

Preventing Youth Opioid Misuse & Addiction

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Learning Objectives

- To improve knowledge about the opioid crisis in Alaska.
- To increase knowledge about resources available for schools to address this crisis.



Image Source:
<https://www.resumetarget.com/blog/wp-content/uploads/2013/05/objective-quiz-test.jpg>

What is an Opioid?

- heroin
- morphine
- codeine
- methadone
- oxycodone
- hydrocodone
- fentanyl
- hydromorphone
- buprenorphine
- others



Sources:
Centers for Disease Control and Prevention (CDC):
<https://www.cdc.gov/drugoverdose/opioids/index.html>
Am Health Drug Benefits. 2015 *New Perspectives in the Treatment of Opioid-Induced Respiratory Depression*. Oct; 8(6 suppl3): S51–S63.

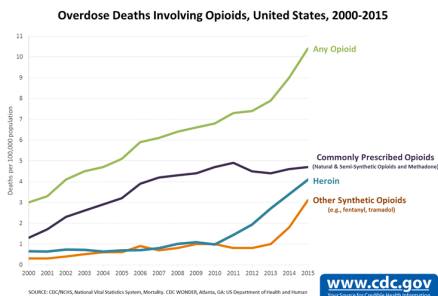
How do opioids work?

- Bind to receptors in the:
 - brain
 - spinal cord
 - gastrointestinal tract
- Affects:
 - mood
 - blood pressure
 - breathing



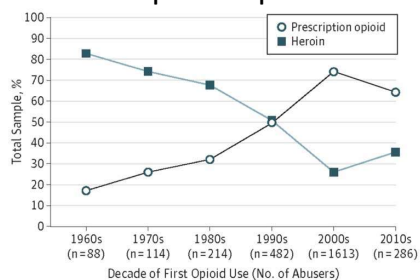
Source: Am Health Drug Benefits. 2015 *New Perspectives in the Treatment of Opioid-Induced Respiratory Depression*. Oct; 8(6 suppl3): S51–S63
Image Source: NIDA

What is the magnitude of opioid misuse in the United States?



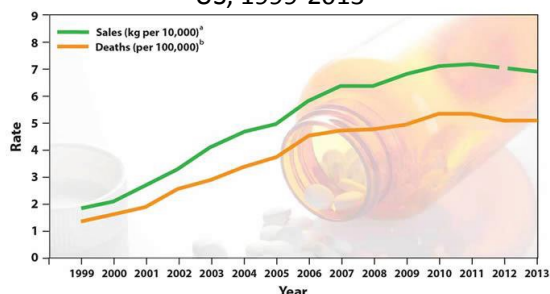
Source: Centers for Disease Control and Prevention (CDC):
<https://www.cdc.gov/drugoverdose/epidemic/index.html>

Link: Prescription Opioids & Heroin



Percentage of the total heroin-dependent sample that used heroin or a prescription opioid as their first opioid of abuse. Data are plotted as a function of the decade in which respondents initiated their opioid abuse. Source: Cicero et al., 2014; NIDA:
<https://www.drugabuse.gov/publications/research-reports/relationship-between-prescription-drug-heroin-abuse/prescription-opioid-use-risk-factor-heroin-use>

Prescription Opioid Sales and OD Deaths, US, 1999-2013



Sources:
^aAutomated Reporting and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA). 2012 data not available.
^bCenters for Disease Control and Prevention, National Vital Statistics System mortality data. (2015) Available from URL:
<http://www.cdc.gov/nchs/deaths.htm>

Opioid Epidemic in Alaska



Source: The Alaska Department of Health and Social Services Division of Public Health:
<http://dhss.alaska.gov/dph/Director/Pages/heroin-opioids/data.aspx>

Opioid Epidemic in Alaska cont.



Sources: The State of Alaska Epidemiology, Bulletin No. 11, April 20, 2017, Update on Drug Overdose Deaths – Alaska, 2016; The Alaska Department of Health and Social Services Division of Public Health:
<http://dhss.alaska.gov/dph/Director/Pages/heroin-opioids/data.aspx>

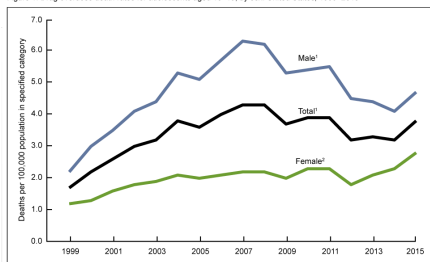
Alaska Disaster Declaration



Image source: <https://vimeo.com/207349680>

Drug Overdose Death Rates for Adolescents Aged 15-19, US (1999-2015)

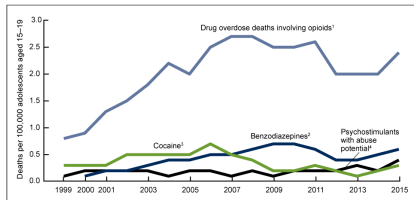
Figure 1. Drug overdose death rates for adolescents aged 15-19, by sex: United States, 1999-2015



Significant increasing trend for 1999-2007; significant decreasing trend for 2007-2014; rate for 2015 significantly higher than for 2014, $p < 0.05$.
 Significant increasing trend for 1999-2004; stable trend for 2004-2012; significant increasing trend for 2012-2015, $p < 0.05$.
 NOTES: Drug overdose deaths are identified with International Classification of Diseases, Tenth Revision underlying cause of death codes X40-X44, X50-X54, X60, and T10-T14. In 2015, there were 772 total drug overdose deaths: 454 for males and 278 for females. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/tables/2015_2016.pdf.
 SOURCE: NCHS, National Vital Statistics System, Mortality.

Drug Overdose Death Rates for Adolescents Aged 15-19 by Type of Drug

Figure 3. Drug overdose death rates for adolescents aged 15-19, by type of drug involved: United States, 1999-2015



Significant increasing trend for 1999-2007; significant decreasing trend for 2007-2014; rate for 2015 significantly higher than for 2014, $p < 0.05$.
 Significant increasing trend for 1999-2000; significant decreasing trend for 2000-2012; significant increasing trend for 2012-2015, $p < 0.05$; too few cases in 1999 to compute a reliable rate.
 Significant increasing trend for 1999-2000; significant decreasing trend for 2000-2005; stable trend for 2005-2013; rate for 2015 significantly higher than for 2013, $p < 0.05$.
 Significant increasing trend for 1999-2015, $p < 0.01$.
 NOTES: Drug overdose deaths are identified with International Classification of Diseases, Tenth Revision underlying cause of death codes X40-X44, X50-X54, X60, and T10-T14. Drug overdose deaths involving specific drugs are identified with multiple cause of death codes including T40.1, T40.2, T40.3, T40.4, or T40.5 (2015 N = 249). Drug overdose deaths involving cocaine include code T40.5 (2015 N = 70); benzodiazepines include code T40.4 (2015 N = 120); and psychostimulants with abuse potential include code T40.3 (2015 N = 12). Deaths might involve more than one drug; so categories are not exclusive. Trends may have been affected by improvement in the reporting of specific drugs for drug overdose deaths during the reporting period; see data source and methods. Access data table for Figure 3 at: https://www.cdc.gov/nchs/data/tables/2015_2016.pdf.
 SOURCE: NCHS, National Vital Statistics System, Mortality.

More Youth Opioid Data

- In 2015, 276,000 adolescents were current nonmedical users of pain reliever and 21,000 adolescents had used heroin in the past year (5,000 current users).¹
- Most adolescents who misuse prescription pain relievers are given them for free by a friend or relative.²
- Prescribing rates for prescription opioids among adolescents and young adults nearly doubled from 1994 to 2007.³

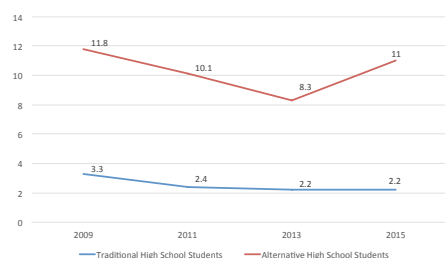
Sources:

1. Center for Behavioral Health Statistics and Quality. (2016). Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health (HHS Publication No. SMA 16-4984, NSDUH Series H-51). Retrieved from <http://www.samhsa.gov/data/>

2. National Institute of Drug Abuse. (2015). Drug Facts: Prescription and Over-the-Counter Medications. Bethesda, MD: National Institute of Drug Abuse. Available at <http://www.drugabuse.gov/publications/drugfacts/prescription-over-counter-medications>

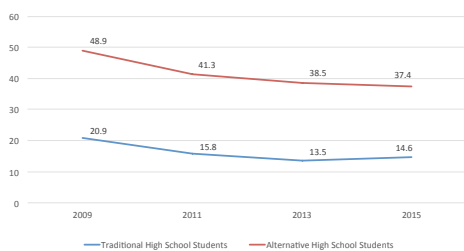
3. Fortuna RJ, Robbins BW, Caiola E, Joynt M, Halterman JS. Prescribing of controlled medications to adolescents and young adults in the United States. *Pediatrics*. 2010;126(6):1108-1116.

% of HS Students Who Ever Used Heroin



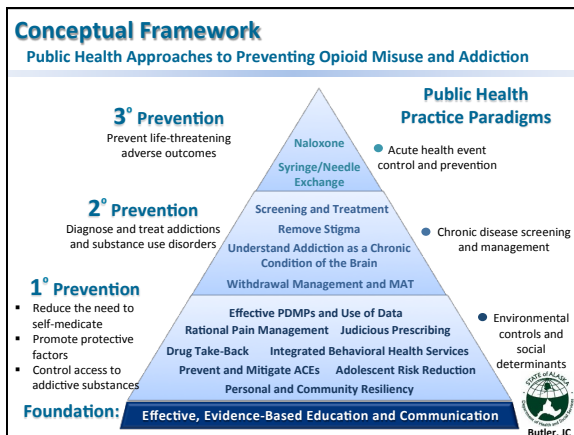
Source: AK YRBS (2009-2015)

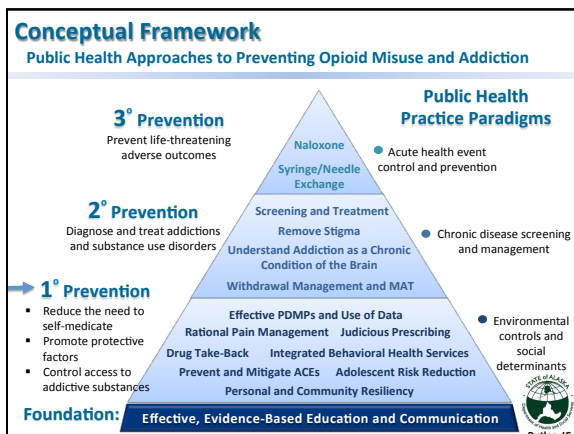
% of HS Students Who Ever Took Prescription Drugs Without Doctor's Prescription

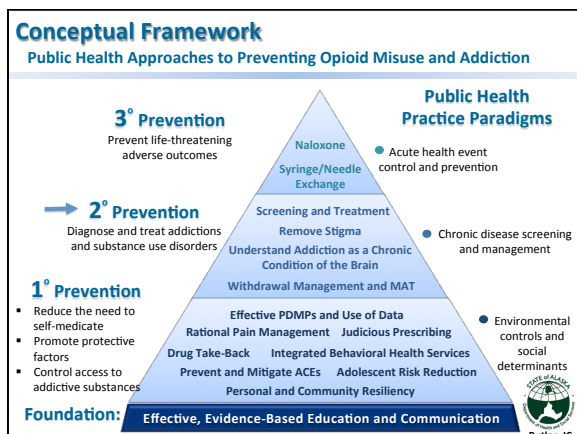


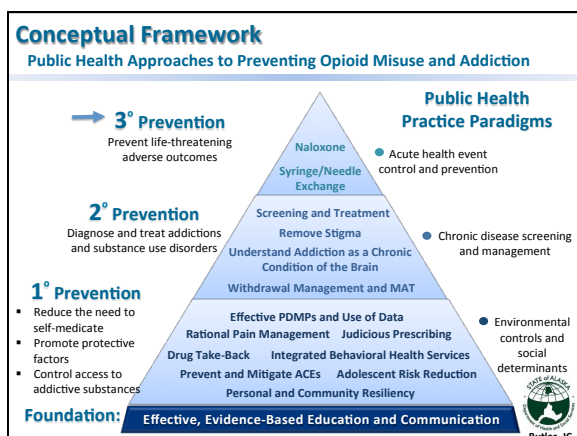
Source: AK YRBS (2009-2015)

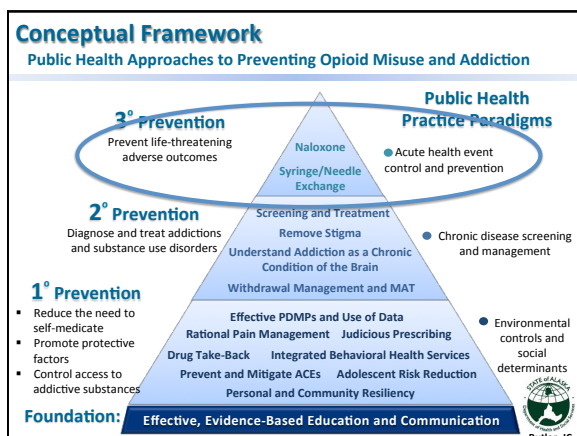


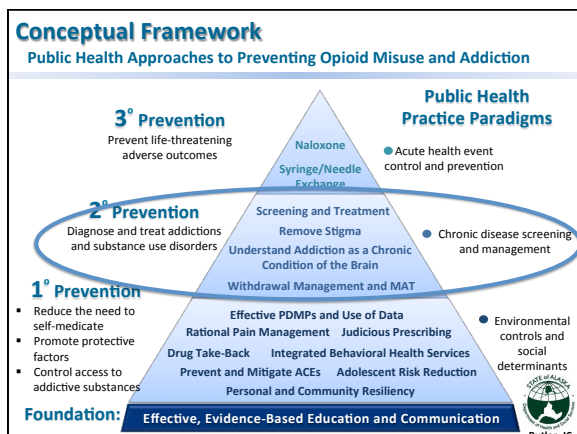


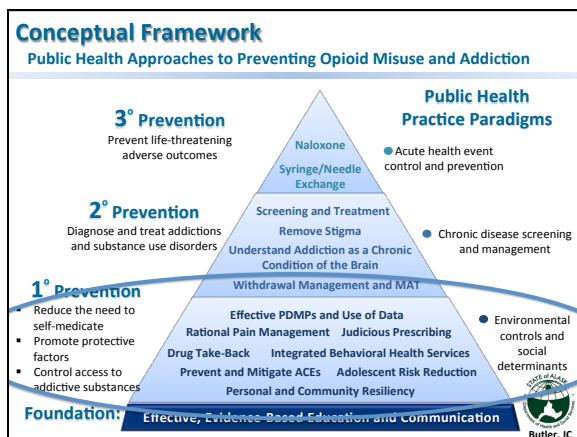


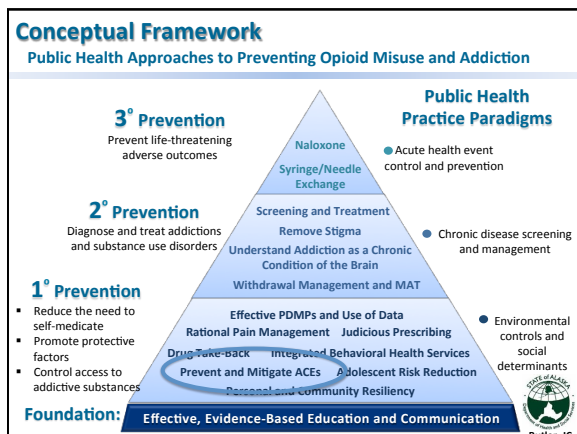












Link Between ACEs and Opioid Misuse

Policy Brief

June 2017 | Number 1 | www.ctipp.org

CTIPP
Campaign for Trauma-Informed
Policy and Practice

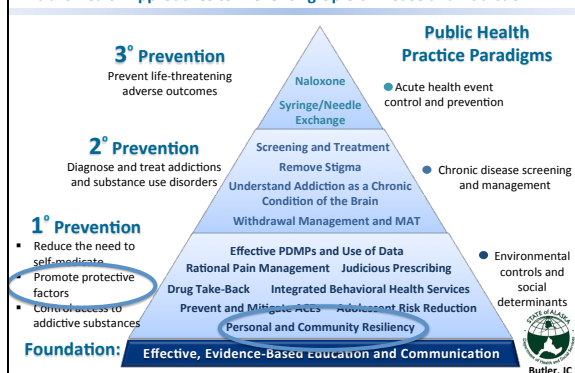
Trauma-Informed Approaches Need to be Part of a Comprehensive Strategy for Addressing the Opioid Epidemic

EXECUTIVE SUMMARY

This policy brief reviews the evidence linking trauma and adverse childhood experiences to opioid addiction. It also provides examples of effective prevention and treatment programs, and describes innovative approaches being used by communities to address the current epidemic. The argument is made that efforts to address the current crisis will be effective only if we acknowledge the roots of addiction and make

Conceptual Framework

Public Health Approaches to Preventing Opioid Misuse and Addiction



Risk & Protective Factors



Image Source: <https://www.centerforresilientchildren.org/wp-content/uploads/scales.gif>

Risk & Protective Factors: Infancy/Early Childhood

Persons	Risk Factor	Protective Factor
Individual	<ul style="list-style-type: none"> Difficult temperament 	<ul style="list-style-type: none"> Self-regulation Secure attachment Mastery of communication and language skills Ability to make friends and get along with others
Family	<ul style="list-style-type: none"> Cold and unresponsive mother behavior Parental modeling of drug/alcohol use 	<ul style="list-style-type: none"> Reliable support and discipline from caregivers Responsiveness Protection from harm and fear Opportunities to resolve conflict Adequate socioeconomic resources for the family
School, Peers, Community		<ul style="list-style-type: none"> Support for early learning Access to supplemental services such as feeding, and screening for vision and hearing Stable, secure attachment to childcare provider Low ratio of caregivers to children Regulatory systems that support high quality of care

<http://youth.gov/youth-topics/substance-abuse/risk-and-protective-factors-substance-use-abuse-and-dependence>

Risk & Protective Factors: Middle School

Persons	Risk Factor	Protective Factor
Individual	<ul style="list-style-type: none"> Poor impulse control Low harm avoidance Sensation seeking Lack of behavioral self-control/regulation Aggressiveness Anxiety, Depression, Hyperactivity/ADHD Antisocial behavior Early persistent problem behaviors Early substance use 	<ul style="list-style-type: none"> Mastery of academic skills (math, reading, writing) Following rules for behavior at home, at school, and in public places Ability to make friends Good peer relationships
Family	<ul style="list-style-type: none"> Permissive parenting Parent-child conflict Inadequate supervision and monitoring Low parental warmth Lack of or inconsistent discipline Parental hostility Harsh discipline Low parental aspirations for child Child abuse/maltreatment Substance use among parents or siblings Parental favorable attitudes toward alcohol and/or drugs 	<ul style="list-style-type: none"> Consistent discipline Language-based, rather than physical, discipline Extended family support

<http://youth.gov/youth-topics/substance-abuse/risk-and-protective-factors-substance-use-abuse-and-dependence>

Risk & Protective Factors: Middle School, cont.

Persons	Risk Factor	Protective Factor
School, Peers, Community	<ul style="list-style-type: none"> School failure Low commitment to school Accessibility/availability of substances Peer rejection Laws and norms favorable substance use Deviant peer group Peer attitudes toward drugs Interpersonal alienation Extreme poverty for those children antisocial in childhood 	<ul style="list-style-type: none"> Healthy peer groups School engagement Positive teacher expectations Effective classroom management Positive partnering between school and family School policies and practices to reduce bullying High academic standards

<http://youth.gov/youth-topics/substance-abuse/risk-and-protective-factors-substance-use-abuse-and-dependence>

Risk & Protective Factors: Adolescence

Persons	Risk Factor	Protective Factor
Individual	<ul style="list-style-type: none"> Behavioral disengagement coping Negative emotionality Conduct disorder Favorable attitudes toward drugs Rebelliousness Early substance use Antisocial behavior 	<ul style="list-style-type: none"> Positive physical development Emotional self-regulation High self-esteem Good coping skills and problem-solving skills Engagement and connections in two or more of the following contexts: at school, with peers, in athletics, employment, religion, culture
Family	<ul style="list-style-type: none"> Substance use among parents Lack of adult supervision Poor attachment with parents 	<ul style="list-style-type: none"> Family provides structure, limits, rules, monitoring, and predictability Supportive relationships with family members Clear expectations for behavior and values
School, Peers, Community	<ul style="list-style-type: none"> School failure Low commitment to school Associating with drug-using peers Not college bound Aggression toward peers Norms (e.g., advertising) favorable toward alcohol use Accessibility/ availability 	<ul style="list-style-type: none"> Presence of mentors and support for development of skills and interests Opportunities for engagement within school and community Positive norms Clear expectations for behavior Physical and psychological safety

<http://youth.gov/youth-topics/substance-abuse/risk-and-protective-factors-substance-use-abuse-and-dependence>



Source:

<https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles>

Prevention Principle 6

Prevention programs can be designed to intervene as early as preschool to address risk factors for drug misuse, such as **aggressive behavior, poor social skills, and academic difficulties.**

Source:

<https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles>

Prevention Principle 7

Prevention programs for elementary school children should target improving academic and social-emotional learning to address risk factors for drug misuse, such as **early aggression, academic failure, and school dropout.**

Focus on skills such as: **self-control, emotional awareness, communication, social problem-solving and academic support** (especially **reading**).

Source:

<https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles>

Prevention Principle 8

Prevention programs for middle school/junior high and high school students should increase academic and social competence skills, such as: **study habits and academic support, communication, peer relationships, self-efficacy and assertiveness, drug resistance skills, reinforcement of anti-drug attitudes, and strengthening of personal commitments against drug misuse.**

Source:

<https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles>

Prevention Principle 13

Prevention programs should be **long-term** with **repeated interventions** (booster programs) to reinforce the original prevention goals.

Prevention Principle 14

Prevention programs should include teacher training on **good classroom management practices**, such as **rewarding appropriate student behavior**. Such teaching techniques help to foster students' positive behavior, achievement, academic motivation, and school bonding.

Prevention Principle 15

Prevention programs are most effective when they employ **interactive techniques**, such as **peer discussion groups** and **parent role-playing**. These activities allow for active involvement in learning about drug misuse and reinforcing skills.

Action Box

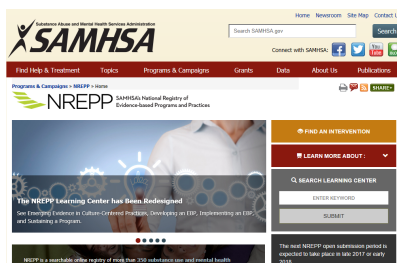
Educators can:

- Strengthen learning and bonding to school by addressing aggressive behaviors and poor concentration—which are associated with later onset of drug misuse and related issues.
- Work with others in their school and school system to review current programs, and identify research-based prevention programs appropriate for their students.
- Incorporate research-based content and delivery into their regular classroom curricula.

Recommended Research-Based Curricula

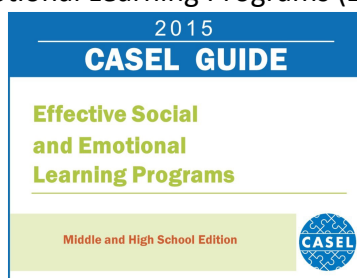
- Fourth R Healthy Relationships
- Fourth R Healthy Relationships Plus
- The Great Body Shop, and
- Second Step
- The Substance Abuse and Mental Health Services Administration (SAMHSA)
- The Collaborative for Academic, Social, and Emotional Learning (CASEL)

Evidence-Based Curricula



<http://nrepp.samhsa.gov/landing.aspx>

CASEL Guide: Effective Social & Emotional Learning Programs (2015)



<http://www.casel.org/>

<http://secondaryguide.casel.org/casel-secondary-guide.pdf>

EED E-Learning Courses



<https://education.alaska.gov/Elearning/>

EED E-Learning Courses



<https://education.alaska.gov/Elearning/>

What Else Can Schools Do?

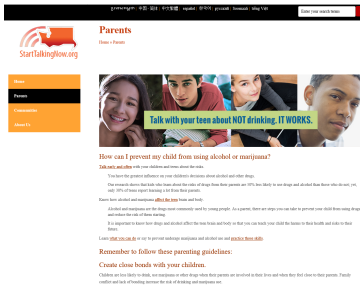
Talk Early, Talk Often



www.speaknowcolorado.org



starttalkingnow.org/parents



www.starttalking.ohio.gov



blog.mass.gov/blog/government/opioid-abuse-in-massachusetts-what-parents-need-to-know/



Reducing Youth Access to Opioids



Source: SAMHSA, Opioids, 2016 (<https://www.samhsa.gov/atod/opioids>)

Encourage Adults to Control Access



<https://www.youtube.com/watch?v=alce4DCOEL0>

Encourage Adults to Control Access



Safe Disposal Options

- Drug Take-Back Events
- Do not crush tablets or capsules
- Mix medicines with an unpalatable substance such as dirt, kitty litter, or used coffee grounds
- Place the mixture in a container such as a sealed plastic bag
- Throw the mixture container in your household trash
- Scratch out all personal information on the prescription label of your empty medicine container, and
- Dispose of the container

Source: U.S. Food & Drug Administration:

<https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm>

Safe Disposal Options (Cont.)



What Can Be Done Summary

- Support and/or implement K-12 evidence-based programs.
- Increase students' understanding of the potential harm of prescription pain medication use.
- Support and implement trauma/ACE prevention programs.
- Create safe, supportive, nurturing school environments where students feel connected to teachers, staff and peers.
- Be a safe and supportive place for young people to come to and ask questions.
- Encourage parents to have open, non-judgmental conversations.
- Educate parents about preventing youth access to prescription opioids (proper medication monitoring, safe storage and safe disposal).

Thank You & Questions

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