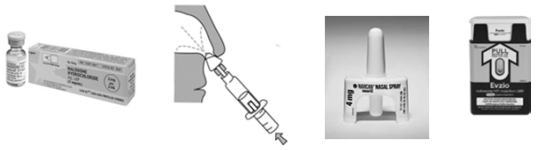
State of Connecticut Naloxone Training Program



Developed by:
Department of Consumer Protection - Drug Control Division
Connecticut Pharmacists Association
Department of Mental Health and Addiction Services
Connecticut State Medical Society
University of Saint Joseph and University of Connecticut – Schools of Pharmacy

Disclosure

- Conflicts of Interest & Disclosure
  - In accordance with the Accreditation Council for Pharmacy Education (ACPE) Standard for Continuing Pharmacy Education, the information contained in this presentation is free of commercial bias and the speaker has no related vested financial interest in any capacity, including research grants, consulting or advisory committees.
  - This activity may contain discussion of unlabeled/unapproved use of drugs. The content and views presented in this educational program are those of the contributors and do not necessarily represent those of the University of Connecticut School of Pharmacy or the CT Pharmacists Association. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications, and warnings.

Objectives

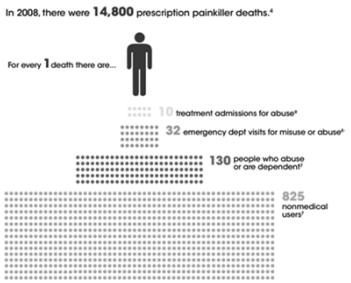
- Identify the risk factors for and clinical presentation of a person with an opioid overdose
- Discuss naloxone use as an opioid antagonist
- Describe naloxone prescribing and dispensing instructions for intranasal and intramuscular dosage forms
- Discuss how to administer intranasal and intramuscular naloxone
- Review current CT state laws regarding naloxone access
- Discuss proper counseling points and technique
- Discuss the referral of patients and caregivers to support programs, 211, and physicians specializing in addiction services

Introduction

- Drug overdoses are a growing problem throughout the United States with opioid abuse at the forefront
- Naloxone is an antidote for opioid overdose
- Pharmacists in the state of Connecticut can now **prescribe** and **dispense** take-home naloxone kits for individuals, caregivers, or family members to help reduce the risk of death from overdose

Connecticut General Assembly, Substitute House Bill No. 6856, Public Act No. 15-197, 2015. http://www.cga.ct.gov/2015/act/pa/pdf/2015PA-00198-R00HB-06856-PA.pdf

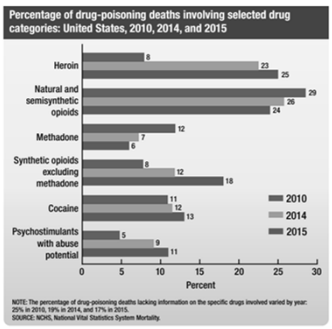
Background



- **Overdose deaths** involving prescription opioids approximately **doubled** from 2001 to 2010
- This increase coincided with a nearly **fourfold** increase in **opioid use** for the treatment of pain

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2011; www.cdc.gov/vitalsigns/PainkillerOverdoses/; http://www.ct.gov/dph/cwp/view.asp?a=4601&q=541328&dphNavPage=%7C; www.cdc.gov/drugoverdose/pdf/policyimpact-prescriptionpainkillerovrdse-a.pdf

Epidemiology



Centers for Disease Control and Prevention, National Center for Health Statistics, 2015; http://www.cdc.gov/nchs/data/databriefs/db190.htm

Risk Factors for Opioid Overdose

- Opioid overdose impacts all socioeconomic groups
- Can occur in urban, rural, and suburban areas of the state

Who is at highest risk of an overdose?

People who use opioids for chronic pain management	Young adults who are experimenting with drugs	Long time drug users, after a period of abstinence

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-april2013.pdf

Additional Risk Factors

- History of opioid addiction or other substance use disorder
- Concurrent use of benzodiazepines or alcohol
- Comorbid mental illness
- Receiving prescriptions from multiple pharmacies and prescribers
- Daily opioid doses exceeding 100 mg of morphine equivalents
- Receiving a methadone prescription for pain management
- Previous non-fatal overdose or recent emergency medical care for opioid intoxication
- Comorbid renal dysfunction, hepatic disease, or respiratory diagnoses (smoking/COPD/emphysema)

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Clinical Presentation in Opioid OD

- Unconscious or minimally responsive
- Slow breathing or respiratory arrest
- Limp body
- Pale and/or clammy skin
- **BLUE** fingernails and lip
- Vomiting or making gurgling noises
- Pinpoint pupils - miosis

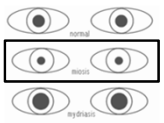
VITAL SIGNS

HR

RR

BP

Body Temp.



College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Naloxone

Why Use Naloxone?

- Safe, effective, inexpensive, easy to administer
- Cannot be abused
  - No euphoria from naloxone
  - No adverse effects if opioids are not present
- Not scheduled or controlled
  - Fewer barriers to access
- Naloxone programs have shown success in various regions throughout the U.S. and Canada

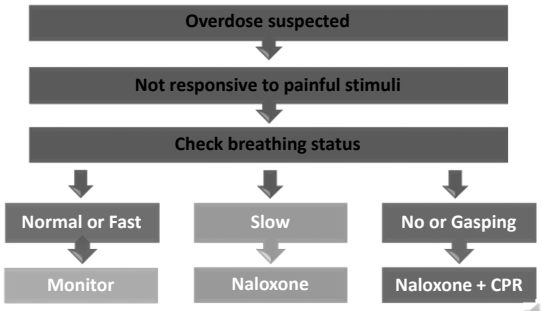
Open Society Foundations, 2013; http://www.naloxoneinfo.org/get-naloxone;
Micromedex, Truven Health Analytics, 2015; https://www.micromedexsolutions.com/home/unpaid

Why Should Pharmacists Prescribe?

- Early intervention improves outcomes for the person
  - Oftentimes, people are closer to their pharmacy than to a healthcare center
- Helps prevents hospital admissions and reduces medical care costs
- Increases access to naloxone through a pharmacy
  - May provide more exposure to treatment programs
- Opportunity to improve trust and community relations
- Physicians may not prescribe naloxone due to unfamiliarity with ordering and administration technique

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-april2013.pdf

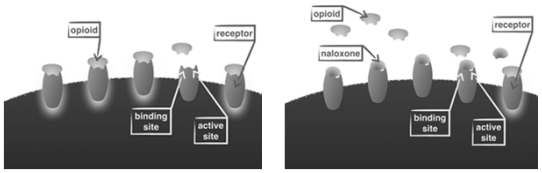
When to Use Naloxone



New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-approved.pdf

How Naloxone Works

- Mechanism of Action
  - Naloxone is an opioid receptor antagonist at the mu, kappa, and sigma receptors



Micromedex, Truven Health Analytics, 2015; https://www.micromedexsolutions.com/home/dispatch

Naloxone in Action

- Naloxone reverses opioid overdose by displacing the opioid agonists from the receptor and blocking the effects on the body
  - Can be administered intravenous, intramuscular, or intranasal
- No agonist activity
- Administration of naloxone will precipitate sudden withdrawal from the opioid in the person

Micromedex, Truven Health Analytics, 2015; https://www.micromedexsolutions.com/home/dispatch

Naloxone Pharmacokinetics

- **Absorption:** Onset of action can range from 2-15 min depending on dosage form and rapidly inactivated
- **Distribution:** Relatively weak protein binding
  - Distribution $t_{1/2}$ = 4.7 min
  - V_D= 200 L
- **Metabolism:** Primarily hepatic metabolism through glucuronidation
- **Elimination:** Excreted by the kidneys through urine
  - Elimination $t_{1/2}$ = 30-90 min
  - No renal dose adjustments

Micromedex, Truven Health Analytics, 2015; https://www.micromedexsolutions.com/home/dispatch
Lexicomp, Wolters Kluwer Health, 2015; https://online.lexi.com/lco/action/home

Prescribing and Dispensing
Intranasal and Intramuscular

Intranasal Naloxone (IN)

- **Suggested IN naloxone kit components**:
  - 2 x 2 mg/2mL prefilled naloxone cartridges
  - 2 plastic syringes
  - 2 mucosal atomization devices
  - Step-by-step instructions for responding to an opioid overdose
  - Directions for naloxone administration

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-guide.pdf

Intranasal Naloxone (IN)

- Commercially available as a single 4mg dose in a 0.1ml nasal spray
- Carton contains two blister packages, each with a single spray

Narcan® nasal spray, www.narcannasalspray.com

Sample IN Naloxone Prescription

Date: ___/___/____
Name: _____ D.O.B. ___/___/_____
Address:_____

2 x Naloxone HCl 2 mg/2mL prefilled cartridges with syringes
SIG: Spray one-half of syringe into each nostril upon signs of opioid overdose. May repeat x 1.

2 x Atomizer
SIG: Use as directed for naloxone administration.

Prescriber Signature: _____
Prescriber Name (print): _____
NPI: _____ Phone: _____

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Intramuscular Naloxone (IM)

- **Suggested IM naloxone kit components** :
  - 2 naloxone 0.4 mg/mL vials
  - 2 IM plastic syringes
  - Step-by-step instructions for responding to an opioid overdose
  - Directions for naloxone administration
- **IM naloxone auto-injector**:
  - Commercially available as a twin pack with audio instructions in English from the device

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf
Evzio, Kaleo, 2014; http://www.evzio.com/hcp/about-evzio/how-to-use-evzio.php

Sample IM Naloxone Prescription

Date: ___/___/_____
Name: _____ D.O.B. ___/___/_____
Address:_____

2 x Naloxone HCl 0.4 mg/mL single dose vial
SIG: Inject 1 mL IM upon signs of opioid overdose. May repeat x 1.

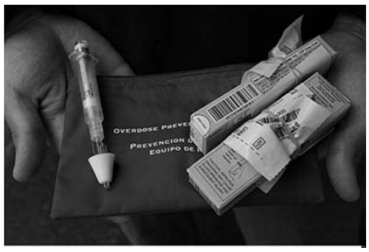
2 x Syringe 3 mL 25G x 1 inch
SIG: Use as directed for naloxone administration.

Prescriber Signature: _____
Prescriber Name (print): _____
NPI: _____ Phone: _____

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Naloxone Administration
Intranasal

Intranasal Naloxone Kit

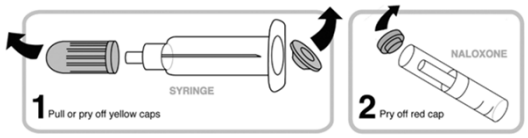


Intranasal Kit Administration

Box Components = **SYRINGE** and **MEDICATION CARTRIDGE**

Step 1: Remove the yellow caps from the syringe

Step 2: Remove the red cap from the prefilled medication cartridge

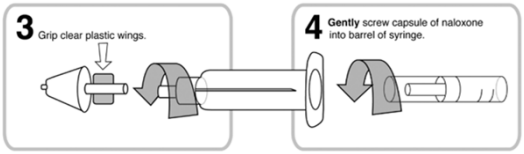


College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Intranasal Kit Administration

Step 3: Open the atomizer provided in the kit and attach to the syringe by gripping the clear plastic wings and twisting

Step 4: Screw the naloxone cartridge into the barrel of the syringe

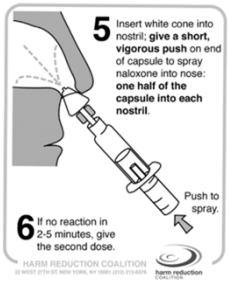


College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Intranasal Kit Administration

Step 5: Administer half the naloxone dose (about 1 mL) into each nostril

Step 6: Give a second dose if the person does not respond in 2-5 min



College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Intranasal Spray Administration

- Remove blister pack from box and peel back the tab to open the nasal spray
- Hold the nasal spray with your thumb on the bottom and two fingers on either side of the nozzle
- Insert the nozzle into one nostril, until your two fingers are against the bottom of the nose
- Press the plunger firmly to give one dose
- If second dose is needed, use new nasal spray

Narcan® nasal spray, www.narcannasalspray.com

Intranasal Administration Technique

1. Make sure the **nostrils are clear**
2. Hold the person's head with one hand
3. Keep the person's **head tilted backwards** to prevent the medication from running out of the nose afterwards
4. Insert the atomizer in one nostril
5. For one dose using the kit, **spray half the cartridge** into a nostril and spray the other half into the other nostril
6. For one dose of the nasal spray, spray the contents of one spray into one nostril
7. If no response, **wait 2-5 minutes before administering a second dose**

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-april2013.pdf

Advantages & Disadvantages

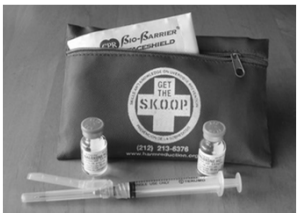
INTRANASAL

✓ Easy access point for medication delivery ✓ Painless ✓ Eliminates the risk of a needle stick	× Some of the medication may not be absorbed × Kit requires assembly

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-april2013.pdf

Naloxone Administration
Intramuscular

Intramuscular Naloxone



Intramuscular Administration – syringe and vial

Step 1: Unwrap the syringe and remove the cap from the naloxone vial

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Intramuscular Administration – syringe and vial

Step 2: Draw up a dose of naloxone

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Intramuscular Administration using a syringe

Step 3: Administer the naloxone by injecting the entire contents of the syringe into the thigh or another large muscle

***If no response, wait 2-5 min before administering a second dose**

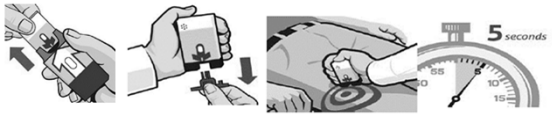
College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Auto-injector Administration

Step 1: Pull the naloxone auto-injector from the outer case

Step 2: Pull off the red safety guard ONLY when ready for administration

Step 3: Place the black end against the person's **outer thigh**, then press firmly and hold in place for 5 seconds



***If no response, wait 2-5 min before administering a second dose**

Evzio, Kaleo, 2014; http://www.evzio.com/hcp/about-evzio/how-to-use-evzio.php

Advantages & Disadvantages

INTRAMUSCULAR

✓ Syringes are similar to dosing and injecting insulin	× May need to move the person to find a large muscle for injection
✓ Auto-injector reduces needle stick injury potential	× Syringe kit requires sharps technique and blood borne pathogen education
✓ Auto-injector device talks you through the administration	× Auto-injector is costly

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-apprvd.pdf

Post-administration Considerations

- Use **caution** when administering naloxone because it will send the person into rapid opioid withdrawal
  - Withdrawal symptoms include **nausea and vomiting** and can be described as a severe case of the flu
  - Roll the person onto their **right side** (recovery position) to **keep airway clear**
- Naloxone will reverse the analgesic effect of the opioid so the person may be **agitated** and/or **combative**

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-apprvd.pdf
UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Post-administration Considerations

- Naloxone's duration of action is **30-90 minutes**
  - The person can go back into overdose if long acting opioids were ingested
  - **Long acting opioids include:** fentanyl patch (Duragesic®), methadone, morphine ER (Avinza®, Kadian®, MS Contin®), oxymorphone ER (Opana®), hydrocodone ER (Zohydro®), and oxycodone ER (Oxycontin®)
- The person always requires medical attention after naloxone is administrated to treat the withdrawal symptoms and to prevent another overdose from occurring

Micromedex, Truven Health Analytics, 2015; https://www.micromedexsolutions.com/home/dispatch

Storage

- Shelf-life ~ 12 to 18 months
- Store in original package at room temp. and avoid light exposure
  - Can be left in car glove box overnight, but **not as permanent storage**
- IN administration: do **NOT** screw in naloxone cartridge until ready to use
  - Once inserted, expiration date is within 2 weeks
- IM administration: monitor expiration date on the naloxone vial and replace **BEFORE** it expires
  - When there are no other alternatives, **expired naloxone can still be administered** but it may not be as effective and second dose may be required

American Journal of Emergency Medicine, 2008; http://ac.els-cdn.com/S0735675707005967/1-s2.0-S0735675707005967-main.pdf?_tid=fd2c6330-272f-11e5-b3a6-00000aacb35e&acdnat=1436552457_4ee9f56aae53ac7a3a6bc14c5d2c0f9e
College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone-access.pdf

CT Law Review

CT Good Samaritan Laws

- Provides <u>immunity from civil damages</u> with the rendering of emergency medical service by specified individuals under certain circumstances
- Allows medical providers and other specified professions to <u>provide naloxone for use as first aid</u> on another person
- <u>Protects a person calling 911</u> for an overdose from being arrested for drug possession

Connecticut General Assembly, Liability of Volunteers, 2003; http://www.cga.ct.gov/2003/olrdata/jud/rpt/2003-R-0285.htm

Naloxone Access and Overdose Good Samaritan Laws (2012)

- CT Conn. Gen. Stat. § 17a-714a (2012)
- Effective: Oct 1, 2012
- A licensed health care professional who is permitted by law to prescribe an opioid antagonist, and who acts with reasonable care, may prescribe, dispense, or administer an opioid antagonist to treat or prevent a drug overdose without being liable for damages in a civil action or subject to criminal prosecution for prescribing, dispensing, or administering such opioid antagonist or for any subsequent use of such opioid antagonist or for any subsequent use of such opioid antagonist
- Any person who believes that another person is experiencing an opioid-related drug overdose, if acting with reasonable care, may administer an opioid antagonist and shall not be liable for damages in a civil action or subject to criminal prosecution

National Alliance for Model State Drug Laws, 2014; http://www.namsdl.org/library/16CE4FDC-1989-E1C5-3175B29bb1A05FBC/

CT Substance Abuse and Opioid Overdose Prevention Act (2015)

- Public Act No. 15-198 Sec. 6.
- Approval: June 30, 2015
- Effective: October 1, 2015
- A pharmacist may only prescribe an opioid antagonist pursuant to this section if the pharmacist has been trained and certified by a program approved by the Commissioner of Consumer Protection
- A licensed pharmacist prescribing and dispensing an opioid antagonist MUST:
  1. Provide appropriate training regarding the administration
  2. Maintain a record of such dispensing and the training required

Connecticut General Assembly, Substitute House Bill No. 6856, Public Act No. 15-198, 2015 http://www.cga.ct.gov/2015/act/pa/pdf/2015PA-00198-R00HB-00656-PA.pdf

An Act Concerning Opioids and Access to Overdose Reversal Agents (2017)

- 7-day limit on opioid prescriptions for minors and adults
  - first outpatient visit
- Veterinarians required to provide information to CPMRS weekly for controlled substances
- Insurers prohibited from requiring prior authorization for naloxone

Public Act 16-43; 2017. https://www.cga.ct.gov/2016/act/pa/pdf/2016PA-00043-R00HB-05053-PA.pdf

An Act Preventing Opioid Diversion and Abuse (2017)

- Act made to add new items and modify previous legislations
  - Effective July 2017: Previous 7-day fill limit for reduced to 5 days, with additional risk counseling to be made by provider
  - Effective July 2017: Encourage prescriber certification to prescribe medications for an individual with opioid use disorder
  - Effective October 2017: Patients may file a Voluntary Nonopioid Directive Form so they are not prescribed opioids

Public Act No. 17-131; 2017. https://www.cga.ct.gov/2017/ACT/pa/pdf/2017PA-00131-R00HB-07052-PA.pdf

An Act Preventing Opioid Diversion and Abuse (2017) *cont.*

- Effective October 2017: Pharmacies have an agreed standing order from a physician to dispense the IN or IM naloxone for at risk patients; pharmacists must have certification
- Effective January 2018: Prescriber must electronically submit controlled substance prescriptions, with few exceptions
- Effective January 2018: Insurance companies are required to extend coverage related to detox for individuals with substance use disorders

Public Act No. 17-131; 2017. https://www.cga.ct.gov/2017/ACT/pa/pdf/2017PA-00131-R00HB-07052-PA.pdf

Summary

- Health care professionals as well as caregivers who are not in a health care related field can administer naloxone and be protected under the Good Samaritan Laws
  - The law protects individuals who call for help at the scene of an overdose from being arrested for drug possession
- Pharmacists can now **prescribe** and **dispense** naloxone under the CT Substance Abuse and Opioid Overdose Prevention Act of 2015
  - Prescribing pharmacists must provide naloxone administration training and maintain appropriate records when dispensing naloxone kits

National Alliance for Model State Drug Laws, 2014; http://www.namsdl.org/library/16CE4FDC-1989-E1C5-3175B29B81A03FBC/

Pause and Ponder

- Do you think the law also allows the pharmacist to administer naloxone, or just prescribe and dispense?
- What are some signs and symptoms to look for before administering naloxone?
- What is your preferred route of administration and why?
- What are your motivations for prescribing naloxone?

National Alliance for Model State Drug Laws. 2014; http://www.namsdl.org/library/16CE4FDC-19B9-E1C5-3175B29881A03FBC/

Counseling Points

Information for the Person or Caregiver

What are Opioids?

Drugs derived from, or similar to, opium:

- Heroin
- Morphine
- Codeine
- Oxymorphone (Opana®)
- Oxycodone (Oxycontin®)
- Hydrocodone (Norco®)
- Hydromorphone (Dilaudid®)
- Fentanyl (Duragesic®)
- **Methadone** (Dolophine®)
- **Buprenorphine** (Subutex®, Suboxone®, Zubsolv®, Bunavail™, Butrans®)
- Many others including combination products

COMMONLY MISTAKEN FOR OPIOIDS:

- Cocaine
- Methamphetamines
- Benzodiazepines
  - Diazepam (Valium®)
  - Alprazolam (Xanax®)

New York State, Division of Criminal Justice Services. 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-agrx2013.pdf

Risk Factors for Opioid Overdose

- Long term opioid use for chronic pain management
- History of opioid addiction or other substance use disorder
- Loss of tolerance during periods of sobriety
  - Rehabilitation, prison sentences, illness, etc.
- New experimentation with drug use
- Mixing opioids with other types of drugs
- Variations in strength or quality of street opioids
- Using alone without friends or family nearby

Prescribe to Prevent, 2015; http://prescribetoprevent.org/patient-education/materials/

Prevention Techniques

- **Know your tolerance** and never start using at the same dose after a period of abstinence
- Only use **one substance at a time**
- **Never mix opioids** with benzodiazepines or alcohol
- If street opioids are a from a new supplier, **try test shots**
- Use with **friends or family nearby** and educate them on naloxone administration
- Always **leave doors unlocked** when using
- Create an **overdose emergency plan**

Prescribe to Prevent, 2015; http://prescribetoprevent.org/patient-education/materials/

Drug Treatment in Opioid Dependence

- **Methadone** and **buprenorphine** are medications used to treat opioid dependence and addiction
- If taken daily, these medications reduce the risk of overdose death by as much as 80%
- Although they are used to treat dependence, both are still classified as opioids and can cause overdose
- Methadone is also used for pain management
- **Incorrect use of methadone** for the treatment of pain has a much **higher overdose risk** than does buprenorphine for addiction treatment

New York State, Division of Criminal Justice Services. 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-agrx2013.pdf

Naloxone

- Reverses an opioid overdose
- Requires a prescription
- Safe and highly effective medication
- Only works if the person has used opioids
- Is an opioid **antagonist** meaning it has no abuse potential or street value
  - You cannot get high from naloxone and if you are high on opioids it causes withdrawal

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

How Naloxone Works

- In an opioid overdose, the automatic drive to breathe is shut down
  - Death is typically due to a **lack of oxygen** over an extended period of time
- Naloxone **"steals the parking space"** of the opioid at the receptor site for **30–90 minutes**
- During this time the effects of the opioid are reversed
- When the naloxone wears off, the **person could go back into overdose** depending on what they used
  - Long acting formulations are a concern for this reason

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Steps in Response to Opioid Overdose

1. Survey the scene
2. Check the person for responsiveness
3. CALL 911
4. Perform rescue breathing
5. Administer naloxone
6. Place the person in the recovery position
7. Stay with the person until emergency medical personnel arrive

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf
American Red Cross, 2011; https://www.redcross.org/images/MEDIA_CustomProductCatalog/m4240170_Adult_ready_reference.pdf

Step 1: Survey the Scene

- Check the scene for safety and beware of any accident or fire hazards
- Ask anyone present if they know when and what the person injected, ingested, or inhaled
  - Has a transdermal patch been used?
  - Is it truly an opioid overdose?

American Red Cross, 2011; https://www.redcross.org/images/MEDIA_CustomProductCatalog/m4240170_Adult_ready_reference.pdf

Signs of an Opioid Overdose

- Unconscious or minimally responsive
- Not breathing or breathing very slowed
- Blue color especially around the fingernails or lips
- Pale and clammy skin
- Pinpoint pupils
- Might be making loud snoring/gurgling sounds
- Other helpful indications:
  - History of opioid use
  - Visible pills, pill bottles, and/or drug paraphernalia around the person

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Step 2: Check for Responsiveness

- Call the person's name while tapping on the back of the shoulders
  - Can also shout, "Are you OK?"
- If still unresponsive, check for a pain reaction:
  - Rub hard up and down on the person's sternum with your knuckles
- **IF NO RESPONSE: CALL 911!!!**

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Step 3: Call 911

- Tell the operator the person isn't breathing or is having trouble breathing
  - Makes the call a priority
- Describe exactly where the person is located
- *Note: In Connecticut, a person calling 911 for an overdose CANNOT BE ARRESTED for drug possession under the Good Samaritan Law*

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Step 4: Perform Rescue Breathing

1. Make sure nothing is in the individual's mouth
2. Open the airway by tilting the head back and lifting the chin. Pinch the person's nose shut so no air escapes
3. Give 2 slow breaths initially, followed by 1 breath every 5 seconds. Check to see if their chest is rising when you provide breaths

***Do this until they regain consciousness or EMS arrives**

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Step 5: Administer Naloxone

- Take-home kits come in both an intranasal spray and intramuscular injection
- Both forms require some assembly
- Both a nasal spray and auto-injector are also commercially available

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Intranasal Nasal Spray Administration

- Remove one nasal spray from the blister pack
- Hold the nasal spray with your thumb on the bottom and two fingers on either side of the nozzle
- Insert nozzle in nostril, until your fingers are against bottom of nose
- Press the plunger firmly to give one dose

Narcan® nasal spray, www.narcannasalspray.com

Intranasal Kit Administration

- Pull off plastic caps from the syringe and screw atomizer into top
- Pull plastic cap off the medication cartridge and screw into bottom of the syringe
- Spray half of the naloxone up one nostril and half up the other

Harm Reduction Coalition, 2011; http://harmreduction.org/wp-content/uploads/2012/02/dope-quick-dirty-training.pdf

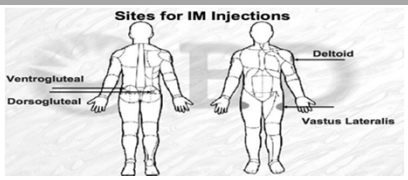
Intranasal Kit Naloxone Counseling

- How to Use the VA Intranasal Naloxone Kit Counseling session video
- Pause the presentation and click on the link below or the type link into browser to view video

https://www.youtube.com/watch?v=WoSfEf2B-Ds

US Department of Veterans Affairs, Health Administration, 2015; www.youtu.be/WoSfEf2B-Ds

Intramuscular Administration



- Remove cap from naloxone vial and uncover the needle
- Insert needle through the rubber plug with the vial upside down
- Pull back on the plunger and draw up 1 mL
- Inject 1 mL of naloxone at a 90 degree angle into a large muscle like the upper thigh or shoulder

Harm Reduction Coalition, 2011; http://harmreduction.org/wp-content/uploads/2012/02/dope-quick-dirty-training.pdf

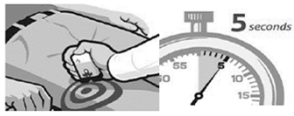
Intramuscular Naloxone Counseling

- How to Use the VA Intramuscular Naloxone Kit Counseling session video
- Pause the presentation and click on the link below or type link into browser to view video

https://www.youtube.com/watch?v=lg1LEw-PeTE

US Department of Veterans Affairs, Health Administration, 2015; www.youtu.be/WoSfEf2B-Ds

Auto-Injector Administration



- Pull off the red safety guard ONLY when ready for administration
- Place the black end against the outer thigh and press firmly
- Hold in place for 5 seconds and release

Evzio Kaleo, 2015; http://www.evzio.com/wp-content/uploads/2015/09/How-to-Use-Evzio.php

Auto-Injector Counseling

- How to Use the VA Intramuscular Auto-injector Counseling session video
- Pause the presentation and click on the link below or type link into browser to view video

https://www.youtube.com/watch?v=-DQBCnrAPBY

US Department of Veterans Affairs, Health Administration, 2015, https://www.youtube.com/watch?v=-DQBCnrAPBY

Step 6: Place in Recovery Position

- Naloxone will send the person into opioid withdrawal which includes nausea and vomiting
- To avoid the potential of the person choking on vomit, roll onto **right side**
- This is only necessary if the person has to be left alone or regains consciousness after the naloxone

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Step 7: Monitor the Person

- **Do not leave the person** until EMS arrive
- Be sure to seek medical attention even if the person regains consciousness and starts breathing normally
  - Naloxone only works for **30-90 minutes** so the person can go back into overdose if long acting opioids were taken
  - Withdrawal symptoms will also need to be monitored and/or treated

UW Alcohol & Drug Abuse Institute, 2013; http://stopoverdose.org/docs/Naloxone_PRO_brochure.pdf

Pause and Ponder

- What are some key points you would emphasize when counseling patients about naloxone?
- What are some differences between the administration methods?
- Can you list the seven steps taken in response to an opioid overdose?

Storage of Naloxone

- Store in original package at room temperature
- Avoid prolonged storage in extreme heat or cold
  - Can be left in car glove box overnight, but **not as permanent storage**
  - Best to keep on the person
- Keep out of direct sunlight
- Do not refrigerate
- Store according to manufacturer's instructions
- Keep in an easily accessible area

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf
American Journal of Emergency Medicine, 2008; http://ac.els-cdn.com/S0735675707005967/1-s2.0-S0735675707005967-main.pdf?_tid=fd2c6330-2725-11e7-b2e5-00000aacb35e&acdnat=1436552457_4ee9f56aae53ac7a3a6bc5ea2a2c2c9d

Expiration of Naloxone

- Shelf-life ~ 12 to 18 months
- IN administration: do **NOT** screw in naloxone cartridge into the syringe until ready to use
  - Once inserted the expiration date is within 2 weeks
- IM administration: monitor the expiration date on the naloxone vial and replace **BEFORE** it expires
  - In urgent situations without alternatives, it will not hurt the person to administer expired naloxone and may provide some benefit

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Naloxone in Pregnancy

- Tell each person to **consult her doctor** if she is pregnant or plans on becoming pregnant
  - A discussion will need to occur about the risks and benefits of opioid use while pregnant
- Generally, in an opioid overdose, naloxone can and should be administered to a pregnant woman
  - There is still a risk of opioid withdrawal for not only the mom but also the fetus
  - Seek medical attention immediately following administration

College of Psychiatric and Neurologic Pharmacists, 2015; http://cpnp.org/_docs/guideline/naloxone/naloxone-access.pdf

Pediatric Naloxone

- Naloxone is **safe and effective** for children
- Indicated in children for apnea and respiratory depression associated with opioid overdose
  - Young children with any parent, grandparent, or family member who is prescribed and/or using opioids are at risk
  - To avoid unintentional ingestion, store all medications and illicit drugs out of reach
- Children may also be prescribed opioids if they have certain medical conditions

American Academy of Pediatrics, 2008; http://pediatrics.aappublications.org/content/121/2/455

Pediatric Administration

- IM administration is preferred for ages < 5
- Follow the same procedure for administration and **ALWAYS seek medical attention** after giving naloxone
- Children < 5 years old or < 44 lbs. = **0.1 mg/2.2 lbs.**
- Doses may be repeated as needed to maintain opioid reversal
  - Duration = **20-60 minutes**

American Academy of Pediatrics, 2008; http://pediatrics.aappublications.org/content/121/2/455
Lexicomp, Wolters Kluwer Health, 2015; https://online.lexi.com/lco/action/home

Counseling Documentation


State of Connecticut Naloxone Program Documentation Form

REFILL USE ONLY

Counseling Documentation

- Here is what the CT Dept of Consumer Protection counseling documentation form consists of:

State of Connecticut Naloxone Program Documentation Form

FOR PHARMACISTS: After providing the state mandated administration counseling, please answer the following questions to the best of your knowledge by checking the appropriate box or writing in the space provided. Return to/Fax to _____.

QUESTIONS #1 – #7 ARE MANDATORY

Date of Patient Administration Training: _____
(Training required by CT Public Act No. 15-198 Sec.6)

Pharmacist Name: _____

RX Number: _____

Pharmacy Zip Code: _____

Take note that there are MANDATORY questions that need to be answered. Also, be sure to print clearly.

Counseling Documentation

- Here are the seven **MANDATORY** questions.

1. Who is the health care provider that prescribed the naloxone?
- ☐ Pharmacist
- ☐ Other health care provider (M.D., APRN, etc.)

2. Was this an initial prescription or a refill?
- ☐ Initial fill
- ☐ Refill – if so, what fill # is this? _____

3. Whom was this prescription for?
- ☐ Self
- ☐ Caregiver
- ☐ Family
- ☐ Friend
- ☐ Unknown

4. Which naloxone dosage form was dispensed?
- ☐ Intranasal
- ☐ Intramuscular syringe
- ☐ Auto-injector

5. Billing: Was this prescription reimbursed?
- ☐ Product ONLY
- ☐ Product and training

Payment Method (circle one) Cash or Third-party

6. Which of the following CT Naloxone Program treatment resource lists, found on the DCP website, were provided?
- ☐ Greater Bridgeport and Stamford
- ☐ Greater Danbury, Torrington, and Waterbury
- ☐ Greater Hartford, Enfield, and New Britain
- ☐ Greater New Haven and Middletown
- ☐ Greater New London, Norwich, and Willimantic

7. Was a referral to a substance abuse service provided?
- ☐ Yes, patient information was shared with a specific referral program, after his/her consent
- ☐ Yes, contact information for a specific referral program was provided to the patient
- ☐ No referral provided
- ☐ No referral required / NA

Counseling Documentation

- Questions 8-12 are regarding refills.

8. If refilling, what was the reason?
- ☐ Administered during overdose
- ☐ Lost or stolen
- ☐ Expired
- ☐ Gave away or sold
- ☐ Confiscated
- ☐ Unknown
- ☐ Other: _____

9. If naloxone was previously administered, who was it to?
- ☐ Self
- ☐ Client
- ☐ Friend or family member
- ☐ Unknown
- ☐ Other: _____

10. If naloxone was previously administered, which dosage form was used?
- ☐ Intranasal
- ☐ Intramuscular syringe
- ☐ Auto-injector
- ☐ Unknown

11. If naloxone was previously administered, how many doses of naloxone were used?
- ☐ One
- ☐ Two
- ☐ Unknown

12. If naloxone was previously administered, what was the result?
- ☐ Woke up after naloxone administration
- ☐ EMS came and revived the person
- ☐ Person remained unconscious and EMS took them to the ER
- ☐ Passed away
- ☐ Unknown
- ☐ Other: _____

Patient Populations

Assessing and Addressing Addiction

Pain Management

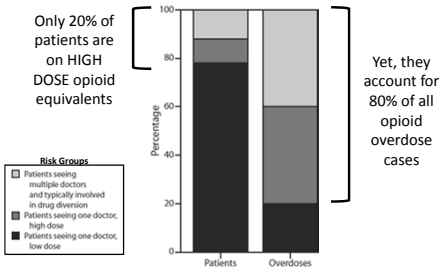
- Pain affects more Americans than diabetes, heart disease and cancer combined
- It is associated with a wide range of injury and disease and sometimes is the disease itself
- More than **1.5 billion people** worldwide suffer from **chronic pain**
- Today, there are many pain clinics that focus on diagnosing and managing patients with chronic pain
  - In many cases, patients are prescribed high doses of opioids as treatment before other forms of therapy are considered

The American Academy of Pain Medicine, 2015; http://www.painmed.org/patientcenter/facts-on-pain/

Assessing Overdose Risk

Percentage of patients and prescription opioid overdoses by risk group

Only 20% of patients are on HIGH DOSE opioid equivalents



Yet, they account for 80% of all opioid overdose cases

Centers for Disease Control and Prevention, 2012; http://www.cdc.gov/mmwr/preview/mmwrhtml/mm61e1a3.htm

Assessing High Risk Patients

- The Prescription Drug Monitoring Program (PDMP) is a useful resource to assess patients for their risk of overdose
- Certain **red flags** can mark someone as a high risk overdose patient including:
  - ≥ 100 MG OF MORPHINE EQUIVALENTS DAILY
  - 4 OR MORE PRESCRIBERS
  - 4 OR MORE PHARMACIES
- Directing patient education and counseling towards high risk individuals can potentially reduce the rates of overdoses and mortality associated with opioid abuse

Journal of the American Medical Association, 2014; http://www.ncbi.nlm.nih.gov/pubmed/24569873

Other Considerations

- Certain groups are more likely to abuse or overdose on prescription painkillers:
  - **More men** than women die of overdoses from prescription painkillers each year
  - **Middle-aged adults** have the highest prescription painkiller overdose rates
  - People in **rural counties** are about two times as likely to overdose on prescription painkillers as people in big cities
  - **American Indian or Alaska Natives** are more likely to overdose on prescription painkillers
    - About 1 in 10 American Indian or Alaska Natives age 12 or older used prescription painkillers for nonmedical reasons compared to 1 in 20 whites and 1 in 30 blacks

The American Academy of Pain Medicine, 2015; http://www.painmed.org/patientcenter/facts-on-pain/

Adolescent Opioid Abuse

- Young adults ages 12 to 17 years old are at a risk of opioid overdose due to **experimentation** and **novice experience**
  - Every day 2,500 American youth abuse a prescription pain reliever for the first time
  - Over 50% of individuals 12 years or older have used pain relievers non-medically from a friend or relative
  - Nearly 1 in 20 high school seniors have abused Vicodin® and 1 in 30 have abused OxyContin®

American Society of Addiction Medicine, 2015; http://www.asam.org/docs/default-source/advocacy/opioid-addiction-disease-facts-figures.pdf

Adolescent Naloxone Prescriptions

- The number of opioids prescribed to adolescents and young adults **nearly doubled** between 1994 and 2007
- More often than not, adolescents were prescribed an opioid for **injury-related pain**
- It is important to assess and recommend naloxone kits for these individuals when we dispense opioid prescriptions as a precautionary consideration

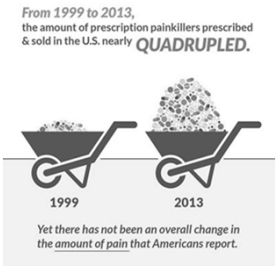
Pediatrics, 2010; http://pediatrics.aappublications.org/content/126/4/834.long

Important Note

- Caregivers can be the recipient of naloxone
  - Pharmacists can prescribe and dispense to any caregiver of a person using opioids where overdose is a concern

Public Health Impact
Bridging the Gap as Providers

The Facts



Every day
***115 people** in the U.S. **DIE** from overdose of prescription painkillers, and many more become addicted*

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2015; www.cdc.gov/drugoverdose/index.html; www.cdc.gov/drugoverdose/epidemic/pruevuers.html

Role of the Healthcare Team

- Safe and Effective Pain Management:

PRESCRIBE	The lowest effective dose and only the quantity needed for the expected duration of pain
PLAN	With your patients how to stop opioids and when to discontinue use
PROVIDE	Information your patients on how to use, store, and, properly dispose of opioids
AVOID	Combination use of prescription opioids and sedatives, unless medically necessary
USE	PDMP to identify patients who might be misusing prescriptions drugs and are at risk of overdose

Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2015; www.cdc.gov/drugoverdose/epidemic/providers.html

Gaps in Care

- Rates of prescription opioid abuse and dependence are continually rising
  - Heroin use is also on a steep increase which may have prescription opioid origins
- More programs that provide medication-assisted treatment (MAT) for drug dependence are now available
- Patients need to be educated on and referred to these programs in order to get proper treatment

National Institute on Drug Abuse, 2014; http://www.drugabuse.gov/about-nida/legislative-activities/testimony-to-congress/2014/americas-addiction-to-opioids-heroin-prescription-drug-abuse; Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2015; www.cdc.gov/drugoverdose/pubs/index.html#tabs-nazmm-4

Bridging the Gap

Patients
With/at risk of opioid dependence or abuse

Pharmacists
Providers

Opioid treatment programs

- Stewards for public health
- Greatest access to community healthcare
- **REFERRALS** to support programs and specialists
- ↑ support and improves rehabilitation rates

New York State, Division of Criminal Justice Services, 2014; http://www.criminaljustice.ny.gov/Ops/docs/training/pubs/naloxone/law-enforcement-participant-manual-3pressrs.pdf

Making Referrals

- Treatment is **ALWAYS NECESSARY** for someone with an opioid addiction
- In addition to naloxone kits, it is critical that pharmacists educate patients and provide proper referrals
  - Patients need to know what to expect if they decide to make an appointment
  - Having personal contacts at local substance abuse treatment agencies will provide any necessary details and help answer patient questions

Department of Mental Health and Addiction Services, 2015; http://www.ct.gov/dmhas/site/default.asp

Resources for Referral

- Find your closest treatment program
  - Call 211 to ask for addiction physicians and support programs
  - Department of Mental Health and Addiction Service
  - 800-662-HELP (4357)
- Lists of treatment options by geographic area are available for download on the following websites:
  - www.ct.gov/dmhas/site/default.asp
  - findtreatment.samhsa.gov/locator

Department of Mental Health and Addiction Services, 2015; http://www.ct.gov/dmhas/site/default.asp

Referral Process

Step 1 **Patient assessment** and work up

Step 2 **Find appropriate program** per geographic location, patient preference, insurance, etc.

Step 3 **Obtain release of information** from patient
"Can I provide your information to the facility for scheduling?"

Step 4 **Contact and send information** to referral program
*Allow facility to determine scheduling procedures

Step 5 **Follow-up**

Pause and Ponder

- What substance abuse treatment programs are in your area?
- Do you know populations are at higher risk for opioid overdose?
- Have you considered how you will be reimbursed for this service?

Additional Reminder

- Develop a plan for quality assurance reporting to ensure adequate records are maintained
- Report any adverse reactions you are made aware of to the FDA at MedWatch
  - http://www.fda.gov/safety/medwatch/default.htm
  - 1-800-FDA-1088
- Patients can also report suspected adverse drug reactions directly to the FDA at MedWatch

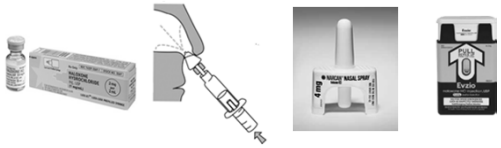
U.S. Food and Drug Administration, 2015; http://www.fda.gov/Safety/MedWatch/default.htm

Key Points

- Opioid abuse and dependence is a growing problem in the U.S. and has lead to an increase in the number of overdose deaths
- Naloxone is a safe and effective medication used for the reversal of opioid overdoses
- Pharmacists in Connecticut can now **prescribe** and **dispense** naloxone rescue kits as well as **refer** patients to appropriate addiction and support programs

Connecticut General Assembly, Substitute House Bill No. 6856, Public Act No. 15-197, 2015; http://www.cga.ct.gov/2015/act/pa/pdf/2015PA-00198-R00HB-06856-PA.pdf

State of Connecticut Naloxone Training Program



Developed by:
Department of Consumer Protection - Drug Control Division
Connecticut Pharmacists Association
Department of Mental Health and Addiction Services
Connecticut State Medical Society
University of Saint Joseph and University of Connecticut – Schools of Pharmacy

CONGRATULATIONS!

YOU HAVE COMPLETED THE TRAINING!

In order to receive continuing pharmacy education credit for this module, please visit the website below to complete the quiz and evaluation of the activity.
https://web2.uconn.edu/pharmacyce/login.php

Use your **NABP E-Profile ID** with the course-specific **Session Code 15NP25-TXX24** to complete the evaluation.

Your CE credit will be uploaded to the CPE Monitor within 72 hours of submission.