Emergency Department Naloxone Implementation Guide
This detailed guide is designed to facilitate implementation of your unique ED-tailored naloxone distribution program.
The persistent opioid overdose epidemic killed almost 47,000 people nationally in 2018,\(^1\) with over 2,000 reported deaths in Michigan alone.\(^2\)

This is equivalent to 5 Michiganders dying every day from an overdose.
Naloxone Distribution in the ED

Increased Visits
Emergency department (ED) visits from opioid overdoses have increased 70% from July 2016 to September 2017 in the Midwest.³

Increased Mortality Risk
A retrospective observational study of over 11,000 patients treated for nonfatal overdoses in Massachusetts’s EDs showed that 20% died within the first month after ED discharge and 22% died within 2 days of ED discharge.⁴

Harm Reduction
EDs are a key access point to the health system. EDs can identify people at risk for overdose, intervene to reduce future harm, and remove barriers for treatment and recovery support.

The Gap
While there is growing consensus that ED-based naloxone distribution is impactful and cost-effective, harm reduction strategies have generally failed to get traction in most EDs in Michigan. The major obstacle has been the education, training, and resources required to effectively introduce and sustain these evidence-based practices. We hope to reduce these barriers to implementation by providing this step by step guide for EDs.
Michigan has overdose prevention laws that protect prescribers, dispensers, and community laypeople when administering and distributing naloxone. Prescribing naloxone to patients in the ED setting is recommended, legal, and within the scope of practice, carrying no more liability than the prescribing of other medications.

### Naloxone Access Laws

**Civil and Criminal Liability Protection** for anyone administering naloxone in good faith to an individual he/she suspects is experiencing an opioid overdose.

**Third-Party Prescribing**
Allows naloxone to be prescribed to an individual knowing the patient will use the medication on someone else.

**Pharmacy Standing Order**
Allows pharmacies registered in Michigan to dispense naloxone to individuals requesting naloxone.

### Good Samaritan Law

Protects individuals from low-level drug offenses such as possession of controlled substances when calling 911 for another individual or obtaining medical assistance for him/herself.

### Substance Use Disorder Treatment Legislation

Individuals treated for opioid overdose are required to receive information on SUD treatment services.
The key ingredients to building a successful ED naloxone distribution program involve:5

1. Making the Case
2. Forming the Team
3. Building the Naloxone Rescue Kit
Making the Case

1. **Create Urgency to Solve the Problem**
   - Advocate that the time is now to make change
   - Support with information and a compelling rationale
   - Highlight the patient and community benefits to an ED naloxone program
   - Use data presented in this implementation guide to support your case

2. **Secure Project Sponsorship**
   - Successful program implementation requires institutional support from motivated executive leadership
   - These leaders will help overcome barriers and provide links to other areas of the organization necessary for project success

3. **Set and Implement Project Aims**
   - Determine your objectives (e.g., determining contents of your ED’s naloxone rescue kit, securing kit contents, developing and ordering and distribution process, etc)
   - The objectives should be time-specific and measurable
   - Define your specific target population which can evolve as your program matures (e.g., patients in ED with opioid overdose, those with risky opioid use, etc)
   - It is okay to start a program on a small scale
   - Implement, test, then adjust your interventions
Forming the Team

It is important to develop a team of members familiar with all the different aspects of building an ED naloxone program. Your team members can provide process improvement expertise and serve as champions for the work, advocating for naloxone distribution as a critical harm reduction intervention.

Recruit Multidisciplinary Champions

**Physician Champion**
- Encourages hospital administrator and ED leadership buy-in
- Assists in development and implementation of screening and treatment protocols and Electronic Health Record (EHR) orders
- Educates on identifying at-risk patients, ordering naloxone, and educating patients/staff on naloxone use
- Facilitates communication and protocol development between nursing, pharmacy, social work, Information Technology (IT), and ED administration

**Pharmacist Champion**
- Develops processes and protocols for naloxone storage, monitoring, ordering, dispensing, and tracking
- Trains pharmacists on dispensing naloxone rescue kits and overdose education

**Social Work Champion**
- Provides local Substance Use Disorder (SUD) treatment resources and referrals
- Educates patients on naloxone use
- Links patients to social services

**Nurse Champion**
- Educates nurses and ancillary staff on identifying at-risk patients, ordering and dispensing naloxone. Trains nurses to screen and educate patients on naloxone use.
- Provides input to development and implementation of screening and treatment protocols and ordering naloxone in EHR and dispensing naloxone

**IT Champion**
- Develops EHR orders for naloxone rescue kits and associated services
- Coordinates with pharmacy on drug ordering and tracking
- Develops EHR reporting tools for naloxone program quality assurance

*TIP:* Your hospital is unique. Include members on the team who can help advance your naloxone program!
As you form your multidisciplinary team with support from ED leadership, meet to discuss the following:

- What competing ED priorities may prevent this project from getting started?
- Who will order naloxone for ED distribution? Or prescribe it?
- Who will distribute naloxone to the patients?
- Where will naloxone be stored and dispensed from?
- Who will make the kits?
- Who will educate staff on patient risk factors, overdose response and naloxone use?
- Who will educate patients on patient risk factors, overdose response and naloxone use?
- What is the role of in-house recovery specialists or addiction counselors?
- Should the ED partner with outside agencies?
- What is the funding source for naloxone?
Building the Naloxone Kit

1. Identify a Sustainable Funding Source(s) for NRKs

Research all options to decide which one, or combination, would work best for your hospital:

- Billing insurance
- Hospital Foundations
- Regional Prepaid Inpatient Health Plans
- County Health Departments
- Syringe Access Service Agencies
- Michigan Department of Health and Human Services

2. Naloxone Rescue Kit Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Type</th>
<th>Where</th>
<th>Item #</th>
<th>Qty</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narcan</td>
<td>Each box contains 2 doses</td>
<td>emergentbiosolutions.com</td>
<td></td>
<td>1</td>
<td>$75</td>
</tr>
<tr>
<td>Kit Bag</td>
<td>Clear bag with zip lock closure</td>
<td>medline.com/</td>
<td>DNSC500980 - 7.5X10</td>
<td>1</td>
<td>~$1*</td>
</tr>
<tr>
<td>Non-latex gloves</td>
<td>Size - Large</td>
<td>medline.com/</td>
<td>MDS2503M</td>
<td>1</td>
<td>$0.72*</td>
</tr>
<tr>
<td>Barrier mask</td>
<td>face shield</td>
<td>everreadyfirstaid.com/</td>
<td>EVRADFS-1</td>
<td>1</td>
<td>$0.55*</td>
</tr>
<tr>
<td>Patient Education Brochure</td>
<td>4.25 x 9.5 to fit kit bag</td>
<td>Preferred printing service</td>
<td></td>
<td>1</td>
<td>$0.18*</td>
</tr>
<tr>
<td>Pharmacy Access Card</td>
<td>4.25 x 9.5 to fit kit bag</td>
<td></td>
<td></td>
<td>1</td>
<td>$0.29*</td>
</tr>
<tr>
<td>Kit Label*</td>
<td>5x7, in sequential order</td>
<td></td>
<td></td>
<td>1</td>
<td>$0.15*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~$80.00</td>
</tr>
</tbody>
</table>

*Kit Label includes: naloxone instructions on use; kit # for tracking; a QR code for websites with video education
Your hospital system will need to establish its own naloxone distribution protocol. This may require approval by the hospital review committee that approves pharmaceutical procedures and patient education materials.

The 4 key components to a naloxone distribution protocol are:

<table>
<thead>
<tr>
<th></th>
<th>Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identifying Patients</td>
</tr>
<tr>
<td>2</td>
<td>Obtaining Naloxone after Medication Review</td>
</tr>
<tr>
<td>3</td>
<td>Educating Patients on Naloxone Use</td>
</tr>
<tr>
<td>4</td>
<td>Discharging Patients with Naloxone Kit</td>
</tr>
</tbody>
</table>
Identifying Patients

Currently, no validated screening tools exist for acute care settings. The CDC and other studies have recommendations for identifying patients at higher risk for overdoses (see Box 2). Your team should decide which patient population will be targeted to receive naloxone rescue kits. For examples of other drug use disorder and misuse screening tools, see Resources (page 21).

Obtaining Naloxone after Medication Review

TIP: EHR prompts are associated with increased naloxone distribution for patients after overdoses. Work with your IT department to build order sets and alerts to facilitate the process.

<table>
<thead>
<tr>
<th>Ideal Standard</th>
<th>Minimal Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHR flags high risk patients with an overdose prevention order set to include ordering naloxone (Narcan 4mg/0.1mL) for home use.</td>
<td>Prescriber must remember to enter orders for naloxone (Narcan 4mg/0.1mL) for home use.</td>
</tr>
</tbody>
</table>

Discuss with IT how to:

- Create an EHR flag for triage complaint (e.g., drug overdose)
- Add specific EHR screening questions or screening tool to identify risky substance use
- Link the Best Practice Alert (BPA) to a screening tool, discharge diagnosis, triage complaint, or PDMP (MAPS)
- Develop EHR reporting for program quality assurance

Patients at Risk for Overdose

- Inject opioids
- History of opioid overdose
- Opioid Use Disorder
- Combining opioids with other sedating drug (e.g., alcohol, benzodiazepines, antidepressants)
- Currently taking >50mg MME/day
- Combined use of opioids and ESLD, ESRD, HIV/AIDS
- Patients at risk for returning to a high dose for which they are no longer tolerant, such as:
  - Released from incarceration
  - Leaving detoxification facilities
  - Entering and exiting treatment

Box 2

Currently, no validated screening tools exist for acute care settings. The CDC and other studies have recommendations for identifying patients at higher risk for overdoses (see Box 2). Your team should decide which patient population will be targeted to receive naloxone rescue kits. For examples of other drug use disorder and misuse screening tools, see Resources (page 21).
Consider the patient’s health literacy level as well as any reading or comprehension issues.

**Ideal Standard**
- Show the short video (below) to the patient and their support person, to know how to respond to an opioid OD
- Pull out and review all items in the naloxone rescue kit
- Demonstrate how to use
- Answer questions and concerns before dispensing naloxone

**Minimal Standard**
- Using the naloxone patient brochure, point out the 3-step process for use.
- Dispense naloxone

TIP: By teaching your multidisciplinary team how to educate patients, anyone can address patient questions or concerns.

Use the free patient education resources below and cobrand with your hospital’s logo, at no extra cost.
Dispensing Naloxone Rescue Kit

Ideal Standard

1. Naloxone medication
2. Pair of nonlatex gloves
3. Barrier mask
4. Blue kit label with a QR code to access patient video training
5. Patient education brochure
6. Local pharmacies, participating in Michigan’s naloxone standing order program
7. SUD treatment resources (not shown, site-specific, but required by law)

Minimal Standard

☐ Naloxone medication
☐ Naloxone use instructions
☐ SUD Treatment Information
Staff Education

The following main points for staff education have been identified through surveys and research. Many free educational resources have been developed and are available for your use. (See Resources)

TIP: Use your current methods of communication to educate and engage staff: huddles; online modules; in-person 1:1; emails

1. Understand Naloxone
   - Available in intramuscular (IM) or intranasal (IN) formulations
   - Effective for 30-90 mins for IM and up to 120 mins for IN
   - Only effective in opioid-related ODs
   - How to access naloxone in the community
   - Evidence-based facts
     • Naloxone distribution saves lives
     • It is cost-effective
     • It does not increase drug use

2. Identify Patients at High Risk
   - Intravenous drug use
   - History of overdose
   - Concurrent use of sedatives
   - Recently experienced a loss of tolerance
   - Current opioid use is greater than 50 MME/day
   - Co-morbid conditions such as ESRD, ESLD
Opioid legislation covering Good Samaritan and naloxone access laws (see Box 1, page 4)

TIP: When staff is well versed in opioid legislation, they can allay any concerns that friends or family may have about calling 911 in an emergency.

Know the Laws

I care about your safety.
Naloxone saves lives.
We have free naloxone available.
Can I show you how to use it?

Share with your family and friends
where you keep naloxone and how to administer it. You can even use naloxone on someone else as there are laws to protect you.

All medications have side effects and one harmful side effect of taking too many opioids is that it will slow or even stop your breathing.
Just like we prescribe an epi-pen to someone who has an allergy, we prescribe naloxone to someone who may have an accidental overdose or bad reaction to the opioid medication.

In an overdose, it is a breathing problem and lack of oxygenation. So it is important to take action quickly when seeing signs such as blue lips/fingernails, slowed breathing, gurgling/snoring like sounds, and unresponsiveness. Here is a video on how to respond.

Naloxone is a lifesaver, like having a fire extinguisher. Hopefully, you will not need it, but it is important to have just in case you do need it.
Removing Stigma

How Addiction Works

• Addiction is a predictable, chronic disease of the brain, not a moral failing
• Behavior is a symptom of the disease
• Repeated drug use can lead to brain changes that affect decision-making, self-control and ability to resist intense urges to take drugs.

Language Matters - Person-first Language

<table>
<thead>
<tr>
<th>DO’S</th>
<th>DON’TS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance use disorder</td>
<td>Substance abuse/drug habit</td>
</tr>
<tr>
<td>Person who uses drugs</td>
<td>Addict, junkie, drug abuser, druggie</td>
</tr>
<tr>
<td>Person in recovery; in remission</td>
<td>Clean; Staying clean; reformed addict; alcoholic</td>
</tr>
<tr>
<td>Positive drug test/Testing negative for drug use</td>
<td>Dirty drug test/ Clean drug screen</td>
</tr>
<tr>
<td>Medications for opioid use disorder</td>
<td>Medication-assisted treatment</td>
</tr>
</tbody>
</table>
Instill Hope for Recovery

Be aware of your biases

- Why bother?
- I don’t have time for this.
- They will never get better.
- Why can’t you stop using drugs?
- Why do you make these choices?

For a person who overdoses, the underlying feelings consist of:

- Feelings of worthlessness, shame, guilt, hopelessness, loneliness, unloved, exhaustion, and failure
- How would you respond as a clinician if you knew these were the thoughts of your patient?

Know that...

- an overdose reversal can be the jarring moment that a person decides to engage in recovery
- there are multiple pathways to recovery
- the person who overdoses is more than a drug user. She/he is someone’s son, daughter, uncle, mom, dad.

How to engage in conversation

- Meet them where they are
  - “I’m sorry for what you went through, how can I help?”
  - Words matter, use person first language
- Display compassionate care
  - Provide water and food
  - Listen
- Instill hope, confidence, and empowerment
  - “What's your plan when you leave here?”
  - “How would you like things to be different?”

TIP:

- Ensure privacy
- Include patient's support person/system with their permission
- Allow time for questions/concerns
- Use, positive, encouraging, non-stigmatizing, empathetic language
The following resources can be found at https://michigan-open.org/medic/ 

1 Patient Education Videos

2 Staff Education

To read more about the Michigan Compiled Laws, check out the Public ACT MCL search: https://bit.ly/3iKNDok

Opioid Overdose Prevention CME
# Naloxone Formulations

<table>
<thead>
<tr>
<th></th>
<th>Naloxone (Vial)</th>
<th>Nasal Spray (Narcan®)</th>
<th>Auto-Injector (Evzio®)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration of Action</strong></td>
<td>30–90 minutes</td>
<td>30–120 minutes</td>
<td>30–90 minutes</td>
</tr>
<tr>
<td><strong>Repeat Dosing</strong></td>
<td></td>
<td>Every 2–3 minutes</td>
<td></td>
</tr>
<tr>
<td><strong>Strength</strong></td>
<td>0.4mg/mL</td>
<td>4mg</td>
<td>2mg</td>
</tr>
<tr>
<td><strong>Assembly Supplies Needed</strong></td>
<td>#2, 3 mL syringe w/ 23–25 gauge 1–1.5 inch IM needles</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>SIG for suspected overdose</strong></td>
<td>Inject 0.4mg (1 mL) IM x1. Repeat every 2–3 mins till pt responsive or EMS arrives</td>
<td>1 actuation in one nostril x1. Repeat every 2–3 mins till pt responsive or EMS arrives</td>
<td>2 mg IM x1. May repeat dose q2–3 mins until pt responsive or EMS arrives</td>
</tr>
</tbody>
</table>
| **Storage**             | • Protect from light  
                          • Room temperature 68°F to 77°F  
                          • Excursion allowed between 41°F –104°F  
                          • Freezes at temps below 5°F and the device will not spray. Leave the device at room temperature for 15 minutes to thaw.  
                          • Store in the outer case  
                          • Room temperature 59°F to 77°F  
                          • Excursion allowed between 39°F –104°F |                          • Protect from light  
                          • Room temperature 68°F to 77°F  
                          • Excursion allowed between 41°F –104°F  
                          • Freezes at temps below 5°F and the device will not spray. Leave the device at room temperature for 15 minutes to thaw.  
                          • Store in the outer case  
                          • Room temperature 59°F to 77°F  
                          • Excursion allowed between 39°F –104°F |                        |
| **How Supplied**        | Single-dose fliptop vial | Carton contains 2 blister packages of 4mg single use nasal spray | Carton contains 2, 2mg auto-injectors and a single trainer |
| **Disposal**            | Sharps Container | Any waste container that is away from children | Sharps Container |
| **Direct Cost**         | $30–40         | $169                  | $4600                  |
| **Prescription Coverage** |              | Copay varies by insurance |                        |
Examples of Drug Use Disorder and Misuse Screening Tools

- Single Question Screener
- Revised Screener and Opioid Assessment for Patients with Pain (SOAPP-8)
- Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) – NIDA –Modified ASSIST/ World Health Organization
# Emergency Department Take Home Naloxone: Process Map

<table>
<thead>
<tr>
<th>Identify</th>
<th>Target</th>
<th>Dispense</th>
<th>Educate</th>
<th>Mitigate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrives</td>
<td>Candidate for Take Home Naloxone? See Table 1</td>
<td></td>
<td>Delivery</td>
<td>Delivery</td>
</tr>
<tr>
<td><strong>Provider</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Nursing</strong></td>
<td>1. Screening</td>
<td>2. Ordering</td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Social Work</strong></td>
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<td></td>
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<tr>
<td><strong>Hospital Leadership</strong></td>
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<tr>
<td><strong>Community/ Government</strong></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Decision Nodes:

1. **Decision Node: How to Screen**
   - Universal (opioid use disorder, risky opioid use) vs targeted screening (post-overdose)
   - Validated screening instrument vs local home grown approach
   - Standardized vs informal
   - Provider vs nursing vs social work

2. **Decision Node: How to Order**
   - Pull (provider driven) vs push (nursing driven)
   - Electronic health record order set vs none
   - Electronic decision support trigger vs none

3. **Decision Node: How to Store & Label**
   - In ED vs inpatient hospital
   - In ED pyxis vs pharmacy
   - Lot vs little naloxone on shelf
   - With vs without kit (bag, rescue materials) to accompany naloxone
   - Print pharmacy drug label vs add by hand

4. **Decision Node: How to Fund**
   - Free to patient vs billed to insurance
   - Funded by hospital vs local/state partnerships
   - Naloxone only vs with rescue kit materials

5. **Decision Node: How to Educate**
   - Nursing vs pharmacy vs social work
   - Patient self-directed at point-of-care vs on demand post-ED discharge
   - Policy for standardly reinforced by providers vs ad hoc

6. **Decision Node: How to Further Risk Mitigate Post-ED**
   - PEER recovery coaches
   - Patient candidacy for ED or home buprenorphine induction
   - Referral for substance use disorder treatment
   - Naloxone standing order pharmacy community availability
   - Safe syringe exchange programs
   - Stigma reduction advocacy
Orientation to the process map:

- **Vertical lanes.** Major job roles tied to work flows for ED naloxone.
- **Horizontal lanes.** Major points of interaction tied to work flows for ED naloxone.

- **Orange color.** Patient’s chronological path through the ED.
- **Blue color.** Other job responsibility’s interaction with patient’s path through the ED.

- **Circle.** Start and end of process.
- **Diamond.** Major decision nodes located in the primary lane of responsibility. If the diamond crosses lanes, then it is a shared responsibility.
- **Square.** Interim steps in process.

**Table 1. Patients at risk of opioid overdose:**

- Inject opioids
- History of opioid overdose
- Opioid Use Disorder
- Combining opioids with other sedating drug (e.g., alcohol, benzodiazepines, antidepressants)
- Currently taking >50 mg morphine milligram equivalents (MME)/day
- Combined use of opioids and end stage liver disease (ESLD), end stage renal disease (ESRD), or HIV/AIDS
- Patients at risk for returning to a high dose for which they are no longer tolerant, such as:
  - Released from incarceration
  - Leaving detoxification facilities
  - Entering and exiting treatment

References


Guide content and training developed by
Chin Hwa (Gina) Dahlem, PhD, FNP-C, FAANP
Department of Health Behavior and Biological Sciences,
School of Nursing, University of Michigan

Additional contributors:
Monica Walker, MSA, RN, NE-BC
Michigan OPEN, University of Michigan

Aaron Dora-Laskey, MD, MS
Department of Emergency Medicine,
Michigan State University College of Human Medicine

Joan Kellenberg, MS, MPH
Michigan OPEN, University of Michigan

Keith E. Kocher, MD, MPH
MEDIC CQI Director
Departments of Emergency Medicine and Learning Health Science,
University of Michigan

Design and layout by Woori Songhausen

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