or on public school grounds, violation of which is a class 2 misdemeanor.
- The state offers a [comprehensive plan for Virginia's youth](#) that involves universal cannabis and other substance use education as well as strategies for prevention.
- One state level office that helps provide resources to school divisions is the [Virginia Office for Substance Abuse Prevention \(VOSAP\)](#), a collective of multiple state agencies designed to reduce substance abuse in the Commonwealth. Partnering agencies include the Departments of Education, Behavioral Health and Development Services, Healthy Youth, Juvenile Justice, and Social Services (among others).

## MERC Region Policies

School board policies and codes of conduct help guide how MERC divisions address marijuana possession, usage, and distribution in its various forms at the local level.

### *All or Most MERC Divisions*

- All MERC Division districts follow Virginia state codes and penalties on the use of drugs and alcohol on school property or at school-sponsored events or activities based on the [Drug Control Act](#), Chapter 34 of Title 54.1 of the Code of Virginia, and as defined in Schedules I through V of [21 U.S.C. § 812](#).
- If a student violates the codes, most MERC Division districts require a referral to the principal and the division superintendent, notification of parents, and, in some cases, law enforcement.
- Most MERC divisions also deem violations of these codes as potential grounds for removal from school through either suspension or expulsion.

- Most MERC divisions specifically refer to restorative practices in their strategic plans as an alternative discipline model that helps curb unwanted or risky behavior while building and maintaining positive and nurturing relationships between students and adults in schools.

### *One or Some MERC Divisions*

- Some MERC school divisions follow a protocol called the **Student Code of Responsible Ethics (SCORE)**, which offers guidance for navigating marijuana-related incidents. Within this system, if a student exhibits what is considered a “Behavior of Safety Concern” related to marijuana, including possession of drug paraphernalia and vape or CBD products, it could result in level 1 consequences (intended to deter the behavior from happening again), level 2 (administrative response and possible removal from the classroom), or level 3 (student removal from school). Escalating consequences exist for “Behaviors that Endanger Self or Others,” including possessing edibles and being under the influence of controlled substances or illegal drugs. This could result in level 4 (referral to Superintendent and possible long-term suspension) or level 5 (alternative placement, referral to law enforcement, or referral for expulsion) consequences.

## KEY TAKEAWAYS AND RECOMMENDATIONS

Based on the information provided throughout this research brief, this section offers key takeaways and recommendations for how to address the challenges of THC usage in school settings in a post-legalization context.

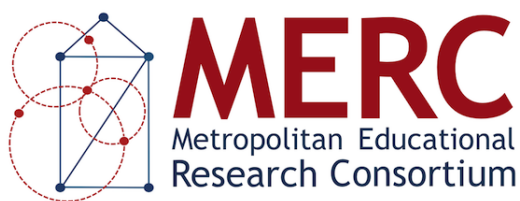
1. There is mixed evidence about how legalization of recreational marijuana impacts usage among adolescents. However, it appears that synthetic THC usage (e.g. vaping) tends to increase in states where it becomes legal because it becomes more readily available. Additionally, although marijuana has long been the most used illicit drug in the US, its usage has also been steadily declining over time in youth while the share of youth marijuana users doing so in synthetic forms has been increasing. This suggests that **efforts to curb marijuana usage in youth should particularly focus on vaping, edibles, and dabbing.**
2. Edible forms of THC are more difficult to detect and prevent in school settings than vaping or smoking marijuana. Because of this, **school systems should provide ongoing professional development to all faculty and staff about common forms of edible marijuana and how to determine when students have it in their possession.**
3. Black students are equally or less likely to report engaging in marijuana usage than their White peers, but are more likely to be disciplined for it in school settings. This suggests potential evidence of bias in how marijuana usage is handled among Black students compared to White students. **Faculty and staff should routinely review discipline data disaggregated by student race to understand how this disparity**

**may surface in their school and actively work to treat students equitably for similar infractions related to marijuana.** Additionally, schools should consider implementing alternative discipline programs like restorative practices as well as diversion programs that help keep students out of the criminal justice system due to marijuana usage.

4. **Curbing adolescent marijuana usage should not be the task of schools alone.** For example, policies that restrict the proximity of recreational cannabis retailers to schools has been shown to help reduce its availability to the students who attend them, but schools have no control over this. Policy solutions within the scope of what schools can implement include universal screening for potential substance use, adopting prevention and intervention strategies that are mindful of the community context in which they serve (e.g. usage tends to be higher in high-poverty settings), and clarifying how and when medical cannabis can be administered within school settings.
5. **School-level interventions should center around clear communication about the potential risks and dangers associated with THC usage in its various forms.** This includes cannabis-specific discussions in middle and high school health classes that help to counteract the increasing tendency for adolescents to perceive THC to be safe. This also includes active collaboration with parents, who may similarly not be aware of the potential cognitive, emotional, and physiological harms of THC, as well as the importance of actively monitoring potential use in their children. Finally, faculty and staff that will be tasked with administering such curricular and outreach-based interventions should receive ongoing professional development on how to effectively do so.
6. Much of the data related to youth marijuana usage and corresponding consequences is either inconsistent or inconclusive, perhaps due in part to disrupted data collection during the pandemic. It is important for state agencies to routinely track THC usage in its various forms among adolescents and for schools to consistently report administrative interactions and disciplinary consequences related to marijuana. Both forms of data collection should be clearly delineated by student demographics to help determine potential disparities in usage relative to punishment. **Particularly in a post-legalization context, clear and consistent data will be imperative for schools to effectively prevent THC usage among students and intervene as needed.**



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