



2026 Insights Report | Education

Revealing Drug Trends through Hair Testing



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Executive Summary

Educational institutions across the United States are navigating an increasingly complex student wellness landscape, one influenced by evolving substance use trends, expanded access to psychoactive products, and growing academic and social pressure among adolescents and young adults.

Recent national data indicates that substance use remains prevalent among high school and college populations, with marijuana use, vaping, and the misuse of prescription stimulants continuing to be reported at measurable levels. At the same time, emerging substances, including high-potency cannabis concentrates, hemp-derived cannabinoids such as Delta-8 THC, and counterfeit pills containing synthetic opioids, are becoming more accessible to students through online marketplaces and retail outlets located near schools and campuses.

These trends present meaningful considerations for educational leaders.

Substance use among students has been associated with impacts on attention, memory, motivation, and emotional regulation; all of which influence academic engagement and long-term educational outcomes. Research from the Centers for Disease Control and Prevention has also linked adolescent substance use with increased absenteeism, behavioral concerns, and decreased likelihood of school completion.

In response, many institutions are reevaluating prevention strategies, student support services, and participation standards for programs such as athletics, clinical placements, transportation roles, and vocational training pathways.

The Psychemedics Education Insights Report provides a data-driven overview of substance use patterns affecting student populations. Drawing on national research and longitudinal hair testing data, this report examines emerging drug trends, academic impact considerations, and prevention-focused strategies relevant to educators, administrators, and student health professionals.

As substance use patterns continue to evolve, maintaining a safe and supportive learning environment requires a proactive and informed approach, one that prioritizes student well-being, academic success, and early intervention where appropriate.

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Key Findings



Overall Student Positivity Declines in 2025: The overall positive rate for drugs tested decreased to 3.1% in 2025, down from a peak of 5.4% in 2022. This downward trend reflects the impact of sustained testing programs and prevention efforts implemented by participating institutions. Schools that maintain consistent testing and education initiatives often see measurable reductions in substance use over time. Notably, this rate is significantly lower than national self-reported substance use levels. For example, the Monitoring the Future survey reports that nearly 30% of high school seniors used marijuana in the past year, highlighting the difference between broader national trends and outcomes observed within structured testing programs. While encouraging, the decline should still be viewed within the context of evolving substance use behaviors rather than as the elimination of risk.



Marijuana Continues to Drive Student Positives: Cannabis remained the most commonly detected substance across all five years. Increased availability of high-potency products, including vapes, concentrates, and edibles, continues to influence student substance use patterns and may impact attention, memory, and academic engagement.



Prescription Stimulant Misuse Persists: Amphetamines remained consistently present throughout the five-year period. Non-medical use of prescription stimulants among high school and college students seeking academic performance enhancement presents concerns related to sleep disruption, dependency, and long-term mental health outcomes.



Emerging Synthetic Threats Increase Health Risk: Counterfeit pills containing fentanyl and other synthetic opioids continue to be identified among youth populations nationally. Even a low prevalence of opioid exposure presents meaningful health and safety considerations within school and campus communities.



Substance Use Is Associated with Academic Outcomes: Students who report substance use are more likely to experience declines in GPA, increased absenteeism, reduced motivation, and behavioral incidents, all of which may influence retention and completion rates.



Longitudinal Data Supports Early Intervention: Tracking substance use trends over time provides educational institutions with insight into behavioral patterns that may affect student success. This information can support wellness initiatives, participation standards for extracurricular programs, and early intervention strategies aligned with student safety and academic achievement.

Introduction

Substance Use Trends in Educational Environments: Implications for Student Safety and Academic Outcomes

Educational institutions today are navigating a rapidly evolving student wellness landscape, one shaped by rising mental health challenges, increased pressure, expanded access to psychoactive substances, and a growing normalization of drug use among adolescents and young adults.

Recent national surveys indicate that substance use remains prevalent among secondary and postsecondary student populations. According to the National Institute on Drug Abuse's Monitoring the Future survey, nearly 30% of high school seniors reported using marijuana in the past year, with a growing number of students perceiving regular cannabis use as low risk despite increasing potency levels in modern products (National Institute on Drug Abuse). At the same time, emerging substances such as Delta-8 THC, prescription stimulants, and synthetic opioids are becoming more accessible through online marketplaces, vape shops, and retail outlets located near schools and campuses.

For educational leaders, this shift presents a complex challenge.

Substance use in student populations has been associated with measurable impacts on:

- Academic performance and classroom engagement
- Attendance and behavioral incidents
- Mental health outcomes
- Risk-taking behavior and injury
- Long-term educational attainment

Research from the Centers for Disease Control and Prevention has linked adolescent substance use with reduced cognitive functioning, impaired memory and attention, and increased likelihood of school disengagement. Additionally, misuse of prescription stimulants, often used non-medically to enhance academic performance, has been reported among both high school and college students, raising concerns about dependency, sleep disruption, and anxiety-related disorders.

Compounding these concerns is the increasing potency of substances students now commonly encounter. Today's marijuana products contain significantly higher concentrations of tetrahydrocannabinol (THC) than those seen in previous decades, while counterfeit pills containing fentanyl have been identified in youth overdose cases across multiple states.

The Psychemedics Education Insights Report provides a data-driven analysis of substance use trends affecting school and campus communities. Drawing on national research and longitudinal hair testing data, this report examines emerging drug threats, behavioral patterns, and prevention considerations relevant to educators, administrators, and student health professionals.

As substance use trends continue to evolve, maintaining a safe and supportive educational environment requires more than policy alone; it requires insight into the behavioral patterns that influence student success and well-being.

Current Drug Trends

Substance Use Patterns Among High School and College Students

Substance use among adolescents and young adults continues to evolve in ways that directly impact student health, academic performance, and campus safety. While traditional substances such as marijuana and alcohol remain prevalent, emerging trends point to increased potency, greater accessibility, and the growing misuse of prescription and synthetic drugs within student populations.

Below are the most significant drug trends affecting secondary and post-secondary educational environments.

1. High-Potency Cannabis Use

Marijuana remains one of the most used substances among high school and college students. According to the National Institute on Drug Abuse's Monitoring the Future survey, nearly one in three high school seniors report past-year cannabis use.

Today's cannabis products, including concentrates, vapes, and edibles, often contain significantly higher levels of tetrahydrocannabinol (THC) than in previous decades. Higher THC concentrations have been associated with:

- Reduced attention and memory retention
- Impaired executive functioning
- Increased risk of anxiety and depressive symptoms
- Decreased academic motivation

These cognitive effects may be particularly pronounced during adolescence, a period of continued brain development.

2. Misuse of Prescription Stimulants

Non-medical use of prescription stimulants such as Adderall® and Ritalin® has become increasingly common among high school and college students seeking

to enhance academic performance or manage workload demands.

The Substance Abuse and Mental Health Services Administration reports that misuse of prescription stimulants is highest among individuals aged 18-25. While often perceived as a study aid, misuse can contribute to:

- Sleep disruption
- Increased anxiety and irritability
- Cardiovascular strain
- Dependency and withdrawal symptoms

Long-term misuse has also been linked to diminished academic outcomes and mental health challenges.

3. Vaping and Alternative THC Products

The rise of vaping has introduced new delivery mechanisms for nicotine and cannabis-derived substances. Products containing Delta-8 THC and other hemp-derived cannabinoids are often marketed as legal alternatives to traditional cannabis, making them more accessible to underage users.

Despite their legal status in some jurisdictions, these substances are psychoactive and may impair concentration, decision-making, and reaction time; factors that can influence both classroom performance and extracurricular participation.

4. Counterfeit Pills and Synthetic Opioids

A growing concern among school health professionals is the presence of counterfeit pills containing fentanyl or other synthetic opioids. The U.S. Drug Enforcement Administration has reported that a significant percentage of fake prescription pills seized in recent years contain potentially lethal doses of fentanyl.

Students may unknowingly consume these substances under the assumption they are legitimate medications, increasing the risk of overdose and serious medical outcomes.

5. Poly-Substance Use

Increasingly, students are combining multiple substances, such as cannabis with alcohol or stimulants, which can amplify cognitive impairment and health risks.

Poly-substance use has been associated with:

- Increased behavioral incidents
- Reduced academic engagement
- Higher likelihood of injury
- Greater risk of mental health complications

For educational institutions, understanding these evolving patterns is essential to developing informed prevention strategies and supportive interventions.

Substance Use and Academic Impact

How Substance Use Influences Student Performance, Engagement, and Retention

Substance use among adolescents and young adults has been consistently linked to measurable impacts on academic performance, classroom engagement, and overall student well-being. While experimentation during adolescence is not uncommon, sustained or repeated use of psychoactive substances may interfere with cognitive development and learning processes critical to educational success.

Research indicated that students who report regular substance use are more likely to experience:

- Declines in grade point average (GPA)
- Increased absenteeism
- Difficulty concentrating or retaining information
- Reduced motivation and academic persistence
- Behavioral incidents or disciplinary actions

According to the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBSS), students who engage in substance use are significantly more likely to report poor academic performance compared to their non-using peers.

Cognitive and Developmental Considerations

Adolescence and early adulthood represent a critical period of brain development, particularly in areas responsible for:

- Memory formation
- Executive functioning
- Decision-making
- Impulse control
- Emotional regulation

Substances such as cannabis, stimulants, and alcohol have been shown to affect neural pathways associated with attention and learning. Studies published by the National Institute on Drug Abuse suggest that early and frequent substance use may disrupt these developmental processes, potentially influencing long-term educational attainment.

Attendance, Engagement, and Campus Climate

Substance use has also been associated with decreased school engagement and increased risk of absenteeism. Students who misuse substances may be more likely to:

- Skip class
- Withdraw from extracurricular activities
- Experience sleep disruption
- Exhibit changes in mood or behavior

At the institutional level, these patterns can influence campus climate, classroom dynamics, and retention rates. The Substance Abuse and Mental Health Services Administration reports that substance misuse among young adults is correlated with higher rates of mental health challenges, including anxiety and depression, which may further impact academic outcomes.

Implications for Educational Institutions

Understanding the relationship between substance use and academic performance is essential for developing effective prevention and support strategies.

Educational institutions may consider:

- Early identification and intervention programs
- Wellness education initiatives
- Student support services

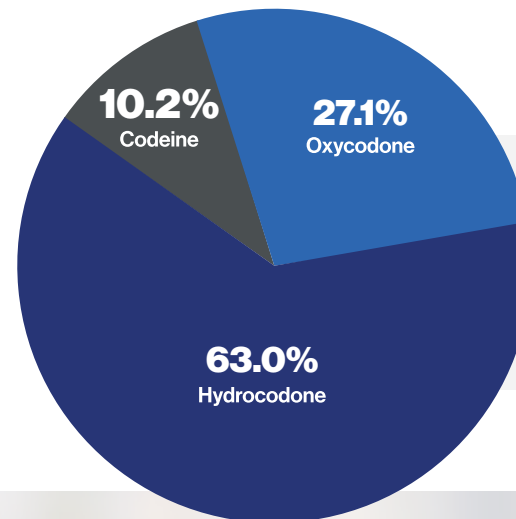
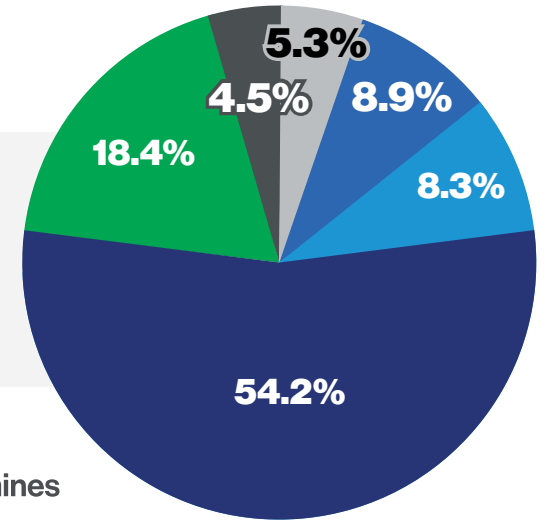
By proactively addressing substance use trends within student populations, schools can better support academic achievement, promote student health, and foster safe learning environments.

2025 Positive Rate for Drugs Tested

Overall Positive Rate:
3.1%

Distribution of Positives by Drug Class

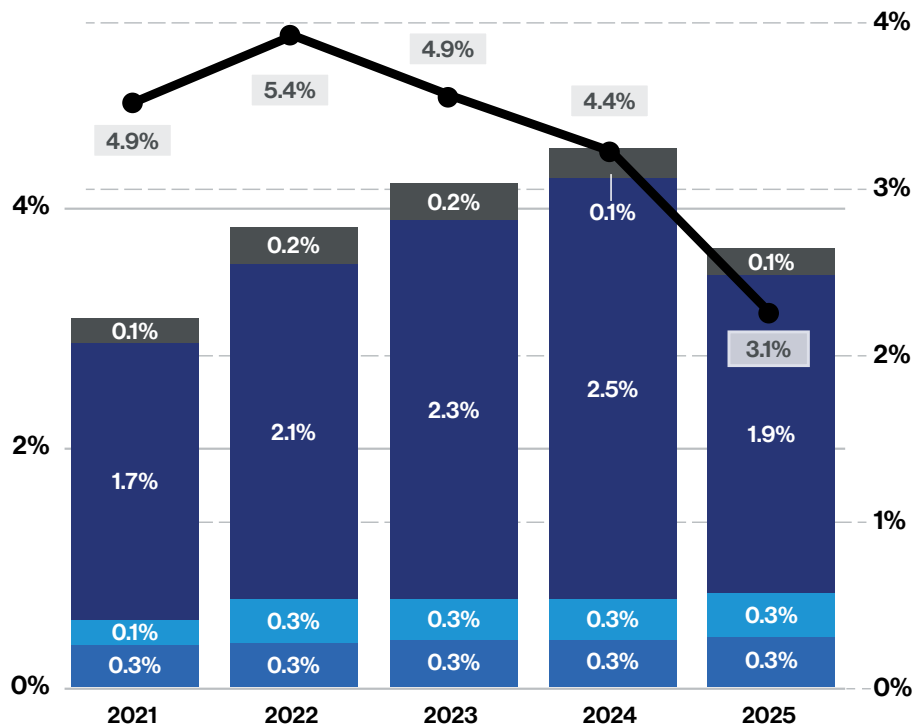
This chart represents the composition of the overall positive rate in each drug class for which was tested.



Distribution of Positives by Opioids

This chart represents analytes present and detected during the screen for Opioids.

5-Year Lookback | By Drug Type



5-Year Lookback: Trends & Patterns

The "y" axis on these charts represents % Positive Results (Total Number of Positives / Total Processed Volume). The trend line spanning all bars in the chart to the left represents overall percentage of positive results year-over-year.

- Positive Rate Trend Line
- Opioids
- Marijuana
- Cocaine
- Amphetamines

Substance Use Patterns Among High School and College Students

A five-year review of positive drug testing rates within educational environments reveals both encouraging moderation in recent years and important emerging risk signals among student populations.

From 2021 through 2024, overall positivity rates remained relatively steady, rising from 4.9% in 2021 to a peak of 5.4% in 2022, before stabilizing at 4.9% in 2023 and 4.4% in 2024. In 2025, the overall positive rate declined to 3.1% marking the lowest level observed during the five-year period.

While this downward trend may suggest progress in prevention efforts, a closer examination of the underlying drug classes highlight several important considerations for institutions.

Marijuana Remains the Primary Driver

Across all five years, marijuana accounted for the largest share of positive results among students.

The upward trend observed between 2021 and 2024 coincided with increased availability of high-potency cannabis products and alternative delivery methods such as vaping and edibles. Although marijuana positivity declined in 2025, it continues to represent the most prevalent substance detected in student testing programs.

Persistent Presence of Opioids and Amphetamines

Opioids and amphetamines remained present across the five-year period at relatively consistent levels, averaging approximately 0.3% annually.

While lower in overall prevalence than cannabinoids, these substances present heightened concern in student populations due to their association with:

- Cognitive impairment
- Sleep disruption
- Increased risk of dependency
- Behavioral and academic challenges

Stimulant misuse, including non-medical use of prescription medications, has been documented among high school and college students seeking academic performance enhancement. These patterns may contribute to sleep deprivation, anxiety, and diminished academic outcomes over time.

Rising Presence of Cocaine in Student Populations

While representing a smaller share of overall positive results, cocaine detection has increased since 2021, reflecting a trend that many educational institutions and student health professionals are beginning to observe more frequently.

Even modest increases warrant attention. Cocaine use has been associated with heightened risk-taking behavior, cardiovascular stress, and impaired decision-making. In educational settings, these effects may contribute to disciplinary incidents, safety concerns, and disruptions to academic engagement.

Although the overall prevalence remains relatively low, the upward trend highlights the importance of continued monitoring and prevention efforts within school and campus communities.

Interpreting the Trend

The decline in overall positivity in 2025 is encouraging but should be viewed in the context of broader behavioral trends among adolescents and young adults. Sustained or lifestyle use patterns, particularly involving cannabis, remain present within student populations and may influence academic engagement, attendance, and performance outcomes.

For educational institutions, longitudinal trend analysis provides valuable insight into evolving substance use behaviors and supports the development of prevention, wellness, and intervention strategies aligned with student success.

The Role of Faculty and Staff Testing

While much of the conversation around substance use in education focuses on students, many institutions also maintain drug testing programs for faculty and staff in safety-sensitive roles. Positions involving student transportation, athletics, clinical instruction, laboratory environments, and vocational training programs carry heightened safety responsibilities.

Testing programs for faculty and staff can help reinforce institutional standards, support safe learning environments, and ensure that individuals responsible for supervising or transporting students are able to perform their duties safely and effectively.

When combined with student prevention initiatives and wellness education, comprehensive testing programs contribute to a broader culture of safety, accountability, and support across the educational community.

Hair Testing: Benefits and Advantages

Hair testing for drug use offers several key benefits and advantages over other testing methods such as urine or blood tests. In this section, we will delve into the details of these benefits and explain why hair testing is considered a superior method for detecting drug use in the education sector.

-  **Longer Detection Window:** One of the most significant advantages of hair testing is its longer detection window compared to other methods. While urine tests can typically detect drug use within the past few days, hair testing can detect drug use over a much longer period, typically 90 days. This longer detection window provides a more comprehensive view of an individual's drug use history, making it more difficult for individuals to conceal recent drug use.
-  **Accuracy:** Hair testing is known for its high level of accuracy. The process of drug incorporation into the hair is well understood, and the testing methods are highly sensitive and specific.
-  **Non-Invasive:** Unlike blood tests, which require a needle stick, or urine tests, which require the collection of a urine sample, hair testing is non-invasive and easy to administer. A small sample of hair, typically taken from the scalp, is all that is needed for the test. This makes hair testing a more comfortable and convenient option for both employers and employees, schools, faculty/staff, parents and students.
-  **Deterrent Effect:** The knowledge that hair testing can detect drug use over a long period can act as a powerful deterrent for students considering using drugs. Knowing that drug use could be detected months after the fact may discourage students from engaging in drug use in the first place, leading to a safer and more productive campus.
-  **Difficult to Cheat:** Hair testing is difficult to cheat. While it is possible to adulterate urine samples or use masking agents to try to hide drug use, these methods are much less effective against hair testing. The structure of hair makes it difficult to tamper with, and attempts to do so are usually easily detected by the testing lab.
-  **Comprehensive Testing:** Hair testing can detect a wide range of drugs, including marijuana, cocaine, amphetamines, opiates, and more. This comprehensive testing capability makes hair testing a versatile tool for employers and institutions looking to screen for multiple drugs simultaneously.
-  **Cost-Effective:** While hair testing may initially seem more expensive than other testing methods, such as urine testing, it can actually be more cost-effective in the long run. Because hair testing has a longer detection window, educational institutions may be able to conduct fewer tests over time, saving money on testing costs.

Hair testing offers a range of benefits and advantages that make it the superior method for detecting drug use in educational institutions. Its longer detection window, high level of accuracy, non-invasiveness, and deterrent effect make it an attractive option for schools seeking to maintain a safe and drug free environment.

Conclusion

Educational institutions play a critical role in supporting not only academic achievement, but also the health, safety, and long-term well-being of the students they serve.

As this report highlights, substance use trends among high school and college students continue to evolve, influenced by increased accessibility, higher potency products, emerging synthetic compounds, and growing normalization of use. These shifts present meaningful challenges for schools and campuses seeking to maintain safe learning environments while promoting student engagement and success.

Substance use has been associated with measurable impacts on attention, memory, motivation, and emotional regulation, all of which are foundational to academic performance. In some cases, sustained use may contribute to absenteeism, behavioral concerns, and decreased persistence toward graduation.

For educational leaders, the goal is not simply policy enforcement, but proactive support.

Understanding emerging trends in cannabis use, prescription stimulant misuse, vaping, and counterfeit pill exposure can help inform prevention strategies, wellness initiatives, and student support services. Programs that emphasize early identification, education, and intervention may contribute to improved student outcomes and a more supportive campus climate.

Maintaining a safe and productive educational environment requires a balanced approach, one that prioritizes student health, academic success, and informed decision-making.

As substance use patterns continue to change, access to reliable data and long-term behavioral insights can help institutions strengthen prevention efforts, protect student well-being, and foster environments where students are positioned to succeed both academically and personally.

About Psychemedics

Psychemedics is the pioneer and leading global provider of hair testing for drugs of abuse, with more than 30 years of experience supporting organizations and institutions in maintaining safe, healthy, and supportive environments.

Methodology

Hair testing is based on a well-established biological process. When drugs are consumed, parent compounds and metabolites enter the bloodstream and are incorporated into the growing hair shaft. As hair continues to grow, it creates a stable, long-term record of drug use.

The graphic below illustrates the four key stages of drug incorporation into hair:



Methodology

Because incorporation occurs internally, hair testing is resilient to dilution, substitution, and many common evasion tactics. Unlike short-window methods that detect only recent exposure, hair testing provides approximately a 90-day detection window, offering visibility into sustained or lifestyle use patterns.

Each sample undergoes a controlled laboratory process that includes decontamination washing, screening, confirmation testing, and certified review. This multi-step workflow ensures accuracy, specificity, and defensible results across major drug classes, including marijuana, cocaine, amphetamines, opioids (including fentanyl), benzodiazepines, and emerging synthetics.

Why It Matters in Education

For educational institutions, understanding behavioral patterns that may impact student well-being and academic performance is an important component of student support strategies.

Longer-term visibility into substance use patterns can help schools and campuses:

- Support student wellness initiatives
- Maintain safe learning environments
- Identify opportunities for early intervention
- Reinforce participation standards in athletics and extracurricular programs

By providing insight into sustained substance use patterns, hair testing can serve as one of several tools used to promote student safety, accountability, and long-term academic success.

Sources

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