Welcome to the NCCHC Webinar:

Responding to the Opioid Epidemic – Treatment of Opioid Dependent Youth in Juvenile Detention Centers

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Responding to the Opioid Epidemic: 
*Treatment of Opioid Dependent Youth in Juvenile Detention Centers*

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Member, NCCHC Juvenile Health Committee
Objectives

- Recognize the increasing problem of opioid dependence and opioid overdose
- Understand the options in medication-assisted treatment of opioid dependence
- Identify issues in treating opioid dependent youth in juvenile detention centers including reducing risk of overdose after release
16 year old Female Admitted to Detention

- During the admission nursing assessment, she admits to IV heroin use daily x 3 months
- Prior to IV use, she was using heroin nasally and Percocet orally/nasally for over a year
- Youth crying, afraid of going into withdrawal
- Last used IV heroin 12 hours ago before being placed in lock-up
Backdrop of Prescription Opioid and Heroin Use

**EACH DAY:**

- **3,900** People initiate nonmedical use of prescription opioids for the first time.
- **580** People use heroin for the first time.
- **78** People die from an opioid-related overdose.

*Source: U.S. Department of Health and Human Services*
2015 National Survey on Drug Use and Health

- Past-year Heroin Use in US
  - 12-17 yo: 0.1%
  - 18-25 yo: 0.6%
  - >25 yo: 0.3%

- Limitations
  - Excludes institutionalized, incarcerated, homeless, active duty military, and those in residential SA or mental health treatment programs
  - Self-report
Past Year Misuse of Prescription Pain Relievers

• 2015 National Survey on Drug Use and Health
  – 12 to 17 yo: 3.9% (Range 1.7-6.8% by age)
  – 18 to 25 yo: 8.5%
  – > 25 yo: 4.1%

• Rate higher (7.8%) for youth with a major depressive episode in the same time period

• Each day, about 1,100 teens initiate misuse of prescription pain relievers, most often from a friend or relative
What are Opioids?

• Any drugs that contain opium (or its derivative)
• Natural or synthetic
• Prescription medications or illegal drugs
• Pill, powder, liquid, film, implant
• Swallowed, smoked, snorted, injected, placed under tongue
Opioids...

- Manage pain, suppress coughs and treat opioid-use disorders
- Cause feelings of euphoria or contentment
- Cause dependence
- In excessive amounts, opioids can suppress a person’s urge to breathe which can lead to overdose and death.
Examples of Common Prescription Opioids

**Oxycodone** – 512s, OC, Oxy, 80s, Oxycotton, Hillbilly Heroin, Killers, Roxis

**OxyContin®, Percocet®, Roxicodone®**

**Oxymorphone** - Mrs. O, Pink/Blue Heaven, The O Bomb, Octagons, Stop Signs

**Opana®**

**Hydrocodone** – Vikes, Hydro, Norco, Fluff, Scratch, Watson 387

**Vicodin®, Lorcet®, Zohydro®**

**Codeine** - Captain Cody, Schoolboy, Pancakes & Syrup, T-3s, Doors & Fours, Purple Drank

**Codeine/Promethazine**

**Tylenol® 3 and 4**

**Lortab®**

**Tramadol** – Ultras, tram cars, trammies

**Utram, Ultram ER, Ultracet**

**Tapentadol - Nucynta**
Examples of Prescription Opioids used for Treatment of Opioid Dependence

**Methadone**
Jungle Juice, Fizzies, Chocolate Chip Cookies

**Buprenorphine:** Subutex®, Suboxone®, Zubsolv®
Bunavail® buccal film, Probuphine® implant
Bupe, Box(es), Subs/Subbies, Orange guys
More Examples of Prescription Opioids

Hydromorphone – D, Juice, Dust, Footballs, Hospital Heroin, H Bomb, Smack

Prescription Fentanyl
Duragesic patch, Fentora tabs, Actiq lozenges
Illegal Opioids: Heroin

Slang terms:

Illegal Opioids: Non-pharmaceutical Fentanyl

- Illicitly produced, synthetic drug
- Pill form packaged to look like prescription med like oxycodone
- Powder form looks like heroin
- Very rapid onset of action

Fentanyl + heroin = deadly combination

Fentanyl is 30-40X stronger by weight than heroin and 100x more potent than morphine

Packets of fentanyl-laced heroin
HARFORD HEROIN OVERDOSE AWARENESS

Overdoses 279 YTD
Lives Lost 52 YTD

#HOPE4HARFORD
DAVID MUIR REPORTING
BREAKING POINT IN AMERICA
HEROIN
abc 2020
Responding to the Heroin Epidemic

**PREVENT**

People From Starting Heroin

Reduce prescription opioid painkiller abuse.
Improve opioid painkiller prescribing practices and identify high-risk individuals early.

**REDUCE**

Heroin Addiction

Ensure access to Medication-Assisted Treatment (MAT).
Treat people addicted to heroin or prescription opioid painkillers with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.

**REVERSE**

Heroin Overdose

Expand the use of naloxone.
Use naloxone, a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

SOURCE: CDC Vitalsigns, July 2015
2016 Surgeon General’s Report on Alcohol, Drugs, and Health

• In 2015, 20.8 million people in US aged 12 or older met criteria for a substance use disorder
• However only 1 in 10 affected individuals received any treatment in the prior year
• Of those who needed treatment but did not receive it, more than 1 million were adolescents aged 12 to 17
2016 Surgeon General’s Report
Goals of Substance Use Disorder Treatment

• Similar to treatment goals for other serious chronic medical conditions
• Reduce symptoms
• Improve health
• Improve social function
• Teach and motivate person to monitor their condition and manage threats of relapse
Key Findings 2016 Surgeon General’s Report

- Although well-supported scientific evidence shows that medications can be effective in treating serious substance use disorders, they are under-used.
- The FDA has approved 3 medications to treat opioid use disorders:
  - Methadone, buprenorphine, & naltrexone
- An insufficient number of existing treatment programs or practicing physicians offer these medications.
• On-site rapid pregnancy test: negative
• Nursing exam reveals multiple track marks
  – Youth denies ever sharing needles
• MD called for orders
  – On-site rapid urine tox screen ordered: + opiates
  – Labs sent for Hep C Antibody, LFTs in addition to routine admission labs which include CBC, HIV, RPR, urine NAAT for GC/CT
  – Opioid withdrawal scales ordered TID x 5 days
Rapid Urine Tox Screens

- Choose a kit that identifies a broad range of opioids including buprenorphine (bup) and methadone
- Bup will not show up as a (+) under opioids so make sure your panel tests for this separately
- Fentanyl also does not show up under opioids: requires separate testing, may be worth extra $
- Test for benzodiazepines
# Clinical Opiate Withdrawal Scale

For each item, circle the number that best describes the patient’s signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

<table>
<thead>
<tr>
<th>Patient’s Name: __________________________</th>
<th>Date and Time <strong><strong>/</strong></strong>/<strong><strong>:</strong></strong>______</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason for this assessment:______________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Resting Pulse Rate:</strong></th>
<th>__________ beats/minute</th>
<th><strong>GI Upset:</strong> over last 1/2 hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured after patient is sitting or lying for one minute</td>
<td></td>
<td>0 no GI symptoms</td>
</tr>
<tr>
<td>0 pulse rate 80 or below</td>
<td>1 stomach cramps</td>
<td></td>
</tr>
<tr>
<td>1 pulse rate 81-100</td>
<td>2 nausea or loose stool</td>
<td></td>
</tr>
<tr>
<td>2 pulse rate 101-120</td>
<td>3 vomiting or diarrhea</td>
<td></td>
</tr>
<tr>
<td>4 pulse rate greater than 120</td>
<td>5 Multiple episodes of diarrhea or vomiting</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sweating:</strong> over past 1/2 hour not accounted for by room temperature or patient activity.</th>
<th><strong>Tremor</strong> observation of outstretched hands</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 no report of chills or flushing</td>
<td>0 No tremor</td>
</tr>
<tr>
<td>1 subjective report of chills or flushing</td>
<td>1 tremor can be felt, but not observed</td>
</tr>
<tr>
<td>2 flushed or observable moistness on face</td>
<td>2 slight tremor observable</td>
</tr>
<tr>
<td>3 beads of sweat on brow or face</td>
<td>4 gross tremor or muscle twitching</td>
</tr>
<tr>
<td>4 sweat streaming off face</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Restlessness Observation during assessment</strong></th>
<th><strong>Yawning Observation during assessment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 able to sit still</td>
<td>0 no yawning</td>
</tr>
<tr>
<td>1 reports difficulty sitting still, but is able to do so</td>
<td>1 yawning once or twice during assessment</td>
</tr>
<tr>
<td>3 frequent shifting or extraneous movements of legs/arms</td>
<td>2 yawning three or more times during assessment</td>
</tr>
<tr>
<td>5 Unable to sit still for more than a few seconds</td>
<td>4 yawning several times/minute</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Pupil size</strong></th>
<th><strong>Anxiety or Irritability</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 pupils pinned or normal size for room light</td>
<td>0 none</td>
</tr>
</tbody>
</table>


• COWS 8, Clonidine 0.1 mg po TID, motrin 600 mg po TID, Benadryl 50 mg po qhs, and oral hydration initiated for mild withdrawal x 5 days

• By that night, youth is experiencing moderate withdrawal with tachycardia, body aches, stomach cramps, unable to eat, anxious, restless, sweating, piloerection, nasal rhinorrhea, slight tremor, yawning, and pupils dilated, COWS 15

• BP drops to 90/48, youth feels dizzy, cannot participate in program activities
Treatment will vary

Not a one size fits all. Look at:

• Severity of the substance use disorder
  – Substances used, amount, frequency, duration, withdrawal severity, past treatment & relapses

• Comorbidities

• Individual’s preference

• Resources
  – Availability of treatment providers
What are the options?

- Continue the course with symptomatic treatment
- Refer to emergency room for withdrawal
- Directly admit to in-patient substance abuse treatment program
- Treat underlying dependence and start buprenorphine
What is Buprenorphine?

- Opioid derivative
- Partial opioid agonist at mu receptor
  - Does not produce strong euphoria
  - Has a ceiling effect
  - Minimizes withdrawal and cravings
  - Relatively safe with few side effects
- Fast acting – feel results within minutes
- Long lasting – up to 72 hours
- Blocks effects of other opioids
More on Buprenorphine

• Approved by FDA in 2002 for 16 years and up as Schedule III CDS (so orders can be faxed)
• Given sublingually – does not work if taken orally
• Repeated administration produces or continues physical dependence but less than that from a full opioid agonist
• There is abuse potential for Bup
Buprenorphine

• Buprenorphine alone (Subutex tablets)
• Buprenorphine + naloxone
  – Suboxone film, Zubsolev tabs
• Used to manage withdrawal acutely and for maintenance to treat opioid dependence
• Dose and frequency can vary - daily dose usually 2-16 mg per day given QD or ÷ BID
Why treat detained youth with BUP?

- Growing problem of opioid abuse and dependence among adolescents
- Increasing # of youth admitted to detention with impending withdrawal, in withdrawal, or on maintenance bup or methadone
- Bup is being used in the community – we should provide a similar level of care
Why treat detained youth with BUP?

- Chronic disease model of care
- Managing youth with medications to treat only symptoms not always ideal
  - Especially if do not have 24/7 nursing
- Inadequate treatment = increased mental health morbidity
BUP Treatment in Detention

- What do you need?
- What to consider?
Prescribing Clinician

- Initially only MDs could prescribe
  - New legislation will allow NPs and PAs to prescribe: Comprehensive Addiction & Recovery Act of 2016
- BUP training → DEA waiver for Bup
- Availability of prescribing clinician 24/7
- Limits on number of patients
- Mentoring of new prescribers
PHARMACY PARTNERSHIP

• Facility needs ready access to Bup
• Licensing of facility (DEA and CDS) for ability to keep Bup on stock
• Storage & documentation of Bup
• Pre-authorization for health insurance coverage
BUP Consent Form

• Check your state laws
• Ensures youth knows risks and benefits
• Opportunity to educate on BUP
• Lays the ground work for what is expected
  – How it will be given
  – Follow up drug testing expected
  – How information will be shared/confidentiality
What about confidentiality?

- Sharing information with case management?
- Sharing information with the court?
- Sharing information with parents and guardians?
- Sharing information with residential staff and the superintendent?
Verify the history before prescribing!

- Youth may be drug seeking unnecessarily
- If treatment for withdrawal
  - Check urine tox test, withdrawal rating scale, discussion with parent/guardian, case manager, previous providers
  - Youth may not present for several days after admit
- If continuation of maintenance medication
  - Verify prior treatment, check urine tox screen
Interdisciplinary Care

- Nurses, substance abuse, mental health, somatic & psychiatric physician/NP/PA, pharmacy, case management, residential staff, prior providers and future providers
- Communication
Mental Health

- Hi risk for co-morbid mental health illness
- Hi risk for sleep problems, depression, anxiety, and suicidal ideation especially if opioid dependence not treated
- Treat the comorbid conditions
Administration of Bup

- Requires a high degree of supervision
- If possible, do not administer on the unit
- Moisten mouth by drinking some water 1st
- Place bup under tongue of youth so youth does not handle the bup
- Observe youth entire time while bup dissolves
- Discourage youth from talking/swallowing bup
- Check mouth and under tongue when done
Managing side effects of bup

- Relatively few
- Constipation main side effect
- Other side effects possible: N/V, headache, insomnia
- Beware of precipitating withdrawal
  - Wait until in mild to moderate withdrawal to start unless already on maintenance buprenorphine
What if she were also experiencing benzo or alcohol withdrawal?

• For more complicated withdrawal that could be life threatening, such as concomitant withdrawal from alcohol or benzodiazepines in addition to opioid withdrawal, recommend initial hospitalization for stabilization and observation unless your facility has 24/7 nursing coverage AND is experienced managing this scenario.
What if she is pregnant?

• If admitted already in withdrawal, recommend transport to hospital for fetal monitoring & treatment during initial stabilization

• Pregnant youth who are currently opioid dependent should be co-managed with OB/GYN and a clinician experienced managing opioid dependence during pregnancy

• Bottom line: Do not allow pregnant women with opioid dependence to withdrawal!

• Initiating bup or methadone and continuing through pregnancy is current recommendation
What if a youth comes in on methadone maintenance?

• Typically would be 18 or over
• Most juvenile facilities are not licensed as methadone treatment centers or OTPs (Opioid Treatment Programs)
• Could continue methadone if OTP is able to dispense a small supply of methadone to the facility using a chain of custody form
• Or, could transition to bup
Physician decides to initiate Bup
Dose is adjusted over the next 2-3 days until symptoms of withdrawal minimal to resolved
Youth is able to participate fully in facility activities
Youth is seen at least weekly by prescribing physician to monitor and order Bup on a week by week basis
SA counselor checks in with her daily
Now what?

• Need to discuss disposition
• Will youth be going home, into treatment, or placement?
• Will she be able to continue Bup after detention? Does she want to remain on it for maintenance treatment? What do her parents want?
What are the options?

- Continue Bup through detention stay and transition to Bup provider in the community
- Taper Bup off during detention stay
  - Go slow whenever possible
  - May need support of other medications
  - Voluntary vs Involuntary taper
- Tapering off in order to start Naltrexone
Naltrexone

- Opioid antagonist (opposes action of opioid agonists)
- Available in oral tablets or an extended release IM injection called Vivitrol which is given monthly
- Jails and detention programs are administering Vivitrol prior to discharge to help prevent relapse & overdose and maintain treatment
- Cost, insurance coverage, and pre-authorization are issues
- FDA approved 18 and up
Vivitrol (380 mg)

• Choosing to start Vivitrol is a big step for people with opioid dependence
• Requires being off opioids for at least 7 to 10 days to avoid precipitated withdrawal
• Side effects & serious injection site reactions have been reported; check baseline labs; get consent!
• Use needles that come with Vivitrol and carefully follow directions for gluteal IM administration
• Drug overdose while on Vivitrol can still occur from opioids or other drugs
Notification and Alerts for Bup and Naltrexone

- Notification card to off-site medical providers
- Emergency alert bracelets for naltrexone
What about cost?
NADAC pricing (without fill fee)

• Suboxone film
  – $4 for 2mg/0.5mg
  – $7.15 for 4mg/1mg
  – $7.15 for 8mg/2mg
  – $14.25 for 12mg/3mg

• Zubsolv tablets
  – $3.75 for 1.4/0.36mg
  – $7.50 for 2.9/0.71mg
  – $7.50 for 5.7/1.4mg
  – $11.25 for 8.6/2.1mg

• Buprenorphine tabs
  – $1.40 for 2 mg
  – $1.66 for 8 mg

• Vivitrol
  • $1,249 per injection

• Naltrexone tablets
  – $0.88 for 50 mg tab
• Team recommends in-patient SA treatment
• Program able to accept in her 7 days on Bup
• Labs, however return positive for Hepatitis C antibody
• Youth now admits to sharing needles with a relative
• Test all youth with IVDA for Hepatitis C
Hepatitis C

• Presence of Hepatitis C antibody does not equal Hepatitis C infection

• If Hepatitis C AB +, check Hep C RNA!

• If Hep C RNA +, order additional preliminary w/u for Hep C and/or refer to specialist
  – LFTs, Hep C genotype, PT/PTT, AFP, liver ultrasound

• Ensure vaccination for Hep A and B complete
CDC Statistics

Hepatitis C
Between 2010-14, there was a 250% increase in new Hepatitis C cases, primarily among young white people who injected drugs

What about HIV?
From 6 to 9 % of the 39,513 new cases of HIV in the US in 2015 were associated with injection drug use

Source: CDC. Diagnoses of HIV infection in the US and dependent areas, 2015
Other Somatic Health Care

• At risk for skin and soft tissue infection from IVDA
• Hi risk for pregnancy, STI, sex in exchange for drugs or money: STI testing, safe sex counseling, contraceptive management, vaccination
• Unmet dental needs common
• Acute and chronic pain complaints common
• Menstrual irregularities, secondary amenorrhea
• Hep C RNA ordered
• Birth control options discussed
• IUD considered but no time to arrange for IUD placement prior to her discharge
• Depo-provera is started after second pregnancy test negative
Preparing for Discharge: Opioid Overdose Risk Reduction

- Any youth abusing opioids is at risk for opioid overdose
- ↑ risk further if they have overdosed before
- Overdose deaths from opioids have been dramatically increasing across the US
Overdose Statistics Vary By Region

Figure 5. Age-adjusted rates for drug-poisoning deaths involving heroin, by census region: United States, 2000, 2007, and 2013

- Northeast
- Midwest
- South
- West

Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2014

Number of deaths

- Heroin
- Prescription opioids
- Alcohol
- Cocaine
- Fentanyl
- Benzodiazepines

Year: 2007 to 2014
Risk of Overdose

- Risk of overdose increases in the immediate period following release from incarceration.
- Overdose risk may be higher after a period of abstinence due to ↓ tolerance and ↑ cravings.
How to reduce risk of overdose

- Counsel/educate youth and parent on opioid overdose: risks of overdosing, how to recognize overdose, how to prevent, how to treat, have a curriculum to use if possible
- Emphasize increased risk of overdose due to
  - Decreased tolerance
  - Fentanyl
  - Mixing drugs
Reducing risk of overdose

• If indicated, maintain youth on medication-assisted treatment for opioid dependence with Bup or Naltrexone (Vivitrol) and substance abuse counseling

• Prescribe or dispense Naloxone to reverse an overdose
What is Naloxone?

- An opioid antagonist (opposes actions of opioids)
- **Note:** Naloxone is **NOT** the same as Naltrexone
- Competitively binds the opioid receptors with a higher affinity than agonists (such as heroin)
- Reverses an opioid overdose & restores breathing
- Can be given nasally, IM, or by IV
- No abuse potential, rare side effects
  - No effect on someone who hasn’t taken opioids
- OK to give to children and pregnant women
- Wears off in 30 - 90 minutes, may require repeated doses
Naloxone
Narcan® nasal spray

✧ Nasal naloxone spray
✧ FDA approved
✧ Ready to use
✧ Needle free
✧ 4 mg naloxone per device
✧ Coming soon: 2 mg formulation
✧ Public interest price: $75 per box of 2 devices
✧ Use each device only once
Transitioning to the Community

- Discharge with naloxone and education on how to prevent, recognize, & treat overdose
- Continuing medication-assisted treatment in community will treat opioid dependence and may help prevent relapse & overdose however may be challenging to arrange
- Involve youth, family, treatment team, and case management in decision-making process
Back to the case

• Youth and parents receive opioid overdose and naloxone training in detention
• Narcan kit dispensed to parents
• Silver lining: her Hep C RNA returns negative
• Discharge summary prepared for placement and community case management
Summary

• Opioid abuse and dependence is an increasing problem and may be seen in incarcerated adolescents.

• It is critical to identify youth in detention who have opioid dependence and offer treatment tailored to their needs using a chronic disease model of care.

• Risk of relapse and opioid overdose may be reduced with youth/parent counseling, continued substance abuse treatment, and naloxone.
Reference Resources


• TIP 40: Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction, Sept 2007, SAMHSA
Reference Resources


Reference Resources


Reference Resources

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