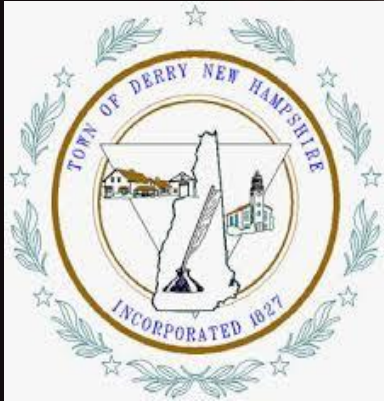


**June 8<sup>th</sup> 2016**  
**Derry, NH**



# ***Overdose Emergency Procedures and Narcan Administration***

# Narcan Administration Objectives

- Identify Local Public Health Network Partners
- Review new NH laws, “Narcan” “Good Samaritan”
- Recognize signs & symptoms of an opioid overdose
- Discuss what to do during an overdose emergency
- Discuss the importance of calling 911
- Review and practice Narcan administration
- Review and practice CPR/Rescue Breathing



# Help is Here at Home You are Not Alone

Public Health Network Partners and Substance Misuse Help available in Derry

- Derry Fire Department and Professional Firefighters of Derry
  - Center for Life Management
  - Parkland Medical Center
  - The Derry Friendship Center
  - Community Alliance For Teen Safety
  - Community Health Services



# Derry Fire Department



## Plan, Prevent, Provide

- The Derry Fire Department strives to improve quality of life through innovative community risk reduction programs
- The Derry Fire Department currently staffs 4 Fire Stations with 4 Battalions
- Average Response Time (00:4:52)
- 3294 EMS responses over last 12 months
- Drug Ingestion/Substance Abuse -132
- Cardiac Arrests - 53
- Narcan Administered - 87





# United Professional Firefighters of Derry, Local 4392

- Affiliated with the International Association of Firefighters, and Professional Firefighters of NH
- Professional Firefighters of Derry take a proactive approach in attempting to constantly improve the services our members are able to provide to the public
- Union President Ron Sebastian; “We are very passionate about a high level of fire and emergency medical services provided to the citizens and visitors of Derry”



# South Central Public Health Network



The South Central Public Health Network is a collaborative partnership of:

- Community Health Services
  - Community Alliance for Teen Safety
  - The Center for Life Management
  - Parkland Medical Center
  - Granite United Way
- Drug Addition Treatment and Recovery available in Derry



**Public Health**  
Prevent. Promote. Protect.

# Parkland Medical Center



## **Commitment to Excellence**

- An 86-bed acute care community hospital serving Southern New Hampshire offering
- Emergency Services
  - Doctors, Nurses, EMT's and other clinicians skilled in Emergency Management, post crisis stabilization and referral for patients with substance use disorders
  - Strong alignment with EMS to ensure high quality care, community outreach and support
  - Center for Emotional Wellness, 14-bed inpatient adult voluntary Behavioral Health Care
- Partner in the South Central Public Health Network

# Center for Life Management

- CLM work closely with a variety of regional health and human service providers and provides a comprehensive complement of mental health and substance misuse services, psychiatric treatment, acute care, and family support services for adults, children, adolescents and families



Main Office  
10 Tsienneto Rd.  
Derry, NH 03038

Salem Office  
103 Stiles Rd.  
Salem, NH 03079

**For Information Call: (603)-434-1577**




# The Community Alliance for Teen Safety (CATS)

- Founded 1996 in Derry
- Committed to Promoting a Safer Community
  - **Focus:** driving safety, substance misuse prevention, issues related to the health and safety of youth & families
- CATS is a subcontracted partner with CLM, CHS, and Parkland to Support Substance Misuse Prevention efforts in the South Central Regional Public Health Network (SCRPHN)



# The Community Alliance for Teen Safety (CATS)



## Contact Info:

- Sue Centner, CATS Executive Director  
603-505-5115 [director@catsnh.org](mailto:director@catsnh.org)
- Mariann White, Substance Misuse Prevention Coordinator, SCRPHN  
603-505-7216 [mariannwhite@catsnh.org](mailto:mariannwhite@catsnh.org)

# Derry Friendship Center

- Non-profit community organization that provides a safe and supportive environment for twelve-step recovery
- Derry Friendship Center, Inc. enjoys a positive relationship with the Town of Derry as well as civic organizations, and healthcare providers. The Center is open to the public as a drop-in center – when staffed by our volunteers

Derry Friendship Center  
6 Rail Road Avenue  
Derry, NH 03038



**For Immediate Need Call (603)-432-9794**

# Greater Derry Community Health Services (CHS)

Greater Derry Community Health Services (CHS) - A Direct Service Support for People In Need of a Health Plan

- What are the best options available?
  - How should we proceed?
  - Medicaid, Marketplace or CHS?
- Assessing status, recommending a plan supporting action through case management
- Providing advocacy, follow up, support and continuity

CHS

14 Tsienneto Road – Suite 301

Derry, NH 03038



**For information call: (603) 425-2545**



# Office of the NH Medical Examiner

## 2015 Current Drug Data



OPIOIDS	# OF DEATHS
Fentanyl (no other drugs)	161
Fentanyl and Other Drugs (excluding heroin)	78
Heroin (no other drugs)	31
Heroin and Other Drugs (excluding fentanyl)	13
Heroin and Fentanyl	44
Other Opiates/Opioids	70
<b>Total Deaths Caused By Opiates/Opioids</b>	<b>397</b>
Other drugs	42
<b>Total Drug Deaths for 2015</b>	<b>439</b>

***283 (71%) Deaths Attributed to Fentanyl***

# Office of the NH Medical Examiner

## 2016 Current Drug Data

As of 5/27/2016

Opiated/Opioids	# Of Deaths
Fentanyl (no other drugs)	51
Fentanyl and Other drugs (excluding heroin)	29
Heroin (no other drugs)	2
Heroin and Other Drugs (excluding fentanyl)	2
Heroin and Fentanyl	1
Other Opiates/Opioids	20
Other Drugs	17
Total Drug Deaths	<b>122</b>

***81 (67%) Deaths Attributed to Fentanyl***

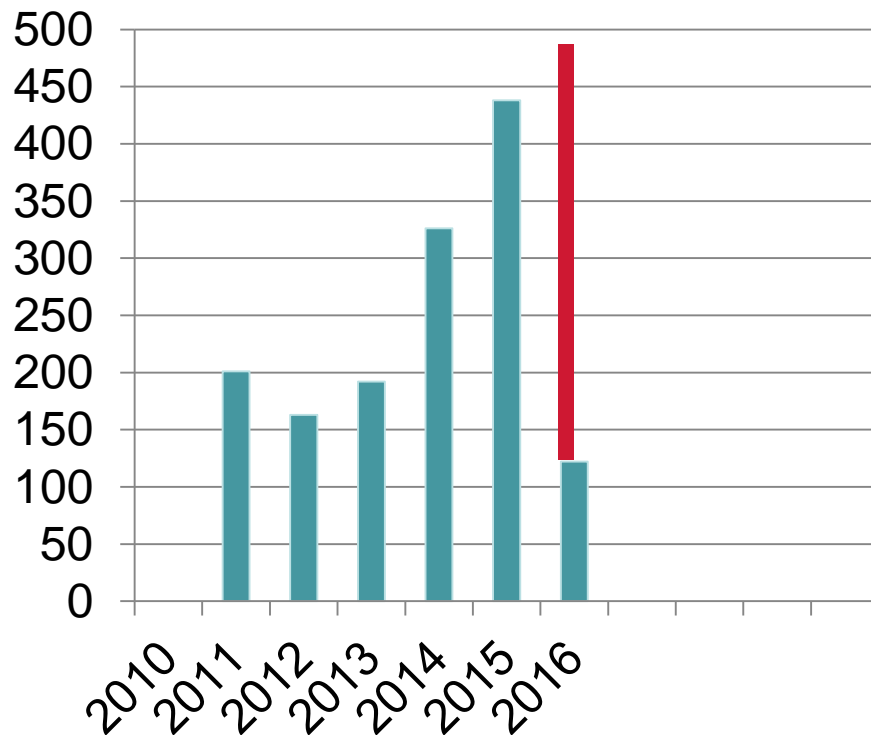
*There are 75 2016 cases open that are “pending toxicology” it takes 2-3 months to receive the toxicology results*

# Office of the NH Medical Examiner

## NH 2016 Current Drug Data

As of 5/27/2016

### NH Drug Overdose Deaths



**2013-2014 73% Increase**

Year	Deaths
2011	201
2012	163
2013	192
2014	326
2015	439
2016	122 +- 75

Based on current numbers, the projected number of drug overdose deaths in 2016 is estimated to be 480+-

# Narcan Use Report

## Derry Ranked #5



**NH**  **TEMSIS**

New Hampshire's Trauma & EMS Information System

Cases per Month	2012	2013	2014	2015	2016	Grand Total
January	60	74	119	207	217	677
February	51	65	104	210	243	673
March	63	75	108	211	217	674
April	63	86	124	225	-	498
June	95	99	139	257	-	508
July	93	107	137	248	-	590
August	82	110	171	296	-	585
September	91	59	164	291	-	605
October	77	106	242	216	-	641
November	76	92	188	174	-	530
December	66	99	282	182	-	629
Total	897	1050	1921	2724	677	7269

**2013-2015 159% Increase**





# Derry, NH Age Groups

Age Groups	2014	2015	2016	Grand Total
15-24	15	13	5	33
25-34	19	27	7	53
35-44	12	14	6	32
45-54	5	7	4	16
55-64	4	10	4	18
65-74	1	2		3
75-84	1	1	1	3
85-94	1			1
Grand Total	58	74	27	159

**2015  
21 to 35 Y/O**

**Males 63% - 27% Females**

# Two New Laws Have Been Signed by Governor Hassan

- HB 271 that allows broad prescribing, dispensing, and expand the public's access to naloxone
- HB 270 that provides “Good Samaritan” protections for individuals administering the drug and protections from drug possession (e.g. heroin) charges





# Who's at High Risk for Overdose?

- Individuals seeing multiple doctors for pain medications and not following instructions about prescription use
- Using prescription drugs prescribed to someone else
- Users who snorts or inject drugs for greater effects
- Former users who are recently released from prison or who entering and exiting from drug treatment programs
- Only 17 % of opiate related deaths are among new users
- As many as 1 in 4 people who receive prescription opioids long term for noncancer pain in primary care settings struggles with addiction

# Opioids & Opiates May Include



- **Heroin**

- Buprenorphine (Suboxone)
- Butorphanol (Stadol)
- *Codeine*
- Hydrocodone (Vicodin)
- Hydromorphone (Dilaudid)
- Meperidine (Demerol)

- **Fentanyl**

- Fentanyl, 50-100 times more potent than morphine
- 30-50 times more potent than heroin

- *Morphine*

- Nalbuphine (Nubain)
- Oxycodone (Percocet/Percodan)
- Oxymorphone
- Pentazocine (Talwin)
- Paregoric
- Propoxyphene (Darvon)



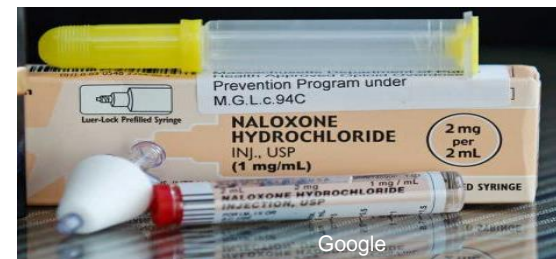
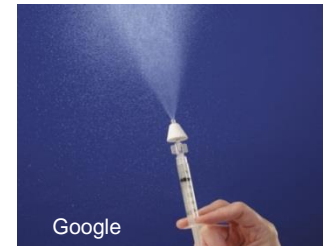
# Poly Drug Use



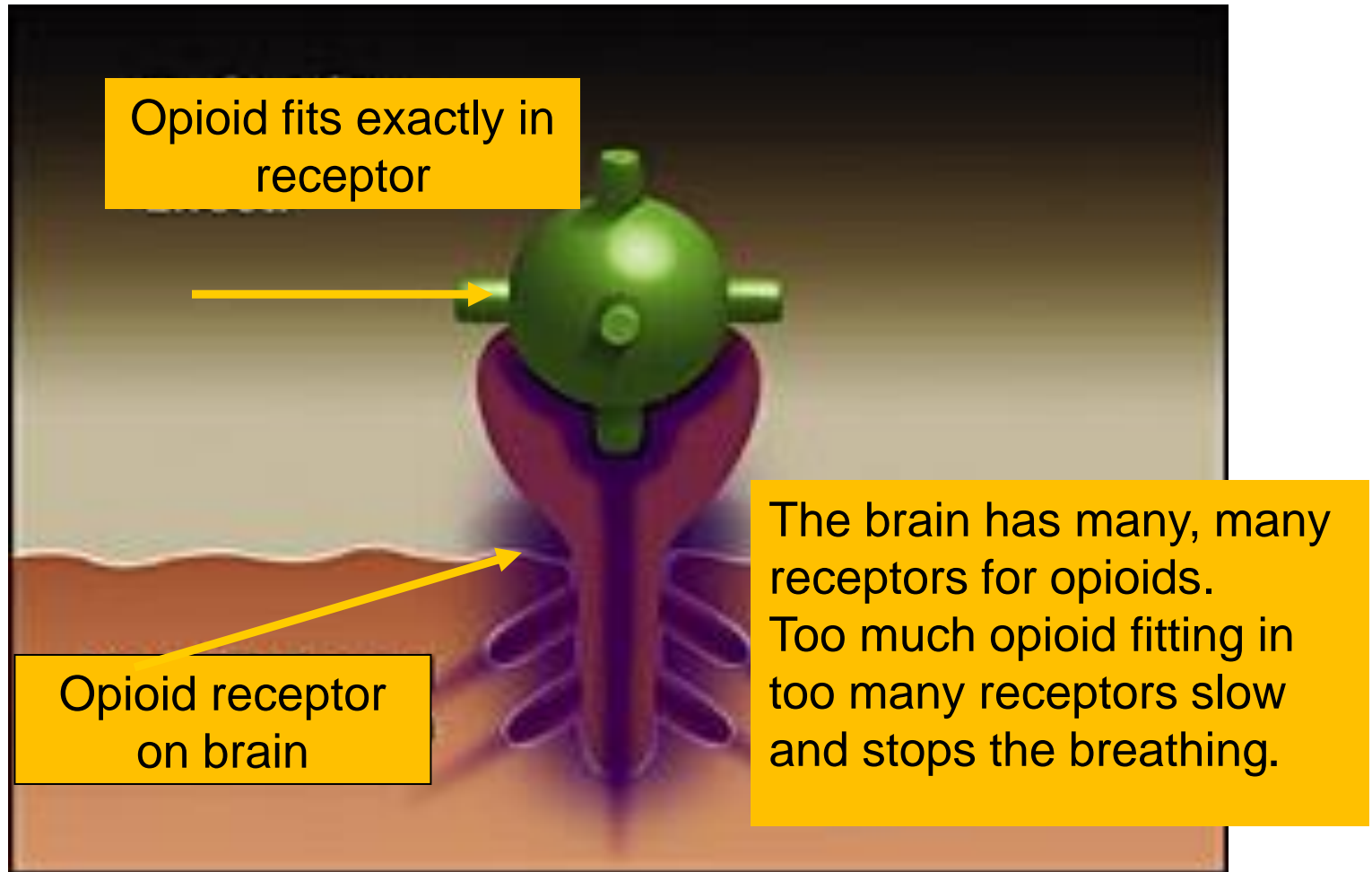
- When drugs taken are illegally, they have a chance of being mixed (also known as "cutting") with other substances which dealers are reported to do to increase their quantity/profits for example, Heroin mixed with Fentanyl
- Benzodiazepines are notorious for causing death when mixed with other CNS depressants such as opioids, alcohol, or barbiturates

# Rationale for Overdose Education and Naloxone Distribution

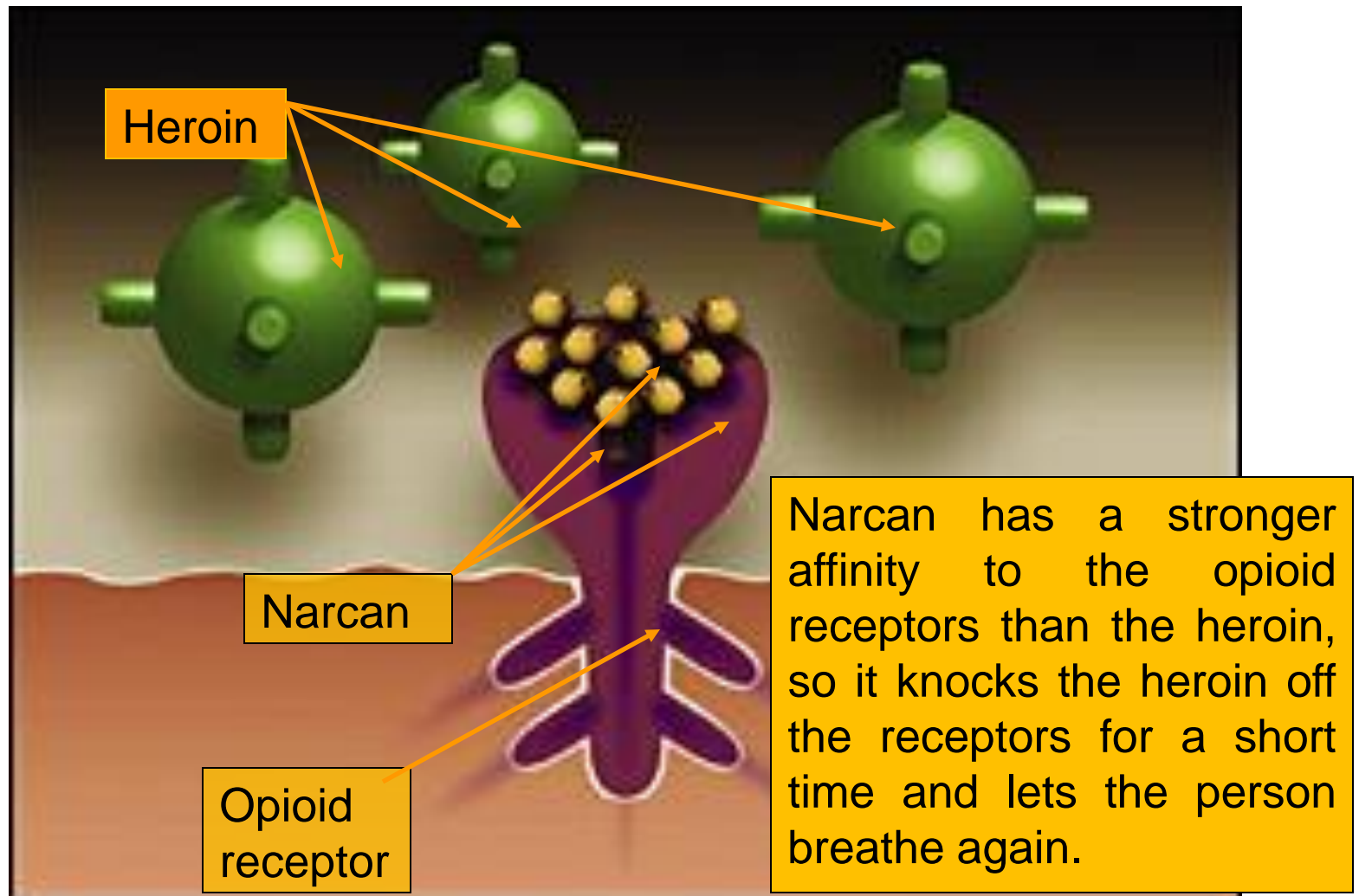
- Most opioid users do not use alone
- Known risk factors:
  - Mixing substances, abstinence, using alone, unknown source
- Opportunity window:
  - Opioid OD takes minutes to hours
  - Bystanders can be trained to recognize OD
  - Bystanders can be trained to administer Narcan
  - Narcan can save a life....
  - Bystanders trained in CPR



# What is an Opioid Overdose?



# Narcan Reversing an OD





# Process of an Overdose

- Person has **“Opioid Overdose Triad”**
  - Unconsciousness/reduced consciousness
  - Pinpoint pupils
  - Respiratory depression
- If an opioid overdose is not treated, a person will...
  - Stop breathing
  - Go into cardiac arrest
  - Die....

**An Opioid Overdose is a Dire Medical Emergency  
Call 911**

# Opioid ODs, continued

## ODs are rarely instantaneous!

- ODs happen as a process- someone slowly stops breathing
- They usually happen 1-3 hours after the drug was used
- Someone “found dead with a needle in their arm” is a rare event



# Respond to Opioid Overdose



1. Stimulate, Sternal Rub
2. Alert EMS by calling 911
3. Administer Narcan
4. Rescue Breathing/Ventilations
- 5. Be Prepared to Provide Chest Compressions**
6. Repeat 3 & 4, if necessary
7. Recovery position, if breathing
8. Do not handle sharps, never recap needles, leave for EMS



**Rescue Breathing is a Critical Step in Care**



# Chest Compressions or Not?

- Effective bystander CPR provided immediately after sudden cardiac arrest can double or triple a victim's chance of survival
- Within 4 to 6 minutes lack of oxygen results in brain damage or death
- **As a Rule** - If the victim is unresponsive with no breathing or abnormal breathing = **Start CPR**
- CPR Training offered at no cost by DFD the 3<sup>rd</sup> Wednesday evening of each month, **free of charge**  
Hampstead Road Fire Station

**Call 432-6751 to Register**





# Opioid Overdose Kit



## Kit contents:

- Two **(2)** individual pre-filled syringes of Narcan (2) mg each
- One **(1)** mucosal atomizer (nose pieces/spray device)





# Narcan (naloxone)



## Narcan® (naloxone)

- Only blocks opioid receptors; no opioids = no effect
- Not harmful if no opioids in system
- **Temporarily** takes away the “**high**,” giving the person the chance to breathe
- Narcan works in 1 to 3 minutes and lasts 30 to 90 minutes
- Narcan can **neither** be abused nor cause overdose
- Narcan is not the silver bullet.....
- **Note:** DFD EMS Narcan Doses have ranged from 2-8 mg in the last 20 OD, average dose required 4 mg

# Signs & Symptoms: Indications for Narcan

- Person is not breathing, or has respiratory depression
- Unresponsive, decreased mental status, or confusion
- Constricted or “pinpoint” pupils
- Bystanders or witness accounts
- Drug Paraphernalia



# What Does Narcan Do?

Narcan can reverse respiratory depression due to an opioid overdose



Photo courtesy of MDPH Opioid Overdose Prevention & Reversal Information Sheet (1/25/12)

**Note: It is not effective against respiratory depression due to non-opioid drugs**

# Contraindications

In a life-threatening situation, there are no contraindications. Safe and Effective



# Narcan May Not Always be Effective



Why Narcan may not work ...

- Victim goes into cardiac arrest
- Inadequate dose of Narcan
- Multiple or Poly Drugs taken
- Alcohol overdose as well as Opioids
- Other medical conditions
- Always Be Prepared to Start CPR...





# Crazy Myths About Drug Overdose Antidote, Naloxone



**Myth #1:** If you give an overdose antidote to drug users, they will abuse more drugs

**Fact:** Studies report that naloxone does not encourage drug use, and in fact, has been shown to decrease it in some circumstances. By blocking the effects of opiates, naloxone can produce unpleasant withdrawal symptoms, which nobody wants, especially not an active drug user.

# Crazy Myths About Drug Overdose Antidote, Naloxone



**Myth #2:** We can't trust a person who is high to respond appropriately in a life-threatening situation

**Fact:** Since 1996, over 10,000 overdose reversals have taken place using naloxone. The vast majority of these were done by active drug users. Many of them were probably high

# Crazy Myths About Drug Overdose Antidote, Naloxone



**Myth #3:** Naloxone will keep drug users from seeking treatment

**Fact:** Death keeps people from seeking treatment. Naloxone gives people another chance to get help if they choose, and often, the near-death experience of drug overdose and being saved with naloxone acts as a catalyst to encourage people to get into treatment.

# Crazy Myths About Drug Overdose Antidote, Naloxone



**Myth #4:** Naloxone makes people violent

**Fact:** There is some truth to this - but not much. While naloxone can cause confusion and “fight or flight” response when administered at high doses, in smaller amounts, naloxone rarely causes overdose victims to become combative

# Crazy Myths About Drug Overdose Antidote, Naloxone



## **Myth #5:** Naloxone Can Give People Heart Attacks

**Fact:** According to research in the American Journal of Public Health, “Complications such as seizures and arrhythmia have been reported after naloxone administration on very rare occasions or 0.25% of cases. Pulmonary edema has also occurred in overdose patients, but that is a result of respiratory depression, not naloxone administration.”



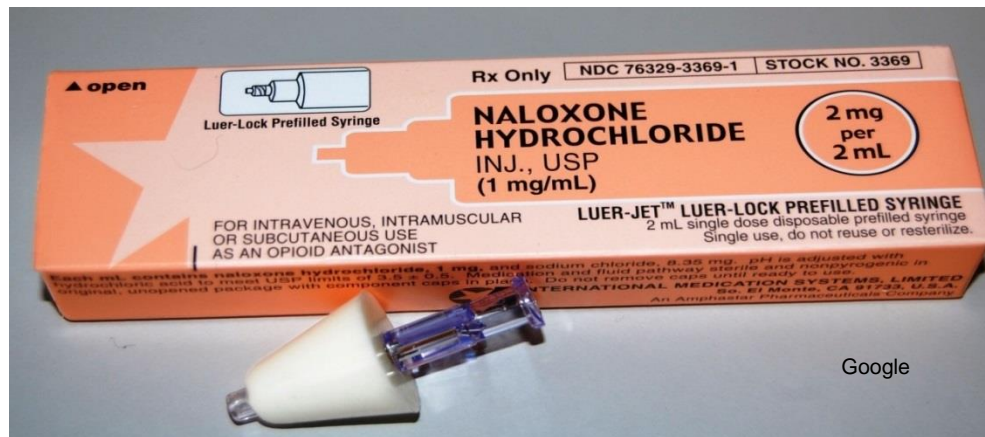
# Crazy Myths About Drug Overdose Antidote, Naloxone



## **Myth #7:** Naloxone Loses Effectiveness Under High Temperatures

**Fact:** Even after exposure to extreme temperature change, naloxone still works. In clinical studies, naloxone maintained a concentration  $89.62 \pm 1.33\%$  even when subjected to  $\sim 21$  and  $\sim 129$  degrees Fahrenheit temperatures every twelve hours for 28 days. Nevertheless, it is recommended that naloxone be kept at room temperature and/or stored in UV ray resistant materials

# Narcan Administration



Google

# Step 1

You will need...

- One Luer-Jet needle-free syringe
- One ampule of Narcan 2.0 mg
- One atomizer

*Do not assemble medication on atomizer until ready to use*

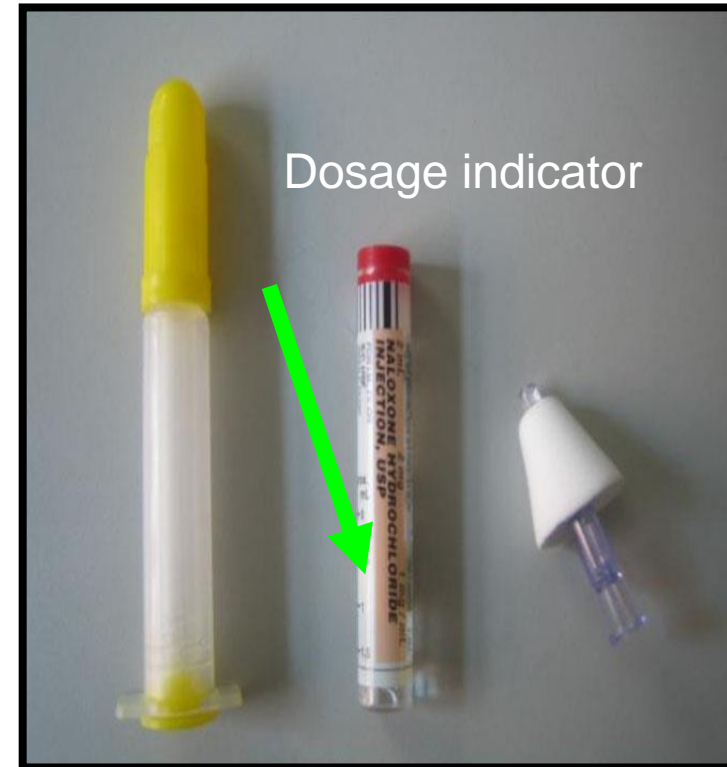


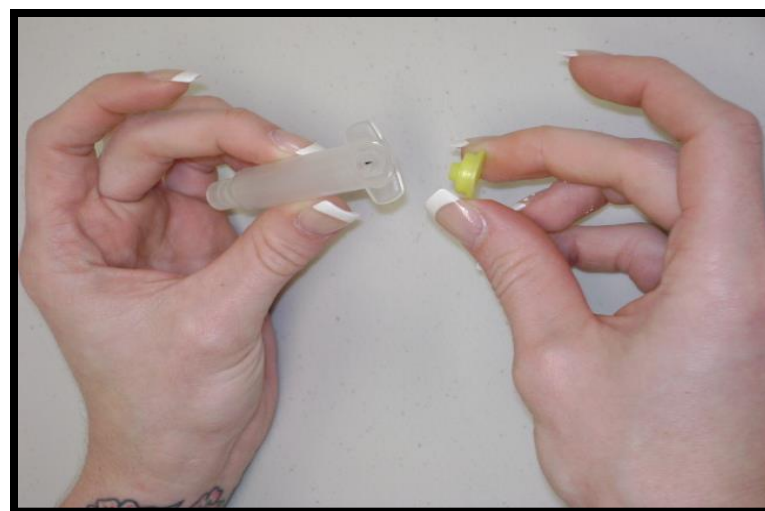
Photo courtesy of [www.intranasal.net](http://www.intranasal.net)

This document is intended to serve as a general resource for training. Those who are administering Narcan are advised to talk with their physician for additional information.

Revised 3/18/16

# Step 2

Remove the caps from each end of the  
Luer-Jet needle-free syringe



Photos courtesy of <https://sites.google.com/site/nomadoverdoseproject/naloxone>

This document is intended to serve as a general resource for training. Those who are administering Narcan are advised to talk with their physician for additional information.

Revised 3/18/16

# Step 3

- Remove red cap from top of Narcan glass vial
- Insert Narcan glass vial into the syringe/adaptor
- Gently twist Narcan glass vial until secured into syringe



Photos courtesy of  
<https://sites.google.com/site/nomadoverdoseproject/naloxone>

This document is intended to serve as a general resource for training. Those who are administering Narcan are advised to talk with their physician for additional information.

Revised 3/18/16



# Step 4

Attach nasal atomizer to other end of syringe as shown



Photos courtesy of <https://sites.google.com/site/nomadoverdoseproject/naloxone>

This document is intended to serve as a general resource for training. Those who are administering Narcan are advised to talk with their physician for additional information.

Revised 3/18/16

# Fully Assembled Narcan



Photo courtesy of <https://sites.google.com/site/nomadoverdoseproject/naloxone>

# Respond to Opioid Overdose

## Narcan Administration



### **Intranasal route has advantages:**

- Preferred route for EMS
- Rapid onset of action
- Nose is an easy access point for medication delivery
- No shots needed
- It eliminates any risk of a needle stick

# Narcan Administration

- Control patient's head with one hand
- Place atomizer in one nostril, press down on opposite nostril to close
- Slowly compress syringe to administer 1.0 mg Narcan (half of syringe)
- Repeat steps above for other nostril, Total Dose 2 mg

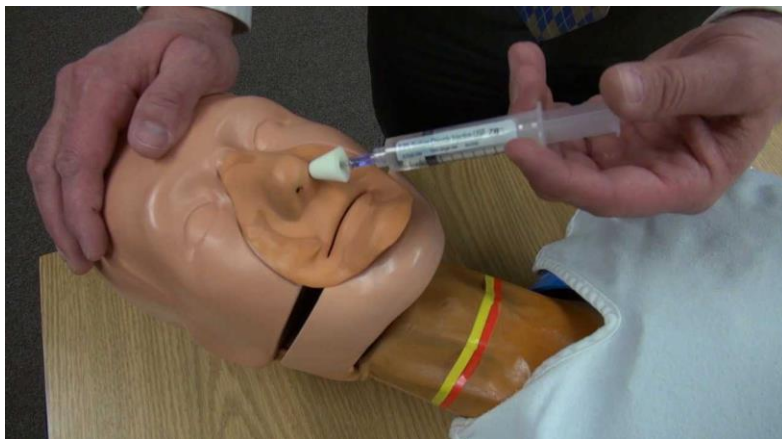


Photo courtesy of [www.intranasal.net](http://www.intranasal.net)



# Waking the Dragon



Narcan can cause withdrawal symptoms such as:

- Disorientation
- Combativeness



# Possible Adverse Reactions



**Combativeness**



**Nausea, Vomiting**



**Nervousness**



**Watery Eyes & Nose**



**Sweating & Chills  
(Cold Turkey)**



**Trembling, Muscle  
Spasms  
(Kicking the Habit)**

# Possible Adverse Reactions



**Yawning**



**Rapid Heart Rate**



**Low blood pressure**

Photos courtesy of charydmiller.com, kidneybuzz.com, stagingdiva.com, webmd.com, bambamail.com, whydomyhandsshake.com, personal-psu.com, ladycarehealth.com, myhealthtips.in

# After Administering Narcan...

- Ensure 911 has been called
- Return to rescue breathing/CPR, if needed
- If breathing is normal, roll victim on his or her side



Photo courtesy of [www.fGoogleirstaidforlife.org.uk](http://www.fGoogleirstaidforlife.org.uk)



# Other Products for Opioid Overdose



# Evzio Device

Narcan via auto-injector





# Narcan Nasal Spray

- Sold as two 2 mg packets
- Released 2/18/16



# Key Points

- Talk to our Public Health Partners
- Narcan effects may be shorter than opioid taken
- Be prepared to start CPR
- Patients require further medical care, call 911
- Note time Narcan was given and report to EMS
- If possible, determine...
  - What drug and how much was taken
  - If any other drugs were taken
  - Effect of Narcan
  - Timeframe
  - Medical history



Questions??????

