Overdose is the leading cause of injury-related death in the U.S.¹

100 PEOPLE DIE FROM DRUG OVERDOSE EVERYDAY IN THE UNITED STATES

FIGURE 1. MAINE OVERDOSE DEATH BY DRUG TYPE OVER TIME²

In 2015 there were 272 Opioid Overdose deaths in Maine. This is a 31% increase from 2014. 111 (41%) of these deaths were due to pharmaceutical opioids.²

The majority of opioid overdose deaths (as much as 88%)² involve at least one other drug: Most commonly alcohol, benzodiazepines or cocaine.⁴

Maine Adults between the ages of 30 and 34 had the highest rate of death due to substance abuse or overdose in 2014.⁴ This remained true in 2015, but the mean age was slightly higher at 42.²
Accidental overdose is preventable

The main risk of death from an opioid overdose is **prior overdose**. A patient who has previously overdosed is **6 times** more likely to overdose in the subsequent year.

**Other factors that increase risk of overdose:**

- **Reduced Tolerance:**
  - Change in Dose
  - Use of Vivitrol™

- **Period of Abstinence:**
  - Release from prison
  - Release from rehab

- **Genetic Predisposition:**
  - Male Gender

- **Concomitant Use of Substances:**
  - Alcohol
  - Benzodiazepines
  - Cocaine

**Figure 3. Overdose mortality rate by week since prison release:**

An example of overdose risk if opioids are discontinued and restarted.

When a patient reduces or stops opioid use, there is an increased risk of overdose death if opioid use increases again.
Naloxone

- Highly specific, high-affinity opioid antagonist used to reverse the effects of opioids.
- Can be safely administered by laypersons via intramuscular or intranasal routes, with virtually no side effects and no effect in the absence of opioids.
- Effects last 30-90 minutes; usually sufficient for short-acting opioids but help should always be sought.
- While high doses of intravenous naloxone by paramedics have been associated with withdrawal symptoms, lower lay-administered doses produce much more mild symptomatology.7

**FIGURE 4. NALOXONE MECHANISM OF ACTION**8

Naloxone has a higher affinity to the opioid receptors than opioids like heroin or oxycodone, so it knocks other opioids off the receptors for 30-90 minutes. This reverses the overdose and allows the person to breathe.

In 2014, a total of 829 patients in Maine received naloxone administrations from Maine EMS responders.4

Naloxone is effective

In California, counties with naloxone programs had an overall slower rate in the growth in opioid overdose death compared to counties without naloxone programs.13
Naloxone is cost-effective

A manuscript in the *Annals of Internal Medicine* indicated that providing naloxone to heroin users is robustly cost-effective and possibly cost-saving. Investigators believe similar results apply to other opioid users.

Emerging data suggests that providing naloxone may encourage patients to be safer with their opioid use. If this is the case, the intervention would be cost-saving and 36 prescriptions would prevent one death.

**Cost:**

$421

per quality-adjusted life-year gained

**Benefit:**

164 naloxone scripts = 1 prevented death

Maine Law Encourages Naloxone Prescribing

Naloxone is NOT a controlled substance. *Any Licensed Healthcare Provider can prescribe naloxone.* Maine law provides additional protections to encourage naloxone prescribing and distribution:

**PRESCRIPTION, POSSESSION, AND ADMINISTRATION** *(22 M.R.S.A. § 2353(2))*

- A health care professional may directly or by standing order prescribe naloxone to an opioid user or the user’s family member, friend, etc.

- In addition, it is now (effective 7/29/16) legal for a pharmacist to dispense and for an individual to possess and administer naloxone without a prescription for use in case of an opioid-related drug overdose.

- That individual may be the opioid user, a family member, a friend, or any person in a position to assist an at-risk person.

- Rules establishing training requirements and dispensing protocols have not yet been established.

**ADMINISTRATION BY LAW ENFORCEMENT OFFICERS & FIREFIGHTERS** *(22 M.R.S.A. § 2353(3))*

- Law enforcement officials and firefighters may administer intranasal naloxone if they have received the appropriate training

**COMMUNITY BASED DRUG OVERDOSE PREVENTION PROGRAMS** *(22 M.R.S.A. § 2353(4))*

- Under standing orders from a health care professional, a public health agency may store and dispense naloxone to anyone who has successfully completed the training program.
**NALOXONE FOR OPIOID SAFETY**

**INTRANASAL**

**Rx** Naloxone HCl Nasal Spray
4mg into nostril for suspected opioid overdose. Call 911.

**Rx** Naloxone 2mg/2ml prefilled syringe, spray ½ into each nostril for suspected opioid overdose. Call 911.

- MAD (Mucosal Atomization Device) nasal adapter

*Atomizer Access is complicated. Pharmacies may need to purchase them directly from a manufacturer.*

Additional Prescribing information may be found at prescribetoprevent.org
**INJECTABLE**

Naloxone 0.4mg/1ml IM for suspected opioid overdose. Call 911.
Repeat PRN

- IM Syringes (3ml 25g 1” syringes are recommended)
- Dispense Two Syringes

**AUTO-INJECTOR**

**Rx** Naloxone Auto Injector 0.4mg
Dispense one (two pack) Use PRN for suspected opioid overdose. Call 911.
Indications for naloxone prescription

The American Medical Association has endorsed the distribution of naloxone to anyone at risk for having or witnessing an opioid overdose.13

CONSIDER OFFERING A NALOXONE PRESCRIPTION TO:

- All patients prescribed long-term opioids
- Anyone otherwise at risk of experiencing or witnessing an opioid overdose

WHY PRESCRIBE TO ALL PATIENTS ON LONG-TERM OPIOIDS?

<table>
<thead>
<tr>
<th>Reason</th>
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<tbody>
<tr>
<td>It is difficult to predict which patients who take prescription opioids are at risk for overdose.</td>
</tr>
<tr>
<td>Many patients do not feel they are at risk for overdose. Prescribing to all patients on opioids will help patients understand naloxone is being prescribed for risky drugs, not risky patients.</td>
</tr>
<tr>
<td>About 40% of overdose deaths result from diverted medications. Whether intentional or unintentional, diverted opioids are a serious risk. Co-prescribing naloxone increases the chance that the antidote will remain with the medication.</td>
</tr>
</tbody>
</table>

RISK FACTORS for opioid-induced respiratory depression15:

1. Recent emergency medical care for opioid poisoning/intoxication/overdose
2. Suspected history of heroin or nonmedical opioid use (e.g., DAST-10)
3. High dose opioid prescription (e.g., >100 mg. morphine equivalence/day)
4. Any methadone prescription to opioid naïve patient
5. Recent release from incarceration/prison/jail
6. Recent discharge from opioid detox or abstinence-based program
7. In methadone or buprenorphine detox/maintenance for addiction or pain
8. Request from patient or family member
9. May have difficulty accessing EMS (distance, remoteness, etc.)

Any opioid prescription AND ...

10. Respiratory diagnoses: Smoking/COPD/emphysema/asthma/sleep apnea/ other.
11. Renal dysfunction or hepatic disease.
12. Known or suspected concurrent alcohol use
13. Concurrent benzodiazepine prescription or nonmedical use
14. Concurrent SSRI or TCA anti-depressant prescription
How to educate patients on naloxone

Clinic staff can educate patients about naloxone. Education generally includes:

- When to administer naloxone
- How to administer naloxone (including demonstration)
- Informing patients to alert others about the medication, how to use it and where it's kept, as it is generally not self-administered

Brochures remind patients and caregivers how to manage an overdose. Example brochures can be found at www.mainemed.com/micis.

OPIOID SAFETY LANGUAGE

The word “overdose” has negative connotations and prescription opioid users may not relate to it.

**Patients prescribed opioids (including high-risk persons with a history of overdose) reported their risk of “overdose” was 2 out of 10.**¹⁷

Instead of using the word “overdose,” consider using language like “accidental overdose,” “bad reaction” or “opioid safety.” You may also consider saying:

- “Opioids can sometimes slow or even stop your breathing.”
- “Naloxone is the antidote to opioids—to be [sprayed in the nose/injected] if there is a bad reaction where you can’t be woken up.”
- “Naloxone is for opioid medications like an EpiPen® is for someone with an allergy.”
**Payment for Educating Patients about Naloxone**

**SBIRT CODES COVER TRAINING** (per 15 min intervals)

<table>
<thead>
<tr>
<th>Medicare:</th>
<th>G0396</th>
</tr>
</thead>
<tbody>
<tr>
<td>MaineCare:</td>
<td>99408, 99409 if &gt;30 mins</td>
</tr>
<tr>
<td>Commercial:</td>
<td>CPT99408</td>
</tr>
</tbody>
</table>

Training includes:
- Administering Drug Abuse Screening Test (DAST-10)
- Counseling on how to:
  - recognize overdose
  - administer naloxone

**Insurance Coverage**

- **MaineCare**: prefilled syringe & vial (no PA required)
- **Medicare**: depends on part D coverage, but some cover all forms
- **VA**: vial, auto-injector
- **Commercial insurers**: most do not cover any form, check through individual plan

The fact that individuals may purchase naloxone as a bystander (and availability without prescription) influence the coverage, particularly with commercial insurers.

**Cash Prices***

*Some prices require free online coupons or discount cards

- Naloxone 0.4 mg/ml 1 vial (2) $20-$48
- Naloxone 2 mg/2 ml prefilled syringe $60-$90
- Narcan nasal spray (2 pack) $140
- Evzio (2 pack) $3,650

**Source**: goodrx.com 10-31-16
Resources


Maine Office of Substance Abuse: www.maine.gov/dhhs/samhs/osa/help

Northern New England Society of Addiction Medicine: www.NNESAM.weebly.com

Prescribe to Prevent: Clinic-based prescribing information and guidelines: prescribetoprevent.org

Reach for Me: Film and resource materials for advocates, families and providers: reach4me.org

Maine Harm Reduction Alliance: maineharmreduction.org/overdose-prevention/

References


Objectives

1. Describe recommendations for naloxone prescribing to increase patient safety.
2. Understand Maine Law and payment options for naloxone.
3. Consider how to implement naloxone prescribing into your practice work flow.
4. Prepare scripting for opioid safety discussions with patients, family, or friends.

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The recommendations contained in this brochure are general and informational only; specific clinical decisions should be made by providers on an individual case basis.