Welcome To

Addressing the Latest Emerging Substance Use Trends

Xylazine, Nitazenes, Tianeptine, Hallucinogens and Others

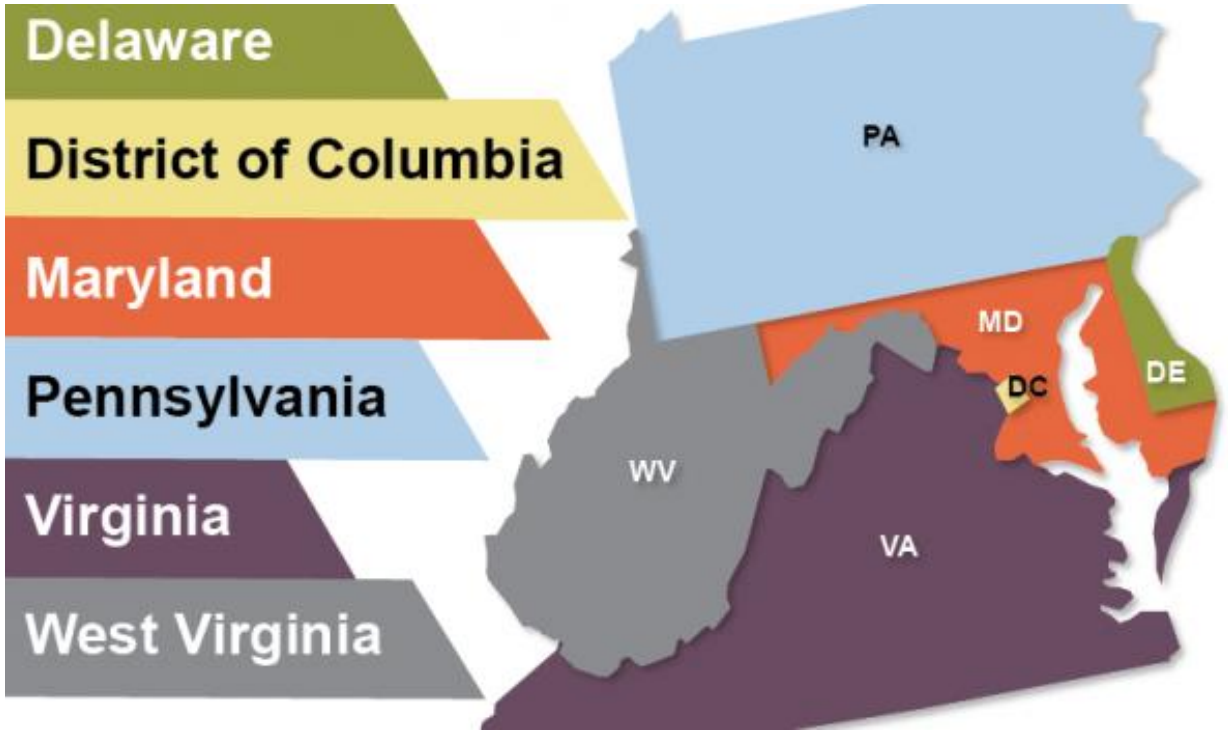
SAMHSA's Prevention Day – Washington, DC

January 29, 2024

Central East (HHS Region 3)
PTTC

Central East Region

SAMHSA REGION 3



Central East (HHS Region 3)
PTTC

The use of affirming language inspires hope.

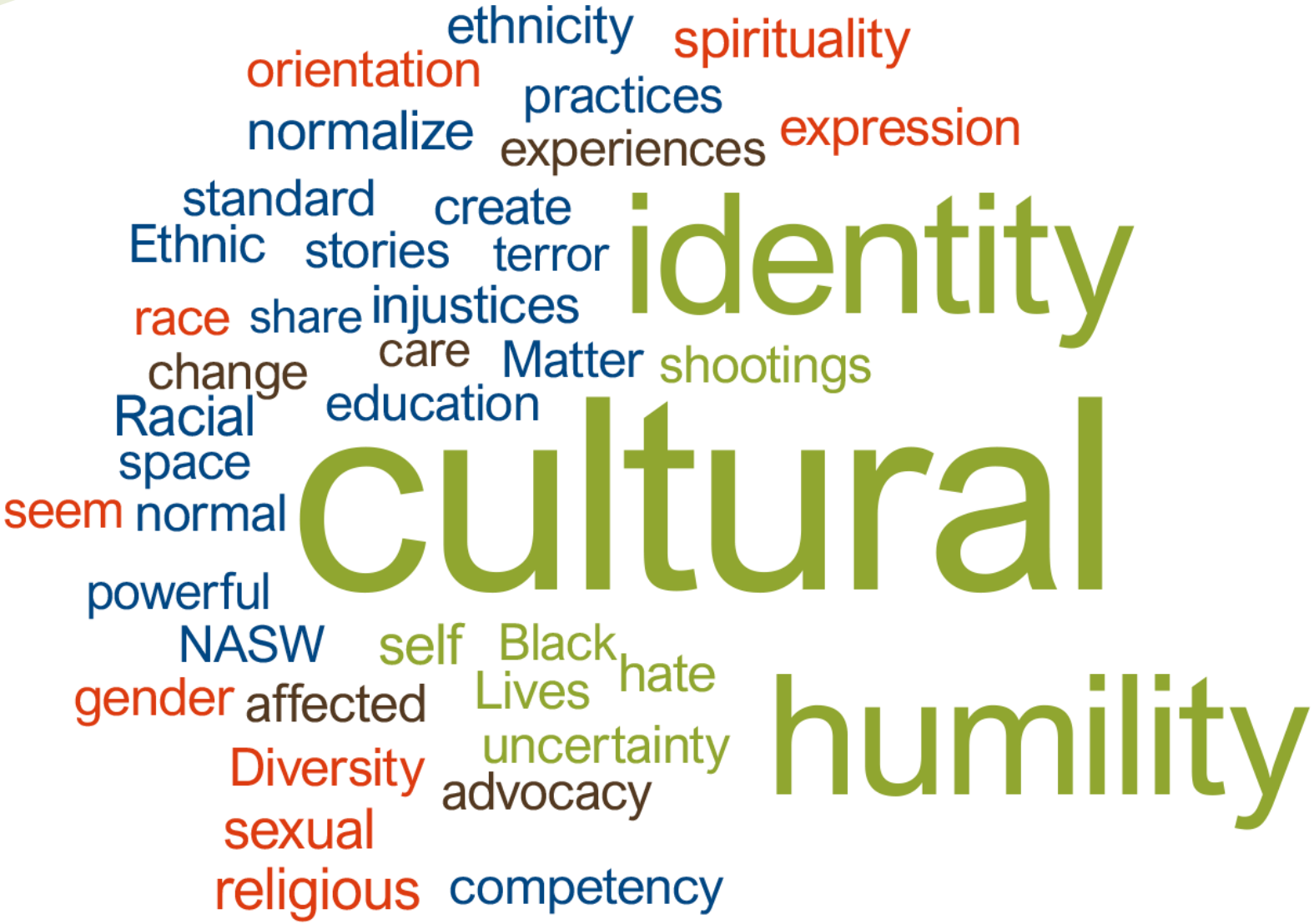
LANGUAGE MATTERS.

Words have power.

PEOPLE FIRST.

The PTTC Network uses affirming language to promote the application of evidence-based and culturally informed practices.

Central East (HHS Region 3)
PTTC



Central East (HHS Region 3)
PTTC

PTTC Mission

1. To Strengthen the Capacity of the Workforce
2. To Deliver Evidence-Based Prevention Strategies
3. Facilitate Opportunities for Preventionists to Pursue New Collaboration Opportunities, which include Developing Prevention Partnerships and Alliances

Central East (HHS Region 3)
PTTC

Services Available

Central East (HHS Region 3)
PTTC

Other Resources in SAMHSA Region 3

Central East (HHS Region 3)

ATTC Addiction Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

Central East (HHS Region 3)

MHTTC Mental Health Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

Central East (HHS Region 3)

PTTC

Carnevale Associates

Our specialized team of subject matter experts bring a wealth of industry knowledge to deliver practical and research-based solutions

Contact Information

www.carnevaleassociates.com
P: (410) 685-1169
4 Belinder Road
Gaithersburg, MD 20878

Carnevale Associates (CALLC) is an internationally recognized woman-owned small business providing strategic consulting services for more than 20 years.

Services Include:

- Research & Evaluation
- Training & Technical Assistance (TTA)
- Performance Measurement & Management
- Policy Formulation
- Strategic Planning

CARNEVALE ASSOCIATES LLC

Presenters

Josh Esrick
Speaker

Emily Patton
Speaker

Olivia Stuart
Speaker

Central East (HHS Region 3)
PTTC

Learning Objectives

1. Describe the scope and impacts of the latest emerging substance use trends
2. Identify data sources and primary data collection methods that can provide information on emerging trends
3. Recognize the importance of incorporating emerging trend data into strategic planning efforts

Scope & Impact of the Latest Trends

Central East (HHS Region 3)
PTTC

What is Xylazine

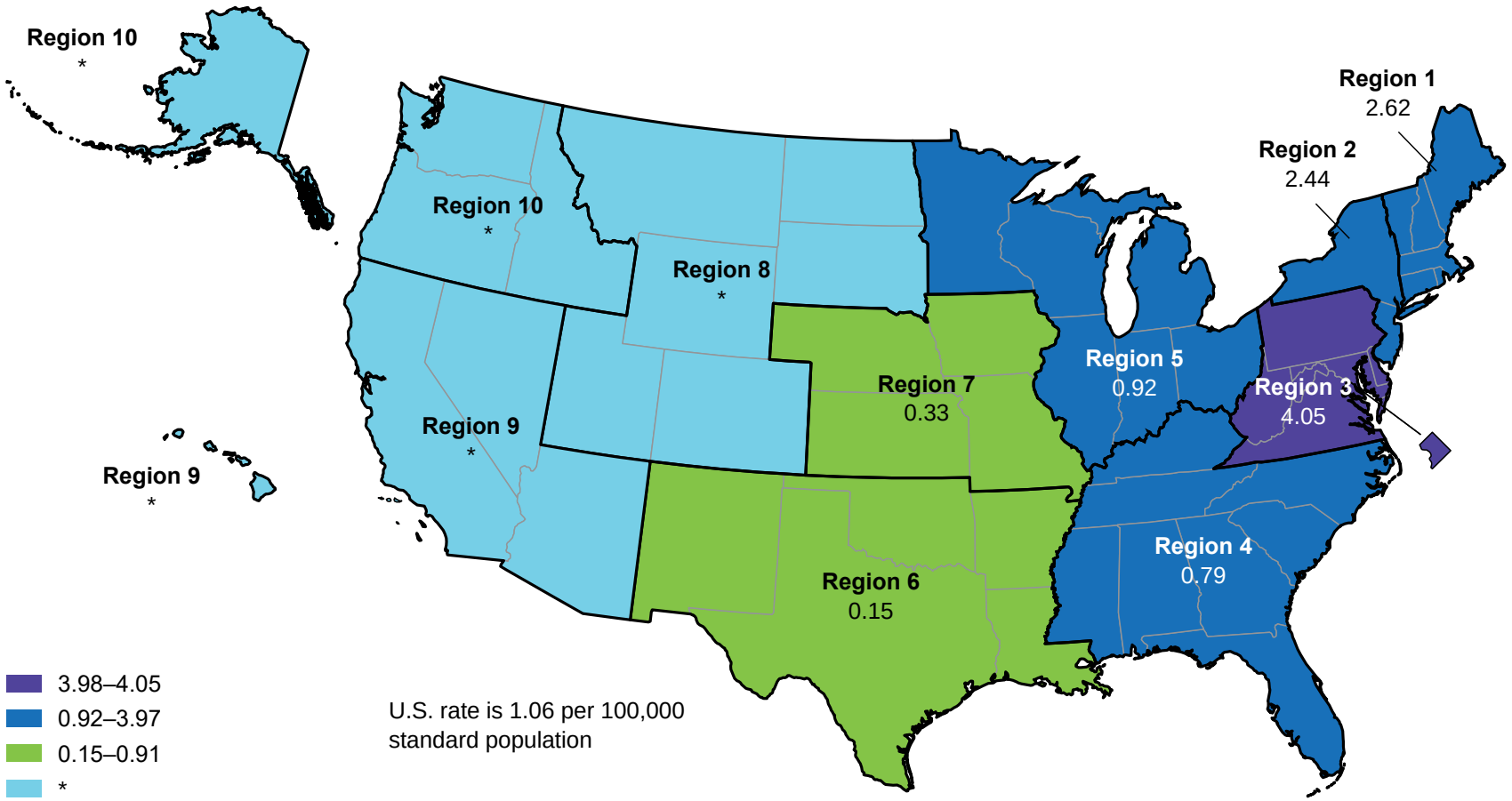
- FDA non-classified veterinary anesthesia drug for animals
  - Non-opioid sedative
  - Muscle relaxant
  - Analgesic
- Not a controlled substance
- Sold in vials or preloaded syringes

Central East (HHS Region 3)
PTTC

Scope of Consequences

- Over 3,468 fatal overdoses in 2021
  - 34% of all fatal overdoses in Philadelphia
- 40% of people in a 2011 study developed necrotizing wounds
  - Rate may be higher now
- No data, but…
  - High potential for use disorder
  - Use has led to significant health problems, including amputations

Xylazine Overdoses, 2021



Central East (HHS Region 3)
PTTC

Xylazine Overdoses, 2021

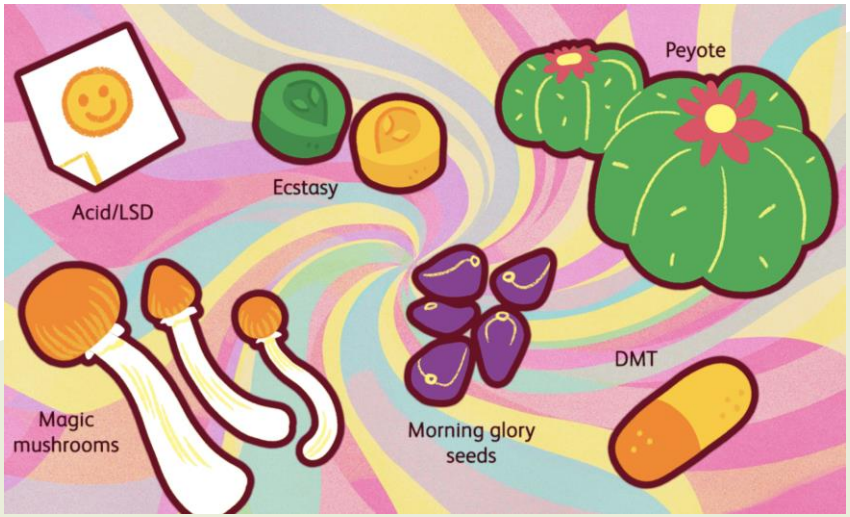
Other Substances Involved	%
Fentanyl	99.1
Cocaine	35.1
Methamphetamine	18.8

Race/Ethnicity	Deaths Per 100,000
Black, non-Hispanic	1.82
White, non-Hispanic	1.21
Multiracial, non-Hispanic	0.35
Hispanic	0.64

Age Range	Deaths Per 100,000
0-24	0.16
25-34	1.89
35-44	2.24
45-54	1.68
55-64	1.48
65+	0.28

Hallucinogens

- Can be found in certain plants or fungi, or produced synthetically
- Includes psilocybin, LSD, DMT, mescaline, ketamine, PCP, MDMA, salvia, and others



- Induces sensory distortions and psychic effects which change how the user perceives reality
- High potential for injury and safety issues due to impaired thought processes and perceptions

Hallucinogens

- In 2022, 8.5 million people ages 12+ used hallucinogens in the past year (NSDUH)
  - Highest prevalence among emerging adults ages 18-25 (7.7%)
- Among adults aged 19-30, past-year non-LSD hallucinogen use more than doubled from 2018-2021
- Use among adults 35-50, past-year hallucinogen use reached an all-time high in 2022
- Hallucinogen use is generally higher among white males with college-educated parents

Hallucinogens

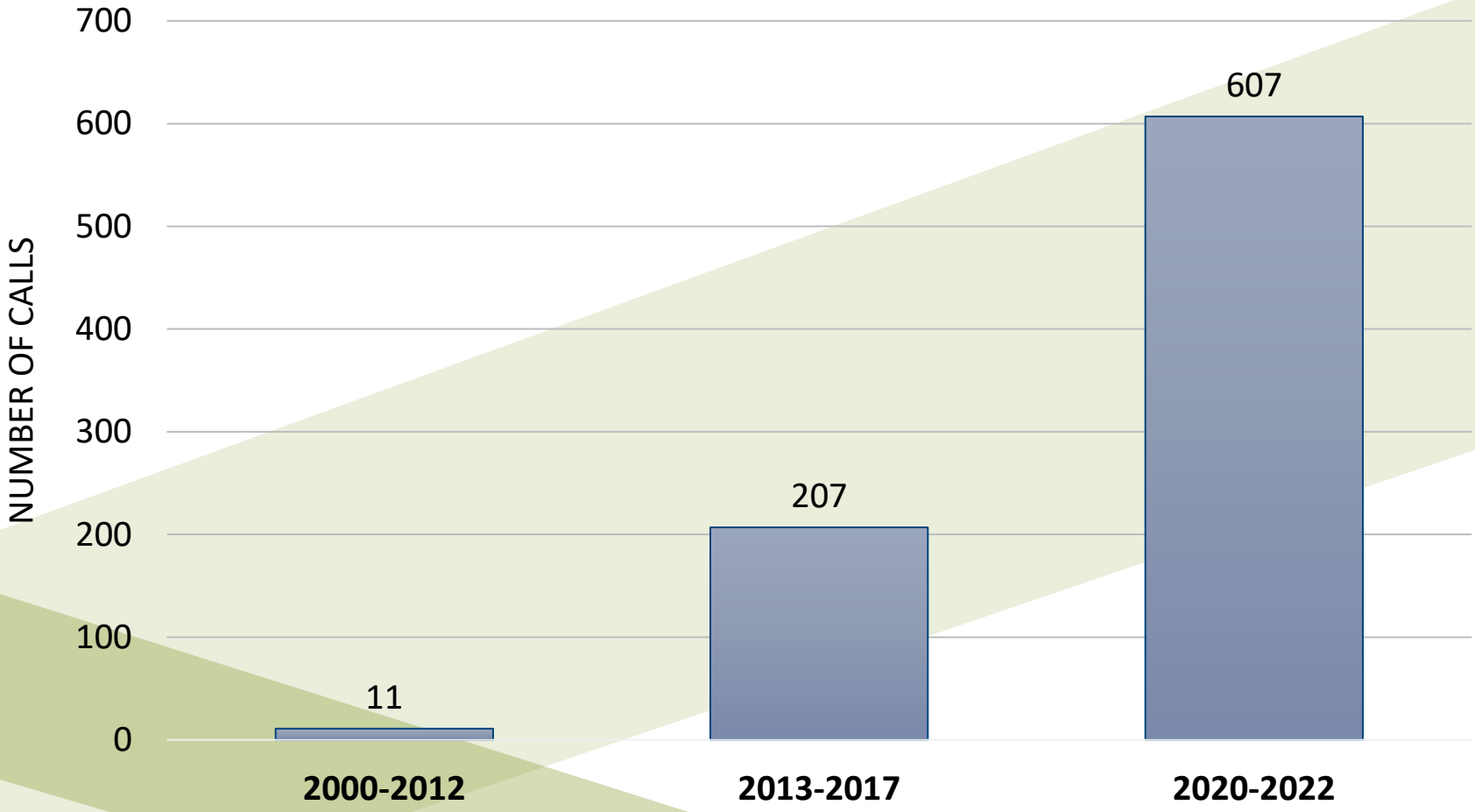
- Emerging research has shown that certain psychedelics may be useful in the treatment of behavioral health disorders
  - Esketamine approved by the FDA for use in treatment-resistant depression
- Legislation to decriminalize hallucinogens has been introduced in at least 22 states
- Psilocybin has been fully legalized in Oregon and Colorado

Tianeptine

- Also known as “Gas Station Heroin”
- Sold under brand names Pegasus, Tianaa, Zaza Red
- Prescribed as an antidepressant in other countries but not approved for any medical use by the FDA

- Bonds to opioid receptors in the brain and mimics the effects of heroin in high doses
- Banned in 9 states as of Sept. 2023

Tianeptine-Related Calls to Poison Control Centers Over Time



Central East (HHS Region 3)
PTTC

Nitazenes

- Synthetic opioid analgesic created in the 1950s
- Misuse in the U.S. was first identified in the Midwest in 2019
- At least 12 types identified, with most common including isonitazine (”ISOs”), metonitazine, and protonitazine
- Commonly mixed into heroin or fentanyl, or falsely marketed as dilaudid or oxycodone
- Activates the μ-opioid receptor to produce feelings of euphoria and sedation

Nitazenes

- 2,400 reports to NFLIS-Drug since 2019
  - Often co-identified with illicit opioids and benzodiazepines
- High potential for overdose → some estimated to be up to **43 times** more potent than fentanyl
- Can result in respiratory depression, vomiting, and low blood pressure/heart rate
- Involved in 200+ overdose deaths in Europe and North America so far (real numbers likely higher)

Data Sources & Data Collection

Central East (HHS Region 3)
PTTC

Finding Data

- Data collection begins with determining what data sources already exist and whether or not you have access to these data
- Start by determining the complete universe of relevant data sources first, then narrow down, as necessary

Central East (HHS Region 3)
PTTC

Examples of National Data Sources

- National Survey on Drug Use and Health (SAMHSA)
- Wide-ranging ONline Data for Epidemiologic Research (WONDER) (CDC)
- Behavioral Risk Factor Surveillance System (CDC)
- Youth Risk Behavioral Surveillance System (CDC)
- Uniform Crime Reports (FBI)
- U.S. Census
- Drug Abuse Warning Network (SAMHSA)

Potential State Data Sources

- State Department of Education
- State Department of Health/Public Health
- State Department of Motor Vehicles
- State Police Department/Agency
- Office of State Courts
- State Liquor Licensing Agency
- Prescription Drug Monitoring Program (PDMP)

Potential Local Data Sources

- County/Municipal Health Departments
- Medical examiner/coroner
- Local hospitals, urgent care centers, health care providers
- Substance use treatment and recovery providers
- Local law enforcement
- School districts
- Local colleges/universities
- Other partners

Data Elements to Look For

- Prevalence data
  - What substance misuse problems are happening in the community?
  - Where in the community are they happening?
- Risk and protective factor data
  - Why is this happening in the community?
- You may also want to collect data related to your capacity to try and address these emerging issues
  - How capable are we of helping the community?
  - Who can we work with to help the community?

Surveys

Advantages

- Can be highly accurate
- Can be highly reliable and valid
- Can be compared to other populations
- Can be used to generate quantitative data
- Easier to summarize and analyze findings
- Can add more sensitive questions

Challenges

- Accuracy constrained by size and diversity of reachable sample
- Can be high cost
- Time-consuming to create and use
- Can have low response rates
- Difficult to explore issues in depth
- Cannot clarify questions
- Cannot build rapport with respondents

Key Informant Interviews

Advantages

- Can be low cost
- Can have short turnaround time
- Respondents define what is important
- Can explore issues in depth
- Can clarify responses through probes
- Can be source of leads to other data
- Have generally lower refusal rates
- Can be opportunity to build partnerships

Challenges

- Can be time-consuming to schedule
- Requires skilled/trained interviewers
- Have limited generalizability
- Produce limited quantitative data
- Might not provide sensitive data
- Can be difficult to analyze findings
- Potential for interviewer bias

Focus Groups

Advantages

- Can be low cost
- Can have short turnaround time
- Participants define what is important
- Can explore issues in depth
- Can clarify responses through probes

Challenges

- Can be time-consuming to assemble
- Require skilled/trained facilitators
- Have limited generalizability
- Produce limited quantitative data
- Offer less control over the process
- Might not provide sensitive data
- Can be difficult to analyze findings

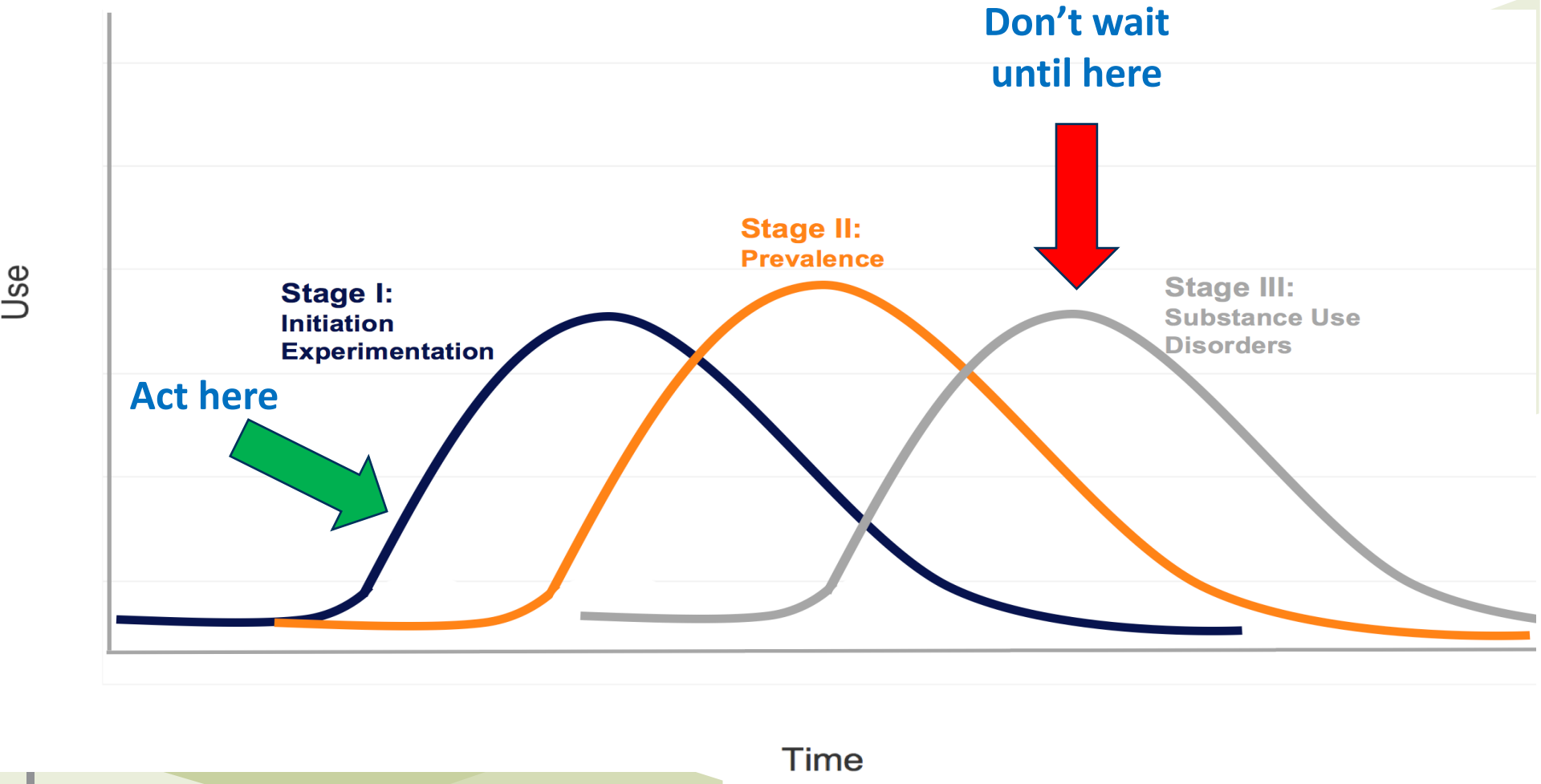
Other Methods

- Consider other methods of data collection--especially when working with populations that have their own traditions for sharing information
- Native American examples:
  - Story Telling
  - Talking Circles
  - Visual Expressions

Strategic Planning & Emerging Trends

Central East (HHS Region 3)
PTTC

The Stages of an Epidemic



The Importance of Balance

- Prevention needs to be careful to balance between three competing areas:
  - Emergent trends
  - Ongoing issues
  - Underlying needs
- Ignoring any of these areas can cause significant harm to under-served populations
- With limited resources, it can be difficult to maintain this balance; strategic planning can help

Strategic Planning

- Processes for identifying and implementing evidence-based prevention
  - Using data to establish goals
  - Using existing evidence to implement processes for achieving goals
  - Using new evidence to make adjustments
- Having evidence-based programs gives the greatest chance of success
- Use strategic planning to figure out how to address emerging trends

SAMHSA's Strategic Prevention Framework

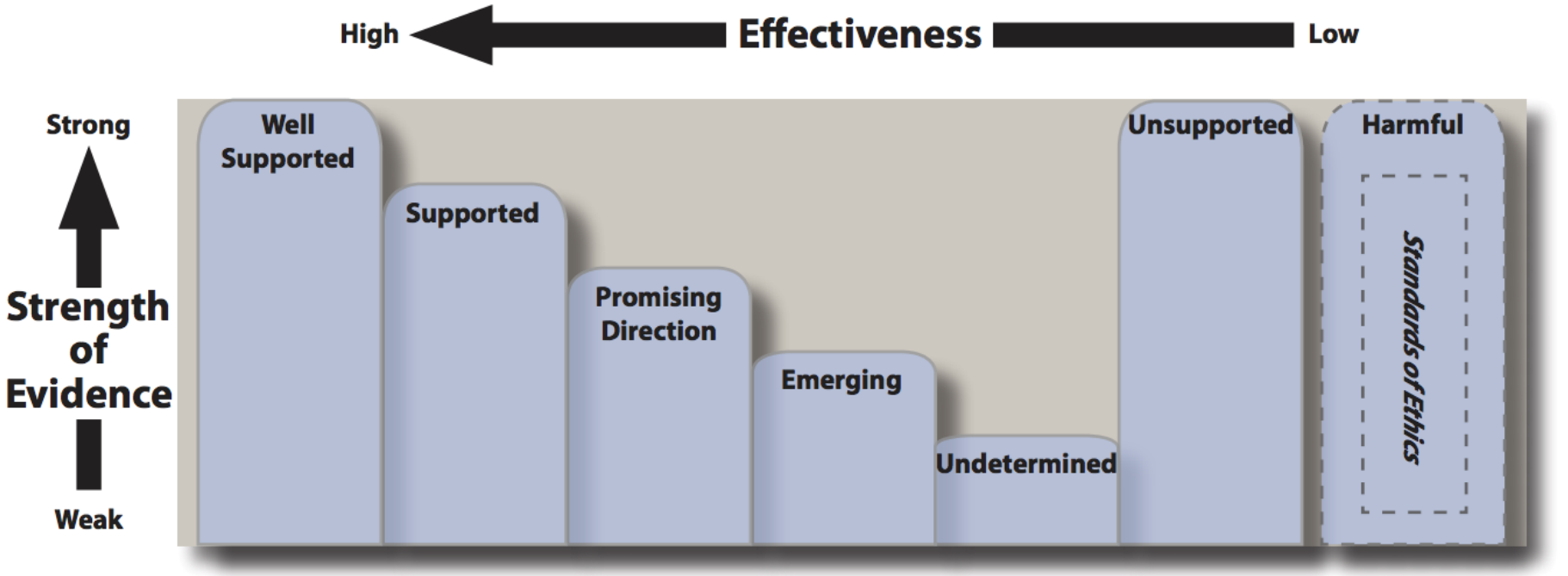
- Step 1: Needs Assessment
- Step 2: Build Capacity
- Step 3: Planning
- Step 4: Implementation
- Step 5: Evaluation

- Be mindful throughout of:
  - Sustainability
  - Cultural Competence
  - Ethical Behavior

Incorporating Emerging Trends

- Needs Assessment: Epidemiological surveillance is necessary to identify emerging trending early
- Capacity Building: Emerging trends may require new partnerships or resources
- Planning: Need to identify EBPs that can address emerging trends
- Implementation: Continue to follow best practices of implementation science
- Evaluation: Need to track progression of the trend and obtain comparison data to determine impact of EBPs

Strategic Planning Lets Us Better Follow the Continuum of Evidence!



Central East (HHS Region 3)
PTTC

Conclusion

- The substance use landscape is ever-changing
- Need to understand the causes behind emerging trends and follow the principles of strategic planning to address them
- Important to address the underlying causes of substance use; not reinventing the wheel
- BUT, emerging trend data can allow us to better identify and serve community needs
- The earlier we address a trend, the greater the impact we can have!

Let's Hear From You!

Central East (HHS Region 3)
PTTC