



# Overdose Prevention and Intervention Task Force

September 13, 2017

## **CO-CHAIRS:**

**DIRECTOR NICOLE ALEXANDER-SCOTT, MD, MPH,** RHODE ISLAND DEPARTMENT OF HEALTH

**DIRECTOR REBECCA BOSS, MA,** RHODE ISLAND DEPARTMENT OF BEHAVIORAL HEALTHCARE,  
DEVELOPMENTAL DISABILITIES, AND HOSPITALS



# Levels of Care Designation

## Level 3 Facility

### South County Health

# South County Health Department of Emergency Medicine



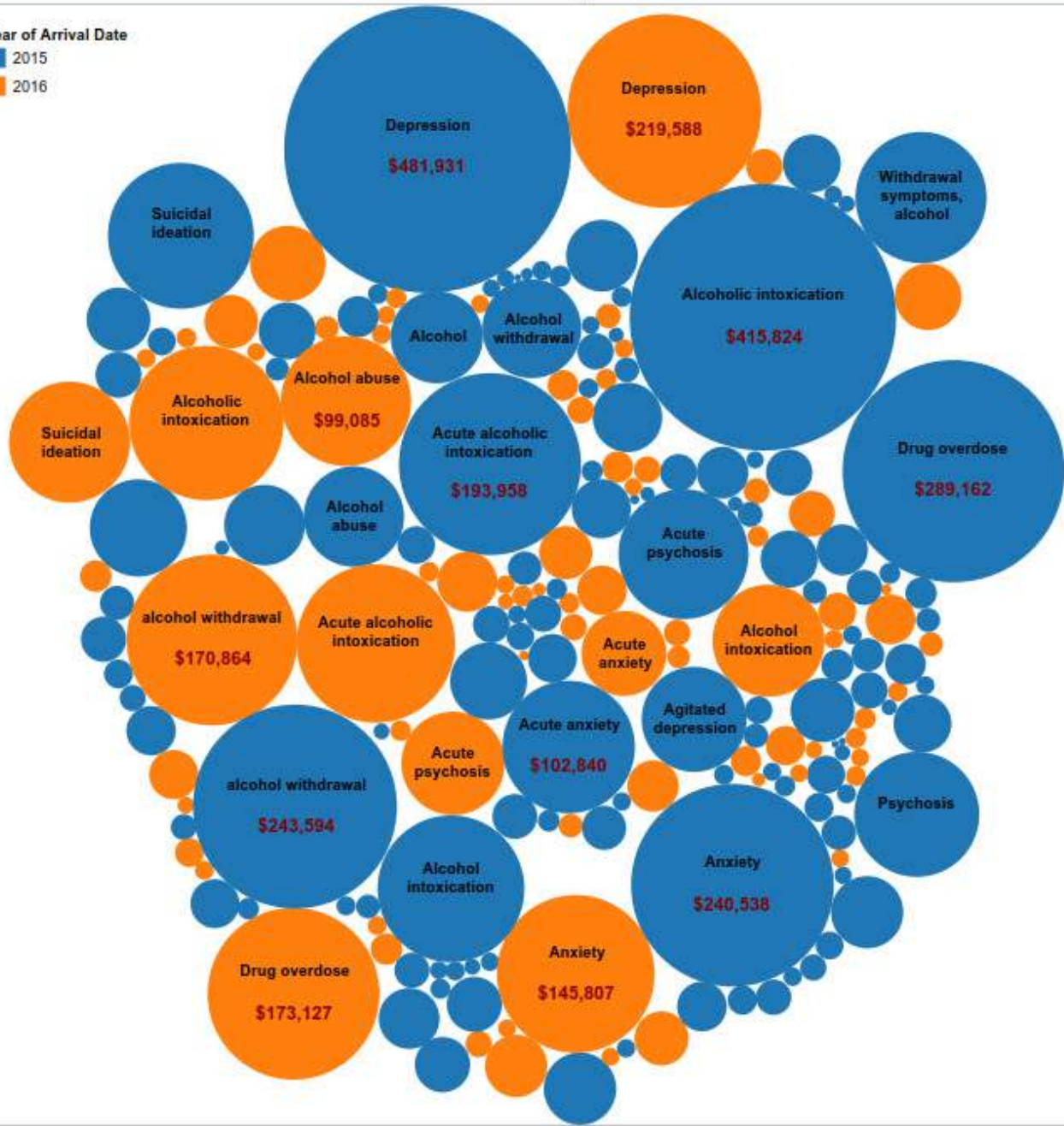
William Sabina, MD, FACEP  
Medical Director, Department of Emergency Medicine  
Regional Director, TeamHealth Emergency Medicine





Financial Impact of BH on SCH ED -2015/2016YTD  
Actual Charges

Year of Arrival Date  
2015  
2016



Patients in Department



For Date c

We saw

16 pati

Through

Door to T

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Total Len

Discharge

Discharge

Door to E

Decision

LOS (Arr



**COUNT IT!**



**LOCK IT!**



**DROP IT!**

IT ONLY MAKES SENSE



[narragansettprevention.org](http://narragansettprevention.org)

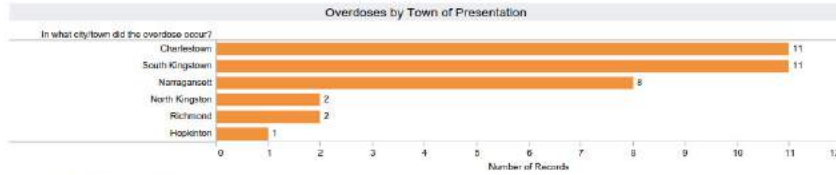
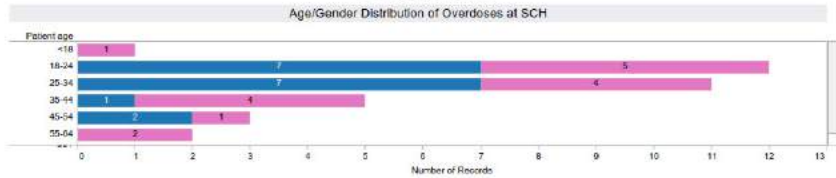
**SOUTH COUNTY HEALTH**  
Emergency Department

[southcountyhealth.org](http://southcountyhealth.org)



**SKPP**  
SOUTH KINGSTOWN  
PARTNERSHIP FOR PREVENTION  
[skprevention.org](http://skprevention.org)

## DOH Data - Overdoses at South County Health Demographics

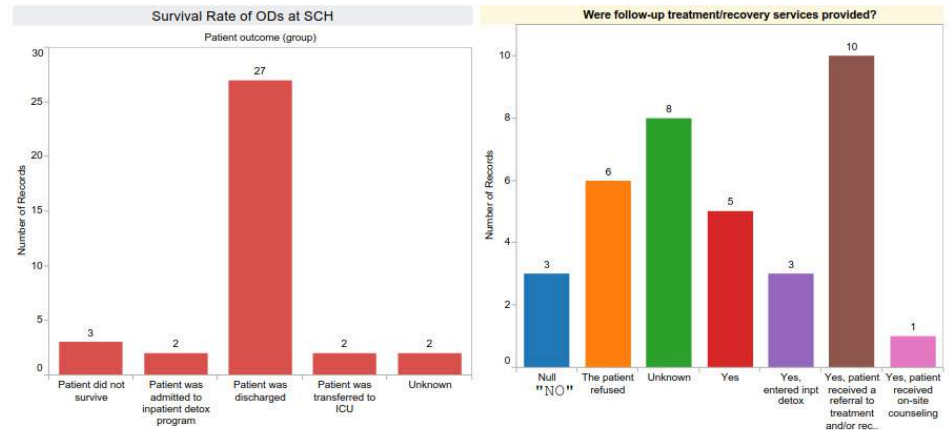
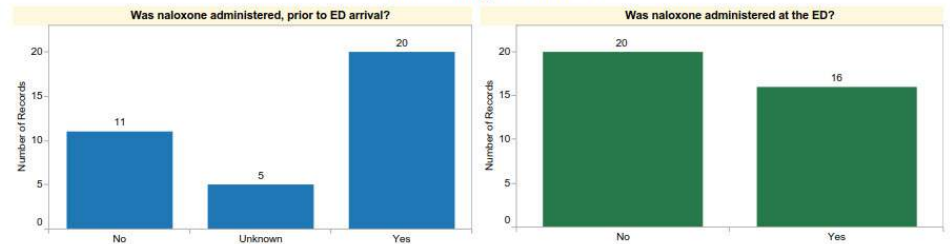


### Geographic Distribution of OD Cases at SCH

Patient city or town of residence	Number of Records
Charlestown	10
Jamestown	1
Narragansett	7
North Kingstown	1
Other, outside RI, MA, & CT	2
Providence	1
Richmond	2
South Kingstown	10
Warwick	1
West Warwick	1

Data includes dates of service: 10/1/15-7/27/16

## DOH Data on Overdoses at South County Health ED



Data includes dates of service: 10/1/15-7/27/16



# Emergency Physicians



What my friends think I do



What my Mom thinks I do



What society thinks I do



What the government thinks I do



What I think I do



What I really do

Thank You



# **Naloxone Administration Data 2015 - Present**

**September 13, 2017**

**Overdose Prevention Epidemiologist**

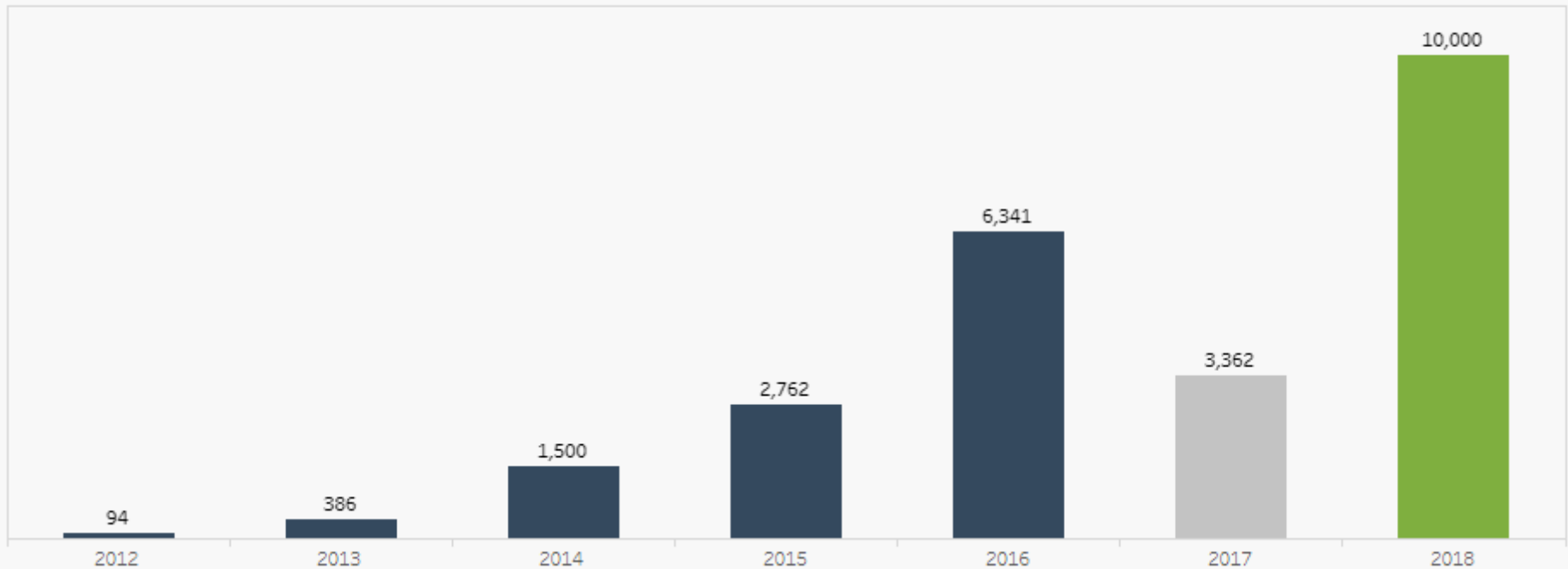
**Meghan McCormick, MPH**

# Action Plan Metrics



The Naloxone Workgroup increased the 2018 goal from 5,000 to 10,000 kits per year.

Annual number of naloxone kits distributed statewide



Track Action Plan Metrics at [www.PreventOverdoseRI.org](http://www.PreventOverdoseRI.org).

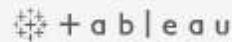
# Naloxone Distribution



## Naloxone Distribution Breakdown in Rhode Island (2015 - June 2017)



Data Viz Last Updated: September, 2017

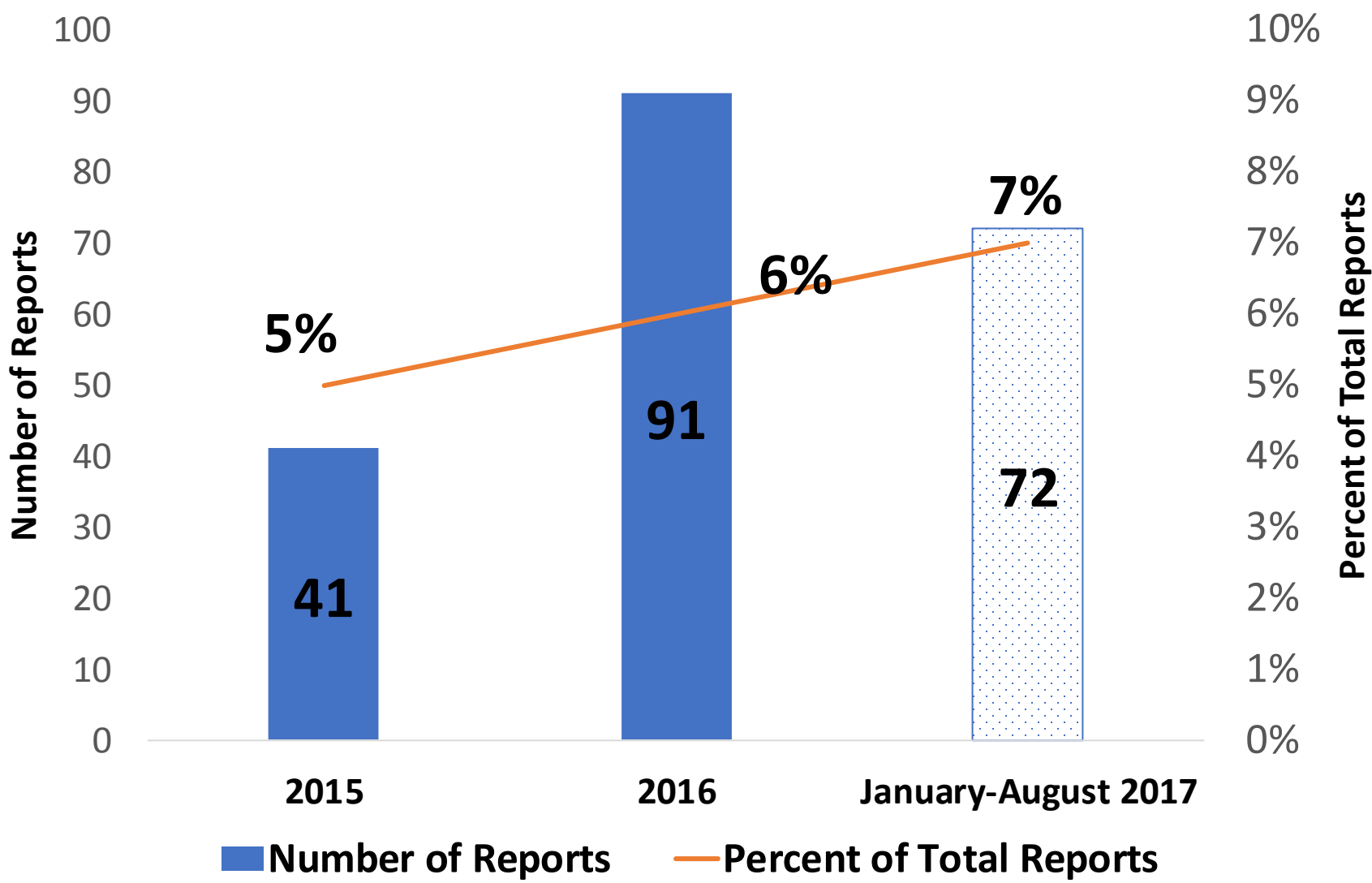


Share Download Full Screen

Find more naloxone data at [www.PreventOverdoseRI.org](http://www.PreventOverdoseRI.org).

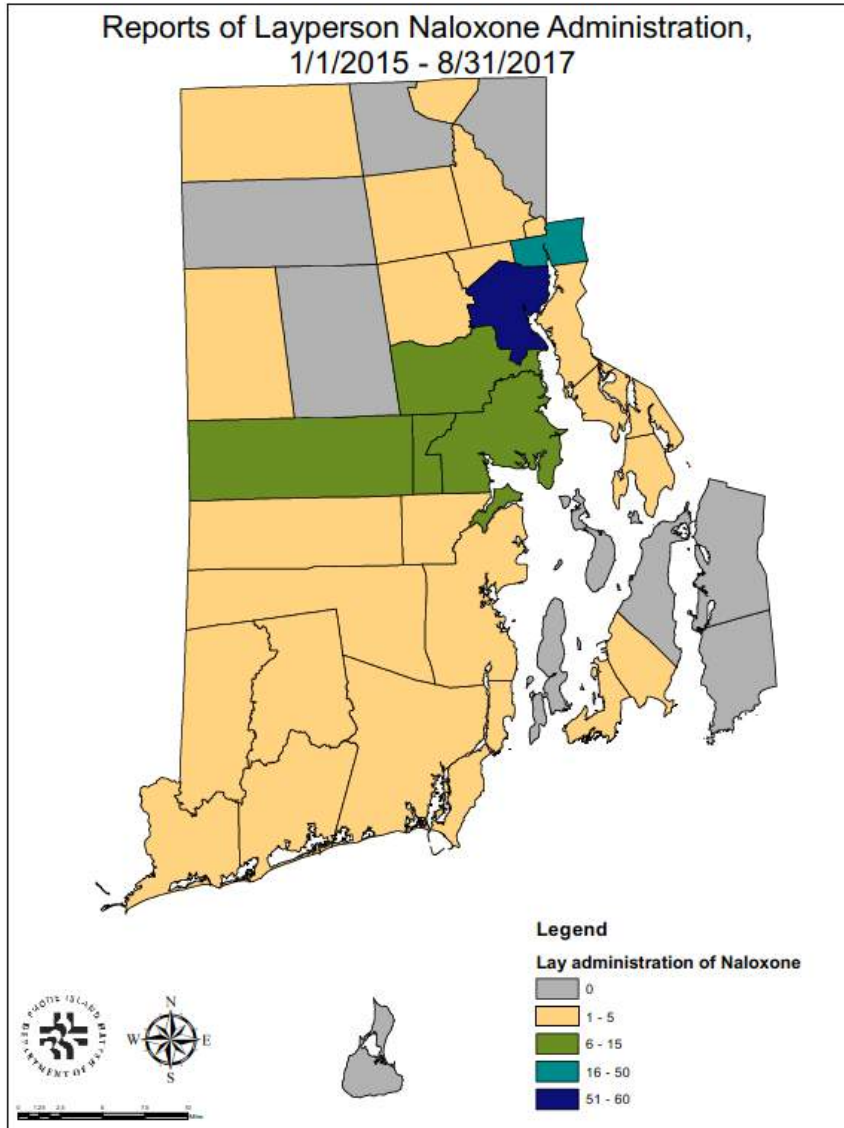


# Reports of Naloxone Administration by Laypeople

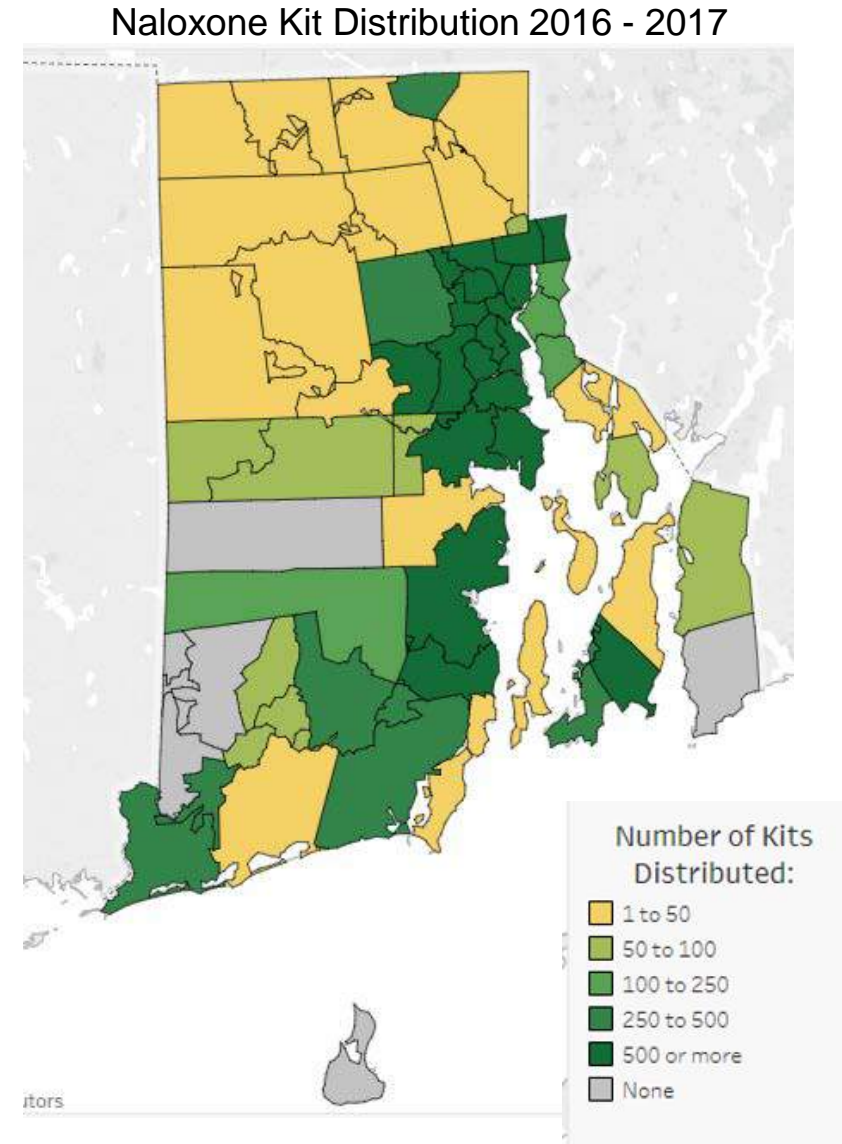


Data source: Rhode Island Department of Health Opioid Overdose Reporting System

# Geographic Distribution



Data source: Rhode Island Department of Health Opioid Overdose Reporting System

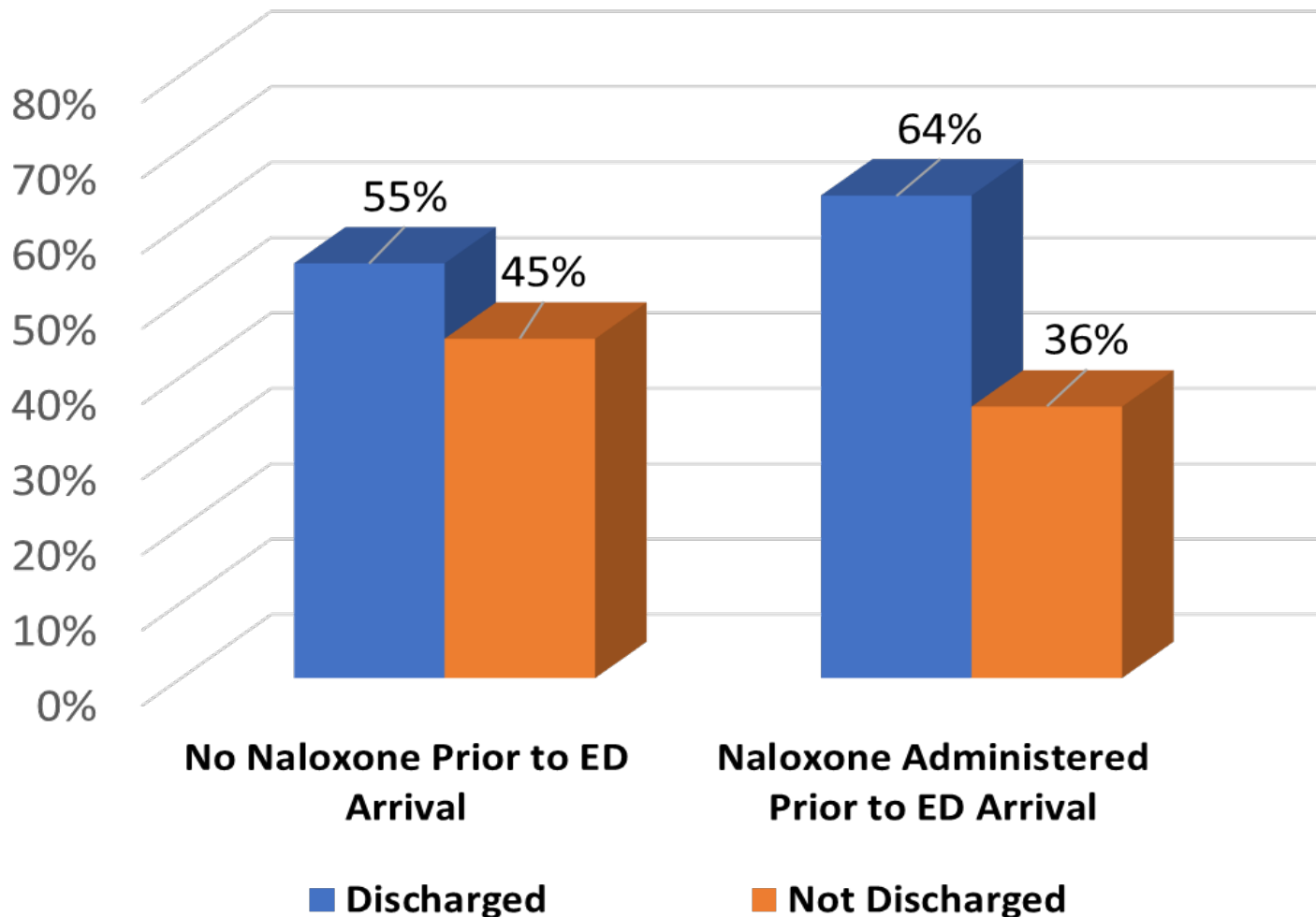


Data source and maps: [www.PreventOverdoseRI.org](http://www.PreventOverdoseRI.org)

# Preliminary Outcome Data by Prior Naloxone Administration



Discharge Status, 1/1/2015 - 8/31/2017



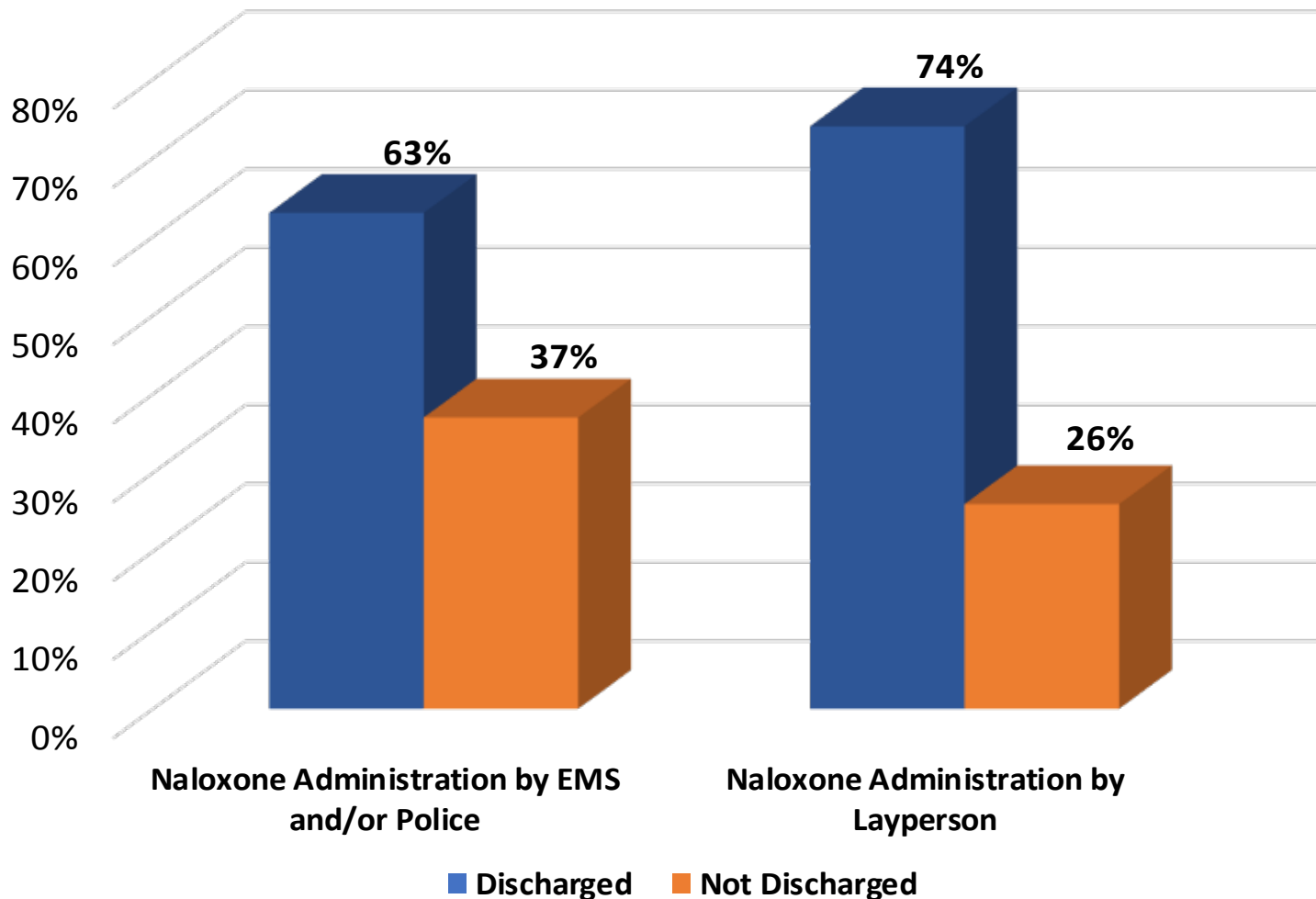
Data source: Rhode Island Department of Health Opioid Overdose Reporting System



# Preliminary Outcome Data by Prior Naloxone Administration



Discharge Status, 1/1/2015 - 8/31/2017



\*Naloxone may be administered by more than one source.

Data source: Rhode Island Department of Health Opioid Overdose Reporting System



# Abbie Steinberg Naloxone Rescue



# Naloxone Community Distribution Models

Michelle McKenzie, MPH



**No normal breathing, has pulse**

- Activate emergency response system (if not already done) after 2 minutes.
- Continue rescue breathing; check pulse about every 2 minutes. If no pulse, begin CPR (go to "CPR" box).
- If possible opioid overdose, administer naloxone if available per protocol.

rescue breathing:  
every 5-6 seconds, or  
12 breaths/min.  
the emergency response  
(if not already done)  
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available per protocol.

**No breathing or only gasping, no pulse**

**CPR**

By this time in all scenarios, emergency response system or backup is activated, and AED and emergency equipment are retrieved or someone is retrieving them.

**No normal breathing, has pulse**

- Activate emergency response system (if not already done) after 2 minutes.
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***From where?***

**No breathing or only gasping, no pulse**

**CPR**

By this time in all scenarios, emergency response system or backup is activated, and AED and emergency equipment are retrieved or someone is retrieving them.

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# NaloxBox: Going Beyond 1:1 Distribution





NALOXBOX

**Geoff Capraro, MD, MPH**

University Emergency Medicine Foundation

Department of Emergency Medicine

Hasbro Children's Hospital- Rhode Island Hospital- Lifespan

Brown University Alpert School of Medicine



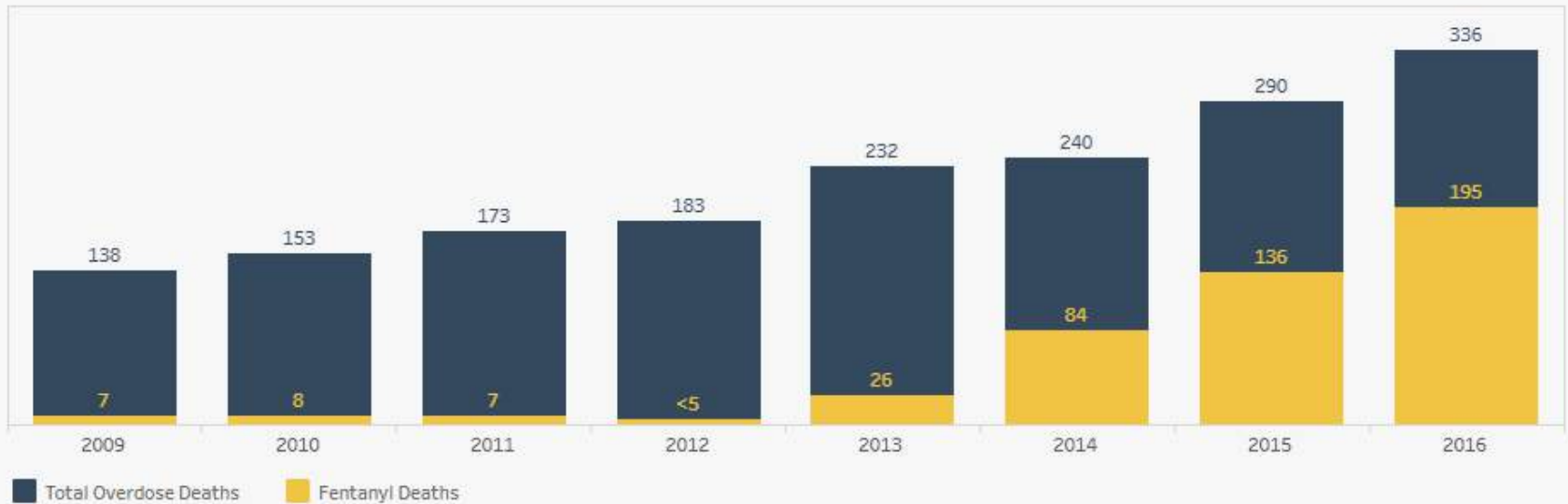
# Fentanyl-related overdoses are on the rise

Fentanyl, a highly potent opioid, poses a great threat and worsens our overdose crisis. The number of overdose deaths related to fentanyl has increased by almost 20-fold since 2009. **In 2016, over 50% of overdose deaths have involved fentanyl.**

[Source \(RIDOH\)](#)

[Learn more about Fentanyl](#)

## Overdose Deaths due to Fentanyl (2009 to 2016)



tableau

[Share](#) [Download](#) [Full Screen](#)

*Note: Data updated biannually*

# NaloxBox Design



- No Lock
- “Analog” or “Smart function” latch
- 2-4 doses of naloxone
- Intramuscular/intranasal
- Gloves and mask for rescue breathing
- Instructions
- Training
- Messaging

amos  
HOUSE



# Partners

Health  
Equity  
Zone  
West Warwick



amos  
HOUSE

9 Yards



# NaloxBoxes

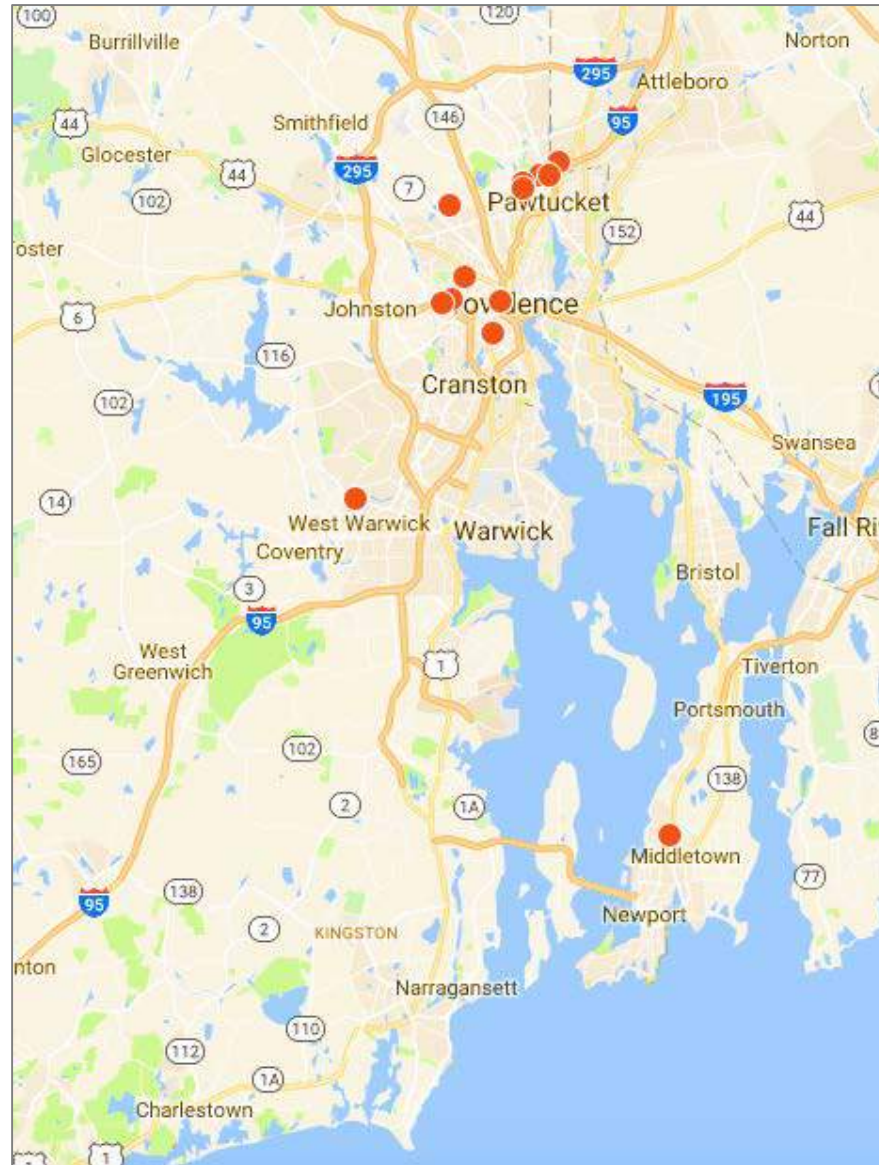
## What are NaloxBoxes?

**NaloxBoxes are a new resource** for helping someone who might have accidentally overdosed.

The NaloxBox includes naloxone, a medicine that reverses the overdose, and a mask so that you can give rescue breaths until emergency help arrives. The NaloxBox stores these life-saving tools in public places and community organizations, that means bystanders can give naloxone right away. **Learn more about NaloxBox in the news**, and **visit their page to become a NaloxBox**

For information about NaloxBox, visit: [PreventOverdoseri.org/naloxboxes/](https://PreventOverdoseri.org/naloxboxes/)

# NaloxBox Locations in Rhode Island



NALOXBOX



Show

Search

10

entries

	Title	Category	Address	Description
●	Amos House (Main Building)	NaloxBox Locations	460 Pine St. Providence, RI 02907	<b>Phone:</b> 401-338-6320 Social services work station, first floor left off entrance, public space 6-6, locked overnight Second floor staff room, Key access room/staff only Basement carpentry classroom, Open 8-5, key-locked closed hours
●	Amos House (Women's Shelter)	NaloxBox Locations	446 Pine St. Providence, RI	<b>Phone:</b> 401-339-1356 Second floor office/staff only/, locked
●	Amos House (Reunification Program Building)	NaloxBox Locations	419 Friendship St Providence, RI	<b>Phone:</b> 401-338-1740 First floor, kitchen, public shared space
●	Amos House (Men's Shelter)	NaloxBox Locations	414 Friendship St. Providence, RI	<b>Phone:</b> 401-440-5661 First floor entrance office/ staff only
●	McAuley House	NaloxBox Locations	622 Elmwood Ave Providence, RI	

Showing 1 to 5 of 17 records

Previous

1

2

3

4

Next



NALOXBOX



## Amos House (Reunification Program Building)

419 Friendship St Providence, RI

**Phone:** 401-338-1740

First floor, kitchen, public shared space

[Get directions](#)



# Future Plans

- Conduct installations and trainings:
  - high-risk populations
  - public-facing locations
- Extend Initiative
- Seek funding
- Obtain training



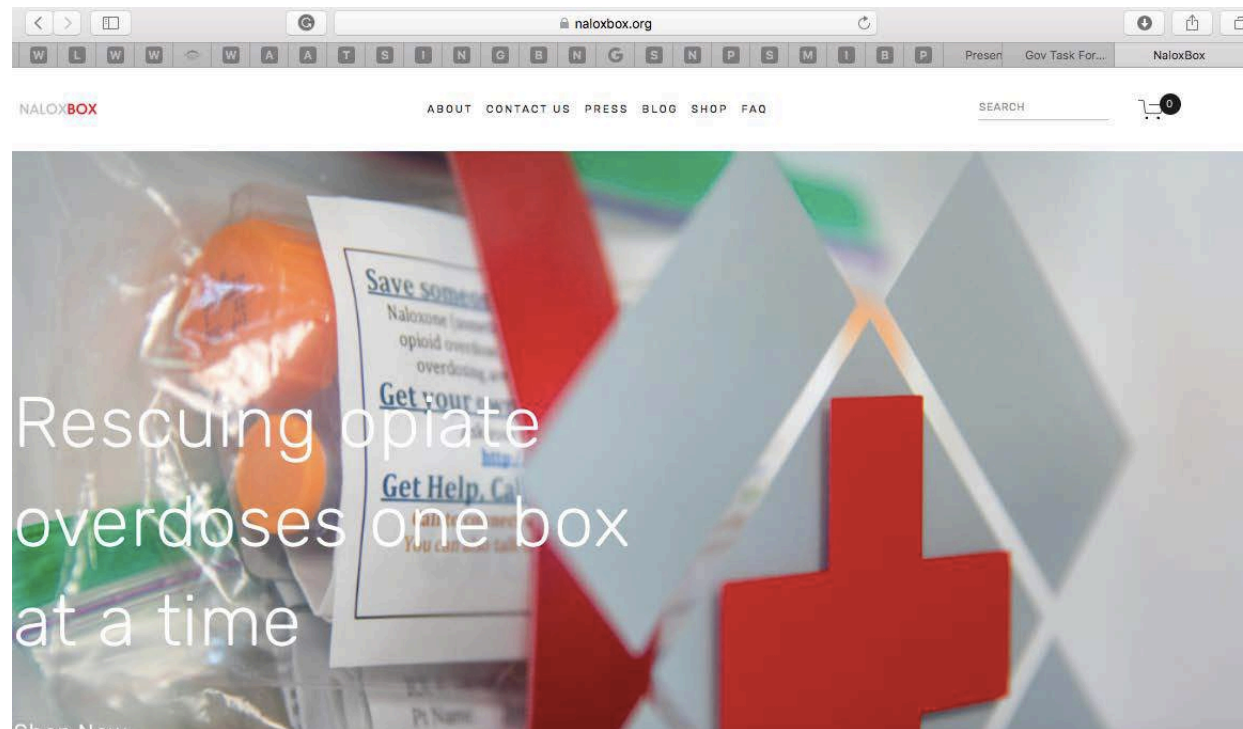
NALOXBOX

# Please partner, please help!

Email: [NaloxBoxProject@gmail.com](mailto:NaloxBoxProject@gmail.com)

Twitter: [@NaloxBox](https://twitter.com/NaloxBox)

Web: [www.NaloxBox.org](http://www.NaloxBox.org)





# NALOXONE AND OVERDOSE PREVENTION EDUCATION PROGRAM OF RHODE ISLAND

We Are The Help Until Help Arrives



**RHODE ISLAND**



# Opioids and Overdose in Rhode Island

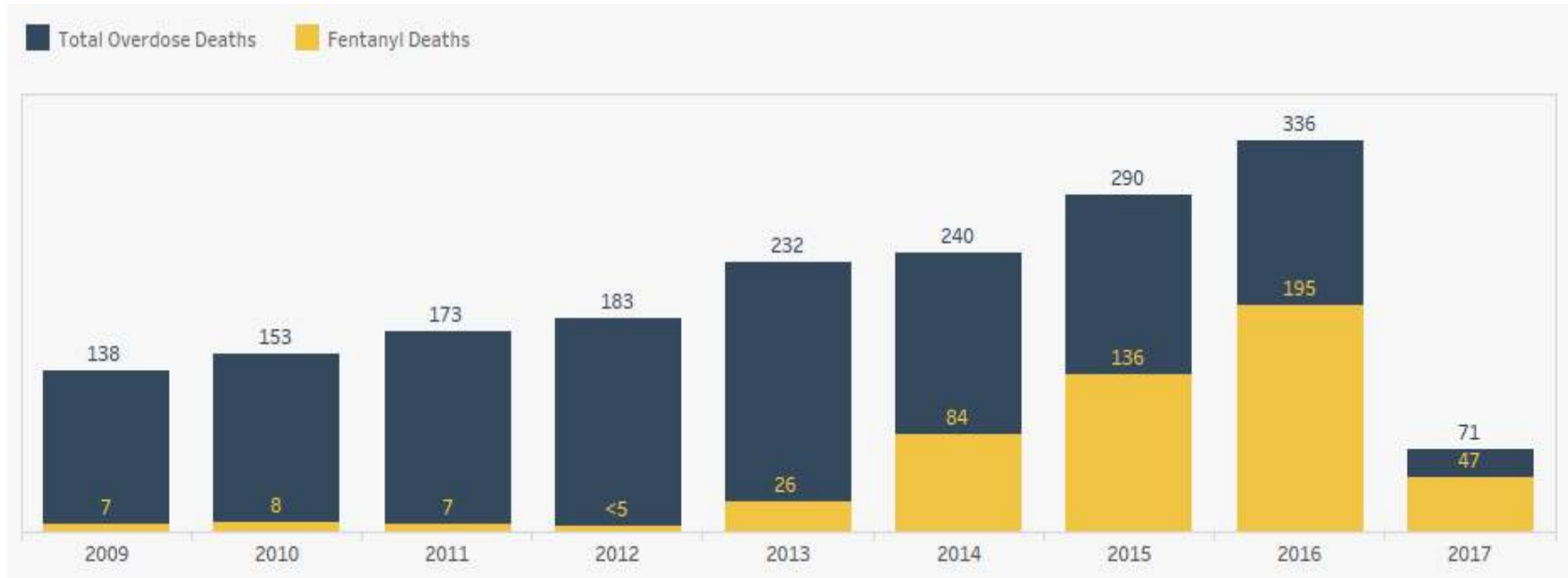


# Opioids and Overdose in Rhode Island

- Of concern are both illicit opioids (e.g., heroin) and misuse of prescription opioids (oxycodone, hydrocodone).
- In Rhode Island, prescription overdose deaths have remained relatively stable over the past five years. Illicit overdose deaths have quadrupled in this time period.



# Opioids and Overdose in Rhode Island



Source: PreventOverdoseRI.org

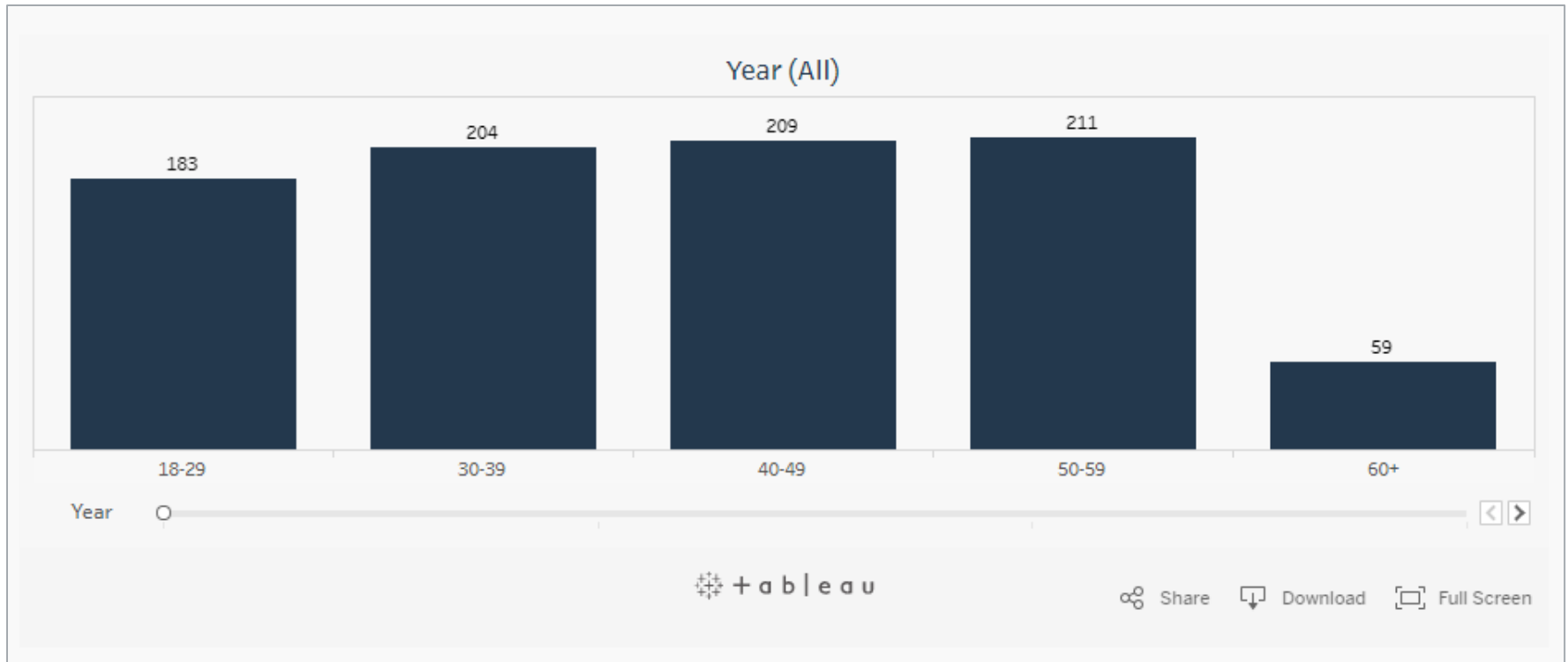


## Overdose Deaths by Age Group (2014-2016)

- While illicit drug use is most common in young adults, the highest rates of fatal overdoses occur in men, between 30 and 60 years old.
- Most overdose fatalities in women occur in this age range as well. Women currently make up one quarter of overdose deaths in all age ranges, but this gap is RAPIDLY closing.



# Overdose Deaths by Age Group (2014-2016)



Source: PreventOverdoseRI.org





## Harm Reduction

- **Overdose prevention education and naloxone distribution** are feasible and cost effective methods that have been shown to reduce fatal overdose in communities and increase enrollment in drug treatment.
- **Lay responders armed with knowledge, skills, and resources** are willing and able to identify an overdose and administer naloxone, resulting in lives saved.



# Harm Reduction

- **Naloxone distribution and other harm reduction** programs are not the solution to the opioid addiction epidemic; they help keep individuals alive so that they can work towards recovery.





# Opioids, Tolerance, and Naloxone



# Opioids

## **STRONG OPIOID AGONISTS**

- Morphine
- Fentanyl
- Methadone
- Heroin
- Hydromorphone (Dilaudid<sup>®</sup>)
- Oxycodone (Oxycontin<sup>®</sup>, Percocet<sup>®</sup>)
- Meperidine (Demerol<sup>®</sup>)

## **MODERATE OPIOID AGONISTS**

- Codeine
- Hydrocodone (Vicodin<sup>®</sup>\*)

## **OTHER OPIOID AGONISTS**

- Tramadol (Ultram<sup>®</sup>)
- Dextromethophan

\*contains acetaminophen (Tylenol)



# Opioids

## **MIXED OPIOID AGONIST-ANTAGONISTS**

- buprenorphine
- Buprenorphine + naloxone  
(Suboxone<sup>®</sup>)
- butorhanol
- nalbuphine
- pentazocine

## **OPIOID ANTAGONISTS**

- naloxone (Narcan<sup>™</sup>)
- naltrexone

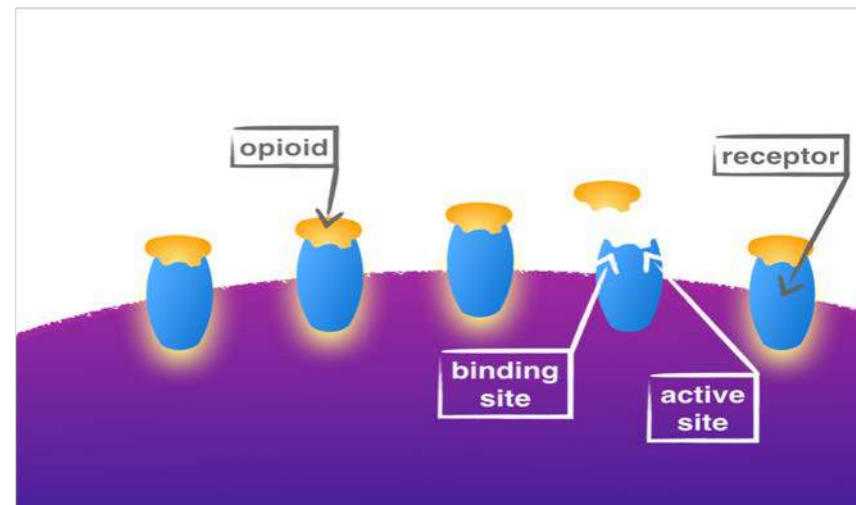


# Tolerance

- Opioids bind at opioid receptors causing a spectrum of therapeutic, pleasurable, and potentially dangerous effects.
- Repeated exposure to opioids (for any reason) desensitizes opioid receptors and leads to a

decrease in their number and density.

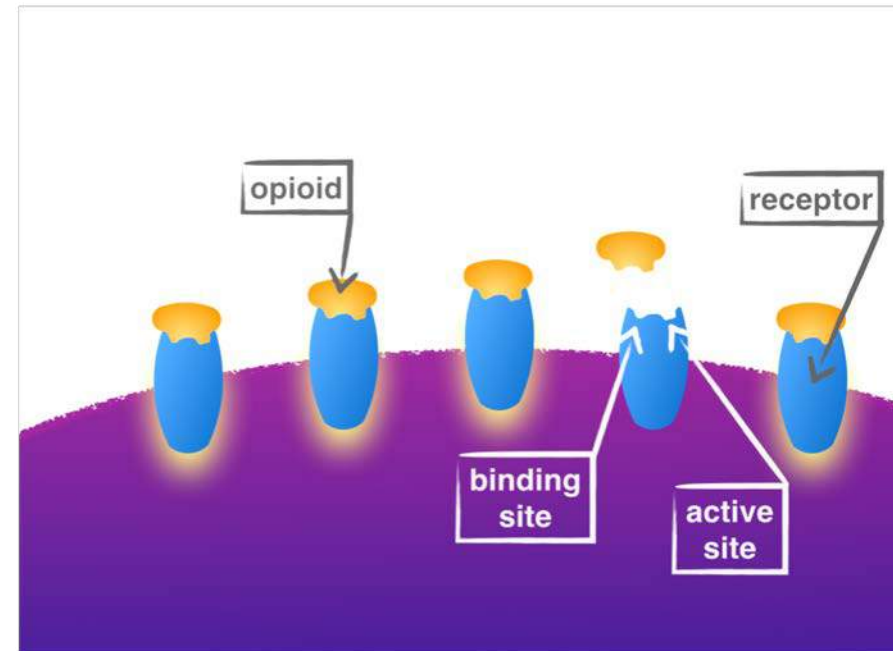
- It will now take more opioids to cause the same effect (i.e., tolerance).





# Tolerance

- When opioid receptors are not exposed to opioids for any period of time, the number and density of receptors returns to baseline.
- It will now take less opioid to cause the same effect.
- If the same amount of opioid is given, it will cause a stronger reaction.





# Tolerance



- Individuals develop tolerance to the pleasurable effects of opioids (e.g. pain relief, feelings of euphoria, a “high”).
- There is **VERY LITTLE** tolerance to the respiratory depression and hypoxia caused by increased doses of opioids.





# Tolerance

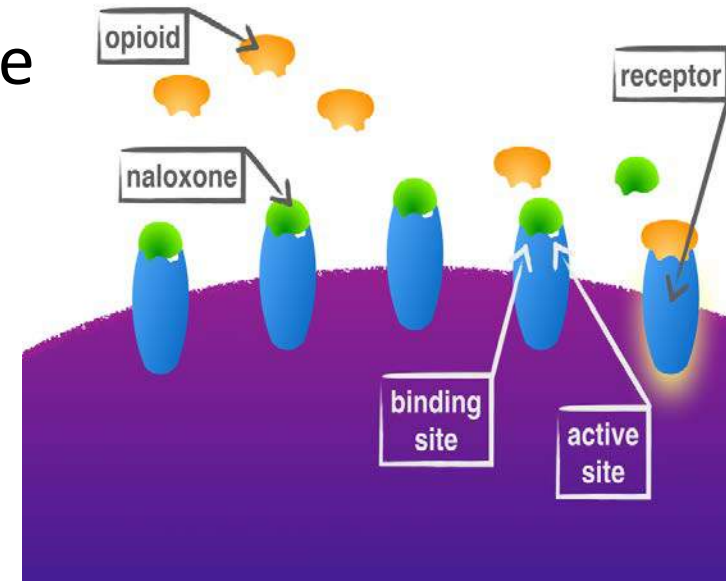


- Therefore, as an individual increases the amount they are taking (or as the amount prescribed increases in order to achieve a therapeutic goal), the risk of overdose and death increases.
- Overdose is especially likely in those where the amount needed to get “high” is very close to the amount that causes them to stop breathing.



## Naloxone (Narcan®)

**Naloxone (Narcan®)** is an opioid antagonist that is used to treat acute opioid overdose. It has a stronger affinity for opioid receptors than opioids and therefore reverses and blocks their effects.





## Naloxone (Narcan<sup>®</sup>)

- A non-scheduled, non-addictive, prescription drug that is not effective orally.
- Administered by injection (IM) or as a nasal spray (IN), or intravenously (IV)
- Effect has an onset of 3-5 minutes and a duration of 30-90 minutes. Most opioids have a longer half life.



## Naloxone (Narcan<sup>®</sup>)

- Reverses the effects of opioids.
- It only works for opioid overdose (heroin, pain killers), not for other kinds of drugs (cocaine, meth).
- There are no adverse effects if naloxone is given to someone who is not overdosing on opioids, **so when in doubt, give it.**
  - only contraindication is known sensitivity, which is very rare



## Naloxone (Narcan<sup>®</sup>)

- Naloxone starts working in 2-4 minutes and lasts for 30-90 minutes.
  - If there is no improvement in 2-4 minutes, give a second dose.
  - If the first dose wears off and they start to “re-overdose”, give another dose.
- **IN naloxone dosage same for children**



# Overdose Risk Factors, Signs, and Symptoms



# Overdose

- An overdose occurs when a toxic amount of a drug or a toxic combination of drugs overwhelms the body.
- Opioid overdose is characterized by inadequate breathing (respiratory depression).
- This leads to a lack of oxygen in the body (hypoxia) which will lead to death if no intervention is made.



# Overdose Risk Factors

There is an increased likelihood of overdose when any of the following factors are present:

- **Decreased tolerance due to recent abstinence**
  - hospitalization
  - imprisonment
  - detox/rehab
- **Solo opioid use/Social Isolation**
  - using in the absence of anyone who can recognize and respond to an overdose





## Overdose Risk Factors

- **Mixing of opioids with other...**
  - Opioids
  - Alcohol
  - Benzodiazepines
  - Prescription meds
  - Other known or unknown substances (e.g., fentanyl)



# Overdose Risk Factors

- **Acute or chronic illness**
  - Hepatitis C
  - HIV/AIDS
  - Pneumonia
  - Sleep apnea
  - Other liver or respiratory conditions



# Overdose Recognition/Assessment

Overdose can happen right after using, and usually occurs within **1-2 hours**.

A person who overdoses will have some or all of the following symptoms:

Can't be woken up (pressure point, earlobe pinch)	Pale/Ashen
Slow or no breathing (labored )	Fingernails or lips turning blue
Unable to speak or incoherent	Vomiting or gurgling noises
Limp Body	Pinpoint Pupils



# Assessment and Response



# Overdose Response

- If an individual is found unresponsive, attempt arousal. (call their name/shoulder shake /pressure point/ear lobe/sterno rub)
- If you can't wake someone up or they aren't breathing, call 911.
  - Tell them someone is not breathing.
- If there is ANY indication that ANY drug has been taken, administer one dose of naloxone (Narcan<sup>®</sup>), if you have it.



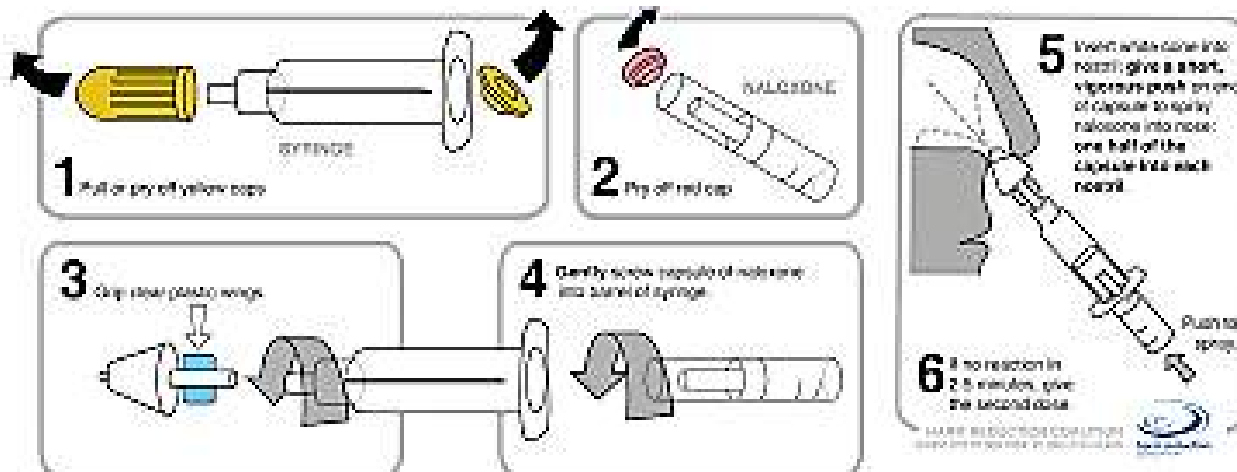
## Overdose Response

- Check for pulse. If no pulse, initiate CPR. If pulse is present, begin rescue breathing.
- Keep rescue breathing/CPR until the naloxone starts to work. If no improvements in 2-5 minutes, give another dose.
- Once the individual begins to breathe independently, place in the rescue position.



# Intranasal Naloxone

1. Remove both yellow caps from the ends of the syringe
2. Twist the nasal atomizer onto the tip of the syringe
3. Remove the purple cap from the naloxone vial
4. **Twist** the naloxone into the bottom of the syringe until you feel resistance





# Narcan<sup>®</sup> Nasal Spray







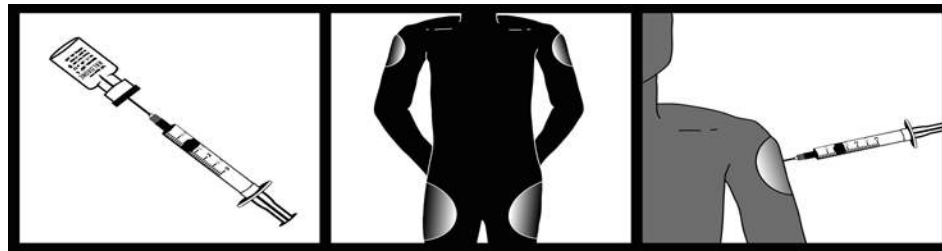
## Narcan<sup>®</sup> Nasal Spray

- Remove the device from the package. Hold with thumb on the bottom of the plunger with your first and middle fingers on either side of the nozzle.
- Tilt the person's head back and provide support to the neck then insert the tip of the nozzle into nostril until your fingers are against the person's nose.
- Press the plunger firmly to give the dose.



## Injectable (IM) Naloxone

1. Remove cap from the naloxone vial and the syringe
2. Insert needle through rubber plug
3. Pull back on plunger until there is 1cc in the syringe (4mg)
4. Inject into a large muscle (thigh or upper arm)





## Rescue Breathing

- Opioid overdose causes respiratory failure.
- Respiratory failure leads to hypoxia and death.
- The primary treatment for opioid overdose is **OXYGEN** and **VENTILATION**.



# Rescue Breathing

- Rescue breathing by any means available (i.e., mouth-to-mouth, mouth-to-mask, bag-valve-mask) is the primary treatment of overdose and should be performed:
  - Immediately - while someone calls 911 and gets naloxone
  - After giving naloxone - until the person can breathe independently.
  - If you don't have naloxone – rescue breathe until rescue arrives.



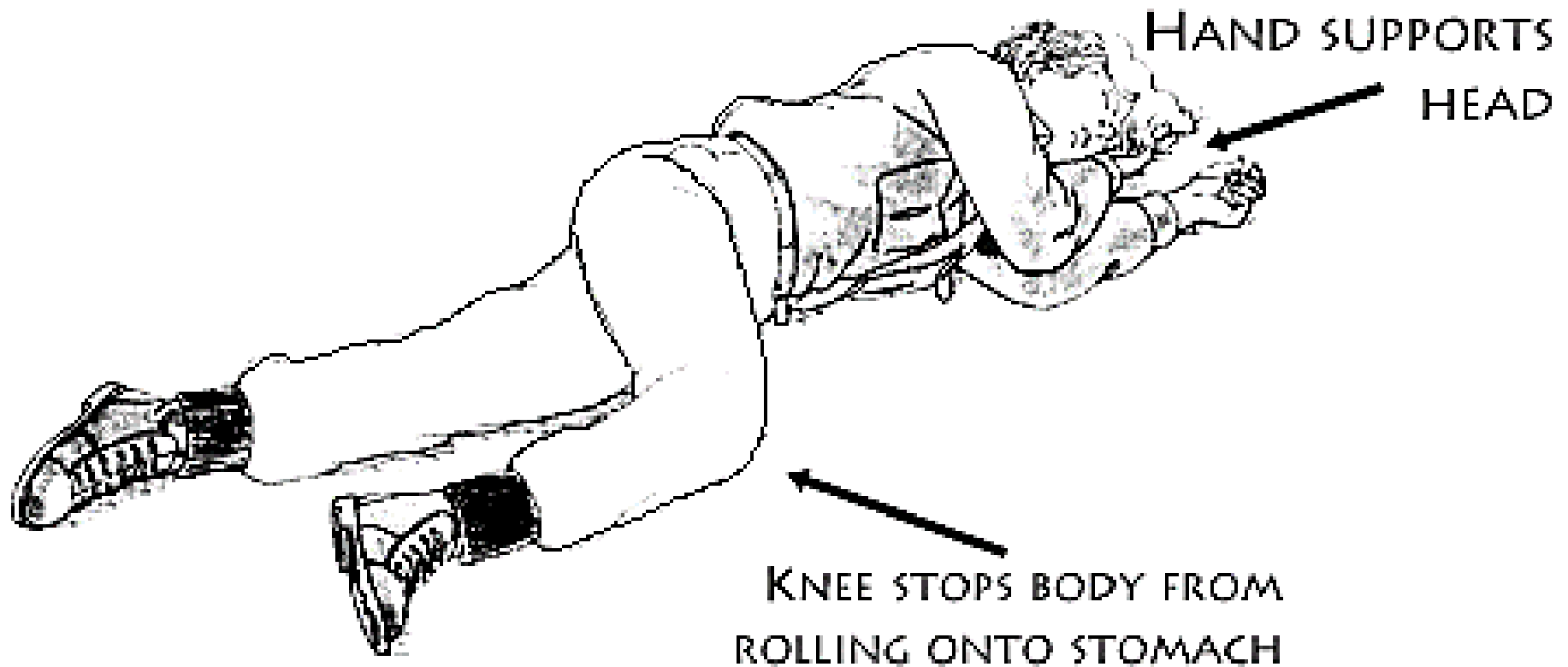
# Rescue Breathing

- Tilt the person's head back.
- Pinch nose.
- Seal your mouth over theirs.
- Use a barrier device.
- Give 1 breath every 5 seconds.
- Continue until help arrives or the person starts breathing independently.





# Rescue Position





## How does a person respond to Narcan<sup>®</sup>?

### Scenario:

1. Gradually improves breathing and becomes responsive within 2-4 minutes
2. Immediately improves breathing, responsive, and is in withdrawal
3. Starts breathing within 2-4 minutes but remains unresponsive
4. Does not respond to first dose and naloxone must be repeated in 2-4 minutes (keep rescue breathing)



## Frequently Asked Questions

### **What are the side effects of naloxone?**

Naloxone reverses opioid overdose and causes withdrawal. The most common symptoms of withdrawal are pain, nausea, vomiting, sweating, and anxiety. Less common are agitation, seizures, or irregular heartbeat. While opioid withdrawal can be dramatic and unpleasant, it is not life threatening.





## Frequently Asked Questions

### **Can people have violent reactions after naloxone administration?**

It is possible an individual will become agitated and combative after going into withdrawal due to naloxone administration, however, this is not likely with the relatively small dose used by lay-responders. Also, administration of intranasal naloxone seems to provide a more gentle reversal with less acute withdrawal symptoms. The City of Boston did not report ANY violent reactions in over 500 administrations of nasal naloxone by non-medical personnel.



## Frequently Asked Questions

**Does naloxone work on cocaine, methamphetamine, benzodiazepines, or alcohol?**

No. Naloxone only works on opioids (i.e., heroin, morphine, fentanyl, methadone). It will not have any effect on someone overdosing on another type of drug. However, if someone is overdosing on opioids AND another drug, naloxone could reverse the opioid part of the overdose and potentially help the person.



## Frequently Asked Questions

**What if naloxone is given to someone who doesn't have any opioids in their system?**

There are no adverse effects if someone is given naloxone who doesn't need it. If someone looks like they may be overdosing on opioids (i.e., showing signs of being unconscious, slow or no breathing), they should be given naloxone. If opioids are present, it will help. If opioids aren't present, it won't hurt to give naloxone.



# Frequently Asked Questions

## **What is the shelf-life of naloxone?**

When manufactured, naloxone has approximately a two-year shelf life. Most of the naloxone that is being distributed has an expiration date 12-18 months in the future. Always check the expiration date on your naloxone (found on the end of the box and on the vial) and follow your department's procedure for exchanging expired or near-to-expiration medications. The atomizers also have an expiration date after which they are no longer considered sterile. This is usually in the four to five year range.



# Frequently Asked Questions

## **How should naloxone be stored?**

Naloxone must be kept at room temperature (59-86°F or 15-30°C). It should never be stored in a refrigerator. It must also be stored out of direct light. If the only naloxone that you have is expired or has been stored improperly - and no other naloxone is immediately available- it may be given to a person experiencing an overdose. It may not be as effective, but it will not cause harm.



# NOPE-RI

A program of:

Naloxone and Overdose Prevention Education  
Program of Rhode Island

Email: [EMcDonough@ridmat.org](mailto:EMcDonough@ridmat.org)

Web: [www.nopeRI.org](http://www.nopeRI.org)

[www.riresponds.org](http://www.riresponds.org)



**RHODE ISLAND**



**John Potvin**  
**Emergency Medical Services**  
**East Providence Fire Department**



# PUBLIC COMMENT