What’s new with naloxone?

Chelsie Porter, MPH & Sharon Stancliff, MD
Participants can’t share their screen or audio.

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If you’re a journalist, let us know if you plan to report on this webinar. It’s helpful for us to know.

Be respectful and curious.
What's new with naloxone? Updates on products, dosing, and overdose response
Overview

- Naloxone doses
- Intranasal 8mg/0.1cc vs 4mg/0.1cc
- Intramuscular 0.4mg/cc
- Training on resuscitation
Mean Plasma Concentration of Naloxone Doses
Comparison Study

• New York implemented law enforcement naloxone in 2014
• Most naloxone administered by law enforcement since 2017 was 4 mg intranasal
• FDA approved 8 mg intranasal naloxone product in 2021
• **Study Aim:** Make the first comparisons of average doses and prevalence of post-naloxone symptoms among individuals administered 8 mg vs. 4 mg

Methods

- **March 2022**: 3/11 troops given 8 mg and the others continued to receive 4 mg; submitted reports for each administration
- **Exclusion Criteria**: Opioid toxidrome not present, multiple naloxone formulations used, aided deceased before naloxone
- Compared average dose numbers with t-test
- Compared post-naloxone symptoms, anger/combativeness, and hospital transport with relative risk
Results

• Between March 1, 2022, and August 16, 2023, 354 reports met inclusion criteria (8 mg=101; 4 mg=253)
• No difference in survival
• Average doses administered did not differ by formulation (p=0.27)
  • 8 mg: Mean=1.58; Standard deviation (SD)=0.67
  • 4 mg: Mean=1.67; SD= 0.88
<table>
<thead>
<tr>
<th>Indicator</th>
<th>4 mg naloxone (% (n)) (Reference)</th>
<th>8 mg naloxone (% (n))</th>
<th>Relative risk (95% confidence interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived anger/combativeness</td>
<td>7.9% (20)</td>
<td>10.9% (11)</td>
<td>1.42 (0.66-3.09)</td>
</tr>
<tr>
<td>Refused transport to hospital</td>
<td>26.6% (66)</td>
<td>19% (19)</td>
<td>0.65 (0.36-1.15)</td>
</tr>
<tr>
<td>Survived</td>
<td>99.2% (248)</td>
<td>99.0% (100)</td>
<td>0.81 (0.07-8.99)</td>
</tr>
<tr>
<td><strong>Post-naloxone symptoms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawal symptoms (including vomiting)</td>
<td>19.4% (49)</td>
<td>37.6% (38)</td>
<td><strong>2.51 (1.51-4.18)</strong>*</td>
</tr>
<tr>
<td>Vomiting</td>
<td>13.8% (35)</td>
<td>20.8% (21)</td>
<td>1.64 (0.90-2.98)</td>
</tr>
<tr>
<td>Disorientation</td>
<td>58.5% (148)</td>
<td>66.3% (67)</td>
<td>1.40 (0.86-2.27)</td>
</tr>
<tr>
<td>Lethargy</td>
<td>43.5% (110)</td>
<td>52.5% (53)</td>
<td>1.44 (0.90-2.28)</td>
</tr>
</tbody>
</table>

* Statistically significant at the p<0.05 level
Conclusion

• No difference in survival
• No significant difference in doses administered suggests increased dosage might have been unnecessary
• Significantly higher risk of post-naloxone withdrawal symptoms among people administered 8 mg
Harm Reduction Services

- Providing Sterile Injection Equipment to prevent HIV & Hep C since 1995.
- Testing for HIV and Hepatitis C
- Case Management, assistance to Tx
- Overdose Prevention & Response Training
- **Naloxone Distribution since 2005.**
- Statewide naloxone mailing project
- Wound Care Consultation Clinic
- Fentanyl test strips since 2017
- Medical Van/buprenorphine prescribing
- All Services Free of Charge
Number of Doses of Naloxone Used

- **2013**
  - 3.5% of 229 opioid overdose deaths in Allegheny County involved fentanyl
  - 89.3% of reversals used 1 or 2 doses of naloxone. Mean doses per reversal 1.62

- **2016**
  - 68.7% of 600 opioid overdose deaths involved fentanyl
  - 92.8% of reversals used 1 or 2 doses. Mean doses per reversal 1.52

Updated Data

• 2020
  – 95% of 590 opioid overdose deaths in Allegheny County involved fentanyl
  – 91% of reversals used 1 or 2 doses of naloxone. Mean doses per reversal 1.52

• 2021
  – 92% of 625 opioid overdose deaths involved fentanyl.
  – 87.5% of reversals used 1 or 2 doses of naloxone. Mean doses per reversal 1.64

Personal communication Prevention Point
Pittsburgh
Observations

• PPP offers intranasal 4mg/0.1cc or intramuscular 0.4mg/cc to people now, half of doses requested continue to be for injectable

• Most reports are from people who reversed someone else's overdose, but people who received naloxone themselves report experience of multiple doses of 4mg nasal making them sick, so they ask for the standard IM 0.4mg injectable
Overdose Response in the Time of Xylazine

Administer naloxone, call EMS, resuscitation efforts!
- Attention to airway positioning even if one does no other resuscitation
- After any dose of naloxone, check for breathing and response
- If there is a pulse oximeter use it to see if they are getting oxygen
- Rescue position when breathing; vomiting may be likely
- May be sedated for some time, move a bit to avoid pressure damage to skin and nerves
Resuscitation

2015-16 NYSDOH convened Technical Working Group on Resuscitation Training in Naloxone Provision Programs

• Goal: To determine what resuscitation techniques should be taught by overdose prevention programs

• Participants represented: harm reduction, emergency services, cardiology, primary care and substance use services

Who is Offering Naloxone Training?

- Harm reduction and substance use organizations addressing people who are well versed in the effects of opioids
- Law enforcement
- People with exposure to people who use opioids both illegally and for pain but with little background
- Consumers in pharmacies
- People attending CPR/First Aid courses
- And more!
Findings

• Administration of naloxone and calling EMS are the highest priorities in responding to a potential opioid overdose.

• Because painful stimulation has a role in both assessing an overdose as well as possibly in inducing respiration, it should be emphasized in training.

• As there is insufficient data to recommend one resuscitation method over another, clinical directors will need to determine whether rescue breathing, chest compressions, both or neither is most appropriate for inclusion in their training curricula.
Points Regarding Rescue Breathing

• Potential benefits
  • Rescue breathing alone may be more beneficial for individuals having an opioid overdose, as opposed to those who are experiencing a sudden cardiac arrest
  • The importance of respiration support increases if naloxone is not available

• Potential problems
  • Learning and retaining skills on effective rescue breathing is challenging
  • Poorly done rescue breathing may increase risk of aspiration
Points Regarding Chest Compressions

• Potential benefits
  • Addresses cardiac arrest
  • Possible passive respiration

• Potential problems
  • In an opioid overdose, the blood and organs become depleted of oxygen
  • There are no data on the effectiveness of chest compressions only in the setting of opioid overdoses
Teaching Both/Neither

• Teaching Both:
  • While teaching both techniques may be optimal and possible in some training settings, it is probably not feasible in brief trainings

• Teaching neither:
  • Teaching rescue breathing or chest compression might reduce the time available to teach about the administration of naloxone in time-limited trainings
Acknowledgements

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- Intramuscular data: Alice Bell MSW for Prevention Point Pittsburg
Questions, comments?

Sharon Stancliff, MD

sharon.stancliff@health.ny.gov
NALOXONE ACCESS IN
WASHINGTON STATE

Drug User Health Program, Office of
Infectious Disease
Over the Counter (OTC) Naloxone

- NARCAN nasal spray approved in March 2023
  - Rivive (3 mg) expected to hit the market in early 2024
- Now available at major pharmacies
  - Current pricing: ~$50 per 2 dose kit
- WA Apple Health/Medicaid will cover OTC naloxone for free
  - Prescription still needed
- More info at stopoverdose.org
Statewide Standing Order to Dispense Naloxone

• Individuals may take the standing order to a pharmacy to get naloxone, instead of going to a health care provider to get a prescription
  • Naloxone is free with Medicaid/WA Apple Health
• Organizations may also use this standing order to get and distribute naloxone
• Standing order and FAQ can be found on DOH’s OEND webpage
Statewide Standing Order to Dispense Naloxone HCI

Pharmacists and other entities can dispense and deliver the following naloxone products to eligible persons and entities based on availability and preference. Eligible persons and entities include persons at risk of experiencing an opioid-related overdose or persons or entities in a position to aid persons experiencing an opioid-related overdose. This includes anyone who may witness an opioid overdose and who understands the instructions for use.

Intranasal Naloxone Hydrochloride Injection Solution (0.4mg/0.6ml) Dispense: 1 2ml single-dose vial of naloxone HCI (0.4mg/0.3ml) injection solution and sufficient quantity of 3ml syringes with needles of 25G or 25G and 1” to 1 ½” length for the number of doses dispensed. A maximum of 10 vials may be dispensed.

Directions for use: Call 911 inject the entire solution of the vial intranasally in the nose or intraocularly in the shoulder or thigh. Repeat every two to three minutes until patient responds or until emergency medical assistance is available.

Nasal Naloxone Hydrochloride Nasal Spray (2mg/0.3ml) Dispense: 1 kit containing two single-dose devices of nasaloxone HCI 2mg nasal spray. A maximum of 5 kits may be dispensed.

Directions for use: Call 911 Administer a single spray in one nostril. Repeat into the other nostril every two to three minutes until patient responds or until emergency medical assistance is available.

Authority: This standing order is issued in accordance with RCW 69.41.050(5), which allows for “the secretary or the secretary’s designee to issue a standing order providing opioid overdose reversal medications to any person at risk of experiencing an opioid-related overdose or any person or entity in a position to assist a person at risk of experiencing an opioid-related overdose.”

Purpose: The purpose of this standing order is to aid persons experiencing an opioid-related overdose by facilitating distribution of the opioid antagonist naloxone to people in Washington.

The standing order is intended to authorize pharmacists and other entities to dispense naloxone to eligible persons and entities.

This standing order authorizes any eligible person or entity in the State of Washington, including but not limited to any pharmacy licensed in the State of Washington to possess, store, deliver, distribute, or administer naloxone. An eligible person or entity is any person at risk of experiencing an opioid-related overdose or any person or entity in a position to assist a person at risk of experiencing an opioid-related overdose. These could include a natural person, such as an individual at risk of an opioid-related overdose or a family member, friend or acquaintance of that individual; or a legal person, such as an ambulance service, police department, school or other educational institution that could be in a position to assist a person at risk of experiencing an opioid-related overdose.

There is no minimum age specified in the standing order. Follow your organization’s protocol for any age limits when dispensing medication. If no protocol exists, we suggest that you use your best judgment to determine the ability of the patient to recognize the signs and symptoms of an opioid overdose and to administer the naloxone.

Terms and Conditions:
- Any pharmacist dispensing naloxone to eligible persons and entities, as defined above, must provide written instructions or the proper response to an opioid-related overdose, including instructions for seeking immediate medical attention. Pharmacists using this standing order to dispense naloxone should list the provider who signed this order as the prescriber. Pharmacists may, but are not required to, download the standing order, print it out, and assign a prescription number so that the printed-out standing order functions like an order processed by most pharmacy software systems as a written prescription. The prescription fill in the recipient’s name, address, and date of birth on the hard copy of the standing order. Additional elements, including the naloxone dose, quantity to dispense, directions for use, number of authorized refills, and physician’s signature, are already provided in the standing order. The standing order functions analogously to an individual prescription written in the recipients name.
- Any individual or entity that dispenses, delivers, or administers an opioid overdose reversal medication as authorized by this section shall ensure that directions for use are provided. Pharmacists and other entities are strongly encouraged to provide in-person training and allow hands-on practice with a demonstration kit and/or show a training video to persons receiving naloxone for the first time. Training may include information on proper response to an opioid-related overdose; instructions on the role of naloxone; recognizing a potential opioid-related overdose; verifying unresponsiveness; calling 911; administering naloxone; standing rescue breathing; administering a second dose of naloxone, if needed, and providing post-overdose care.
- Written printable instructions and a training video for layperson responding to opioid-related overdose and administering naloxone are available at www.doh.wa.gov/ohp/naloxoneinstructions.
How to Access Naloxone: Individuals

• Available for free at syringe service programs and other community orgs across WA
• Order naloxone by mail from the People’s Harm Reduction Alliance: phra.org/naloxone
  • This program is intended to serve people who CANNOT access naloxone at pharmacies or other community access points
How to Access Naloxone: Organizations

• Agencies that want to distribute naloxone can apply to the **Overdose Education and Naloxone Distribution Program**

• DOH OEND provides free naloxone for distribution to people who use drugs, their family and friends

• Orgs eligible to receive kits for agency use: SSPs, street outreach programs, shelters/permanent supporting housing programs, community behavioral health agencies

• Separate funding set aside for Tribes, Tribal organizations, and Urban Indian Organizations
Questions? Please reach out!

• For OEND training requests, please email naloxoneprogram@doh.wa.gov
• For questions about naloxone, email Sean (sean.hemmerle@doh.wa.gov)
• For questions about syringe service programs, email Chelsie (chelsie.porter@doh.wa.gov)
To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.
Resources to learn more

• StopOverdose.org
  • Overdose response
  • Naloxone map
  • Updates on fentanyl exposure
  • Updates on xylazine (still rare in WA State)
  • And much more

• WA Dept of Health-Overdose Education and Naloxone Distribution Program
  • Request naloxone for organizations
  • Overdose response training

• Public Health-Seattle & King County
  • Request naloxone for organizations in King Co.
  • Overdose response training