

# Naloxone Formulations and Overdose Response

## What is ECKS-R?

The Ethnographic Community Knowledge Study-Rapid (ECKS-R) is a project led by Brandeis University, in partnership with the Massachusetts Department of Public Health, to rapidly assess community and harm reduction staff perspectives of naloxone formulations and access. The findings aim to inform overdose prevention efforts and improve programs and policies for people who use drugs.

## What Formulations of Naloxone Do We Need to Meet Current Community Needs?

### What We Asked About

- How do Frequent Responders and staff respond to an overdose emergency?
- What types of naloxone do responders carry and use?
- Are responders interested in varied naloxone formulations (e.g., intramuscular vs. intranasal)?
- What other methods do responders use in overdose response/ what additional supports are needed?

### Who and How We Asked It

- Interviews (n=30) about naloxone formulations & overdose response with Harm Reduction (HR) Staff, Frequent Responders, and Medical Professionals.
- Ethnographic observations across 20 communities.
- Photographs of harm reduction overdose response kits and community distribution spaces.

## Summary of Responses by Naloxone Formulations

### 4mg Intranasal



- Easy to use
- Brand-name recognizable (benefit in wider community)
- Desire to maintain widespread access to this formulation
- Not titratable

### 3mg Intranasal



- Combines similar ease of administration as 4mg naloxone with lower dose
- Not as well known
- Multiple HR staff want 3mg intranasal as an option to distribute

### Titratable Intranasal



- Allows dose titration
- Strong interest among HR staff for wider distribution to Frequent Responders
- Can be tricky to assemble/carry
- Requires knowledge of how to titrate
- Familiar to some (older formulation)

### Intramuscular



- Allows dose titration
- Some interest among HR staff, more comfort among medical professionals, but general reluctance to distribute widely to the community
- Needle introduces additional concerns (disposal, stigma, xylazine wound entry point, policing)
- Robust training needed

## Considerations & Context from Participants

- Because of changes in the drug supply, overdose protocols at many Harm Reduction Programs have shifted to a heightened focus on rescue breathing and sedation monitoring and have moved away from naloxone-centered approaches.
- Harm Reduction Staff fear higher dose intranasal naloxone (>4mg) being used in the community especially in the context of precipitated withdrawal risks.
  - Outside of Harm Reduction Programs and Staff, there is a general low awareness of the benefits of low dose naloxone and limited consideration of IM naloxone
- Harm Reduction Programs are interested in titratable naloxone, however enthusiasm for IM naloxone is tempered by needle-phobia in the community, among clients, and among staff.
- As new formulations of naloxone become available, there should be ongoing training and education.

# How Participants Respond to Overdose Without Naloxone

Harm Reduction Staff and Frequent Responders emphasized the importance of rescue breathing and oxygen when responding to overdose. They also highlighted concerns around overuse of naloxone when responding to overdose and the risks that present with precipitated withdrawal and associated trauma.

## Ways in Which People Described Successfully Responding to Overdose Emergencies Without Using Naloxone:

- Chest compressions
- Rescue breathing
- Pain stimuli (sternum rub)
- Supplemental oxygen

## Naloxone Sparing Tools:

- Ambu bag/bag valve mask
- Nasal and oral airway supports
- Pulse oximeter
- CPR face shield
- Oxygen canister



## Findings from Overdose Response ECKS-R

General Population	Harm Reduction Organizations & Frequent Responders	Public Safety
<ul style="list-style-type: none"> <li>• Messaging about rescue breathing, wait-time between naloxone dosing is needed</li> <li>• Consider face shields to encourage rescue breathing</li> <li>• Stick to less complex forms of naloxone for distribution</li> <li>• Promote concept of compassionate overdose response as best practice: emphasize immediately restoring breathing over immediately restoring alertness</li> </ul>	<ul style="list-style-type: none"> <li>• Provide titratable dose options and training</li> <li>• Offer lower dose formulations</li> <li>• Emphasize rescue breathing, time between dosing</li> <li>• Provide naloxone sparing tools</li> </ul>	<ul style="list-style-type: none"> <li>• Provide orientation to new naloxone and supplemental oxygen approaches</li> <li>• Limit involvement in overdose response</li> <li>• Educate on risks of higher doses (&gt;4mg)</li> <li>• Avoid naloxone over-administration</li> <li>• Ensure public safety partners are aware of overdose response supplies distributed and used by Harm Reduction Programs</li> <li>• Educate public safety on compassionate overdose response</li> </ul>