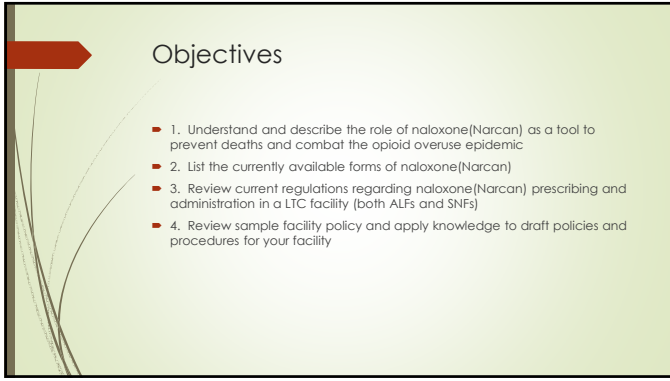


Narcan (Naloxone)
 Use in Long-term Care Facilities
 Matthew Palmer, PharmD, BCGP – Director of Clinical Services at AlixaRx



Disclosures

- None



Objectives

- 1. Understand and describe the role of naloxone(Narcan) as a tool to prevent deaths and combat the opioid overuse epidemic
- 2. List the currently available forms of naloxone(Narcan)
- 3. Review current regulations regarding naloxone(Narcan) prescribing and administration in a LTC facility (both ALFs and SNFs)
- 4. Review sample facility policy and apply knowledge to draft policies and procedures for your facility

Opioid Problem

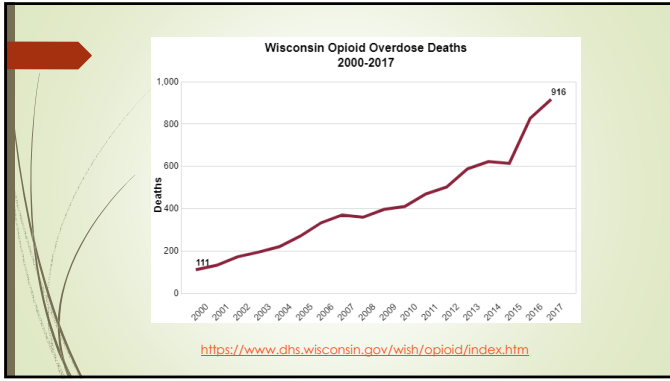
- National Scale
 - CDC reported in 2018 that 2.1 million people suffer from an opioid misuse disorder
 - 11.1 million people self-report misuse of opioids
 - More than 1/3 the deaths from drug over dosage was opioid related in 2017
 - Problem has rapidly escalated over the past 10 years

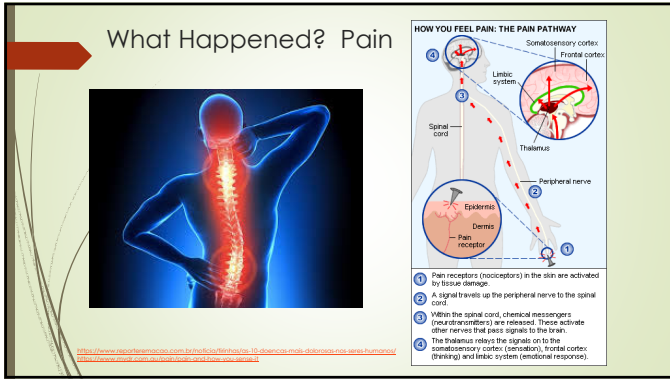
130 AMERICANS
die every day from an opioid overdose
(including Rx and illicit opioids).

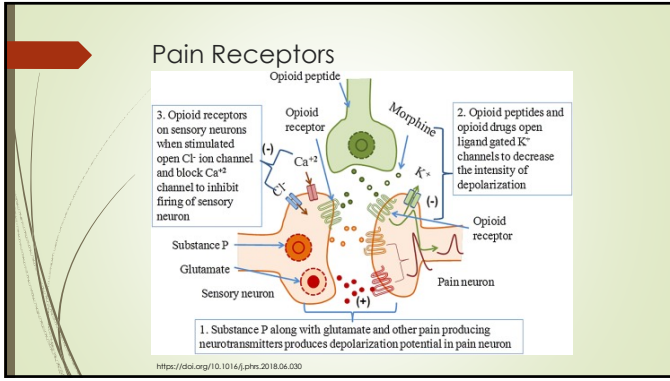
www.cdc.gov

Opioid Problem

- Local Scale
 - More people die of opioid overdose in WI than car crashes
 - Executive Order 214 - Public Health Advisory
 - <https://www.dhs.wisconsin.gov/opioids/opioid-public-health-advisory.pdf>
 - In an effort to reduce death and disability from opioid abuse, Wisconsin is striving to:
 - Expand access and use of naloxone—a safe antidote to reverse opioid overdose.
 - This is a complicated problem which requires a cooperative effort of partners, organizations, and communities. Many are already working on efforts to combat this crisis, and we now ask for redoubled efforts and increased coordination. We are all in this together.







Naloxone(Narcan)

- Can reverse an opioid overdose
- Does not work with any non-opioid overdose
- Will not cause harm if given to someone not experiencing opioid overdose
- Is not addictive

What Happens During Opioid Overdose

- High doses of Opioids result in three main symptoms (Triad)
 - Pinpoint Pupils (opioids stimulate the parasympathetic response)
 - Unconsciousness
 - Respiratory Depression (opioid receptors located on neurons in brainstem respiratory centers)

Naloxone reversing an overdose

Naloxone has a stronger affinity to the opioid receptors than opioids, such as heroin or oxycodone, so it knocks the opioids off the receptors for a short time (30-90 minutes). This allows the person to breathe again and reverse the overdose.

The diagram illustrates the mechanism of naloxone. It shows three 'opioid receptor on brain' structures, each represented as a green funnel-shaped protein. Initially, pink spheres representing 'opioid' molecules are bound to the receptors. Then, green spheres representing 'naloxone' molecules are introduced. The naloxone molecules have a higher affinity for the receptors than the opioids, so they displace the opioid molecules. Finally, the receptors are bound to naloxone, and the opioid molecules are shown being released. The logo 'COPE' is visible in the bottom right corner of the diagram.


<https://slidesguy.com/slides/1062744/>

Naloxone – Who should get it?

- Anyone prescribed an opioid at a dose >50 MME per day
 - Or any caregiver, friend or family member
 - Anyone who would have the opportunity to use it
- What does MME mean
 - MME = Morphine Milligram Equivalents
 - Recommended to have Naloxone available if >50 MME per day but still at increased risk with MME in the 20-30 range
- Free Opioid Guide App from CDC : www.cdc.gov/drugoverdose/prescribing/app.html
 - MME calculator, Prescribing Guidelines, Resources and Interactive Motivational Interviewing module (practice effective communication skills regarding pain management)

Calculating morphine milligram equivalents (MME)

- DETERMINE** the total daily amount of each opioid the patient takes.
- CONVERT** each to MMEs—multiply the dose for each opioid by the conversion factor. (see table)
- ADD** them together.



OPIOID (doses in mg/day except where noted)	CONVERSION FACTOR
Codine	0.15
Fentanyl transdermal (in mcg/hr)	2.4
Hydrocodone	1
Hydromorphone	4
Methadone	
1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
> 61-80 mg/day	12
Morphine	1
Oxycodone	1.5
Oxymorphone	3

These dose conversions are estimated and cannot account for all individual differences in genetics and pharmacokinetics.

https://www.cdc.gov/drugoverdose/pdf/calculating_total_daily_dose-a.pdf

How much is 20-50 MMEs?

- Oxycodone/Acetaminophen (Percocet) 5-325mg q4h prn
 - Resident takes 2 tabs per day
 - 15 MMEs
- Oxycontin (oxycodone ER) 15 mg BID
 - 45 MMEs
- Fentanyl (Duragesic) Patch 25mcg change every 72 hours
 - 60 MMEs

What are some other risk factors?

- Using a combination of medications such as benzodiazepines and opioids
- Patients with an opioid use disorder in treatment or history
- Patients with pre-existing respiratory disease such as COPD, Asthma, sleep apnea
- Patients with mental health condition (depression/anxiety)
- Any patient with a newly prescribed opioid
- History of overdose
- OTC sterile syringe purchase
- Untreated substance abuse disorder
- Period of abstinence (recently out of treatment, long hospital stay)

Opioids and Benzodiazepines

- Commonly Prescribed: Valium (diazepam), Ativan (lorazepam), Xanax (alprazolam), Klonopin (clonazepam), Restoril (temazepam)
- Concomitant use with opioids: **[US Boxed Warning]: Concomitant use of benzodiazepines and opioids may result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate. Limit dosages to the minimum required. Follow patients for signs and symptoms of respiratory depression and sedation.**

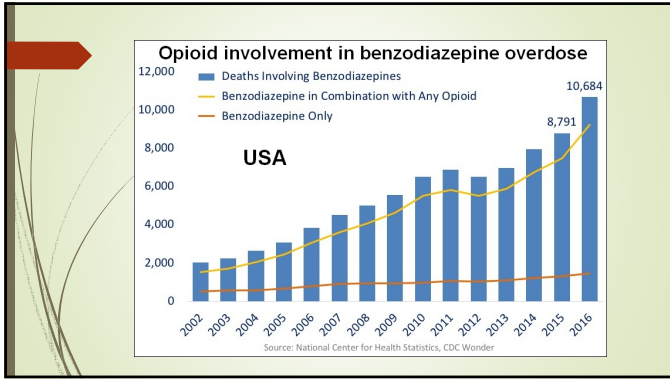
Table 1. The Danger of Combining Opioids And Benzodiazepines

FDA Warning: Risks From Concomitant Use With Benzodiazepines or Other CNS Depressants

Concomitant use of opioids with benzodiazepines or other central nervous system (CNS) depressants, including alcohol, may result in profound sedation, respiratory depression, coma, and death.

- Reserve concomitant prescribing of (opioid) and benzodiazepines or other CNS depressants for use in patients for whom alternative treatment options are inadequate
- Limit dosages and durations to the minimum required
- Follow patients for signs and symptoms of respiratory depression and sedation

Source: US Food and Drug Administration website. Available at: <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm518697>.



- ### Naloxone – How do you get it?
- Prescription from provider
 - Wisconsin standing order issued by Dr. Jonathan Meiman allowing pharmacies to provide naloxone to at risk patients, friends or family with or without a prescription
 - <https://www.dhs.wisconsin.gov/library/naloxone-directory.htm>
 - Currently being revised with some new features
 - SNF – Ensure Naloxone is available in your contingency/emergency kit
 - CBRF – Can have supply stored at facility per guidance from DHS/DQA
 - <https://www.dhs.wisconsin.gov/publications/p02021.pdf>

Naloxone – How is it supplied?

- Naloxone Intranasal
 - Kit preassembled 4mg/0.1ml
 - Kit requiring assembly 1mg/ml
- Auto-injector Naloxone 0.4mg/0.4ml
- Naloxone solution for injection 0.4mg/ml

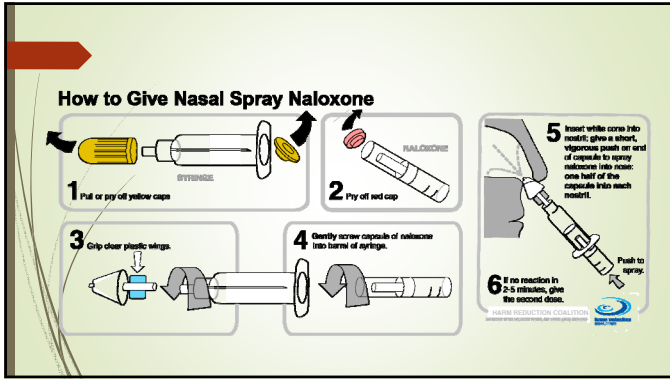
Ready to use Nasal Spray

KEY STEPS TO ADMINISTERING NARCAN® NASAL SPRAY:*

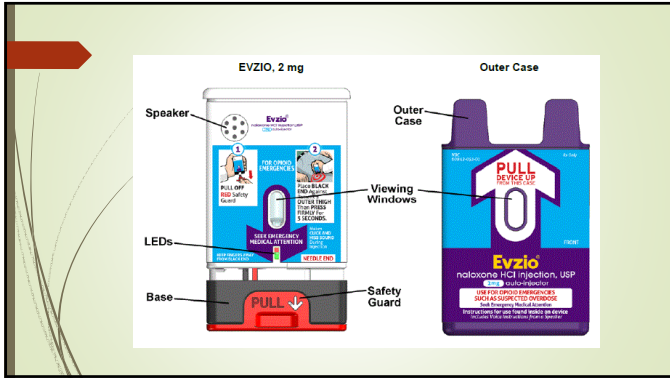
PEEL	PLACE	PRESS
Peel back the package to remove the device. Hold the device with your thumb on the bottom of the plunger and 2 fingers on the nozzle.	Place and hold the tip of the nozzle in either nostril until your fingers touch the bottom of the patient's nose.	Press the plunger firmly to release the dose into the patient's nose.

<https://www.narcan.com/patients/how-to-use-narcan/>

Naloxone Nasal Spray – Requiring Assembly







Using EVZIO: Administration steps

- 1** Pull EVZIO from the outer case.
Do not go to Step 2 (Do not remove the red safety guard) until you are ready to use EVZIO. If you are not ready to use EVZIO, put it back in the outer case for later use.
- 2** Pull off the red safety guard.
To reduce the chance of an accidental injection, do not touch the black base of the auto-injector, which is where the needle comes out. If an accidental injection happens, get medical help right away.
Note: The red safety guard is made to fit tightly. Pull firmly to remove. Do not replace the red safety guard after it is removed.
- 3** Place the black end of EVZIO against the outer thigh, through clothing, if needed. Press firmly and hold in place for 5 seconds. If you give EVZIO to an infant less than 1 year old, pinch the middle of the outer thigh before you give EVZIO and continue to pinch while you give EVZIO.
Note: EVZIO makes a distinct sound (click and hiss) when it is pressed against the thigh. This is normal and means that EVZIO is working correctly. Keep EVZIO firmly pressed on the thigh for 5 seconds after you hear the click and hiss sound. The needle will inject and then retract back up into the EVZIO auto-injector and is not visible after use.
- 4** After using EVZIO, get emergency medical help right away. If symptoms return after an injection with EVZIO, an additional injection using another EVZIO may be needed. Give additional injections using a new EVZIO auto-injector every 2 to 3 minutes and continue to closely watch the person until emergency help is received. EVZIO does not take the place of emergency medical care.
EVZIO cannot be reused. After use, place the auto-injector back into its outer case. Do not replace the red safety guard.
For more detailed information on how to use EVZIO, [click here](https://evzio.com/patient/how-to-use-evzio/).

<https://evzio.com/patient/how-to-use-evzio/>

Naloxone Solution for Injection

<https://communitypharmacy.coop/resources/opioid-overdose-prevention/>

Administration of Naloxone Intramuscular

- 1** Remove cap from naloxone vial and unscrew the needle.
- 2** Insert needle through rubber stopper with vial upside down. Pull back on plunger and take up 1 mL.
- 3** Inject 1 mL of naloxone at a 90-degree angle into a large muscle (upper arm/ thigh, outer buttock).

Images in Public Domain. San Francisco Department of Public Health. Naloxone for opioid safety: a provider's guide to prescribing naloxone to patients who use opioids. January 2015.

<http://www.medical.ca.gov/health/overdose-prevention/overdose-prevention-essential-resources-to-remain-effective/naloxone-injection>

Naloxone – How do you administer?

- How to give Naloxone
 - <https://www.dhs.wisconsin.gov/library/p-01576.htm>

HOW TO GIVE NALOXONE There are four ways to give naloxone. Follow instructions for the type that you have.

— To see video instructions on how to administer the four kinds of naloxone, visit www.prescribeprevention.org—

Nasal spray (ready to use)

1. Peel back the package to remove the device.
2. Place the tip of the nozzle in a nostril until your fingers touch the bottom of the nose.
3. Press the plunger firmly to release the dose into either nostril.
4. Provide a second dose in the other nostril if there is no response after 2-3 minutes.

Nasal spray (assembly required)

1. Remove the two colored caps from the delivery syringe.
2. Screw the white atomizer cone onto the top of the delivery syringe.
3. Remove the cap off the capsule of naloxone.
4. Gently screw the capsule of naloxone into the barrel of syringe.
5. Insert white cone into nostril; give a short, strong push on the end of capsule to spray naloxone into nose. One half (1/2 mL) of the capsule in each nostril.
6. If there is no reaction in 2-3 minutes, give a second dose.

Auto-injector (EVZIO™)

1. Pull auto-injector from outer case.
2. Pull off red safety guard.
3. Place the black end of the auto injector against the outer thigh—through clothing if needed—press firmly and hold in place for 3 seconds.
4. Repeat the injection if there is no response after 2-3 minutes.

Injectable naloxone

1. Put on gloves, if available. Remove cap from naloxone vial and uncover the needle.
2. Insert needle through rubber plug with vial upside down. Pull back on plunger and draw up 1 mL of naloxone.
3. Insert the needle into the muscle of the bare upper arm or thigh. Push on the plunger to inject the naloxone.
4. Repeat the injection if there is no response after 2-3 minutes.

Wisconsin Department of Health Services
#211-4 (04/16/18)

Skilled Nursing Facilities

- Regulations
 - Allow for emergency supply of medications
 - Nursing staff on-site

Skilled Nursing Facilities

- Review facility standing orders to include Naloxone
- Identify what product you have in your emergency/contingency kit
- Create a policy and procedure and ensure all staff are trained on the policy and on how to find and administer the specific Naloxone you have on-site.
- Documentation of administration and actions taken

Assisted Living

- Get a standing order for your facility from medical director or facility MD
- Identify which product you have or would like to store
- Need Policies for:
 - Emergency Response (should have this already but may need to add naloxone)
 - Naloxone administration
 - Staff training
 - Who can administer the Naloxone
 - How will you document the intervention

CBRF

- No waiver or variance is need to store or administer naloxone in CBRF
- Trained CBRF resident care staff can administer nasal spray naloxone
- A registered nurse can administer nasal or injectable naloxone. The RN can also delegate this task to staff that have completed DHS approved CBRF medication administration and management training
 - <https://www.dhs.wisconsin.gov/regulations/cbrf/training.htm>

Storage and Labeling - SNF





- **DHS 132.65(4)(b)** 'Storage.' Medications shall be stored near nurse's stations, in locked cabinets, closets or rooms, conveniently located, well lighted, and kept at a temperature of no more than 85° F (29° C).
- **DHS 132.65(4)(b)8** Labeling medications.' Prescription medications shall be labeled with the expiration date and as required by s. [450.11\(4\)](#), Stats. Non-prescription medications shall be labeled with the name of the medication, directions for use, the expiration date and the name of the resident taking the medication.
 - 450.11(4) – refers to pharmacy regulations = must have a label from the pharmacy that meets those standards

Storage and Labeling - CBRF

- **DHS 83.37(3)(c)** The CBRF shall keep medicine cabinets locked and the key available only to personnel identified by the CBRF
- **DHS 83.31(1)(b) Medications.** Prescription medications shall come from a licensed pharmacy or a physician and shall have a label permanently attached to the outside of the container. Over-the-counter medications maintained in the manufacturer's container shall be labeled with the resident's name. Over-the-counter medications not maintained in the manufacturer's container shall be labeled by a pharmacist.

Naloxone Cost

- Most insurance companies will cover at least 1 dosage form
- ALFs/SNFs – work with pharmacy to provide supply. If used can be billed to that resident's insurance/drug plan
- If patients don't have insurance – AIDS resource center of Wisconsin provides Naloxone for free
 - <https://www.dhs.wisconsin.gov/library/p-01773.htm>

PRODUCT	NARCAN® NASAL SPRAY	EVZIO® AUTOINJECTOR	NALOXONE NEEDLELESS SYRINGE (crash cart-type)	NALOXONE VIAL
ROUTE OF ADMINISTRATION	Intranasal	Intramuscular	Intramuscular	Intramuscular
APPROXIMATE COST	\$150 for box of 2 doses	\$4500 for box of 2 doses and trainer device	\$300 for 2 syringes and 2 nasal adapters	\$18 for 2 single dose vials and 2 syringes/needles
FDA-LABELED FOR LAYPERSON USE	YES	YES	NO	NO
VALIDATED USE BY LAYPERSONS	YES	YES	YES	NO
PRE-ASSEMBLED FOR USE	YES	YES	NO	NO
DURABLE PACKAGING	YES	YES	NO	NO
DIRECTIONS (shown after 2-3 minutes if no or minimal response)	Spray 0.1 mL into one nostril.	Inject into thigh as directed by English voice prompt system.	Spray 1 mL (1/2 of syringe) into each nostril.	Inject 1 mL into shoulder or thigh.
PRODUCT ILLUSTRATION				

Signs of an overdose

- Body feels clammy to the touch
- Pale face – blue lips or blue fingertips
- Small pinpoint pupils
- Limp body – unresponsive
- Slowed or stopped breathing
- Vomiting or gurgling noises


Steps to take

- Call 911
- Give naloxone
 - Can give every 2-3 minutes if there is no response. More than one dose might be needed
 - Start rescue breathing/CPR if indicated ****
- Ensure patient is lying on their side
 - Keep them awake if possible
 - Ensure they don't choke

RESPONDING TO AN OVERDOSE Know how to keep yourself and your loved ones safe.

-- Ask your pharmacist about how to safely dispose of medications and sharps. --

- 1 IDENTIFY OVERDOSE**
Try to wake the overdose victim by yelling their name or rubbing your knuckles in the middle of their chest.
- 2 CALL 9-1-1**
Indicate if the overdose victim has stopped or slowed breathing.
- 3 OPEN AIRWAY AND GIVE RESCUE BREATHS**
If the overdose victim is not breathing, open the airway. Remove any object from the victim's mouth. If breathing has stopped or slowed, start rescue breathing: tilt head back, lift chin, pinch nose with other hand, give one breath every five seconds. Continue this for 30 seconds. If the overdose victim is still not breathing on own, give naloxone.
- 4 GIVE NALOXONE**
See reverse side for how to give naloxone. After giving naloxone, continue rescue breaths. If there is still no response after 2-3 minutes, give naloxone again. More than one dose is sometimes needed.
- 5 RECOVERY POSITION**
Once the overdose victim is breathing again, put the person on their side with the top leg and arm crossed over the body to prevent choking. (see below)
- 6 STAY UNTIL HELP ARRIVES**
Stay with the overdose victim until emergency responders arrive.



Wisconsin Pharmacy Board | PSW | Wisconsin Department of Health Services

Sample Policy Review

- See additional handout
- Free to download and update with facility specific language

Resources

- Wisconsin Department of Health Services
 - <https://www.dhs.wisconsin.gov/opioids/index.htm>
 - Prevention, Overdose, Treatment, Professionals, Data
 - <https://www.dhs.wisconsin.gov/opioids/naloxone-faq.htm>