

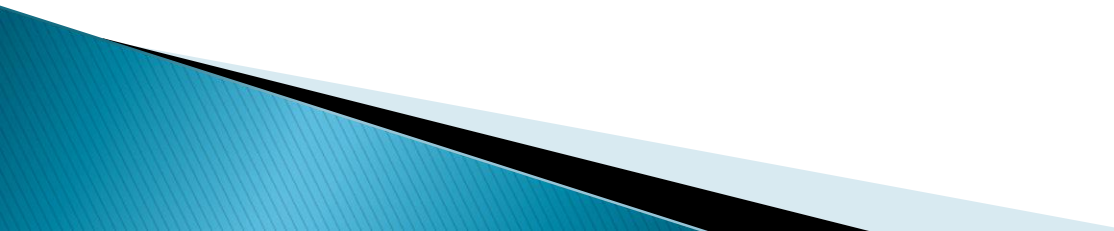
# Clinical Challenges: Medically Assisted Treatment and the Opioid Addicted Patient

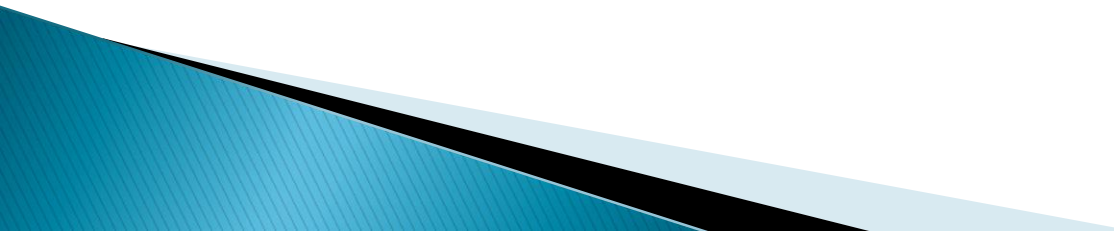
Mark B. Miller, LMFT  
Program Director

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502-894-0234

# Overview of Training

- ▶ What are the effects of opiates on the brain?
  - ▶ The History of Medically Assisted Treatment 1.0: Methadone.
  - ▶ The History of MAT 2.0: Combo Therapy/Buprenorphine with Naloxone.
  - ▶ Harm Reduction and MAT
- 

- ▶ So, does that live up to all your hopes and dreams about MAT? What else, time permitting, would you like me to talk about?
  - ▶ ?
  - ▶ ?
  - ▶ ?
- 

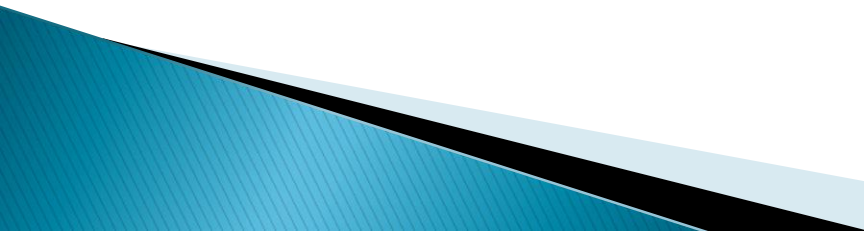
# Objectives of Training

1. Understanding opiates effects on the brain
2. Understand what MAT is
3. Learn the differences between Bup/Combo Therapy and Methadone

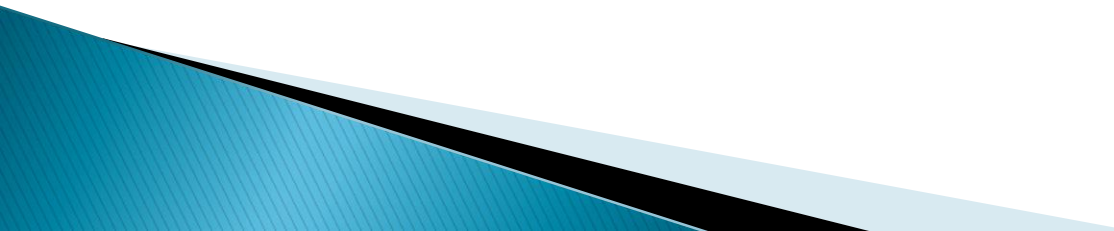
# So, Who is this guy, anyway?

- ▶ Mark Miller
- ▶ Licensed Marriage and Family Therapist
- ▶ Center for Behavioral Health for the last 11 years
- ▶ Last 2 years as State Director
- ▶ CARF Surveyor (7 years)
- ▶ Former President of the Board of MensWork, Inc.
- ▶ Community Council member of SJNP (15 years)
- ▶ Husband and father of one super cute soon to be 10 year old

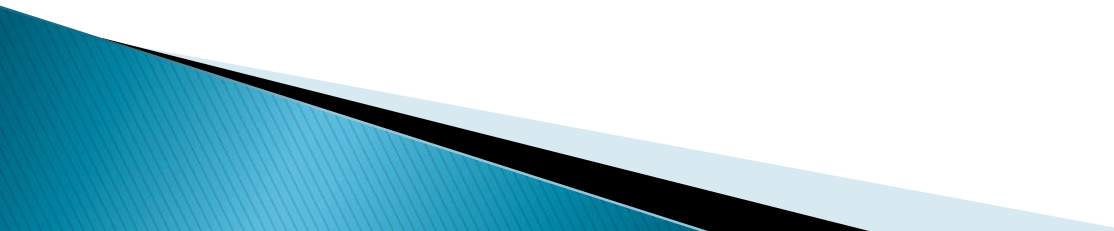
# Opiate Addiction—Pop Quiz!

- ▶ What are typical opiates you all are seeing in your communities / practices?
  - ▶ Does your area have a heroin problem?
  - ▶ Does your area have an opiate problem?
  - ▶ What are the challenges in working with this population you have faced?
  - ▶ How successful have you been to date? How often do you get “frequent flyers”?
- 

# Opiate Abuse and the Media

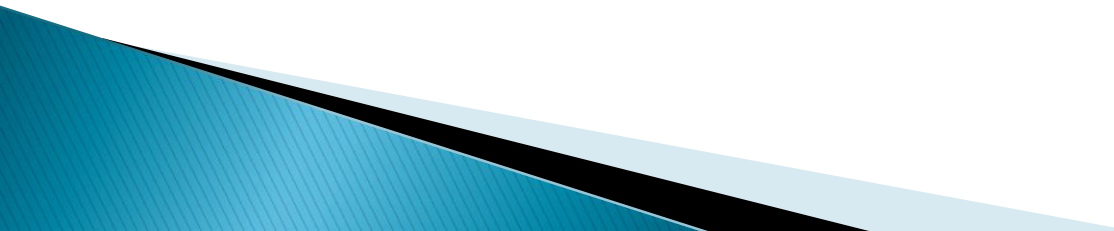
- ▶ What was the last broadcast, print, internet, or other media you saw on this topic?
  - ▶ What stood out for you about this?
  - ▶ What has been the response in your community to what's going on?
- 

# WLWT 5 (Cincinnati)

- ▶ Kentucky school districts to decide whether to accept heroin antidote
  - ▶ *Heroin antidote could be coming to private, public high schools*
  - ▶ *April 22, 2016*
- 



# WTVQ, Frankfort, KY

- ▶ **FRANKLIN CO. SHERIFF: NARCOTICS INVESTIGATION LEADS TO ARREST**
  - ▶ **APRIL 27, 2016**
- 

# **WLKY, Louisville, KY**

**Jeffersontown police announce new  
program to fight heroin use**

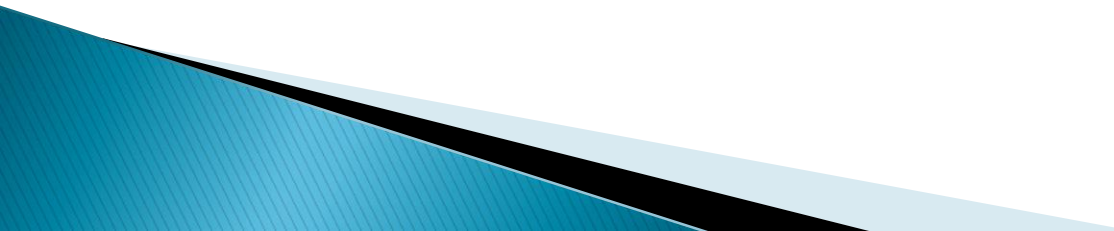
**April 25, 2016**



# Richmond Register, Richmond, KY

- ▶ Richmond man arrested shortly after being released from jail
- ▶ April 15, 2016

# Central Kentucky News, Bowling Green, KY

- ▶ **Story of Jessamine man who battled heroin addiction another warning sign of drug's impact**
  - ▶ **January 27, 2016**
- 

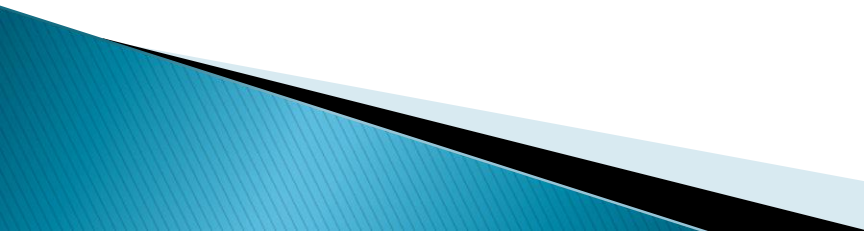
# Prescription Opioids--Nationwide

- ▶ .3 million Americans engaged in non-medical use of prescription painkillers in the last month.
- ▶ Approximately 1.9 million Americans met criteria for prescription painkillers use disorder based on their use of prescription painkillers in the past year.
- ▶ 1.4 million people used prescription painkillers non-medically for the first time in the past year.
- ▶ The average age for prescription painkiller first-time use was 21.2 in the past year.
  - ▶ Source: National Survey on Drug Use and Health (2014)

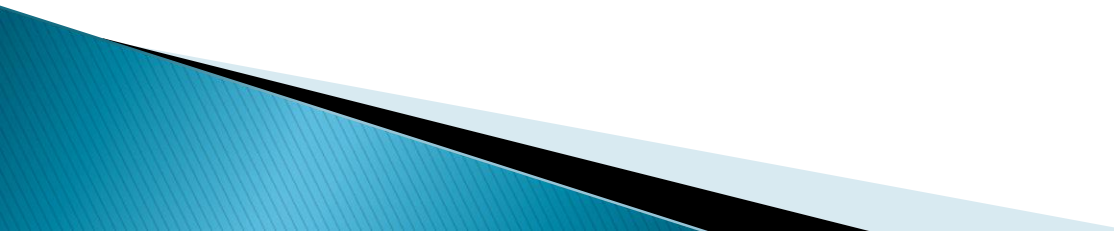
# Heroin--Nationwide

- ▶ 4.8 million people have used heroin at some point in their lives.
  - ▶ Among people between the ages of 12 and 49, the average age of first use was 28.
  - ▶ 212,000 people aged 12 or older used heroin for the first time within the past 12 months.
  - ▶ Approximately 435,000 people were regular (past-month) users of heroin.
- ▶ Source: National Survey on Drug Use and Health (2014)

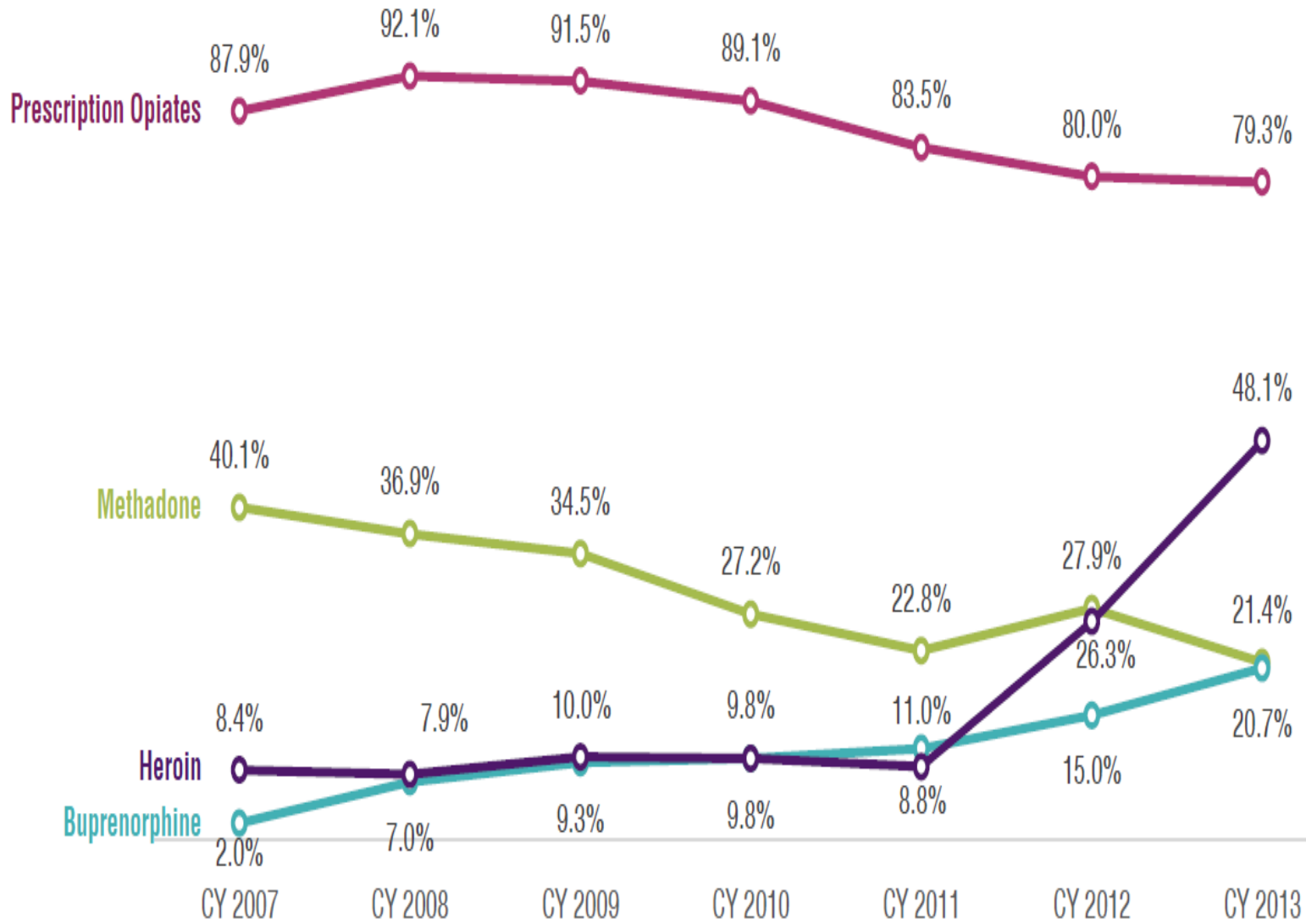
# Heroin--Kentucky

- ▶ 3 in 5 admitted to MAT programs in KY reported heroin use within last 6 months.
  - ▶ The average length of time of heroin use before intake was approximately 5 months.
    - ▶ Source: KORTOS 2015 Annual Report
  - ▶ Most individuals starting at MATs report using ½ to 1 gram of heroin a day intravenously.
- 

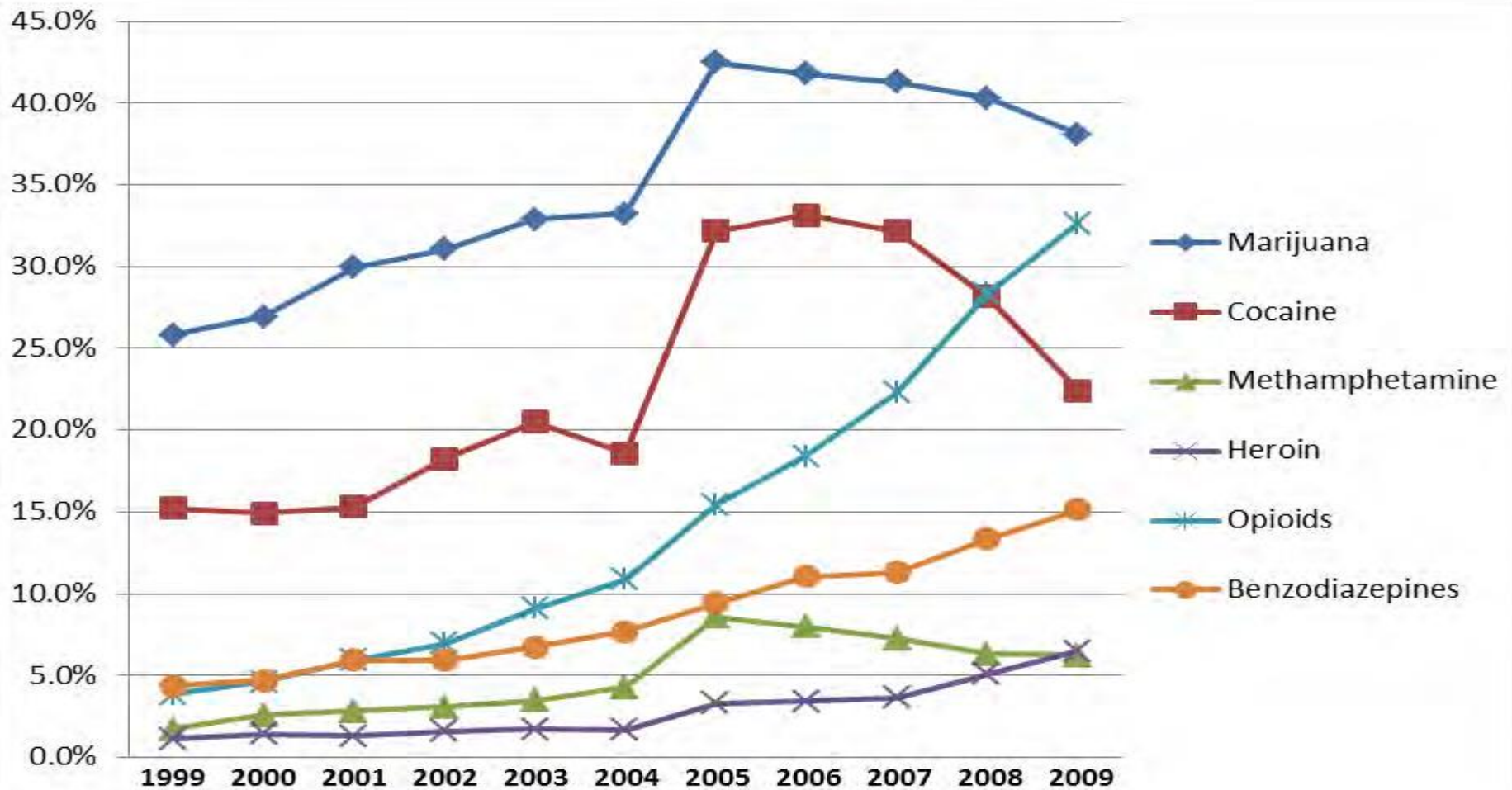
# KORTOS 2015 Annual Report

- ▶ Percentage of All Clients With a Completed Intake Survey Reporting Non-Prescribed Use of Prescription Opiates, Methadone, Buprenorphine, and Heroin in the 30 Days Before Entering Treatment at the MAT
- 





Kentucky trends in substance use reported at treatment intake between 1999–2009. Source: KORTOS (Kentucky Opiate Replacement Treatment Outcome Study).



# Opiates and Kentucky

- ▶ Per the report from the Kentucky Injury and Prevention Center entitled “Drug Overdose Deaths, Hospitalizations, and Emergency Department Visits in Kentucky, 2000 – 2012”:
- ▶ Heroin involvement in drug overdose related ED visits increased 197% from 266 ED visits in 2011 to 789 visits in 2012.
- ▶ Kentucky resident opioid-related disease condition hospitalization charges totaled \$167 million in
- ▶ 2012; Medicaid was billed for \$55 million.
- ▶ There were 824 Kentucky resident neonatal abstinence syndrome hospitalizations. Associated charges amounted to \$40 million; Medicaid was charged \$35 million.

# Opiates and Kentucky (continued)

- ▶ Of the 9,713 pharmaceutical opioid or heroin related hospitalizations in 2012, viral hepatitis was codiagnosed for 1,653 (17%) of them with associated charges of \$37 million.
- ▶ Pharmaceutical opioids remained the primary cause of Kentucky resident drug overdose deaths in 2012; pharmaceutical opioids accounted for 471 drug overdose deaths.
- ▶ Heroin contributed to 129 Kentucky resident drug overdose deaths in 2012, a 207% increase from the 42 heroin-involved deaths recorded in 2011.

▶ <http://www.mc.uky.edu/kiprc/PDF/Drug-Overdose-Report-released.pdf>

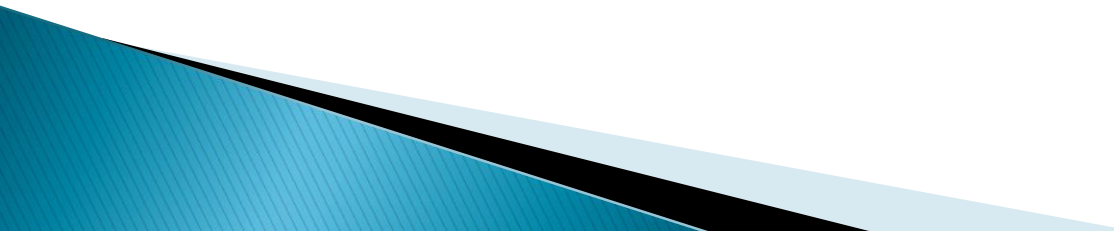
# Heroin and Kentucky

- ▶ 5 years ago, Heroin was on the rise in the state, with opioids edging them out.
- ▶ Now?
  - **Heroin is primary drug reported for 65% of patients in a medically assisted treatment program.**
- ▶ Why do you think individuals would start turning to Heroin instead of opiates?
  - To paraphrase: it's the economy, stupid! Money....
  - ...and a quicker high.

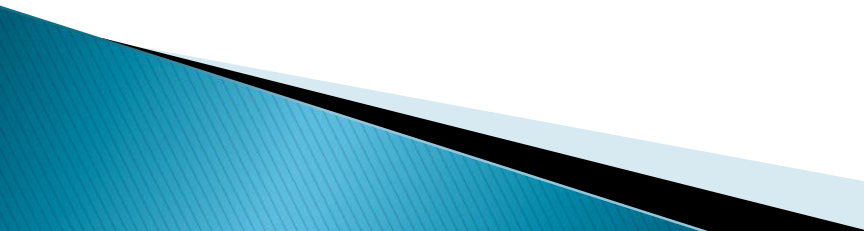
# Oxycontin to Opana to...

- ▶ Oxycontin used to be the go-to opiate for folks who progressed to daily use of opiates.
  - In August 2010, Oxycontin was reformulated so that you could not “tamper” with it and the high it once provided was dampened.
- ▶ Then came Opana or oxymorphone.
  - Pure morphine in an easy-to-use form.
  - By January 2011, we saw fewer Oxycontin users and more Opana users.
  - As of June 2012, Opana reformulated and no longer as easy to use...So, what’s coming next...?

# Everything old is new again...

- ▶ Heroin has been on the rise throughout most of the state and throughout most MAT facilities.
  - ▶ Those states that once had more RX abuse than IV Heroin are seeing a literal spike in abuse.
- 

# What's next? K is for Krokodil

- A new form of pain pill “cooked” like methamphetamines that causes severe tissue damage in its users and has an extremely short half-life.
- So named because repeated use of the drug can lead to having rapid skin damage that looks like scales from a lizard.
  - Base drug, desomorphine, is 8–10 times more powerful than morphine.
  - Mixed with gasoline, paint thinner, other adulterants to create this super-powerful Frankenstein’s monster hodgepodge of Heroin and Methamphetamine.
- 



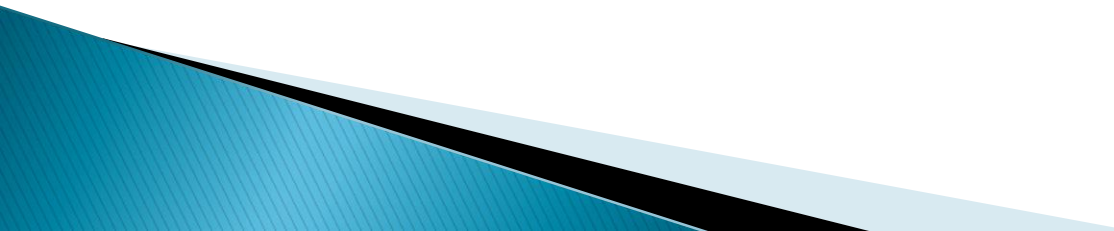
K is for Krokodil...(and these are the images I could show...)



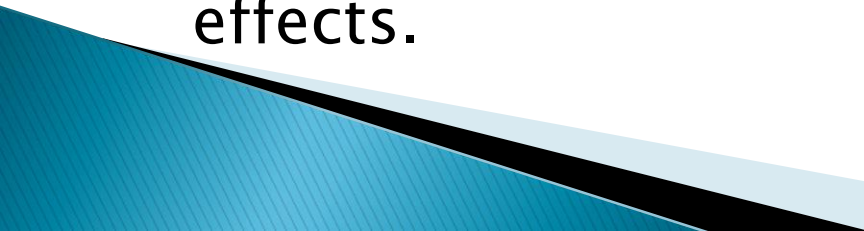
# Krokodil—Urban Legend?

- ▶ Now, the DEA has not confirmed any cases in the United States.
- ▶ Primarily Russia and the former Baltic states.

# We avoided the Krokodil, but the swamp is still dangerous!

- ▶ What has been reported and confirmed: fentanyl-laced Heroin and Black Tar Heroin.
  - ▶ Fentanyl: a powerful painkiller that is measured in MICROGRAMS. Most medications measured in MILLIGRAMS.
    - Incredibly powerful, when laced with Heroin causes almost instantaneous overdose and possible death.
    - Dangerous for those who have been using for years and those who just started—equal opportunity.
- 

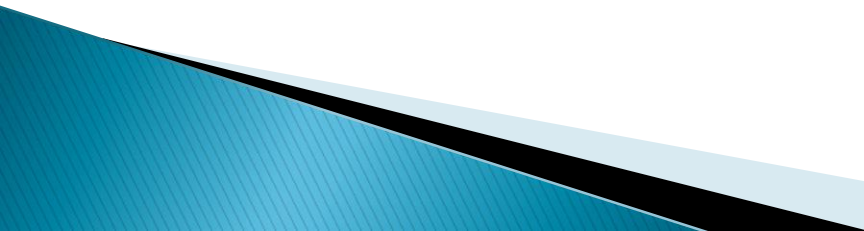
# Black Tar

- ▶ Incredibly potent synthetic, with varying degrees of Heroin in it.
  - ▶ What's more dangerous are the morphine derivatives. The morphine derivatives, when laced with Heroin, produce a potent and potentially deadly combination.
  - ▶ Primarily found in southwestern and western United States, and generally comes from Central and South American.
  - ▶ “Cheap” distillation process that provides a very rocky, ugly product with potentially deadly side effects.
- 

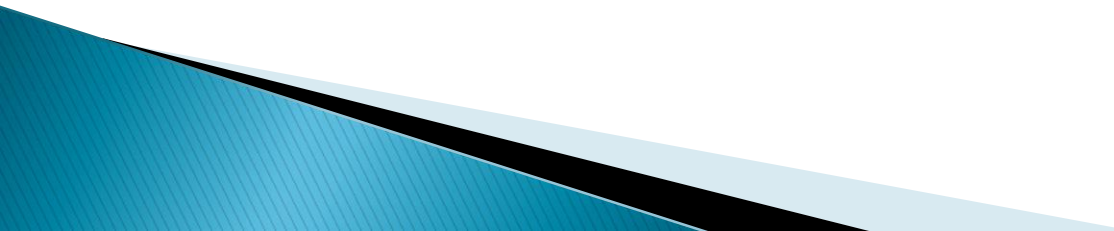
# Black Tar Heroin, courtesy of Wikipedia



# Opiate Addiction: Mechanics

1. What effect do opiates have on the brain?
  2. How do they differ from stimulants such as cocaine or amphetamines?
  3. How do they differ from depressives such as barbiturates or benzodiazepines?
  4. What are differences between heroin and opiates?
  5. What are some of the clinical implications of those effects and the differences of opiates to other drugs?
- 

# Opiates vs. Heroin

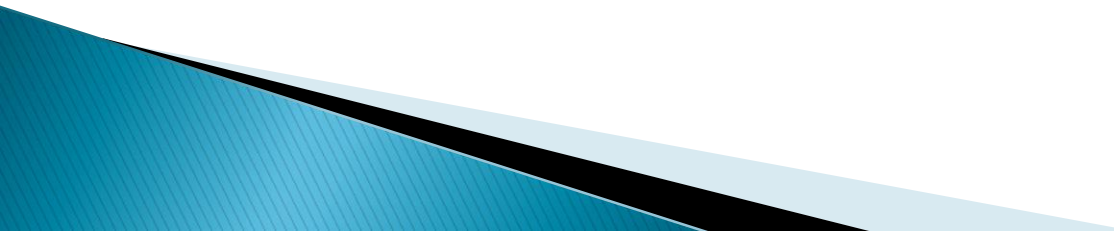
- ▶ Opiates—can give that super espresso bean buzz for users.
    - “I feel 15 feet tall and can shoot laser beams out of my eyes!”
  - ▶ Heroin—that “womb-like feeling”.
    - One patient describes it as “I just feel loved, man!”
  - ▶ Different implications for those looking to get high off opiates and heroin.
  - ▶ Implications for treating one or the other?
- 

# Opiates vs. Heroin (cont)

- ▶ Us vs. Them:
  - “I’m not as bad as they are—I just took some pills the doctor gave me and before I know it...”
  - “I’m a true junky, man, not like these kids who use a handful of pills...”
- ▶ Belief that Heroin use is the “real deal” versus pain pill abuse.
  - Those using pills are more likely to have difficulty identifying with their “peers”—especially heroin using peers.



# Opiates versus Heroin

- ▶ Higher criminal justice involvement with Heroin than Opiates.
    - Could “hide” from family, friends, co-workers, employers better.
    - Able to “function” at a seemingly normal rate.
  - ▶ More patients with more difficulties finding and maintaining work due to CJ involvement.
  - ▶ Additional health problems associated with Heroin use.
- 

# ...and not to mention...

- ▶ Higher rates of HIV, Hepatitis C, and/or endocarditis are associated with Heroin.
- ▶ Because Heroin is generally used via IV, the risk for sexually transmitted diseases or infections is significantly higher for Heroin users than users of opiates.
- ▶

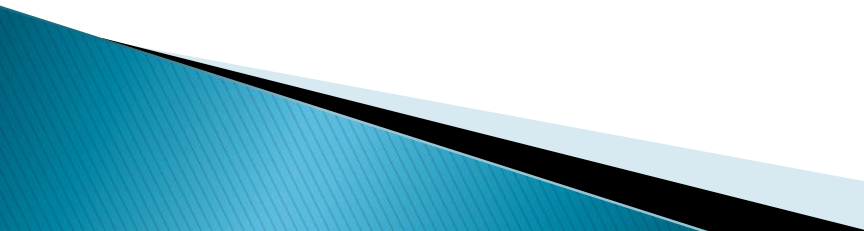
# Let's get to the Heart of the Matter...

- ▶ Even when individuals could shoot Oxycontin or Opana, the risk of endocarditis was lower.
  - Due to the risk of contaminants in Heroin, there is a higher risk of getting endocarditis via Heroin itself or the needles used.
  - Endocarditis, and more specifically, Infective Endocarditis, is caused by any type of bacteria that attacks the valves of your heart. Essentially, it infects and weakens those valves, potentially leading to heart disease, heart attacks, and cardiac problems.

# Opiate Addiction: Withdrawal

- ▶ What are withdrawals? How long will they last?
- ▶ Symptoms:
  - Nausea/Vomiting
  - Feeling as if bones are brittle and will break (Arthralgia/Myalgia)
  - Rhinorrhea/Lacrimation
  - Sweating
  - Dysphoric mood
  - Pupillary dilation
  - Piloerection
  - Yawning
  - Fever
  - Insomnia

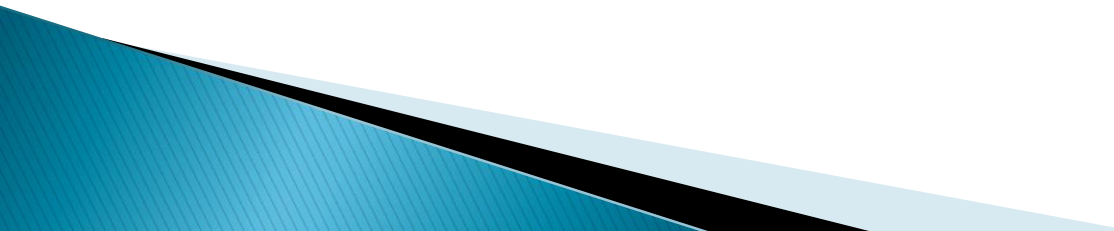
# Opiate Addiction: Withdrawals

- ▶ Those are the symptoms, but what are withdrawals, really?
  - ▶ Withdrawals are the physiological experiences associated with a substance detoxifying and leaving the body. In this case, an opiate.
  - ▶ For those dependent on opiates, this means the symptoms mentioned above increasing in frequency and intensity every 4 to 6 hours, depending on metabolism, use, and administration of the substance...
- 

# Opiate Addiction: Withdrawals

- Withdrawals can last for up to 2 weeks after discontinuing the substance.
- And, as an added bonus, because opiates effect the opiate receptors, opiate addicts experience Hyperalgesia:
  - A higher than usual amount of pain (have a lower pain threshold) and require more medication when have a true pain problem.

# Opiate Addiction: Withdrawals

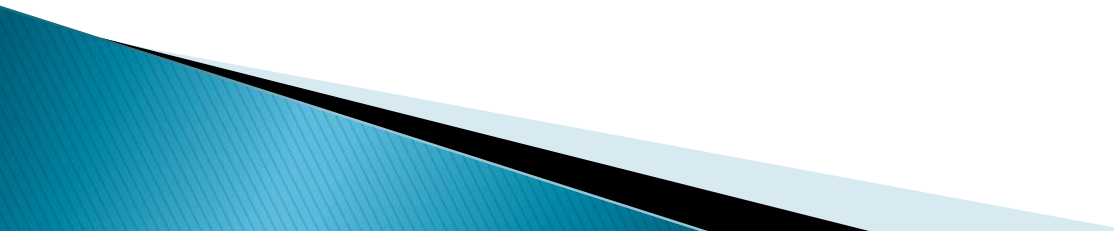
- ▶ And let's not forget about Post-Acute Withdrawal Symptoms.
  - ▶ Like any other substance, PAWS can last for six months or longer.
  - ▶ PAWS can include anxiety, depression, feelings of despair and worthlessness that can influence relapse.
- 

# Opiate addiction: Treatment

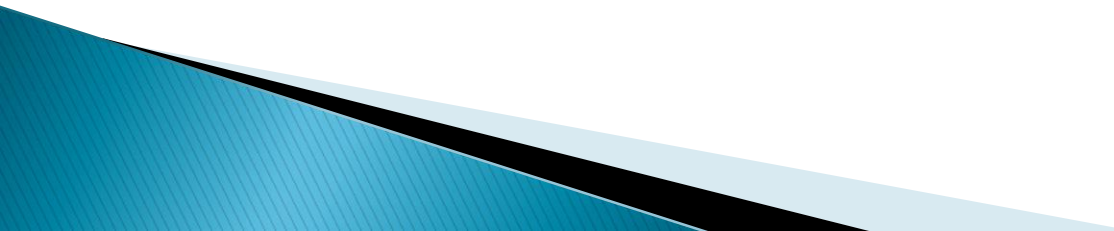
- ▶ What are the different options available for patients seeking treatment?
  - On your own
  - 12-step mutual support
  - Counseling (outpatient, once a week)
  - Peer-based recovery dynamics
  - Intensive Outpatient (several times a week)
  - Inpatient detoxification
  - Residential
- ▶ Where does Medically assisted treatment go?



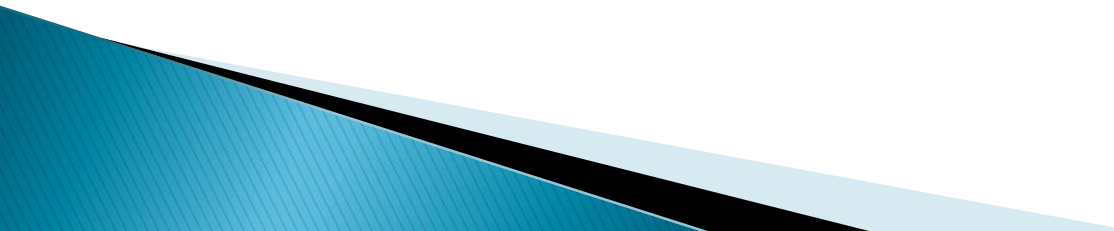
# Medically Assisted Treatment and Methadone

- ▶ What is Methadone?
  - ▶ What are the regulations in Kentucky regarding Methadone?
  - ▶ What are some of the clinical challenges regarding Methadone?
- 

# Methadone

- ▶ Synthetic narcotic with a long half-life
  - ▶ Active ingredient is methadone hydrochloride
  - ▶ Dosed as a liquid to reduce diversion—Kentucky regulation as well.
  - ▶ Full agonist that occupies and activates receptors creating a blocking effect from withdrawal. Also, methadone blocks the ability to feel the narcotic high of illicit opiates.
- 

# Got Methadone?

- ▶ History: Methadone was created as a pain killer, but was found to have an extraordinary half-life.
  - ▶ 24–36 hours versus 4–6 hours. (12 for Oxycontin, maybe 4–8 for Opana)
  - ▶ Creates a “blocking effect” for individuals who are detoxing off of opiates.
- 

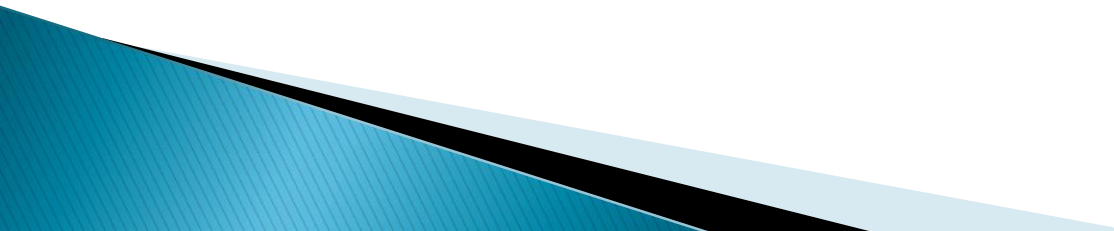
# “Blocking Effect”

- ▶ Methadone has a two-pronged defense against opiate addiction:
  1. Methadone connects with the body’s opiate receptors to make them feel as if those receptors are effectively quelled.
    - Remember our discussion of symptoms on the body?
    - Methadone calms and prevents those symptoms.

# “Blocking Effect”

2. Methadone blocks the symptoms of illicit opiates on the body, preventing someone who opts to use opiates while on methadone from experiencing the narcotic, euphoric high from those illicit drugs.

# Wait, you mean it...

- ▶ Is not methamphetamine (I do not work at a “Meth Lab”)
  - ▶ Does not cause euphoria if taken as administered.
  - ▶ Is not a reason someone cannot function at work, school, or taking care of children.
- 

# Medically Assisted Treatment

- ▶ Entering a MAT program for methadone means that Hank who spikes Heroin will:
  - Be seen by a psychiatrist or board-certified ASAM physician.
  - Attend weekly counseling, daily dosing, provide weekly observed and random drug screens.
  - Have to pay anywhere from \$77–110/week for his treatment.

# Medically Assisted Treatment


- ▶ How long will Hank have to follow all of the above rules (dosing, screening, counseling)?
  - For 90 days. After 90 days with NO infractions, one TH.
  - 2 TH's after 6 months (Zero infractions)
  - 4 TH's after 9 months (Zero infractions)
  - After 6 months (Zero Infractions), Hank only have to attend monthly counseling and provide monthly UDS.



# Medically Assisted Treatment

- Unless Hank has an infraction...
- What, do you think, is an infraction?
  - Positive drug screen
  - Missed counseling session
  - Missed dosing
- Depending on the program, one of these is sufficient to set someone back to the beginning.

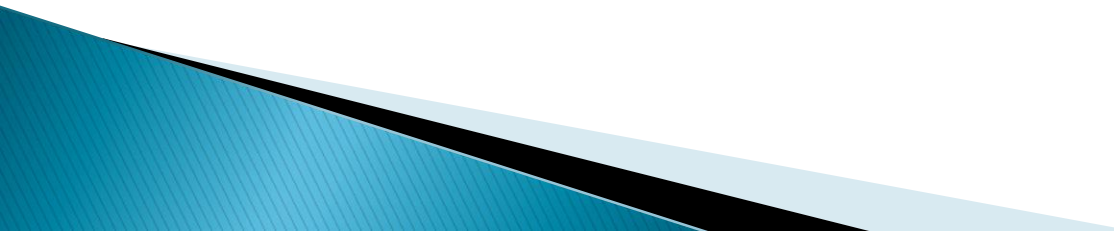
# Medically Assisted Treatment Facilities

- ▶ Are licensed by the State:
    1. Office of the Inspector General
    2. Division of Behavioral Health
  - ▶ Are licensed by the Drug Enforcement Agency
  - ▶ Have to conform to Center for Substance Abuse Treatment rules and regulations
  - ▶ Are accredited by CARF, JCAHO, COA
  - ▶ OIG, DBH, CSAT, and the DEA do random, unannounced surveys on at least an annual basis to MAT programs.
- 

# State of Kentucky Regulations

- ▶ Hank's counselor will only have 39 other patients (40 to 1 ratio).
- ▶ Hank's counselor will have to have a Bachelor's Degree minimum.
  - And she (most likely she) will be working on CADC or other licensure.
- ▶ Hank's MAT will have a Clinical Supervisor who is certified (CADC) or licensed (LMFT, LCSW, etc).
- ▶ Hank's doctor will have 299 other patients, at a maximum.

# Measures of Success—SAMSHA TIP 43

- ▶ MAT patients nationwide are more likely to:
    - Return to work and maintain employment once treatment starts.
    - Decrease criminal justice involvement if not cease altogether.
    - Engage with a medical professional consistently.
    - Prevent transmission of or contracting HIV, Hepatitis C, or other STDs.
    - Not to mention the most important: a decrease in opiate use as well as a decrease in other drug use.
- 

# Measures of Success

- ▶ From KORTOS 2015 follow-up study:
  - After MAT involvement, **87%** were abstinent if the primary drug they abused was opiates.
  - **82%** were abstinent if the drug they primarily abused was heroin.
  - Individuals in MAT programs stopped abusing illicit buprenorphine (90%) and methadone (95%).
  - Those in MAT increased abstinence on illicit drugs by statistically significant measures.
  - **79%** of patients in MAT in KY stopped ALL ILLICIT substance abuse.

# Measures of Success continued

- ▶ What about other indicators?
  - At intake, 60% of clients reported trouble making “ends meet” financially. Within 6 months, only 25% reported the same.
  - MAT patients decrease their criminal justice involvement by 45%.
  - Mental Health problems decreased after becoming involved with MAT (82% depression, 79% anxiety).
  - There was a 74% increase in Quality of Life report by patients within 6 months.

# Measures of Success

For example:

- At one MAT treatment facility, **50%** of patients are employed before entering treatment.
- By the time of six-month follow-ups, approximately **70%** are employed.
- Criminal justice involvement is reduced as well:
  - Patients average **3** arrests per lifetime prior to treatment.
  - Within 6 months, **.1** percent of patients are arrested while in treatment.

# Measures of Success

- Health care
  - 12 months prior to starting treatment, patients reported a combined use of health care facilities such as ER's, inpatient hospital stays, mental health, or drug treatment facilities of:
    - 1400 visits, or nearly 5 visits per patient.
  - After coming into treatment, the number of visits is reduced to:
    - 160 within 6 months. Or, roughly, 0.2 per patient.
  - Why might someone addicted to pain pills use the ER more frequently?



# Kentucky Statistics

- ▶ Per the Kentucky Opiate Replacement Treatment Outcome Study begun in 2007:
  - The average age of clients in treatment in Kentucky is:  
32
  - Average dose level:  
77

Any questions so far?




# Methadone Maintenance

- ▶ The effects of opiates and heroin on the brain of those addicted varies depending on:
  - Years of use
  - Frequency of use
  - Route of use
  - Amount used
  - Metabolism
  - Other health factors—Hepatitis C, HIV, diabetes, etc.

# Methadone Maintenance

- ▶ So, depending on those factors, some individuals may have damaged their receptors to the extent that they cannot function without some type of outside opiate on their receptors.
- ▶ Generally, long-term maintenance is required. These individuals might include:
  - Long-term users of opiates (daily use for 5 years or longer)
  - Individuals who use an excessive amount of opiates (10 bags of heroin a day, 3–5 Oxycontin daily, 2–3 Opanas daily)
  - Individuals who use IV and have done so frequently for a long period of time.
  - Ultimately, dependent on how the patient does at attempting to detoxify successfully.

# METHADONE & PREGNANT PATIENTS

- ▶ Per SAMSHA, methadone is the “gold standard” for opiate-addicted pregnant patients.
  - ▶ Every 4–6 hours, someone on opiates goes through withdrawal. If a woman is pregnant and goes through withdrawal, what happens to the fetus?
  - ▶ Methadone prevents a woman from going into active withdrawal, thereby maintaining her and protecting the fetus.
  - ▶ 40–90% of children born from women on a program are positive for methadone and need to be withdrawn using medically assisted techniques.
- 

# METHADONE & PREGNANT PATIENTS (CONTINUED)

- ▶ Of those born positive, there are no long-term developmental or otherwise impacts at each milestone: 6 weeks, 3 months, 6 months, 1 year, etc.
- ▶ The reason why child is or is not born positive is unknown. Mother's dose level, years of use, time on the program, metabolism all should but do not play a role.
- ▶ NAS does not mean children are “addicted” to methadone!
  - Remember our slides on addiction versus dependence?

# METHADONE & PREGNANT PATIENTS

- ▶ May require dose increase due to changes in metabolism
- ▶ May require split dosing due to changes in metabolism

# METHADONE & PREGNANT PATIENTS

- ▶ **Per the American Pediatrics Association:  
A negligible amount of methadone is transmitted in breast milk, so methadone does not discount someone from nursing**
  - Lauren M. Jansson, MD, Robin Choo, PhD, Martha L. Velez, MD, Cheryl Harrow, RNC, MS, CRNP, IBCLC, RLC, Jennifer R. Schroeder, PhD, Diaa M. Shakleya, PhD and Marilyn A. Huestis, PhD (Decmeber, 2007)

# METHADONE & PREGNANT PATIENTS

**Excerpt from National Advocates for Pregnant Women FAQ page:**

*Are women who use methadone in pregnancy “abusing” their fetuses?*

- ▶ *No, in fact, MMT for pregnant women protects their fetuses from the harmful effects of opioid withdrawal and/or resumption of illicit drug use. For women who are addicted to heroin or other opiates, MMT is the most thoroughly researched option to improve their health and birth outcomes.x*
- ▶ *Methadone does not harm the developing fetus, but maternal withdrawal and detox may create significant risks of harm.*
- ▶ *Methadone does not cause birth defects or other long-term health problems.*
- ▶ *Babies born to mothers on methadone do as well as other babies and much better than babies born to mothers using heroin.*



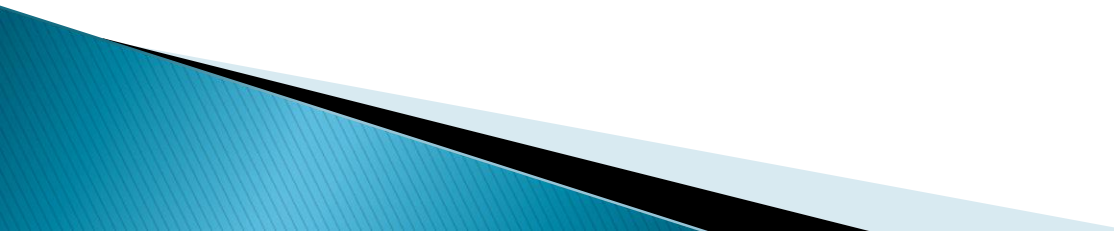
# METHADONE & PREGNANT PATIENTS

- ▶ **“Methadone maintenance treatment can help you stop using drugs. It is safe for the baby, keeps you free of withdrawal, and gives you a chance to take care of yourself.”**
- ▶ “Methadone Treatment for Pregnant Women,”US Department of Health and Human Services

# Potential Side Effects of Methadone

- ▶ The most frequently observed adverse effects include: Lightheadedness, dizziness, sedation, nausea, vomiting, sweating, ankle edema (swelling), and skin rash.
- ▶ Other adverse reactions may include the following: Dysphoria (restlessness, malaise), weakness, headache, insomnia, agitation, disorientation, weight gain, visual disturbances, constipation and dry mouth. Flushing of the face, low heart rate, faintness and syncope (fainting, loss of strength), urinary retention, change in sexual drive, or irregular menses, joint pain and swelling and numbness are also some possible side effects.

# Potential Side Effects of Methadone

- ▶ Generally, side effects should go away 7–10 days after beginning induction.
  - ▶ Most patients are at a stable dose within 45 days after beginning induction.
- 

# Methadone Quotes

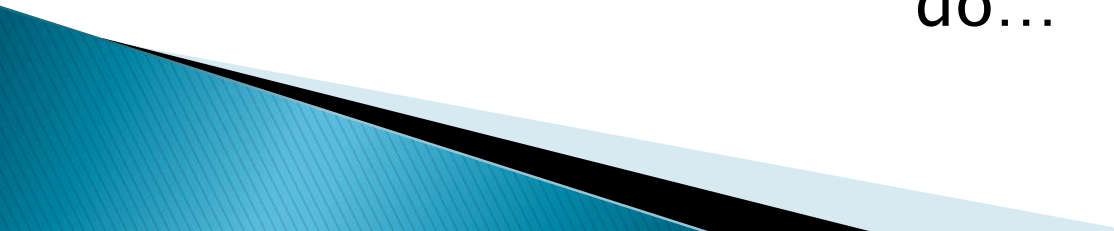
“It saved my life. I was heading for the gutter before I came to see you guys.”

“I wish I had come here sooner.”

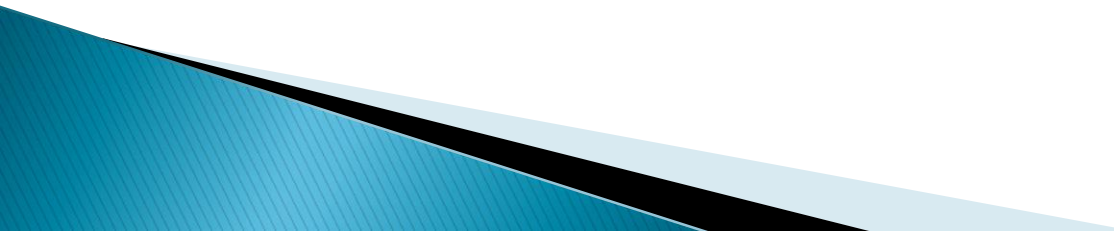
“My [Significant Other] was gonna leave me and I was gonna lose my job.”

“Nobody believed me that I felt pain when I couldn’t use.”

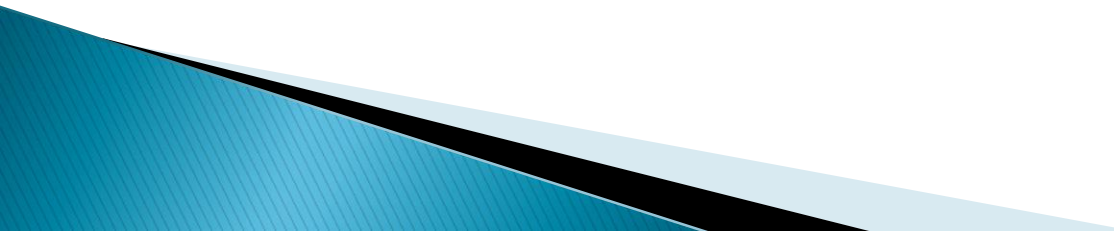
“I never thought I would get addicted, until my doctor cut me off...then I didn’t know what to do...”



# Buprenorphine

- ▶ There is a fourth option to detoxifying off of methadone, and that includes transitioning to Buprenorphine. Will come back to this.
  - ▶ But, hey, what is Buprenorphine?
- 

# Medically Assisted Treatment and Buprenorphine

- ▶ What is Buprenorphine?
  - ▶ What are the regulations in Kentucky regarding Buprenorphine?
  - ▶ What are some of the clinical challenges regarding Buprenorphine?
- 

# Buprenorphine

- ▶ Comes in two basic “flavors”
- ▶ Partial Opioid Agonist: binds to and activates the receptors.
  - Example: buprenorphine or Mono Therapy. (Originally patented as Subutex, currently now all generic)
- ▶ Opioid Antagonists: bind to but don't activate the receptor. Block the receptors from activation by full and partial agonists.
  - Buprenorphine with Naloxone (antagonist) or Combo Therapy. (Originally patented as Suboxone)
- ▶ Buprenorphine will cause active withdrawal when a new patient is inducting (initial dose) if they have opiates covering their receptors.
- ▶ Buprenorphine will block the effects of illicit substances while holding back withdrawals and will not activate the receptors.

# Buprenorphine

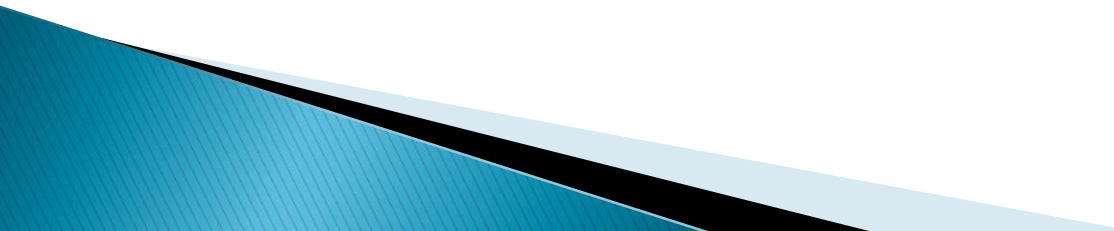
## Cons:

1. More expensive than Methadone.
2. Not approved for pregnant patients—although AMA has come out with approved guidelines, there is some concern about the studies used to validate Buprenorphine Combo or Mono Therapy with pregnant patients.
3. “Ceiling effect”: an upper limit of dosing effects.



# Buprenorphine

## Cons, continued:

3. Because of lower dose, not effective for long-term users of opiates or heroin or those with a high amount of use.
  4. Can throw into active withdrawal if use an opiate prior to titrating.
  5. Withdrawal also occurs if inject the combo therapy because the naloxone will be activated at that point.
- 

# Possible Side Effects from Buprenorphine

- ▶ Headache, pain, problems sleeping, nausea, sweating, stomach pain, constipation.
  - These side effects generally may come on and last for a few days to a week, then go away.
  - Most common seen professionally—Headache.
- ▶ Can cause liver problems.
  - Symptoms include if skin or white part of eyes turn yellow, urine turns dark, bowel movements turn light in color, lack of desire to eat, consistent nausea, and stomach pain.
  - Most of these symptoms are rare, but to be attended to if arise.

# Buprenorphine Quotes from Patients

“I feel like I did before I started using pain pills.”

“I feel balanced.”

“I feel normal.”



# Buprenorphine Regulations

- ▶ What are regulations?
  - If run out of a MAT center such as mine, have to follow the KY state regulations for MAT.
  - If provide prescriptions for patients, can go per doctor's orders and specifications.
- ▶ Who can RX?
  - A Medical Doctor who has completed 8 hours of training and has a working DEA number.
  - Doctor must complete the 8 hours, get an "X" number assigned to them.
    - Doctor can then prescribe up to 30 patients for 1 year.
    - After 1 year, can prescribe up to 100 patients.
  - If under the MAT regulations and not RX, can have as many patients as will walk in. As long as you follow the MAT regs we talked about earlier.

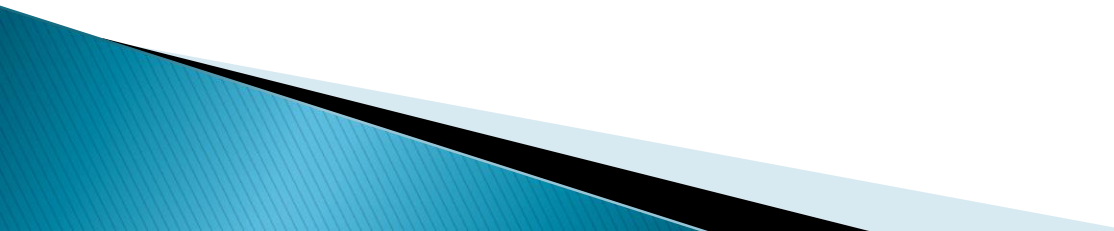
# Buprenorphine Treatment

- ▶ To Maximize Success and Achieve Goals:
  - Work with a trained or licensed substance abuse professional;
  - Attend 12-step or support groups on a regular basis;
  - Work with a psychiatrist or trained addictionologist who can prescribe.

# Goals of MAT

- ▶ Whether Methadone or buprenorphine the goals of MAT are, quite simply:
  - What are the goals of the patient in front of you?
  - What do they want to achieve?
  - How can they go about doing that and how can we help them in that process.

# Goals of MAT

- ▶ We do not set the goals for our patients. Our patients set their own goals and follow them.
  - ▶ Now, having said that, if a patient opted to discontinue treatment on any of the Medically Assisted Treatment interventions offered, there are several different options they have.
  - ▶ Our job as part of their recovery team is to discuss the pros and cons of each option.
- 

# Methadone Detoxification

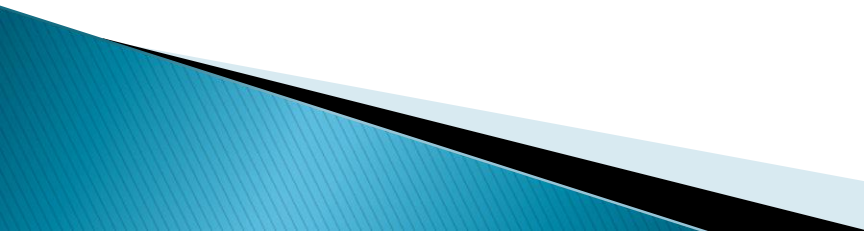
1. “Cold turkey”: Dose on a Monday, stop immediately afterward.
  - Pros: discontinue payment of fees.
  - Cons: will be fine the first day and possibly into the second. By the third, all the withdrawals kept at bay by methadone will come crashing down on patient.



# Methadone Detoxification

- Suggestion: get back into treatment or go inpatient for successful detoxification.
- Likelihood of success: minimal. If can go two weeks post-dosing, might be successful. However, if discontinue immediately may not be prepared to handle triggers, may not have a positive recovery environment, and may forget the AA adage:
  - one's too many, 100's never enough.
- Likelihood of return: high.

# Methadone Detoxification

2. Quick taper—discontinue by 1–5 mgs a day for X number of days to “get out” of clinic.
    - Pros: are coming down steadily, so will know when begin to have difficulty or experience withdrawals.
    - Cons:
      - Once do experience withdrawals, may ignore and continue. Withdrawals will intensify, generally after approximately  $\frac{1}{2}$  of stable dose and/or around 30 mgs.
      - And, again, after last initial dose, will be fine the first day and possibly into the second. By the third, all the withdrawals kept at bay by methadone will come crashing down on patient.
      - Generally, when attempt this will go back up and sometimes even further than last stable dose.
- 

# Methadone Detoxification

- Suggestion: Follow up with 12-step, counseling, or other support group (Church, peers, something). If start experiencing withdrawals, slow down, hold, restart when re-stabilize. Body can readjust at lower level given time and patience.
- Likelihood of success: medium. Depending on patient's damage to receptors while abusing. If patient has made the changes to their recovery environment so they are supported, if they have identified their triggers, if they have worked to create new coping skills, and if they have a positive relapse prevention plan in place, then might be successful. Again, once they discontinue dosing, if can go two weeks post-dosing, might be successful. The longer they stay at the lower numbers (30-20, 20-10, 10-0), the more likely they will be successful.
- Likelihood of return: medium.

# Methadone Detoxification

3. Slow taper: Reduce dose by 1 mg a week, 2 mgs a month, 1 mg a month, etc with “plateaus” put in to stop at 5, 10, 20 mg increments.
  - Pros:
    - Are coming down steadily but slowly and carefully.
    - Have breaks built in so that can give body time to adjust from change of dose.
    - Allow yourself to “catch up” and stabilize before re-starting.
    - If have to go back up on dose, generally will not go back up as far as prior dose.
  - Cons: Unfortunately, dependent on damage done to receptors. Can take an extremely long time, up to 2–3 years if take it as slowly as can.

# Methadone Detoxification

- Suggestions to maximize success: Follow up with 12-step, counseling, or other support group (Church, peers, something). If start experiencing withdrawals, slow down, hold, restart when re-stabilize. Body can readjust at lower level given time and patience.
- Likelihood of success: high. Depending on patient's damage to receptors while abusing. If patient has made the changes to their recovery environment so they are supported, if they have identified their triggers, if they have worked to create new coping skills, and if they have a positive relapse prevention plan in place, then might be successful. Again, once they discontinue dosing, if can go two weeks post-dosing, might be successful. The longer they stay at the lower numbers (30-20, 20-10, 10-0), the more likely they will be successful.
- Likelihood of return: low.

# Buprenorphine Detoxification

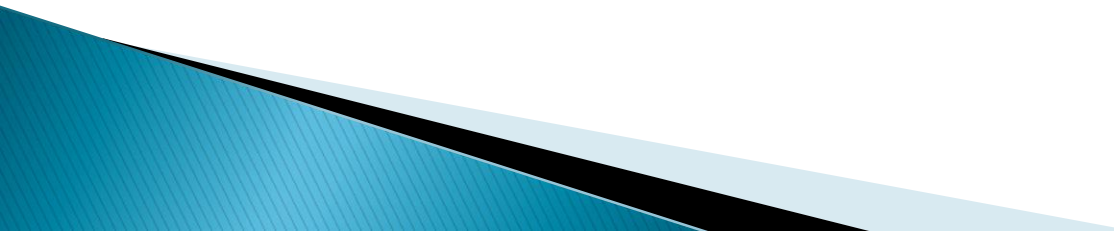
- ▶ The “fourth” option for detoxifying off of methadone.
  - Taper down to 30 mgs.
    - Could do so by any of the methods mentioned.
    - Best results if stable at 30 mgs, so better if did not do one of the quicker techniques for detoxification.
  - Need to be 2 days in active withdrawal.  
Buprenorphine will/could cause active withdrawal if induced sooner.
  - Beginning at 4 mgs, wait an hour, dose 2<sup>nd</sup> 4 mgs depending on how patient is feeling.

# Harm Reduction and Medically Assisted Treatment

- ▶ What clinical styles do you all use in your treatment of your populations?
- ▶ When I say “Harm Reduction” what does that mean to you?

# Harm Reduction

## ▶ Basic tenet:

- By engaging in treatment with our patients, we are decreasing the likelihood of them using illicit drugs, decreasing the likelihood of them engaging in illegal activity or risky behavior, and increasing the likelihood of them making positive and healthy decisions.
  - We see them come in on a daily basis, we test them weekly for at least 6 months, and we engage them in weekly counseling.
  - Individuals will reduce their illicit or unhealthy behavior over time if given the choices and education to do so. By respecting who they are as people in a non-judgmental, respectful manner, we can provide them the opportunity to make better, healthier decisions.
- 



# Harm Reduction

- ▶ External Locus of Control:
  - Harry's Probation officer tells him to get in a program, to stop using Heroin, or go to jail until he dies.
  - CPS worker informs Sally she needs to stop using THC or her children will go into the foster care system—and probably not come out.
  - Hank's current significant other threatens to leave him if he “doesn't get your act together” and stop his relapse.

# Harm Reduction

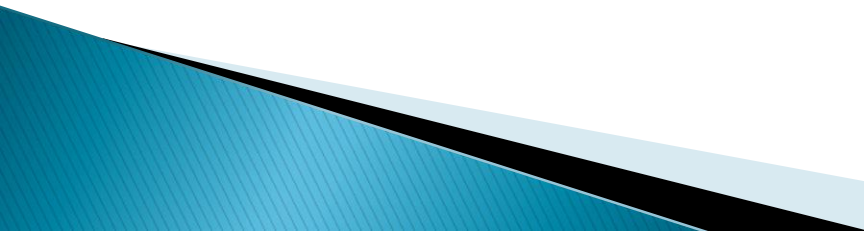
- How successful will Hank, Sally, and Harry be with these external threats to their livelihood?
- What happens when those external constraints are lifted?

# Harm Reduction

## ▶ Internal Locus of Control

- You decide that you want to quit smoking cigarettes because of that nasty cough each morning.
- You realize that drinking 5 cups of coffee a day may have an impact on your blood pressure.
- You wake up, don't have any pills, and go into withdrawal. You realize you've spent your inheritance, lost your job, and your SO left you the other day when you were too "out of it" to talk to them about how you felt. Your dog left you, you lost your truck, and your house is in foreclosure. You are a country music song.

# Internal Versus External

- ▶ Which will lead to on-going change?
  - ▶ Which will lead to on-going sobriety?
  - ▶ Following external constraints is good for you RIGHT NOW. Following internal constraints has the potential to be good for you for the REST OF YOUR LIFE.
  - ▶ External constraints can help one get into treatment and potentially kickstart the process of discontinuing from illicit substances. But, unless those external constraints become internalized, the likelihood of relapse is high.
- 

# Examples of Harm Reduction Treatment

- ▶ What are examples of Harm Reduction:
  - Needle exchange programs
  - Free condoms
  - Free birth control
  - “DanceSafe (anti-X-tacy programs)
  - Smoking cessation programs offered by Health Department
  - Chantix, Wellbutrin, the Patch, Nicorette.
  - Health classes for diabetics

# Type of Harm Reduction Treatment

- ▶ Solution Focused
- ▶ Motivational Interviewing
- ▶ Brief Intervention
- ▶ What do these have in common?
  - The individual patient's right to choose their course of treatment, their goals, and, essentially, how they will live their lives.

# A More Timely Harm Reduction Tool:

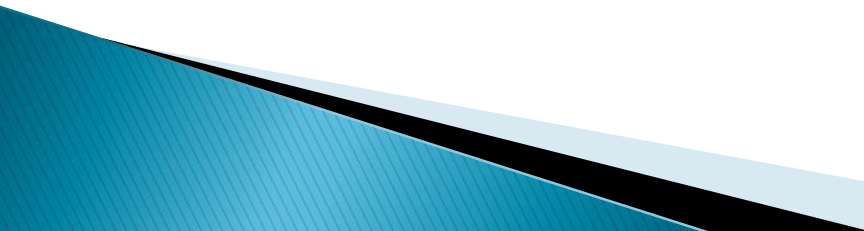
- ▶ From The Overdose Toolkit from SAMSHA (2014):
- ▶ **“Ensure ready access to naloxone. Opioid overdose–related deaths can be prevented when naloxone is administered in a timely manner. As a narcotic antagonist, naloxone displaces opiates from receptor sites in the brain and reverses respiratory depression that usually is the cause of overdose deaths. During the period of time when an overdose can become fatal, respiratory depression can be reversed by giving the individual naloxone .”**

# Opiate Overdose Toolkit

- ▶ In Northern Kentucky through their Heroin Task Force, there are doctors who will prescribe the toolkit and are distributing.
- ▶ Currently, not in practice throughout Kentucky.
- ▶ For more information, see SAMSHA's website ([www.samsha.gov](http://www.samsha.gov)).



# So, Where Do We Go From Here?

- ▶ The future of MAT:
    1. Vivitrol
    2. Generic form of Buprenorphine
    3. Increase in training and treatment of Mental Health Disorders (particularly PTSD)
    4. Inpatient providers who will assist in induction and stabilization of patients pre-outpatient MAT (Hey, I can hope, can't I?)
    5. Insurance reimbursement for mental health and substance abuse issues.
      - Right now, how much does Kentucky Passport or Medicaid pay for in terms of Methadone? Buprenorphine?
- 

# ...and don't forget...

6. Inpatient providers who will assist in induction and stabilization of patients pre-outpatient MAT (Hey, I can hope, can't I?)
7. Insurance reimbursement for mental health and substance abuse issues.
  - Right now, how much does Kentucky Passport or Medicaid pay for in terms of Methadone? Buprenorphine?

# Summary

- ▶ So....is MAT:

  - “Exchanging one drug for another”

    - “Legal drug dealing”

    - “Enabling drug users”

    - “Liquid handcuffs”

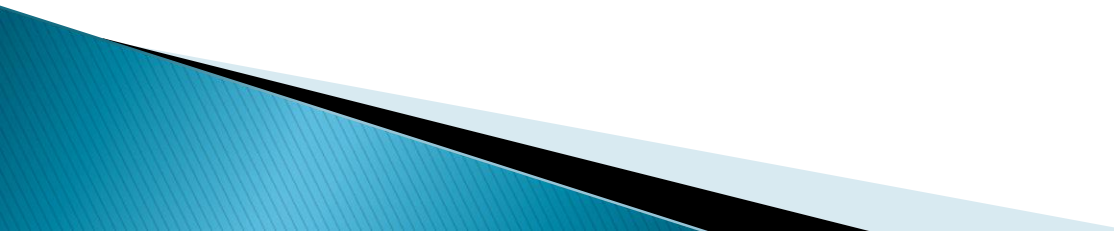
OR

    - “A viable treatment alternative.”

    - “A necessary tool in the war on drugs.”

    - “A life saver.”

# And don't forget...

- ▶ Our job is to provide education to the patients, clients, people served who comes to us.
  - ▶ Even if it is an option we do not personally agree with and especially when it is one that can have a dramatic, possibly life-saving impact on the people we work with, need to take our personal opinions out of the equation.
- 

**Questions / Final Thoughts?**

