



The Opiate Crisis & Prevention Education

From Crisis to Solutions



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Drug Awareness and Prevention Inc.
216-432-6620



Drug Abuse in the United States

United States:
5% of world's
population,
Uses over **60%** of
world's
illegal drugs, and
over **80%** of the
world's Rx opiates



Drug Abuse costs the U.S. \$180.9 billion annually



Societal Costs

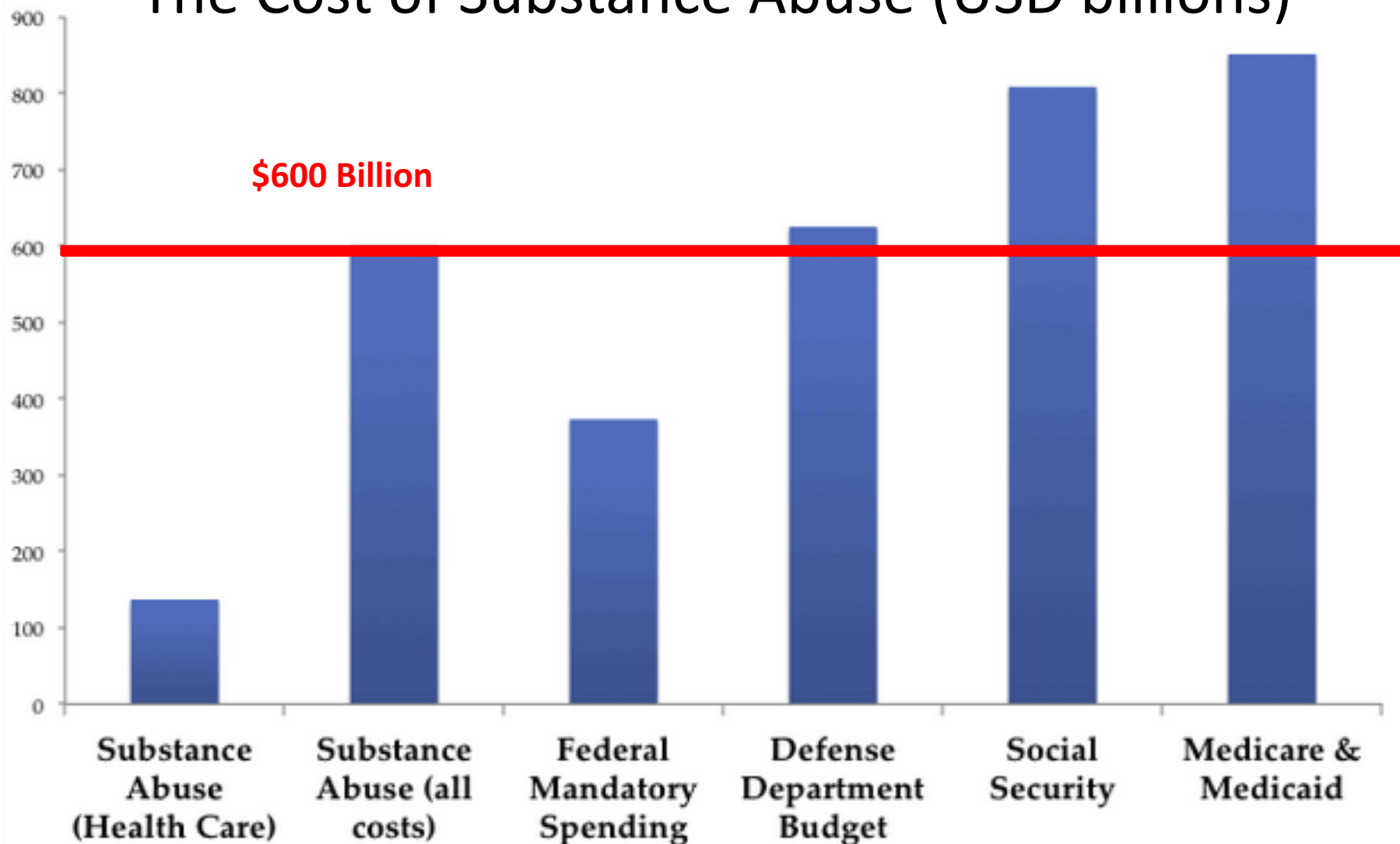
- Courts, Jails, Police
- Dangerous streets
- Child neglect
- Domestic violence
- Lost Workplace Productivity



Medical Costs

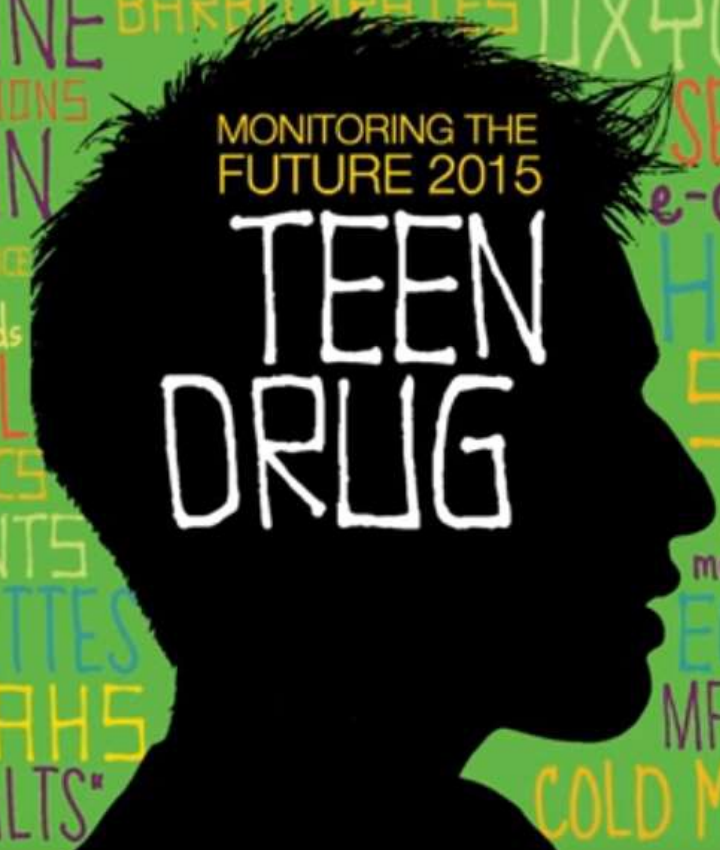
- Emergency Room
- Overdose
- Rehab/Treatment
- Health Insurance
- Health Problems

The Cost of Substance Abuse (USD billions)



**Source: NIDA – Trends & Statistics
US Federal Spending FY 2013**

Monitoring the Future 2015



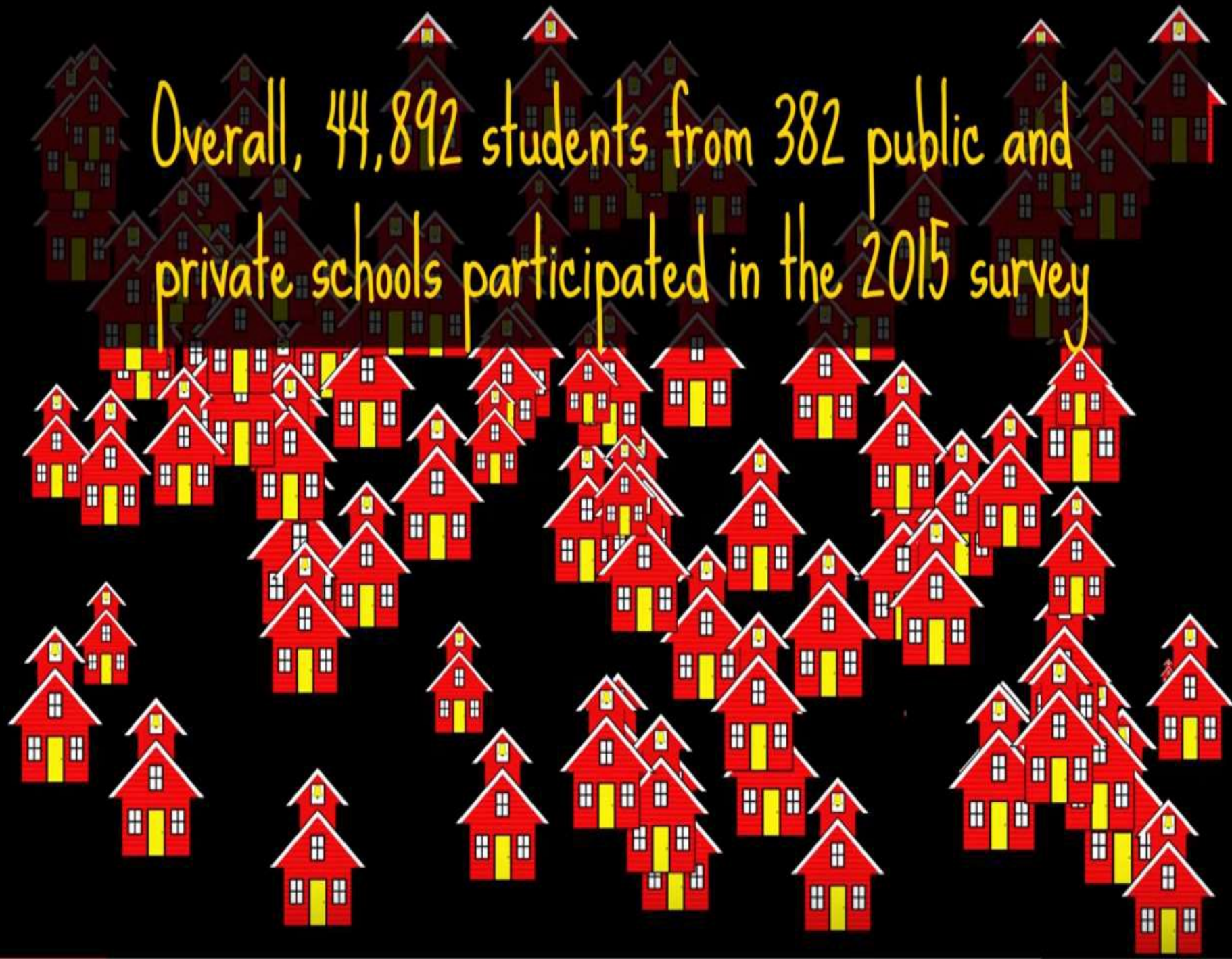
COCAINE
PRESCRIPTIONS
VICODIN
CRACK
RITALIN
Steroids
ALCOHOL
SYNTHETICS
INHALANTS
CIGARETTES
HOOKAHs
"BATH SALTS"

MONITORING THE
FUTURE 2015

TEEN
DRUG

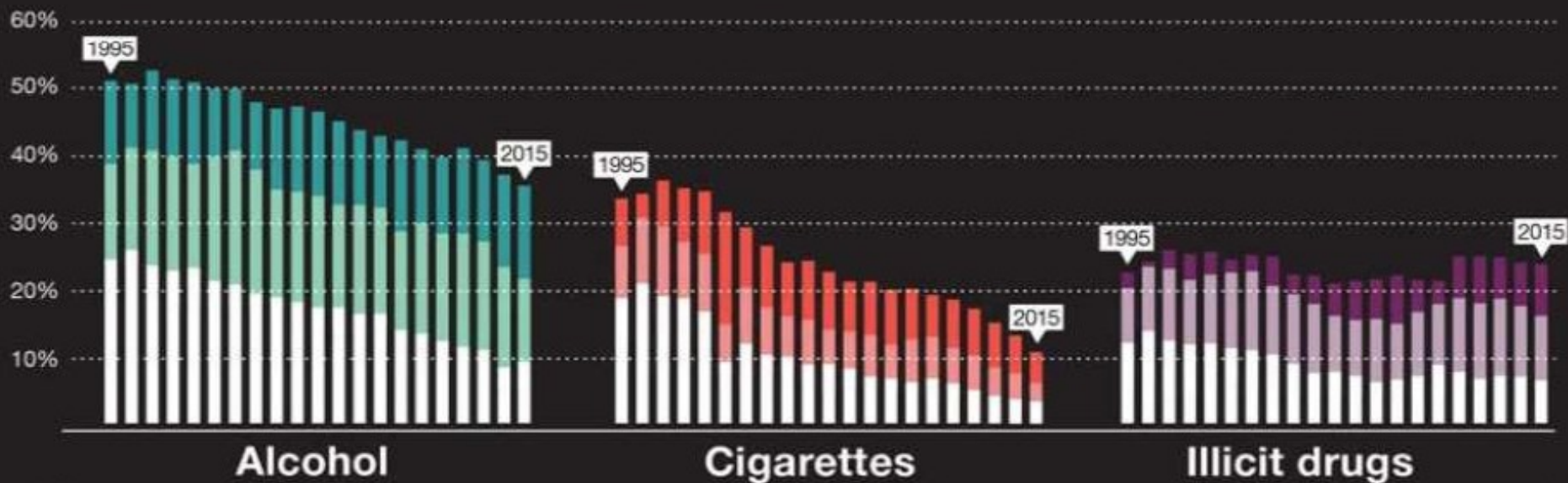
BARBITURATES
OXYCONTIN
SEDATIVES
e-cigarettes
HEROIN
SALVIA
ADDERALL
methamphetamine
ECSTASY
MARIJUANA
COLD MEDICINES

Overall, 44,892 students from 382 public and private schools participated in the 2015 survey



LAST TWO DECADES OF ALCOHOL, CIGARETTE, AND ILLICIT DRUG USE*

*Past-month use



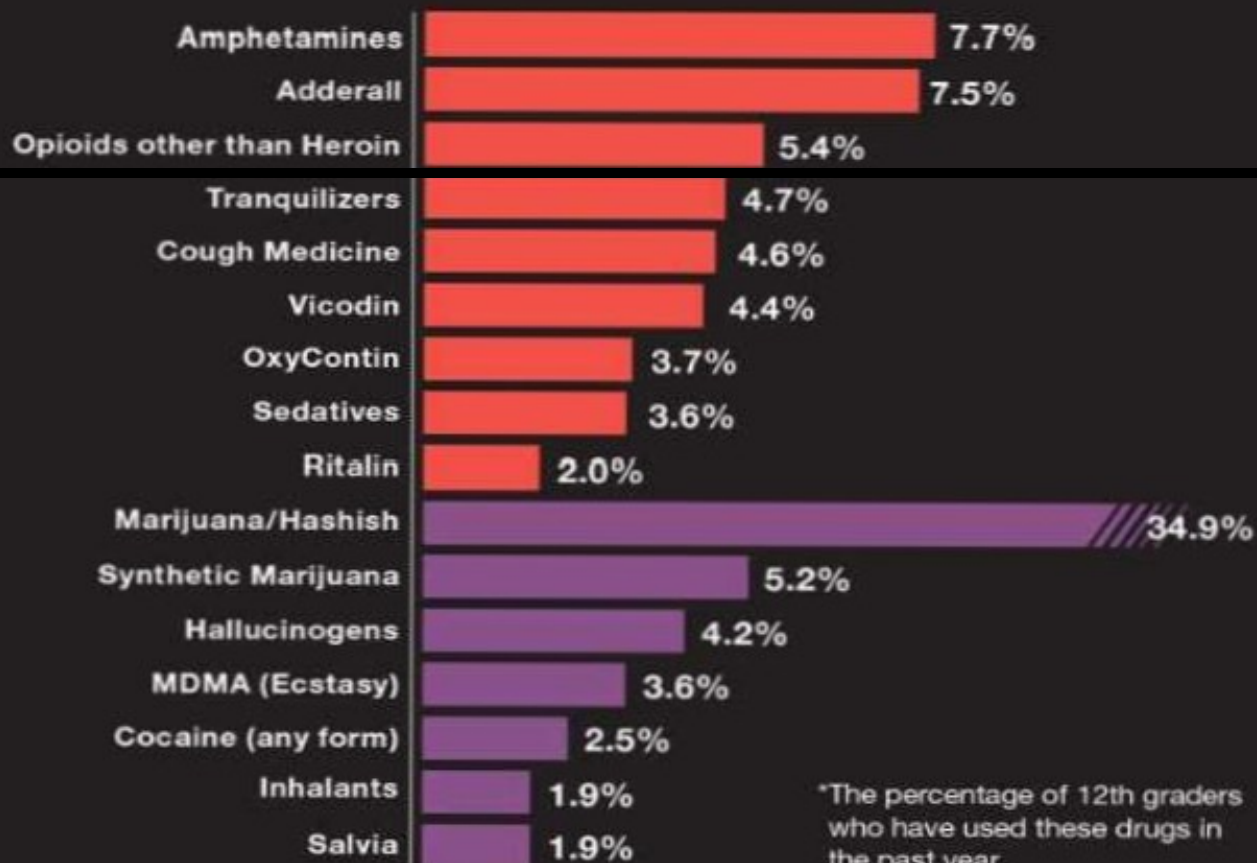
2015



National Institute
on Drug Abuse

WWW.DRUGABUSE.GOV

PRESCRIPTION/OVER-THE-COUNTER VS. ILLICIT DRUGS*



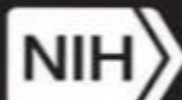
PRESCRIPTION/OTC



ILLICIT DRUGS

Despite the ongoing opioid overdose epidemic, past year use of opioids other than heroin has decreased significantly each 5 year over the past years among teens.

Heroin use has also decreased over the past 5 years and is at the lowest rate since the MTF survey began.



National Institute
on Drug Abuse

WWW.DRUGABUSE.GOV

OPIATE CRISIS



Opiates are Depressants

Street Names: Smack, Horse, Brown Sugar

Opiates include legal forms: codeine, morphine, fentanyl

And ILLEGAL HEROIN +abused Rx drugs

Perceived benefits:

- ☐ Pain relief
- ☐ Euphoria

Facts:

- ☐ Intended for end-of-life pain
- ☐ 90% of Rx drug abuse in the U.S.A.



Poppy plant-Source of opiates; Can also be synthetically produced

Causes of the Crisis ?

Societal belief: Pill for Every Ill

1990s Pain as the 5th Vital Sign

Overprescribing Heredity

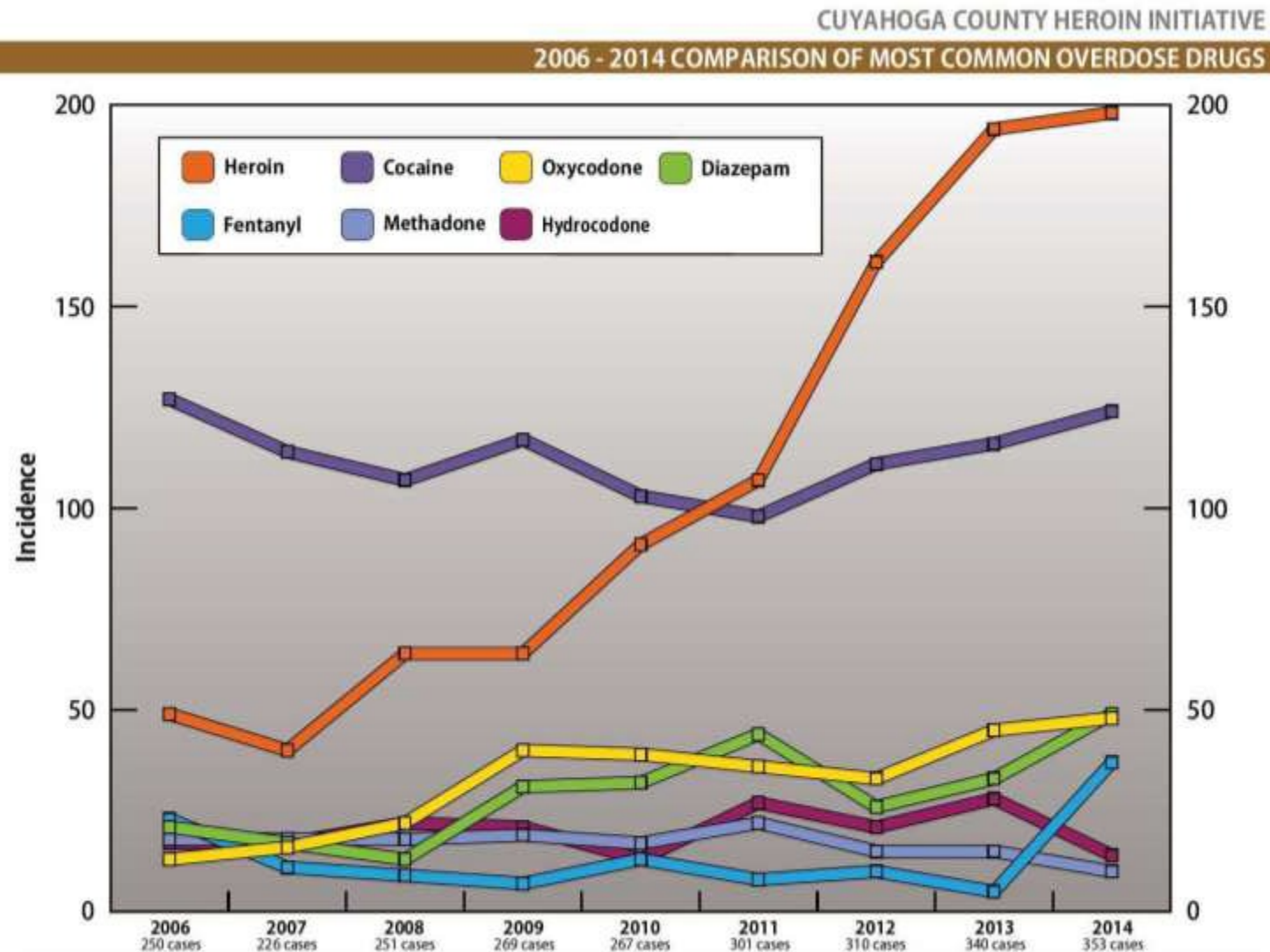
Pharmaceutical Company Profit

Drug dealers adding fentanyl

Mental illness - Self-medicating

Cuyahoga County Opiate Overdose Deaths—

Serious effort to close “Pill Mills” and lessen Rx opiates ~2010



Opioid Addicts: From Rx Pills to Heroin

Cost of Opiates:

Brand	Dose	Cost
Oxycontin	80mg	\$40-80
Oxycodone	5-10 mg	\$5-10
Percocet		
Heroin stamp	1“fix”	\$8-\$20



From Heroin to Fentanyl

Participants reported that the most common adulterates used to “cut” powdered heroin are **fentanyl** and lactose.

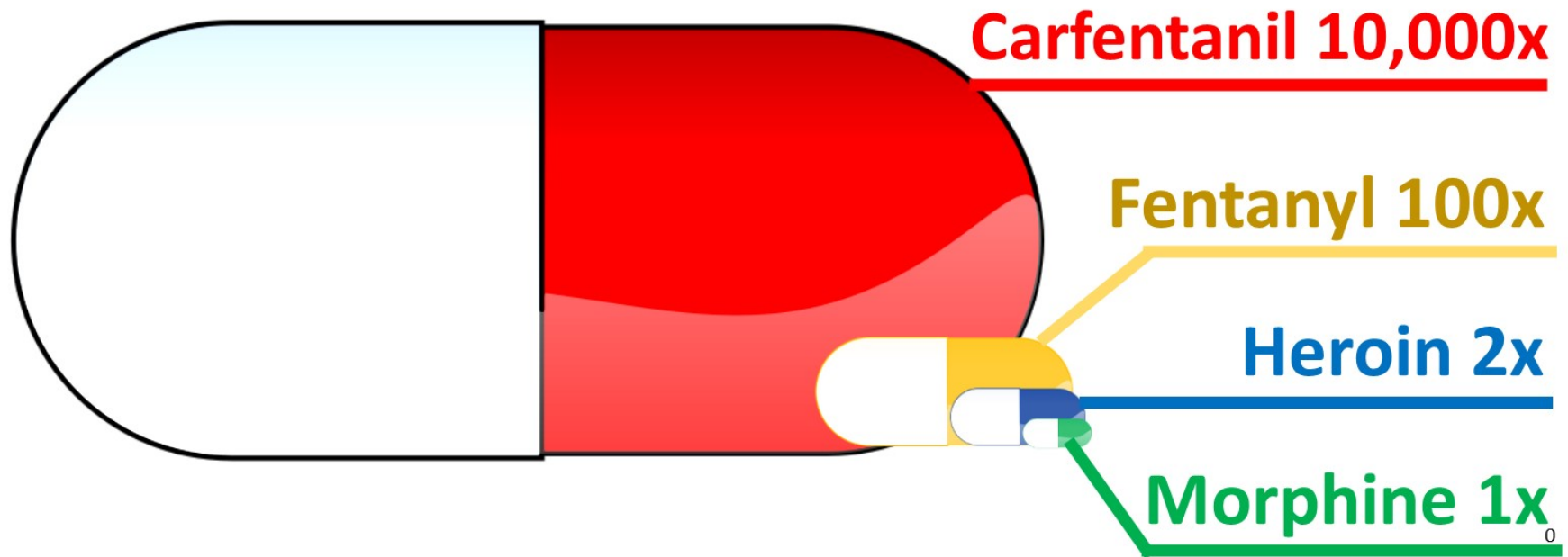
-from OSAM

Fentanyl is 50x to 100X as strong as heroin
Carfentanil – elephant tranquilizer has appeared



Heroin/Fentanyl
“pills”

Opioid Potency Comparison



2016 Cuyahoga County

- FATAL OVERDOSES IN 2016
- ALL DRUGS: 663
- FENTANYL: 375
- HEROIN: 320

2004 – 50 heroin
~ 20 fentanyl

2014 – 200 heroin
~ 40 fentanyl

NALOXONE

Reverses Overdose



2016

**8 died in Ohio
every day of an
overdose**



Cuyahoga County Project DAWN Deaths Avoided with Naloxone

The Cuyahoga County Board of Health

5550 Venture Drive, Parma, Ohio

Walk-in hours: Fridays, 9 a.m. - Noon

The Free Medical Clinic of Greater Cleveland

12201 Euclid Avenue, Cleveland, Ohio

Walk-in hours: Fridays, 1 - 5 p.m.

& Tuesdays Noon - 4 p.m.

Cleveland Department of Public Health's Thomas F. McCafferty Health Center

4242 Lorain Ave., Cleveland, OH 44113

Walk-in hours: Thursdays, 4 - 8 p.m.

Cleveland Emergency Medical Services

1701 Lakeside Ave., Cleveland OH

Walk-in hours: Monday - Friday 9a.m. - 4p.m.

(216-664-2555)

DAP 2017 ©¹⁷

SOLUTIONS



From Teacher ...



With a Student At-Risk...

[REDACTED]

Oh when my step mom and my Dad were talking
to me and I told them everything [REDACTED]
and how [REDACTED] and introduced
me to ~~my~~ ^{her} ~~dad~~ and how like she would always
have pills and people coming over to do drugs and how
[REDACTED] and my dad
was like well I kind of knew what was going on
So he is getting a restraint on her and



Law Enforcement

Troopers
confiscated 156
pounds of
heroin in 2016,
a 290% increase
from 2015

Ohio State Highway Patrol Drug Arrests Year 2016



...to a Prevention Specialist
with a Mission:

Lessen the demand for illicit
drugs through education and
prevention strategies.



What works in Prevention?



Key Strategies

- 1. Information Dissemination**
- 2. Prevention Education**
- 3. Alternatives to Use**
- 4. Community-based Process**
- 5. Problem I.D. and Referral**
- 6. Environmental Strategies**

Risk & Protective Factors

☐ More Risk Factors > chance of addiction

☐ More Protective Factors < risk of addiction

Examples of Individual and Environmental Risk and Protective Factors

Risk Factors	Domain	Protective Factors
Early Aggressive Behavior	Individual	Self-Control
Poor Social Skills	Individual	Positive Relationships
Lack of Parental Supervision	Family	Parental Monitoring and Support
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Anti-Drug Use Policies
Poverty	Community	Strong Neighborhood Attachment

DrugAbuse.gov

Prevention to Target Early Use

Age of first use is the **most significant risk factor**

Teens who start drinking before age 15 are 5x more likely to develop alcohol problems as adults.

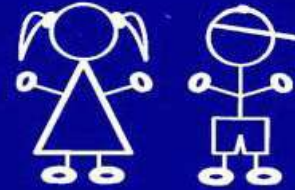


5x

*Archives of Pediatrics &
Adolescent Medicine*

PREVENTION EDUCATION

**Preventing Drug Abuse
in
Adolescents and Young Adults**



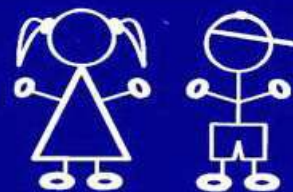
In School

If possible, school-based prevention programs should be integrated into the school's academic program...*

* Preventing Drug Abuse among Children and Adolescents
U.S. Dept. of Health and Human Services,
National Institutes of Health

PREVENTION EDUCATION

**Preventing Drug Abuse
in
Children and Adolescents**



Although the new educational climate may leave less time for school-based health prevention, there are opportunities to infuse health information into the core curriculum.

Science-based drug prevention programs have an added benefit:

Science achievement test scores increase*



***U.S. HHS, NIH, NIDA**

OHIO Senate Bill 101 - October 2012

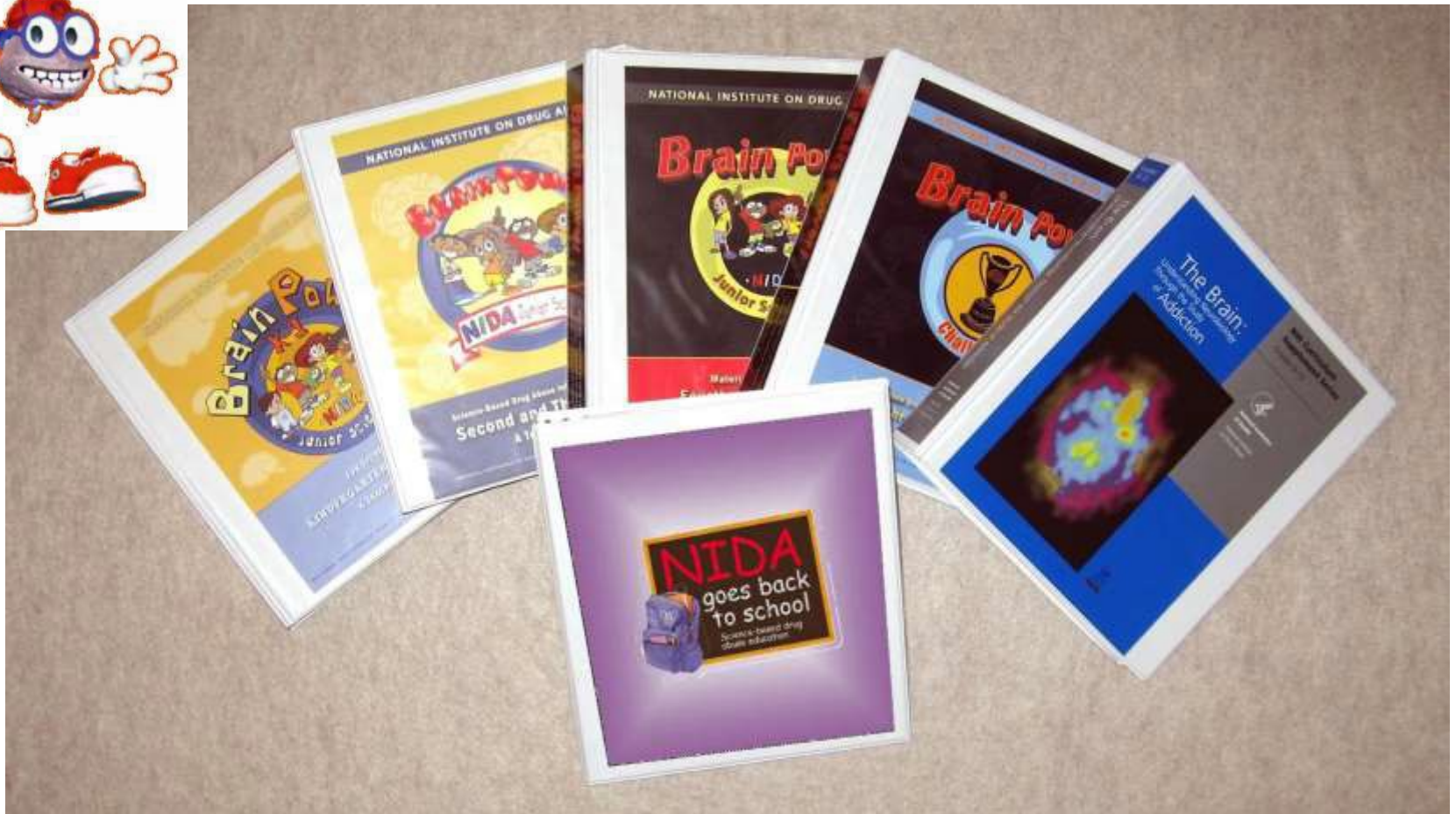
Designated May as “Ohio Substance Abuse Awareness and Education Month”



Senator Tom Patton, Governor John Kasich, Nancy Pommerening

Brain Power

by the National Institute on Drug Abuse



Free * Multi-Media * K-12 Science Curriculum

National Science Standards

Unifying Concepts and Processes

Levels K–4

How Mission Is Aligned

Systems, order, and organization

The mission explains the key concept that the brain is part of a larger system—the human body—and that both systems work together to make all human behavior possible.

Standards for Science and Technology

Levels

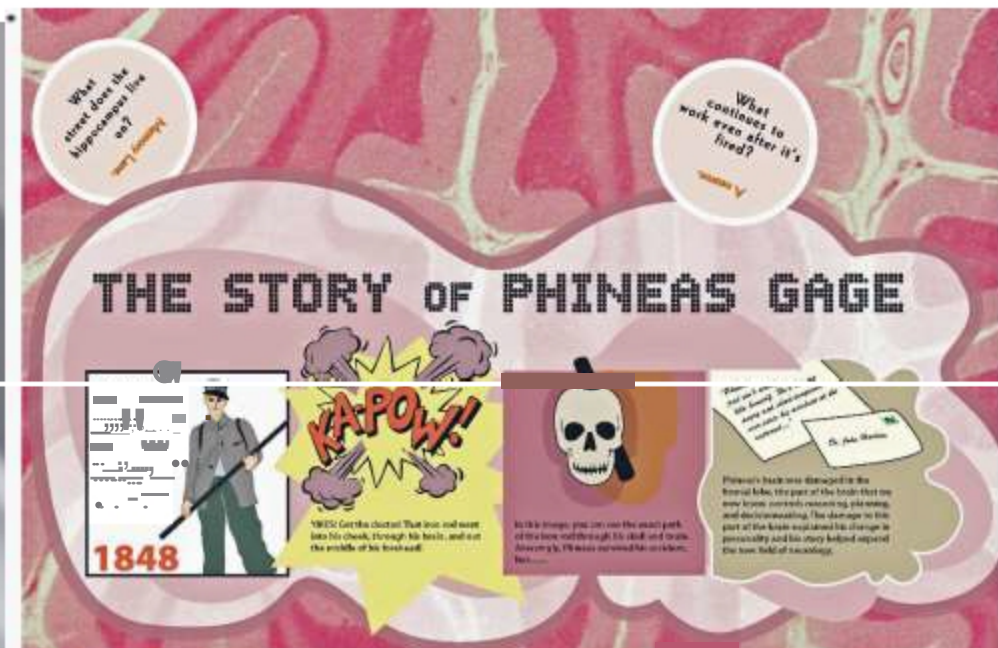
How Mission is Aligned

Characteristics of organisms

This mission introduces students to the concept that all organisms have basic needs. One need of humans is to have a brain to perform many key functions of living.



- Best curricular fit: Science or Health Class, no daily schedule disruption.
- Parent Newsletter
- Multimedia, interactive lessons address Visual, Auditory and Kinesthetic learning styles
- Supplemental worksheets, games, DVDs, posters, trading cards, and website
- Extension Activities + relevant online links



DRUG PREVENTION EDUCATION

Lessons on the brain, addiction and how drugs affect the body.

- ☐ Age appropriate
- ☐ Occur at each stage of development
- ☐ Continuous, K-12
- ☐ Science-based
- ☐ Based on Theory of Reasoned Action



Grade 2 – Brains in a Box

Grades 6-8

- DVD Game “Room”
- “Student Magazine”



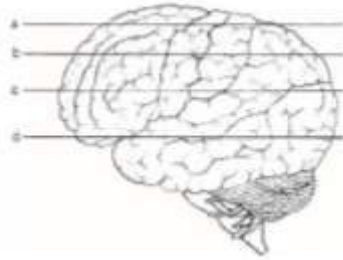
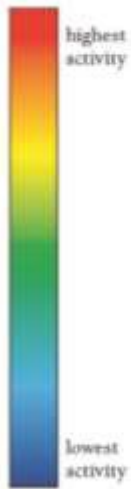
Supplemental workbooks*



*Supplemental workbooks- \$12.00 each

Grades 9-12

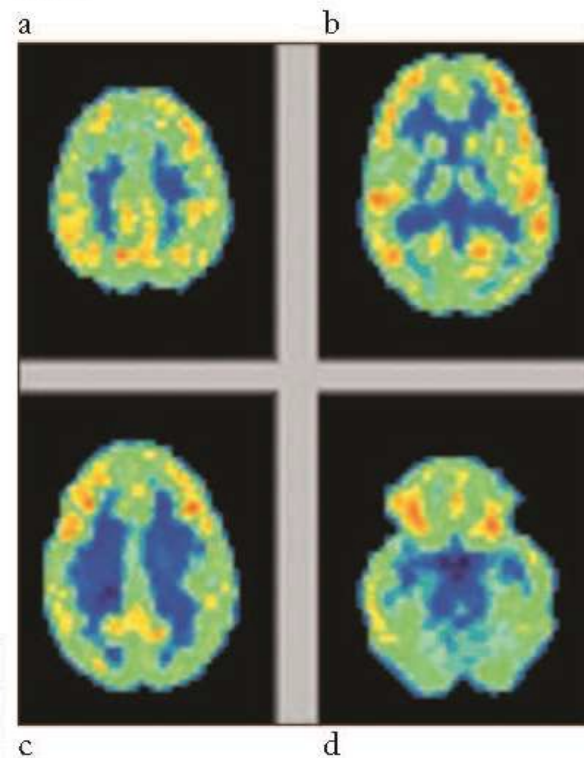
Master 1.1



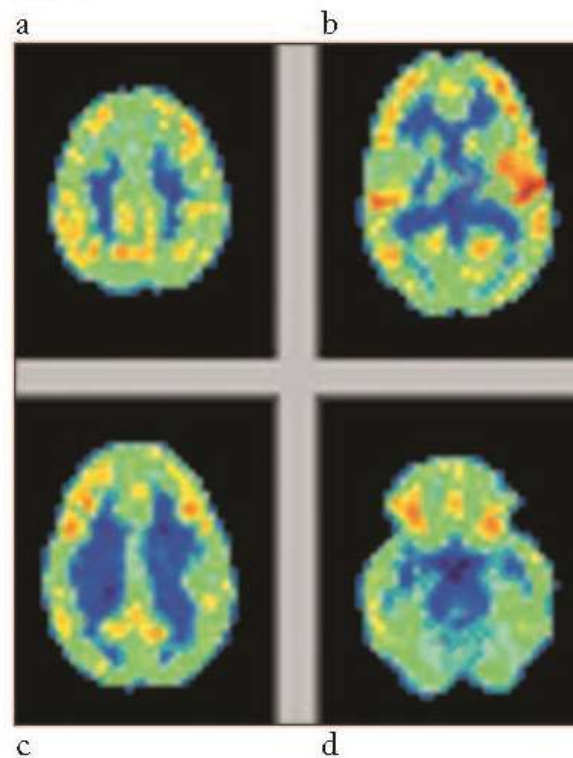
Positron Emission Tomography (PET) Images

Each set of PET images below contains four images of a human brain. The four images show cross-sections taken at different levels of the brain.

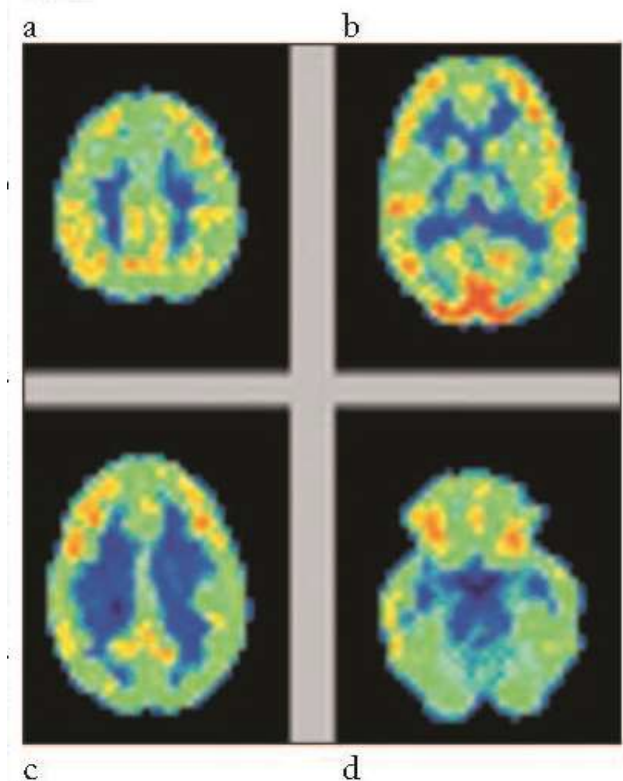
Set 1



Set 2



Set 3



Grades K-5 Program

K-1

NIDA's Brain Power - Grade Levels K-1	
Module	Concepts
1	Science as a human endeavor (Who scientists are, and what they do)
2	Meet the Scientists (Brain Scientists, and Introduction to Scientific Inquiry)
3	Your Amazing Brain (Parts of the brain, and Functions of each part)
4	Keeping Your Brain Healthy (Sleep, Physical Activity, and Eating)
5	Protecting Your Brain (Helpful medicines: antibiotics, aspirin –vs – Harmful Drugs: Alcohol, Nicotine)

2-3

NIDA's Brain Power - Grade Levels 2-3	
Module	Concepts
1	Ooey Gooney! (Scientific Inquiry- Observe, Hypothesize, Experiment, and Conclude)
2	Brain in a Box (Parts and Function of Brain: Cerebral Cortex, Cerebellum, Brain Stem, Limbic System)
3	Sending & Receiving Messages (Neurotransmission, How messages travel, Brain + Nervous System)
4	Medicines and Drugs (What's helpful: Aspirin, Tylenol, Antibiotics, Fluoride, Immunizations , and What's harmful : Alcohol, Nicotine, Caffeine, Marijuana, Cocaine)
5	The Science behind Smoking (Effects of tobacco on the body)
6	How Drugs Affect the Brain (Cocaine, Marijuana, Alcohol, Nicotine)

4-5

NIDA's Brain Power - Grade Levels 4-5	
Module	Concepts
1	Drugs in Society (Legal & illegal, drugs in the media, why drugs are such a problem for society)
2	Your Amazing Brain (Parts & Function of Brain, and their part in larger system-the human body)
3	Neurotransmission (Neurons, Receptors- difficult concept, looking for basic understanding)
4	Stimulants: Nicotine, Caffeine, Cocaine, Amphetamine (Effects on brain, nervous system and body)
5	Alcohol, Marijuana and Inhalants (Effects on the brain, nervous system and body)
6	What is addiction? Compulsive Use, Tolerance, Withdrawal (Addiction & drug abuse in U.S. society)

Grades 6-8 Program

6

7

8

NIDA's Brain Power - Grade Levels 6-9

Module

Concepts

- | | |
|---|---|
| 1 | The Brain & Nervous System (Brain parts & function, Neurotransmission) |
| 2 | Legal Doesn't Mean Harmless (Nicotine & Alcohol –Negative effects on human body, why it's illegal for children and teens) |
| 3 | Drugs in the Cupboard (Prescription Drugs, Inhalants- effects of abuse) |
| 4 | Weeding Out the Grass (Dispel the myth that marijuana is harmless, effects on young brains) |
| 5 | Drugs on the Street (Heroin and cocaine – short and long term effects, including addiction) |
| 6 | Drugs in the News (Steroids, Meth, GHB, Rohypnol, ketamine, MDMA- effects on the brain, body; effects on individuals and society) |

Grades 9-12 Program

NIDA's The Brain - Grade Levels 9-12

Lesson	Concepts
1	What Does the Brain Do? (PET scans, Parts and Function, Drugs and the Brain's Reward System)
2	Neurons, Chemistry and Neurotransmission
3	Drugs Alter Neurotransmission (The way neurons communicate)
4	Drug Abuse and Addiction (Drug Abuse is voluntary. Addiction is Compulsive.)
5	Drug Addiction is a Disease (A chronic, treatable disease)

Drug Awareness and Prevention Inc. 2011

EVALUATION Test CD

Pre/Post Tests K-12



Designed for use with the NIDA
Brain Power & The Brain
prevention curriculum

Drug Awareness and Prevention Inc.

By a Teacher, For a Teacher Series © 2013

www.DrugAwarenessAndPrevention.org

NIDA Website



National Institutes of Health

Researchers | Medical & Health Professionals | Patients & Families | Parents & Teachers | Students & Young Adults

NIDA NATIONAL INSTITUTE ON DRUG ABUSE
The Science of Drug Abuse & Addiction

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News

NIDA announces 2012

NIH Analysis of Reorg Responses

Former NIDA grantee wins Nobel Prize
NIDA Launches Online Family Checkup
New Opioids and Pain Management CMEs

ONDCP & NIDA partner to develop innovative interactive CMEs

[More](#)

Latest Science

Potential Pain Medication Targets Peripheral Nerves
Animal Research Advances Effort to Develop Vaccines Against Cocaine, Heroin Abuse
Prenatal Cocaine Exposure Increases Monkeys' Impulsivity Into Adulthood
[View More](#)

Data and Statistics

One baby per hour is born suffering from opiate withdrawal in the U.S.

[See the infographic](#)
[Get More Stats](#)

NIDA Director

[Biography](#)
[Messages from the Director](#)
[Reports](#)
[View Director's Page](#)

NIDA AIDS Research Program

National Drug Abuse Treatment Clinical Trials Network

Intramural Research Program

International

<http://www.drugabuse.gov>

Protecting Ohio's Families



Ohio Joint Study Committee on Drug Use Prevention Education

Report
February 2017

 **MIKE DEWINE**
OHIO ATTORNEY GENERAL

 **SENATE PRESIDENT
LARRY OBHOFF**

 **HOUSE SPEAKER
CLIFFORD A. ROSENBERGER**

EXECUTIVE SUMMARY

On August 11, 2016, Ohio Attorney General Mike DeWine, former Senate President Keith Faber, and Speaker of the House Clifford A. Rosenberger formed the Ohio Joint Study Committee on Drug Use Prevention Education (Study Committee). This committee examined appropriate education measures that schools and communities can take to reduce and help prevent substance abuse. After conducting meetings across the state, reviewing testimony, and performing research, the Study Committee issued 15 recommendations:

1. Kindergarten through 12th Grade Substance Abuse Prevention Education – The Study Committee concluded that Ohio schools should provide consistent, age-appropriate, evidence-based substance abuse education for all students, Kindergarten through 12th grade.¹ The Study Committee found many examples of prevention curricula that have been successfully implemented in schools, some of which are available at no cost. While some guidelines from the Ohio Department of Education (ODE) are necessary, the Study Committee believes the choice of a specific curriculum should be left to individual school districts.

2. Required Reporting for Schools – The Study Committee recommends that Ohio adopt a reporting system that requires schools to report and explain how they are fulfilling their requirements to provide substance abuse education. These reports should be electronically available to parents and the public.

3. Social and Emotional Learning Content Standards – Research has shown that incorporating social and emotional learning standards into the school day has positive effects on students and can reduce the likelihood of substance abuse.² While Ohio has incorporated these standards in grades Kindergarten through three, the Study Committee recommends that Ohio extend these standards through grade 12.

4. School and Community Surveys – The Study Committee recommends that Ohio schools implement student and community surveys both to monitor for warning signs of substance abuse or mental illness and to measure the success of their substance abuse prevention efforts.

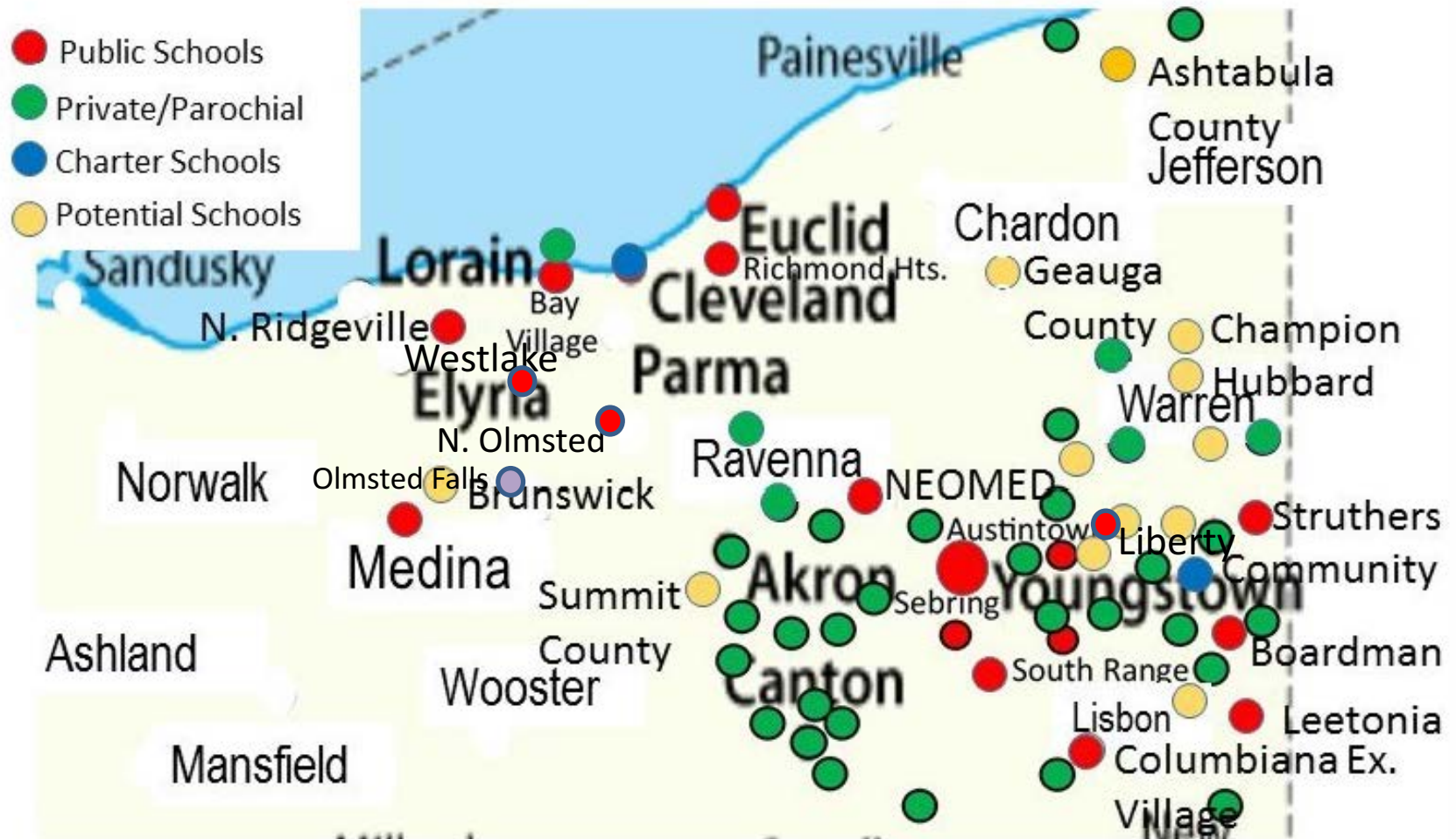
5. Expand Substance Abuse Curriculum across Subjects – The Study Committee recommends that schools consider including substance abuse curriculum in other subjects beyond health, like science or language arts. For example, **Brain Power**, a free curriculum from the National Institute on Drug Abuse, examines the scientific effects of drugs on the body and is used in science classes.

6. Resources for Schools about Substance Abuse Prevention – The Study Committee recommends that the Ohio Department of Mental Health and Addiction Services (ODMHAS) provide guidance, training, and other resources to schools about curriculum and other policies that are useful with substance abuse prevention.

¹ Evidence-based is a research-based practice that has demonstrated effectiveness in achieving the designed outcomes for a particular population. For purposes of this report, we follow the definition of evidence-based provided by the Substance Abuse Mental Health Services Administration (store.samhsa.gov/shin/content/SMA09-4205/SMA09-4205.pdf, p. 13). Programs or policies which are research-based, yet not evidence-based, may also be referred to as evidence informed, or emerging or promising practices.

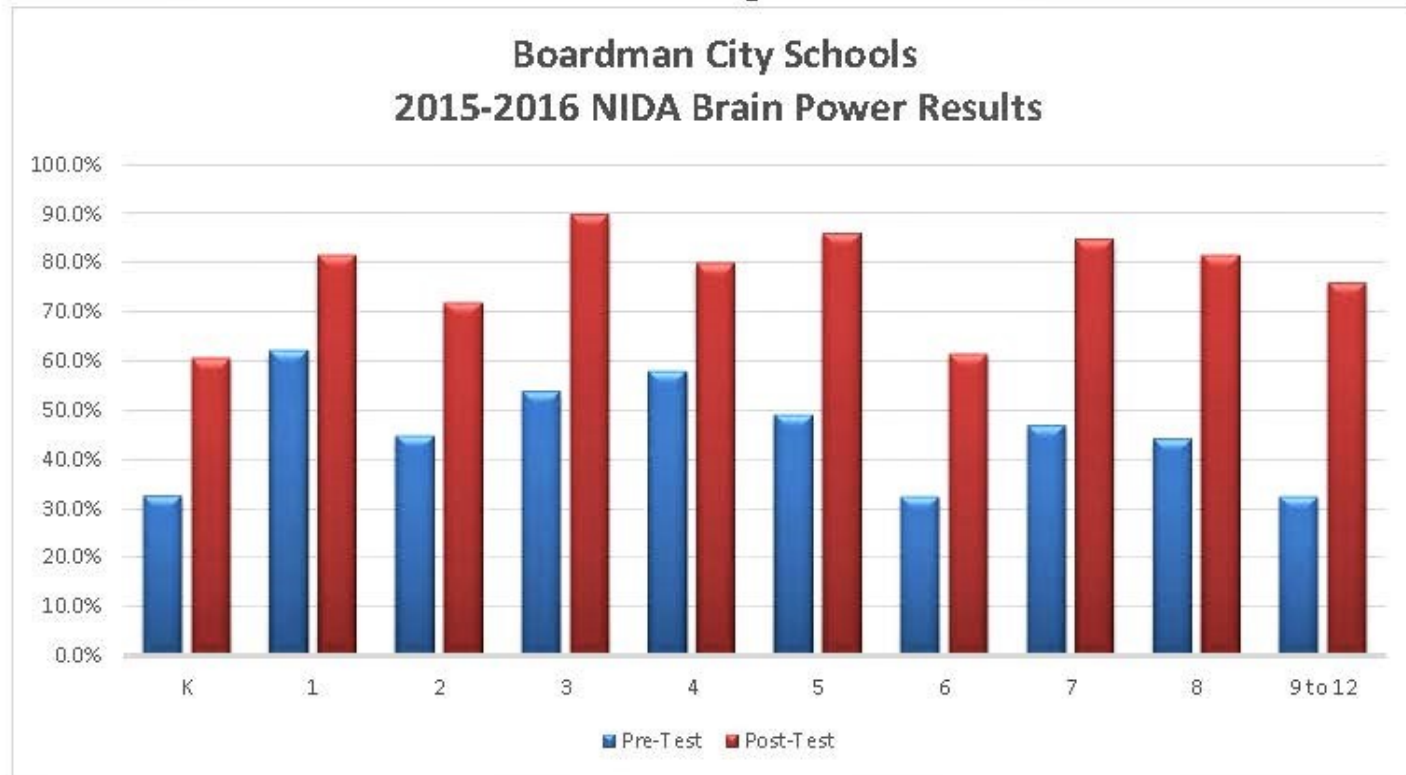
² Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships and make responsible decisions (casei.org).

Northeast Ohio “NIDA” Schools



“Brain Power Prevention” Education”

Pre/Post-Test Results - Average Growth 34%



Early results: 22-35% Growth Pre to Post-test

I think the winning strategy hasn't changed. It hasn't changed for 15 years. We never have adopted it. **You give every kid in the United States meaningful, mandatory substance abuse education, starting in kindergarten.** And by the time they reach the tenth grade, there are studies that show that 15 percent less of them will experiment with drugs.

Now, that doesn't win the ballgame, because you'll never stop everybody. But it makes a far greater dent in the ballgame than what we have done now.

The RAND Corporation has done two or three studies showing that dollars we spend on treatment and prevention give us a far greater return than dollars we spend on enforcement. The general point is that we have never adopted the strategy that a lot of people think is truly a winning strategy.



Bob Stutman is a retired special agent for the DEA.

He became Special Agent in Charge for the New York City office.

<http://www.pbs.org/wgbh/pages/frontline/shows/drugs/interviews/stutman.html>

Societal Norms and Standards: School, Parent, and Workplace Programs



Drug-Free Workplace Safety Programs

Substance abuse is a serious threat to workplace safety and every employer's "bottom line."
Employers have a right to reasonable expectations of their employees.

Accidents, Absenteeism



Coping Skills & Natural Highs



LIFE WITHOUT ARTIFICIAL ENHANCEMENT OF DRUGS

SOLUTIONS

- **Invest in prevention programs at the school level**
- **Limit 'doctor shopping'** and mandate ongoing **education for prescribers**
- **Fund more in-patient crisis, intensive and rehabilitative beds**
- **Expand access to Naloxone**
- **Limit time horizon on first-time opioid prescriptions** and provide **better consumer information** when dispensed
- **Support community partnerships that include families, law enforcement, support services and educators**
- **Provide better supports for families trying to navigate treatment options**
- **Insurance: Eliminate prior approvals** and standardize criteria for coverage
- **Expand recovery infrastructure**; community centers, transitional housing and extended 'wraparound' support

Source: [New York Heroin and Opioid Task Force Report, 2016](http://www.usatoday.com/story/news/2016/08/05/broken-road-recovery-opioids-heroin-fentanyl-rochester/88045334/)

<http://www.usatoday.com/story/news/2016/08/05/broken-road-recovery-opioids-heroin-fentanyl-rochester/88045334/>

QUESTIONS? COMMENTS?



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**For further information on PSI,
please visit our web site at:**

<http://www.psi-solutions.org>

Or call at: 800-841-4774

