



National American Indian & Alaska Native

PTTC

Prevention Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



**Native Center for
Behavioral Health**



SAMHSA
Substance Abuse and Mental Health
Services Administration

Prevention of Teen Substance Use

Ken Winters, Ph.D.

Senior Scientist

Oregon Research Institute (MN location)

&

Consultant to National AI & AN PTTC

winte001@umn.edu

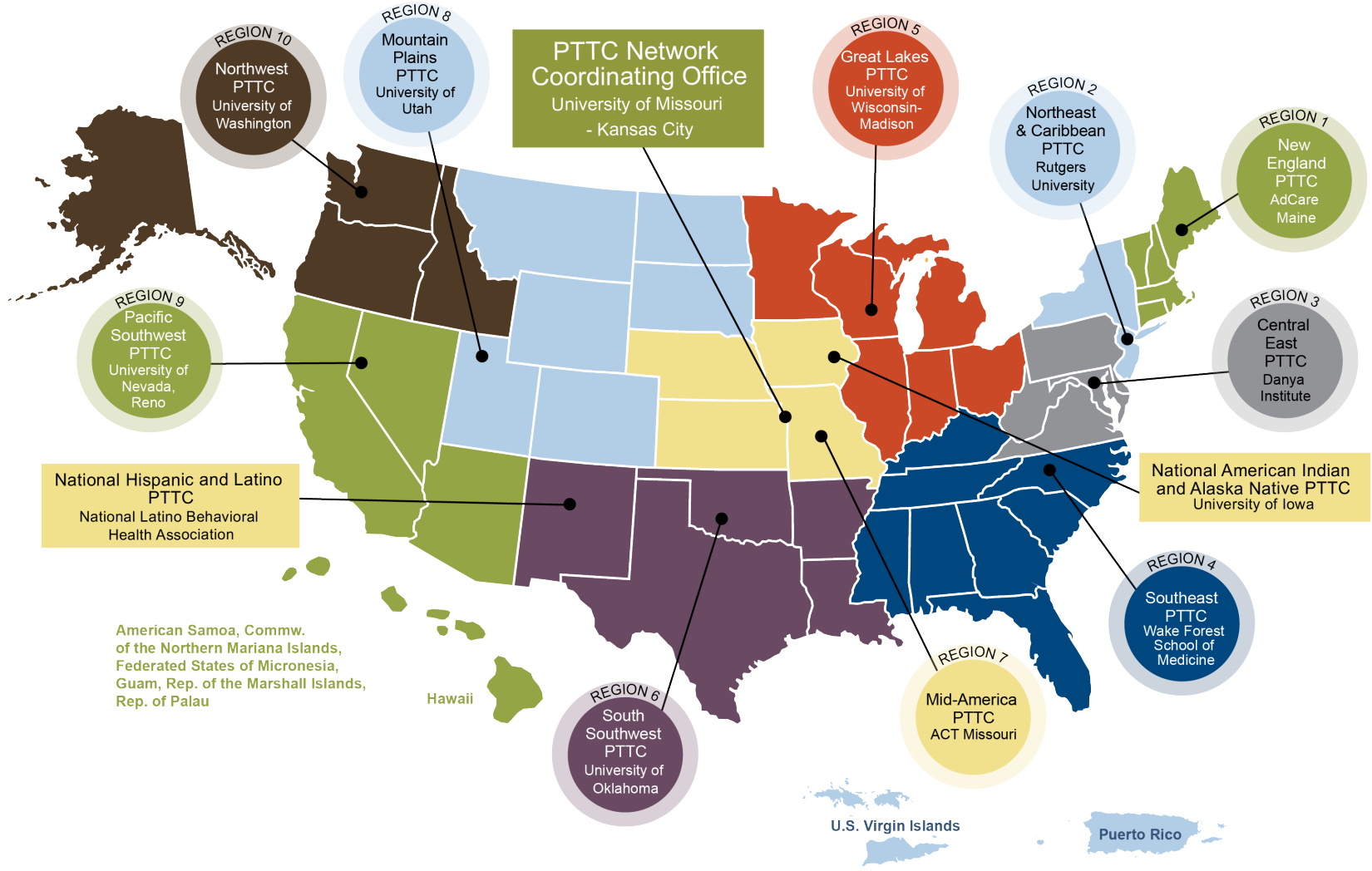
June 23, 2021



PTTC

Prevention Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

PTTC Network



American Indian & Alaska Native
Prevention
Technology
Transfer Center

This webinar is provided by the National American Indian & Alaska Native PTTC, a program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA).

SAMHSA

Substance Abuse and Mental Health
Services Administration

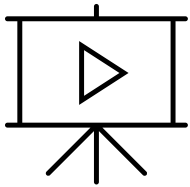
The National American Indian and Alaska Native Prevention Technology Transfer Center is supported by a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA).

The content of this event is the creation of the presenter(s), and the opinions expressed do not necessarily reflect the views or policies of SAMHSA, HHS, or the American Indian & Alaska Native PTTC.

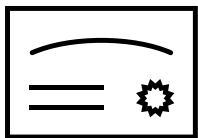


Follow-up

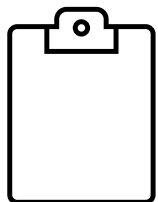
Following today's event, you will receive a follow up email, which will include:



Links to the presentation slides and recording, if applicable



Information about how to request and receive CEUs



Link to our evaluation survey (GPRA)



Land Acknowledgement

We would like to take this time to acknowledge the land and pay respect to the Indigenous Nations whose homelands were forcibly taken over and inhabited.

Past and present, we want to honor the land itself and the people who have stewarded it throughout the generations.

This calls us to commit to forever learn how to be better stewards of these lands through action, advocacy, support, and education.

We acknowledge the painful history of genocide and forced occupation of Native American territories, and we respect the many diverse indigenous people connected to this land on which we gather from time immemorial.

While injustices are still being committed against Indigenous people on Turtle Island, today we say thank you to those that stand with Indigenous peoples and acknowledge that land reparations must be made to allow healing for our Indigenous peoples and to mother earth, herself.

Dekibaota, Elleh Driscoll, Meskwaki and Winnebago Nations

Ttakimaweakwe, Keely Driscoll, Meskwaki and Winnebago Nations

Keokuk, Sean A. Bear, 1st. Meskwaki Nation

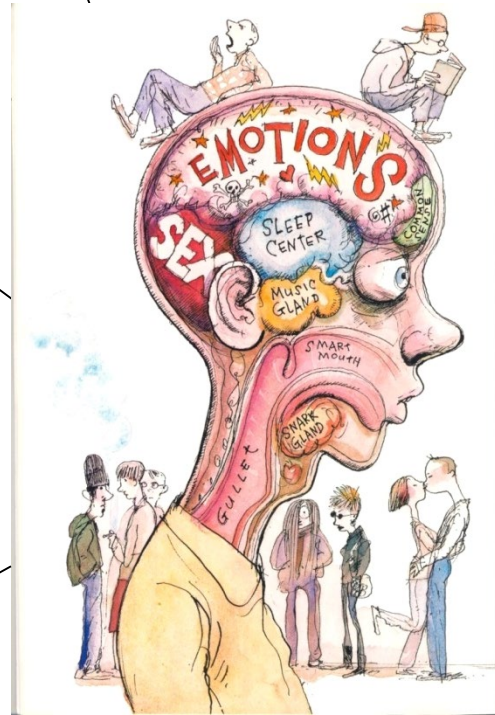


1. Introduction

- Terms
- Basic points
- Resources
- Use patterns
- Developmental issues

4. Summary

3. Examples of AI/AN programs



2. Prevention

- Keys
- New threats: vaping & cannabis

Source: US News & World Report, 2005

1. Introduction

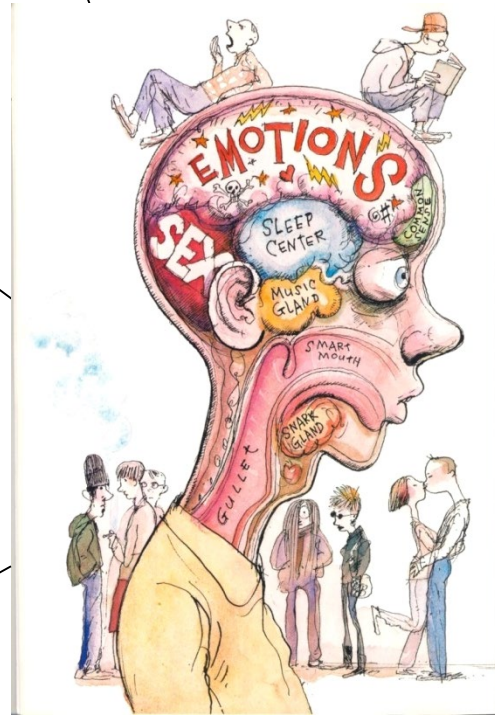
- Terms
- Basic points
- Resources
- Use patterns
- Developmental issues

4. Summary

3. Examples of AI/AN programs

2. Prevention

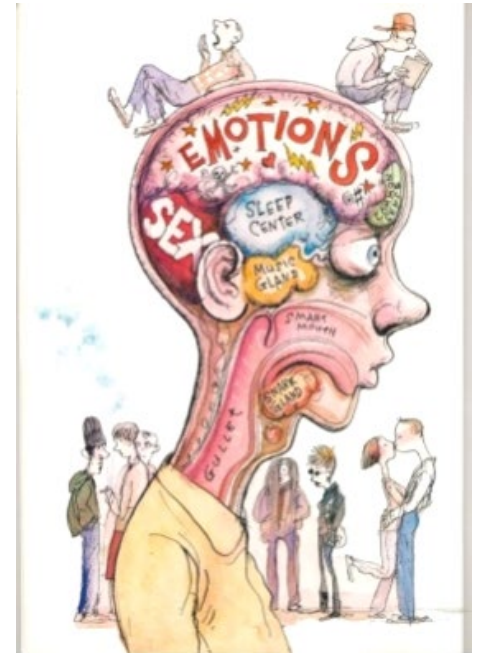
- Keys
- New threats: vaping & cannabis



Source: US News & World Report, 2005

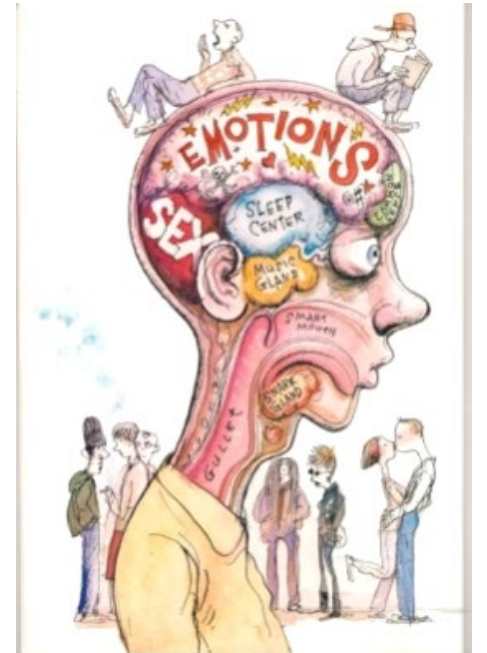
Terms

- Adolescents = 12-18-year-old age group (middle and high school)
- Substances = alcohol and other drugs (not tobacco)



Basic Summary Points

1. Most teens use some substances; risk of current and future problems linked to age of initiation and other risk factors
2. The most commonly used substances by teens: alcohol, cannabis & nicotine
3. Prevention works!
 - ▣ Keys to effective prevention are established
 - ▣ Prevention does not have to be expensive
 - ▣ Outcomes are promising (extending age of initiation; more teens choosing to be drug-free or risk/harm reduction behaviors)



Resources

1.) Preventing Drug Use among Children and Adolescents

https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/preventingdruguse_2_1.pdf

2.) Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide

www.drugabuse.gov



Resources

3.) National Center for American Indian & Alaska Native Prevention Technology Transfer Center

<https://pttcnetwork.org/centers/national-american-indian-alaska-native-pttc/home>



Prevention in our Native American Communities Volume 1 Issue 2

Publication Date: December 20, 2019

Developed By: National American Indian & Alaska Native PTTTC

 DOWNLOAD

Culture is Prevention session 2: Resilience and Healing of Spirituality in Native American Culture

Collaborating TTC: National Hispanic & Latino PTTTC
Publication Date: July 16, 2020

 VIEW RESOURCE



Native American Storytelling: Culture is Prevention

2:00pm - November 10, 2020 | Timezone: US/Central

Hosted By: National American Indian and Alaska Native ATTC

Resources

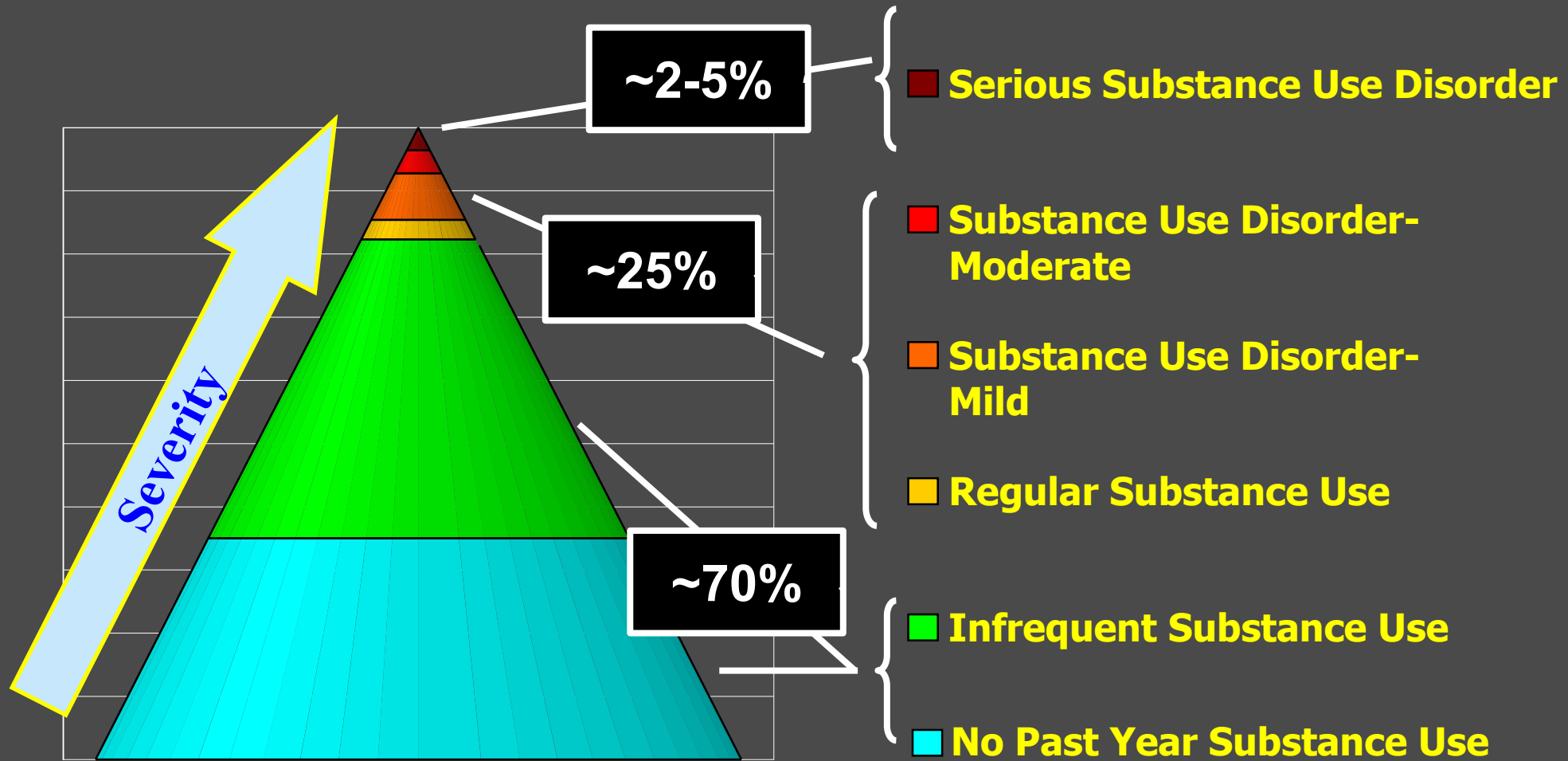
4.) Academic Centers:

- Colorado School of Public Health, Centers for American Indian and Alaska Native Health
- Johns Hopkins Center for American Indian Health
- University of Washington, Indigenous Wellness Research Institute



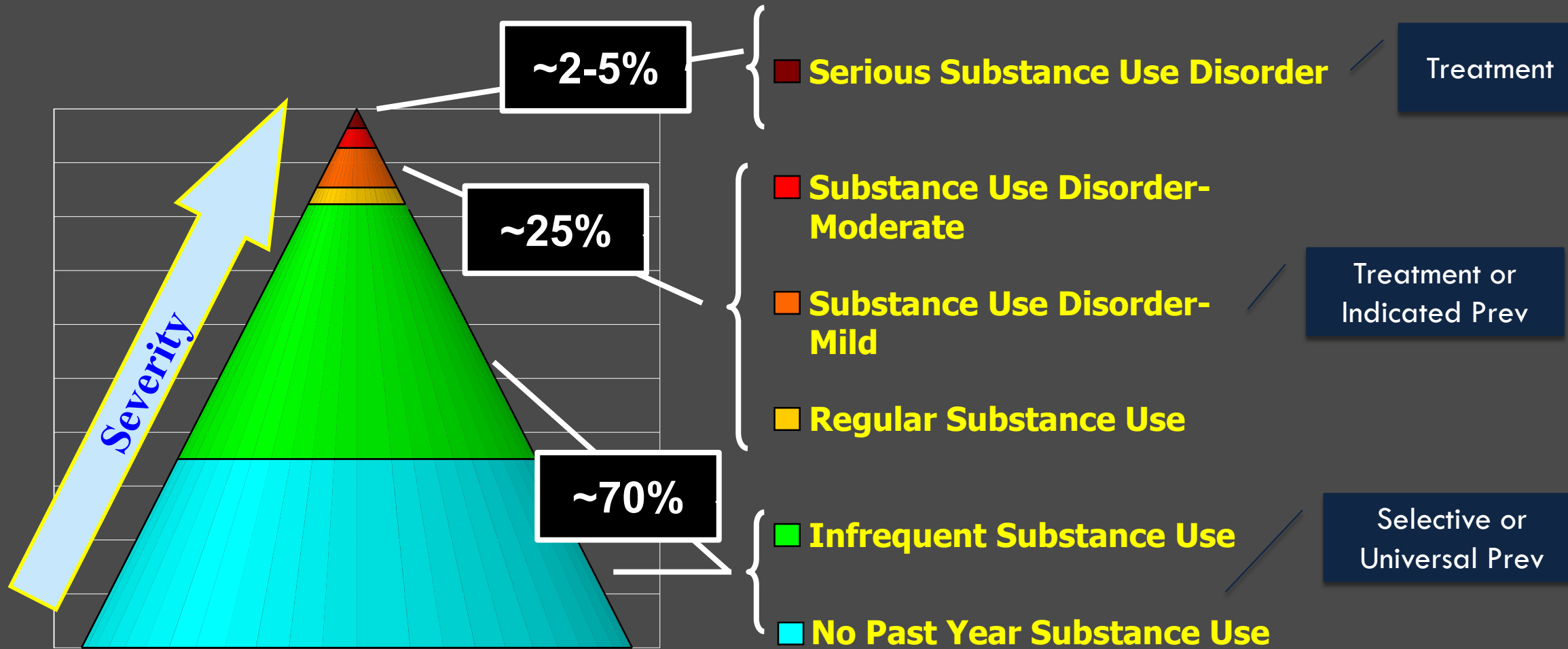
General Prevention Strategies

Estimated Prevalence Rates of Drug Involvement in an Adolescent Population



(source: adapted from Tammy Chung, Ph.D.)

Prevention Strategies Based on Level of Drug Involvement



(source: adapted from Tammy Chung, Ph.D.)

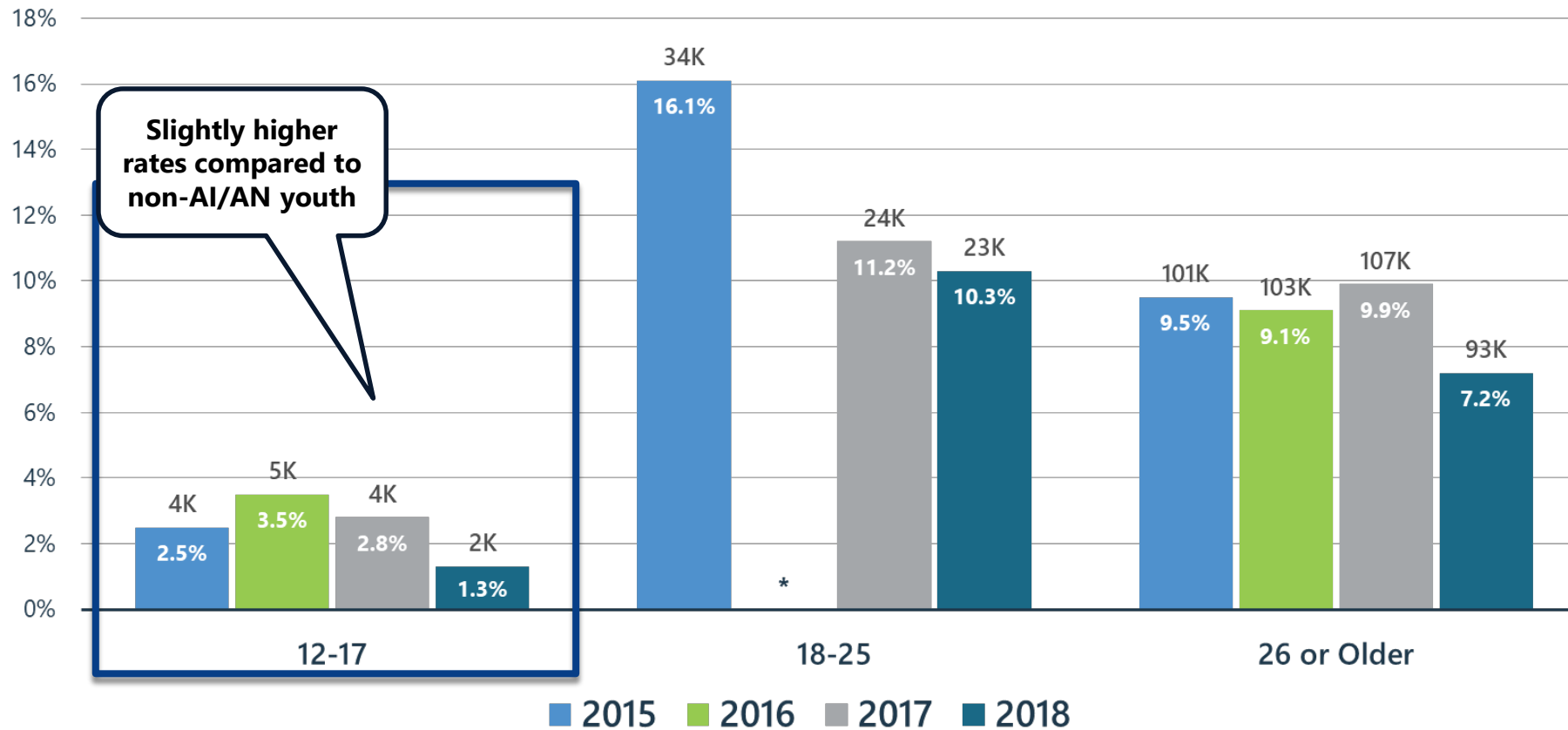
Various Prevalence Data



Alcohol Use Disorder among AI/ANs

NSDUH-AI/AN

PAST YEAR, 2015-2018 NSDUH, AI/AN 12+



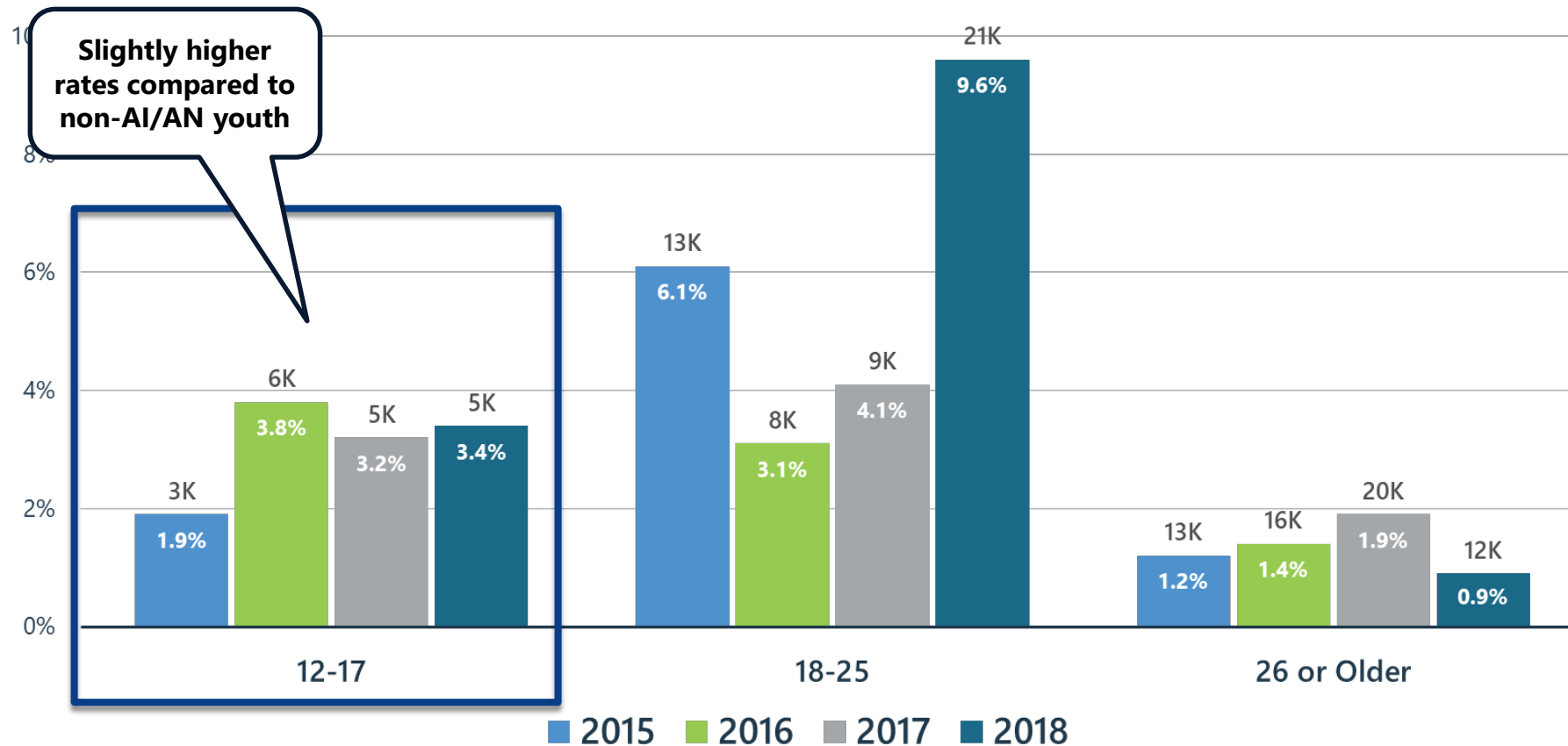
* Estimate not shown due to low precision.

No differences between prior year estimates and the 2018 estimates are statistically significant at the .05 level.

Marijuana Use Disorder among AI/ANs

NSDUH-AI/AN

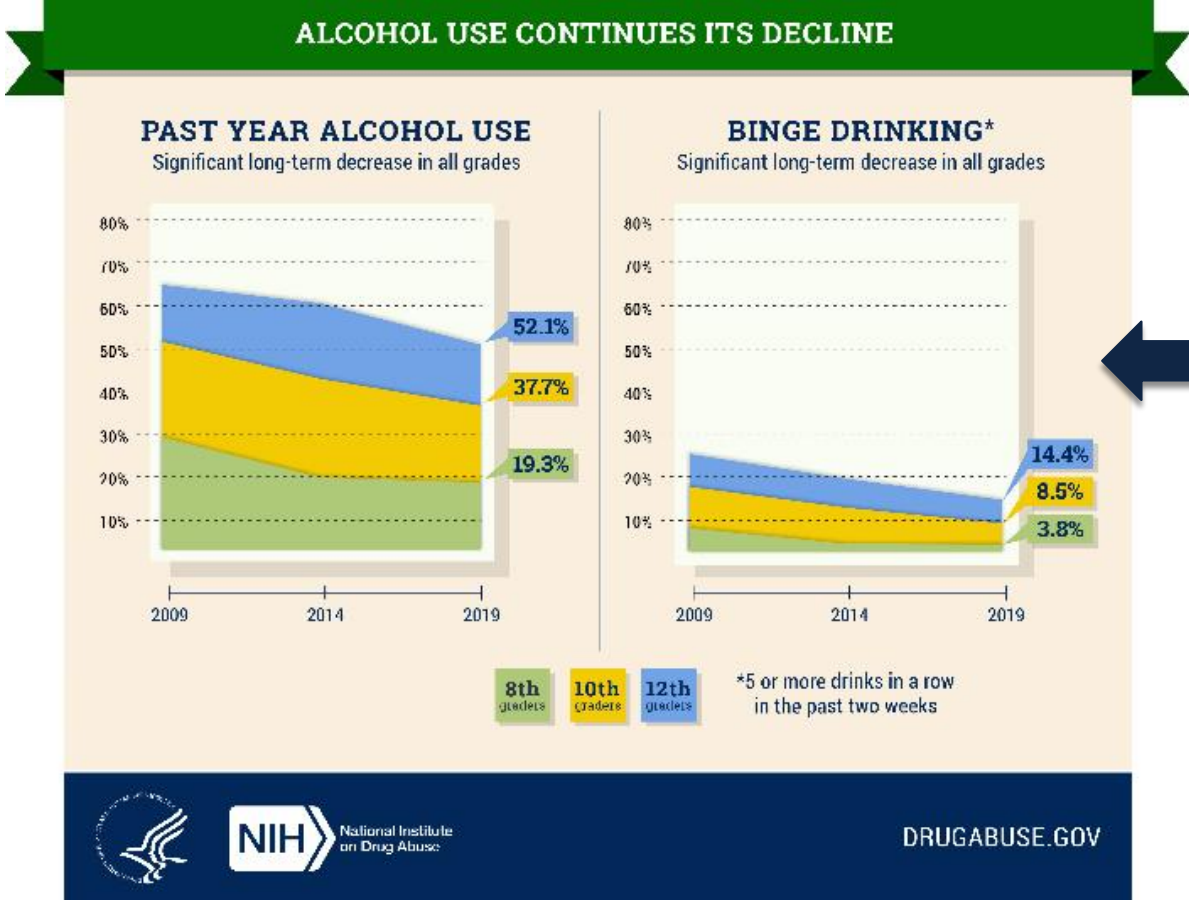
PAST YEAR, 2015-2018 NSDUH, AI/AN 12+



Substance Use Among Reservation-Based AI/AN Adolescents vs Rates Among National US Youths

- Population-based survey study of 8th-, 10th-, and 12th grade students attending participating schools on or near reservations, during the 2016-2017 school year.
- Substance use rates were compared with those of a national sample of comparably aged students from the *Monitoring the Future*
- AI/AN students reported substantially higher lifetime and last-30-day rates of alcohol, cannabis and several other illicit drugs compared with the *Monitoring the Future* students, with the greatest disparity among eighth graders

Good News: Binge Drinking is Declining



Binge Drinking (past 30 days)

- Adolescents age 12-17: 1.2 million (1 in 21)

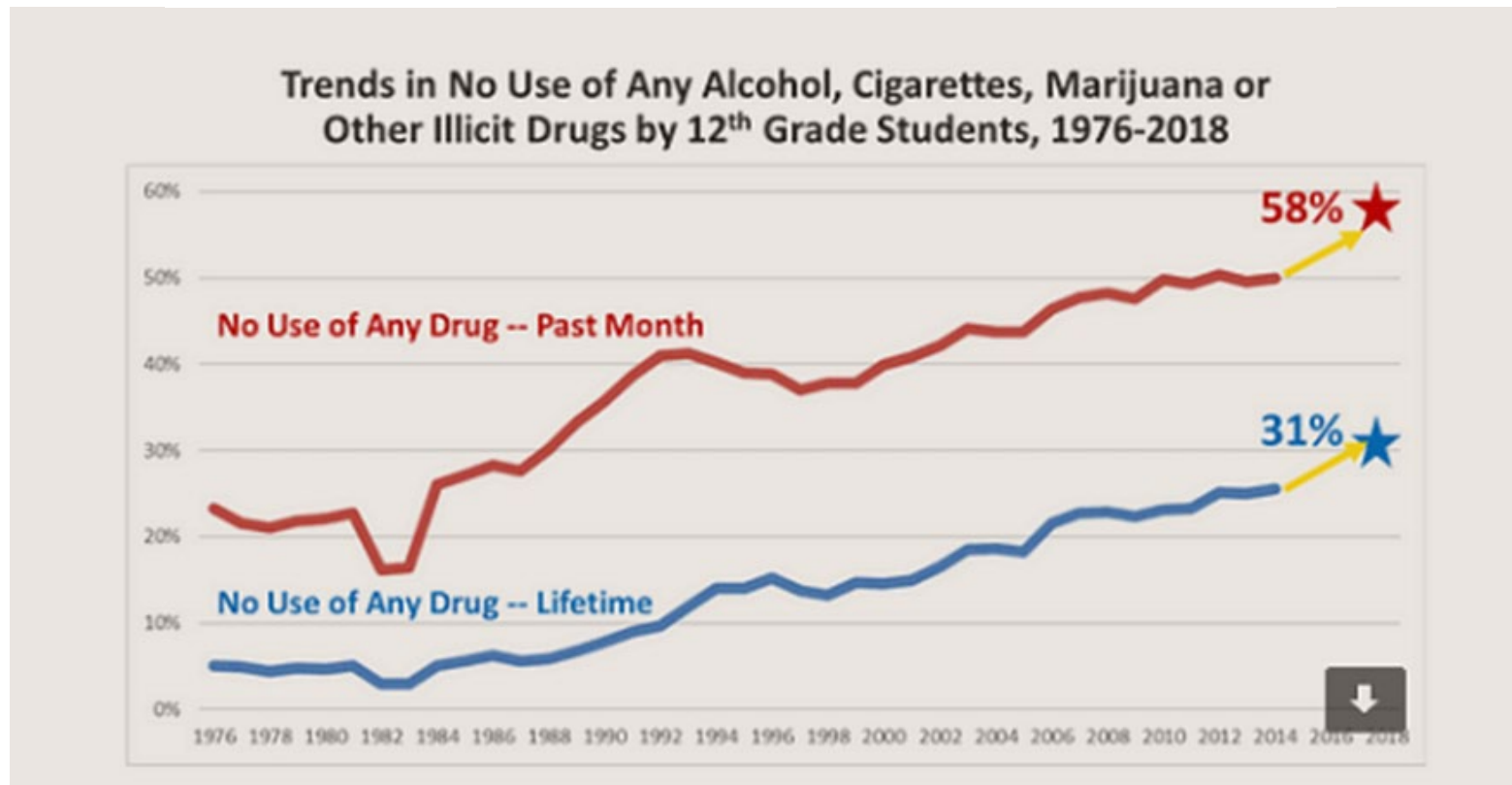
More Good News: Trend of Drug-Free During Adolescence is Increasing

In 2018:

57.8% of high school seniors did not use any substances in the past month

30.7% of high school seniors did not use any substance in their lifetime

Trends in Substance Nonuse by U.S. High School Seniors: 1975–2018 (Levy et al., 2020)



Question for the Group

1. Which right or privilege in the US matches where experts place the age at which the brain is “fully” mature ?
 - a. Vote
 - b. Gamble in casinos
 - c. Rent a car
 - d. Serve in the military



- Based on research by neuroscientists, brain maturation continues through adolescence, until approx. age 25

INSIDE THE ADOLESCENT BRAIN

The brain undergoes two major developmental spurts, one in the womb and the second from childhood through the teen years, when the organ matures by fits and starts in a sequence that moves from the back of the brain to the front.

Nerve Proliferation ...



By age 25, the girls had 12% more than the neurons in the back of the brain have. Several thousands of new connections, from the rest, have since, more of them 1.4% of the total.

Corpus Callosum

Thought is transferred from one side of the brain to the other by a bundle of nerve fibers, called the corpus callosum, that connects the two halves of the brain. The fibers in the corpus callosum are made of myelin and grow all day.

Prefrontal Cortex

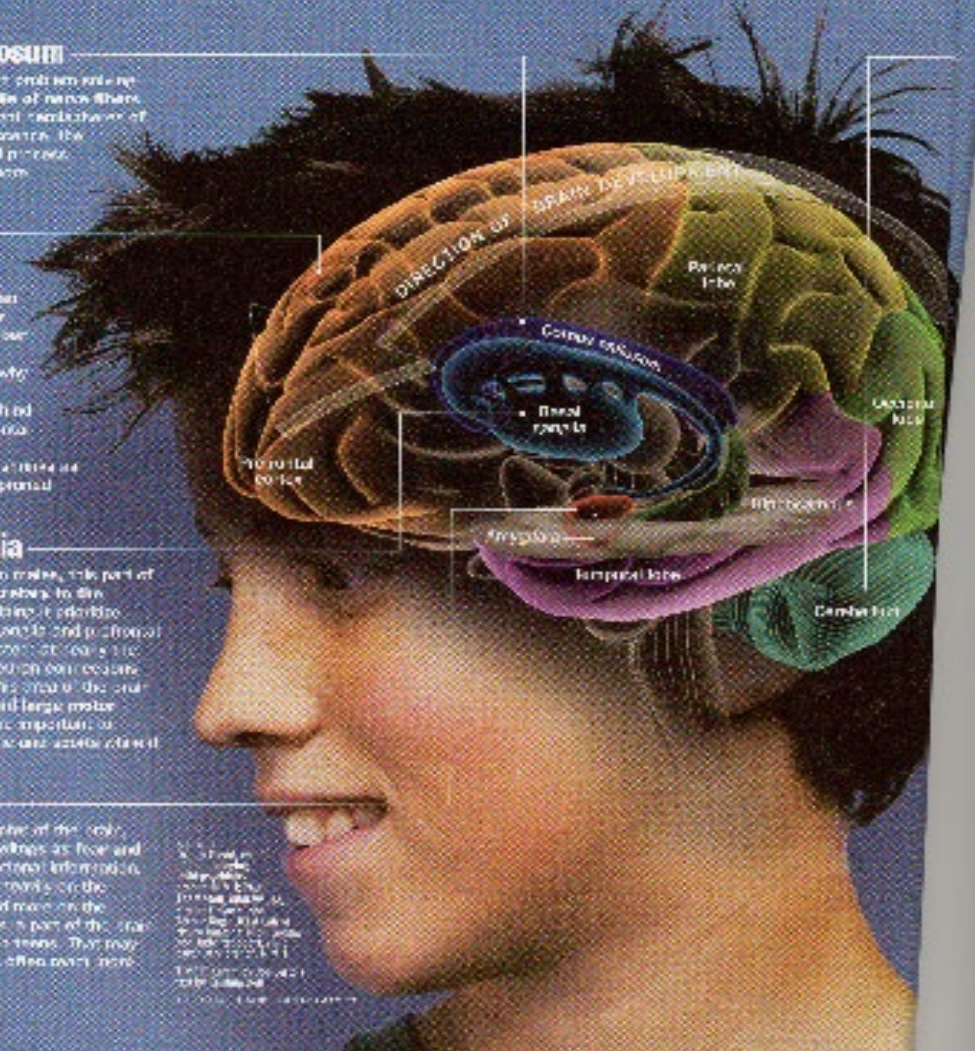
The part of the brain that makes the area of sober second thought. It's the last part of the brain to mature—which may be why you're still so much to do. As the prefrontal cortex grows during the preteen years and then a more of neural connections are pruned during adolescence.

Basal Ganglia

Like a thermostat that controls the part of the brain that sends messages to the prefrontal cortex, the basal ganglia sends information to the basal ganglia and prefrontal cortex. The basal ganglia and prefrontal cortex are both involved in controlling the body's movements. The basal ganglia is also involved in controlling the body's movements. The basal ganglia is also involved in controlling the body's movements.

Amygdala

The amygdala is the emotional center of the brain. It's the part of the brain that sends information to the prefrontal cortex. The amygdala is also involved in controlling the body's movements. The amygdala is also involved in controlling the body's movements.



A Survival Guide
to the
Adolescent Brain for
You and Your Teen

WHY Do They Act That Way?

David Walsh, Ph.D.

**KEEP
OUT**

Copyrighted Material

Get Out of My Life,

but First Could You Drive Me and Cheryl to the Mall?



A PARENT'S GUIDE TO THE NEW TEENAGER

Anthony E. Wolf, Ph.D.

Copyrighted Material

A Developing Brain =
More Acceleration on the “Go” (Limbic) System Compared to Less
Breaking on “Stop” (Prefrontal) System



Implications of Brain Development for Adolescent Behavior



Preference for

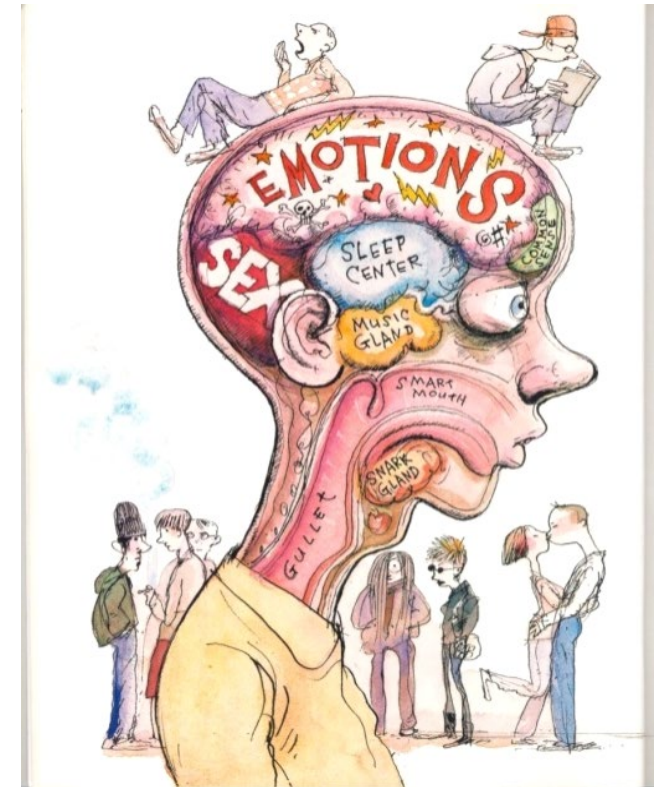
1. physical activity
2. high excitement and rewarding activities
3. activities with peers that trigger high intensity/arousal
4. novelty

Less than optimal..

5. control of emotions
6. consideration of negative consequences

Greater tendency to...

7. be attentive to social information
8. take risks and show poor self-control



Source: US News & World Report, 2005

Implications of Brain Development for Adolescent Behavior



Preference for

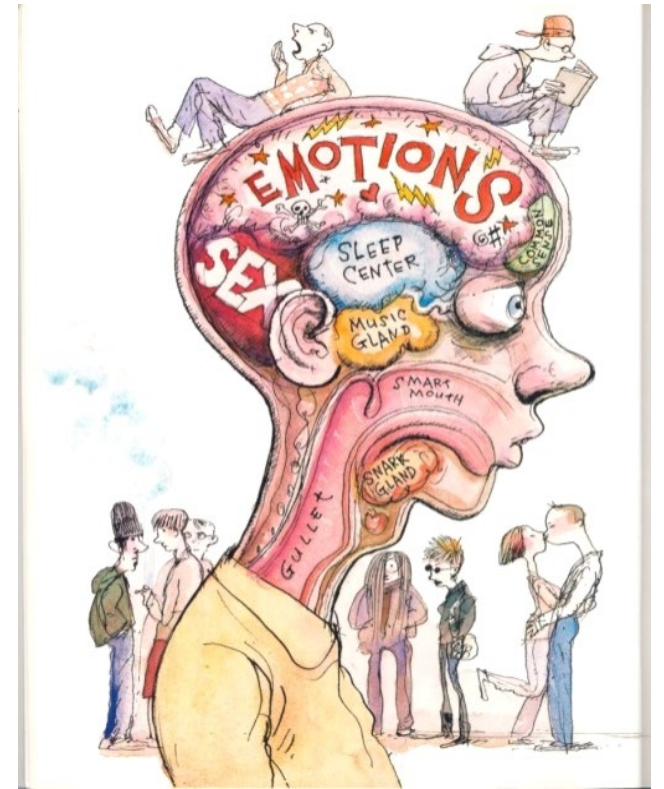
1. **physical activity**
2. **high excitement and rewarding activities**
3. **activities with peers that trigger high intensity/arousal**
4. **novelty**

Less than optimal..

5. **control of emotions**
6. **consideration of negative consequences**

Greater tendency to...

7. **be attentive to social information**
8. **take risks and show poor self-control**



Source: US News & World Report, 2005

Brain Development: Implications for Prevention

1) Teach youth about brain development and the science of addiction



<https://www.drugabuse.gov/publications/drugfacts/marijuana>

Brain Development: Implications for Prevention

- 2) Choose an evidenced-based treatment approach and make sure it has “teen-brain friendly” features
- engaging
 - relevant
 - fun
 - content related to decision making skills



Brain Development: Implications for Prevention

3) Teach parents about brain development

P = Promote activities that capitalize on the strengths of the developing brain.

A = Assist children with challenges that require planning.

R = Reinforce their seeking advice from adults; teach decision making.

E = Encourage a lifestyle that promotes good brain development.

N = Never underestimate the impact of a parent being a good role model.

T = Tolerate the “oops” behaviors due to an immature brain.

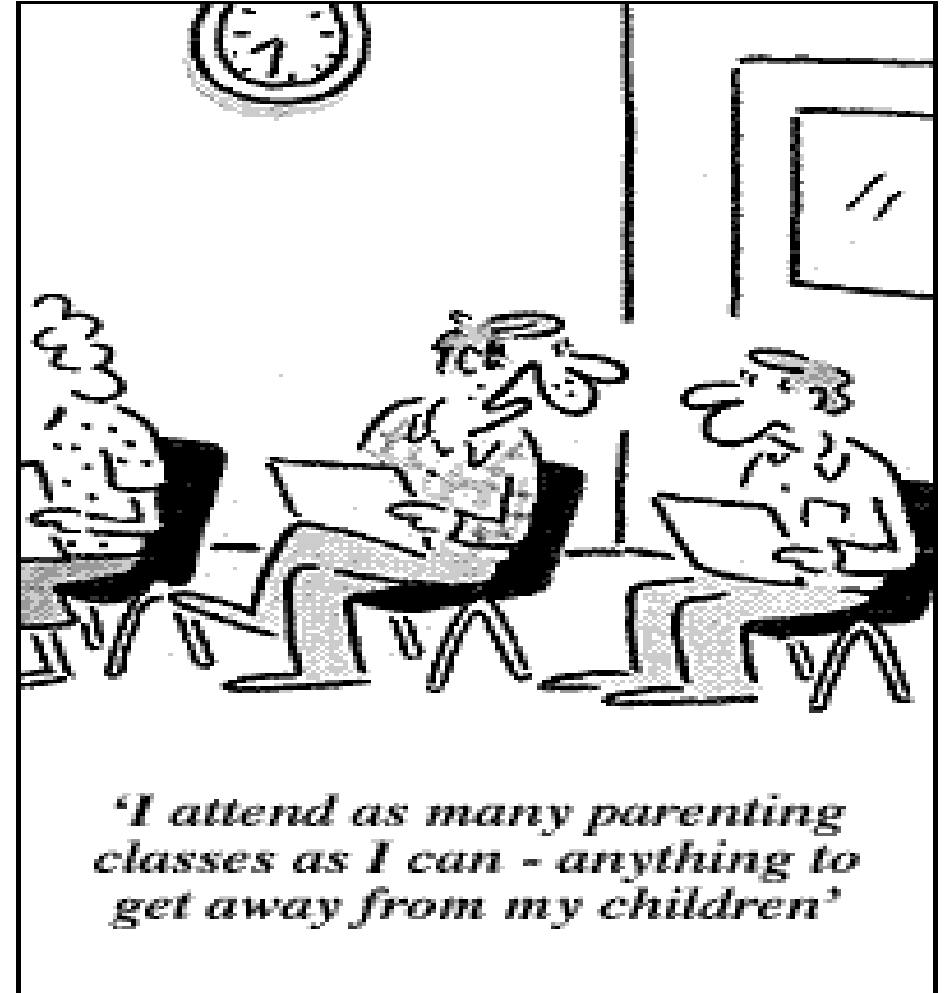


Parent Resources

THE PARTNERSHIP™
AT DRUGFREE.ORG

Prevent, Intervene, Get
Treatment, Recovery

www.drugfree.org

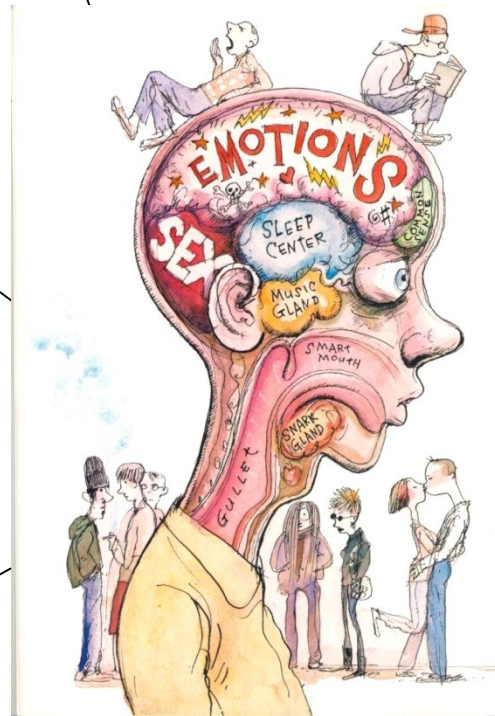


1. Introduction

- Terms
- Basic points
- Resources
- Use patterns
- Developmental issues

4. Summary

3. Examples of AI/AN programs



2. Prevention

- **Keys**
- New threats: vaping & cannabis

Source: US News & World Report, 2005

National Institute on Drug Abuse

Preventing Drug Use

among Children and Adolescents

A Research-Based Guide
for Parents, Educators, and Community Leaders

Second Edition

U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
National Institutes of Health

Risk and Protective Factors (Principles 1 – 4)

- **Prevention programs should**
 - ❑ Enhance protective factors and reverse or reduce risk factors
 - ❑ Address all forms of drug abuse
 - ❑ Address the drug abuse problems of the local community by targeting modifiable risk factors
 - ❑ Address the drug abuse problems of the local community by strengthening protective factors

Adolescent Risk Factors for Substance Abuse are Risk Factors for Other Problem Behaviors

- As the number of risks accumulate (snowball effect), the greater the individual's overall risk of substance abuse and other problems (Scheier et al., 2019)



| | Substance Abuse | Teen Delinquency | School Drop-Out | Teen Pregnancy | Violence | Depression & Anxiety |
|-------------------------------------------------------------------------|-----------------|------------------|-----------------|----------------|----------|----------------------|
| Risk Factors | | | | | | |
| Community | | | | | | |
| Availability of Drugs | ✓ | | | | ✓ | |
| Availability of Firearms | | ✓ | | | ✓ | |
| Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime | ✓ | ✓ | | | ✓ | |
| Media Portrayals of Violence | | | | | ✓ | |
| Transitions and Mobility | ✓ | ✓ | | ✓ | | |
| Low Neighborhood Attachment and Community Disorganization | ✓ | ✓ | | | ✓ | |
| Extreme Economic Deprivation | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Family | | | | | | |
| Family History of the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Family Management Problems | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Family Conflict | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Favorable Parental Attitudes and Involvement in the Problem Behavior | ✓ | ✓ | | | ✓ | |
| School | | | | | | |
| Academic Failure Beginning in Late Elementary School | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lack of Commitment to School | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Individual/Peer | | | | | | |
| Early and Persistent Antisocial Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Alienation and Rebelliousness | ✓ | ✓ | | ✓ | | |
| Friends Who Engage in the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Favorable Attitudes Toward the Problem Behavior | ✓ | ✓ | ✓ | ✓ | | |
| Early Initiation of the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Constitutional Factors | ✓ | ✓ | | | ✓ | ✓ |

Table 2. Reliability of Scores on Risk and Protective Factor Scales

| <i>Domain</i> | <i>Full</i> | <i>Native American</i> |
|-------------------------------------------------------------------|-------------|------------------------|
| Community | | |
| Opportunities for prosocial involvement ^a | 0.77 | 0.77 |
| Rewards for prosocial involvement ^a | 0.83 | 0.81 |
| Low neighborhood attachment ^b | 0.83 | 0.79 |
| Community disorganization ^b | 0.82 | 0.79 |
| Transitions and mobility ^b | 0.65 | 0.67 |
| Laws & norms favorable to drug use and firearms ^b | 0.79 | 0.80 |
| Perceived availability of drug use and firearms ^b | 0.86 | 0.87 |
| Family | | |
| Family attachment ^a | 0.76 | 0.75 |
| Opportunities for prosocial involvement ^a | 0.78 | 0.79 |
| Rewards for prosocial involvement ^a | 0.77 | 0.76 |
| Poor family supervision ^b | 0.76 | 0.78 |
| Poor family discipline ^b | 0.78 | 0.79 |
| Family conflict ^b | 0.75 | 0.73 |
| Family history of antisocial behavior ^b | 0.82 | 0.84 |
| Parental attitudes favorable to ATOD use ^b | 0.77 | 0.83 |
| Parental attitudes favorable to antisocial behavior ^b | 0.72 | 0.74 |
| Peer or individual | | |
| Social skills ^a | 0.60 | 0.64 |
| Belief in the moral order ^a | 0.68 | 0.71 |
| Low perceived risks for drug use ^b | 0.65 | 0.60 |
| Early initiation of drug use and antisocial behavior ^b | 0.79 | 0.80 |
| Sensation seeking^b | | |
| Gang involvement ^b | 0.60 | 0.65 |
| Rebelliousness ^b | 0.66 | 0.66 |
| Friends' delinquent behavior ^b | 0.81 | 0.85 |
| Friends' use of drugs ^b | 0.74 | 0.77 |
| Peer rewards for antisocial behavior ^b | 0.76 | 0.79 |
| Favorable attitudes to antisocial behavior ^b | 0.88 | 0.88 |
| Favorable attitudes to ATOD use ^b | 0.71 | 0.73 |
| School | 0.79 | 0.82 |
| Opportunities for prosocial involvement ^a | 0.83 | 0.84 |
| Rewards for prosocial involvement ^a | 0.83 | 0.85 |
| Poor academic performance ^b | 0.79 | 0.82 |
| Low school commitment ^b | 0.85 | 0.86 |

ARTICLE | [Full Access](#)

ASSESSMENT OF RISK AND PROTECTION IN NATIVE AMERICAN YOUTH: STEPS TOWARD CONDUCTING CULTURALLY RELEVANT, SUSTAINABLE PREVENTION IN INDIAN COUNTRY

Katarina Guttmannova ✉, Melissa J. Wheeler, Karl G. Hill, Teresa A. Evans-Campbell, Lacey A. Hartigan, Tiffany M. Jones, J. David Hawkins, Richard F. Catalano

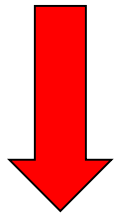
First published: 30 January 2017 | <https://doi.org/10.1002/jcop.21852> | Citations: 6

Prevention Planning (Principles 5 – 8)

- ❑ **School Programs should be specific to the school-age status of the children**
 - ❑ Before/during the **elementary school years**: self control, emotional awareness, problem solving, communication & academic readiness/competence
 - ❑ **Middle, junior high, and high school**: peer relations, study habits and academic support, communication, self-efficacy and assertiveness, drug resistance skills
- ❑ “This should arguably provide the biggest bang for the dollar, as both low- and high-risk students present in school are exposed to the intervention.” (Larry Scheier, in press)

Prevention Planning (Principles 5 – 8)

- **Family programs should....**
 - Enhance protective and reduce risk factors (related to family bonding, parenting skills, and communication)



| <i>Risk Factors</i> | <i>Protective Factors</i> |
|---------------------------------------------|-------------------------------|
| Harsh discipline | Consistent discipline |
| Rejection/neglect | Close family bond |
| Lax supervision | Monitoring/supervision |
| Parent/sibling drug use | Anti-drug family rules |
| High family conflict | Family communication |
| Parent mental illness or life stress | Functional family |



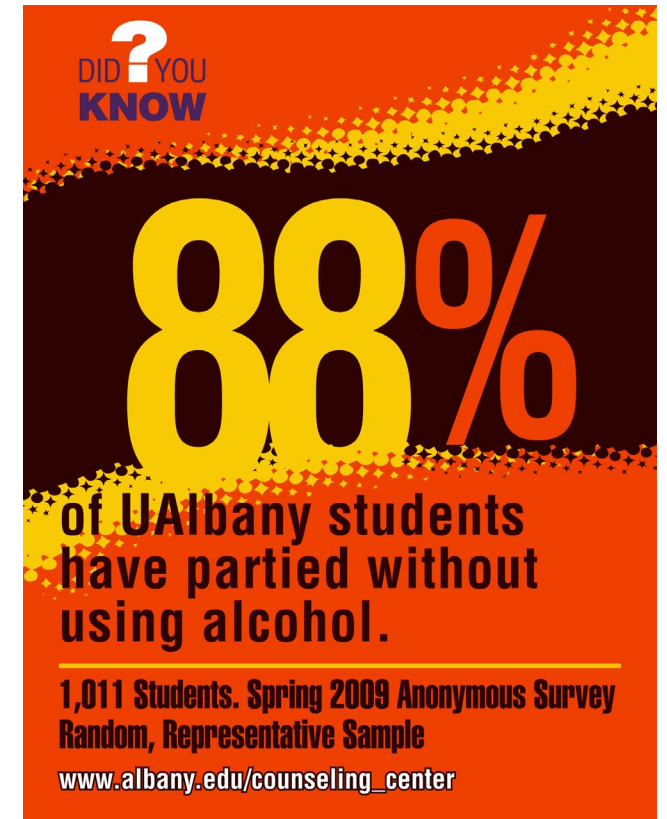
Prevention Planning (Principles 9 – 11)

❑ **Community/Environmental Programs**

- ❑ Involve multiple and diverse stakeholders
- ❑ Those that combine 2 or more effective programs (e.g., school and family component) may optimize effectiveness
- ❑ The Communities that Care (CTC) programs is one of several exemplary community-based prevention programs
- ❑ Environmental ex: policies to restrict availability of tobacco to young people; compliance checks regarding access to alcohol (Nelson et al., 2013); prevention messaging campaigns

Prevention Planning

- **Sidebar: Community Programs for College Students**
 - Consider social norms approach
 - Use campus assessment data and develop student awareness campaigns to address the “reign of error” (Wesley Perkins)



Prevention Program Delivery (Principles 12 – 16)

- ❑ When communities select programs to meet their needs, the implementation should retain the core elements of the original program
 - ❑ newer thinking: personalize or adapt delivery when feasible
- ❑ Prevention is an on-going effort with repeated programming over time to reinforce earlier goals and develop new skills
- ❑ Teacher training in classroom management is a critical school-based prevention strategy
- ❑ Evidence based prevention interventions are cost effective

Cost

| Summary of Benefits and Costs (2003 Dollars) | | | |
|-----------------------------------------------------|-----------------|--------------|--------------|
| Program | Benefits | Costs | B - C |
| Early Childhood Education | \$17,202 | \$7,301 | \$9,901 |
| Nurse Family Partnership | \$26,298 | \$9,118 | \$17,180 |
| Soc. Dev. Project (Seattle) | \$14,246 | \$4,590 | \$9,837 |
| Strengthening Families | \$6,656 | \$851 | \$5,805 |
| Intensive Juv. Supervision | \$0 | \$1,482 | -\$1,482 |
| Big Brothers/Sisters | \$4,058 | \$4,010 | \$48 |

Cost

| Summary of Benefits and Costs (2003 Dollars) | | | |
|-----------------------------------------------------|-----------------|--------------|--------------|
| Program | Benefits | Costs | B - C |
| Early Childhood Education | \$17,202 | \$7,301 | \$9,901 |
| Nurse Family Partnership | \$26,298 | \$9,118 | \$17,180 |
| Soc. Dev. Project (Seattle) | \$14,246 | \$4,590 | \$9,837 |
| Strengthening Families | \$6,656 | \$851 | \$5,805 |
| Intensive Juv. Supervision | \$0 | \$1,482 | -\$1,482 |
| Big Brothers/Sisters | \$4,058 | \$4,010 | \$48 |

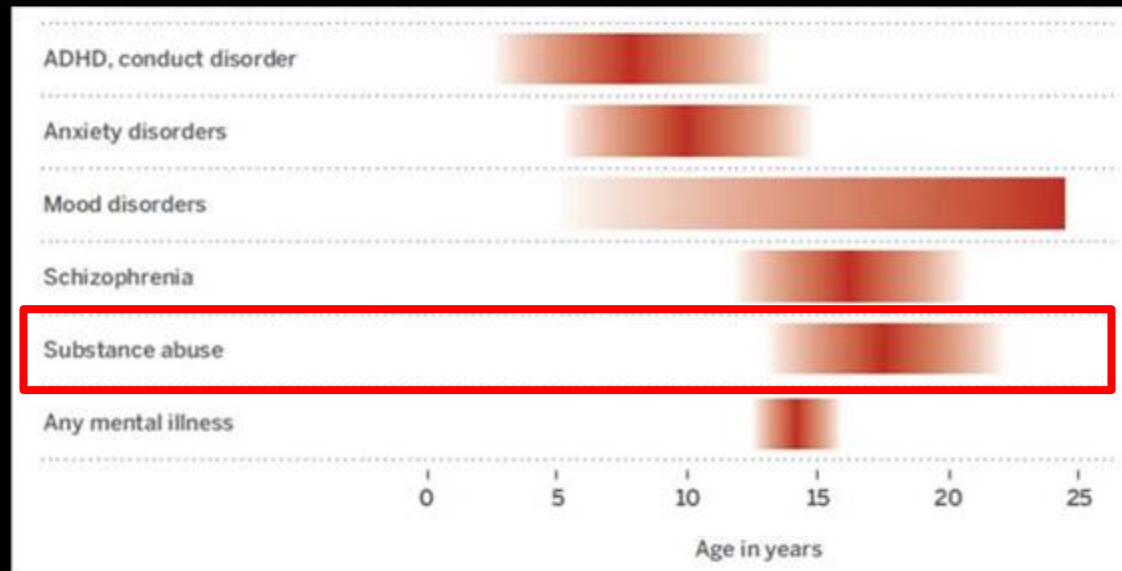
(Aos et al., 2004) - WA State Institute of Public Policy



**Importance of Youth Prevention: The
Later the Initiation of Drug Use, the
Less Likely a Problem Later in Life**

Importance of Youth Prevention

Adolescence is peak time for clinical onset of most mental illnesses



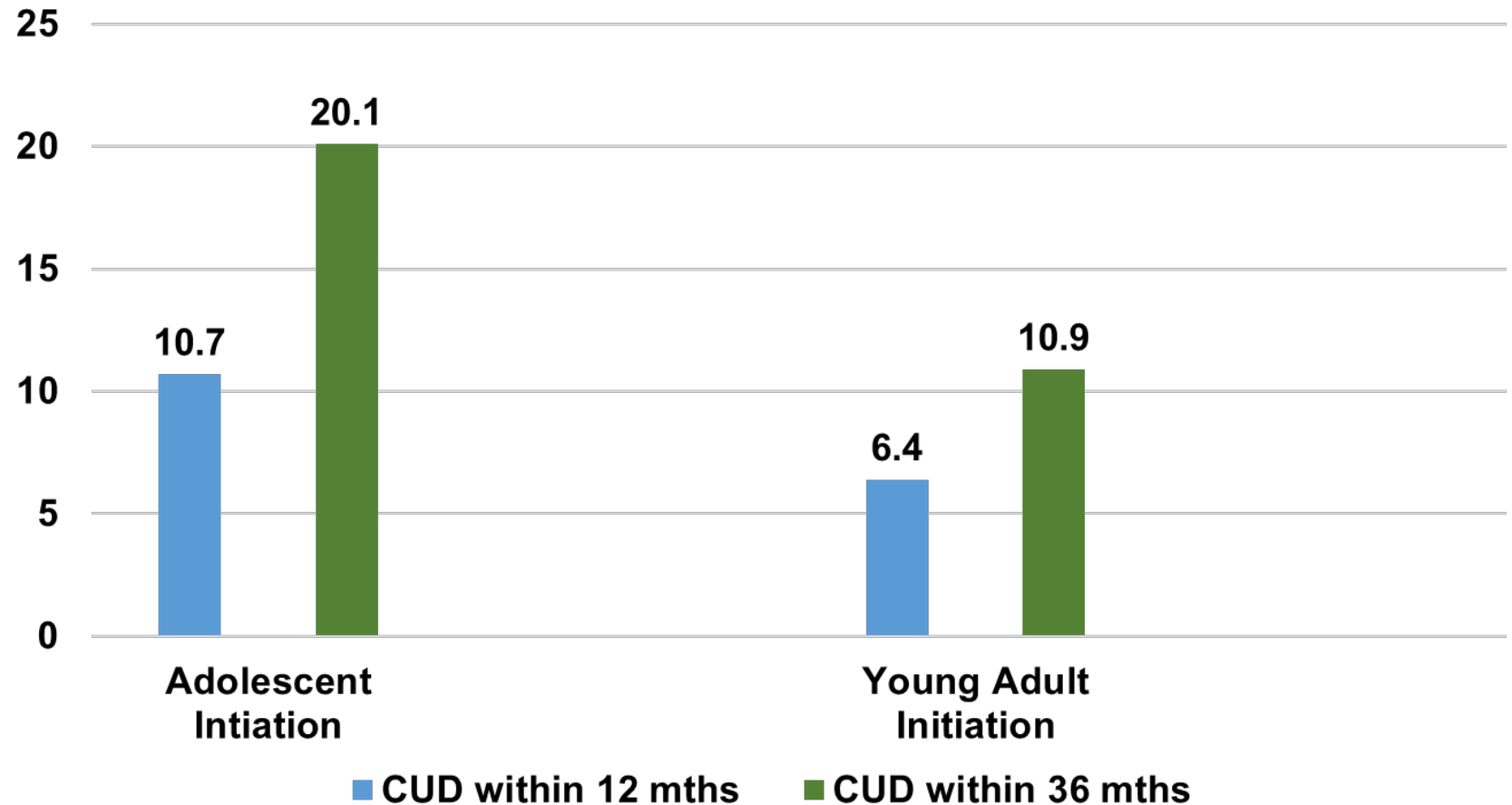
Lee et al. Adolescent mental health-opportunity and obligation. Science 346:546-549 (2014)


Later Age of Initiation = Less Risk of Developing a Problem

Cannabis Use Disorder during adolescence (Volkow et al., 2021)

- Among teens who initiated use of cannabis during their teenage years, within 12 months of initiation, 11% had developed a CUD; and within 36 months, 20% had met criteria for a CUD.
- In comparison: Among young adults who initiated cannabis use during ages 18-25, the CUD rate was about half that of the teenagers.
- These results support the principle that there is a faster transition to a cannabis use problem the younger the age of initiation of use.

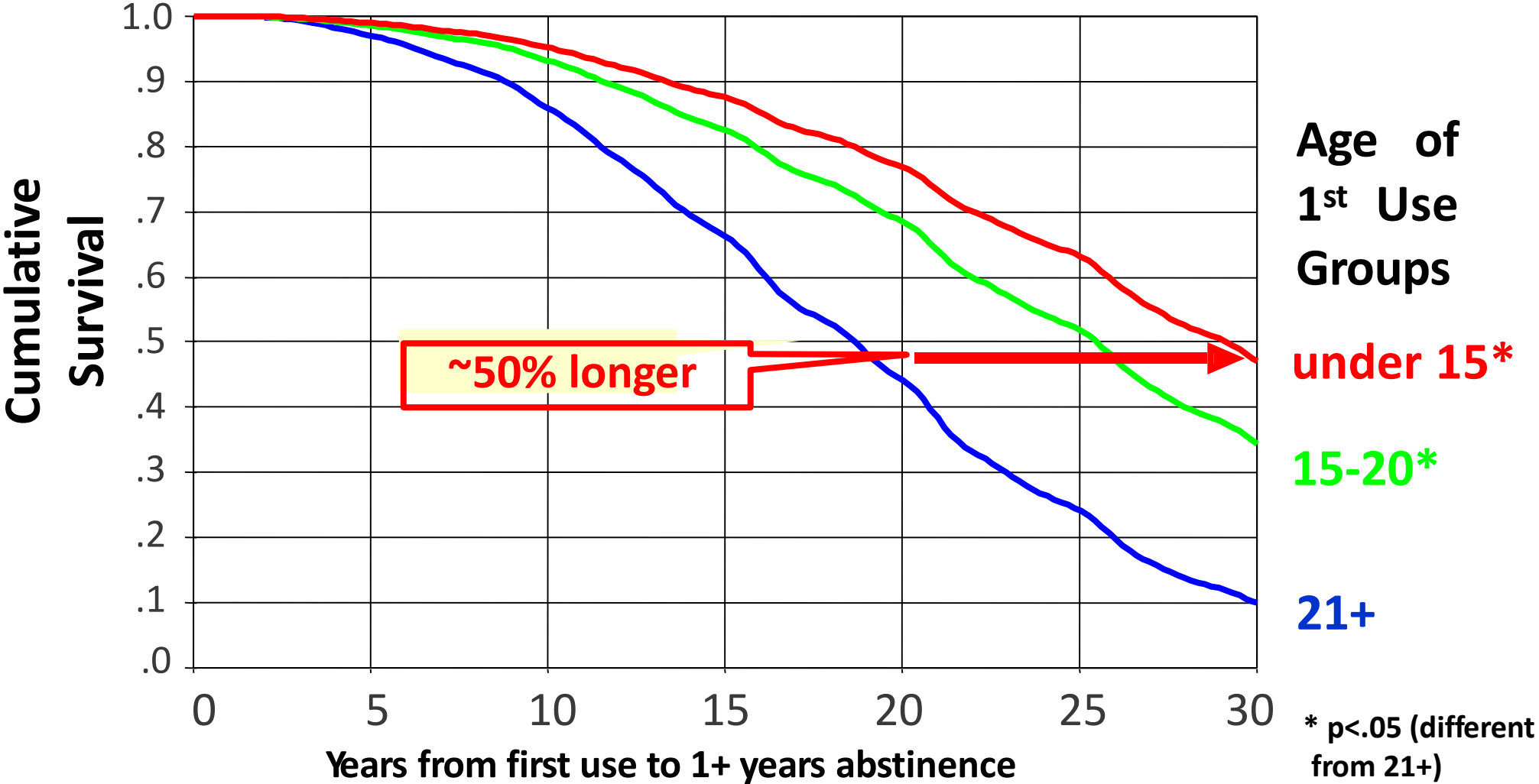
Risk of Developing a Cannabis Use Disorder Based on Initiation NSDUH Data, 2015-2018





**Importance of Youth Prevention: The
Later the Initiation of Drug Use, the
More Likely a Quicker Path to
Recovery**

Early Age of Initiation = Longer to Reach Abstinence



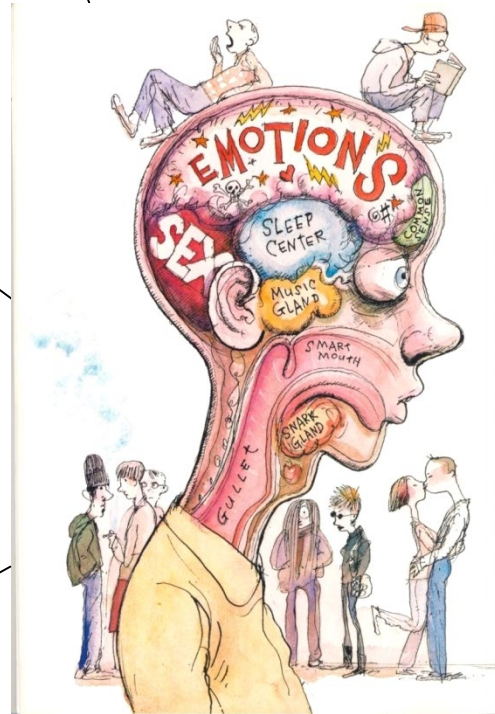
Source: Dennis et al., 2005

1. Introduction

- Terms
- Basic points
- Resources
- Use patterns
- Developmental issues

4. Summary

3. Examples of AI/AN programs



2. Prevention

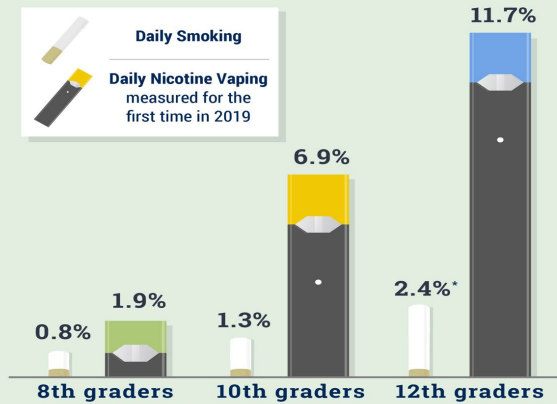
- Keys
- **New threats: vaping & cannabis**

Source: US News & World Report, 2005

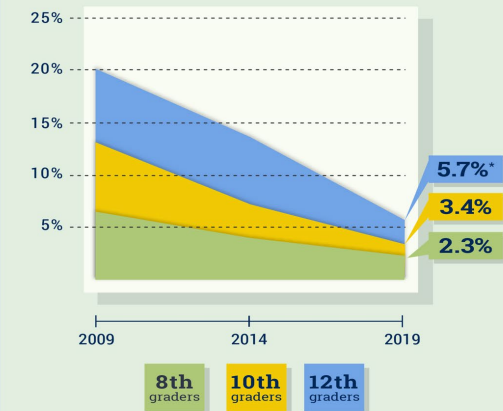
Vaping Nicotine Increases in the Face of Cigarette Use Declining

TOBACCO AND NICOTINE: VAPING THREATENS PROGRESS

2019 NICOTINE – DAILY USE



CIGARETTE SMOKING (PAST MONTH) DECLINES OVER PAST TEN YEARS



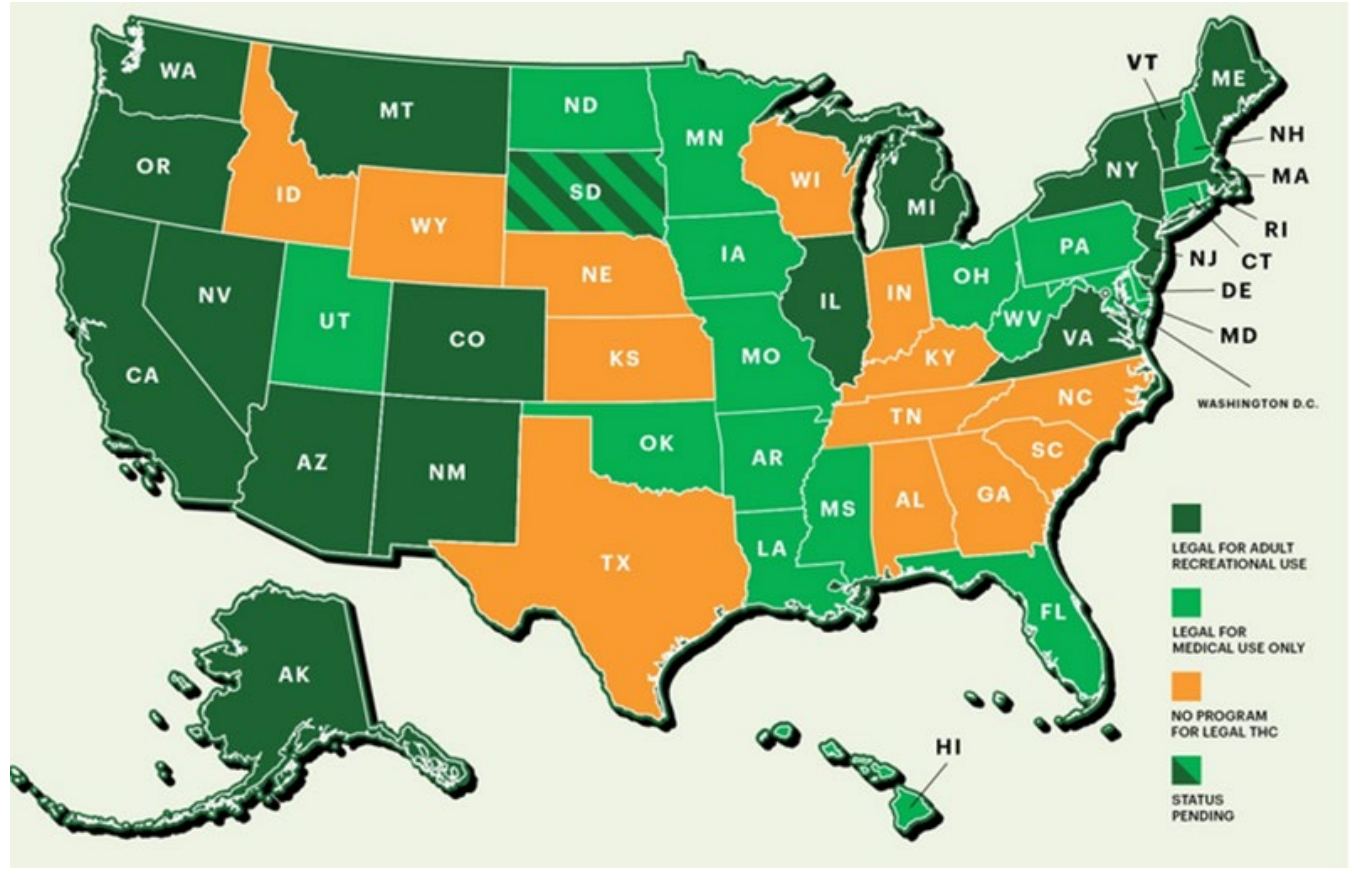
TO VIEW MORE RESULTS ON VAPING VISIT:

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



DRUGABUSE.GOV

Legalization of Cannabis in the U.S.

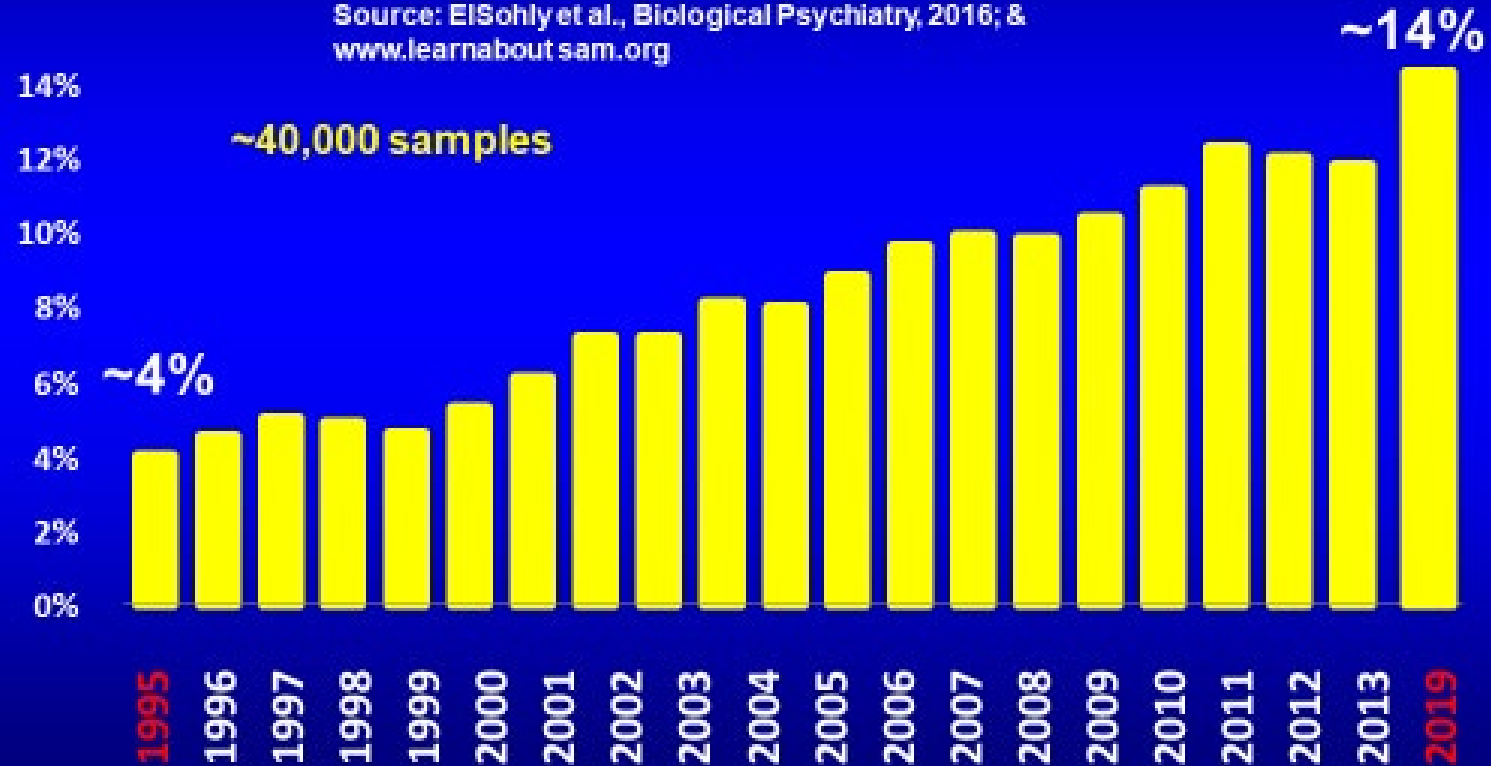


“Its not the same weed our parents and grandparents used.”



Avg. % THC Content among Confiscated Cannabis Products in U.S. (1995-2019)

Source: ElSohly et al., Biological Psychiatry, 2016; & www.learnaboutsam.org



Uphill Prevention Battle



DON'T LET THEM DO IT AGAIN WITH MARIJUANA

BIG TOBACCO AND BIG WEED ARE MERGING TO TARGET VULNERABLE COMMUNITIES, AND OUR KIDS.

Big Pot is pushing for legalization at the federal level, and a bill is being written behind closed doors to give them everything they want – pretending to be social justice.

The marijuana industry is seeing increased investment from existing giants of addiction. Altria recently registered to lobby on Cannabis in Virginia, where a legalization bill backed by the governor is sailing through legislature. Altria, the parent company of Phillip Morris, recently invested more than \$2 billion into the industry, and has secured a minority ownership into Juul – the vaping giant – in a move to cement future stakes in the industry.

As America learned with Big Tobacco, the full consequences of commercialization will materialize over decades. However, we do not need to wait that long to understand some key outcomes. For example, data already gathered by HHS finds legalized marijuana states have among the highest rates of marijuana use in the country, and use is sharply increasing in vulnerable demographics, like youth and young adults whose brains are still developing. The move to legalize marijuana is really a move to commercialize marijuana for profit. It is today's version of Big Tobacco, and it should be discouraged.

Today's pot isn't Woodstock Weed – it's much more powerful and damaging to the brain.

The change in marijuana potency today (daily users) versus 20 years ago (average weekend user) is akin to the caffeine change from one 20 oz. cola a day, to thirty-three 16 oz. cappuccinos a day. (Caulkins, 2018).

Science has proven – and all major scientific and medical organizations agree – that marijuana is both addictive and harmful

to the human brain, especially when used as an adolescent. One in every six 16 year-olds (and one in every eleven adults) who try marijuana will become addicted to it.

It's deadly for our roads.

“AAA opposes the legalization of marijuana for recreational use because of inherent traffic safety risks and because of the difficulties in writing legislation that protects the public and treats drivers fairly.”

Just because you may go 35 MPH in a 65 MPH zone versus 85 MPH if you are drunk, it does not mean you are driving safely! In fact, marijuana intoxication doubles your risk of a car crash according to the most exhaustive research reviews ever conducted on the subject.

Contrary to federal law, under which the use and sale of marijuana for any purpose is illegal, beginning in 2012 several states legalized the commercial sale of marijuana. This has led to the rise of public health, safety and social justice harms, including increased emergency room visits from today's high potency marijuana; increased addiction rates, increased drugged driving crashes, disproportionate outcomes and ownership, and more.

Within the scientific and medical community, there is broad agreement that youth should be protected, social justice must be secured, roadways should be safe, and our mental health must be valued.

Tell your representatives this push to commercialize weed federally is unacceptable.

Big Pot is pushing for legalization at the federal level, and a bill is being written behind closed doors to give them everything they want – pretending to be social justice.

The fact is, marijuana commercialization is nothing more than social injustice, as it only serves the monied interest of Big Pot lobbyists, addiction corporations such as Big Tobacco, alcohol conglomerates, and the investor class that overwhelmingly make up the marijuana industry.

Tell your representatives this push to commercialize weed federally is unacceptable.

**Tell U.S. Senators Collins and King
to listen to the scientists and put Maine's children first.**

Call (202) 224-3121

For more information, visit learnaboutsam.org

SAM Smart Approaches to Marijuana
preventing another big tobacco

Smart Approaches to Marijuana envisions a society where marijuana policies are aligned with the scientific understanding of marijuana's harms, and the commercialization and normalization of marijuana are no more.

Our mission is to educate citizens on the science of marijuana and to promote health-first, smart policies and attitudes that decrease marijuana use and its consequences.

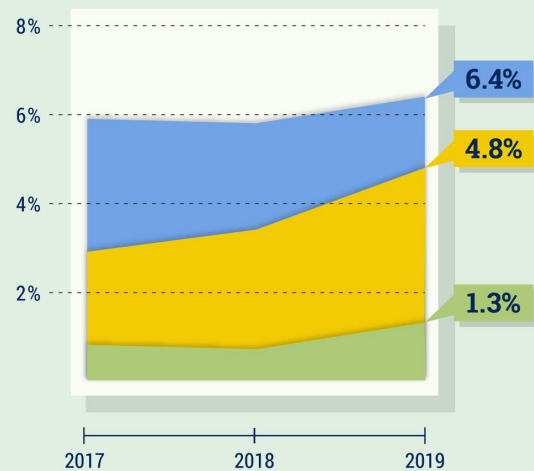
Marijuana Use and Grade Comparison



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

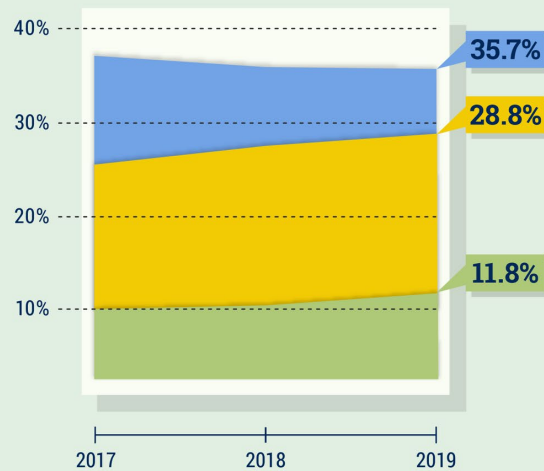
DAILY MARIJUANA USE

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



PAST YEAR MARIJUANA USE

gap closing between older grades



8th graders

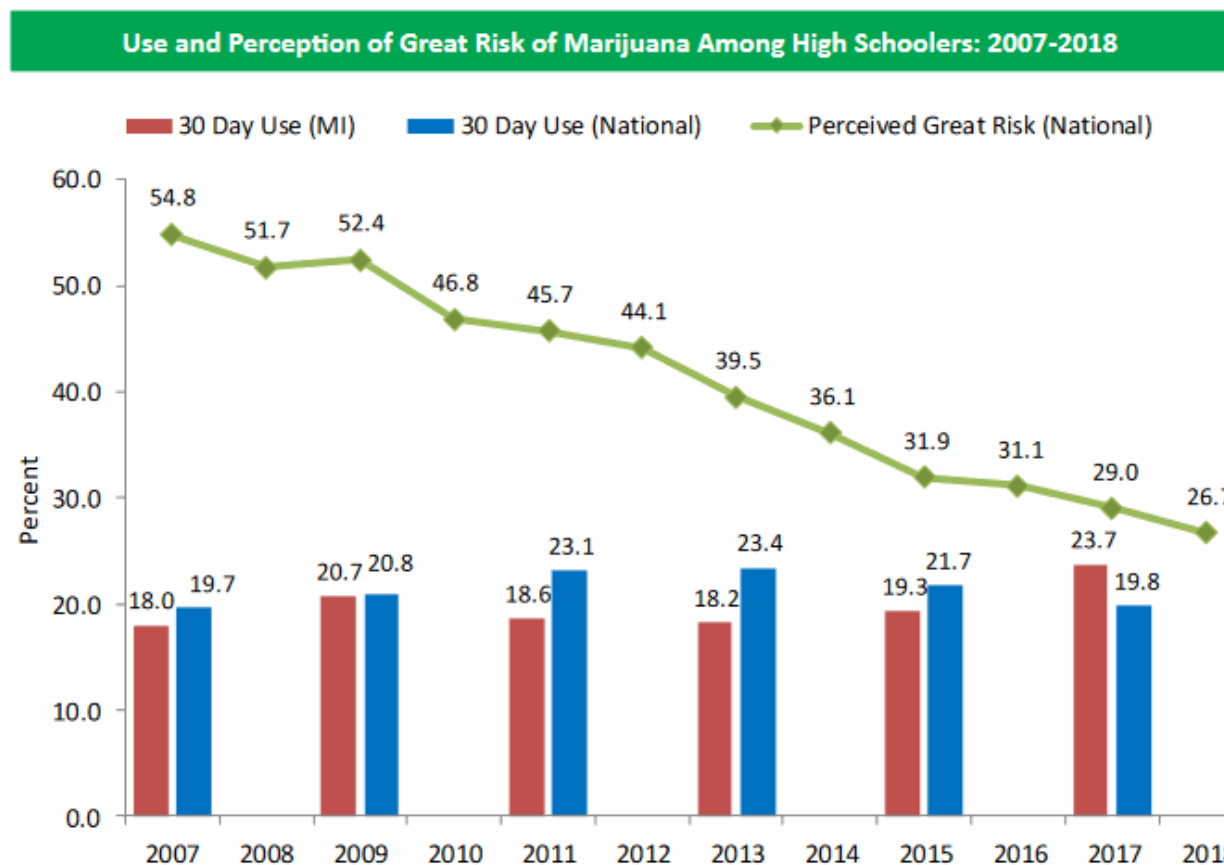
10th graders

12th graders

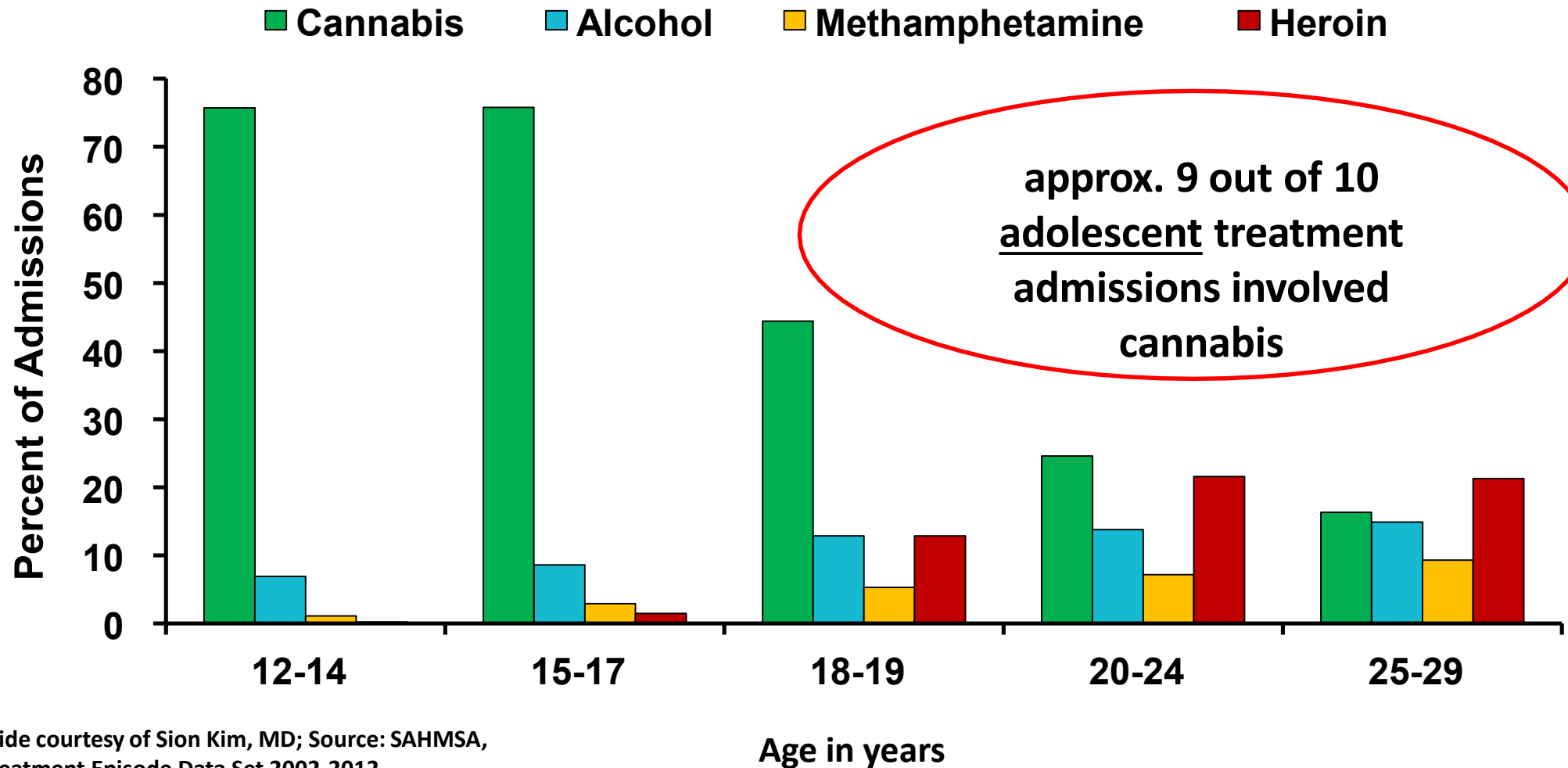


DRUGABUSE.GOV

Perception of Harm Associated with Marijuana Use on the Decline



Treatment Admissions by Drug Type: Cannabis Dominates Among Youth 2002-2012

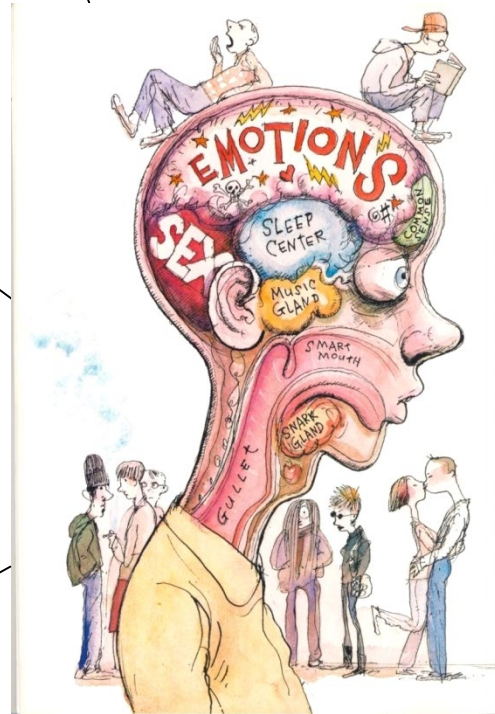


1. Introduction

- Terms
- Basic points
- Resources
- Use patterns
- Developmental issues

4. Summary

3. Examples of AI/AN programs



2. Prevention

- Keys
- New threats: vaping & cannabis

Source: US News & World Report, 2005

Living in Two Worlds

Substance Use Prevention for Urban American Indian Youth: An Efficacy Trial of the Culturally Adapted *Living in 2 Worlds* Program

Stephen S. Kulis, Stephanie L. Ayers, and Mary L. Harthun
Southwest Interdisciplinary Research Center, Arizona State University

- Adaptation of *keepin' it REAL*
- Intended for AI/AN middle school students
- Implementation: teachers, 12-sessions, manualized
- Content and activities focus on strengthening resiliency and AI/AN cultural engagement
 - ▣ Specific skills: drug resistance skills, better decision making
 - ▣ Cultural engagement: one example is having students identify a personal value that reflects resiliency and describe the value with storytelling; supports the importance of the oral tradition in AI/AN culture in transmitting their heritage from one generation to another
- Research study: *Living in Two Worlds* showed better outcomes than *keepin' it REAL*

Project Venture

Project Venture: Evaluation of an Experiential, Culturally Based Approach to Substance Abuse Prevention with American Indian Youth

Susan Carter, Kee J.E. Straits, McClellan Hall


First Published September 1, 2007 | Meeting Report

<https://doi.org/10.1177/105382590702900315>

- Project Venture (PV) is a year-long, outdoor/experiential youth development program for at-risk youth, grades 5-8
- The model is guided by AI/AN traditional values such as family, learning from the natural world, spiritual awareness, service to others, and respect
- Program content includes:
 1. in-school problem-solving games and initiatives
 2. afterschool, weekend and summer skill-building experiential activities delivered weekly; and challenge activities (e.g. hiking, recreation, camping)
 3. summer camp immersion lasting three to ten days
 4. promotion of community service via numerous service leadership projects throughout the year involving older youth and parents

Intertribal Talking Circle Intervention

Formative Research and Cultural Tailoring of a Substance Abuse Prevention Program for American Indian Youth: Findings From the Intertribal Talking Circle Intervention

Julie A. Baldwin, PhD , John Lowe, PhD, RN, FAAN, Jada Brooks, PhD, MSPH, RN, more...

[Show all authors](#)

First Published May 14, 2020

Research Article

 Check for updates

- The Intertribal Talking Circle Intervention was developed by three tribal communities
- Each tribe began with the existing and well-research school-based program, the *Teen Intervention Program*, and then culturally tailored it for their tribal community
- Tribal adaptations and tailoring involved conducting focus groups and advice from AI/AN researchers
- Common elements of behavior change components:
 1. Promote dialogue between many generations of community members including youth, parents, and elders
 2. Include community-based activities that promote positive social relationships in the community, develop traditional skills, incorporate traditional cultural activities and teachings, and draw on cultural sources of resilience
 3. Focus on....
 - i. consequences of substance use
 - ii. addressing a wide array of social issues that get to the larger roots of the problem



Culture is Prevention

(Centers for American Indian and Alaska Native Health; www.ucdenver.edu/caianh)

- This multi-phased community-based participatory research project was initiated by six urban AI/AN health organizations in northern California
- Program aims: to promote strength, health, healing, and wellness improvement in AI/AN youth with culturally informed methods
- To date:
 1. development and validation of a 29-item adaptation of the Culture Connective Scale
 - original scale developed for First Nations/Indigenous youth in Canada by Dr. Angela Snowshoe
 2. confirmed a positive association between mental health and cultural connectedness

A Community Approach to Enhancing Adolescent Health among Rural American Indians *(Indigenous Wellness Research Institute; www.iwri.org)*

- The Indigenous Wellness Research Institute developed and obtained preliminary validation data of an instrument to assess community readiness to support adolescent mental health
- Readiness is the degree to which a community has the capacity and is prepared to take action on behavioral health issues
- The assessment tool, which is completed by community leaders and stakeholders, provides a profile of the community's readiness on six dimensions



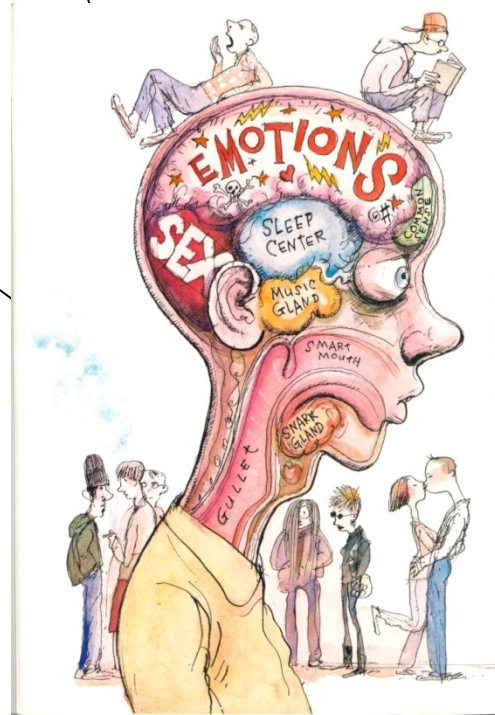
Indigenous Wellness Research Institute
National Center of Excellence

1. Introduction

- Terms
- Basic points
- Resources
- Use patterns
- Developmental issues

4. Summary

3. Examples of AI/AN programs



2. Prevention

- Keys
- New threats: vaping & cannabis

Source: US News & World Report, 2005

Summary: Key Features

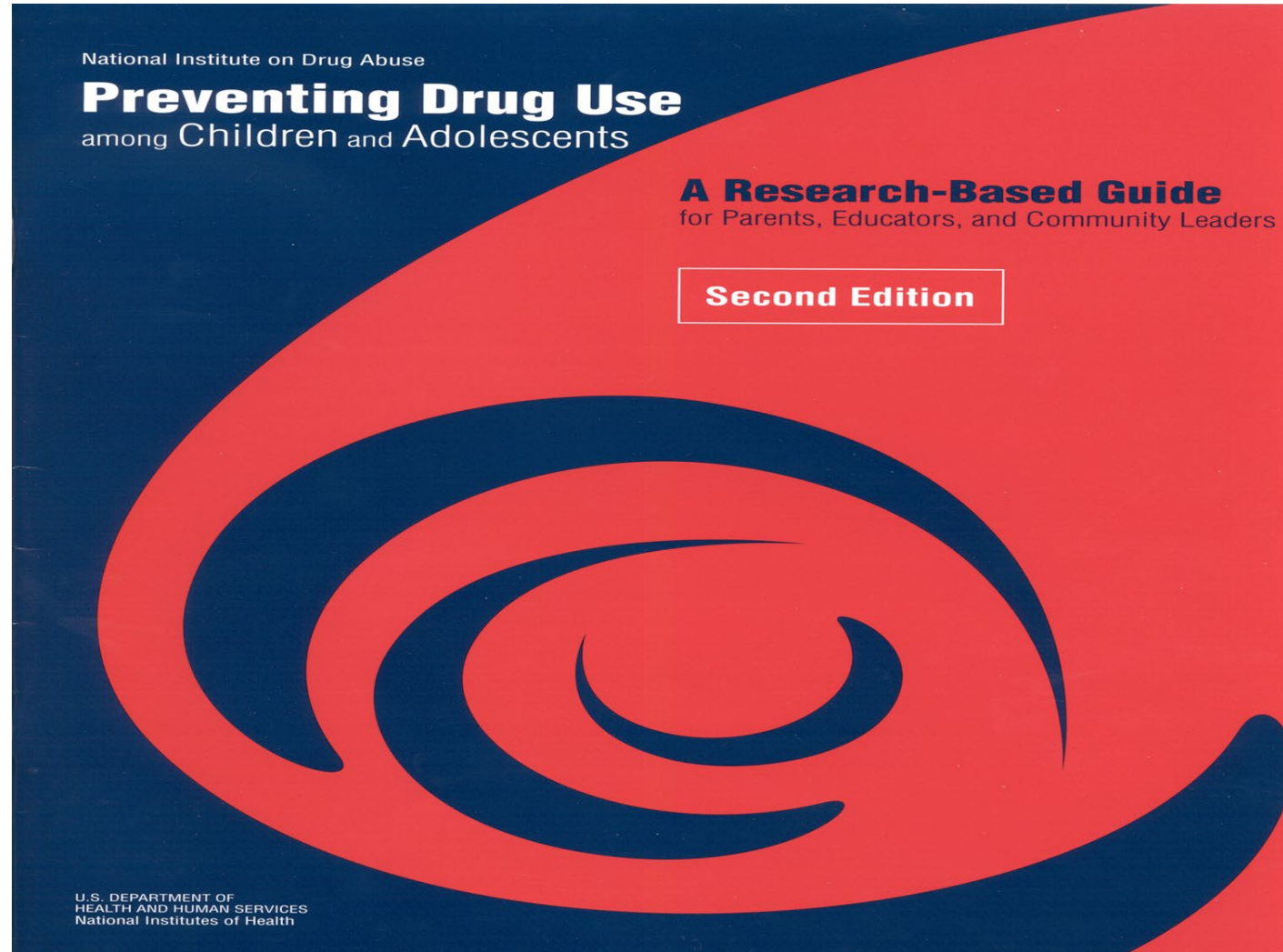
several literature sources

(most notable: NIDA's Prevention Principles, recent chapter by Scheier et al., 2021, & publications from the Centers for American Indian and Alaska Native Health)

+

my synthesis of the programs reviewed here

1. Implement as Many of NIDA Principles as Possible



2. Culture is Prevention

- Growing evidence that AI/AN youth who identify positively with their Native heritage, maintain connections with extended family, and integrate traditional values into their lives are less vulnerable to risky behaviors, including substance use (Clifford, 2007; Spicer et al., 2003).

3. Personalize for Relevance and Effectiveness

- Personalization can be based on age group, culture and other factors, such as
 - personality profiles (e.g., Conrod)
 - allowing choices among menu options
- Apps and other digital technologies are enabling personalization approaches

4. Promote Resiliency/Positive Psychology

- **Resiliency** = the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of threat.
- **Positive Psychology** = a focus on human thoughts, feelings, and behavior that support a person's strengths instead of weaknesses, and an emphasis on the good in life instead of repairing the bad (Peterson, 2008).

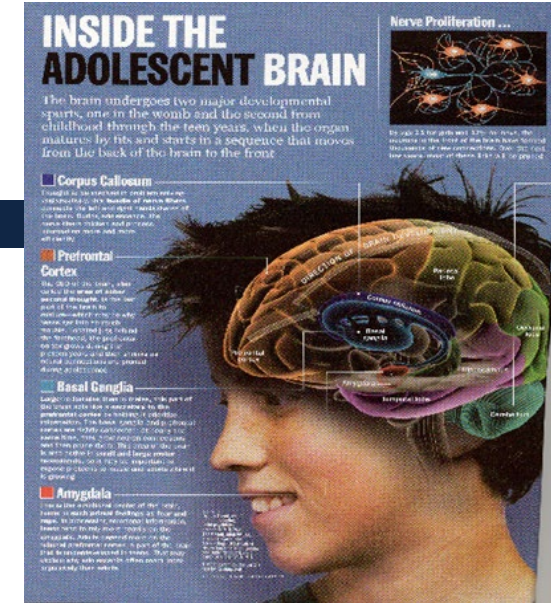


Examples of Resiliency Skills/Positive Psychology Themes

1. realistic optimism
2. mastering challenges; disciplined focus on skill development
3. cognitive flexibility, including tendency to reframe adversity into a more positive light
4. ability to regulate emotions (e.g., delay gratification; rapid stress recovery)
5. high coping self-efficacy
6. strong social supports
7. unselfishness
8. guided by core traditional beliefs

5. Include Teen Brain Science

- Helps to elevate relevance and engagement of your program
- Use this science to
 - emphasize that the teen brain is vulnerable to the effects of substances
 - support sound decision making
- free resource:
<https://www.drugabuse.gov/drug-topics/adolescent-brain>



6. Include Parents

- Parents are key preventionists!!
 - most adolescents still appreciate the positive influence of their parents
 - parenting matters
 - role model

THANK YOU

winte001@umn.edu

Questions and Discussion

