Naloxone (Narcan): The Opioid Overdose Antidote

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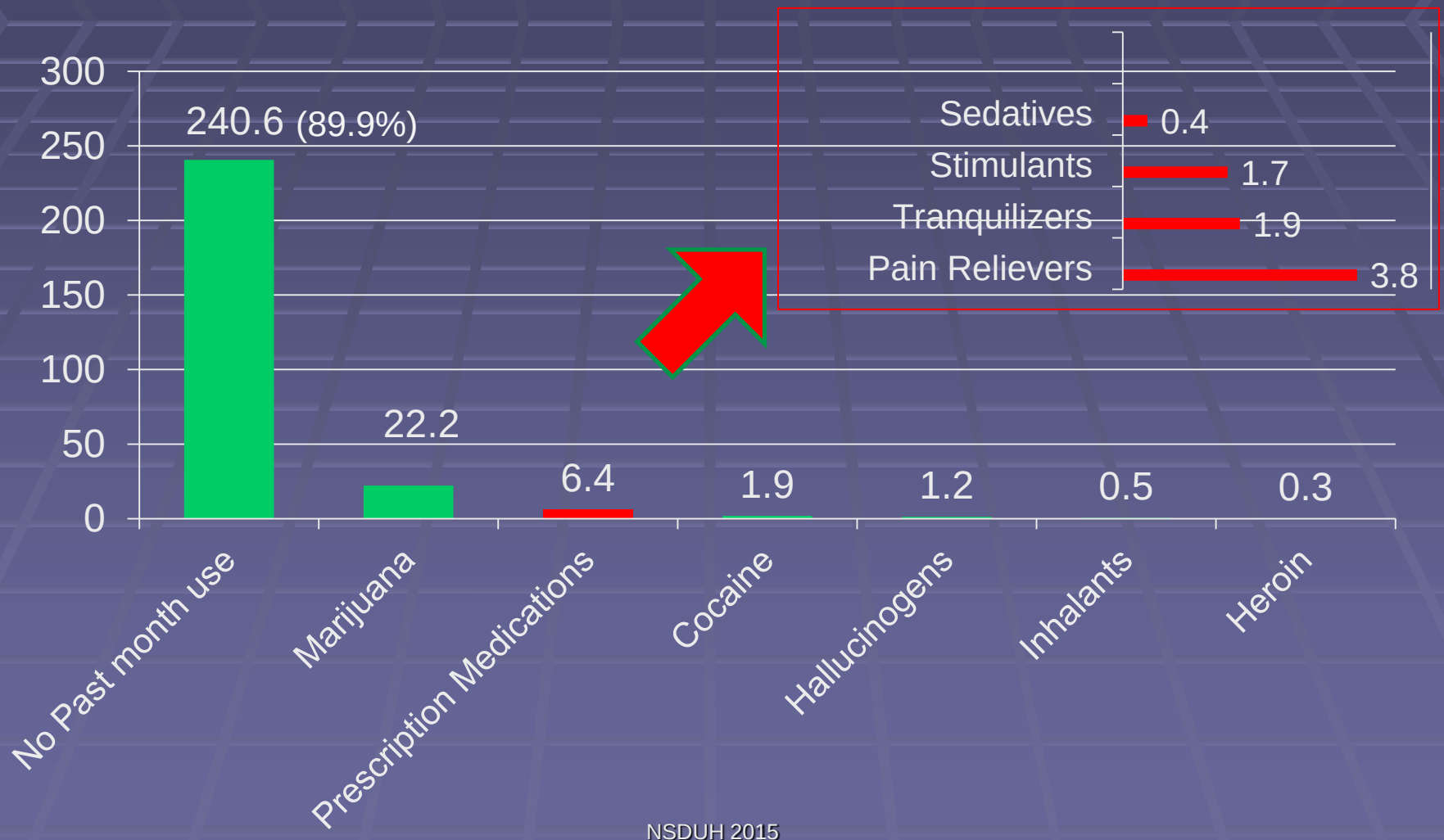
Disclosure Statement:

I have no relevant financial relationships with commercial interests now nor within the last 12 months.

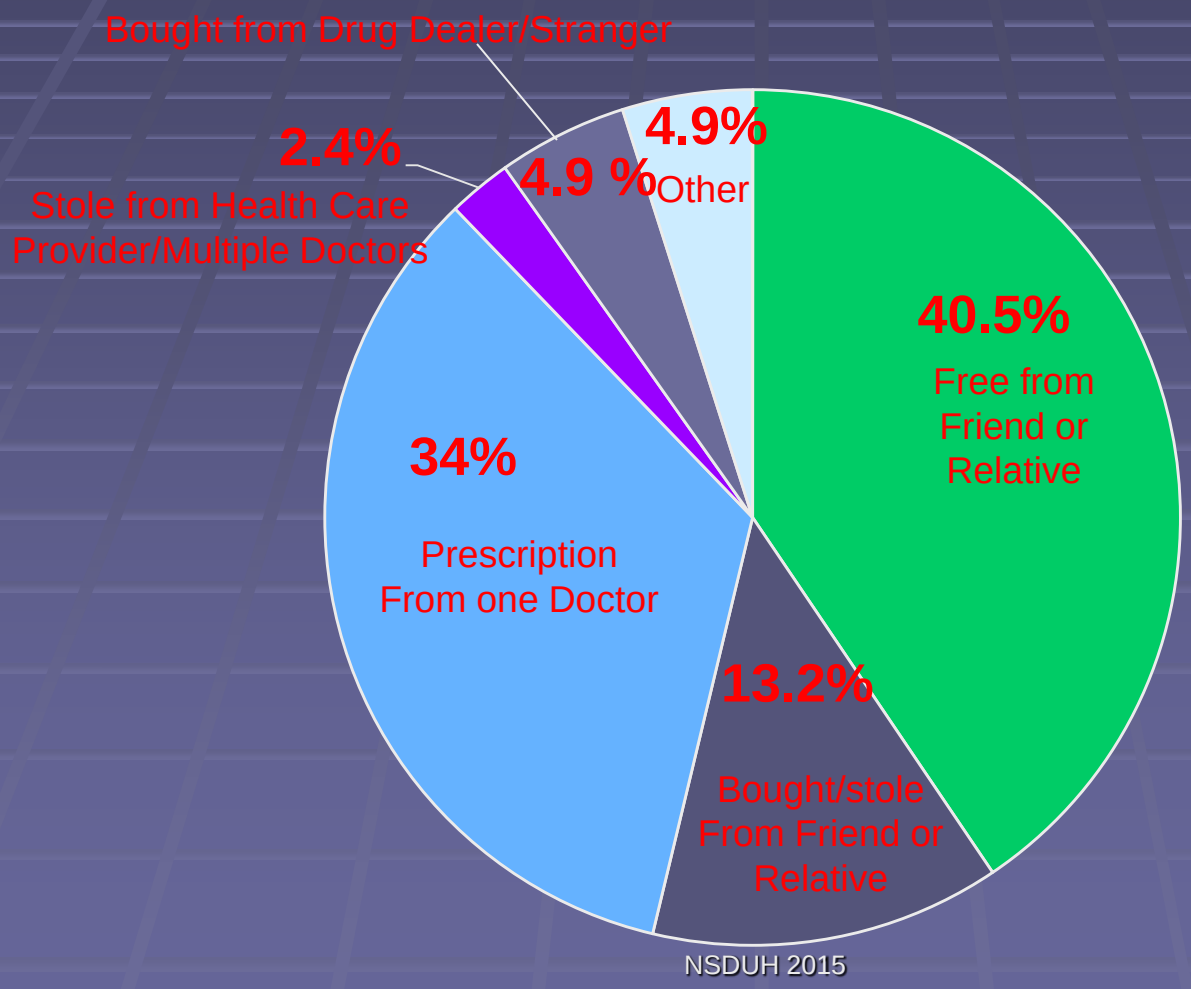
Scope of the Prescription Drug Abuse Problem

Past 30 days Illicit Drug Use among Persons 12 and Older: 2015 (in millions)



NSDUH 2015

Source where pain relievers were obtained for most recent Misuse : 2015



Why the Concern about Prescription Drugs?

- In 2010, enough painkillers were prescribed to medicate *every adult American around the clock for one month*
- People think they are safe
- Risk of Tolerance, Dependence, Addiction, Overdose, and Death
- Diversion
- Transition

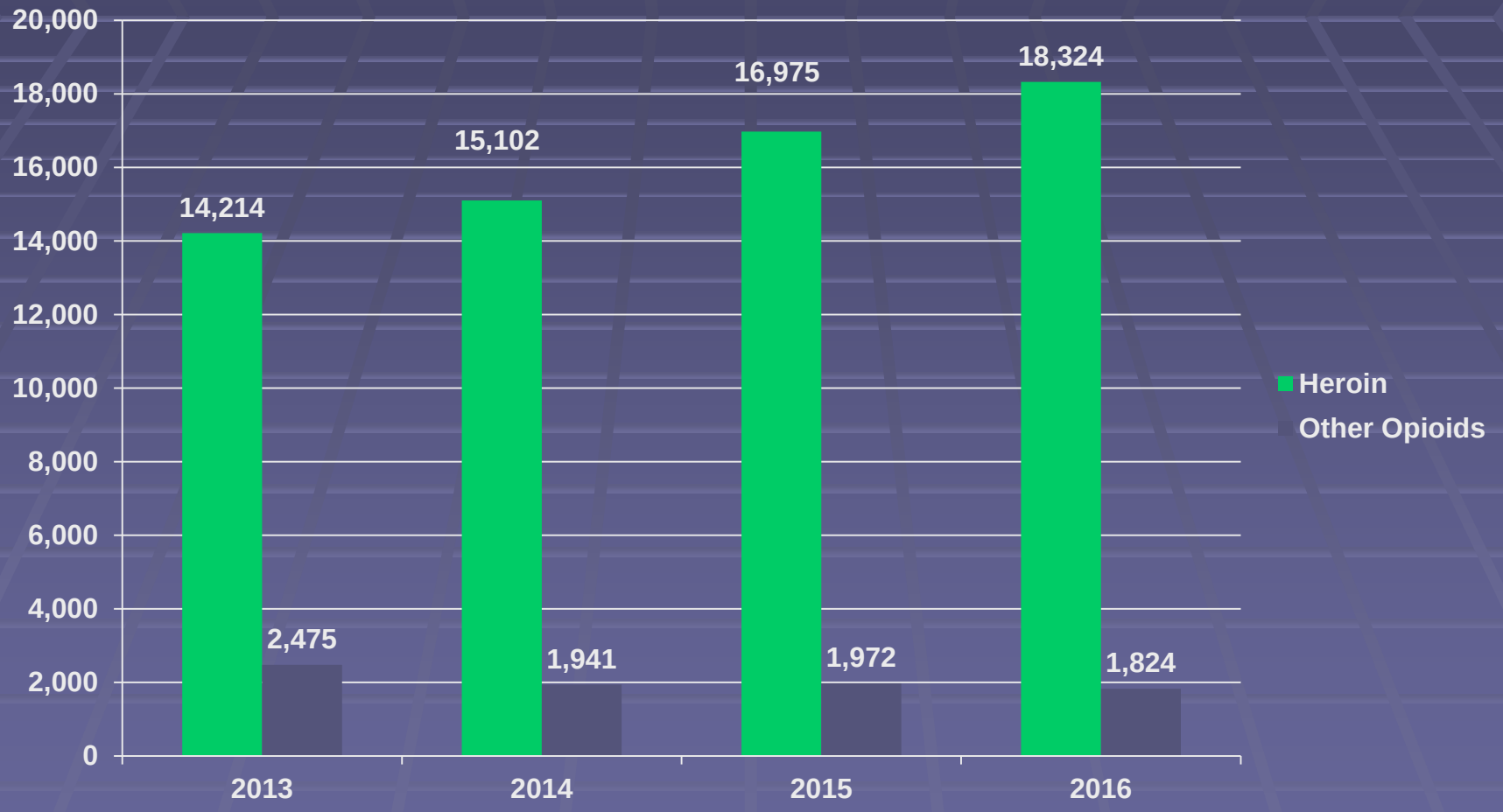
Gateway to Heroin Use

According to the CDC, past misuse of prescription opioids is the strongest risk factor for heroin initiation and use.

CDC: MMWR Dec 18, 2015, Vol. 64

Connecticut's Opioid Problem

Primary Substance at Admission: DMHAS Substance Use Services



DMHAS Annual Statistical Reports

OVERDOSES

Anyone can overdose – but note these populations:

- Seniors/Baby Boomers: ↑ rates of substance use; ↑ pain/health/meds/ODs
- Women: Men still OD at higher rates; but there have been dramatic ↑ for women

- Chronic Pain Patients: Many used to be prescribed opioids long-term but this is no longer recommended as 1° response
- Medicaid Recipients: Prescribed Opioids at higher rates and OD at higher rates than non-recipients

CDC: MMWR July 5, 2013/62 (26); 537-542

CDC Guidelines for Prescribing Opioids for Chronic Pain – United States 2016

1. Don’t start with opioids. Start with a different medication or treatment other than a medication. Only consider opioids if benefits are expected to outweigh risks.
2. Before starting opioids, set goals for pain and function & have a plan to discontinue, if needed. Only continue if benefits outweigh risks.
3. Discuss risks & benefits of opioids as well as patient and provider responsibilities before starting and periodically during treatment.
4. Start with immediate-release opioids, not ER/LA opioids.
5. Start with the lowest effective dose. Put additional precautions in place if ≥50 MME/day and avoid ≥90 MME/day.
6. “Long term opioid use often begins with treatment of acute pain.” For acute pain, prescribe the lowest effective dose of immediate-release opioid and for no longer than the expected duration of pain – usually 3 or fewer days.

CDC: Guidelines for Prescribing Opioids for Chronic Pain - US, 2016

CDC Guidelines for Prescribing Opioids for Chronic Pain – United States 2016

7. Regularly assess benefits and harms with the patient. If benefits don't outweigh harms, work with the patient to reduce the dose and discontinue use.

8. Assess risk factors (history of OD or SUD, higher dosages, use of other substances, 65 or older, other medical conditions) before starting and regularly during opioid treatment. Incorporate strategies to reduce risk, including overdose education and naloxone.

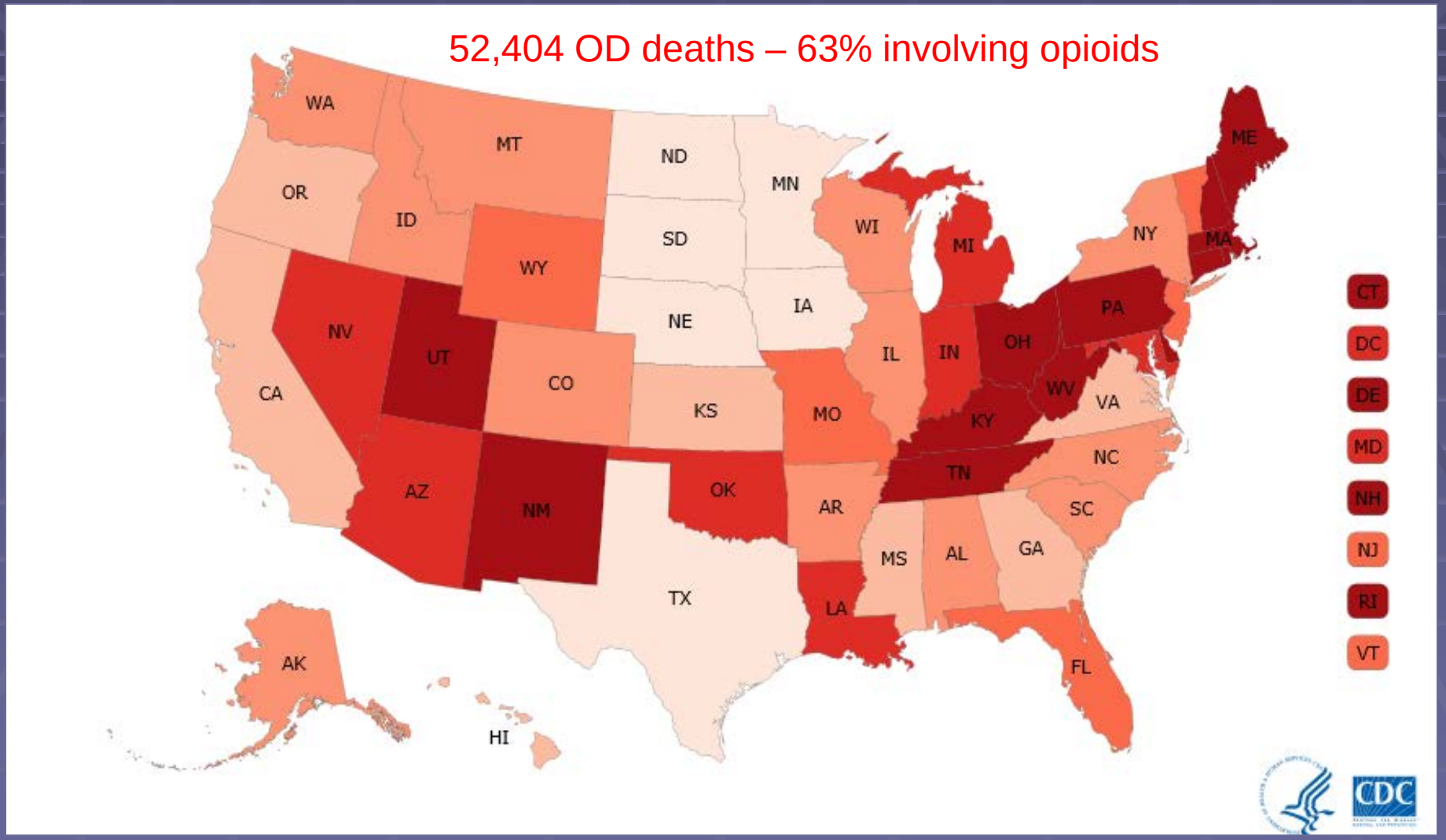
9. Check the PDMP for other opioid prescribing or dangerous combinations before starting and regularly during opioid treatment.

10. Conduct Urine Drug Testing before starting and at least annually.

11. Avoid prescribing opioids for those receiving benzodiazepines.

12. Arrange for MAT (methadone, buprenorphine) for patients with OUD.

CDC: Drug OD Death Rates 2015



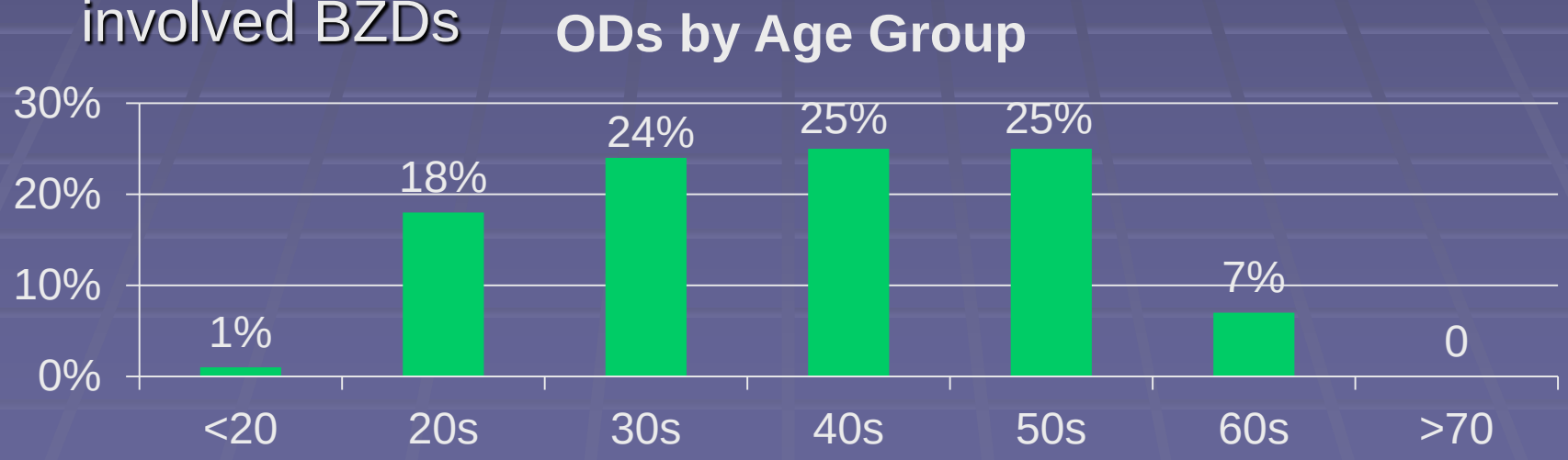
CDC: MMWR Dec 30, 2016/65 (50-1); 1445-52

2015 Overdose Death Rates by State

CDC: MMWR July 5, 2013/62 (26); 537-542

917 Accidental Drug Related Deaths in CT: 2016

- 75% Male
- 78% White/non-Hispanic; 11% White/Hispanic; 9% Black/non-Hispanic
- 94% involved Opioids (most also used other substances)
- 6% did not involve Opioids (71% of these involved Cocaine)
- 30% involved Cocaine, 28% involved Alcohol, 28% involved BZDs



Office of the Chief Medical Examiner
Posted CY 2016 data

Typical OD Victim in CT in 2016

A non-Hispanic white male between the ages of 30 – 59 who was using opioids, probably heroin/fentanyl and other substances. He overdosed that day along with one or two other people.

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
- Most states now have programs
- Strategies/legislation vary by state
- Education is an expectation

CDC: MMWR June 19, 2015/64 (23): 631 - 635

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 so it has no abuse potential or street value and if you are high on opioids, it causes withdrawal

How does Narcan Work?

- In an opioid overdose, the automatic drive to breathe is diminished – people die from a lack of oxygen over a 1 – 3 hour period
- 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)

- Overdose Risk Factors
- Identifying an Opioid Overdose
- Calling 911
- Rescue Breathing
- Naloxone (Narcan) administration
- Recovery Position

Overdose Risk Factors

- **Decreased Tolerance**: after a detox, program, hospital stay or jail
- **Using alone: *(although most people aren't alone)***
- **Mixing**: opioids, especially in combination with benzodiazepines and/or alcohol
- **Quality/strength:** of drugs can be unpredictable
- **Other health issues:** (asthma, liver and heart disease, AIDS, malnourishment, etc.)
- **Previous overdose:** (risky use or health issues)
- **Mode of administration:** (IV and smoking ↑ risk)
- **Age:** (↑ age & longer drug hx – more fatal ODs)

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: CALL 911

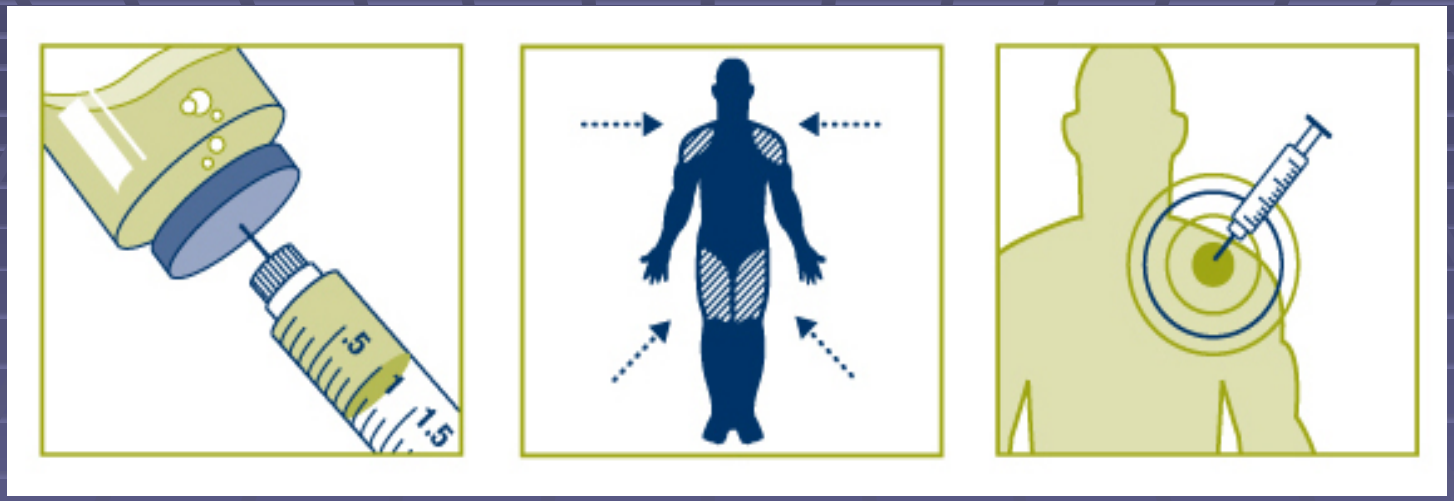
Call 911

- Tell them the person isn’t breathing or is having trouble breathing, this makes the call a priority
- Describe exactly where the person is located

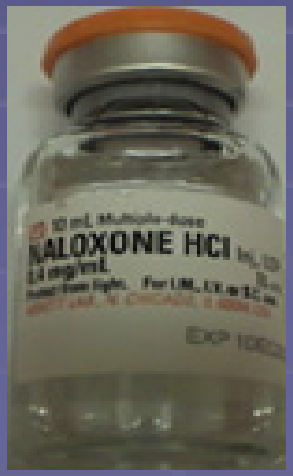
Rescue Breathing

- If you are alone with the victim, start rescue breathing and then go get the Naloxone after you have given a few breaths
- Head tilt/chin lift/pinch nose
- Look, listen and feel to see if chest rises/falls
- Give 2 normal size breaths
- Then one breath every 5 seconds
- Breathe for victim until they respond to the Naloxone or EMS arrives

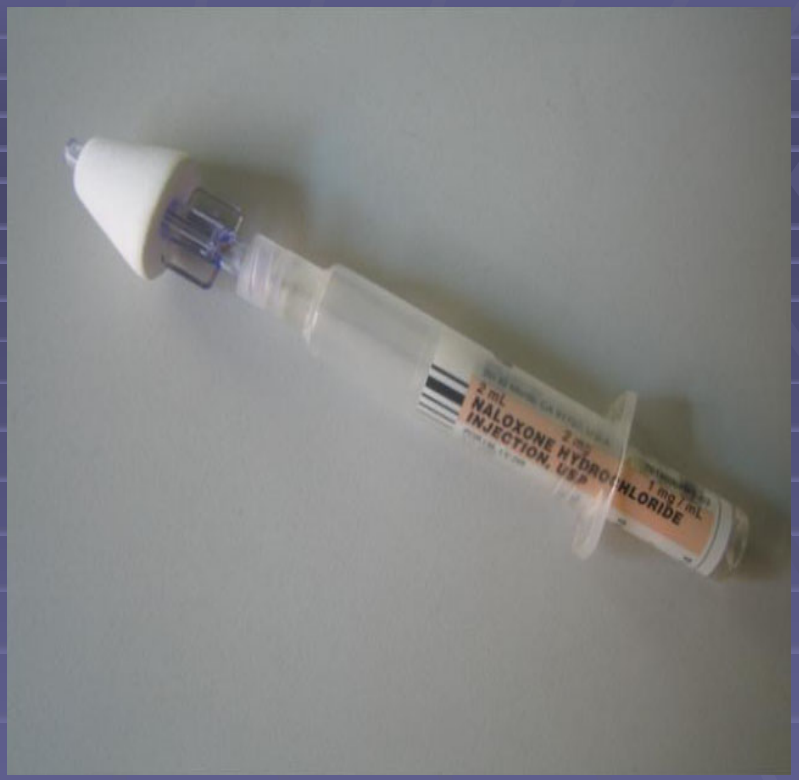
Intramuscular Administration



- Clean with alcohol wipe
- Inject into muscle (shoulder or thigh) at 90°
- Push in plunger



Intranasal Naloxone Device



- 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

Auto-Injector Naloxone Device

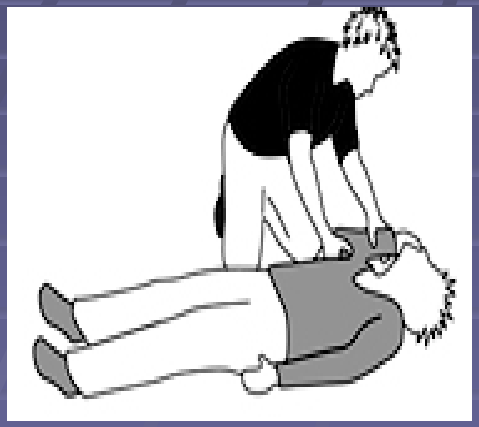
Talks you through the process.

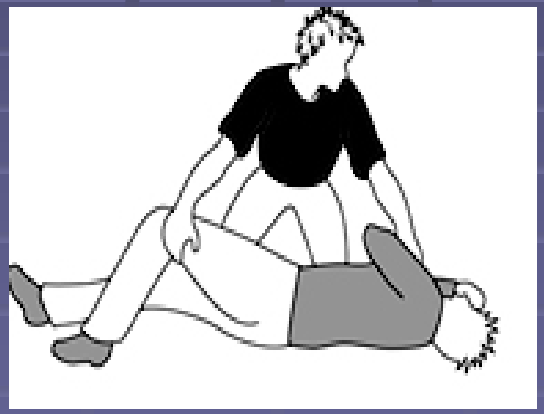
Narcan Nasal Spray

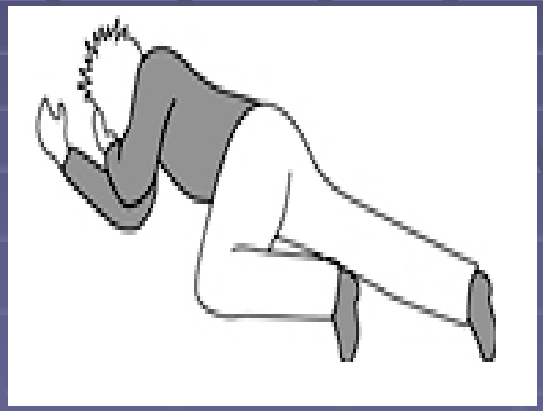
- With one hand under their neck, tilt their head back
- With the other hand, insert the device into one nostril until your fingers touch
- Press firmly on the plunger & spray

Adapt Pharma Prescribing Information Highlights

Rescue Position







Afterwards

- People usually revive in 2 – 3 minutes, feeling sick and not realizing that they've overdosed
- If the person doesn't respond to the Naloxone within that time, give a second dose
- They may be agitated, in withdrawal, and in need of an explanation
- 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**: Narcan can be prescribed to anyone; Prescribers protected from civil liability/criminal prosecution
- **PA 14-61**: persons administering narcan protected from civil liability and criminal prosecution
- **PA 15-198**: Pharmacist prescribing/dispensing; CMEs; checking CPMRS; clarify 2012; ADPC
- **PA 16-43**: 7-day limit on prescribing opioids; licensed health care professionals (LHCP) can administer narcan; each municipality's designated 1st responders must be trained/equipped with narcan; pharmacy CS data entered by next business day (veterinarians weekly); CPMRS authorized agents don't have to be LHCP, but prescriber responsible for ensuring appropriate access/confidentiality; health insurers can't require prior authorization; ADPC plan must include ↓ opioid-related deaths

Naloxone Kit Materials:

(from the Harm Reduction Coalition Website)

Container, 2 doses of Narcan, pair of gloves, instructions, if IM: alcohol swabs, if IN: atomizer

Storage and Expiration

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

Questions/Discussion

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Resources

- DMHAS website: http://www.ct.gov/dmhas/cwp/view.asp?a=2902&q=509650
- Harm Reduction Coalition; Harm Reduction. org
- Prescribe to Prevent. org
- DMHAS help for opioid use: 1-800-563-4086
- Naloxone Prescribing Pharmacists: https://data.ct.gov/Health-and-Human-Services/Naloxone-Prescribing-Pharmacists/qjtc-pbhi
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