Opioid Use Disorder (OUD) and Medication Assisted Treatment (MAT) 101: Understanding the Disorder and The Medications

A Training for Multidisciplinary Addiction Professionals

Revised May 2019

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Disclosures

The development of these training materials were supported by grant H79 TI080209 (PI: S. Becker) from the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, United States Department of Health and Human Services. The views and opinions contained within this document do not necessarily reflect those of the US Department of Health and Human Services, and should not be construed as such.

These training materials were based upon materials created through the NIDA Blending Initiative and were updated by a New England ATTC trainer.

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NIDA/SAMHSA Blending Initiative

According to the Webster Dictionary definition

To **Blend** means:

a. combine into an integrated whole;
b. produce a harmonious effect

http://www.merriam-webster.com/dictionary/blend

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NIDA/SAMHSA Blending Initiative

- Developed in 2001 by NIDA and SAMHSA/CSAT, the initiative was designed to meld science and practice to improve addiction treatment.
- "Blending Teams," include staff from CSAT's ATTCs and NIDA researchers who develop methods for dissemination of research results for adoption and implementation into practice.
- Scientific findings are able to reach the frontline service providers treating people with substance use disorders. This is imperative to the success of drug abuse treatment programs throughout the country.

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Introduction

- Let's get started!
  - Break into small groups of 4 or 5
  - Introduce yourselves to each other
  - Determine a goal for today's training
  - Identify a member to share the goal with the class and to introduce the other members of your group

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Predetermined Goals for the Training

- Participants will be able to state facts regarding:
  - the history of opioid treatment in the United States.
  - changes in the laws regarding treatment of opioid addiction and the implications for the treatment system.
  - how medication will benefit the delivery of opioid treatment.
  - the types of medications used to treat opioid use disorder
- And to identify groups of people who are using opioids.

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A Life in the Community for Everyone
SAMHSA
Substance Abuse and Mental Health Services Administration
U.S. Department of Health and Human Services

An Introduction to SAMHSA/CSAT

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SAMHSA/CSAT

CSAT's Mission:

- To improve the lives of individuals and families affected by alcohol and drug abuse by ensuring access to clinically sound, cost-effective addiction treatment that reduces the health and social costs to our communities and the nation.
- CSAT's initiatives and programs are based on research findings and the general consensus of experts in the addiction field that, for most individuals, treatment and recovery work best in a community-based, coordinated system of comprehensive services.
- Because no single treatment approach is effective for all persons, CSAT supports the nation's effort to provide multiple treatment modalities, evaluate treatment effectiveness, and use evaluation results to enhance treatment and recovery approaches.

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ATTC Unifying science, education and services to transform lives.

The ATTC Network

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The ATTC Network

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- 4 National Focus Area Centers
  - National SBIRT ATTC
  - National Hispanic & Latino ATTC
  - National Rural & Frontier ATTC
  - National Native American & Alaska Native ATTC
- Network Coordinating Office

SAMHSA

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NIDA NATIONAL INSTITUTE ON DRUG ABUSE

An Introduction to NIDA

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The Mission of the National Institute on Drug Abuse

- To lead the Nation in bringing the power of science to bear on drug abuse and addiction
- This charge has two critical components.
  - Strategic support and conduct of research across a broad range of disciplines
  - Ensuring the rapid and effective dissemination and use of the result of that research to significantly improve prevention, treatment and policy as it relates to drug use and addiction

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What do you think?

- What are your thoughts about the use of medication to treat opioid use disorders and other substance use disorders?
- What thoughts do you have about treatment programs coming to your community?

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Medication Assisted Treatment: The Myths and The Facts

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Myth #1: Patients are still addicted

Dependence vs. Addiction: What's the Difference?

In your small groups, discuss this question.

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Myth #1: Patients are still addicted

- **FACT:** Addiction is pathologic use of a substance and ***may*** or ***may not*** include physical dependence.
  - ✓ Physical dependence on a medication for treatment of a medical problem ***does not*** mean the person is engaging in pathologic use and other behaviors.

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Terminology
Dependence versus Addiction

- To avoid confusion, in this training, "**Addiction**" will be the term used to refer to the pattern of continued use of opioids despite pathological behaviors and other negative outcomes.
- "**Dependence**" will only be used to refer to physical dependence on the substance as indicated by tolerance and withdrawal as described above.

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Terminology
Dependence versus Addiction

- Addiction may occur with or without the presence of **physical dependence**.
- **Physical dependence** does not always result in addiction.
- Physical dependence results from the **body's adaptation** to a drug or medication and is defined by the presence of
  - **Tolerance** and/or
  - **Withdrawal**

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MYTH #2: Those medications are simply a substitute for heroin or other opioids

FACT: The medications are corrective, not curative
- ✓ When taken as prescribed, they are safe.
- ✓ They allow the person to function normally, not get high.
- ✓ They are legally prescribed, not illegally obtained.

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MYTH #3: Providing medication alone is sufficient treatment for opioid addiction

FACT: Medication is an important treatment option. However, the ***complete*** treatment package must include other elements, as well.

- ✓ Combining pharmacotherapy with counseling and other ancillary services increases the likelihood of success.

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MYTH #4: Patients are still getting high

FACT: When taken as prescribed, the person will feel normal, not high.

- ✓ Buprenorphine has a ceiling effect resulting in lowered experience of the euphoria felt at higher doses.
- ✓ Naltrexone/Vivitrol has non-narcotic effects
- ✓ Methadone is highly medically monitored

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Other Myths:

- Methadone:
  - Rots teeth
  - Causes bones to become brittle due to calcium depletion
  - Makes newborns more susceptible to addiction
  - Makes a person more prone to other addictions
  - Dyes a person's innards orange
- Buprenorphine:
  - Is as addictive or more addictive than heroin
  - Should only be used for a short time.
- Naltrexone/Vivitrol
  - It's ineffective
  - It's too hard to stick to the program
  - It's just one more drug to abuse
  - It's too expensive
  - It has too many side-effects

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A Brief History of Opioid Treatment

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A Brief History of Opioid Treatment

- 1964: Methadone is approved.
- 1974: Narcotic Treatment Act limits methadone treatment to specifically licensed Opioid Treatment Programs (OTPs).
- 1984: Naltrexone is approved, but has continued to be rarely used (approved in 1994 for alcohol addiction).
- 1993: LAAM is approved (for non-pregnant patients only), but is underutilized.

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A Brief History of Opioid Treatment

- 2000: Drug Addiction Treatment Act of 2000 (DATA 2000) expands the clinical context of medication-assisted opioid treatment.
  - Expands the number of treatment slots
  - Allows opioid treatment in office settings (OBOT)
  - Establishes physician qualifications for prescribing
- Establishes Physician Qualifications:
  - Be licensed to practice by his/her state
  - Have the capacity to refer patients for counseling
  - Limit number of patients to 30 patients for the first year
  - File for a new waiver after first year to increase to 100 patients.

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A Brief History of Opioid Treatment

- Be qualified to provide buprenorphine and receive a license waiver:
  - Board certified in Addiction Psychiatry
  - Certified in Addiction Medicine by ASAM or AOA
  - Served as Investigator in buprenorphine clinical trials
  - Completed 8 hours of training by ASAM, AAAP, AMA, AOA, APA (or other organizations that may be designated by Health and Human Services)
  - Training or experience as determined by state medical licensing board
  - Other criteria established through regulation by Health and Human Services

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A Brief History of Opioid Treatment

- October 8, 2002: Tablet formulations of buprenorphine (Subutex®) and buprenorphine/naloxone (Suboxone®) were approved by the FDA.
  – Product launched in U.S. in March 2003
  – Interim rule changes to federal regulation (42 CFR Part 8) on May 22, 2003 enabled Opioid Treatment Programs to offer buprenorphine.
  2004: Sale and distribution of ORLAAM® is discontinued.
  October, 2010: Vivitrol is approved for the treatment of opioid use disorder

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A Brief History of Opioid Treatment

- August 2016: CARA (Comprehensive Addiction and Recovery Act of 2016)
  - On July 6, 2016, the Department of Health and Human Services (HHS) released a final rule to increase access to medication-assisted treatment with buprenorphine products in the office setting by allowing eligible practitioners to request approval to treat up to 275 patients.
  - The final rule also includes requirements to ensure that patients treated by these practitioners receive high-quality care, and that aim to minimize the risk of diversion.
  - This became effective on August 8, 2016.

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A Brief History of Opioid Treatment

To be eligible for a patient limit increase to 275, a physician must:

- possess a current waiver to treat up to 100 patients,
- must have maintained that waiver without interruption for at least one year, and
- meet one of the following requirements:
  - Hold "additional credentialing," meaning board certification in addiction medicine or addiction psychiatry by the American Board of Addiction Medicine (ABAM) or the American Board of Medical Specialties (ABMS) or certification by the American Osteopathic Academy of Addiction Medicine, ABAM or ASAM; or

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A Brief History of Opioid Treatment

Practice in a "qualified practice setting" that:

- Provides professional coverage for patient medical emergencies during hours when the practitioner's practice is closed;
- Provides access to case-management services for patients including referral and follow-up services for programs that provide, or financially support, the provision of services such as medical, behavioral, social, housing, employment, educational, or other related services;
- Uses health information technology (health IT) systems such as electronic health records, if otherwise required to use these systems in the practice setting. Health IT means the electronic systems that health care professionals and patients use to store, share, and analyze health information;
- Is registered for their State prescription drug monitoring program (PDMP) where operational and in accordance with Federal and State law.
- Accepts third-party payment for costs in providing health services, including written billing, credit, and collection policies and procedures, or Federal health benefits.

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A Brief History of Opioid Treatment

- Additionally, practitioners may not have had Medicare enrollment and billing privileges revoked under 42 CFR 424.535 nor have been found to have violated the Controlled Substances Act pursuant to 21 U.S.C. 824(a) to be eligible for the higher limit.

- Nurse Practitioners and Physician Assistants have obtained prescribing privileges:
  - Complete 8-hour Bupenorphine training
  - Complete 24 hours of addiction/recovery training

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Prevalence of Opioid Use and Abuse in the United States

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Prevalence of Opioid Use

- From 1999 to 2017, more than 700,000 people have died from a drug overdose.
- Around 68% of the more than 70,200 drug overdose deaths in 2017 involved an opioid.
- In 2017, the number of overdose deaths involving opioids (including prescription opioids and illegal opioids like heroin and illicitly manufactured fentanyl) was 6 times higher than in 1999.
- On average, 130 Americans die every day from an opioid overdose.
- From 1999-2017, almost 400,000 people died from an overdose involving any opioid, including prescription and illicit opioids.

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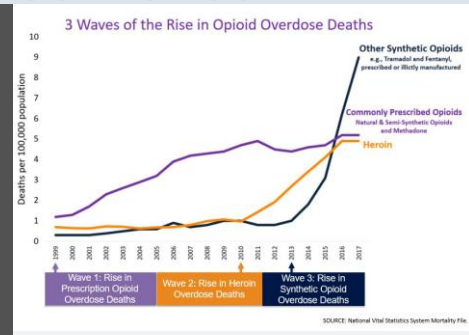
The Three Waves

This rise in opioid overdose deaths can be outlined in three distinct waves.

1. The first wave: increased prescribing of opioids in the 1990s with overdose deaths involving prescription opioids increasing since at least 1999.
2. The second wave began in 2010 with rapid increases in overdose deaths involving heroin.
3. The third wave began in 2013, with significant increases in overdose deaths involving synthetic opioids – particularly those involving illicitly-manufactured fentanyl (IMF). (The IMF market continues to change, and IMF can be found in combination with heroin, counterfeit pills, and cocaine.)



In 2017, the states with the highest rates of death due to drug overdose were West Virginia (57.8 per 100,000), Ohio (46.3 per 100,000), Pennsylvania (44.3 per 100,000), the District of Columbia (44.0 per 100,000), and Kentucky (37.2 per 100,000).[1] States with statistically significant increases in drug overdose death rates from 2016 to 2017 included Alabama, Arizona, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, West Virginia, and Wisconsin.

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Impact on Special Populations

- **Adolescents (12 to 17 years old)**
  - In 2016, 3.6 percent of adolescents aged 12 to 17 reported misusing opioids over the past year. This percentage is twice as high among older adolescents and young adults aged 18 to 25.[2] The vast majority of this misuse is due to prescription opioids, not heroin.
  - Among high school seniors, past year misuse of pain medication, excluding heroin, decreased to 4.2 percent in 2017. The past-year misuse of Vicodin decreased from a peak of 10.5 percent in 2003 to 2.0 percent in 2017, and Oxycontin misuse has decreased from the peak rate of 5.5 percent in 2005 to 2.7 percent in 2017. Furthermore, students in the 12th grade believe that opioids are harder to obtain than in the past. In 2010, 54 percent of students in 12th grade believed that these drugs were easily accessible, as compared to 35.8 percent in 2017.
  - In 2015, 4,235 youth aged 15 to 24 died from a drug-related overdose; over half of these were attributable to opioids. The health consequences of opioid misuse affect a much larger number of people. For example, the CDC estimates that for every young adult overdose death, there are 119 emergency room visits and 22 treatment admissions.
  - Research suggests that adolescents with substance use disorders also have high rates of co-occurring mental illness; over 60 percent of adolescents in community-based substance use disorder treatment programs also meet diagnostic criteria for another mental illness.

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Impact on Special Populations

- **Women** are more likely to have chronic pain, be prescribed prescription pain relievers, be given higher doses, and use them for longer time periods than men.
  - Since 1999, the opioid overdose rate among women 30 to 64 rose an incredible 492%. That's the highest leap in any population group. During that time, deaths from drug overdoses of all types increased 260% among women in that same age group.
  - 48,000 women died of prescription pain reliever overdoses between 1999 and 2010.
  - Women may become dependent on prescription pain relievers more quickly than men.
  - Heroin overdose deaths among women have tripled in the last few years. From 2010 through 2013, female heroin overdoses increased from 0.4 to 1.2 per 100,000.

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Frequently Cited Reasons for Not Entering OUD Treatment

1. **Limited treatment options**
   - Methadone or Naltrexone
   - Drug-Free Programming
   - Limits placed on Buprenorphine prescribers
2. **Stigma**
   - Many users don't want methadone
     - "It's like going from the frying pan into the fire"
     - Fearful of withdrawing from methadone
   - Concerned about being stereotyped
   - Not accepted by many abstinence-based programs and self-help groups.
3. **OTP's are highly structured**
   - Standing in line regardless of weather
   - Standing in line and having access to pills, urine, etc.
   - Going to the clinic every day until take-homes are earned

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N.I.M.B.Y. Syndrome

Methadone clinics are great, but

Not **I**n **M**y **B**ack **Y**ard

- New opioid treatment programs are difficult to open.
- Zoning regulations and community reaction often create delays or prevent programs from opening.
- Some states have few, one has one (SD) (ND)

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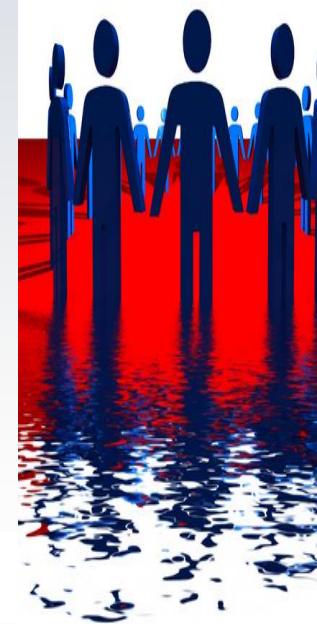
Who Uses Heroin?

Individuals of all ages use heroin:

- Today's average first time heroin user is no longer a 16 year old male of color as it was in the '60's, but more likely a 23 year old white woman.
- White women among heroin users increased from 20% in the 50's to approximately 52% in 2014.
- White men and women have embraced prescription pills and turn to heroin when the source runs out.
- 90% of people who started using heroin in the past decade are white, most of them in their late 20's.



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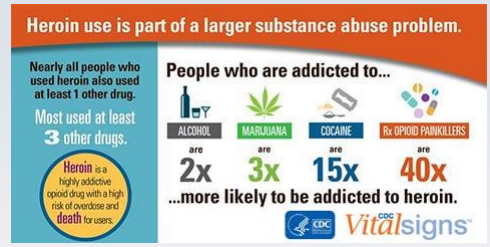
Who is most at risk for heroin addiction?



- People who are addicted to prescription opioid pain relievers
- People who are addicted to cocaine
- People without insurance or enrolled in Medicaid
- Non-Hispanic whites
- Males
- People who are addicted to marijuana and alcohol
- People living in a large metropolitan area
- 18 to 25 year olds

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New Non-Medical Users of Pain Relievers

- 46 people die every day from overdoses involving prescription opioids. In 2017, prescription opioids continue to contribute to the epidemic in the U.S. – they were involved in more than 35% of all opioid overdose deaths.
- The most common drugs involved in prescription opioid overdose deaths include:
  - Methadone
  - Oxycodone (such as OxyContin®)
  - Hydrocodone (such as Vicodin®)
- For people who died from prescription opioid overdose in 2017:
  - Overdose rates from prescription opioids significantly increased among people more than 65 years of age.
  - Overdose rates from prescription opioids were higher among non-Hispanic whites and American Indian or Alaskan Natives, compared to non-Hispanic blacks and Hispanics.
- The rate of overdose deaths from prescription opioids among men was 6.1 per 100,000 people and the rate among women was 4.2 in 2017.
- The highest overdose death rates from prescription opioids were in West Virginia, Maryland, Kentucky, and Utah.

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Risk Factors for Overdose

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Risk Factors for Overdose

- What do we know about the opioid crisis?
  - Roughly 21 to 29 percent of patients prescribed opioids for chronic pain misuse them.
  - Between 8 and 12 percent develop an opioid use disorder.
  - An estimated 4 to 6 percent who misuse prescription opioids transition to heroin.
  - About 80 percent of people who use heroin first misused prescription opioids.
  - Opioid overdoses increased 30 percent from July 2016 through September 2017 in 52 areas in 45 states.
  - The Midwestern region saw opioid overdoses increase 70 percent from July 2016 through September 2017.
  - Opioid overdoses in large cities increased by 54 percent in 16 states.

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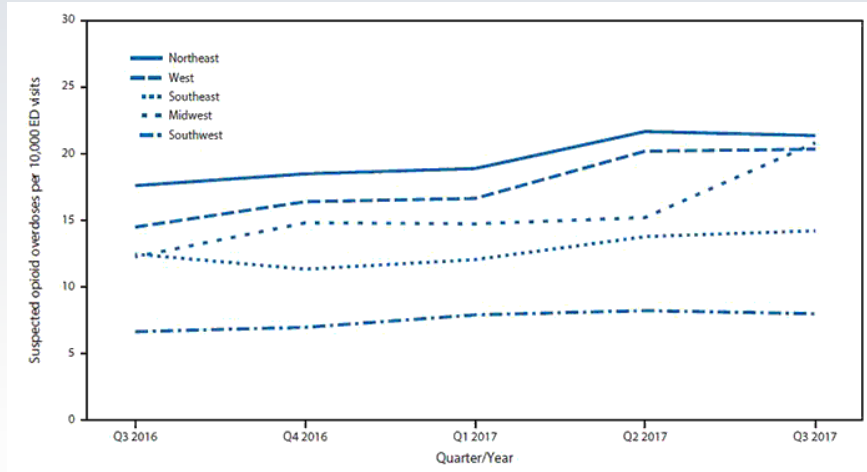
Risk Factors for Overdose



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A Need for Alternative Options

- Move outside traditional structure to:
  - Attract more patients into treatment
  - Expand access to treatment
  - Reduce stigma associated with treatment
- Buprenorphine and Vivitrol is a potential vehicle to bring about these changes.

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Module I - Summary

- Use of medications as a component of treatment can be an important in helping the person to achieve their treatment goals.
- DATA 2000 expands the options to include both opioid treatment programs and the general medical system.
- Opioid addiction affects a large number of people, yet many people do not seek treatment or treatment is not available when they do.
- Expanding treatment options can
  - make treatment more attractive to people;
  - expand access; and
  - reduce stigma.

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