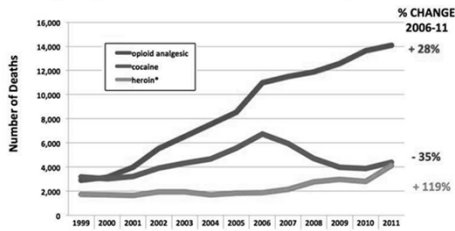


The opiate crisis

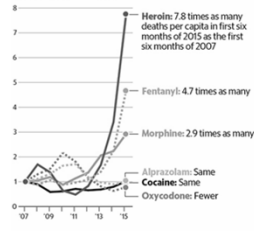
Unintentional Drug Poisoning Deaths Involving Opioid Analgesics, Cocaine and Heroin: United States, 1999–2011



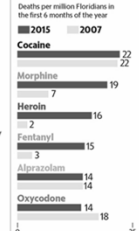
Heroin deaths surge in Florida

Deaths caused by heroin and fentanyl (a potent, synthetic alternative) have skyrocketed in Florida. During the first six months of 2015 — the latest data available — there were roughly six times as many deaths per capita as there were during same period in 2007.

Deaths per capita during first six months of the year compared to same period in 2007



Floridians are now more likely to be killed by opioids like morphine, heroin and fentanyl than oxycodone or the state's lead benzodiazepine killer, alprazolam (generic: Xanax).



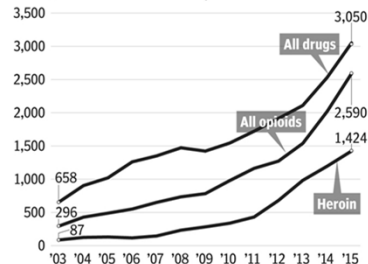
Note: Heroin is rapidly metabolized to morphine, which may lead to a slight over-reporting of morphine deaths.

Source: Florida Department of Law Enforcement Medical Examiners Commission

KARA DAPENA kldapena@msmherald.com

Overdose deaths in Ohio

Overdose deaths caused by opioids, and specifically heroin, have risen dramatically since 2003.

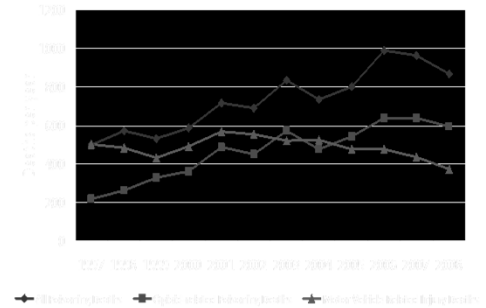


*Individual drugs do not add up to the total deaths because more than one drug was listed for the cause of death in some cases.

Source: Ohio Department of Health

GATEHOUSE MEDIA

Poisoning Deaths vs. Motor Vehicle-Related Injury Deaths, MA Residents (1997-2008)

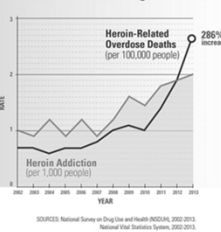


The source of the data is: Registry of Vital Records and Statistics, MA Department of Public Health

Heroin Use Has INCREASED Among Most Demographic Groups

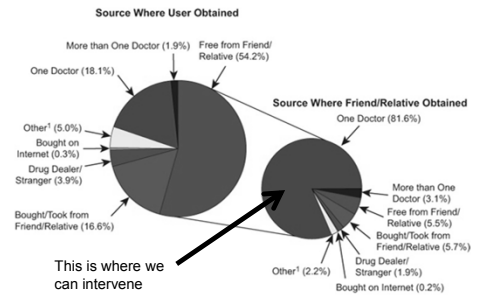
	2002-2004*	2011-2013*	% CHANGE
SEX			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
AGE, YEARS			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
RACE/ETHNICITY			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
ANNUAL HOUSEHOLD INCOME			
Less than \$20,000	3.4	5.5	62%
\$20,000-\$49,999	1.3	2.3	77%
\$50,000 or more	1	1.6	60%
HEALTH INSURANCE COVERAGE			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

Heroin Addiction and Overdose Deaths are Climbing

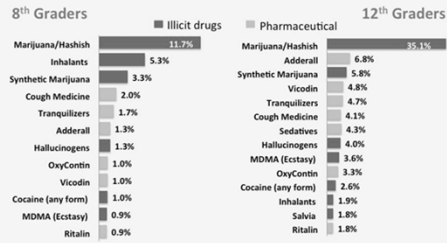


Source: 2013 National Survey on Drug Use and Health (NSDUH), 2002-2013; National Vital Statistics System, 2002-2013

Where do patients get their opiates?

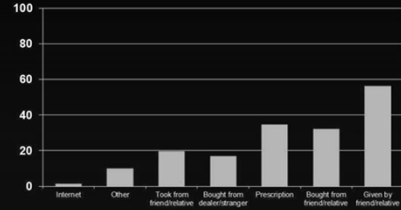


Top Drugs among 8th and 12th Graders, Past Year Use



* Only 12th graders surveyed about sedatives use
Source: University of Michigan, 2014 Monitoring the Future Study

Source of Prescription Narcotics Among Those Who Used in the Past Year, 12th Grade*



*Categories not mutually exclusive

SOURCE: University of Michigan, 2015 Monitoring the Future Study

NIDA (1999). High School and Youth Trends. Retrieved November 1, 2016, from <https://www.drugabuse.gov/publications/drugfacts/high-school-youth-trends>

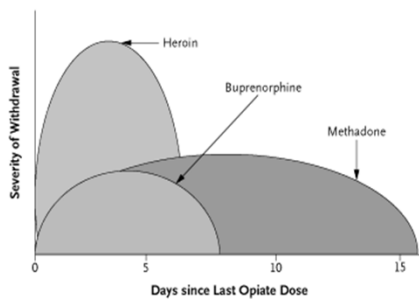
Who needs to be tapered or discontinued from opioids?

- Patients not improving with opioid treatment – inadequate analgesia
- Side effects or medical complications
- Chronic pain patients who need surgery
- Patients on high doses of opioids (>90MME/day)
- Patients you are concerned about opioid abuse or diversion

Determinants of Withdrawal Risk

- Exposure to steady state level of medication
 - Neuro-adaptation to opioids
- Higher intensity withdrawal from:
 - Higher steady state levels
 - Longer term exposure
 - Faster rate of medication clearance
 - Long vs. short half life agents

Opioid Withdrawal Timing/Intensity



Kosten and O'Connor, 2003

Clinical Opioid Withdrawal Scale (COWS)

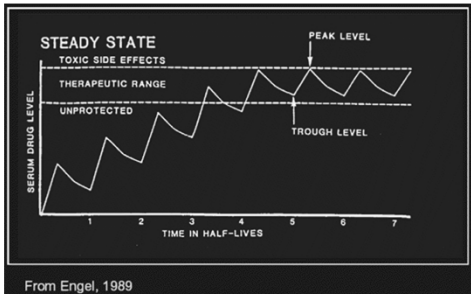


5-12 Mild
13-24 Moderate
25-36 Moderately severe
≥ 36 Severe

- Pulse rate
- Sweating
- Restlessness
- Pupil Size
- Bone/joint aches
- Runny nose/tearing
- GI upset
- Tremor
- Yawning
- Anxiety/irritability
- Gooseflesh

Wesson DR, Ling W 2003

Who needs “detox”?



Tapering long-acting opioids

- Consider tapering long acting first
- Decrease by 10-20% each week
 - Long acting pill formulations dictate increments of dose decrease that are possible
 - Rate of decrease determined by circumstances of withdrawal: Emergency vs. controlled taper
- Allow supply of short acting medications to treat “breakthrough” symptoms
 - Build up alternative pain treatment modalities
 - Comfort medications
- Rotate patients on fentanyl to a different long-acting opioid

Tapering short-acting opioids

- Decide if you need a taper at all (is there physiological dependence?)
- Decrease strength of tablets each week
- Decrease by a specific number of tablets each week
- Consider substitution with long acting medication, then taper???
 - Very difficult to do as an outpatient
 - Possibly more difficult to taper
 - Build up alternative pain treatment modalities
 - Comfort medications
 - If this is needed, maybe addiction treatment better?

Manage patient expectations

- Ask the patient about prior experience tapering down or off opiates?
- Have they tried to do detox at home?
- What barriers do they perceive in reducing their dose or discontinuing their opioid?
- How long will they experience withdrawal symptoms?

Treatment: Clonidine

Oral Dosing

- Initial dosing: 0.1 mg po
Watch BP carefully
- Titrate up to 0.1 to 0.3 mg po q4-6 hours, then taper
- Risk: HYPOTENSION
- Effective adjuvant to other meds listed

Transdermal (Patch)

- more steady levels of med; avoid cyclic hypotension and rebound.
- Dosed one patch per week (\$10/patch).
- Dose range: 0.1-0.4 mg
- 24-48 hours to start to work-- can use oral clonidine initially while waiting for effect.

“Comfort Meds” (1)

Analgesics

- NSAIDS: Ibuprofen, Naproxen
- Acetaminophen
- Avoid Tramadol:** it is opioid
- Antispasmodics (abd cramps)
 - Dicyclomine (Bentyl) – 20 mg 4 times per day
 - Decongestants
 - Pseudoephedrine – 30-60 mg 4 times daily
 - Phenylephrine – 10 mg 4 times daily

Antiemetics

- Prochlorperazine (Compazine)
 - 5-10 mg 3 times daily
- Promethazine (Phenergan)
 - 25 mg 4 times daily
- Metochlopramide (Reglan)
 - 10 mg 4 times daily
- Antidiarrheals:
 - Kaolin with Pectin;
 - PeptoBismol (Bismuth HCL)
 - Loperamide (Immodium)

"Comfort Meds" (2)

Muscle relaxants:

- Cyclobenzaprine (Flexeril)
–5-10 mg 3 times daily
- Methocarbamol (Robaxin)
–1000-1500 mg up to QID
- Do not prescribe SOMA
(Carisoprodol)
–metabolized to barbiturate
–Overdose, dependence and withdrawal risks

Sleep aids

- Diphenhydramine (Benadryl)
–50 mg
- Trazodone
–50-100 mg
- Amitriptyline
–50mg
- Melatonin
- ?Zolpidem?

• Avoid Benzodiazepines

Clinical Approach to Outpatient Opioid Withdrawal

- Anticipate the patient's distress
- Describe decision in terms of risk/benefit
 - Safety first; this is not personal
 - Function may improve on lower dose
- Reinforce commitment to work with patient
 - Describe steps to minimize withdrawal symptoms
 - Describe safer pain management you will pursue
 - Maximize non opioid modalities
 - Refer to specialty pain treatment
 - Describe options if withdrawal doesn't work
- See patient frequently to evaluate progress and monitor for safety

Challenges

- Involuntary Withdrawal
 - Set a reasonable schedule and stick to it
- Emergency Termination
- Recurrence of pain
 - Overlap of pain and withdrawal symptoms
 - Assess withdrawal intensity with scale
- Psychiatric instability
 - Overlap of pain and psychiatric symptoms
 - Suicidality
- Threatening behavior
 - "if you don't prescribe this for me I will just have to get it on the street"
 - "I'm calling my lawyer"

Avoiding "Abandonment"

- Documentation of risk/benefit discussion and why treatment discontinued
 - *Allow for medically appropriate taper*
- Restate commitment to continue to work with patient on pain and addiction if needed
 - Refer to specialty pain treatment providers
 - Alert patient to addiction treatment resources
- See patient frequently and monitor for progress and safety
- Copy to patient and to chart

Fishbain DA Pain Medicine 2009

Patient example 1:

John is a 52 yo male who transferred care to you from a colleague with fibromyalgia and osteoarthritis. He is not engaged in any treatment other than opiates and doesn't want to be. Review of his chart shows imaging with no evidence of OA. He is currently on 60mg of MS contin BID.

Plan: wean off MS Contin

- Week 1: MS Contin 45mg BID
- Week 2: MS Contin 30mg BID
- Week 3: 15mg qAM, 30mg qPM
- Week 4: 15mg BID
- Week 5: 15mg daily
then discontinue

Alternative weaning plan

- Week 1+2: MS Contin 45 mg BID with 1 tablet of oxycodone 5mg for mid-day breakthrough symptoms – provide for each week
- Week 3+4: MS Contin 30mg BID
- Weeks 5+6: MS Contin 15mg qAM, 30mg qPM
- Weeks 7+8: MS Contin 15mg BID
- Week 9: MS Contin 15mg daily
- Week 10: Oxycodone 5mg BID
- Discontinue medications

Patient example 2:

- Lucy is a 33 yo female who underwent an orthopedic surgery and is now 8 weeks out from her procedure date. She is ready to taper off her hydrocodone/acetaminophen. She is taking 2 tabs every 6 hours as needed for pain and typically takes 8 tablets per day.

Plan: wean off hydrocodone/acetaminophen

- Option 1: slow taper over 3 weeks by reducing 1 tablet per day every 3 days until off
- Option 2: rapid taper over 10 days
 - 1 tab every 6 hours for 1 day (4 tablets/day), then
 - 1 tab every 8 hours for 3 days (3 tablets/day), then
 - 1 tab every 12 hours for 3 days (2 tablets/day), then
 - 1 tab every day for 3 days (1 tablet/day), then
 - Discontinue

Patient example 3:

- Doris is a 70 yo female with spinal stenosis, degenerative disc disease at multiple levels and severe OA of her knees which all limit her function. She is on Oxycontin 60mg BID and oxycodone for breakthrough pain 5mg TID. Pain score is always 8-9/10.

Plan: wean down

- Month 1: Oxycontin 40mg BID and oxycodone 10 mg TID PRN pain
- Month 2: Oxycontin 40mg BID and oxycodone 5mg TID PRN pain
- Month 3: Oxycontin 30mg BID and oxycodone 5mg TID PRN pain
- Month 4: Oxycontin 30mg BID and oxycodone 5mg in the afternoon PRN pain
- Month 5: Oxycontin 30mg BID and 10 tablets per month of oxycodone 5mg as needed for breakthrough pain

Patient example 4:

- David is a 25 yo male who started using oxycodone after knee surgery as a high school senior. He continued to use opiates sporadically after he had recovered from surgery but more recently has used oxycontin 10mg for 6 months. He is taking 8-10 tablets per day and when he misses a day, he feels very sick.

Inpatient detoxification

- ◉ Usually patient initiated and voluntary
- ◉ Short length of stay: 4-5 days
 - Insurance coverage varies
- ◉ Diagnosis of opioid addiction, not just physiological dependence
 - Addiction focused, not pain
- ◉ Nursing managed
 - No labs/Xrays/Pharmacy
- ◉ **Reserve for the most unstable or unsafe**
 - May be difficult to place patients with serious mental health or medical co-morbidities

Opioid Agonist Treatment Methadone Program (OTP)

- ◉ Daily observed dosing of opioid medication
- ◉ Monitoring for drug and alcohol use
- ◉ Dosing titrated to withdrawal symptoms
- ◉ Gradual taper over time
- ◉ Mandated behavioral tx

Why Methadone Maintenance?

Because it Works...

- ◉ **80-90% relapse to drug use without it**
- ◉ **Increased treatment retention**
- ◉ **80% decreases in drug use, crime**
- ◉ **70% decrease all cause death rate**

NIH Consensus Statement
JAMA 1998

Drawbacks to Methadone

- ◉ Once daily dosing = inferior pain relief
- ◉ Can take weeks to months to stabilize
- ◉ Daily attendance
- ◉ Transportation
- ◉ Not covered by most private insurance
- ◉ Risk by association
- ◉ Stigma
- ◉ Will patients with chronic pain ever taper?

Opioid Agonist Therapy: Buprenorphine

"Pros"

- ◉ Partial opioid agonist
 - Lower overdose risk
 - ? Lower intensity withdrawal
- ◉ Mixed with naloxone
- ◉ Office-based treatment
- ◉ Patients control dosing times
- ◉ No "take home" restrictions
- ◉ Maintain or detox

"Cons"

- ◉ Weaker agonist activity
- ◉ Blocks out other opioids
- ◉ 8 mg and 2 mg tabs only
- ◉ Sublingual formulation only
- ◉ Limited prescriber availability
- ◉ Limited insurance coverage
- ◉ Must be **in withdrawal** to initiate treatment
- ◉ Just enough rope to hang yourself with...

Transitioning pain patients to OAT: other caveats

Not pain treatment

- Patients should not expect analgesia
- Addiction recovery focused, not pain focused treatment environment
- Must meet DSM IV criteria for **opioid addiction**
 - not just abuse of other drugs
- Required behavioral treatment/drug testing
- Concomitant opioid pain meds not allowed

No direct transfer of care or dosing

- Most patients must be in withdrawal (Bup)
- Must start from low dose and gradually build up (methadone)

Transferring to Opioid Agonist Therapy

Communication is key: Provider to Program

- How meet opioid addiction diagnostic criteria
 - Describe in detail pain treatment history and reasons for referral
- Confirm what is being prescribed, last RX and no further RX
- **Long** waits for admission
 - Behavioral screening/intake
 - Medical intake
 - Call, advocate
 - Program director
 - Medical director

Finding Treatment

- SAMHSA Treatment Facility Locator
 - <http://dasis3.samhsa.gov/>
- Massachusetts State Helpline 800-327-5050
 - www.helpline-online.com
- Buprenorphine Treatment
 - MA State hotline: 617-414-6926
 - <http://buprenorphine.samhsa.gov/>
 - www.naabt.org

Summary

- Identify patients who need to be tapered or discontinued from opioids.
- Utilize the weaning methods as discussed
- Recognize and treat withdrawal symptoms with “comfort meds”.
- Refer patients for inpatient detox or to an addiction specialist as needed for additional support

References

- CDC. “CDC Guidelines for Prescribing Opioids for Chronic Pain – United States, 2016” MMWR. 2016; 65 (1).
- Suttner, J. et al. “Best Practices in Tapering Methods in Patients Undergoing Opioid Therapy”. Advances in Pharmacology and Pharmacy. 2013;1(2): 42-57.
- Fishbain, D. A., J. E. Lewis, et al. “Alleged medical abandonment in chronic opioid analgesic therapy: case report.” Pain Medicine. 2009;10(4): 722-9.
- Wesson, D. R. and W. Ling. “The Clinical Opiate Withdrawal Scale (COWS).” Journal of Psychoactive Drugs . 2003;35(2): 253-9.