

**Breaking Down the Stigma  
around Medication Assisted  
Treatments (MAT)  
and Leveraging MATs to Support  
Native/Tribal Adolescents in their  
Recovery Journeys**

# Learning Objectives

- ① Understand the impact of addiction on the brain.
- ② Explore the latest research on opiate addiction and medication assisted treatments (MATs), with particular emphasis on adolescents.
- ③ Examine common concerns related to medication assisted treatments.
- ④ Engage in culturally-relevant understanding of MATs.



# What Are Adverse Childhood Experiences (ACEs)?

- Negative experiences
- Potentially traumatic or stressful
- Include abuse or neglect
- Can be more subtle
- Before the age of 18

Source: <https://www.cdc.gov/aces/about/index.html>





# Why is this important?

- Impacts brain development
- Has significant short-term and long-term consequences
- Influences behavior well into the future
- Impacts their life trajectory
- Significantly impacts entry into the criminal justice system



# By the numbers

- Experiencing trauma in childhood increases the odds of engaging in violent behavior as an adult by 200%.
- An ACEs score of 4 or more increases the risk of suicide by 1200%.
- People in the criminal justice system have 4 times as many ACEs as people in the general population.
- Over 90% of juveniles in the criminal justice system report experiencing at least one traumatic event.

Source: <https://www.centerforchildcounseling.org/aces-and-juvenile-justice/>







# Underage Substance Use

- Disproportionate harm.
- Significant and long-lasting impact on the brain.
- Greater likelihood of several negative consequences including:
  - legal issues.
  - physical and sexual assault.
  - memory issues.
  - teenage pregnancy or sexually transmitted diseases.
  - fatal accidents including fatal car crashes.



# What is Addiction?

- Treatable brain disease
- Chronic, recurring, relapsing illness
- Characterized by craving and seeking
- Persists in spite of negative consequences
- Behavior is harmful by some acceptable standard
- Diagnosable



# Neurobiology of Addiction

## Limbic System

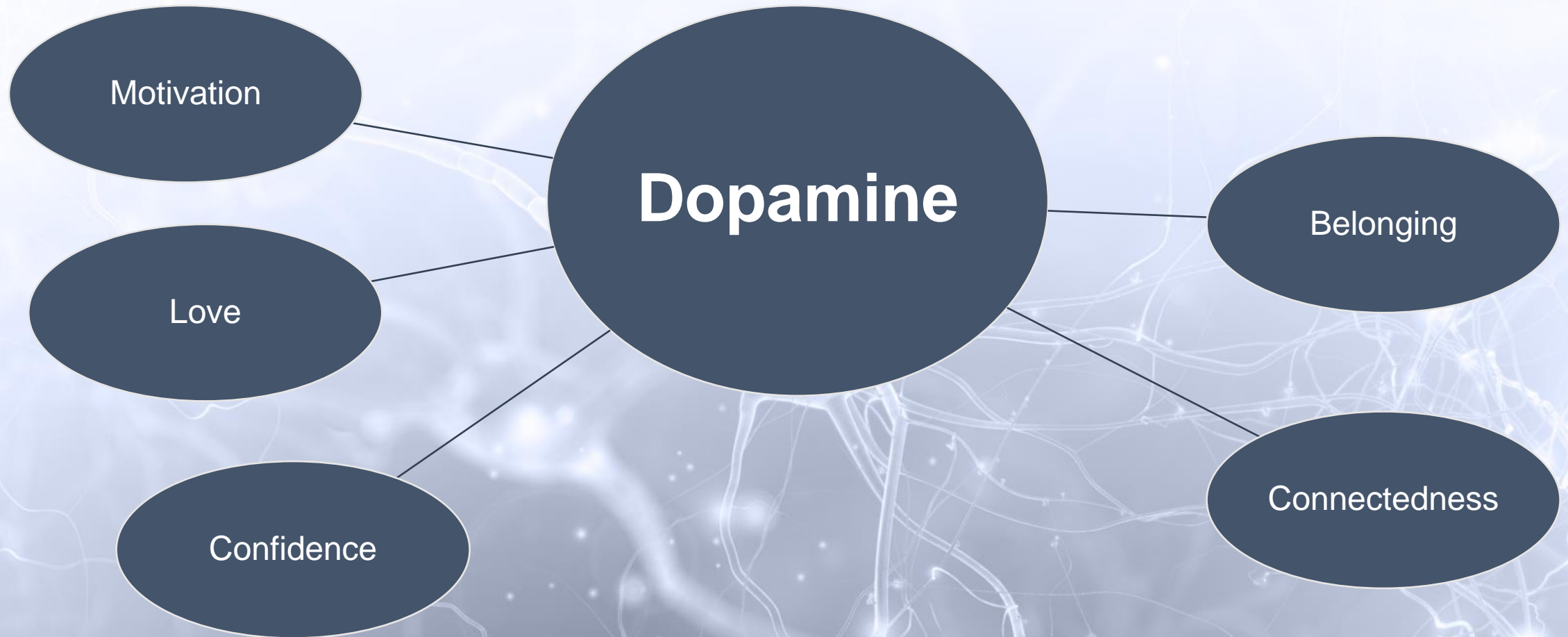
- Emotions
- Reactions
- Survival
- Matures early
- Reward

## Frontal Cortex

- Consequences
- Problem solving
- Pros/cons
- Complex decisions
- Executive Functions

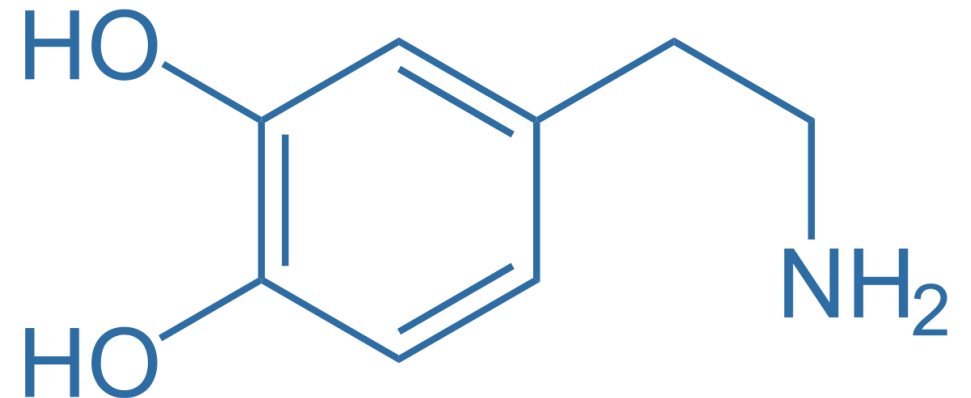


# Neurobiology of Addiction (Cont.)



# Dopamine

- Ranges between 50 and 100 ng/deciliter
- Drugs increase dopamine to about 10x that amount
- Homeostasis: normal range
- Body fights to get back to homeostasis
- Adaptations to bring back homeostasis





A collection of medical supplies including several glass vials of varying sizes, some containing clear liquids, and several capsules and tablets scattered around. A large, clear plastic syringe with a needle is prominently displayed in the foreground, angled from the bottom left towards the center. The background is a clean, light blue gradient.

# Opiate Use Disorder

- Chronic brain disease related to the use of opiates:
  - Prescription drugs like oxycodone, hydrocodone, codeine, morphine, fentanyl
  - Illicit drugs like heroin
- Produce pleasure, relieve pain
- Affected over 2.6 million Americans in 2018
- Use has **DOUBLED** among adolescents in the past 10 years
- Drug overdose and death
- 4 in 5 heroin users started by misusing prescription painkillers

Source: <https://nida.nih.gov/research-topics/opioids>



# Treatment of Opiate Use Disorder

- Relapse rates are high
- Without medication, relapse rates can be as high as 90%
- Combining medication and treatment is the most effective way of treatment opiate addiction
- This is especially true for people with limited social support and stability, trauma, and the presence of adverse childhood experiences

Source: <https://www.samhsa.gov/blog/preventing-overdose-death>



# Prognosis

## Better Prognosis

- Extensive social support
- Access to healthcare
- Access to counseling
- Well supported



## Poor Prognosis

- Limited social support
- Limited stability
- Trauma
- Adverse childhood experiences

# What is MAT?

Medication Assisted Treatment (MAT) is using a combination of medication and counseling to treat a substance use disorder.

MAT is more successful at treating opiate addiction than using counseling or behavioral therapies alone.



# MAT is Best Practice for Adolescents with Opiate Use Disorder (OUD)

Marsch, Lisa A., et al. (2005)

Derek C. Chang, Jan Klimas, Evan Wood & Nadia Fairbairn (2017)

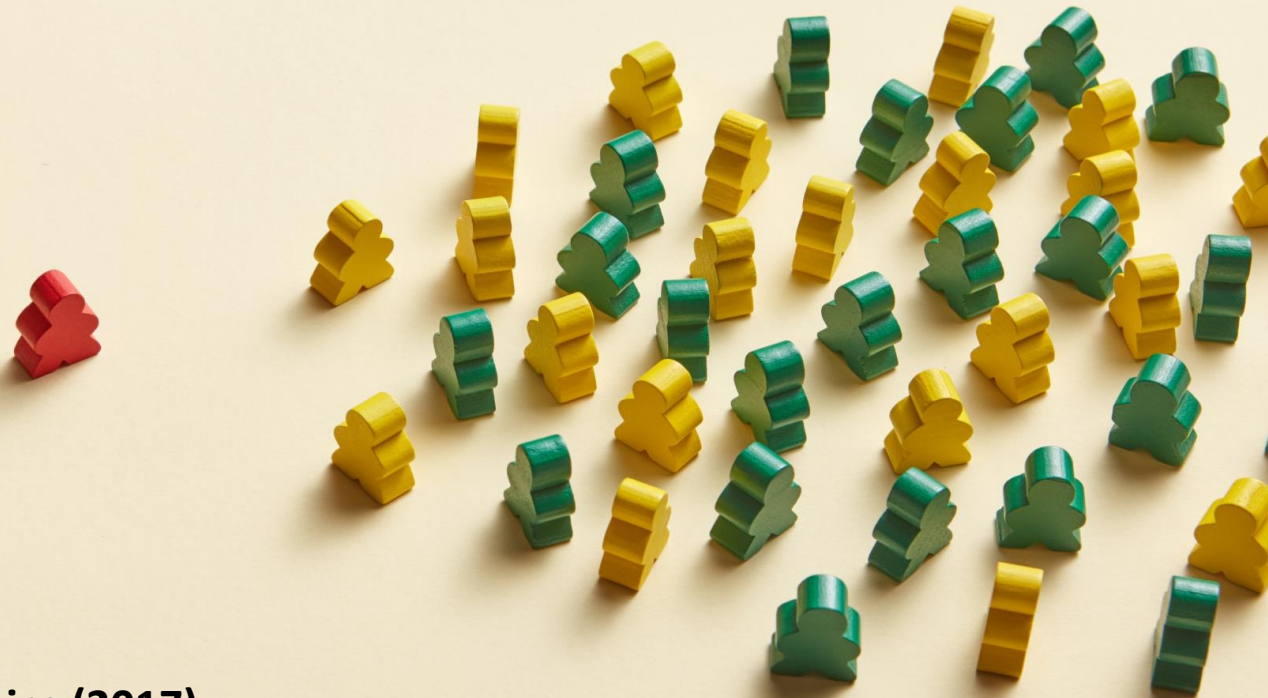


# MAT is Best Practice for Adolescents

MAT with behavioral interventions has been found to be significantly more efficacious in the treatment of youth with OUD.

Marsch, Lisa A., et al. (2005)

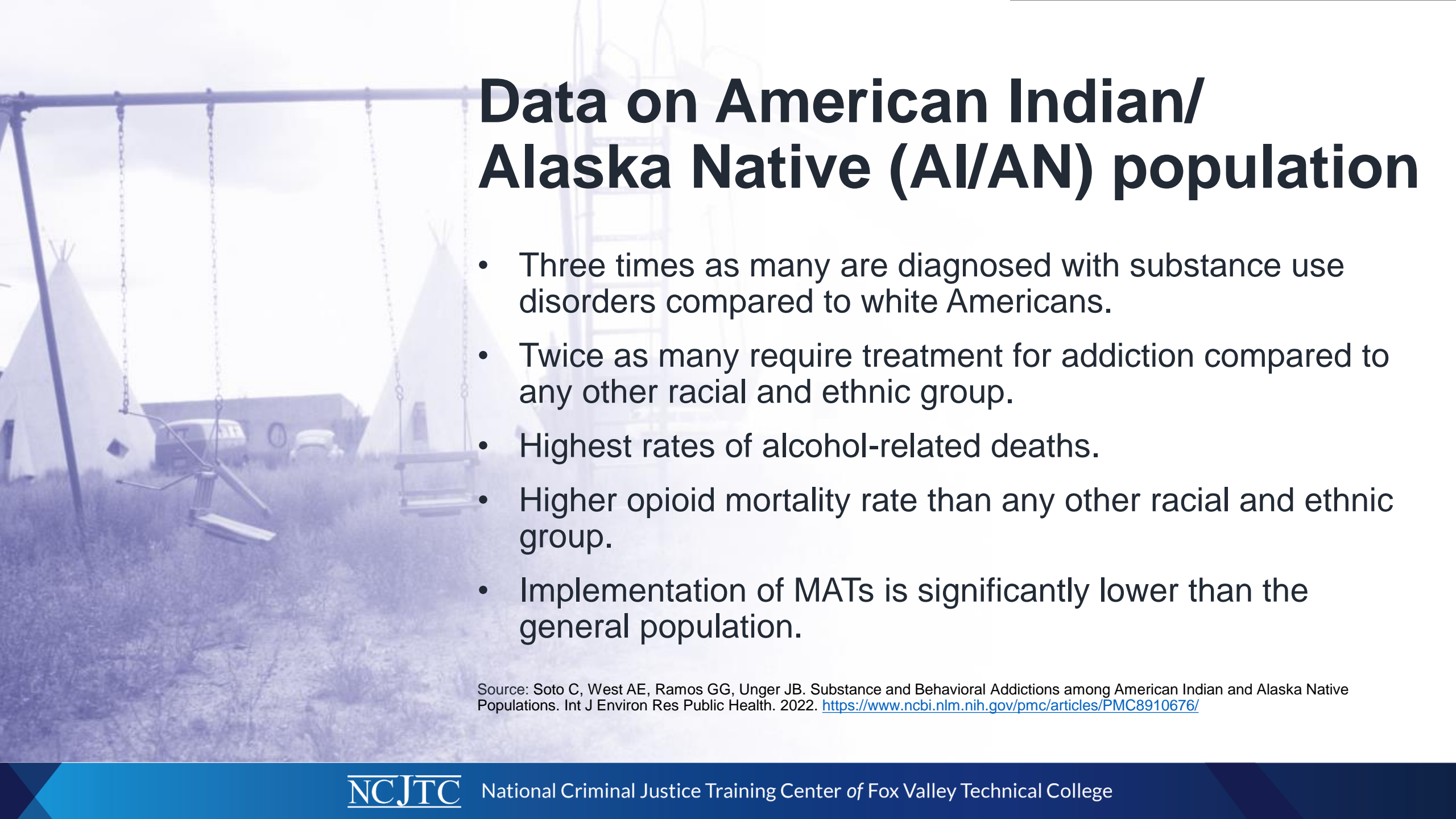
Derek C. Chang, Jan Klimas, Evan Wood & Nadia Fairbairn (2017)





# Goal of MATs

- Full recovery
- Improve survival
- Increase retention in treatment
- Decrease illicit opiate use, criminal activity among people with substance use disorders
- Increase ability to gain and maintain employment
- Improve birth outcomes among women who have substance use disorders and are pregnant
- Reduce likelihood of contracting HIV and Hep C

The background of the slide features a faded image of a playground. In the foreground, there are several swings hanging from a metal frame. In the background, there are several teepees and a building, suggesting a Native American cultural or educational setting.

# Data on American Indian/ Alaska Native (AI/AN) population

- Three times as many are diagnosed with substance use disorders compared to white Americans.
- Twice as many require treatment for addiction compared to any other racial and ethnic group.
- Highest rates of alcohol-related deaths.
- Higher opioid mortality rate than any other racial and ethnic group.
- Implementation of MATs is significantly lower than the general population.

Source: Soto C, West AE, Ramos GG, Unger JB. Substance and Behavioral Addictions among American Indian and Alaska Native Populations. Int J Environ Res Public Health. 2022. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8910676/>

# Common Concerns

What is the difference between providing a medication and using the substance?

Isn't this just substituting one drug for another?

- Intensity and Effect
- Dosage is not enough to get high
- Reduces cravings and withdrawal
- Allows brain circuitry to rebalance





# Common Concerns (Cont.)

Wouldn't people who are given medications just sell them to fund their drug habit?

- Diversion is uncommon
- When it does occur, it is primarily used for managing withdrawal



# Medications for Alcohol Use Disorder

Generic	Brand name	Drug Effects
<b>Disulfiram</b>	Antabuse	Causes a significant physical reaction when alcohol is consumed
<b>Naltrexone</b>	Vivitrol Revia	Blocks opiate receptors thereby limiting the reward circuitry activated when drinking or craving Available orally or as a monthly injectable
<b>Acamprosate</b>	Campral	Supports the rebalancing of neurotransmitters GABA and glutamate

# Medications for Opioid Use Disorder

Generic	Brand name	Drug information
<b>Naltrexone (18+)</b>	Vivitrol Revia	Blocks opiate receptors thereby limiting the reward circuitry activated when craving Available as a monthly injectable Can be prescribed by anyone licensed to prescribe medications
<b>Methadone (16+)</b>	Methadose Diskets Dolophine	Acts as an opiate agonist Can only be dispensed by certified and approved opioid treatment programs
<b>Buprenorphine (16+)</b>	Butrans Buprenex	Relieves the symptoms of withdrawal Can only be prescribed by physicians who have completed special training to prescribe buprenorphine
<b>Buprenorphine/ Naloxone (16+)</b>	Suboxone	Relieves symptoms of opiate withdrawal; the addition of naloxone reduces the likelihood of abuse Can only be prescribed by physicians who have completed special training to prescribe buprenorphine



# What Can We Do?

- You've started by being here
- Increase access to treatment
- Increase awareness and access to MATs
- Talk with medication providers about MATs
- Conduct myth-busting workshops in your communities



# Tribal Program Model and Cultural Approaches to MATs

# Question and Answers

**Dr. Anjali Nandi,**  
**PhD, MAC, LAC**  
*Associate,*  
National Criminal Justice  
Training Center

anjalinandi@hotmail.com



**Ashley Azure**

Medication Assisted Treatment  
Peer Support Specialist Spotted  
Bull Recovery Resource Center

(406) 768-5364

