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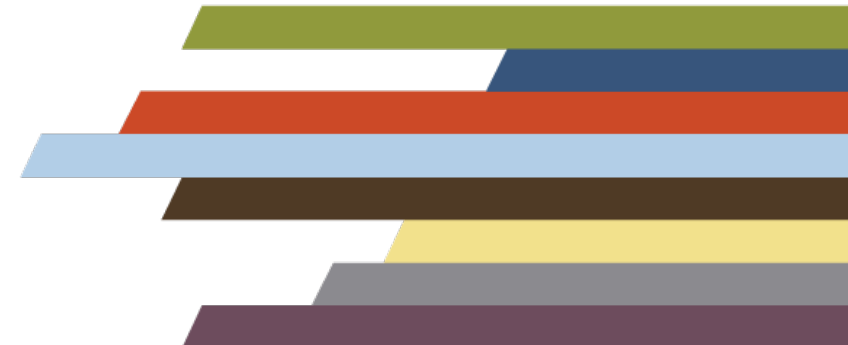
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Funded by Substance Abuse and Mental Health Services Administration

# Emerging Trends in Substance Use

Presented by Mary McCarty-Arias, MA  
May 2020

***SAMHSA***

Substance Abuse and Mental Health  
Services Administration



# Disclaimer

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The use of affirming language inspires hope and advances recovery.

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LANGUAGE MATTERS.

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**Words have power.**



**PEOPLE FIRST.**



The ATTC Network uses affirming language to promote the promises of recovery by advancing evidence-based and culturally informed practices.

# Mary McCarty-Arias, M.A.

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More than 25 years experience training in co-occurring disorders, HIV, and vocational rehabilitation.



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# Housekeeping

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- Time: 12:00 – 2:00
- Evaluations
- Certificates
- If you are sharing a computer, please type in your names.



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# Evaluations at the end of the Course

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You will receive an evaluation of the course today at the end of the session. Three ways:

1. You can scan the bar using your cell phone.
2. There will be a link to the evaluation.
3. Tri Chaple will send one to your e-mail account.



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# Guidelines

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- Chat box – When I ask questions, please type your answers in the chat box. You can also write in questions during the webinar.
- Anonymity – I can see your questions and responses, but others can't. I will not call on anyone by name.



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# Objectives

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1. Review some of the trends that have happened as a result of COVID-19
2. List drugs that have emerged recently (or re-emerged) such as methamphetamines, heroin, K2 (synthetic marijuana), fentanyl
3. Describe the route of administration for each substance
4. List three reasons why these substances are popular
5. List at least three effects of each of these substances
6. Describe treatment challenges for each substance



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# Tracking Trends

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- Recent trends – various publications
- SAMHSA
- Youth Risk Behavior – CDC
- Hospital discharges/emergency room visits
- OASAS



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# Recent Trends

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Alcohol sales have increased by 55%

- Hard liquors – increase 75%
- Beer – increase 66%
- Wine – 42%

Alcohol stores are deemed “essential businesses”

(Newsweek, 4/1/2020)



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# Marijuana

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- Sales have boomed in states where recreational marijuana exists (US News, 3/20/20)
  - California – increase by 56%
  - Oregon – increase by 75%

Medical marijuana facilities are deemed “essential business”

NY dealer says, “Sales of weed are up 50%” (NY Post, 4/1/20)



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# Nora's Blog (from NIDA)

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## COVID-19:

- Could be serious threat to those who smoke tobacco, marijuana, or vape
- Effects on lungs (meth constricts blood vessels, opioids slow respiration)

(Nora Volkow, NIDA, 5/2020)



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# For People in Recovery

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- Most 12 Step meetings are now on Zoom
- Very few meetings are occurring in-person
- Relapse rates have increased
- Rates of suicidal ideation have increased  
(ATTC webinar on AAPCAA people, 5/7/20)



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# Trends for Treatment

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- Counseling is happening via skype, zoom, or other virtual platforms
- Can be a challenge for counselors
- MH disorders are exacerbated (Lieberman & Olfson, Psychiatric Times) 4/24/20



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# Some Effects of COVID-19 on Us

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- Increase of stress & anxiety
- Sense of powerlessness
- Concentrating at the job may be difficult
- Fatigue
- Discouragement
- Dealing with your personal losses

(Dr. Jeffrey Lieberman, Columbia Media, May 2020)



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# SAMHSA Guide to Taking Care of Your Behavioral Health

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- Typical reactions: anxiety, worry, or fear
- Supporting yourself during social distancing, quarantine, & isolation

[info@samhsa.hhs.gov](mailto:info@samhsa.hhs.gov), May 2020)



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## National Survey on Drug Use & Health

### Purpose:

Use of illegal drugs, prescription drugs,  
alcohol & tobacco and misuse of prescription  
drugs

SUDs and Substance Use treatment

Serious psychiatric diagnoses



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# Some Trends

- **Significant decrease in prescription opioid misuse across all age groups**
  - Majority continue to obtain from friends/relatives and from healthcare provider/prescriber underscoring the need for ongoing education of practitioners, appropriate pain management, and partnership with states to monitor opioid analgesic prescribing
- Buprenorphine continues to have a high rate of misuse relative to other prescribed opioids
- Decline in overall heroin use from 2016-2018 with some differences among age groups; decline in young adult (18-25y.o.) heroin use is responsible for the overall downward trend



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# Mental Health 2018



- Serious mental illness increased in adults (18 and older)
- Significant increases in major depression and severe impairment associated with major depression were observed in adolescents (12-17 y.o.) and young adults (18-25 y.o.). These findings were higher than in adults  $\geq 26$ .
- Significant increases in suicidality were observed in 18-25 y.o.
- Co-occurring substance use and mental disorders are common.
- Use of one substance—alcohol or other illicit substances-- is strongly correlated with polysubstance use and with major depression and serious mental illness underscoring the need to screen for all substances as well as mental disorders when evaluating a person identifying a substance problem or a mental health issue, *and* to treat all co-occurring disorders
- Substance use disorders increase risk for suicidality.
- The large gap in treatment need continues.

# Drugs that Continue to be Used

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- Methamphetamines
- K2
- Heroin
- Fentanyl



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# Crystal Methamphetamine

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- White bitter-tasting crystalline powder, dissolves in water or alcohol
- Developed early in the 20th century as a nasal decongestant
- Used by soldiers during World War II and truckers after the war
- Used by women to lose weight



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# Crystal Methamphetamine *(continued)*

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- Street names: crystal, tina, speed, crank, ice
- Schedule II drug: high potential for abuse
- Similar in chemical structure to other amphetamines



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# Chemicals Used to Make Methamphetamine

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- Acetone
- Lithium (batteries)
- Toluene (brake fluid)
- Hydrochloric acid
- Pseudoephedrine
- Ammonia

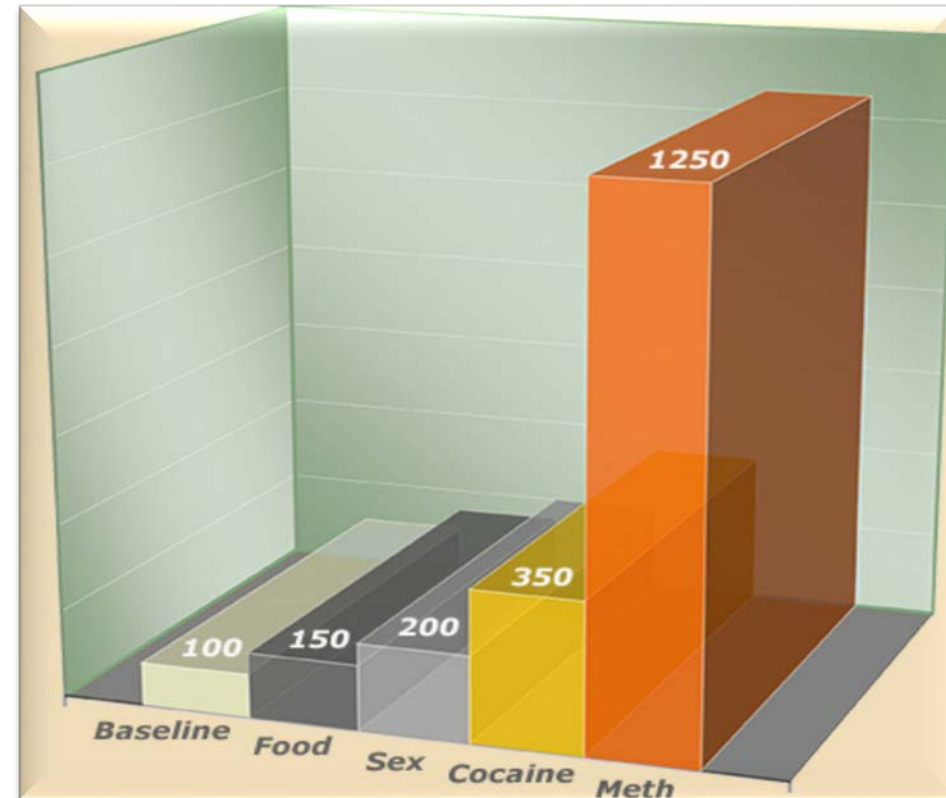
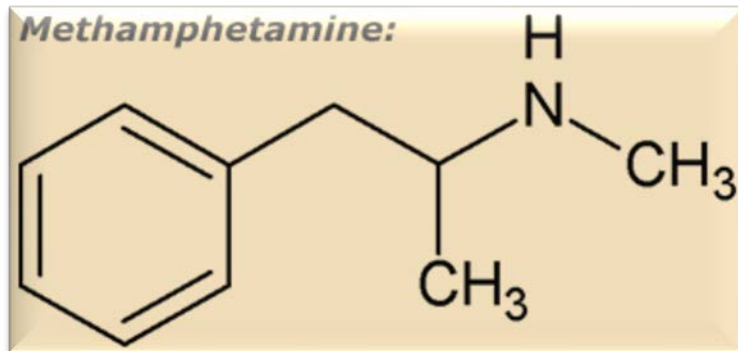
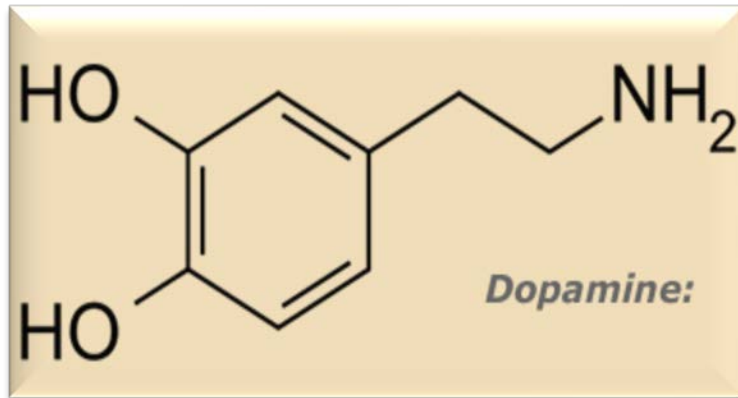


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# Methamphetamine and the Brain



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# Methamphetamines: Perceived Benefits

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- Increase in attention
- Decrease in fatigue
- Decrease in appetite
- Euphoria and rush
- Avoid rebound



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# Methamphetamines: Long Term Effects

- Anhedonia
- Anxiety
- Insomnia
- Tooth decay (may be caused by high sugar diets, dry mouth, and bruxism)
- Psychotic features including hallucinations (visual & auditory) and delusions
- Reduced motor speed
- Cognitive difficulties
- Sexual Difficulties – “Crystal Dick”



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# Spice vs. “Spice”



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# K2: Some Facts

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1. Sold as incense, looks like potpourri
2. Not detected in drug screens
3. Schedule 1 drug
4. Illegal to sell but legal to smoke
5. 90% of ER visits are men



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# Popularity of K2

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- Induces psychoactive effects
- Readily available in retail stores and online
- Packaging is highly attractive
- Perceived as safe drugs
- Not easily detectable in urine and blood samples



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# Perceived Benefits of K2

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- Elevated mood
- Relaxation
- Altered perception
- Detachment from reality



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# Psychotic & Physical Effects of K2

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- Extreme anxiety
- Confusion
- Paranoia
- Hallucinations
- Rapid heart rate
- Vomiting



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# K2: Withdrawal

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- Headaches
- Anxiety
- Depression
- Irritability



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# K2: Routes of Administration

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- Usually smoked
- Can be added to hot water for drinking



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# MJ vs. K2

## Similarities:

- Tachycardia
- Reddened eyes
- Anxiousness
- Mild sedation
- Hallucinations
- Memory deficits

## Differences:

- Seizures
- Hypertension
- Nausea/vomiting
- Agitation
- Violent behavior
- Coma



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# Sample Treatment Protocol

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- Direct individual to emergency room via ambulance
- Consult a regional Poison Control Center
- Acute management consists of:
  - Supportive care with the use of benzodiazepines if needed
  - Observe until resolution of abnormal vital signs, vomiting, and psychiatric symptoms
  - Screen for COD



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# Heroin



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Write for literature to  
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40 Stone Street, New York,  
SELLING AGENTS

# Pharmacology

- Stimulate opioid receptors in central nervous system & gastrointestinal tract
- Analgesia – pain relief (somatic & psychological)
- Antitussive action – cough suppression
- Euphoria, “nodding”
- Respiratory depression



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# Opioid Agonists: Pharmacology

- Pupillary constriction (miosis)
- Constipation
- Histamine release (itching, bronchial constriction)
- Reduce libido
- Tolerance, cross-tolerance
- Withdrawal: acute & protracted



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# Possible Acute Effects of Opioid Use

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- Surge of pleasurable sensation = “rush”
- Warm flushing of skin
- Dry mouth
- Heavy feeling in extremities
- Drowsiness
- Clouding of mental function
- Slowing of heart rate and breathing
- Nausea, vomiting, and severe itching



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# Treatment

## Medically-Assisted Withdrawal

- Relieves withdrawal symptoms while patients adjust to a drug-free state
- Can occur in an inpatient or outpatient setting
- Typically occurs under the care of a physician or medical provider
- Serves as a precursor to behavioral treatment, because it is designed to treat the acute physiological effects of stopping drug use



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*(National Institute on Drug Abuse, 2009)*

# Fentanyl

- Powerful synthetic opiate analgesic
- More potent than morphine
- Schedule II prescription drug
- Names – Actiq, Duragesic, and Sublimaze
- Used in surgeries



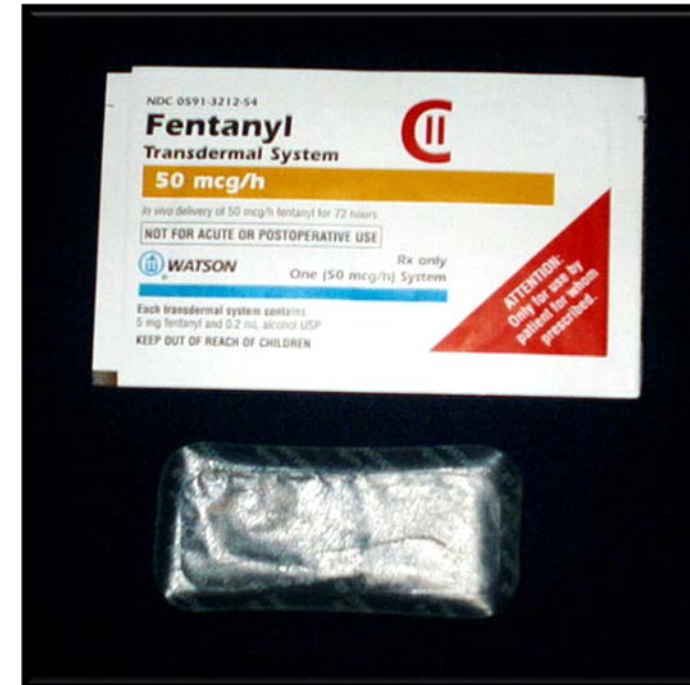
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# Fentanyl: Routes of Administration

- Injection
- Transdermal patch
- Lozenges



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# Fentanyl on the Street

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- Manufactured in China
- Looks like a powder
- Can be swallowed, snorted, injected or put on blotter paper and placed under the tongue
- Street names – Apache, China Girl, China white, dance fever, TNT



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# Effects of Fentanyl

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- Highly concentrated in areas of the brain that control pain & emotions
- Produces euphoria and relaxation
- May cause drowsiness/respiratory depression, nausea, confusion, constipation, sedation, and coma
- When mixing fentanyl with street-sold heroin or cocaine, it amplifies their potency & potential dangers
- May be added to counterfeit oxycontin



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# Use of Naloxone

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- Can be used with fentanyl but person may need several doses
- Narcan is being provided to clients, first responders, and family members of users



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