Opioid-Related Mortality and Response- Including Fentanyl

**Objectives**

- Understand the history and current status of opioids and fentanyl in the U.S.
- Identify those at risk for opioid and fentanyl overdose deaths
- Link patients with opioid use disorders (OUDs) with appropriate interventions
- Understand the role of naloxone in preventing opioid overdose deaths

**Some opioid basics**

The opioid family includes:
- Opiates (sold in past as laudanum or paregoric)
- Morphine
- Codeine
- Heroin
- Hydrocodone
- Oxycodone
- Hydromorphone
- Oxymorphone
- Buprenorphine
- Methadone
- Fentanyl
- tramadol

**Fentanyl**

Can you tell which pill contains a deadly dose of fentanyl?

Neither can your child.

**History & Origin**

- Fentanyl was first developed in 1959 and introduced in the 1960s as an intravenous anesthetic. It is legally manufactured and distributed in the United States. Licit fentanyl pharmaceutical products are diverted via theft, fraudulent prescriptions, and illegal distribution by patients, physicians, and pharmacists.
History & Origin Continued

• From 2011 through 2018, both fatal overdoses associated with abuse of clandestinely produced fentanyl and fentanyl analogues, and law enforcement encounters increased markedly. According to the Centers for Disease Control and Prevention (CDC), fentanyl analogues were involved in roughly 2,600 drug overdose deaths each year in 2011 and 2012, but from 2012 through 2018, the number of drug overdose deaths involving fentanyl and other synthetic opioids increased dramatically each year.

www.getsmartaboutdrugs.com DEA Factsheet

History & Origin Continued

• More recently, there has been a re-emergence of trafficking, distribution, and abuse of illicitly produced fentanyl and fentanyl analogues with an associated dramatic increase in overdose fatalities, ranging from 2,446 in 2011 to 31,335 in 2018.

www.getsmartaboutdrugs.com DEA Factsheet

Fentanyl Street Name and Appearance

• Common street names include: • Apache, China Girl, China Town, Dance Fever, Friend, Goodfellas, Great Bear, No Man, Jackpot, King Ivory, Murder 8, and Tango & Cash.

• Fentanyl pharmaceutical products are currently available in the following dosage forms: oral transmucosal lozenges commonly referred to as fentanyl "lollipops" (Actiq®), effervescent buccal tablets (Fentora®), sublingual tablets (Abstral®), sublingual sprays (Subsys®), nasal sprays (Lazanda®), transdermal patches (Duragesic®), and injectable formulations. Clandestinely produced fentanyl is encountered either as a powder or in counterfeit tablets and is sold alone or in combination with other drugs such as heroin or cocaine.

www.getsmartaboutdrugs.com DEA Factsheet

Fentanyl continued

• What is fentanyl and how does it work in the body? Fentanyl is a powerful synthetic opioid, similar to morphine but 50 to 100 times more potent. In its prescription form it is prescribed for pain, but fentanyl is also made illegally and distributed as a street drug. (Illegal) fentanyl is sold as a powder or made into pills that look like real prescription opioids (pain relievers). Fentanyl works by binding to the body’s opioid receptors, which are found in areas of the brain that control pain and emotions. Its effects include euphoria, drowsiness, nausea, confusion, constipation, sedation, tolerance, addiction, respiratory depression, and arrest, unconsciousness, coma, and death.

Substance Abuse Coalition Leaders of Arizona via SAMHSA HHS Grant H79TI083320

Arizona and Fentanyl

• Why is fentanyl a problem in Arizona? Fentanyl is the most common substance found in opioid overdose deaths in Arizona. Teens as young as 14 years old have overdosed and died. Illegal fentanyl is being mixed with other drugs, such as oxycodone, heroin, and methamphetamine. This is especially dangerous because people are often unaware that fentanyl has been added. The high potency of fentanyl greatly increases risk of overdose, especially if a person is unaware that a powder or pill contains it. Naloxone is a medicine that can be given to a person who appears to be having a fentanyl overdose. Multiple doses might be necessary because of fentanyl’s potency.

Substance Abuse Coalition Leaders of Arizona via SAMHSA HHS Grant H79TI083320

Opioids and the effects

• profound analgesia (pain-killing)
• overwhelming sense of calm, pleasure
• sedation, nausea, constipation
• physical dependence
• risk of blood-borne illness if used IV
• respiratory depression: the cause of death in overdose
Misuse of prescription opioids in our region

- 2017: in a Cronkite News poll, 46% of Arizona 18 to 35 year-olds polled said they had a “close friend” who took prescription opioid medications that were not prescribed for them.

Cronkite News, 4/12/2017

Opioid prescribing guidelines

- CDC has issued prescribing guidelines to improve safety and to make sure opioid therapy was achieving its intended purpose.


Opioid prescribing guidelines

- Try non-opioid treatments first, have a treatment plan, discuss risks, use short-acting opioids first, lowest effective dose, evaluate overdose risk, check prescription database, do periodic drug testing, don’t also prescribe benzodiazepines, set specific treatment goals as condition of continuation.


Overdose deaths in the US

- Synthetic opioids such as fentanyl are currently the main driver of opioid overdose deaths.
- About 3/4 of opioid-involved overdose deaths involve synthetic opioids.
Suicide or accidental death?

- around 20% of all drug overdose deaths are classified as suicides.
- but Nationwide Emergency Department Sample considered only 54% of all overdoses "unintentional".
- all drugs, all outcomes.

Suicide or accidental death?

- it is often impossible to be certain.
- without clear evidence of suicide (note, statement to others, etc.), overdose deaths are usually reported as accidental.
- different states use different indicators.
- combined data are unreliable.
- suicide deaths are underestimated.

Suicide: A Silent Contributor to Opioid-Overdose Deaths

Variable Classification of Drug-Intoxication Suicides across US States: A Partial Artifact of Forensics?
Opioid misuse and suicide

- The misuse of prescription opioids is associated with a 40-60% increase in suicidal ideation.
- After controlling for medical and psychiatric conditions.
- People who misuse opioids regularly are 75% more likely to make suicide plans and twice as likely to attempt suicide.

Suicide: A Silent Contributor to Opioid-Overdose Deaths


Opioids are depressants

- From a retrospective study of VA patients 2000-2012.
- Risk of developing treatment-resistant depression increased with length of time on prescribed opioid analgesics.

Who is a higher risk for overdose?

- All ‘street’ drug users (heroin, black market fentanyl).
- No controls on potency of supply.
- Those misusing their own or others’ prescription medications.
- Those prescribed opioids who also have:
  - History of any substance abuse
  - Current alcohol use
  - Benzodiazepine co-prescription
  - High prescribed dose
  - Liver, lung disease

Risk factors for overdose

- People taking more than one opioid, rotating opioid doses.
- After discharge from emergency care for opioid intoxication or poisoning.
- Those in court-ordered opioid detoxification programs.
- People just released from incarceration with past history of opioid abuse.

Opioid overdose signs

- Breathing slow, shallow
- Unresponsive
- “Pinpoint” pupils
- Gurgling
- Blue or purple lips or fingers
- Can’t wake up
- Skin cold/clammy
- Slow heart rate, low blood pressure

Who is likely to witness an overdose?

- Friends and family of opioid users
- Healthcare workers
- Police, emergency service workers
- Outreach workers
- People providing shelter for opioid users
Overdose intervention

- **Naloxone** is an opioid antagonist
- Temporarily reverses opioid effect
- Administered immediately, it can be effective in preventing overdose deaths
- In some states it is available without a prescription
- Patients on chronic opioid therapy should have kits in their homes

How naloxone works

Naloxone effectively knocks opioid drugs off the receptor
- This "turns off" the opioid effect on breathing
- It does not last as long as many opioid drugs

Delivery systems for naloxone

Opioid dependence

- Everyone who takes opioids on a continuous basis for weeks to months will develop a physical dependency
- People with terminal illnesses
- People on chronic pain medications
- People misusing prescription opioid medication
- People using "street" drugs heroin
- Dependence and "addiction," "abuse" are not the same

Opioid Use Disorder Treatment

- Determine level of care by clinical needs
- Manage physical withdrawal
- Patient education on risks and health issues
- Treatment planning for stability and safety

Diversity Toolkit for Opioid Overdose Prevention

- Tailoring Opioid Overdose Prevention Efforts for Diverse Groups within Tribal and Urban Indian Settings
- Click here to read the full toolkit: https://tinyurl.com/DiversityToolkit7D
Medication Assisted Therapy (MAT)

- is the best medical treatment for Opioid Use Disorders
  - provided together with psychosocial supports (group and individual counseling, peer support, AA/NA, etc.)
- buprenorphine and methadone both work by preventing opioid withdrawal
  - using a monitored, known dose

MAT: how buprenorphine works

- like naloxone, it effectively knocks opioid drugs off the receptor
- unlike naloxone, it partially turns on the opioid signal

MAT with buprenorphine

- because of its mechanism of action, a patient must be in withdrawal to start buprenorphine
  - COWS score of 9-24, 15 considered safe
- for patients in withdrawal, symptoms resolve
- however, it can also TRIGGER withdrawal in patients who have opioids on board

MAT with methadone

- being in withdrawal is not required
- dose is adjusted until withdrawal symptoms are prevented
  - start with 10-30 mg dose
  - if withdrawal symptoms occur, adjust dose until they are prevented

MAT: how long?

- surprisingly little research on optimum length of replacement therapy
- methadone: >12 months recommended
- buprenorphine: from less than 12 months to lifetime
- weigh risks and benefits

Safety in the home and community

- Disposal, proper disposal, of prescribed medications
- Lockboxes for medications, an injury prevention initiative that works
- Talking with family and friends about the dangers of opioids
- Seeking treatment for those that may be struggling with addiction issues
- Promote awareness and prevention efforts
- Learn more about resources
Phoenix Area Treatment Pool Services and more

- 6 treatment contracts maintained
- Opioid cases are prioritized
- Partners with SAMHSA Block Grant programs
- Detoxification services managed by Patient Referred Care (PRC)
- Linkage to counseling for aftercare, continuum of care services
- What is working in your community?
- What are the gaps in care?

Resources

- MAT TRAINING SAMHSA - https://www.samhsa.gov/medication-assisted-treatment/training-resources
- MAT Medications, Counseling, and Related Conditions - https://www.samhsa.gov/medication-assisted-treatment/medications-counseling-related-conditions
- Comprehensive MAT Free Webinar with CEUs from NAADAC - https://www.naadac.org/comprehensive-mat
- AHCCCS MAT PAGE - https://www.azahcccs.gov/Members/BehavioralHealthServices/OpioidUseDisorderAndTreatment/MAT.html
- MAT Tx Resources AZ - https://cabhp.asu.edu/sites/default/files/medication-assisted_treatment_resource_guide_for_arizona.pdf
- Substance Abuse Coalition Leaders of Arizona - https://saclaz.org/toolkit/
- OPIOID RESPONSE NEVADA - https://nvopioidresponse.org/get-the-facts-on-opioid-use-disorder/
- Utah Opioids - https://www.utahopioids.org/
- Arizona Opioid Assistance Referral line at 1-888-688-4222
- NaloxoneAZ.com

questions?