The Opioid Epidemic & Naloxone (Narcan)

Susan (Wolfe) Bouffard, PhD
DMHAS
Disclosure Statement:

I have no relevant financial relationships with commercial interests now nor within the last 12 months.
3 Waves in the current Opioid Epidemic

- 1st wave: began 1999 with prescription opioids
- 2nd wave: began 2010 with heroin
- 3rd wave: began 2013 with synthetic opioids, primarily illicitly manufactured fentanyl (IMF)
Prescription Opioid Misuse

- Over-prescribing of pain relievers (191,146,822 prescriptions dispensed 2017)
- Unused meds kept, especially opioids, but not locked up
- Sharing/diverting of prescription medications (> half of misused prescription opioids come from family/friends)
- Lack of perceived risk of prescribed opioids
- When use becomes problematic/expensive, people switch to heroin
Past 30 days Illicit Drug Use among Persons 12 and Older: 2016 (in millions)

- No Past month use: 240.9 (89.4%)
- Marijuana: 24
- Prescription Medications: 6.2
- Cocaine: 1.9
- Hallucinogens: 1.4
- Methamphetamine: 0.7
- Inhalants: 0.6
- Heroin: 0.5

- Sedatives: 0.5
- Stimulants: 1.7
- Tranquilizers: 2
- Pain Relievers: 3.3

NSDUH 2016
OVERDOSES:
632,331 between 1999 – 2016

63,632 OD deaths – 19.8/100,000 people; 21% higher than 2015

CDC MMWR March 30, 2018/67 (12): 349–358
2016 State Overdose Death Rates: United States

West Virginia (52)

Ohio (39.1), New Hampshire (39), Pennsylvania (37.9), Kentucky (33.5), Maryland (33.2), Massachusetts (33), Rhode Island/Delaware (30.8)

Maine (28.7), Connecticut (27.4), New Mexico (25.2), Tennessee (24.6), Michigan (24.4), Indiana (24), Florida (23.7), Missouri (23.6), New Jersey (23.2), Utah (22.3), Vermont (22.2), Louisiana (21.8), Nevada (21.7), Oklahoma (21.5), Arizona (20.3)

19.8/100,000

North Carolina (19.7), Wisconsin (19.3), Illinois (18.9), South Carolina (18.1), New York (18), Wyoming (17.6), Alaska (16.8), Virginia (16.7), Colorado (16.6), Alabama (16.2), Idaho (15.2), Washington (14.5), Arkansas (14), Georgia (13.3), Hawaii (12.8), Minnesota (12.5), Mississippi (12.1), Oregon (11.9), Montana (11.7), California (11.2), Kansas (11.1), Iowa/North Dakota (10.6), Texas (10.1)

South Dakota (8.4), Nebraska (6.4)
# CT Accidental OD Deaths

- 2015: 723 deaths
- 2016: 917 deaths
- 2017: 1036 deaths

### Opioids Involved

<table>
<thead>
<tr>
<th>Opioids Involved</th>
<th>93%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin Involved</td>
<td>45%</td>
</tr>
<tr>
<td>Fentanyl Involved</td>
<td>65%</td>
</tr>
<tr>
<td>Prescription Opioid Involved</td>
<td>11%</td>
</tr>
</tbody>
</table>

- Total ODs involving cocaine: 33%
- Total ODs involving BZDs: 32%
- Total ODs involving alcohol: 28%

US: 66%
# 2017 OCME data (N=1036)

<table>
<thead>
<tr>
<th>Accidental Drug Related Deaths</th>
<th>Males: 75%</th>
<th>Females: 25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Non–Hispanic</td>
<td></td>
<td>78%</td>
</tr>
<tr>
<td>White/Hispanic</td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>Black/Non–Hispanic</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>&lt; 20</td>
<td></td>
<td>&lt;1%</td>
</tr>
<tr>
<td>20s</td>
<td></td>
<td>18%</td>
</tr>
<tr>
<td>30s</td>
<td></td>
<td>29%</td>
</tr>
<tr>
<td>40s</td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>50s</td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td>60s</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>70+</td>
<td></td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

OCME data [act.gov](http://act.gov) 2017
Typical OD Victim in CT in 2017

A non–Hispanic white male between the ages of 30 – 59 who was using opioids, probably fentanyl/heroin and other substances. On the day he overdosed, so did two other people.
Who is at Risk with Opioids?

- Children/Adolescents/Adults who access unsecured medications
- Teenagers experimenting/partying
- Seniors prescribed multiple medications who may have cognitive & medical issues
- Chronic pain patients on long-term opioids
- Medicaid patients prescribed more opioids
- Young adults (18–25) who use at higher rates

- 1.3 m patients who were 18+, cancer–free, with no history of opioid abuse with at least 1 opioid prescription between June ‘06 – September ’15 were followed over time.
- An initial prescription for 1 day of opioids resulted in a 6% chance of being on opioids at one year.
- The longer the initial opioid prescription, the greater the risk of long–term use.

![Chance of still using opioids at one year](chart.png)
Greatest Risk of Overdose

- History of Overdose
- History of Substance Use Disorder (SUD)
- Taking Opioids and Benzodiazepines (BZDs)
- ↓ Tolerance for opioids due to a break in use (incarceration, detox, hospitalization, rehab)
- On doses of opioids > 50 MME/day
CDC Guidelines for prescribing opioids for chronic pain

1. Don’t start with an opioid
2. Set goals for pain and for function
3. Discuss risks/benefits & provider/patient responsibilities
4. Start with immediate release (not ER/LA)
5. Start with lowest effective dose (avoid > 90 MME)
6. Prescribe for expected duration of pain
7. Regularly assess risks & benefits
8. Assess risk factors and take steps to reduce risk
9. Check PDMP (web–based database of CS dispensed)
10. Urine drug screening
11. Don’t combine Opioids and Benzodiazepines
12. Arrange for MAT (methadone/suboxone) for those who develop Opioid Use Disorder
Naloxone Distribution Programs

- Naloxone Distribution Programs started in 1996
- As of June 2014, there were 644 sites distributing kits & reporting 26,463 opioid overdose reversals
- All 50 states now have naloxone access laws
- Strategies/legislation vary by state
- Education is an expectation
Naloxone (Narcan): IM & IN
Naloxone (Narcan)

- Prescription medication
- Safe medication
- Only has an effect if the person has opioids in their system
- You cannot get high from it, it has no abuse potential/street value, and if you are dependent, it causes withdrawal
- Its only function is opioid overdose reversal by displacing opioids from receptor sites
How does Narcan Work?

- In an opioid overdose, the automatic drive to breathe is diminished
- Narcan “steals the spot” of the opioid in the brain receptor site for 30 – 90 minutes – so breathing resumes while the Narcan lasts
- Works on any opioid
Standard Training on Naloxone (Narcan)

- Identifying an Opioid Overdose
- Naloxone (Narcan) administration
- Calling 911
- Resuscitative efforts
- Recovery Position
Identifying an Opioid Overdose

- Unresponsive or minimally responsive
- Blue or gray face, especially fingernails and lips
- Shallow breathing with rate less than 10 breaths per minute or not breathing at all
- Pinpoint pupils
- Loud, uneven snoring or gurgling noises

- Other evidence: known opioid user, track marks, syringes, pills or pill bottles, information from bystanders
Try to rouse them

- Call their name and shake them
- Check for a pain response: rub hard up and down on the person’s sternum with your knuckles

- IF NO RESPONSE: Administer Naloxone and CALL 911
Intramuscular Administration

- Clean with alcohol wipe
- Inject into muscle (shoulder or thigh) at 90°
- Push in plunger
• Pull off plastic caps, screw spray device onto syringe
• Pull plastic cap off the vial and screw into bottom of syringe
• Spray half of vial up one nostril and half up the other

Intranasal Naloxone Device
Auto-Injector Naloxone Device

Talks you through the process.
Narcan Nasal Spray

- With one hand under their neck, tilt their head back
- With the other hand, insert the device into one nostril until top of fingers touch bottom of nose
- Press firmly on the plunger & spray into nose
Call 911

- Provide as much information as possible, including about the person’s breathing
- Describe exactly where the person is located
- They may provide instructions
Resuscitation

- **Rescue Breathing** is recommended by:
  - Most U.S. opioid OD prevention programs
  - World Health Organization
  - SAMHSA Opioid OD Toolkit
  - AHA now (1/2018) says for suspected Opioid OD, if not breathing normally, but has pulse – provide rescue breaths every 5–6 seconds for an adult and provide CPR if no pulse and administer naloxone per protocol (and use mobile phone to call 911 & put on speaker)
How do the different formulations of naloxone compare?

- All formulations are in the standard dose range (0.4–2.0 mg) except Narcan Nasal Spray (4.0 mg)
- Most commercial insurance & CT Medicaid will cover (may be co-pay/deductible)
- Cost varies considerably, but for 2 doses out of pocket:
  - $60–$100
  - $75 “public interest organization” or $120–150
  - Started $800
Rescue Position
People usually revive in 2 – 3 minutes, feeling dazed and/or confused and not realizing that they’ve overdosed.

They might be in withdrawal, only about 1% are agitated.

If the person doesn’t respond to the Naloxone within 2–3 minutes, give a second dose.

The person could re–overdose based on how much they used and how long the Naloxone lasts; don’t let them use more opioids.

They should be monitored for at least one hour.
CT Narcan Legislation

- PA 11–210: Good Sam Law; ↑ calls to 911
- PA 12–159: Naloxone can be prescribed to anyone, but only prescribers protected
- PA 14–61: Person administering protected
- PA 15–198: Certified pharmacists can prescribe/dispose; CMEs; checking PDMP
- PA 16–43: 7 day limit on opioid prescribing; PDMP entries by next business day & weekly for veterinarians; expanded definition of “authorized agents” that can check the PDMP
CT Narcan Legislation: PA 17–131

- **More Opportunity to Dispose of Controlled Substances (CS)**
  - DCP can take custody of/destroy excess/unwanted
  - Nursing Homes/OP Surgery Centers can dispose with 2+ leaders
  - Home Health Agency RNs can dispose

- **Electronic Transmission of CS Prescriptions**
  - Exceptions: technical/electronic lack/problem, prescriber anticipates harmful delay/negative impact on patient care, or an out of state pharmacy is dispensing

- **Revised limit on Prescribing Opioids to Minors**
  - From 7 to 5 days with same exceptions/documentation as before
  - Risks to be discussed with patient: addiction/OD, mixing with alcohol/Benzodiazepines (BZDs), reason for opioid

- **ASAM Criteria for Substance Use Treatment Admissions**
- Each municipality will have at least one 1st responder trained/equipped with naloxone
- DCP can share CPMRS info with other state agencies
- Mandatory Insurance Coverage of Inpatient Detox
- Voluntary Non–Opioid Directive Form
- DPH will post info on how prescribers can prescribe Suboxone
- ADPC assignments
CT Narcan Legislation: PA 18-166

- Study feasibility of drug courts
- Persons with unwanted CS may return them to prescriber;
- Emergency: prescribers can prescribe/dispense/administer 72 hours of CS to themselves/family/household relatives
- Agreements between prescribers & organizations wanting to distribute/train on naloxone; staff must be trained 1st; agreement must cover: storage, handling, labeling, recalls & recordkeeping
- ADPC will create workgroup to look at data and investigate other strategies for responding to the opioid crisis
Storage and Expiration

- Store in moderate temperatures
- Out of direct sunlight
- Not in refrigerator
- Generally expires after 12 – 24 months
Security & Disposal

- Medication lock boxes
- Medication drop boxes
- DEA take back days
- Pharmacy disposal bags
Questions / Discussion
References


Resources

- Harm Reduction Coalition; Harm Reduction. org
- Prescribe to Prevent. org
- DMHAS help for opioid use: 1–800–563–4086
- Susan (Wolfe) Bouffard, PhD
  - susan.bouffard@ct.gov
  - 860–418–6993