



Center on  
Rural Addiction  
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## **Strategies for Distributing Naloxone to Rural Communities**

*UVM CORA Community Rounds Workshop*

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## This presentation is part of the Community Rounds Workshop Series

These sessions are provided monthly thanks to the University of Vermont Center on Rural Addiction, the Vermont Center on Behavior and Health, and a grant from the Health Services and Resources Administration.

*This presentation is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$13,699,254 with zero percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.*



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# Disclosures

There is nothing to disclose for this UVM CORA Community Rounds session.

## **Potential Conflict of Interest (*if applicable*):**

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# Disclosures

**Geoff Capraro** co-founded NaloxBox community access naloxone program and has no financial stake in sales. NaloxBox pilot studies were funded by RI Department of Health and presently, a pilot study of tech-enhanced NaloxBoxes is funded by the NIH NIGMS COBRE on Opioids and Overdose

**Brooke Lawrence** is Director of the NaloxBox program based in the non-profit RI DMAT (RI Disaster Medical Assistance Team) where he also serves as Executive Director



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## Learning objectives:

1. Discuss evidence showing need for improved naloxone distribution
2. Describe the need for naloxone in rural communities
3. Outline the ways that improved naloxone distribution can reduce stigma and other barriers
4. Describe innovative technologies to increase access to naloxone



# Overdose Rates: Rural vs Urban

Hedegaard H, NCHS 2021

Figure 1. Age-adjusted rates of drug overdose deaths, by urban and rural residence: United States, 1999–2019

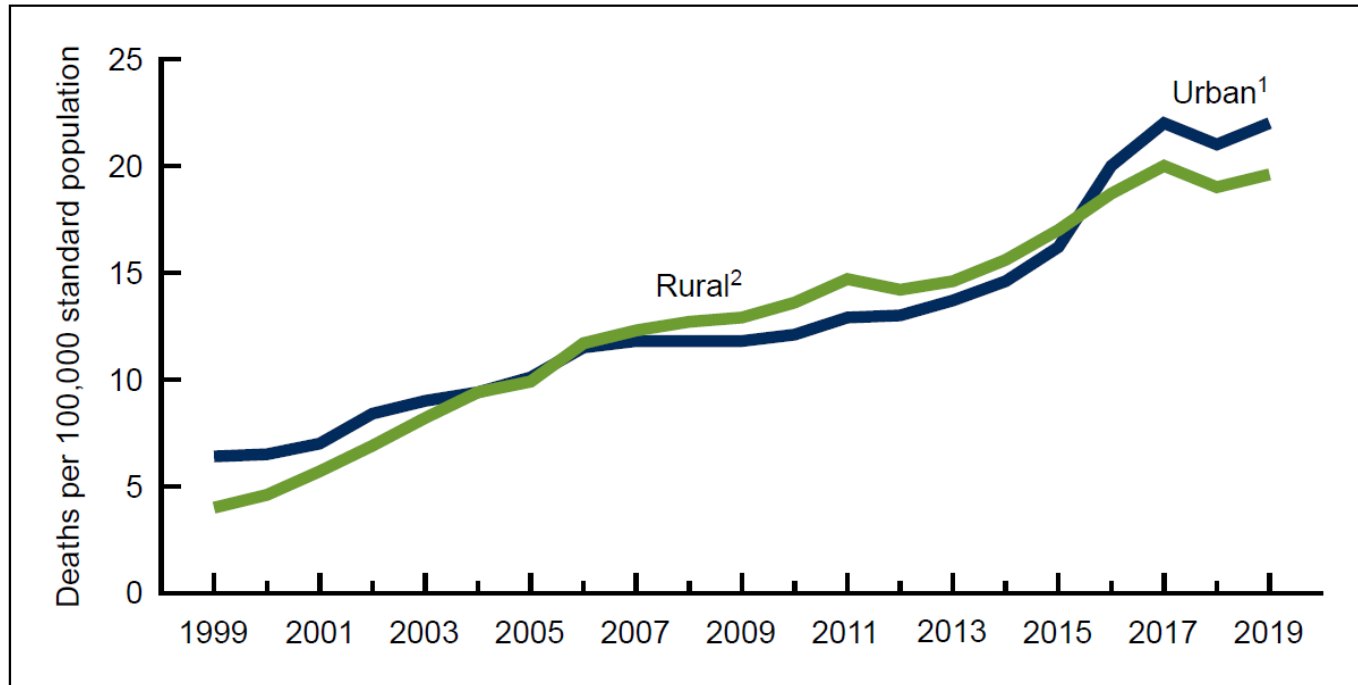
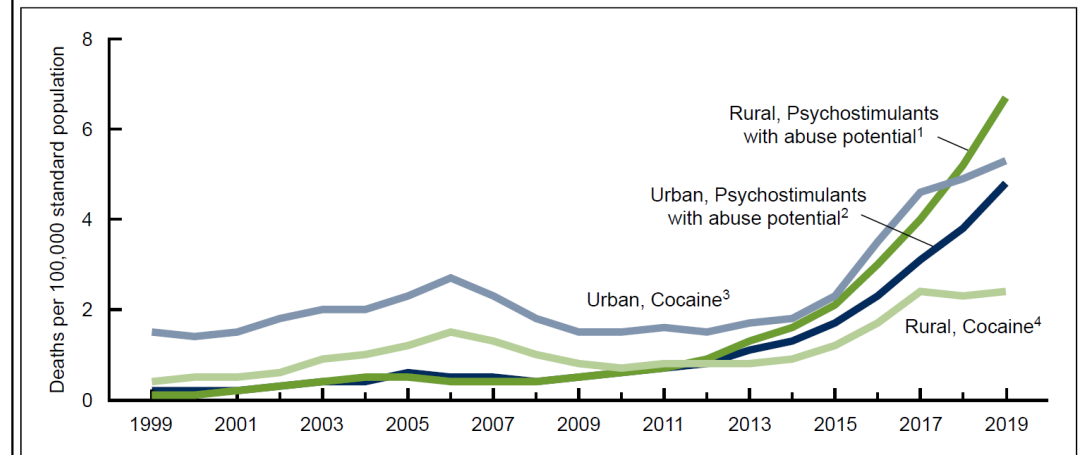
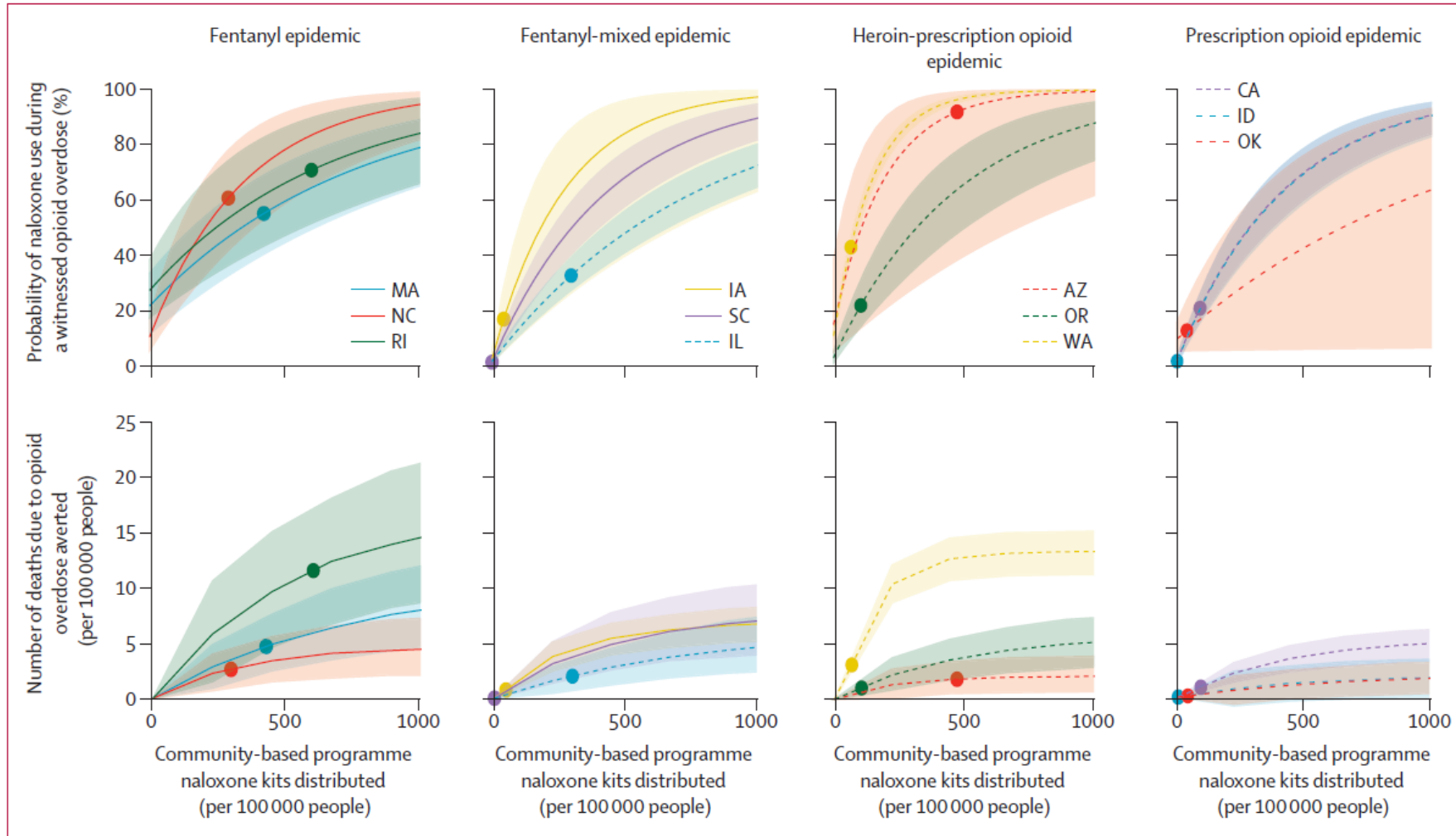


Figure 4. Age-adjusted rates of stimulant-involved drug overdose deaths, by type of stimulant and urban or rural residence: United States, 1999–2019



# How Much Naloxone to Distribute

Irvine MA, Lancet Public Health, 2022



# Needed Because it Works

Pitt AL, AJP, 2018

**TABLE 2—Estimated Effects of Individual Interventions Over 10 Years: United States, 2016–2025**

Intervention	Mean Change <sup>a</sup> Compared With the Status Quo				Total Opioid Deaths, No. (%)
	Discounted Net Present LYs, <sup>b</sup> No. in Thousands (%)	Discounted Net Present QALYs, <sup>b</sup> No. in Thousands (%)	Pill Deaths, No. (%)	Heroin Deaths, No. (%)	
Acute pain prescribing	500 (0.007)	-450 (-0.007)	-6 100 (-3.6)	-1 900 (-0.6)	-8 000 (-1.6)
Prescribing for transitioning pain	80 (0.001)	180 (0.003)	-2 600 (-1.5)	1 500 (0.5)	-1 000 (-0.2)
Chronic pain prescribing	40 (0.001)	670 (0.010)	-24 400 (-14.2)	28 200 (8.2)	3 800 (0.7)
Drug rescheduling	-920 (-0.014)	990 (0.015)	-103 800 (-60.7)	146 600 (42.8)	42 800 (8.3)
PMP	-1 780 (-0.027)	-1 450 (-0.022)	-47 800 (-28.0)	90 200 (26.3)	42 300 (8.2)
Drug reformulation	650 (0.010)	2 000 (0.030)	-43 300 (-25.3)	39 400 (11.5)	-3 900 (-0.8)
Excess opioid disposal	210 (0.003)	510 (0.008)	-7 900 (-4.6)	5 500 (1.6)	-2 400 (-0.5)
Naloxone availability	790 (0.012)	670 (0.010)	-8 400 (-4.9)	-12 700 (-3.7)	-21 200 (-4.1)
Needle exchange	210 (0.003)	180 (0.003)	0 (0.0)	-5 900 (-1.7)	-5 900 (-1.1)
MAT	560 (0.008)	940 (0.014)	-2 900 (-1.7)	-9 600 (-2.8)	-12 500 (-2.4)
Psychosocial treatment	440 (0.007)	650 (0.010)	-1 600 (-0.9)	-6 000 (-1.7)	-7 500 (-1.5)

# The "How" of Distributing Naloxone



## Harm Reduction Vending Machine



The machine includes the following items:

- Harm Reduction Kits
- Safer Sex Kits
- Wound Care Kits
- Hygiene Kits
- Fentanyl Test Strip Kits
- NARCAN/Naloxone Kits

To use the machine:  
Call (401) 781-0665. You will be given an access code to use the machine. You can then use the machine up to three times per week.

Provided by ENCORE, this vending machine is located to the right, and down the stairs, of the main entrance/parking lot at Thundermist Health Center, 186 Providence Street, West Warwick.

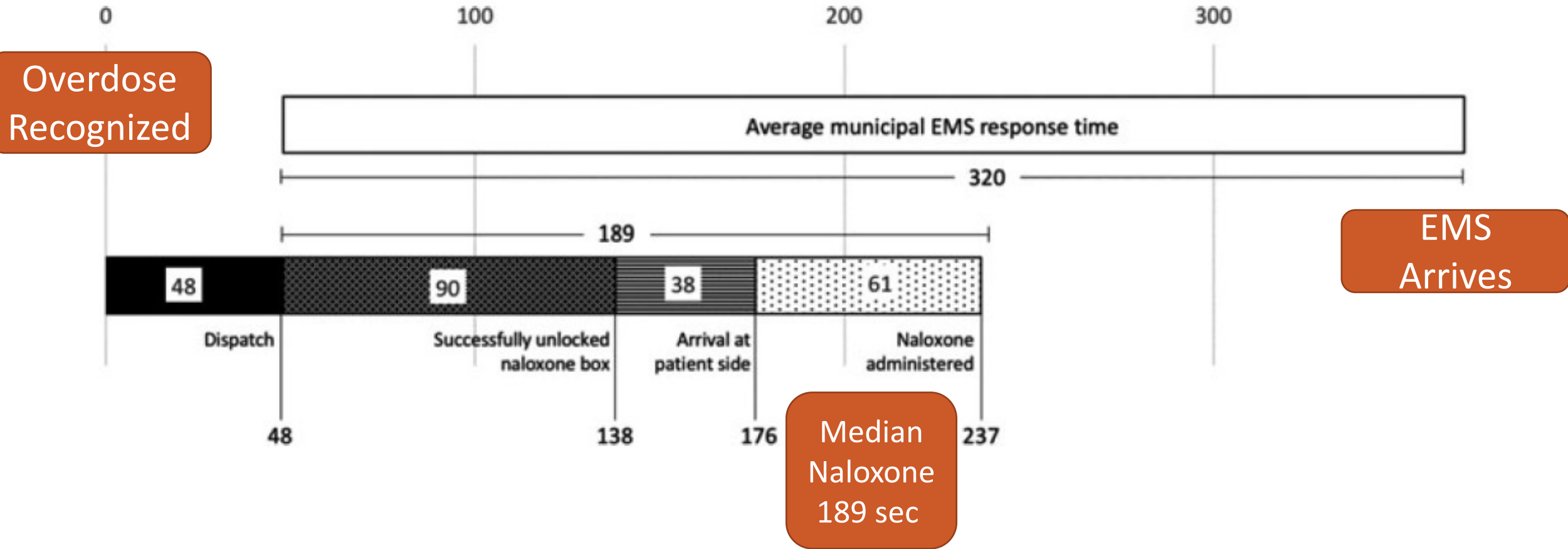


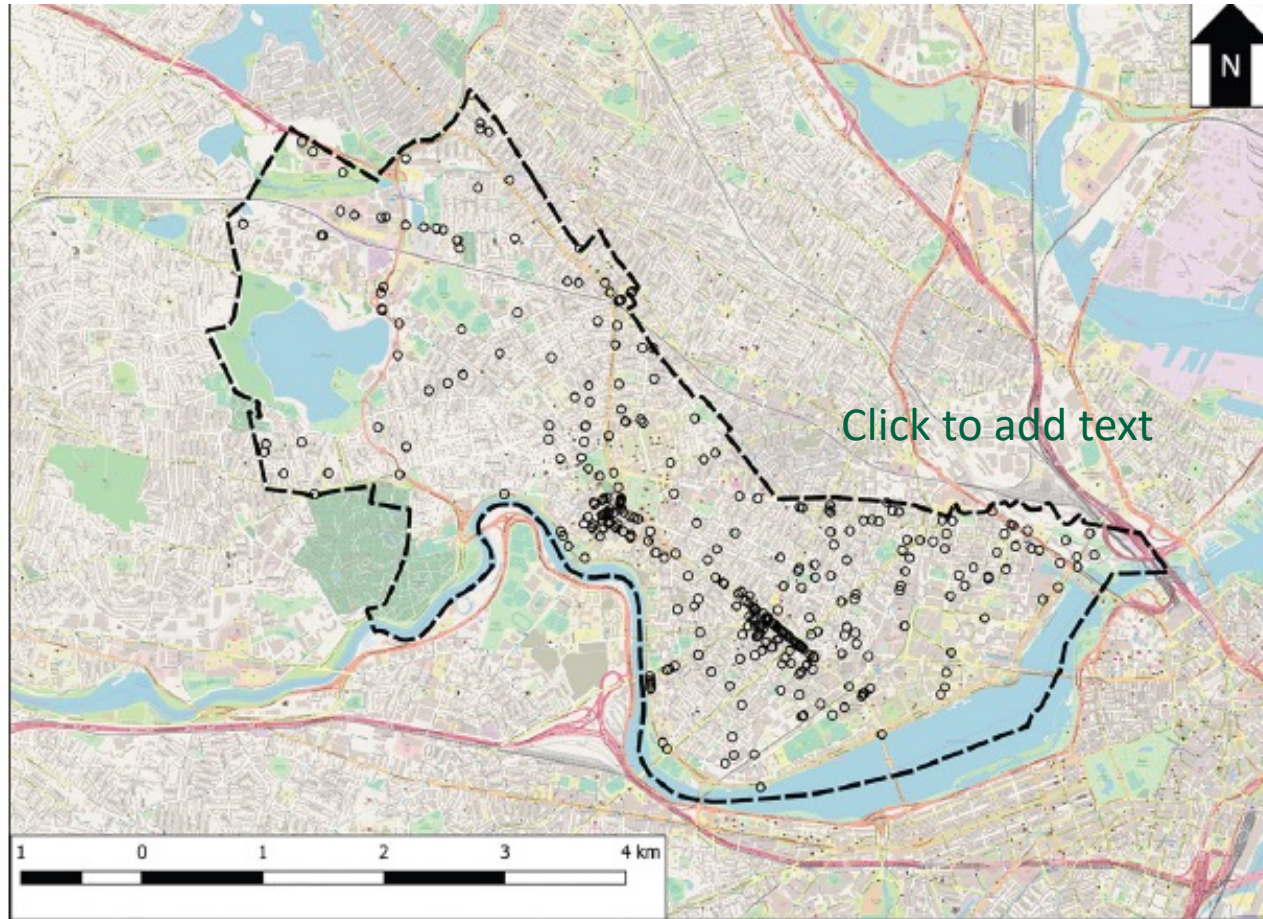


In the hands  
of the public

# The "Who" of Administering Naloxone

Goldberg SA, Prehospital Emergency Care, 2018





**Figure 1.** Map of locations of opioid-related emergency medical services (EMS) runs in Cambridge, Massachusetts (MA).

## The "Where" of Naloxone Placement

Dworkis, DA West J Emerg Med, 2018

# Communities Selecting Solutions

Martinez LS, Drug Alcohol Depend, 2020

- HEALing (Helping to End Addiction Long-term) Communities RCT to reduce opioid fatalities
- Communities select solutions that make most sense to them
- Community access naloxone as in-roads to engagement



## Potential Secondary Positive Impacts of Enhanced Distribution

- ✓ Reduce stigma
- ✓ Improve awareness
- ✓ Spur conversation
- ✓ Conveys shared community responsibility

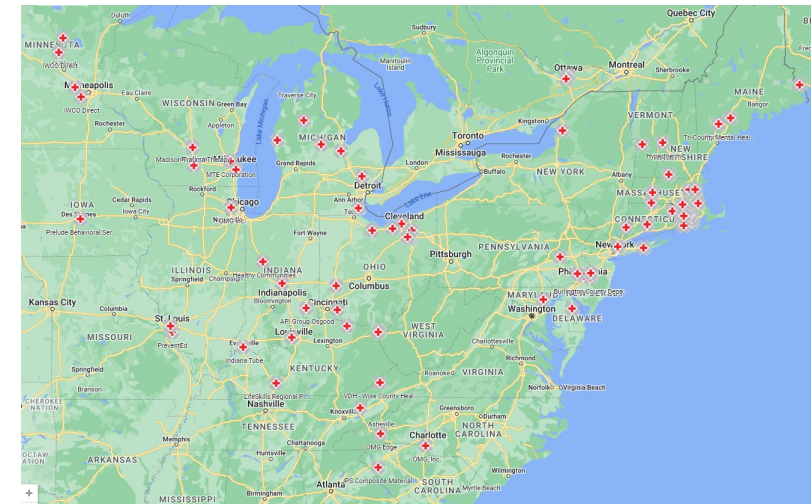
# Innovative Technologies for Enhanced Distribution

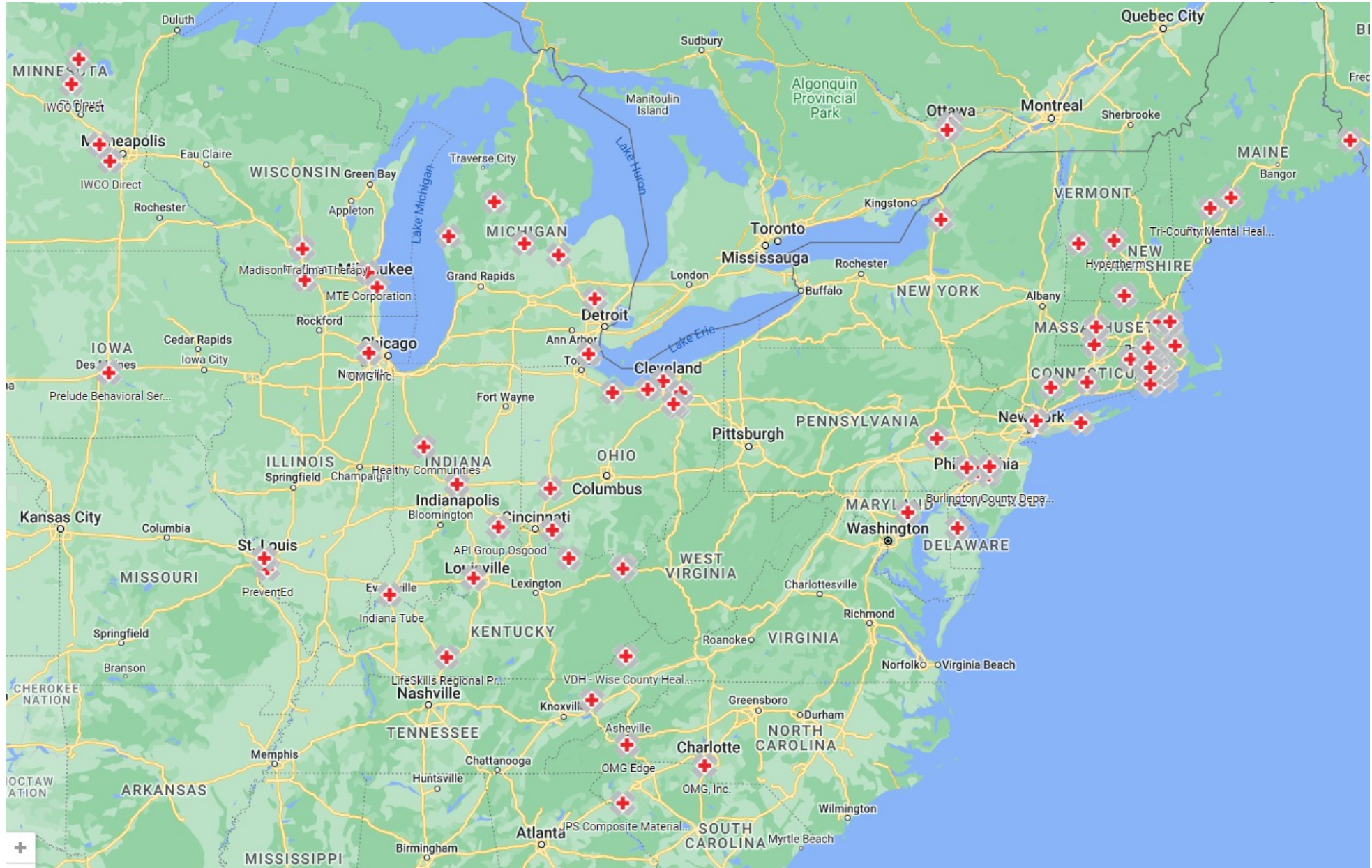
- Mail/Phone/Web order
- Vending machines
- Opioid rescue kits
- Rescue network apps
- IoT rescue buttons
- 911 dispatch-assisted CPR



# Innovative Technologies for Enhanced Distribution, continued

- App-linked rescue communities
  - Currently in development
- Geolocative mapping with dispatch-assisted CPR





# Multiple Points of Distribution Success in a Rural Community

- Put as many opportunities as possible in the path to success
  - POD Distribution of intranasal Naloxone Rescue Kits
  - Public Access to intranasal Naloxone Rescue Kits
  - Fire/EMS
  - Law Enforcement
  - Public Safety Agency leave behind kits
    - Naloxone & Recovery Resources
    - POD Locations
  - Outreach Programs & Community grassroots groups

# Timing of Overdose to Reversal: Rural Response Considerations

## Public Safety

### FIRE/EMS

- Challenges to overcome
  - Unmanned stations
  - Volunteers responding from home
    - Are they equipped with EMS gear including intranasal naloxone?
  - Geography
  - Weather conditions at time of call

### LAW ENFORCEMENT OFFICERS

- Challenges to overcome
  - Limited dept size
  - Call volume
  - Are they equipped with basic medical gear including intranasal naloxone?
  - Training & comfort level
  - Geography
  - Weather conditions at time of call

## Rural Response Factors

- These impacts on time drive the need for wider spread public access to intranasal naloxone
- Same challenges faced public access deployment of AEDs
- Having public access intranasal naloxone visible to the community reduces stigma and raises awareness

# Rural Stigma



- Living in a small town is like CHEERS
  - EVERYONE KNOWS YOUR NAME & YOUR BUSINESS!
  - This unquestionably drives secrecy and fear of discovery
- Impact is across all socioeconomic classes
- First responders need to be reminded that HIPPA applies to substance use disorder

*Stop the gossip, be part of reducing stigma*



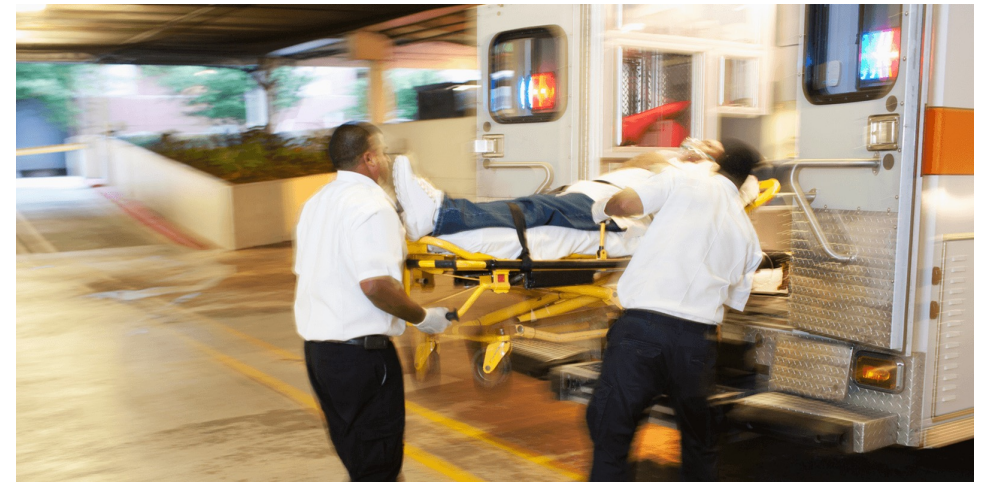
# Points of Distribution (POD)

- Anonymous distribution
  - Small town / rural stigma
    - It's real!
- Leave behind kits
- In-person distribution
- Kit contains
  - Intranasal naloxone
  - Instructions to use naloxone
    - QR Codes to short videos
  - Recovery resources



# Using Data to Assess Public Access & Emergency Rescue Needs

- Identify Patterns of Overdose
  - Partnerships – FIRE/EMS & PD
    - Identify hotspots
    - Develop a strategy for success
  - GIS Mapping Data
    - Best practices for utilization



# Using data to assess public access & emergency rescue needs, cont.

- Integration of public access opioid rescue kit locations to the 911 system & Public Safety Answering Point Centers
  - Metadata on location or written description of box location
  - Photo of installed box
  - Bystanders and first responder use
    - **Especially valuable in a rural setting**
- Integration of box location data to response apps & 911 Centers
  - SMART BOX© – Technology
    - Auto notification of an emergency via text or push notification via app

# Technologies - QR CODES

- Use & acceptance increase as a result of COVID-19.
- Use the boxes presence in a facility as tool to educate and reduce stigma
- Video / Multimedia Content
- Not more than few minutes
  - Multiple Languages
  - Doodley Cartoons
- Print Content
  - Easy to follow instructions
  - Multiple Languages
- Limitations
  - Internet service availability



SciToons

## QR CODES (continued)

- Stickers
- Informational Posters
  - Back of rest room doors
  - Captured audience
  - High Traffic areas
- Many code creation services have good analytics tools
  - Location
  - Number of scans
  - Time of day, day of week, dates, etc...



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## Remember - Multiple Points of Success

- Put as many opportunities as possible in the path to success.
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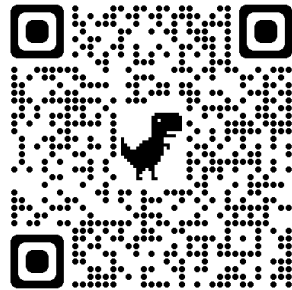
**Thank You!**

*What is your take on best methods to maximize rural community rescue capacity?*

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# Questions & Discussion

Email us your questions at [cora@uvm.edu](mailto:cora@uvm.edu)



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