Stimulants

(Session 1)

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Objectives

Identify different stimulants, including methamphetamine, cocaine, methylenedioxymethamphetamine (ecstasy), and others.

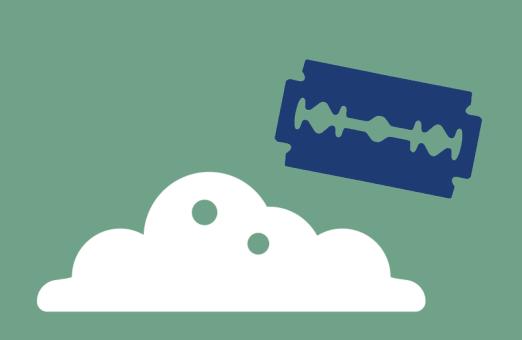
Recognize clinical clues to use of stimulants.

Discuss problems resulting from use of stimulants.

Recognize the basic elements of brief intervention for stimulant use.



Stimulants



- Amphetamine
- Methamphetamine
- Cocaine
- Methylenedioxy-methamphetamine (ecstasy)
- Pseudoephedrine (Sudafed)
- Cathinone (khat)

Street Names



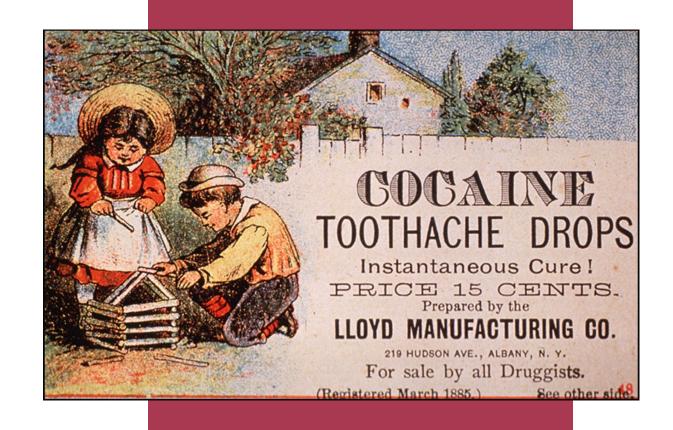
- Speed, Crank, Meth
- Crystal meth, Ice
- Coke, blow, snow
- Crack, rock, freebase
- Ecstasy (MDMA), Adam

- Eve
- The love drug
- STP (serenity, tranquility and peace)
- Uppers
- Bennies, Dexies

- Black Beauty
- White Crosses
- Vitamin R, rits
- Pep pills
- Cat

Therapeutic Uses

- Attention deficit disorder
 - Methylphenidate (Ritalin), amphetamine salts (Adderall)
 - Enhance focus and concentration
- Narcolepsy
- Weight loss
- Refractory depression
- Decongestant (Sudafed)
- Local anesthetic (cocaine)



Methamphetamine

- Potent, long-acting stimulant
- Route of administration
 - Oral
 - Intranasal
 - Smoke
 - Inject
- Synthesized in clandestine labs directly for illicit use
- 14.5 million adults in U.S. have used methamphetamine
 - 5.4% of population
- Nearly 1 million current users in U.S.



"Bath Salts"



- Designer stimulants
 - Newer versions of older stimulant drugs
- Colorful names
 - Ivory Wave, Vanilla Sky
- Labeled "not for human consumption"
 - Not actually sprinkled into bathtub water
 - Snorted or smoked

Usage and Dosages



Users May Start With Oral Route

Low risk, but less 'rush' (euphoria)



Intranasal Insufflation

(snorting, sniffing)



Most Dangerous

Smoking
Injection
(especially intravenous)



Users Average 1-7 Binges Per Week

Each lasts 4-24 hours

May re-administer
every 10-30 minutes
'run,' 'spree'

Acute Intoxication

















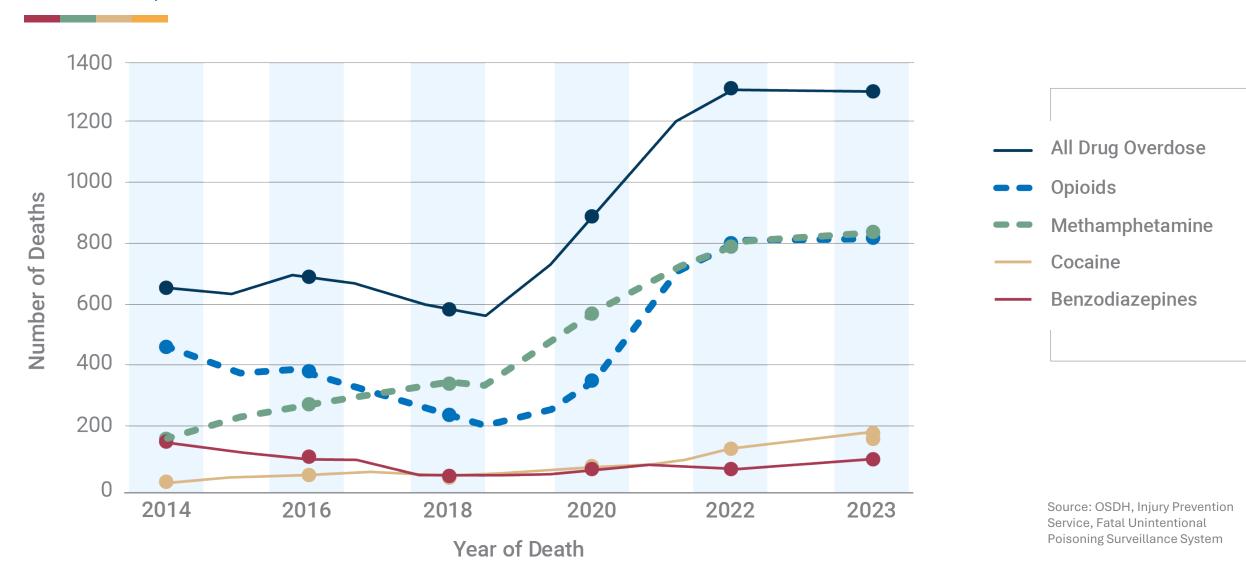
- Euphoria
- Hyperalertness
- Elevated HR and BP
- Decreased appetite
- Intoxication resolves in 6-24 hours

Higher doses

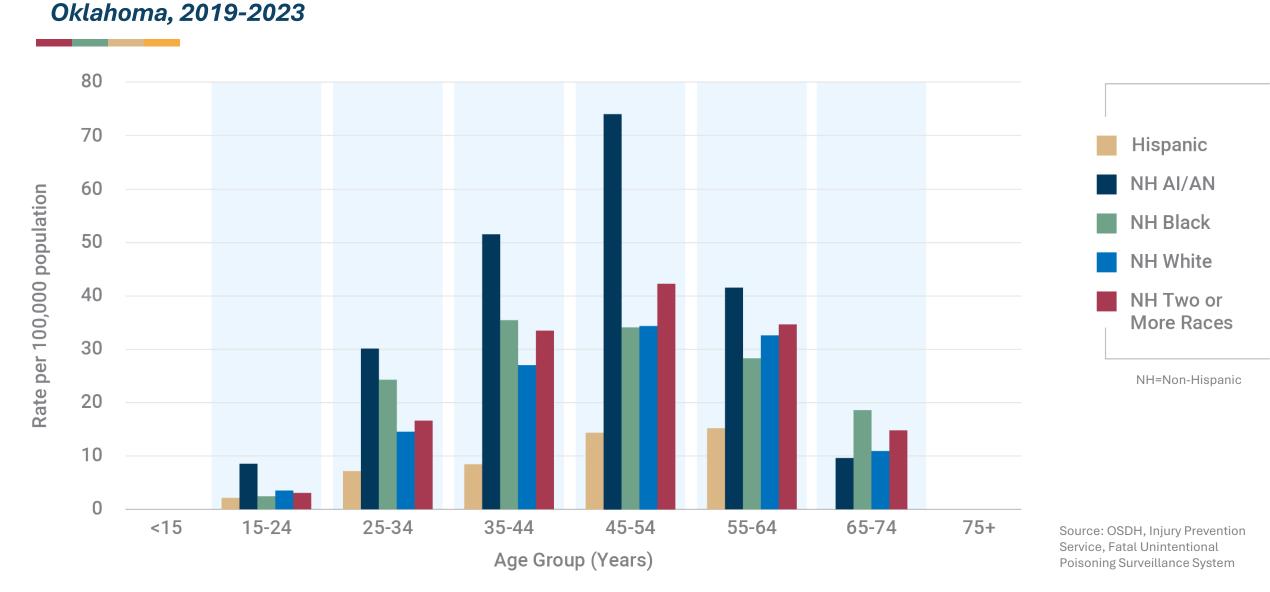
- Intense euphoria
- Impaired judgment
- Dizzy, tremor
- Elevated Temperature
- Diaphoresis
- Hyperreflexia
- Seizures

Unintentional Drug Overdose Deaths by Type of Drug

Oklahoma, 2014-2023



Unintentional Methamphetamine Overdose Death Rates by Age Group and Race/Ethnicity



Screening for Stimulant Use



Screening tools

- Brief instruments to determine if substance use is problematic
- Self-administered or clinician-administered
- Use in a range of settings (primary care, school, etc.)
- Determines if a comprehensive assessment is needed

 There are currently no known screening tools or assessments specifically for identifying prescription stimulant misuse

Adolescent Screening Tools

- General screening tools for multiple substances
 - Not specific to stimulants (prescribed or illicit)
 - Identify higher risk of stimulant use along with use of other substances





Patient Health Questionnaire for Adolescents (PHQ-A)



Screening to Brief Intervention (S2BI)



Drug Abuse
Screening Test
(DAST-20: Adolescent version)

What to Look for



- Evasive behavior
- Missing activities
- Hang out with friends who use
- Reversal of sleep-wake cycle (staying up all night)
- Worsening of personal hygiene
- Appears intoxicated
- Legal problems
- Family history of drug use
- School drop out
- Tobacco product use
 - Cigarettes, e-cigarette, smokeless
 - Already established an addiction

DSM-5 Criteria Stimulant Use Disorder

Use in larger amounts or for longer periods than intended

Persistent desire or unsuccessful efforts to cut down

Great deal of time spent on acquiring, using, or recovering from effects

Failure to fulfill major role obligations

(work, school, home)

Give up important activities (social, occupational, recreational)

Use in situations in which it is physically hazardous

Continued stimulant use despite social or interpersonal problems

Use despite worsening physical or psychological problems

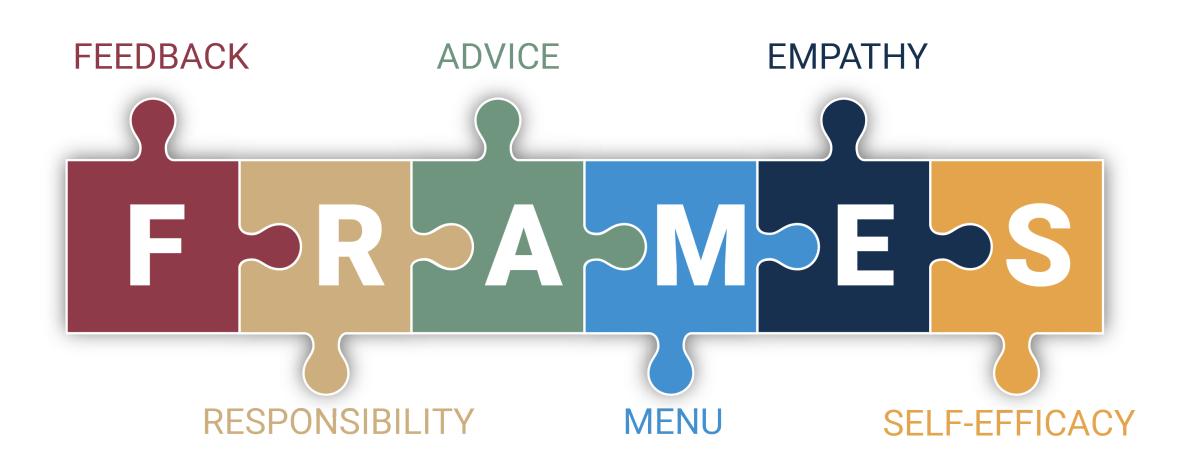
Craving
Tolerance
Withdrawal syndrome

Brief Intervention

- Motivate patients to change problem behavior
- Multiple brief sessions
- Bridge to treatment or sufficient itself
- Same impact as more extensive counseling
- Most cost effective



Elements of Brief Intervention



Motivational Interviewing: Core Skills

Open-ended questions

Affirmations

- Anything that is going right
- Any strengths that the patient has
 - Supports: S Family, Friends, Co-workers
 - Employment, Relationships, Hobbies, Pets

Reflections

- Statements about what you hear and observe
- Not problem-solving or advice
- Demonstrates you have heard and understood the patient

Summaries

- Summarize all the change talk the person provided to you
- Then ask: Where do we go from here?
- The patient makes the plan

Motivating Patients Not Yet Ready to Quit: The 4 'Rs'



■ **RELEVANCE** to that patient

- RISKS of continuing to use
- **REWARDS** of quitting
- **REPETITION** at each encounter

Summary

- Many different types of stimulants and ways to use, but all have similar effects on user
- Stimulants 'rev up' the body and mind
- No specific screening tools have been developed for stimulant misuse in adolescents, but general addiction screening tools for adolescents can help identify stimulant use problems
- Clinical and behavioral clues can help identify stimulant use disorder in adolescents

References

- Substance Abuse and Mental Health Services Administration (SAMHSA): Prescription Stimulant Misuse and Prevention Among Youth and Young Adults. Pub. No. PEP21-06-01-003. Rockville, MD: National Mental Health and Substance Use Policy Laboratory. SAMHSA, 2021.
- Miller SC, et al: Principles of Addiction Medicine, 7th Ed., New York: Wolters Kluwer, 2024
- Weaver MF: Addiction Treatment. Carlat Publishing, 2017

Resources

- Tips for Teens: Prescription Stimulants
 https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/TipsforTeens_
 s_PrescriptionStimulants_508.pdf
- Tips for Teens: The Truth About Methamphetamine
 https://store.samhsa.gov/product/tips-teens-truth-about-methamphetamine/pep18-03
- Prescription Stimulant Misuse and Prevention Among Youth and Young Adults https://store.samhsa.gov/sites/default/files/pep21-06-01-003.pdf