Neither Kenneth McCall nor Stephanie Nichols have conflicts of interest to disclose.
LEARNING OBJECTIVES

- Recognize the impact of the opioid epidemic in Maine.
- Identify stigmatizing terms related to patients with substance use disorder (SUD) and select appropriate alternatives.
- Recognize the impact of stigmatizing terminology on patient care.
- Apply non-stigmatizing language to a scenario involving a patient with SUD.
- Compare SUD to other medical/psychiatric diseases and describe the harm reduction approach to care.
- Describe the mechanism of naloxone and its place in therapy.
- Identify persons at risk of an opioid overdose and signs of an overdose.
- Compare the characteristics of the various naloxone formulations including administration techniques.
- Discuss critical patient education points regarding opioid overdose and naloxone.
OPIOID EPIDEMIC
NUMBER AND AGE-ADJUSTED RATES OF DRUG OVERDOSE DEATHS BY STATE PER 100,000 PEOPLE, US 2017

STATES WITH A STATISTICALLY SIGNIFICANT INCREASE IN DRUG OVERDOSE DEATH RATE FROM 2016 TO 2017

FATALITIES DUE TO DRUGS IN MAINE FROM 2007 TO 2017
(A) WITH SPECIFIC DRUGS IN 2017 (B AND C)

A. Fatalities
- Total
- Pharmaceutical
- Illicit

B. Involvement of specific drugs
- Opioid
  - > 1 drug
  - Illicit drug
- Any pharmaceutical
- Fentanyl/analogues
- Naloxone
- Pharmaceutical opioid
- Benzodiazepine
- Cocaine
- Heroin/morphine
- Methamphetamine

C. Fentanyl analog
- Acetyl fentanyl
- Furanyl fentanyl
- Despropionyl fentanyl
- Methoxyacetyl fentanyl
- Para-fluorobutyl fentanyl
- Cyclopropyl fentanyl
- Carfentanil
- Butyl fentanyl
- Acryl fentanyl

### PERCENT OF BABIES BORN EXPOSED/AFFECTED TO SUBSTANCES IN MAINE

<table>
<thead>
<tr>
<th>Location</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Androscoggin</td>
<td>7.4%</td>
<td>9.7%</td>
<td>8.4%</td>
<td>10.1%</td>
<td>10.8%</td>
<td>9.5%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>2.3%</td>
<td>3.6%</td>
<td>3.8%</td>
<td>3.8%</td>
<td>2.9%</td>
<td>4.2%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Penobscot</td>
<td>12.9%</td>
<td>12.4%</td>
<td>15.9%</td>
<td>16.8%</td>
<td>14.4%</td>
<td>11.7%</td>
<td>7.9%</td>
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<tr>
<td>Piscataquis</td>
<td>11.3%</td>
<td>10.9%</td>
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<td>18.5%</td>
<td>12.8%</td>
<td>13.2%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Waldo</td>
<td>6.0%</td>
<td>8.1%</td>
<td>9.4%</td>
<td>9.3%</td>
<td>16.3%</td>
<td>10.7%</td>
<td>12.9%</td>
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<tr>
<td>Washington</td>
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<td>15.1%</td>
<td>13.8%</td>
<td>13.9%</td>
<td>14.2%</td>
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<td>4.5%</td>
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<td>4.8%</td>
<td>3.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>MAINE</strong></td>
<td>772</td>
<td>927</td>
<td>961</td>
<td>1013</td>
<td>1024</td>
<td>952</td>
<td>904</td>
</tr>
</tbody>
</table>

http://www.mekids.org
DRUGS INVOLVED IN ARRESTS AS REPORTED TO THE MAINE DIVERSION ALERT PROGRAM FROM 2014 TO 2017

* Represents significant (p<0.05) change compared to 2014

Which best describes the impact of the opioid epidemic in Maine?

A. Nearly 1 Mainer fatally overdoses every DAY
B. Approximately 1000 substance exposed babies are born in Maine every DAY
C. Close to 100 Mainers fatally overdose every YEAR
D. Over 5000 substance exposed babies are born in Maine every YEAR
Which best describes the impact of the opioid epidemic in Maine?

A. Nearly 1 Mainer fatally overdoses every DAY
B. Approximately 1000 substance exposed babies are born in Maine every DAY
C. Close to 100 Mainers fatally overdose every YEAR
D. Over 5000 substance exposed babies are born in Maine every YEAR
Maine drug overdose deaths continued decline in first quarter, falling 14%

The state had 74 fatal drug overdoses through March, down from 86 for the same period last year. Most of the deaths were caused by fentanyl, and cocaine-related overdoses are on the rise.

OPIOID USE DISORDER AND STIGMA
“Taking opioids provided relief from discomfort for the first time in my life.”

“After that first dose of opioids, I had peace, calm. Just for a second, the daily pain was gone and there was nothing.”
“I didn’t know how to ask for help.”

“I knew what I was. I knew what my problem was. I just couldn’t stop.”
FACTORS INFLUENCING STIGMA TOWARDS PEOPLE WITH SUBSTANCE USE DISORDERS

<table>
<thead>
<tr>
<th>Population</th>
<th>N= 1069 young adults (mostly female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods</td>
<td>Vignettes describing situations of people with high or low levels of: responsibility, controllability, immorality, willpower, consequences, and accountability. Participants completed stigma assessment tools for each situation, focusing was on affective reactions, negative judgments, and social distancing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor</th>
<th>Does Lower Levels of this Factor Elicit Stigma from an Observer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility for causing the SUD</td>
<td>No</td>
</tr>
<tr>
<td>Controllability of the SUD</td>
<td>No</td>
</tr>
<tr>
<td>Immorality about the SUD</td>
<td>No</td>
</tr>
<tr>
<td>Willpower to avoid the substance</td>
<td>Yes</td>
</tr>
<tr>
<td>Experiencing severe Consequences related to the SUD</td>
<td>Yes</td>
</tr>
<tr>
<td>Accountability for things related to the SUD</td>
<td>Yes</td>
</tr>
</tbody>
</table>
“Hearing ‘you already had your one chance’ is hard. Recovery after the first try is very uncommon; look at smoking, which requires 13-33 times.”

“The idea of ‘once a junkie, always a junkie’ is devastating.”

QUOTES FROM PEOPLE IN LONG TERM RECOVERY: IMPACT OF STIGMA

Maine’s Opioid Summit
Augusta, Maine
July 15, 2019
“Words are important. If you care for something you call it a flower; If you want to kill it, you call it a weed.”
### TERMINOLOGY FOR PHARMACY PROFESSIONALS TO AVOID

<table>
<thead>
<tr>
<th>Stigmatizing</th>
<th>Preferred</th>
<th>Rationale</th>
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</thead>
<tbody>
<tr>
<td>Addict</td>
<td>Person with Substance Use Disorder or Person who uses medications nonmedically</td>
<td>High incidence of ACEs including abuse in patients with SUDs</td>
</tr>
<tr>
<td>Substance Abuser</td>
<td>Clean Urine</td>
<td>Dirty Urine</td>
</tr>
<tr>
<td>Clean Urine</td>
<td>Dirty Urine</td>
<td>Junkie</td>
</tr>
<tr>
<td>Dirty Urine</td>
<td>Junkie</td>
<td></td>
</tr>
</tbody>
</table>

## TERMINOLOGY FOR PHARMACY PROFESSIONALS TO AVOID

<table>
<thead>
<tr>
<th>Stigmatizing</th>
<th>Preferred</th>
</tr>
</thead>
</table>
| IV drug user                  | Stigmatizing preferred: 
|                               | Person who injects drugs Person first language Substance Abuse Substance Use Disorder or Nonmedical use of medications |
| Against Medical Advice        | Stigmatizing preferred: 
|                               | Preferred to leave or Preferred to go home Removed judgment which can break down rapport |
| Alcoholic                     | Stigmatizing preferred: 
|                               | Person with Alcohol Use Disorder Person first language and use of diagnostic terminology according to DSM-5 |
| Medication Assisted Therapy   | Preferred to 
|                               | Medication for Addiction Treatment or Pharmacotherapy for OUD |

Highlights that the gold standard care for patients with OUD includes treatment with methadone or buprenorphine vs the role as adjunctive therapy.

Which choice appropriately corrects the following sentence to avoid stigmatizing terms and replace with an appropriate alternative? “Intravenous drug users often have an opioid use disorder.”

- a. “People who inject drugs often have an opioid use disorder”
- b. “Addicts often have an opioid use disorder”
- c. “Intravenous drug users are often opioid addicts”
- d. “Intravenous drug users are often people who have a physiologic and psychological dependence to opioids”
Which choice appropriately corrects the following sentence to avoid stigmatizing terms and replace with an appropriate alternative? “Intravenous drug users often have an opioid use disorder.”

- a. “People who inject drugs often have an opioid use disorder”
- b. “Addicts often have an opioid use disorder”
- c. “Intravenous drug users are often opioid addicts”
- d. “Intravenous drug users are often people who have a physiologic and psychological dependence to opioids”
FIVE RULES TO IMPLEMENT IN YOUR VERBAL MESSAGING TO AVOID STIGMATIONIZATION

1. Use person first language
   a. Person with AUD

2. Don’t conflate substance use (including nonmedical use of prescription medications) and substance use disorders
   a. Nonmedical use of oxycodone vs using oxycodone as part of an OUD

3. Use technical terms with clear and simple language
   a. Negative urine screen vs clean urine

4. Avoid using sensational or language based in fear
   a. Perception of inauthenticity from people with SUDs

5. Avoid perpetuating drug-related moral panic
   a. Further marginalizes people with SUDs rather than engaging them in a caring relationship

FIVE RULES TO “BREAK THE CYCLE” OF STIGMA ON A SYSTEMS LEVEL

1. Perform a language audit of existing material related to SUDs
2. Carefully consider shared material before re-sending to minimize perpetuating stigmatizing information
3. When delivering a message to others on prevention, carefully consider your word choices and respectfully help other allies select more appropriate options
4. Whenever developing new educational material in the area of SUDs, seek input from people who have active substance use disorders or those who are in long term recovery
5. Train all staff on stigma-free word choice and approach to patients

“If you still have breath in your lungs, there is hope.”

“Being in long term recovery, I came to believe I could live an abundant life and now I just can’t dream big enough.”
THE IMPACT OF STIGMA ON PATIENT CARE

- Substance Use Disorders (SUDs) are among the most stigmatized conditions worldwide and many people still consider SUDs a lifestyle choice
  - Impacts the way people view co-workers, neighbors, family, and friends

- Patients are treated differently by healthcare providers when they have a substance use disorder
  - Lower expectations for positive health outcomes and reduced hope
  - Resentment, frustration, countertransference, and provider burnout can result

- People who experience stigma experience worse treatment outcomes with regard to SUD treatment
  - Less likely to accept and engage in treatment; reduced motivation
  - More likely to drop out of treatment programs; reduced treatment adherence

- Caregivers’ attitudes toward people with SUDs are important in driving patient outcomes

ACCORDING TO PEOPLE WITH CHRONIC PAIN AND THEIR CAREGIVERS, HOW DOES STIGMA AT THE PHARMACY LEVEL IMPACT ACCEPTANCE OF NALOXONE?

“I think that if you go to the pharmacist and let them know you are picking up an opioid and you would bring it up that you are interested in getting Narcan, to me automatically red flags go up in that pharmacist’s mind. Why do you want Narcan? Do you think you are going to overdose? Then all of a sudden there you are the criminal again.”

Solution: Universal Naloxone

“If you see in the Globe an article of Narcan and how it saves lives and you see on the news you know ABC’s been great about doing so much information and Narcan is saving lives and it’s in the pharmacies and you go to your pharmacist and you ask them and you get that, like, shut-off, no, that shut-off response, what are you gonna do? There are people that there is that stigma that they’re gonna turn around and walk away.”
Consider the following situation. A new patient presents to the pharmacy with a prescription for buprenorphine 16mg daily and sertraline 200mg daily. The patient indicates that he is in distress and requests the buprenorphine be filled while he waits. The pharmacy professional behind the counter rolls his eyes and mutters something under his breath about “another one”. Which is most likely to result from this interaction in the future?

- a. The patient feels comfortable and welcome at this new pharmacy
- b. The patient is likely to come back to this pharmacy with questions or concerns
- c. The patient feels judged and ashamed and is unlikely to seek help from the pharmacy when needed
- d. The patient is used to this treatment and it does not phase the patient
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- c. The patient feels judged and ashamed and is unlikely to seek help from the pharmacy when needed
- d. The patient is used to this treatment and it does not phase the patient
WHAT IS THE PHARMACIST PERSPECTIVE?

“I think it, for me, I think it might ruin a relationship even knowing the background of somebody, but you don’t want to step over those boundaries where you would ruin a relationship, then they will go and talk to their friends, “Oh, she thinks I’m an addict.”

Solution: Universal Naloxone

HOW TO INITIATE THE CONVERSATION

“We are recommending that you get naloxone today. The medications you are taking may cause respiratory depression, overdose, and maybe even death. Naloxone is an antidote you can keep in hand to reverse this situation. Is it OK to provide you with naloxone today?”

“You don’t have a fire extinguisher in your house because you’re an arsonist. You have it because it’s an accident … the naloxone your provider is offering you … is because of the possibility of an accident, not because of the possibility of abuse … it’s just that this is a high-risk medication and we don’t want anything bad to happen to you.”

POTENTIAL SOLUTIONS TO REDUCE THE AWKWARDNESS

“Have a card stapled to the bag, Would you like naloxone?, and put it big and staple it big: Would you like a free thing of naloxone?, and then have the [card] flip over with information about naloxone for people who don’t know what it is.”

“like the Sudafed cards that are in the aisle, and if we had naloxone cards instead of … so like there is no question. You don’t have to walk up to the counter and be like “can I have Naloxone?” You just hand them the card and it’s not awkward anymore. It’s not a conversation.”
WHAT WORKS TO REDUCE STIGMATIZING ATTITUDES?

- n= 64 medical residents (n= 29 completed 6 month follow up)
- Completed an online training module regarding substance use disorders and patient care including:
  - How clinicians’ attitudes toward individuals with SUDs are worse than their attitudes toward people with other medical and psychiatric conditions
  - Explaining why this may occur
    - Stigma
    - The thought that substance use is a moral failing rather than a disease
    - Challenging personal experiences
    - Difficult past clinical experiences
  - Included videos of people in long term recovery and family members of individuals with SUDs, discussing hopeful and challenging experiences with clinicians
  - Provided links to resources for more information on treating patients with SUDs

IMPACT OF EDUCATION ON THE ATTITUDES OF LEARNING PROVIDERS USING THE MEDICAL CONDITION REGARD SCALE (MCRS)

**Opioid Use Disorder**

- **MCRS**
  - Validated and reliable
  - 11-item assessment
  - 6-point Likert scale
- **Higher scores = higher:**
  - Enjoyment
  - Perceived treatability
  - Belief in the utility of dedicating medical resources for a given condition
- **Used as a proxy for attitude**

**Alcohol Use Disorder**

- **MCRS**
  - Validated and reliable
  - 11-item assessment
  - 6-point Likert scale

WHAT ABOUT PHARMACY STUDENTS?

- N= 58 students
- 3-hour opioid education summit
- Neuropharmacology professor provided information on:
  - Pharmacology of opioids
  - Signs and symptoms of an opioid overdose
  - Naloxone administration
  - Treatment options for OUD
  - Anatomy of pain transmission (new)
  - Development of opioid tolerance, dependence, and withdrawal (new)
  - Differences between prescription and illicit opioids, such as heroin (new)
- A pharmacy practice professor addressed:
  - The current state of the opioid epidemic by covering trends in opioid prescribing
  - The pathway from legitimate pain treatment to illicit opioid use
  - Statistics of illicit opioid use and overdose deaths
  - Harm reduction strategies

- An interdisciplinary panel consisting of a psychiatrist, psychiatric pharmacist, and a therapist presented case studies to show how they would collaborate to treat patients with OUD

IMPACT OF EDUCATION ON THE ATTITUDES OF PHARMACY STUDENTS TOWARD OPIOID USE DISORDER

Survey Statements

Knowledge based
1. I know what naloxone is and how to administer it.
2. I can recognize the symptoms of opioid intoxication and/or withdrawal.
3. I know what my future role will be as part of a health care team treating someone with opioid use disorder.

Stigma based
1. Moral strength plays a large part in the cause of an opioid use disorder.
2. Most people with substance use disorders are uneducated and of lower economic status.
3. I wouldn’t be comfortable knowing someone with history of a substance use disorder was going to be one of my health care providers.
4. I think that people with substance use disorders have unstable childhoods.

Control statements
1. I feel people with diabetes are at fault for their disease.
2. I know several people who have been diagnosed with an opioid use disorder.
3. I would feel comfortable using an EpiPen for someone having an allergic reaction.

Mean Differences
Knowledge: 2.9 (SD 3.3)
Stigma: 1.1 (SD 4.5)

High stigma = high numbers
High knowledge = low numbers
PHARMACIST ATTITUDES REGARDING PEOPLE WHO INJECT DRUGS (PWID) AND PROVISION OF SYRINGES

88% agreed


N= 204 community pharmacists

Increased stigma w/ increased social conservatism and age, and reduced education

*P<0.05
**P<0.01
***P<0.001
WHAT IS HARM REDUCTION?

“Strategy directed toward individuals or groups that aims to reduce the harms associated with certain behaviours”

“accepts that a continuing level of drug use (both licit and illicit) in society is inevitable and defines objectives as reducing adverse consequences”

“emphasizes the measurement of health, social and economic outcomes, as opposed to the measurement of drug consumption”
WHAT ARE EXAMPLES OF HARM REDUCTION STRATEGIES IN PATIENTS WITH OUD?

- Clean needles & needle exchange programs
- Overdose education
- Education about available and gold standard treatment
- Naloxone distribution
Cumulative HIV Diagnoses and Public Health Response

- Initial diagnosis
- Incident identified
- Cluster identified
- Incident command established
- Federal support requested
- Syringe exchange started
- Local HIV clinic opened
- HIV testing staff and DIS deployed
- Public health emergency declared
- >35,000 cumulative syringes dispensed
- >77,000 cumulative syringes dispensed

Which is/are harm reduction measures?

- a. Fire extinguishers
- b. Take home naloxone
- c. Seat belts
- d. Take home epinephrine
- e. All of these
Which is/are harm reduction measures?

- a. Fire extinguishers
- b. Take home naloxone
- c. Seat belts
- d. Take home epinephrine
- e. All of these
A patient presents to your pharmacy with post hospital discharge scripts. He tells you he was admitted for infective complications of intravenous fentanyl use. You would like to offer him a naloxone prescription. Which conversational prompt is non-stigmatizing?

- a. “As an opioid addict, you are at high risk of opioid overdose and I can prescribe you take home naloxone as a harm reduction measure.”
- b. “As an opioid addict, you are at high risk of opioid overdose and I can prescribe you take home naloxone as a crutch until you can quit.”
- c. “As a person with an opioid use disorder, you are at high risk of opioid overdose and I can prescribe you take home naloxone as a harm reduction measure.”
- d. “As a person with an opioid use disorder, you are at high risk of opioid overdose and I can prescribe you take home naloxone as a crutch until you quit.”
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- c. “As a person with an opioid use disorder, you are at high risk of opioid overdose and I can prescribe you take home naloxone as a harm reduction measure.”
- d. “As a person with an opioid use disorder, you are at high risk of opioid overdose and I can prescribe you take home naloxone as a crutch until you quit.”
WHAT IS THE PHARMACIST PERSPECTIVE?

“One of the barriers is that these folks come in and they’re already embarrassed ... It took some courage for them to show up at that pharmacy, a mother or father, a brother or sister, or whomever, to say hey you know what I need this for my, you know, I want to get some naloxone, I want to get Narcan and you’ve got a technician at the drop-off station who says, well, I don’t know what to do and then you got a pharmacist who says, geez, I didn’t look that up, I don’t know what to do either, and all of a sudden, you’ve lost that patient. You’ve lost that opportunity and that person. It may take them a while to get that courage back to come back to say, hey, I really need to do this.”

WHAT IS THE PHARMACIST PERSPECTIVE?

“I think a lot of it is, people don’t feel comfortable educating or suggesting something that they are not personally comfortable with ... if you don’t really know how it works or what the best way to do it is, you’re not going to go out of your way to suggest it to someone.”

REVERSAL AGENT – NALOXONE
NARCAN (NALOXONE)

Highly specific, high-affinity opioid antagonist
  - Stronger affinity than other opioids, knocking them off, reversing the overdose

Naloxone ONLY works if there are opioids involved
  - It does NOT work on other non-opioid based drugs
  - Does NOT harm someone if given when patient has no opioids in system

NARCAN (NALOXONE)

Onset: ~2-8 minutes

Duration: 30-90 minutes

Bioavailability:
- IV – 100%
- IM – 54%
- IN – 43.1%

Side Effects: induction of opioid withdrawal – agitation, increased blood pressure, muscle cramping, nausea/vomiting

No potential for abuse
NALOXONE FORMULATIONS

• Injectable (and intranasal) generic
  o Manufacturer: Amphastar & Teleflex (IN adapter)

• Intranasal branded (Narcan Nasal Spray)
  o Manufacturer: Adapt Pharma

• Injectable generic vials
  o Manufacturers: Hospira, Mylan

• Auto-injector (Evzio Auto-Injector)
  o Manufacturer: kaléo
## FORMULATION COMPARISON CHART

<table>
<thead>
<tr>
<th></th>
<th>IJ/IN generic</th>
<th>IN brand</th>
<th>IJ generic&lt;sup&gt;1&lt;/sup&gt;</th>
<th>IJ generic&lt;sup&gt;2&lt;/sup&gt;</th>
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<tbody>
<tr>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Assembly required</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titrable</td>
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<td>X</td>
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<td>4mg/4mL</td>
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<td>0.8mg/2mL OR 4mg/10mL</td>
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</tr>
<tr>
<td>Cost/kit</td>
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<td>$</td>
<td>$</td>
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<td>Storage requirements</td>
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<td>Store at 59-77°F</td>
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<tr>
<td></td>
<td>Fragile: glass</td>
<td>Store at 59-77°F</td>
<td>Breakable: glass</td>
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<tr>
<td>Rx and quantity</td>
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<td>IN brand</td>
<td>IJ generic¹</td>
<td>IJ generic²</td>
<td>Auto-IJ brand</td>
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<tr>
<td>-----------------</td>
<td>---------------</td>
<td>----------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------------</td>
</tr>
<tr>
<td>#2 2mL Luer-lock needleless syringe plus #2 mucosal atomizer devices</td>
<td>#1 2-pack of 2 0.4mg/ 0.1mL IN devices</td>
<td>#2 single-use 1mL vials OR #1 10mL MDV PLUS #2 3mL syringe w/ 23-25 gauge 1-1.5 inch IM needles</td>
<td>#2 single-use 1mL vials PLUS #2 3mL syringe w/ 23-25 gauge 1-1.5 inch IM needles</td>
<td>#1 2-pack of 2 0.4mg/0.4mL prefilled auto-injector devices</td>
<td></td>
</tr>
</tbody>
</table>

| Sig | | | | | |
| Spray 1mL (1/2 syringe) into each nostril. | Spray 0.1 mL into one nostril. | Inject 1mL in shoulder or thigh. | Inject 1mL in shoulder or thigh. | Inject into outer thigh as directed by voice-prompt. Place black side firmly on outer thigh and depress and hold for 5 seconds |

| Repeat dose? | Repeat after 2-3 minutes if no-minimal response |

| Manufacturer | Amphastar/ Teleflex (IN adapter) | Adapt Pharma | Hospira | Mylan | kaléo |

PrescribeToPrevent.org
Which describes naloxone’s mechanism of action and role?

A. Naloxone is an opioid agonist that treats opioid overdose

B. Naloxone is an opioid antagonist that treats opioid use disorder

C. Naloxone is a partial opioid agonist that treats opioid use disorder

D. Naloxone is an opioid antagonist that treats opioid overdose
Which describes naloxone’s mechanism of action and role?

A. Naloxone is an opioid agonist that treats opioid overdose
B. Naloxone is an opioid antagonist that treats opioid use disorder
C. Naloxone is a partial opioid agonist that treats opioid use disorder
D. **Naloxone is an opioid antagonist that treats opioid overdose**
Which naloxone formulation does the following describe? “This naloxone formulation is administered in one nare and there is no assembly required.”

A. Naloxone nasal spray (Narcan NS)
B. Naloxone nasal kit with atomizer and carpuject (Narcan)
C. Naloxone autoinjector (Evzio)
D. Naloxone injection vial and syringe (Narcan)
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IDENTIFYING AT-RISK INDIVIDUALS
RISK FACTORS

History of receiving emergency medical care for acute opioid poisoning/overdose

Suspected or confirmed history of substance abuse, dependence or non-medical use of prescription or illicit substances

Recent release from prison or opioid detox program

In methadone or buprenorphine detox/maintenance for addiction or pain
RISK FACTORS CONT.

Receiving high-dose opioid prescriptions (>100mg morphine equivalence)

Have difficulty accessing emergency medical services

Any opioid prescription in combination with:
  o Respiratory diagnoses
  o Renal dysfunction
  o Alcohol, benzodiazepines, or antidepressant use
Which of the following patients would be considered to be at ‘high risk’ of an opioid overdose?

a) 28 yo male who recently was in the emergency department for an OD
b) 84 yo male who has COPD/emphysema, diagnosed with lung cancer 1 year ago, and has been using benzodiazepines for sleep and high-dose opioids to control his pain (MME > 100)
c) 76 yo frail female who lives in Allagash, ME and has been using fentanyl patches for her chronic lower back pain for years, but the nearest hospital is 1 hour away
d) 26 year old male using a 100mcg/hr fentanyl patch every 3 days for pain
e) All of the above
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d) 26 year old male using a 100mcg/hr fentanyl patch every 3 days for pain

e) All of the above
WAYS TO AVOID ACCIDENTAL OVERDOSE

1. Take medicine only if it has been prescribed for you.
2. Do not mix your opioids with alcohol, benzodiazepines, or other sedating medications
3. Store your medicine in a safe place away from children.
4. Learn the signs of overdose and teach your family and friends how to respond.
5. Be extra careful if you miss or change doses, feel ill, or start new medications
6. Dispose of unused medication properly.

https://store.samhsa.gov/shin/content/SMA13-4742/Toolkit_Patients.pdf
REQUIRED PATIENT EDUCATION
REQUIRED PATIENT EDUCATION

1. Recognizing signs of an overdose
1. RECOGNIZING THE SIGNS OF OVERDOSE

Person won’t wake up
Slowed/stopped breathing
Blue/gray lips and fingernails
Pale, clammy skin
Pin-point pupils
REQUIRED PATIENT EDUCATION

1. Recognizing signs of an overdose

2. Emergency response instructions
2. EMERGENCY RESPONSE INSTRUCTIONS

Call 911
  o Make sure to say the patient is unresponsive and not/struggling to breathe
  o Give a clear address and location

• Administer naloxone (if available)

• Begin CPR or rescue breathing
  o CPR technique should be based on the rescuer’s training level

• If alone ➔ give CPR/rescue breaths for ~2 minutes before leaving to get naloxone or AED
2. EMERGENCY RESPONSE INSTRUCTIONS

Rescue breathing technique

- Make sure nothing is in the mouth, blocking their breathing
- Place one hand on chin & tilt the head back
- With the other hand pinch the nose closed
- Administer **2 slow breaths** and look for the chest rising
- Continue **1 breath every 5 seconds** until the patient starts breathing on own or help arrives
KNOWLEDGE QUESTION

Which of the following is NOT a sign/symptom of an opioid overdose?

a) Respiratory depression
b) Large pupils
c) Unable to be awakened
d) Blue/purple fingernails or lips
KNOWLEDGE QUESTION

Which of the following is NOT a sign/symptom of an opioid overdose?

a) Respiratory depression
b) Large pupils
c) Unable to be awakened
d) Blue/purple fingernails or lips
REQUIRED PATIENT EDUCATION

1. Recognizing signs of an overdose
2. Emergency response instructions
3. How to administer naloxone
3. HOW TO ADMINISTER NALOXONE

 Depends on which formulation is available/on hand:

- Nasal spray naloxone
- NARCAN® Nasal Spray
- Auto-injector (Evzio)
- Injectable naloxone

https://www.youtube.com/watch?v=xCq1ooR9L5k
**Nasal spray naloxone**

1. Take off yellow caps.
2. Screw on white cone.
3. Take purple cap off capsule of naloxone.
4. Gently screw capsule of naloxone into barrel of syringe.
5. Insert white cone into nostril; **give a short, strong push** on end of capsule to spray naloxone into nose: **ONE HALF OF THE CAPSULE INTO EACH NOSTRIL.**
6. Push to spray.

If no reaction in 3 minutes, give second dose.

---

**NARCAN® Nasal Spray**

1. Peel back the package to remove the device.
2. Place the tip of the nozzle in either nostril until your fingers touch the bottom of the patient’s nose.
3. Press the plunger firmly to release the dose into the patient’s nose.
**Injectable naloxone**

1. Remove cap from naloxone vial and uncover the needle.

2. Insert needle through rubber plug with vial upside down. Pull back on plunger and take up 1 ml.

3. Inject 1 ml of naloxone into an upper arm or thigh muscle.

4. If no reaction in 3 minutes, give second dose.
EVZIO AUTO-INJECTOR

**Step 1: Pull EVZIO from outer case**
- Do NOT go to Step 2 until you are ready to use EVZIO

**Step 2: Pull off the Red safety guard**
- Do NOT touch the Black base (where needle comes out)
Step 3: Place the Black end of EVZIO against outer thigh (through clothing if needed)

- Press firmly and hold in place for 5 seconds
REQUIRED PATIENT EDUCATION

1. Recognizing signs of an overdose

2. Emergency response instructions

3. How to administer naloxone

4. Now what?
4. NOW WHAT?

Recommended to stay with patient for at least 3 hours or until help arrives

- If they wake up and start to breathe → STAY WITH THEM!!

If you MUST leave, put the patient into the recovery position

[Image: Recovery position]

https://www.lhsfna.org/LHSFNA/assets/File/recovery%20position.jpg
Which is an important educational point to convey to a patient at your pharmacy who is receiving opioid overdose and naloxone education?

A. Always call 911 when naloxone is administered because a patient can re-overdose when the naloxone wears off
B. Never leave the patient alone after naloxone administration, but if they must be left alone, place the patient on their back to keep the airway open
C. Never administer naloxone unless you are absolutely sure an opioid was ingested
D. Always administer intramuscular naloxone in the gluteal muscle and use the appropriate needle length and gauge
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NARCAN NS RXS DISPENSED BY PHARMACIES: MAINE 2017-2019

Sources: iDNA Data Analytics & Medicaid.gov
As a Maine pharmacist, which of the following patients are you allowed to prescribe and dispense naloxone?

A. 35 yo woman who is picking up a prescription for oxycodone, who also takes sertraline for anxiety/depression, lorazepam for anxiety, prn zolpidem for sleep

B. A mother of a 20 yo man who is concerned that her child may be misusing prescription drugs

C. 84 yo man who has COPD/emphysema, diagnosed with lung cancer 1 year ago, and has been using benzodiazepines for sleep and high-dose opioids to control his pain (MME > 100)

D. An 18 yo woman who requests it

E. All of the above patients
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"OPIOID SAFETY LANGUAGE"

Remember: Naloxone ONLY works on opioids

• Term “overdose” has negative connotations
  o Study reported that patients prescribed opioids (including those at high-risk with a history of OD) rated their overdose risk as 2 out of 10

Consider using other terminology, such as “accidental overdose”, “bad reaction”, or “opioid safety”

Other phrases:
  o “Opioids can stop or slow your breathing”
  o “Naloxone is the antidote to opioids – that is sprayed/injected if there is a bad reaction where you can’t be woken up”
  o “Naloxone is for opioids as an EpiPen® is for someone with allergies”

HELP
THOSE IN NEED
GIVE
OVERDOSE RESCUE
HOPE
FOR A LIFE SAVED
Getnaloxonenow.org
RESOURCE WEBSITES

- Stopoverdose.org
- Naloxoneinfo.org
- Getnaloxonenow.org
- Naloxonesaves.org
- Prescribetoprevent.org
- Takeasprescribed.org
- Harmreduction.org/issues/overdose-prevention/overview/overdose-basics/
KAHOOT!

https://play.kahoot.it/v2/?quizId=74075337-ab2d-449c-8b5e-8ac46403b3a2
WHAT ARE YOUR CONCERNS AROUND NALOXONE PRESCRIBING?

WHAT BARRIERS DO YOU SEE IN YOUR PRACTICE?

Thank you!

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