

Assessing Adolescent Substance Use & Substance Use Disorders

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Disclosure Statement

- I have no conflicts to disclose.



Impacts of Adolescent Substance Use

- The adolescent brain is **more sensitive to toxicity** from drugs and alcohol: cognitive impairments as well as psychiatric symptoms.
- Adolescence is a crucial developmental period with necessary progress through milestones. **Substance use derails this progress.**
- Drug and alcohol use are associated with **leading causes of death** in teens (motor vehicle crashes, falls, suicide, overdoses, alcohol poisoning, homicide).
- Strongly **linked to several serious health risks** (injuries, assault, violence, unprotected sex, teen pregnancy, STIs including HIV/AIDS).





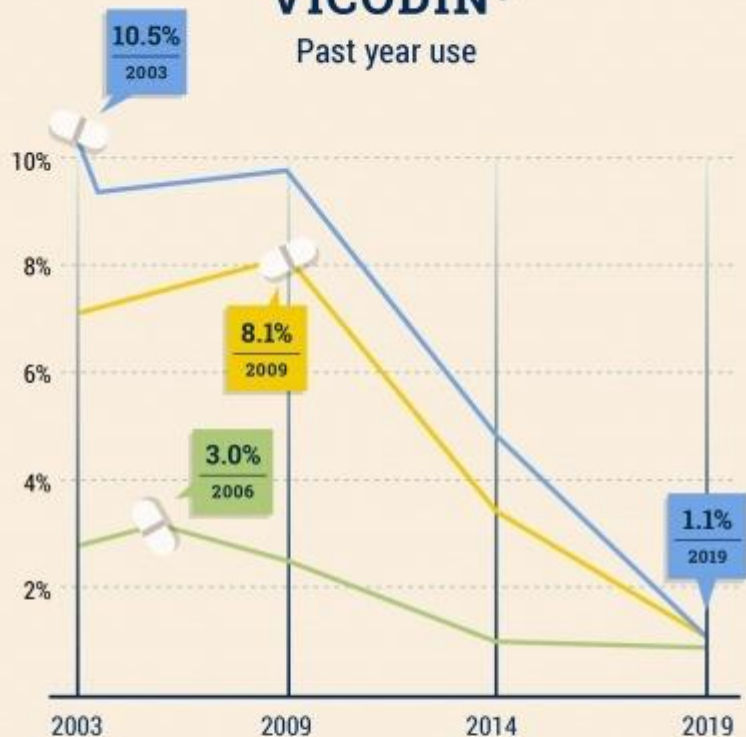
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<https://www.drugabuse.gov/drug-topics/trends-statistics/infographics/monitoring-future-2019-survey-results-overall-findings>

PRESCRIPTION DRUG MISUSE CONTINUES DECLINE FROM PEAK YEARS

VICODIN®

Past year use



OXYCONTIN®

Past year use



8th
graders

10th
graders

12th
graders



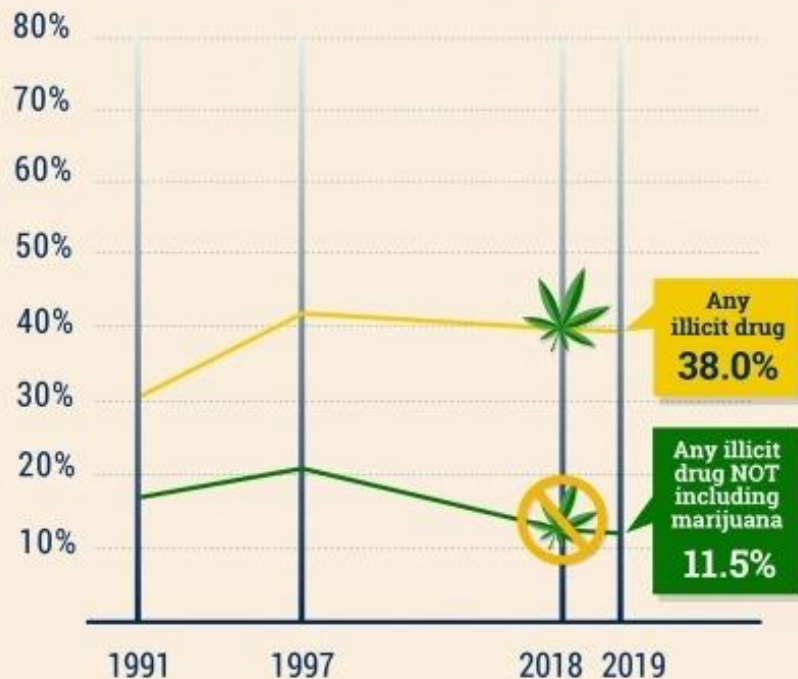
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ILLICIT DRUG USE

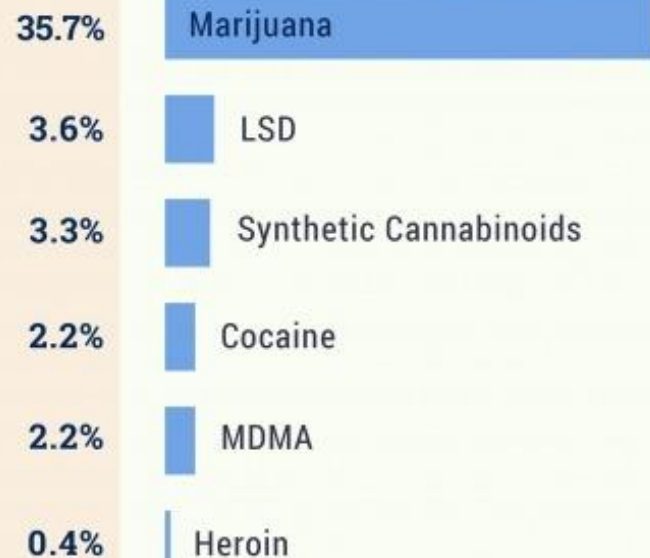
ILLICIT DRUG USE STEADY

Past year use among 12th graders



PAST YEAR ILLICIT DRUG USE

Past year use among 12th graders



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DAILY MARIJUANA USE IN LOWER GRADES INCREASES BUT PAST YEAR MARIJUANA USE STEADY

DAILY MARIJUANA USE

sees significant increase among
8th and 10th graders since 2018



8th
graders

10th
graders

12th
graders

PAST YEAR MARIJUANA USE

gap closing between older grades



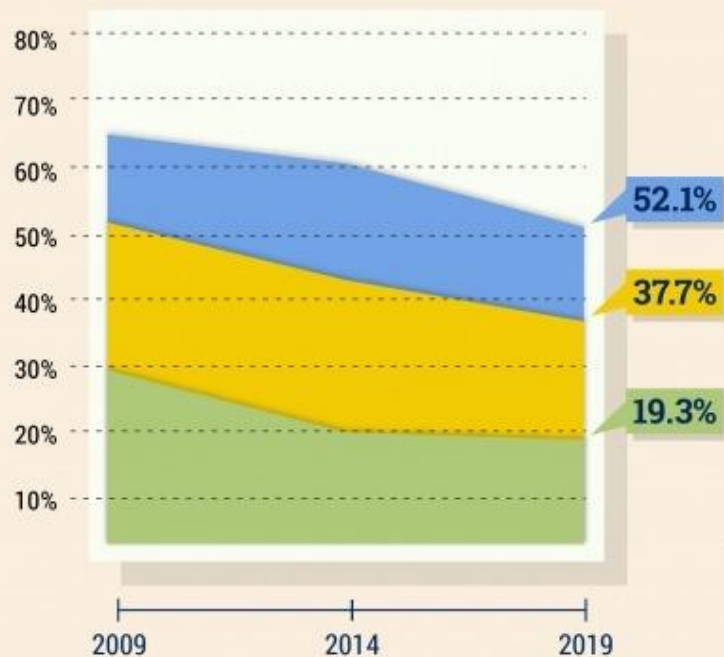
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ALCOHOL USE CONTINUES ITS DECLINE

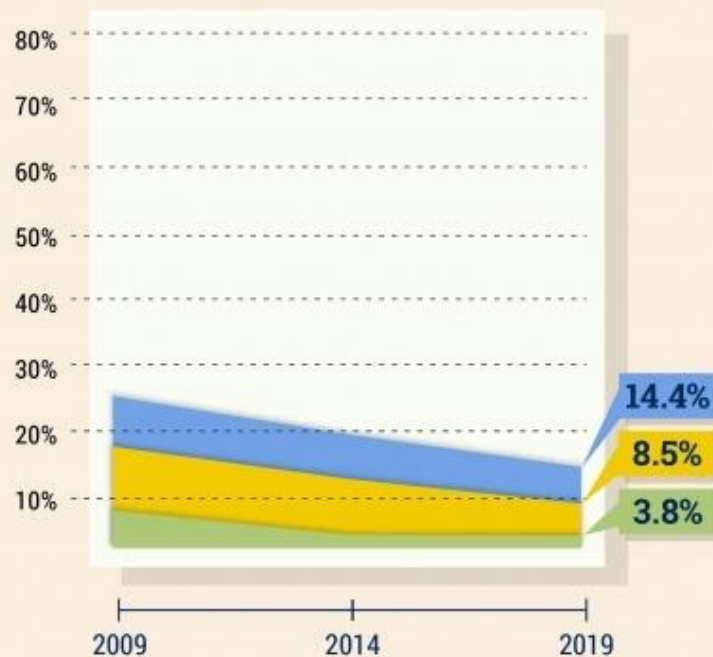
PAST YEAR ALCOHOL USE

Significant long-term decrease in all grades



BINGE DRINKING*

Significant long-term decrease in all grades



8th
graders

10th
graders

12th
graders

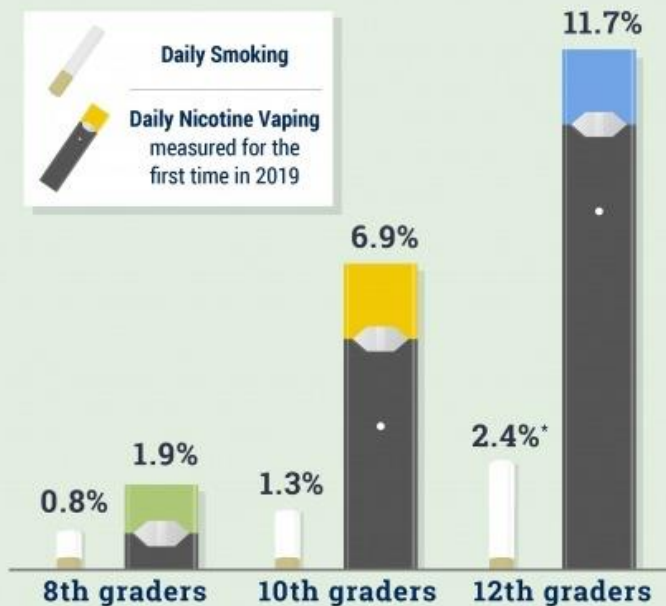
*5 or more drinks in a row
in the past two weeks



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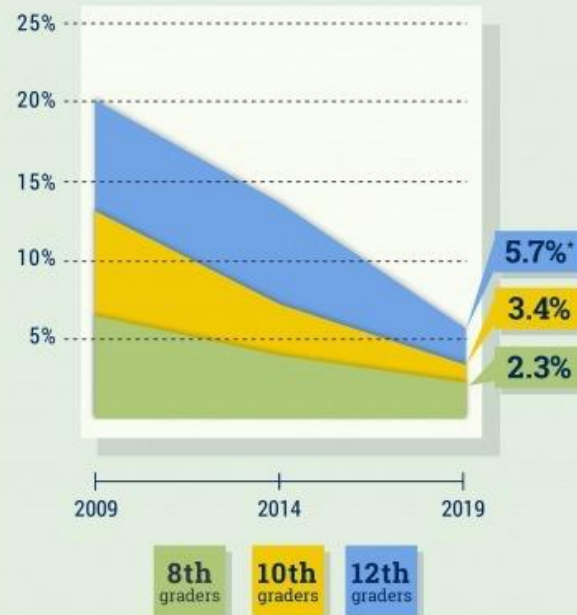
TOBACCO AND NICOTINE: VAPING THREATENS PROGRESS

NICOTINE – DAILY USE



*Significant decline from 2018 (3.6%)

CIGARETTE SMOKING (PAST MONTH) DECLINES OVER PAST TEN YEARS



*Significant decline from 2018 (7.6%)

TO VIEW MORE RESULTS ON VAPING VISIT:

<https://www.drugabuse.gov/related-topics/trends-statistics/infographics/monitoring-future-2019-survey-results-vaping>



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Substance Related Disorders (DSM-5)

- Substance Intoxication
- Substance Withdrawal
- Substance-Induced: Psychotic Disorder, Depressive Disorder, etc.
- **Substance Use Disorder:**
Problematic pattern of use leading to clinically significant impairment or distress



Definitions: Substance Use Disorder

1. Taking in larger amounts or longer than intended
2. Wanting to cut down or quit but not able to
3. Spending a lot of time obtaining substance
4. Craving or strong desire to use
5. Repeatedly unable to carry out major obligations due to use
6. Continued use despite persistent/recurring social or interpersonal problems
7. Stopping /reducing important social, occupational, or recreational activities
8. Recurrent use in physically hazardous situations
9. Consistent use despite acknowledgement of physical/psychological problems
10. Tolerance (need more for same effect)
11. Withdrawal/use to avoid withdrawal



APA, 2013



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DSM-5 SUD Specifiers

- **Severity:**
 - 2-3: “mild”; 4-5: “moderate”; 6+: “severe”
- **Remission:**
 - Early, sustained, partial, full, maintenance therapy, in a controlled environment
- **Categories:**
 - Alcohol (ethanol); tobacco (nicotine); cannabis (marijuana); stimulant (meth, cocaine); hallucinogen (LSD, psilocybin); opioid (heroin, morphine, etc.); caffeine



Prevalence of SUDs

	12-17 y.o.	18-25 y.o.	26+ y.o.
Any Substance Use Disorder	3.7	15.0	6.6
Alcohol Use Disorder	1.6	10.1	5.1
Cannabis Use Disorder	2.1	5.9	0.9
Cocaine Use Disorder	<0.1	0.6	0.4
Opioid Use Disorder	0.4	0.9	0.7
Heroin Use Disorder	<0.1	0.3	0.2
Pain Reliever Use Disorder	0.4	0.7	0.6
Methamphetamine Use Disorder	0.1	0.4	0.4

SAMHSA, NSDUH, 2018



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<https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>

Prevention of SUDs

- People who began drinking or using drugs early in life are **more likely to develop substance use disorders**.
 - Of people who began drinking before age 14, 47% became dependent at some point, compared to 9% of people who began drinking at age 21+ (Hingson et al., 2006)
 - Risk for illicit drug use disorder was 6X higher in people who started cannabis use before age 14 compared to those who started after age 18.



Screening

- **Proactive** – not waiting for problems to develop
- **Opportunistic** – find people where they are
- **Universal** – not just most severe cases
- **Evidence-based** – validated screening tools
- **Patient-centered** – help people develop an understanding of their own health, current level of risk, reasons to change
- **Flexibly implemented** – primary care, emergency departments, schools



S2BI

In the past year, how many times have you used:
Tobacco? Alcohol? Marijuana? (Ask separately.)



Screening

- **Interview:** ex: KSADS, SCID, HEADSS
- **Questionnaires**
 - **CRAFFT**: Car, Relax, Alone, Forget, Friends, Trouble
 - **S2BI**: Gate questions, follow-up
 - **BSTAD**: adaptation of NIAAA questions, self and friends' use
 - **POSIT**: Problem Oriented Screening Instrument for Teachers
 - **AUDIT**: Alcohol Use Disorders Identification Test
 - **CAGE-A**: Cut down, Annoyed, Guilty, Eye Opener
 - **Bright Futures**: Tailored to different ages

Cohen, Reif, Knight, Latimer, 1991; Knight, 1999; Levy et al., 2014; Kelley et al., 2014



SUD Assessment

- **NIDA:**

<https://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/additional-screening-resources>

- **Ongoing use:** Urine & Blood tests; Timeline Follow-Back
- **SUD:** structured interviews (KSADS); Addiction Severity Index (ASI)



Screening – S2BI

Screening to Brief Intervention (S2BI) Tool

The following questions will ask about your use, if any, of alcohol, tobacco, and other drugs. Please answer every question by checking the box next to your choice.

IN THE PAST YEAR, HOW MANY TIMES HAVE YOU USED:

Tobacco?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

S2BI Tool developed at Boston Children's Hospital with support from the National Institute on Drug Abuse.

It is best used in conjunction with "The Adolescent SBIRT Toolkit for Providers" mass.gov/maclearinghouse (no charge).

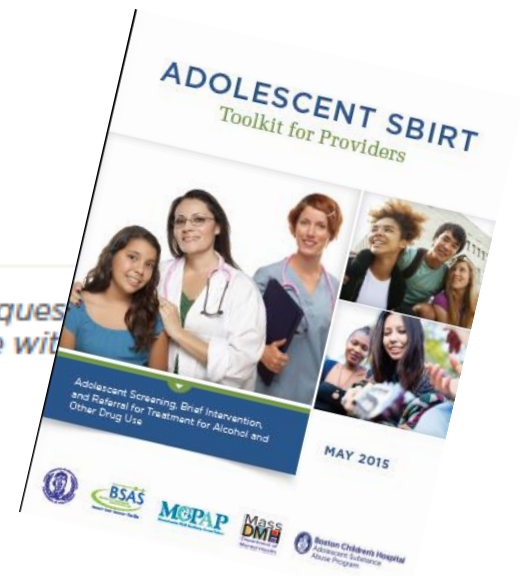
Alcohol?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

Marijuana?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

STOP if answers to all previous questions are "never." Otherwise, continue with questions on the back.



Screening – S2BI

Prescription drugs that were not prescribed for you (such as pain medication or Adderall)?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

Inhalants (such as nitrous oxide)?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

Illegal drugs (such as cocaine or Ecstasy)?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

Herbs or synthetic drugs (such as salvia, “K2”, or bath salts)?

- ☐ Never
- ☐ Once or twice
- ☐ Monthly
- ☐ Weekly or more

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SA3542
MAY 2015

OTHER TOOLS ▾

Screening to Brief Intervention (S2BI)

This screening tool consists of frequency of use questions to categorize substance use by adolescent patients into different risk categories. The accompanying resources assist clinicians in providing patient feedback and resources for follow-up.

Screening Tool Cutoffs and Scoring Thresholds: ▾

Intended use: This screening tool is meant to be used under a medical provider's supervision and is not intended to guide self-assessment or take the place of a healthcare provider's clinical judgment.

This tool may be administered by either the patient or the clinician. Please indicate the mode of administration:

I AM THE PATIENT

I AM THE CLINICIAN



Screening to Brief Intervention (S2BI)

In the PAST YEAR, how many times have you used tobacco?

Never

Once or twice

Monthly

Weekly or more



PREVIOUS

14% complete



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Summary

Overall Risk Level: Higher Risk

Drugs Identified:

Tobacco, Alcohol, Marijuana, Prescription Drugs, K2 Spice

[More Information About Tobacco](#)

Implications of the Score and Overall Risk Level

Adolescents reporting substance use in the past twelve months with these frequencies are at higher risk of meeting diagnostic criteria for a substance use disorder (SUD), although not all who report at this level meet criteria. This result, with co-occurring declines in academic, social, or family functioning, may indicate a higher problem severity. In a small validation study, patients reporting weekly use or greater were categorized at a higher risk for SUD and should receive additional assessment and intervention. These patients would benefit from an assessment for a diagnosis of Major Depressive Disorder, ADHD, or other psychiatric disorders, since these disorders frequently co-occur with a SUD.

Suggested Clinician Action

The suggested intervention for this group is further assessment to determine how to best manage care.

Additional Suggestions

- Assess further through a clinical interview using questions from the [CRAFT](#) as a guide. Consider making a diagnosis using the [Diagnostic and Statistical Manual \(DSM\)-5](#) SUD

Screening – S2BI

Table 1. Definition of Substance Use Categories

Substance Use Disorder	Full Screen and Brief Assessment Tool	Screen to Brief Intervention
None	Any past-year substance use, RAFFT score = 0, other assessment questions negative	Once or twice use of any substance
Mild-moderate	Any past-year substance use, RAFFT score >1, other assessment questions negative	Monthly use of any substance
Severe	Any past-year substance use, RAFFT score >1, other assessment questions positive	Weekly or greater use of any substance

Abbreviation: RAFFT, relax, alone, forget, friends or family, trouble.

Screening – BSTAD

FRIENDS' USE	
Do you have friends who smoked cigarettes or used other tobacco products <u>in the past year</u> ?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Do you have friends who drank beer, wine, or any drink containing alcohol <u>in the past year</u> ?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Do you have friends who <u>in the past year</u> : - sniffed or “huffed” anything; - took illegal drugs like marijuana (weed, blunts), cocaine, etc; - took prescription medications that were not prescribed for them; or - took prescription or over-the-counter medications and took more than they were supposed to take? <input type="checkbox"/> No <input type="checkbox"/> Yes	
PERSONAL USE	
In the past year, have you smoked cigarettes or used other tobacco products?	<input type="checkbox"/> No <input type="checkbox"/> Yes
In the past year, have you had more than a few sips of beer, wine, or any drink containing alcohol?	<input type="checkbox"/> No <input type="checkbox"/> Yes
In the past year, have you: - sniffed or “huffed” anything; - taken illegal drugs like marijuana (weed, blunts), cocaine, etc; - taken prescription medications that were not prescribed for you; or - taken prescription or over-the-counter medications and took more than you were supposed to take? <input type="checkbox"/> No <input type="checkbox"/> Yes	
[IF DRUGS ARE ENDORSED IN THE PERSONAL USE QUESTION, ASK THE FOLLOWING:]	
Which of the following substances have you used in the past year? (check all that apply)	
<input type="checkbox"/> Marijuana or Hashish <input type="checkbox"/> Cocaine or crack <input type="checkbox"/> Heroin <input type="checkbox"/> Amphetamines or methamphetamine (nonpharmaceutical) <input type="checkbox"/> Hallucinogens (eg, Mushrooms, LSD) <input type="checkbox"/> Inhalants	
Which of the following medications have you used in the past year that were not prescribed for you or which you took more of than you were supposed to take? (check all that apply)	
<input type="checkbox"/> Prescription pain relievers (eg, morphine, percocet, vicodin, oxycontin, dilaudid, methadone, buprenorphine) <input type="checkbox"/> Prescription sedatives (eg, Valium, Xanax, Klonopin, Ativan) <input type="checkbox"/> Prescription stimulants (eg, Adderall, Ritalin) <input type="checkbox"/> Over-the-Counter Medications (eg, Nyquil, Benadryl, cough medicine, sleeping pills)	
[FOR EACH SUBSTANCE WHERE USE WAS ENDORSED, ASK:]	
In the <u>past 30 days</u> , on how many days have you... smoked cigarettes or used other tobacco products/used alcohol/used [SUBSTANCE]?	<input type="checkbox"/> <input type="checkbox"/> days
In the <u>past 90 days</u> , on how many days have you... smoked cigarettes or used other tobacco products/used alcohol/used [SUBSTANCE]?	<input type="checkbox"/> <input type="checkbox"/> days
In the <u>past year</u> , on how many days have you... smoked cigarettes or used other tobacco products/used alcohol/used [SUBSTANCE]?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> days

Brief Screener for Tobacco, Alcohol, and other Drugs

In the PAST YEAR, on how many days did you smoke cigarettes or use other tobacco products?

0 days



Click and drag on the bar above to select the number of days or type the number of days in the field above.



PREVIOUS

7% complete

NEXT



National Institutes of Health – Turning Discovery into Health

Summary

Overall Risk Level: Higher Risk

Drugs Identified:

Tobacco, Alcohol, Marijuana

[More Information About Tobacco](#)

Implications of the Score and Overall Risk Level

Adolescents reporting substance use in the past twelve months with these frequencies are at higher risk of meeting diagnostic criteria for a substance use disorder (SUD), although not all who report at this level meet criteria. This result, with co-occurring declines in academic, social, or family functioning, may indicate a higher problem severity. In a small validation study, patients reporting weekly use or greater were categorized at a higher risk for SUD and should receive additional assessment and intervention. These patients would benefit from an assessment for a diagnosis of Major Depressive Disorder, ADHD, or other psychiatric disorders, since these disorders frequently co-occur with a SUD.

Suggested Clinician Action

The suggested intervention for this group is further assessment to determine how to best manage care.

Additional Suggestions

- Assess further through a clinical interview using questions from the [CRAFT](#) as a

Screening: CRAFFT

C	Have you ever ridden in a CAR driven by someone (including yourself) who was “high” or had been using alcohol or drugs?
R	Do you ever use alcohol or drugs to RELAX , feel better about yourself, or fit in?
A	Do you ever use alcohol or drugs when you are by yourself, ALONE ?
F	Do you ever FORGET things you did while using alcohol or drugs?
F	Do your family or FRIENDS ever tell you that you should cut down on your drinking or drug use?
T	Have you ever gotten into TROUBLE while you were using alcohol or drugs?

Source: Knight 1999



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NIDAMED: Clinical Resources

NIDAMED News

Screening Tools and Prevention ^

[Screening and Assessment Tools Chart](#) ▼

[Screening Tools for Adolescent Substance Use](#)

[For Your Discipline](#) ▼

[Health Professions Education](#) ▼

[Treatment](#) ▼

[Opioid Crisis and Pain Management](#) ▼

[Vaping, Marijuana, and Other Drugs](#)

[CTN Dissemination Initiative](#) ▼

[Science to Medicine](#) ▼

[For Your Patients](#)

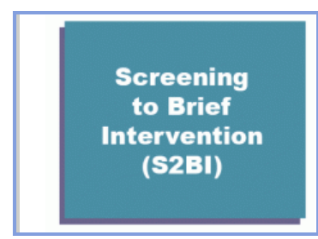
[Resources to Help Your Patients with SUD During the COVID-19 Pandemic](#)

Screening Tools and Prevention

Validating Screening Tools

The [Screening and Assessment Tools Chart](#) provides a comprehensive guide and links to evidence-based screening and assessment tools you can use with your patients from adolescence to adulthood. It is organized by substance type, patient age, and administration method to help you find the right tool for your practice.

- The [Tobacco, Alcohol, Prescription medication, and other Substance Use \(TAPS\) Tool](#) is validated for use with adults to generate a risk level for each substance class. It can be self-administered or conducted via clinician interview and combines screening and brief assessment of past 90-day problematic use into one tool.
- For validated online screening tools for adolescents, visit NIDAMED's [Screening Tools for Adolescent Substance Use](#). These tools will help you assess substance use disorder risks among adolescents 12-17 years old.



Screening for Substance Use

Review the latest science on [screening for substance use](#) and read about how a variety of clinicians have integrated screening into their practice settings, including which tools they use and useful considerations to get started.



Contact

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 - 317-944-8162

