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Opioid Misuse and Prevention in Adolescence

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Region 13 School Nurse Conference
June 21, 2018

Drug Overdose in Texas



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- In 2016, 2,790 Texans died due to drug overdose
- More than the population of a Texas 6A high school
- More than the population of nearly 60 percent of the cities and towns in Texas



Sources: Texas DSHS Provisional counts of drug overdose deaths, 2/15/2018.

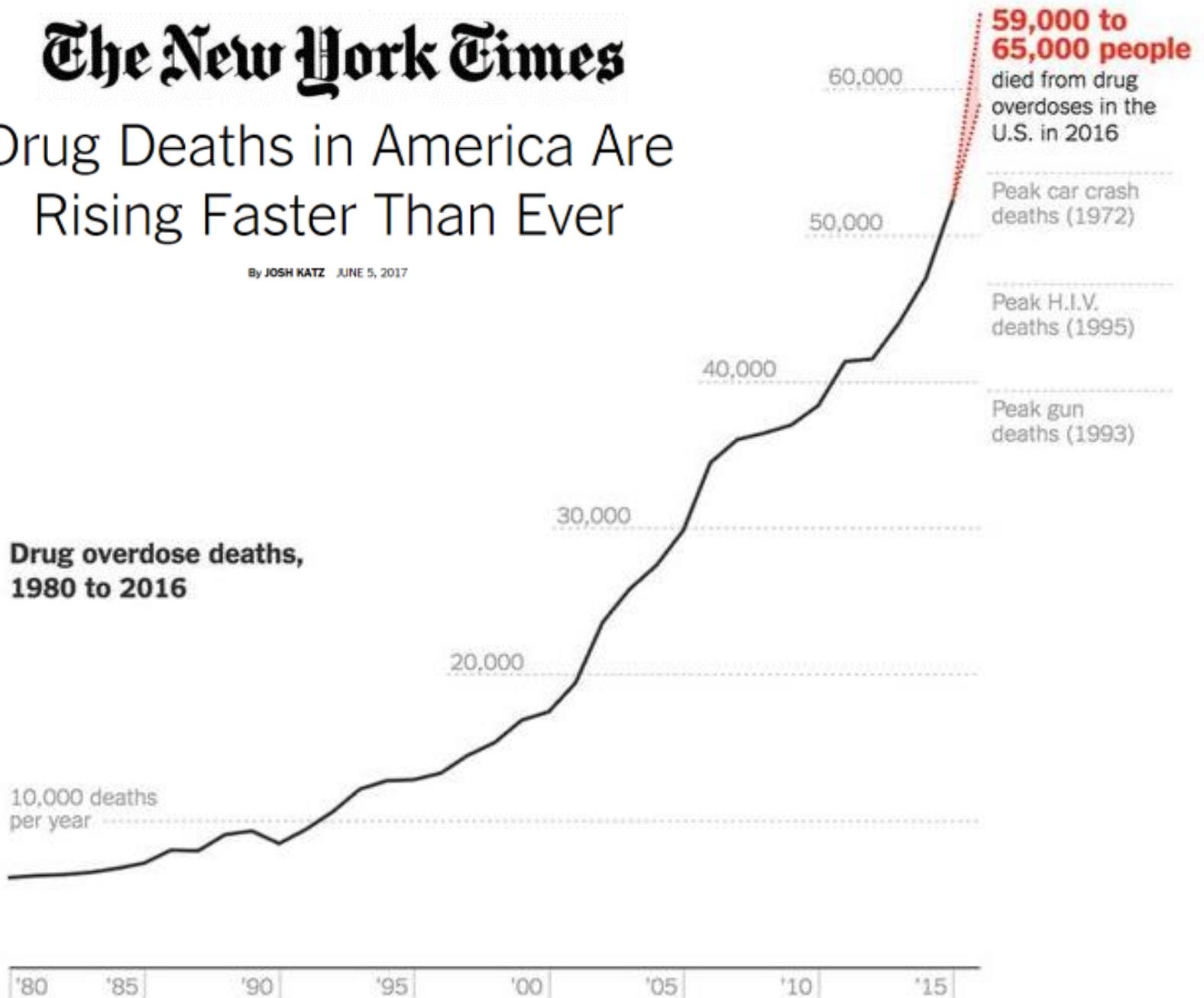
U.S. Census Bureau (2017). Annual Estimates of the Resident Population in Texas: April 1, 2010 to July 1, 2016.

Available at: <https://www.census.gov/data/datasets/2016/demo/popest/total-cities-and-towns.html>

The New York Times

Drug Deaths in America Are Rising Faster Than Ever

By JOSH KATZ JUNE 5, 2017



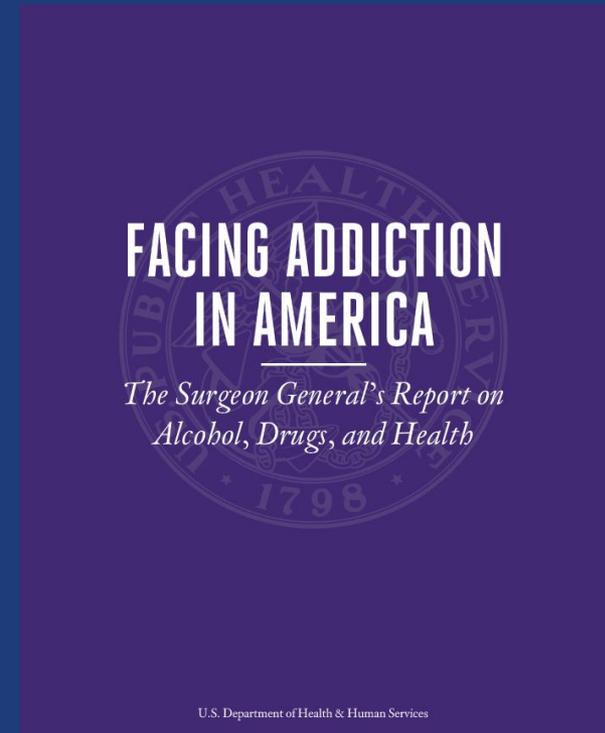
Facing Addiction in America



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- Define the problem
- Identify risk and protective factors
- Develop and test interventions
- Support broad implementation of evidence-based prevention, treatment, and recovery support services
- Monitor impact



<https://addiction.surgeongeneral.gov/>

Define the Problem

Understanding substance misuse and associated consequences in Texas



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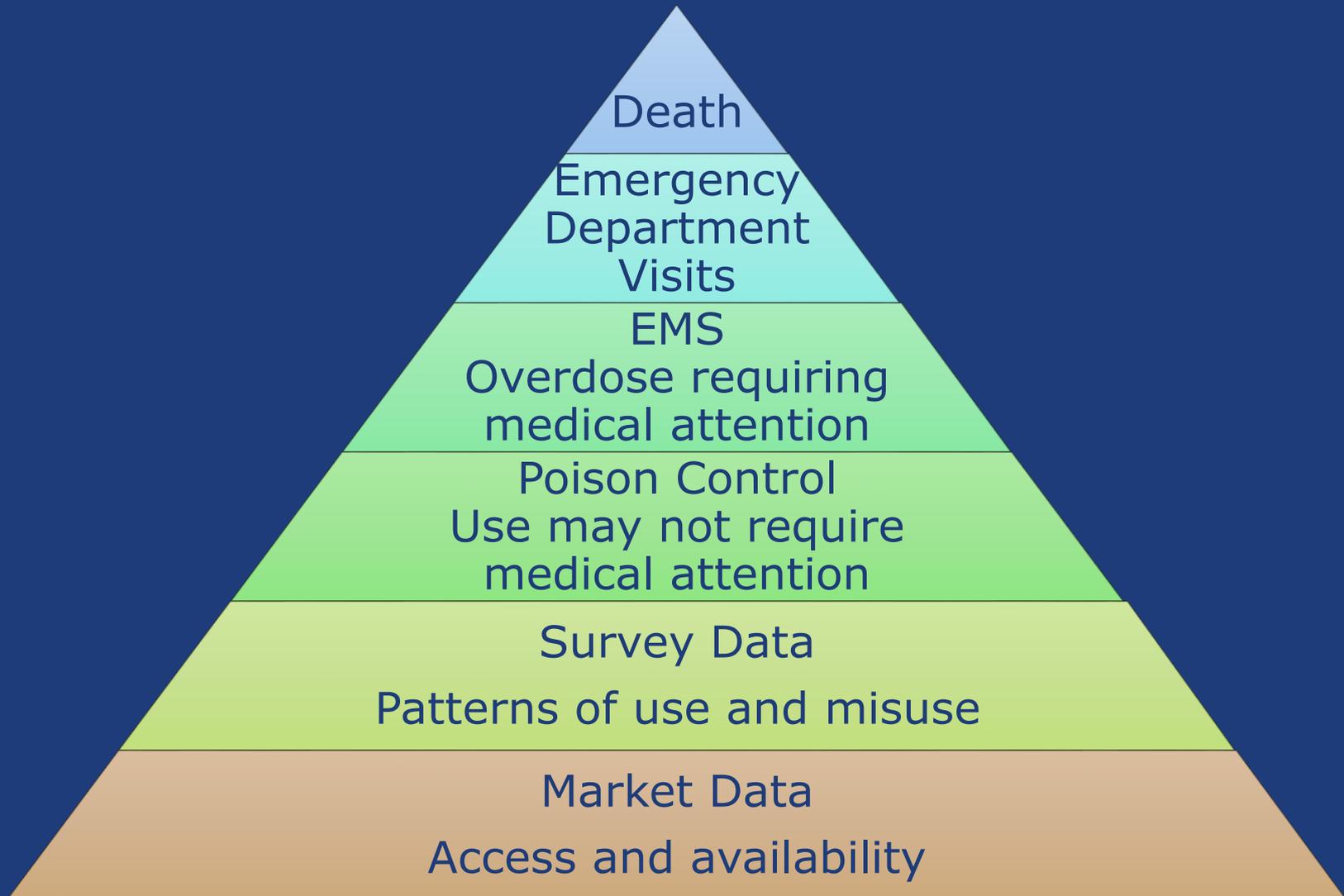
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Defining the Problem



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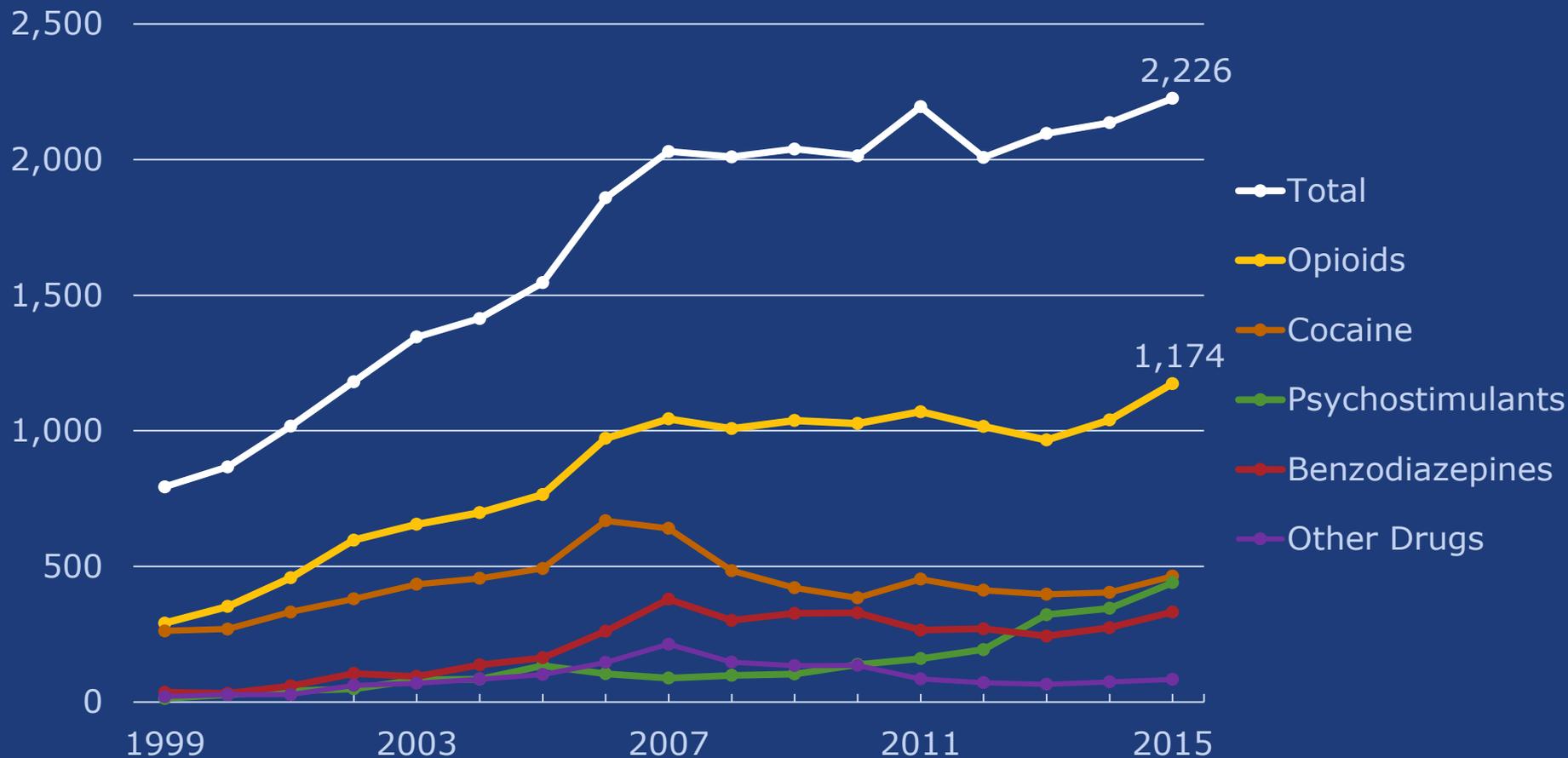


Accidental Poisoning Deaths in Texas: 1999-2015



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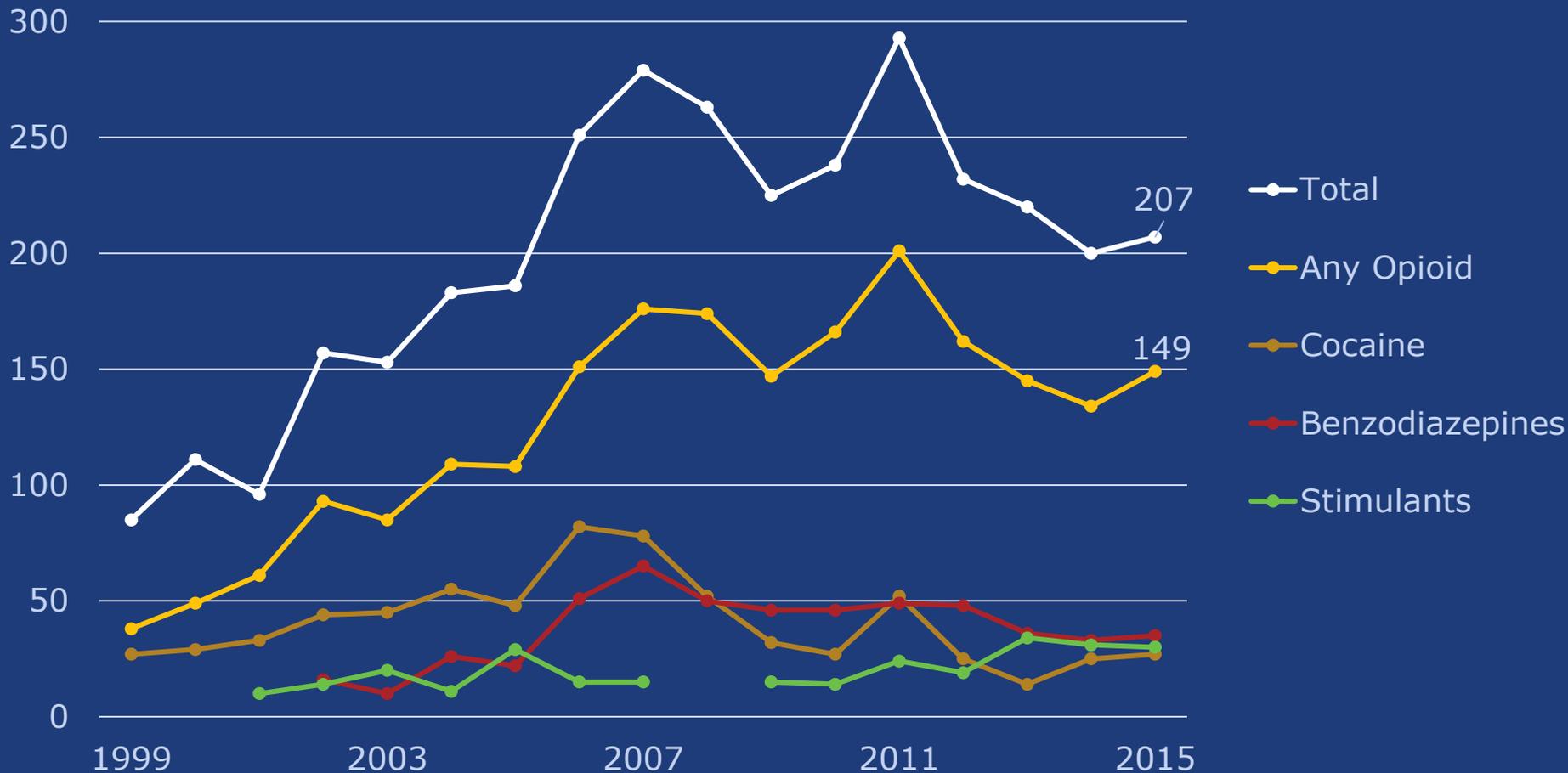
Source: Texas Death Certificates
 Accidental Poisonings based on County of Occurrence
 Prepared by Texas Department of State Health Services, Center for Health Statistics 3/6/2018

Accidental Poisoning Deaths among 15-24 Year Olds in Texas: 1999-2015



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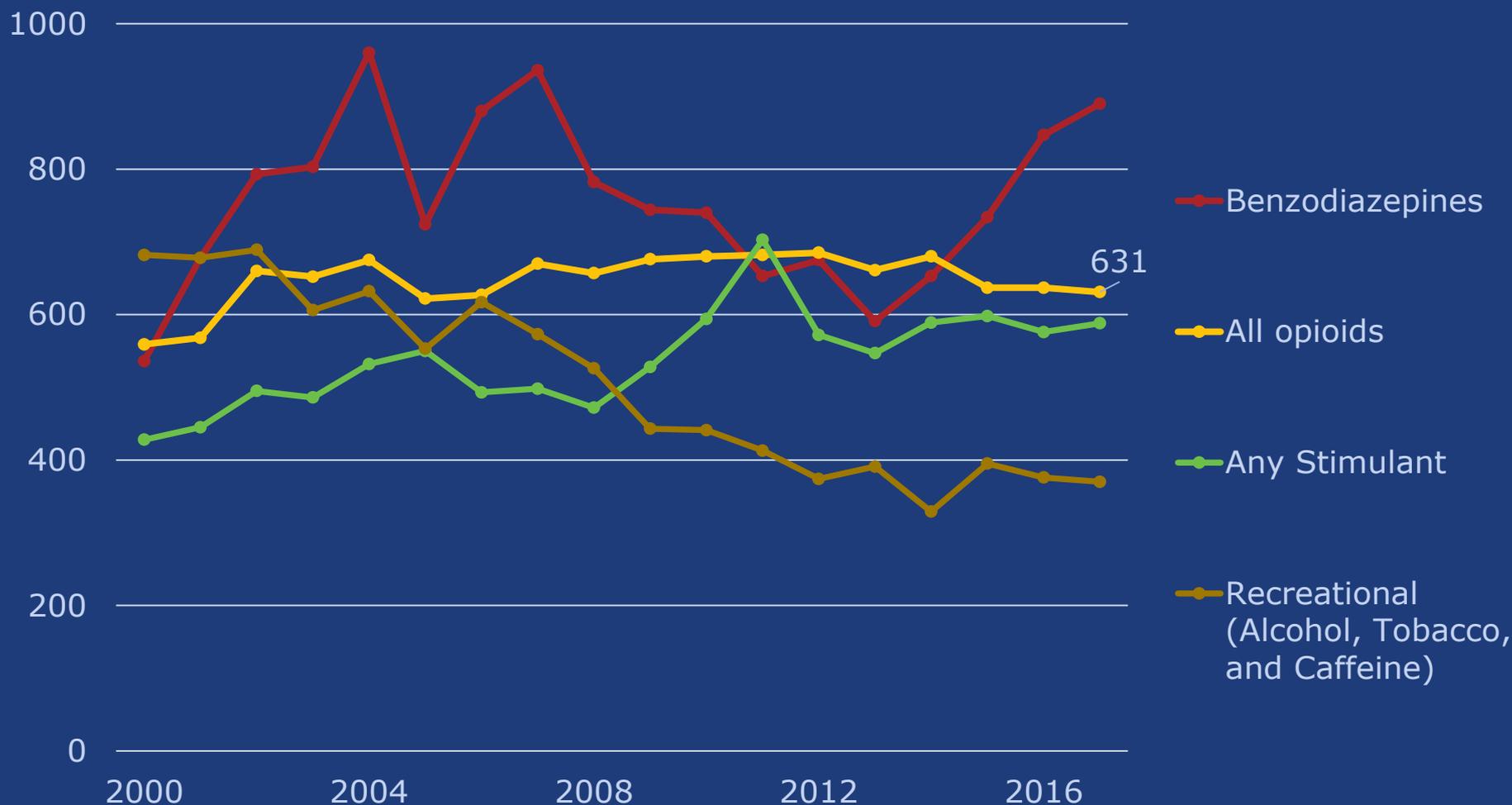
Source: Texas Death Certificates
 Accidental Poisonings based on County of Occurrence
 Prepared by Texas Department of State Health Services, Center for Health Statistics 3/6/2018

Poison Center Exposure Calls among 13-19 Year Olds in Texas: 2000-2017



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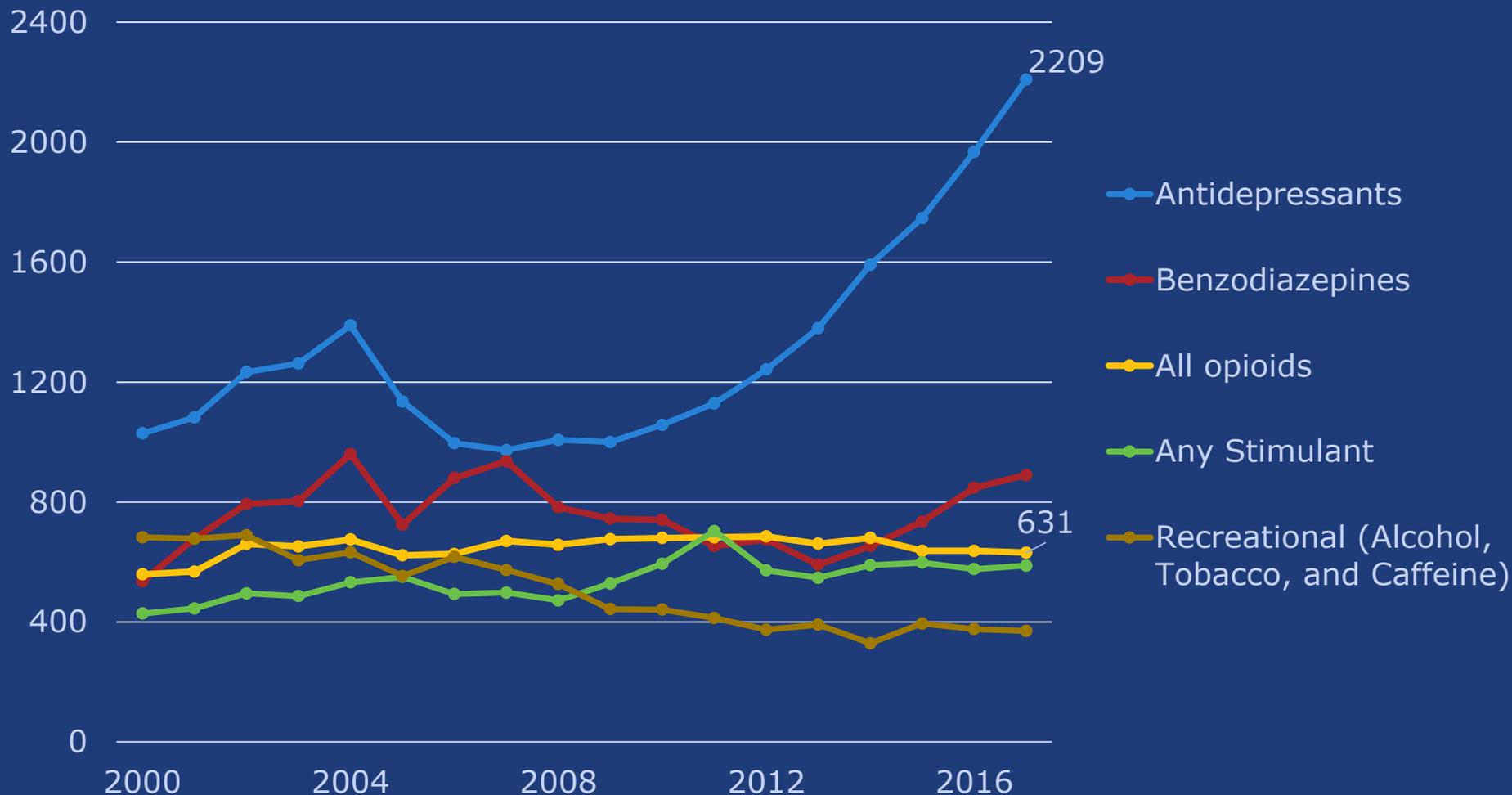
Source: Texas Poison Center Network, 2000-2017. Analyses include only those calls involving drug exposures; calls asking for information were not included.

Poison Center Exposure Calls among 13-19 Year Olds in Texas: 2000-2017



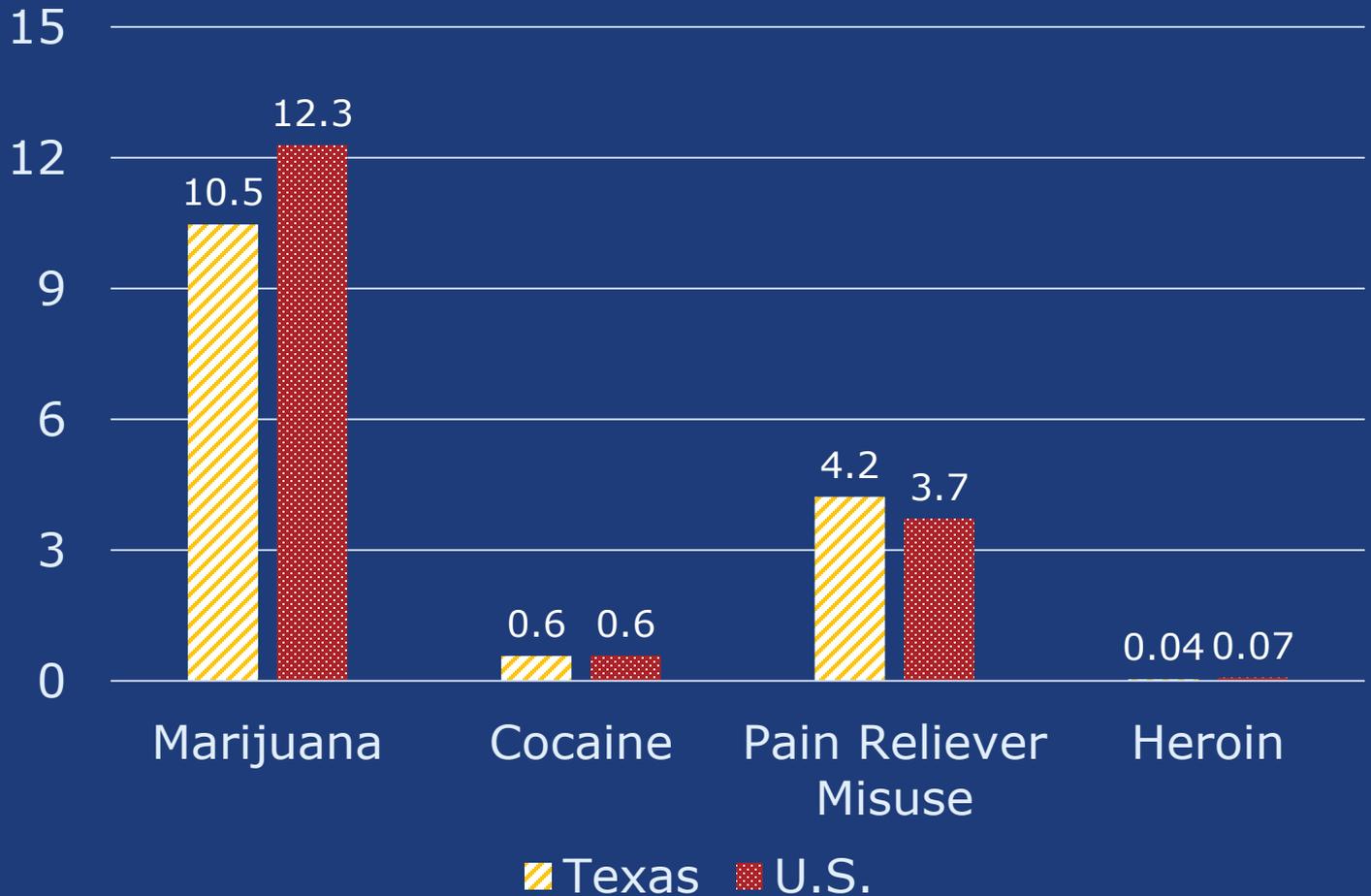
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Source: Texas Poison Center Network, 2000-2017. Analyses include only those calls involving drug exposures; calls asking for information were not included.

Percentage of Past Year Substance Use among Youth Ages 12-17: Texas and National, 2015/2016



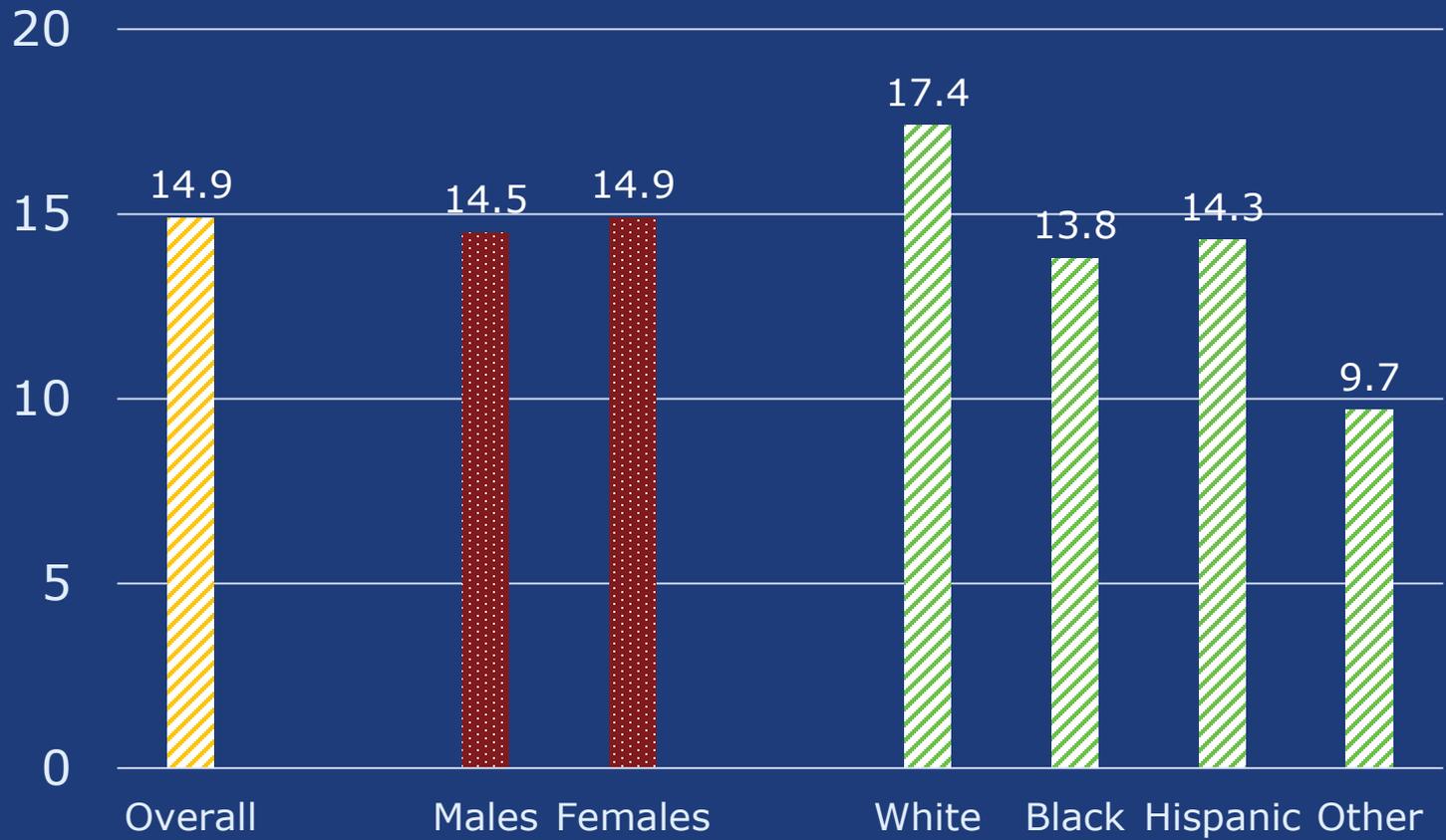
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Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015 and 2016.

Percentage of Lifetime Use of Prescription Pain Medication among Texas High School Students: 2017



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Source: Texas Youth Risk Behavior Surveillance System (2017).
Available at: <http://healthdata.dshs.texas.gov/HealthRisks/YRBS>

Texas Health Data

healthdata.dshs.texas.gov/Home



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Opioid-Related Deaths in Texas Data Visualization Dashboard

Texas Summary Statistics

Year(s): 2015
Type of Death: Accidental Poisoning Deaths where Opioids Were Involved

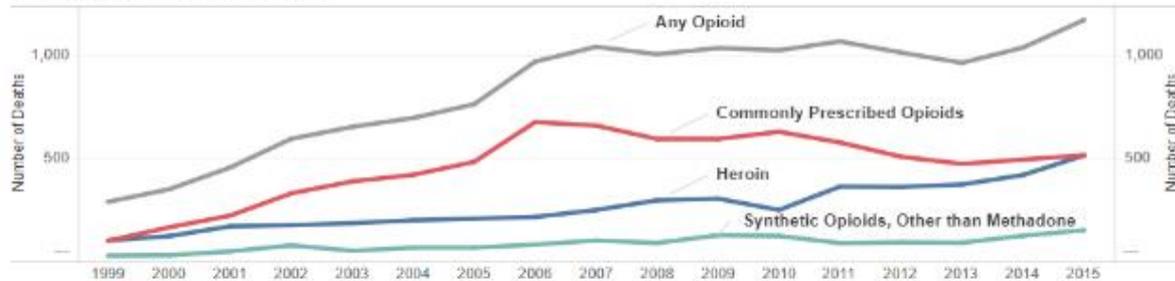
Number of Deaths

1,174

Crude Death Rate

43

Number of Deaths in Texas



Instructions

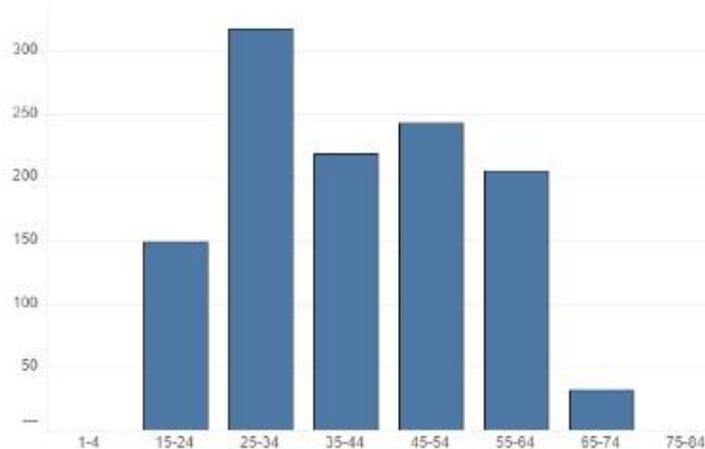
Year: 2015

Type of Death: Accidental Poisoning Deaths where Opioid...

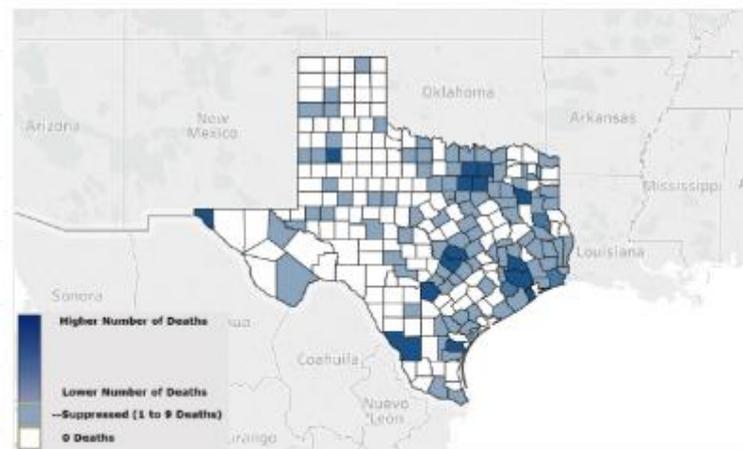
Opioid Category: (All)

Benzodiazepines Involved: (All)

Number of Deaths by Age Group



Number of Deaths by County



Note: Total Number of Deaths from 1 to 9 are masked with "—" on this page.

Why Do Youth Use?

**Identify risk and
protective factors**

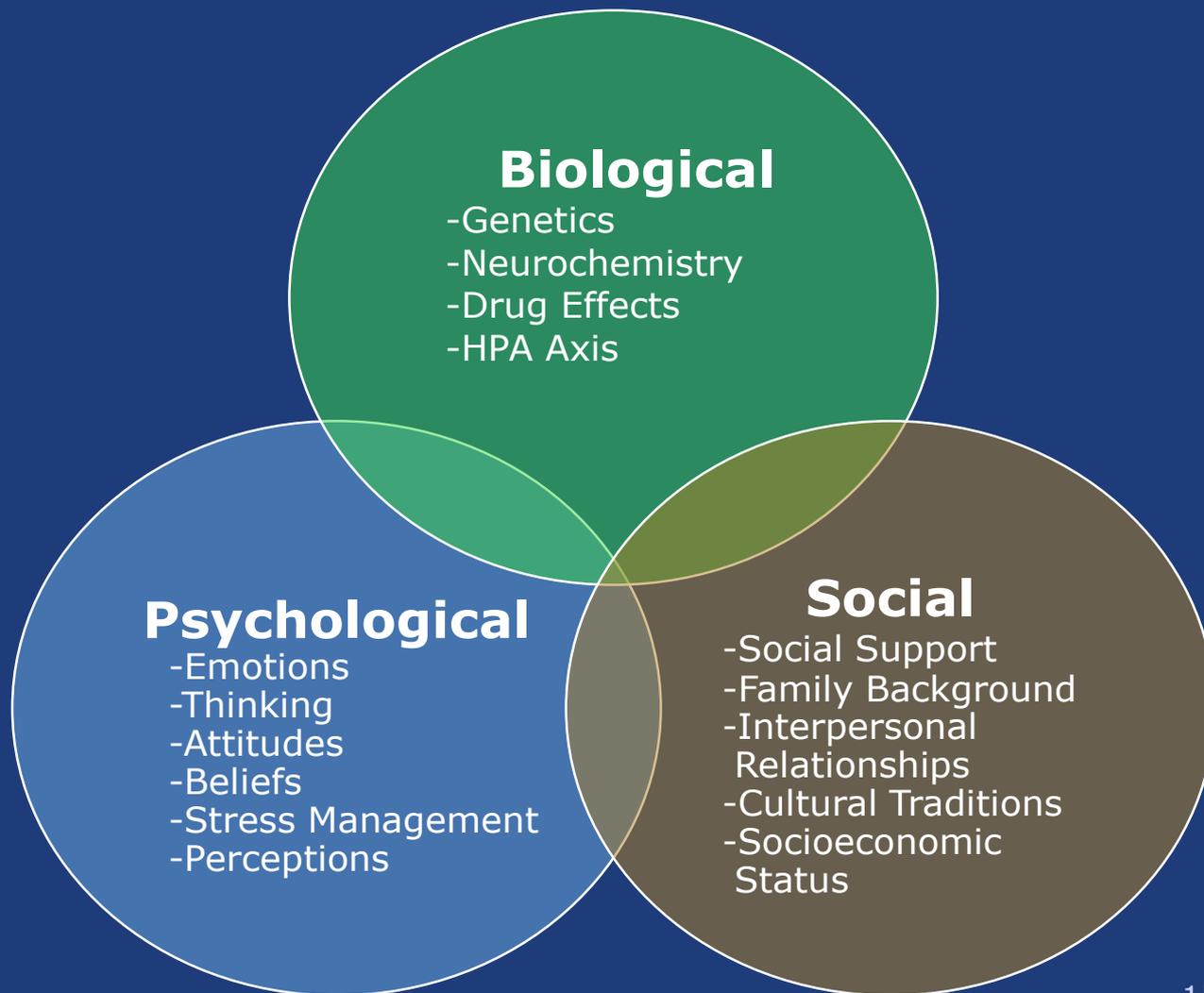


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Bio-Psycho-Social Framework



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Adolescent Brain Development



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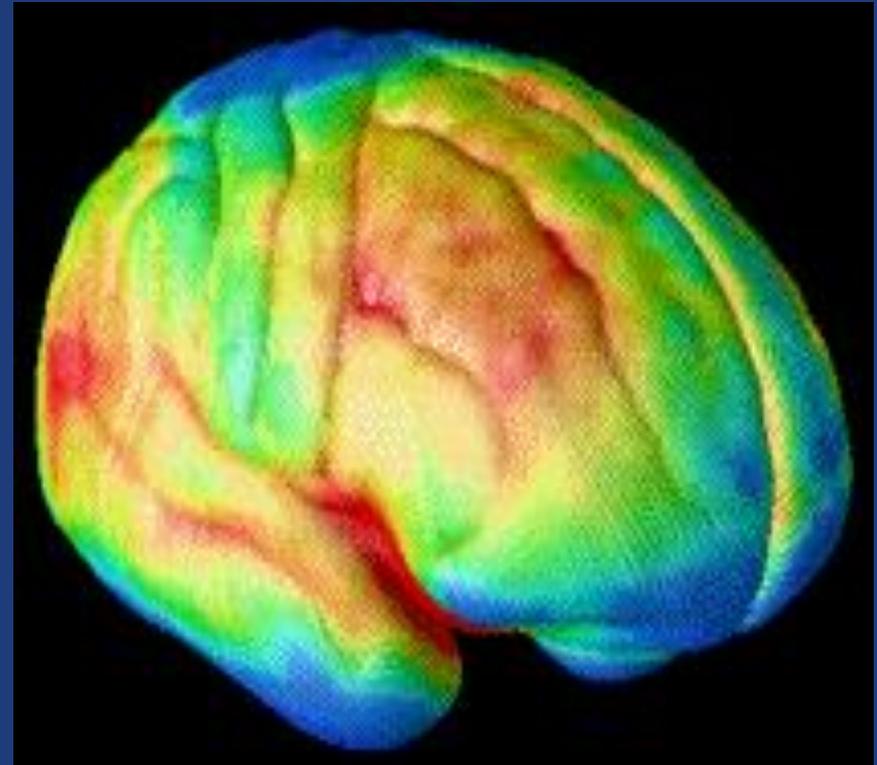
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Earlier: Limbic system

- Processing emotions
- Processing social info
- Experience of reward/punishment

Later: Prefrontal cortex

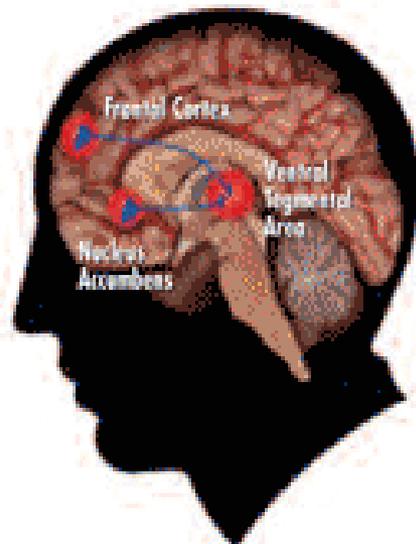
- Deliberative thinking
- Logical reasoning
- Planning ahead
- Weighing costs/benefits
- Regulating impulses



**Blue represents maturing of
brain areas in healthy youth
ages 5-20**

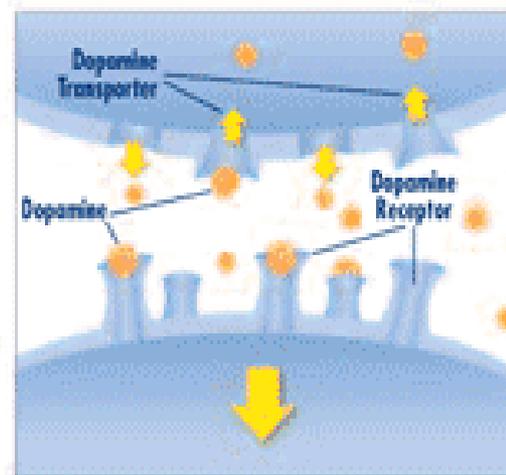
ALL DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

Brain reward (dopamine) pathways

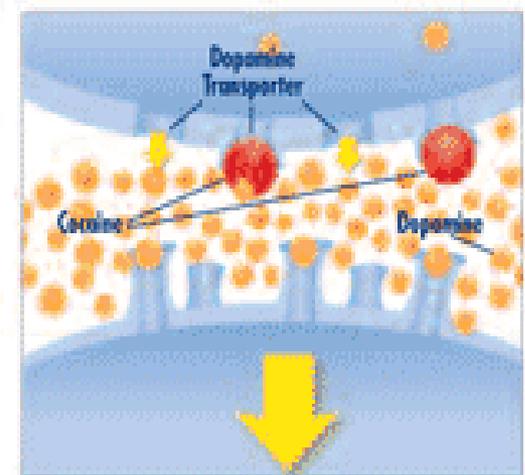


These brain circuits are important for natural rewards such as food, music, and art.

All drugs of abuse increase dopamine



FOOD



COCAINE

Typically, dopamine increases in response to natural rewards such as food. When cocaine is taken, dopamine increases are exaggerated, and communication is altered.

Adolescent Brain Development



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- Developing dopamine system is “robust”
- Creates a greater risk of the dopamine hijacking process for the developing brain



Role of Puberty



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- Puberty is a dynamic interplay of biological, psychological, and social processes
- Feelings range from embarrassment to empowerment
- An adolescent's understanding of their pubertal process is shaped in part by comparisons to and reactions from others





Social Ecological Model



Risk Factors Associated with Substance Misuse



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	Adolescents	Young Adults
Genetic susceptibility	X	X
Early initiation	X	X
Early and persistent problem behavior	X	
Sensation seeking/Impulsivity	X	X
Attitudes towards substance use	X	X
Peer substance use	X	X
Family management	X	X
Family conflict	X	X
Family attitudes towards substance use	X	X
Family history of substance misuse	X	X

Risk Factors Associated with Substance Misuse



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	Adolescents	Young Adults
Academic failure	X	X
Lack of school connectedness	X	X
Low cost of alcohol	X	X
High availability of substances	X	X
Community laws and norms favorable towards substance use	X	X
Media portrayal of substance use	X	
Low neighborhood attachment	X	
Community disorganization	X	

Protective Factors Against Substance Misuse



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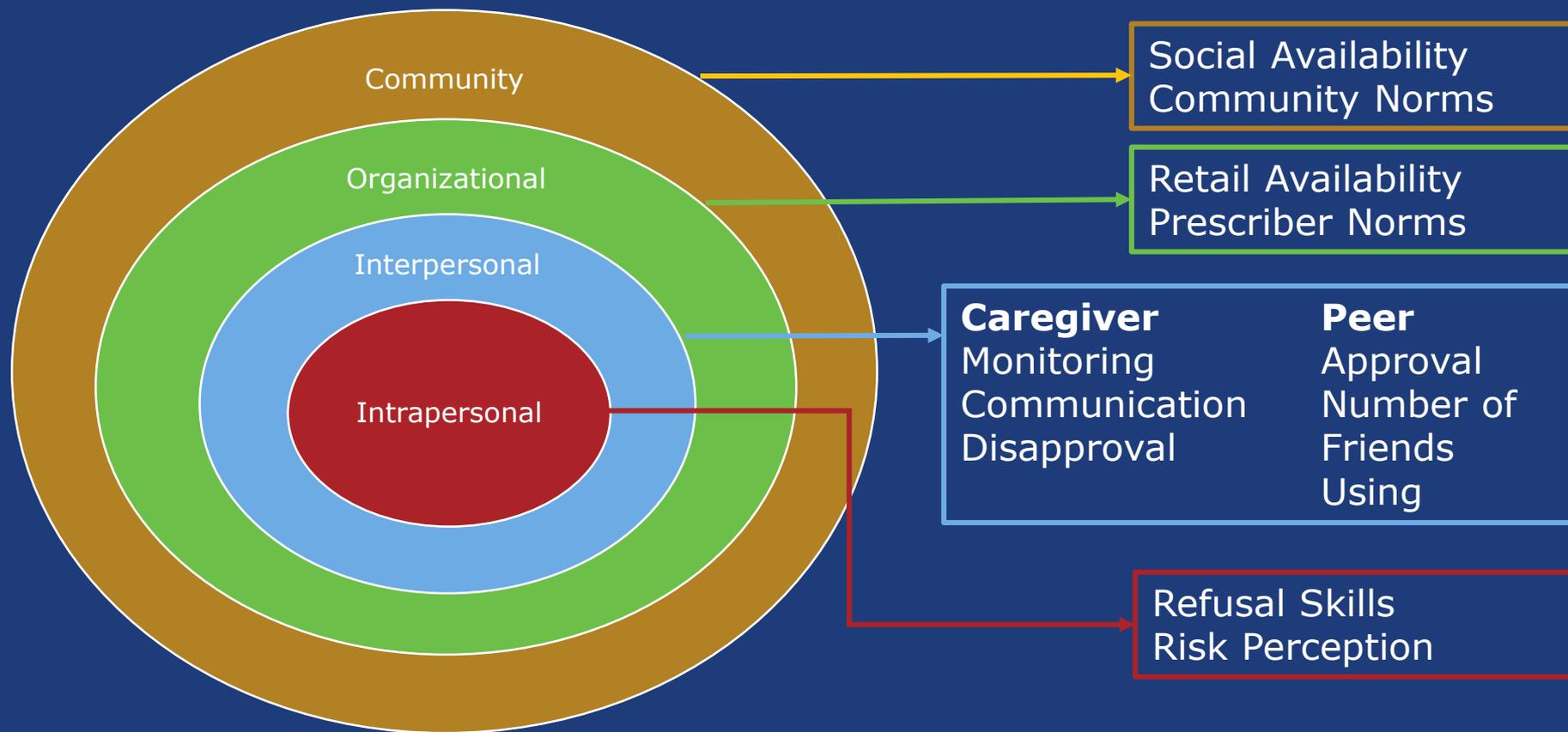
	Adolescents	Young Adults
Social and emotional skills	X	X
Self-efficacy	X	X
Spirituality	X	X
Resiliency	X	X
Opportunities for positive social involvement	X	X
Recognition of positive behavior by family, peers, teachers, and community	X	X
Attachment and positive communication with family, school, and community	X	X

Prescription Opioid Misuse Factors



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SAMHSA CAPT (2016). *Preventing Prescription Drug Misuse: Understanding Who Is at Risk*. Available at: <https://www.samhsa.gov/capt/sites/default/files/resources/preventing-prescription-drug-misuse-understanding.pdf>

What Can We Do?

**Support broad
implementation of
evidence-based
prevention, treatment,
and recovery support
services**



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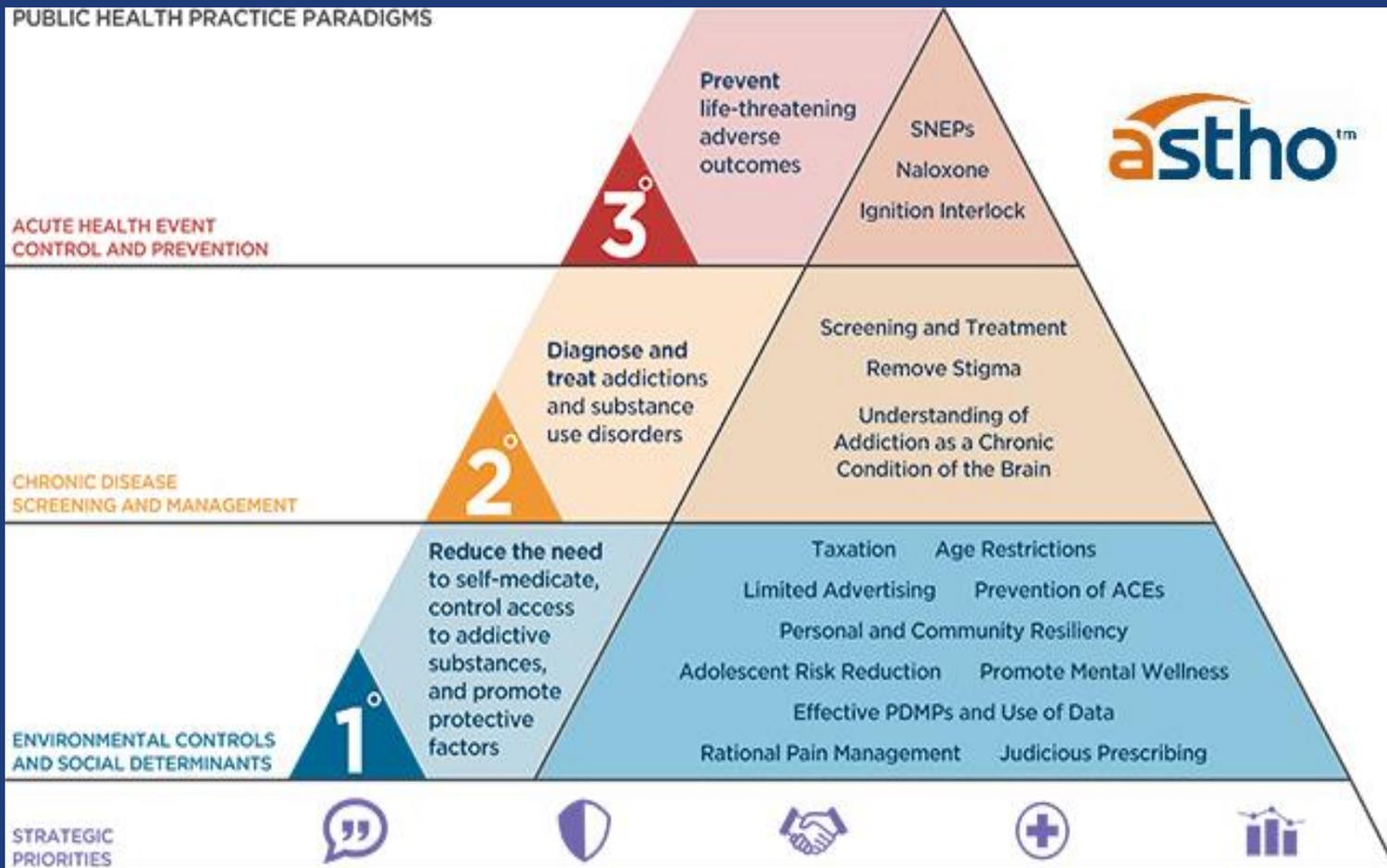
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Public Health Approach to Preventing Substance Misuse and Addictions



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<http://www.astho.org/addictions/>

What is Primary Prevention?



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*Colorado Stream
Carol Cavalari © 2008*

Function of Primary Prevention

- Environmental
- Developmental
- Informational



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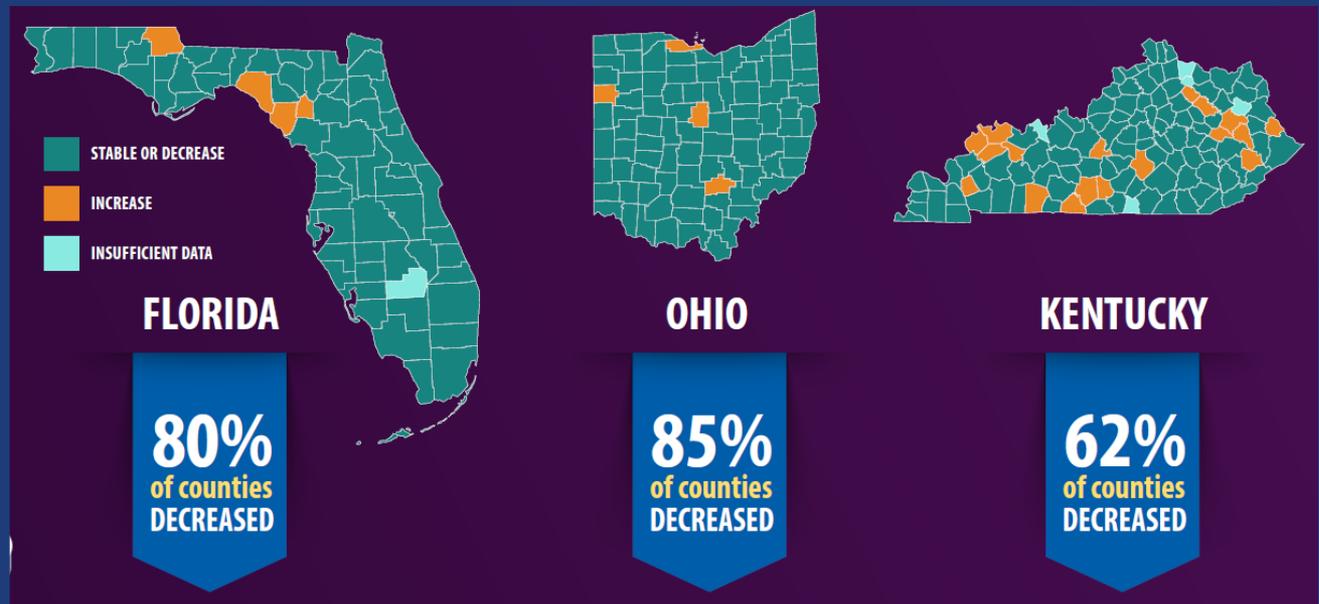
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Source: Foxcroft, D. R. (2014). Can prevention classification be improved by considering the function of prevention?. *Prevention Science*, 15(6), 818-822.

Environmental: Prescribing Practices

- Prescription Monitoring Programs
 - High Utilization
 - Consistent Reporting
 - Incorporate into Prevention Planning



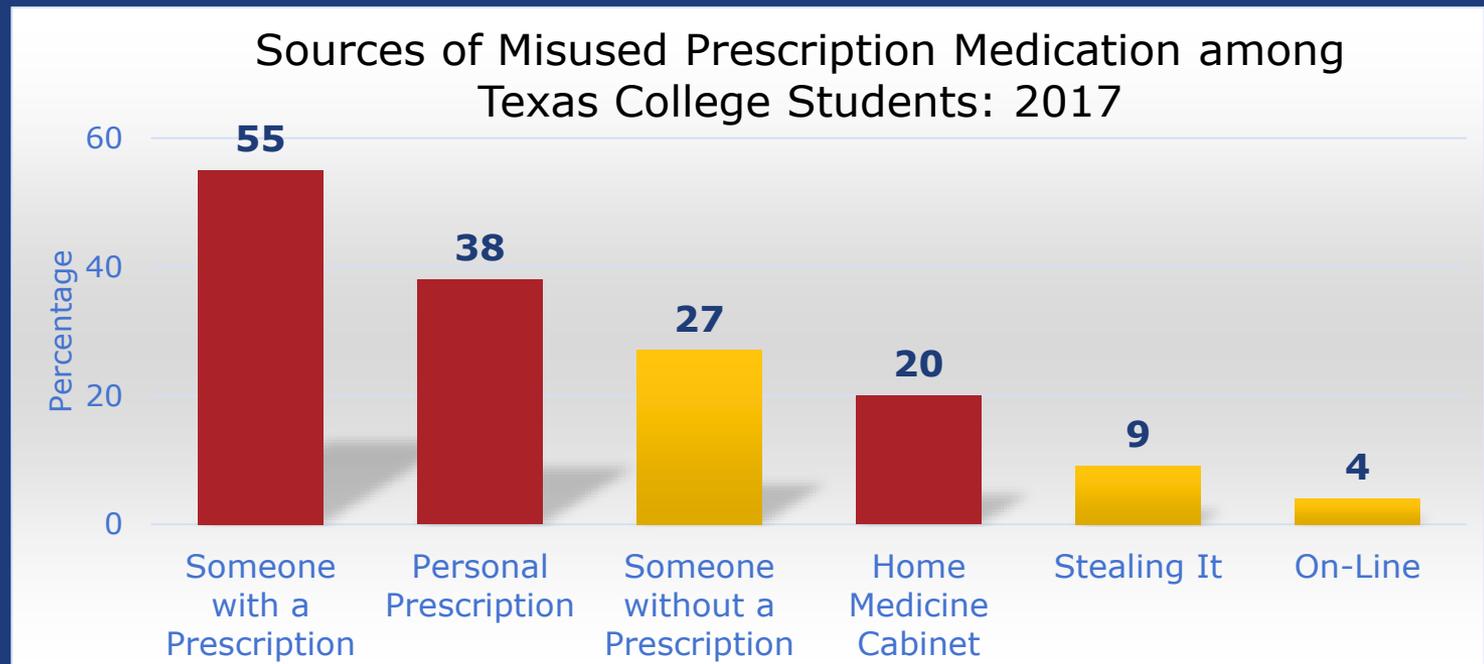
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Environmental: Disposal and Storage

- Take-Back Events and Drop-Boxes
- Individual Medication Disposal Pouches
- Lock-Boxes

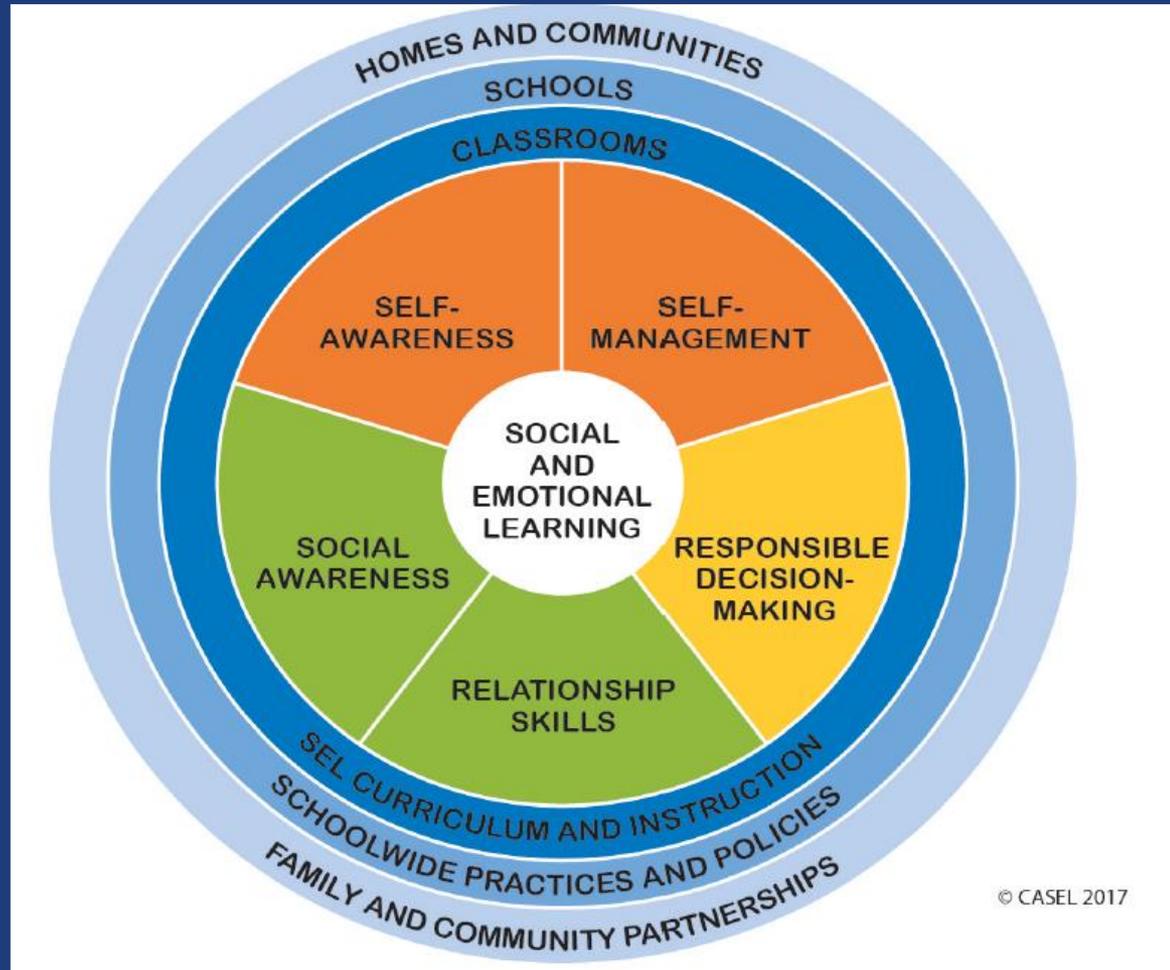


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Developmental



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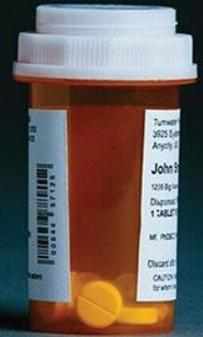
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Source: Collaborative for Academic, Social, and Emotional Learning (CASEL)
<https://casel.org/core-competencies/>

Informational

- Youth and Young Adults
- Communities
- Health Care Professionals

Prescription opioids can be
addictive and **dangerous**.
It only takes a little to lose a lot.



<https://www.cdc.gov/RxAwareness/>



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What is Secondary Prevention?



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Table 4.1: Evidence-Based Screening Tools for Substance Use

Screening Tool	Substance Type		Age Group	
	Alcohol	Drugs	Adolescents	Adults
Alcohol Screening and Brief Intervention for Adolescents and Youth: A Practitioner's Guide	✓		✓	
Alcohol Use Disorders Identification Test (AUDIT)	✓			✓
Alcohol Use Disorders Identification Test-C (AUDIT-C)	✓			✓
Brief Screener for Tobacco, Alcohol, and Other Drugs (BSTAD)	✓	✓	✓	
CRAFFT	✓	✓	✓	
CRAFFT (Part A)	✓	✓	✓	
Drug Abuse Screen Test (DAST-10)		✓		✓
DAST-20: Adolescent version		✓	✓	
Helping Patients Who Drink Too Much: A Clinicians' Guide	✓		✓	✓
NIDA Drug Use Screening Tool	✓	✓		✓
NIDA Drug Use Screening Tool: Quick Screen	✓	✓	See APA Adapted NM ASSIST tools	✓
Opioid Risk Tool		✓		✓
S2BI	✓	✓	✓	

Source: National Institute on Drug Abuse, (2015).⁴³

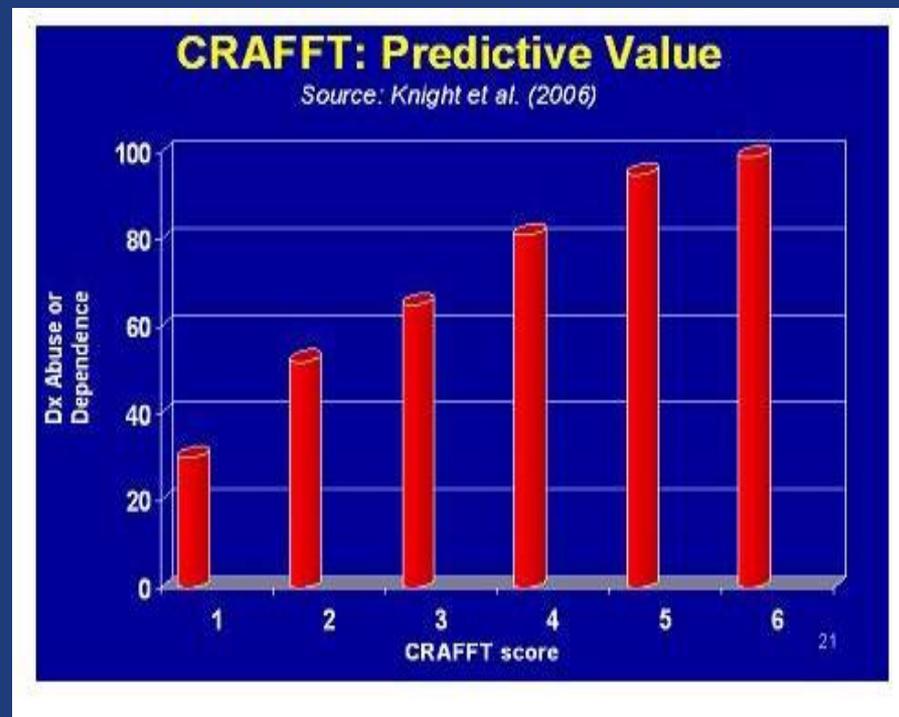
Assessment/Screening Tool: CRAFFT



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- 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 while 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?



Screening & Brief Intervention (SBI)

- Designed for use by counselors and professionals who do not specialize in addiction treatment
- Person-centered methodology that uses motivational techniques based on the person's readiness to change
- Gives feedback and recommendations respectfully, without judgment or accusations, in the form of useful information



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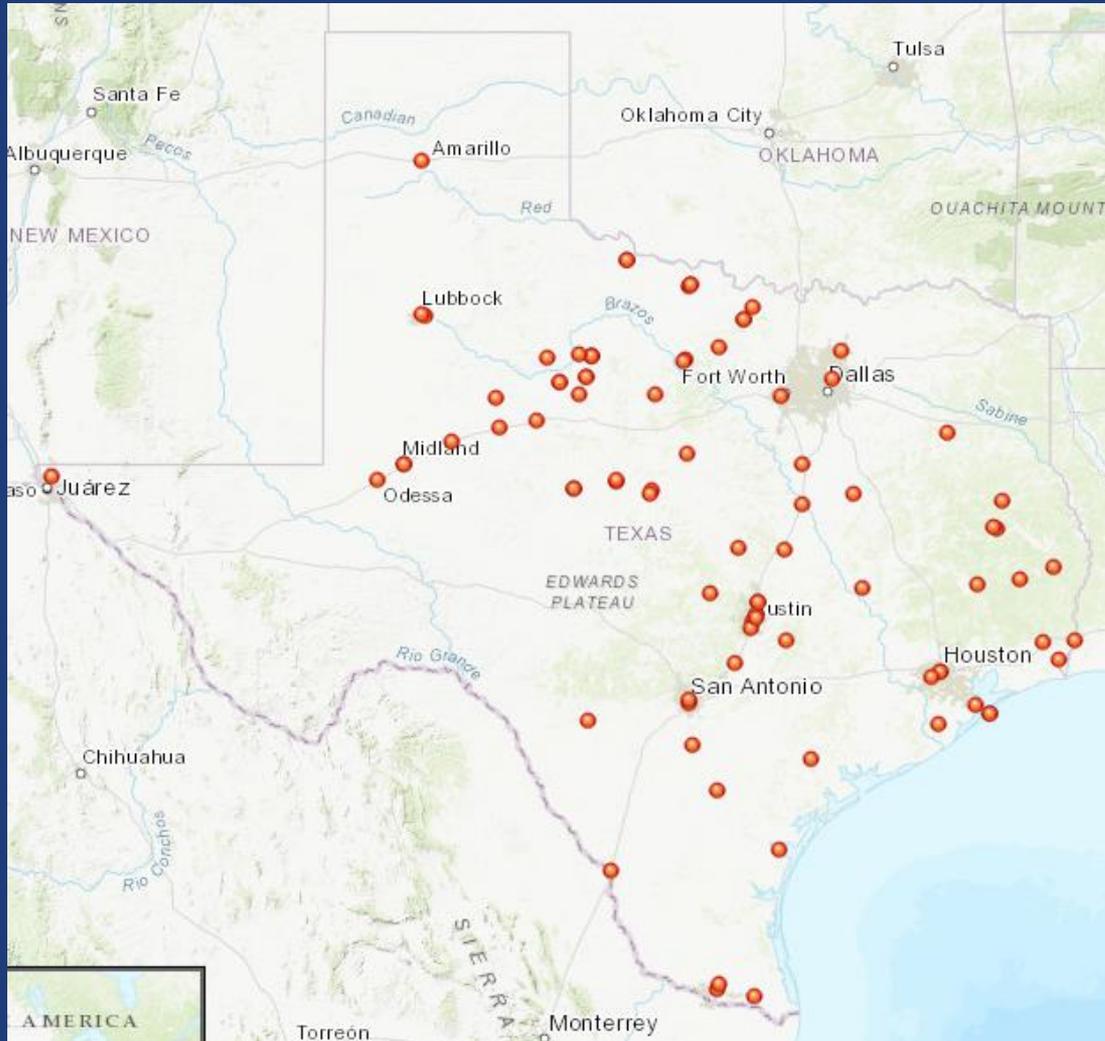
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Outreach, Screening, Assessment, and Referral Services (OSARs)



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Source:
<https://hhs.texas.gov/services/mental-health-substance-use/mental-health-substance-use-resources>

Opioid Use Disorder Treatment: Medication Assisted Therapies

- Methadone
- Buprenorphine
- Naltrexone



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What is Tertiary Prevention?



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Understanding Naloxone



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Source: SAMHSA. Center for the Application of Prevention Technologies (CAPT).
Available at: <https://www.youtube.com/watch?v=uldgRuFXE6s&feature=you.be>

Additional Resources



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Youth Substance Abuse Prevention Coalition

- Local Resources
- Data
- Webinars



www.tcysapc.org

Additional Resources



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Texas Health Data

healthdata.dshs.texas.gov/Home

Texas Health and Human Services Commission (HHSC) Funded Programs

<https://hhs.texas.gov/services/mental-health-substance-use/mental-health-substance-use-resources>

Operation Naloxone

www.OperationNaloxone.org

Centers for Disease Control and Prevention (CDC) - Opioid Overdose Prevention

www.cdc.gov/drugoverdose/index.html

Opioid Epidemic Practical Toolkit: Helping Faith and Community Leaders Bring Hope and Healing to Our Communities

www.hhs.gov/about/agencies/iea/partnerships/opioid-toolkit/index.html

U.S. Surgeon General – Opioid Overdose Prevention

<https://www.surgeongeneral.gov/priorities/opioid-overdose-prevention/index.html>

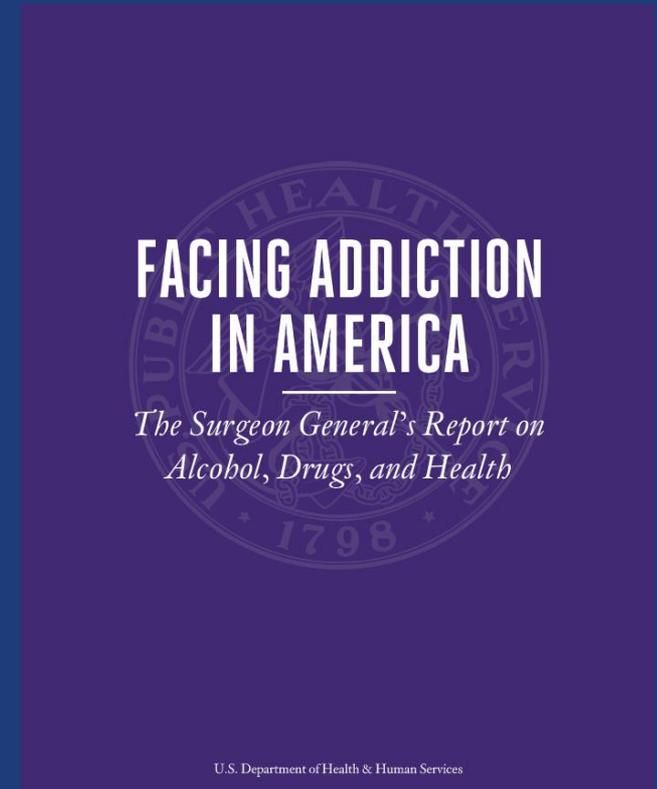
This is Our Community



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“Everyone has a role to play in addressing substance misuse and substance use disorders and in changing the conversation around substance use, to improve the health, safety, and well-being of individuals and communities across our nation.”





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Thank you

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