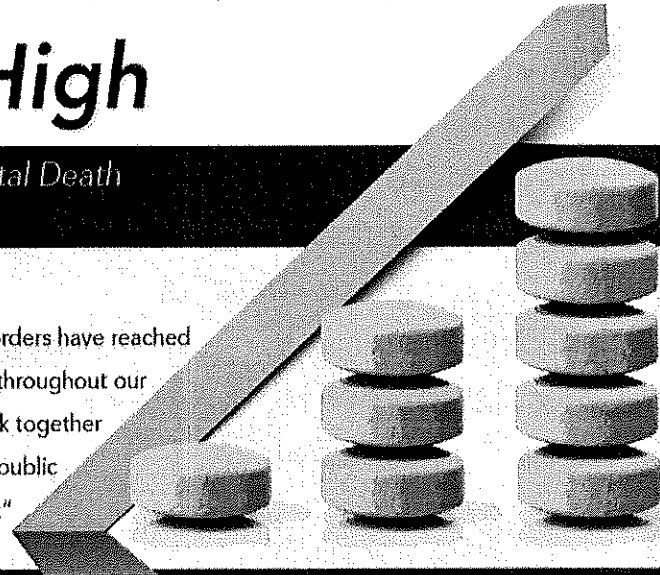


Drug Overdose Deaths At All-Time High

*America's Leading Cause of Accidental Death
is Now Prescription Drug Overdose*

"Opioid disorders have reached
alarming levels throughout our
nation, and we must work together
to overcome this serious public
health threat"



OVERDOSE AWARENESS AND PREVENTION

"Recovery is not possible if someone dies."

CAFSAC meeting – September 21, 2017

Provided with funding from WI Department of Health Services



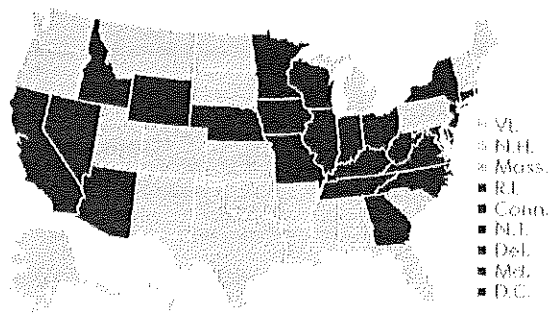
What is the Problem

An overdose can occur when someone misunderstands the directions for a prescription narcotic medication (accidentally takes an extra dose) or deliberately misuses either a prescription opioid or illegal drug such as heroin.

STATE-BY-STATE DRUG OVERDOSE-RELATED DEATHS

Rates of drug overdose fatalities during 2011-2013 compared to rates in 2007-2009.

● Increased rates ● Decreased rates ● No change



DRUG OVERDOSES KILL MORE THAN CARS, GUNS, AND FALLING.



Falling 26,852 death



Guns 31,672 death



Traffic accidents 33,687 death




Drug overdoses 38,329 death*

2015 Governor's Highway Safety Association reports that **DRUGGED** driving accidents surpass drunk driving accidents.

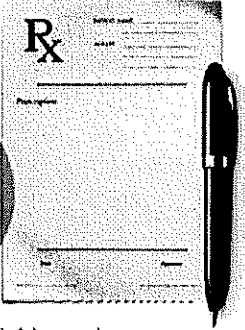
Nearly 17,000 (41%) of those overdose deaths are from Prescription Pain Medications

*30,006 of which were unintentional.
Source: CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER) on Mortality: <http://wonder.cdc.gov/mortsql.html> (2010)



Nearly HALF

of all opioid overdose deaths involve a prescription opioid.







Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.


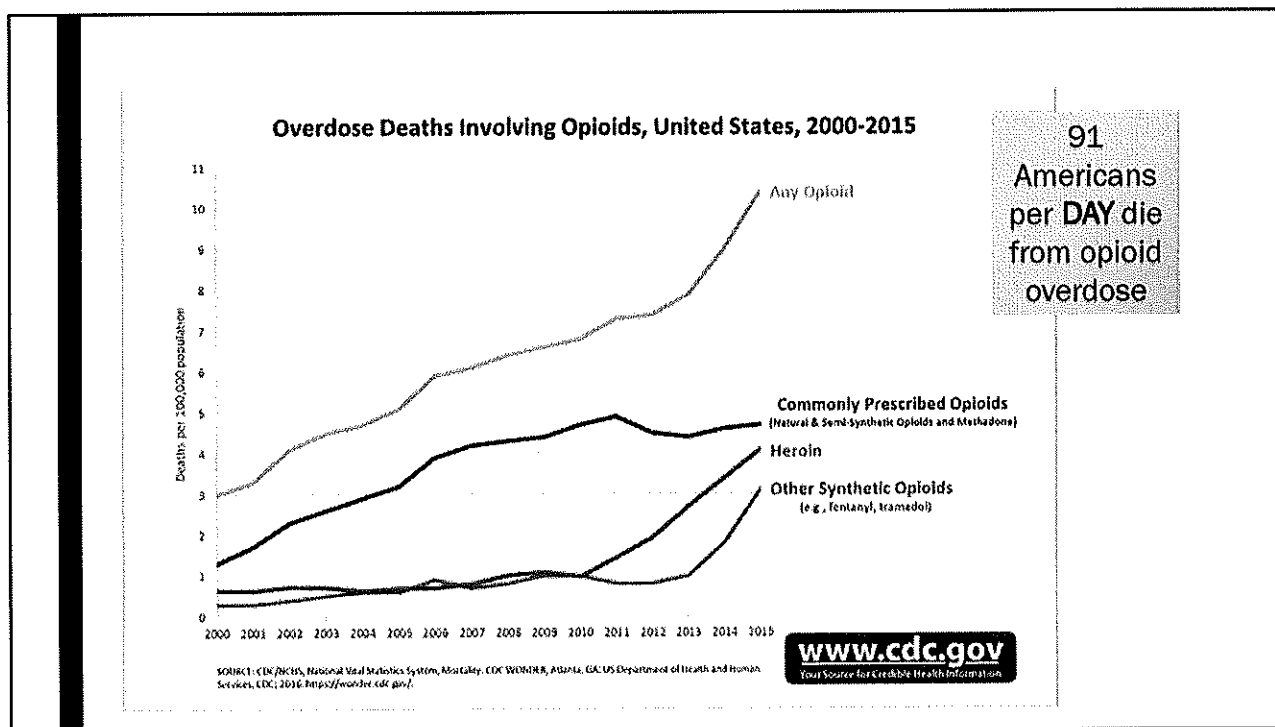
Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and death for users.

People who are addicted to...

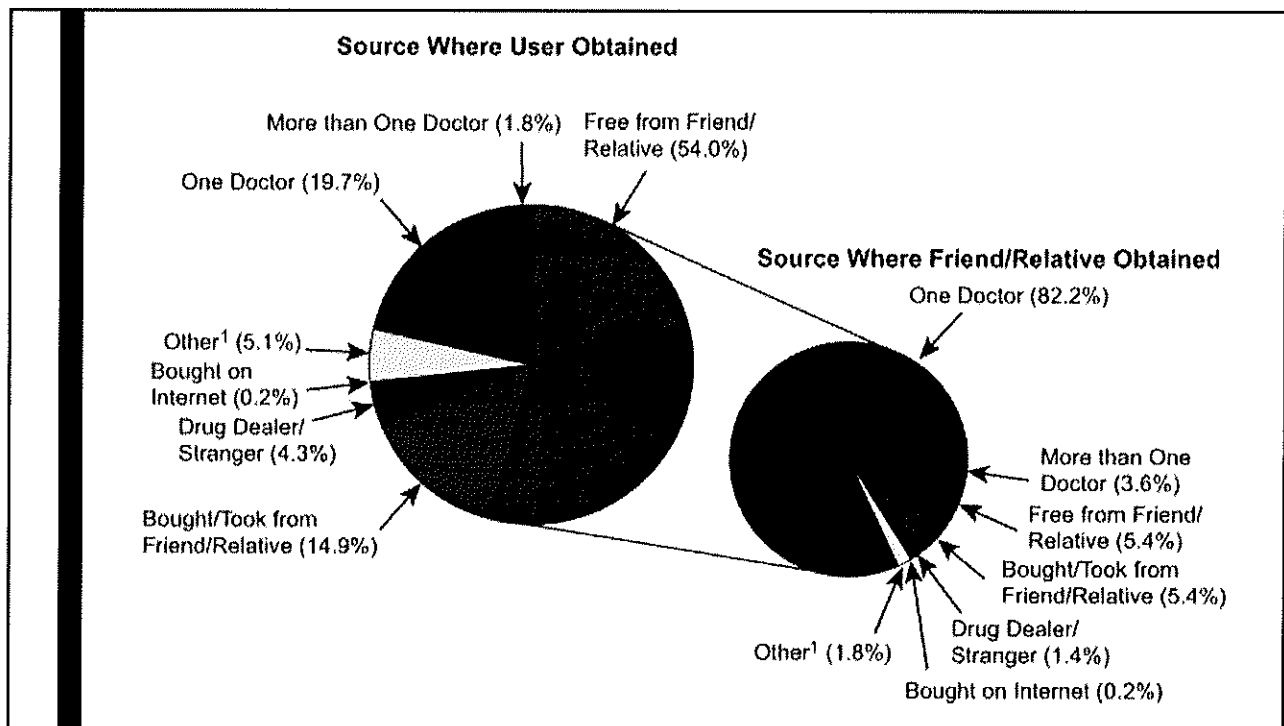
			
ALCOHOL	MARIJUANA	COCAINE	Rx OPIOID PAINKILLERS
OR	OR	OR	OR
2x	3x	15x	40x

...more likely to be addicted to heroin.

SAMHSA – national survey shows

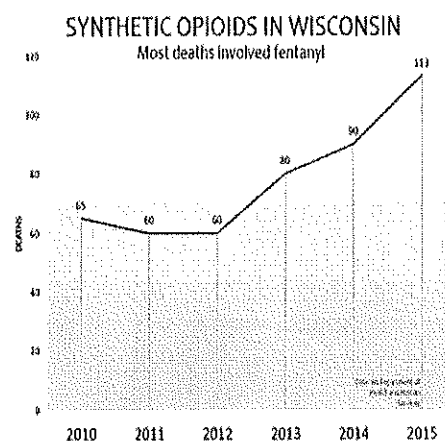
- Over 70 percent of youth who abused pain medication got it from a friend or family member.
- Many heroin users report that their addiction began by using prescription pain medication from their own medicine cabinet or from a medicine cabinet at the home of a friend.
- As the pain medication became expensive or inaccessible, they turned to a cheaper street alternative, heroin.



- Opioid overdose is a growing public health concern in WI.
 - The growing use of legal (*prescription pain killers*) and illicit drugs, such as heroin, puts an increased number of WI residents at risk.
- In WI, during 2014, there were 843 deaths from opioid overdose 392 were from *prescription opioids*.
 - 85% of these deaths were witnessed.

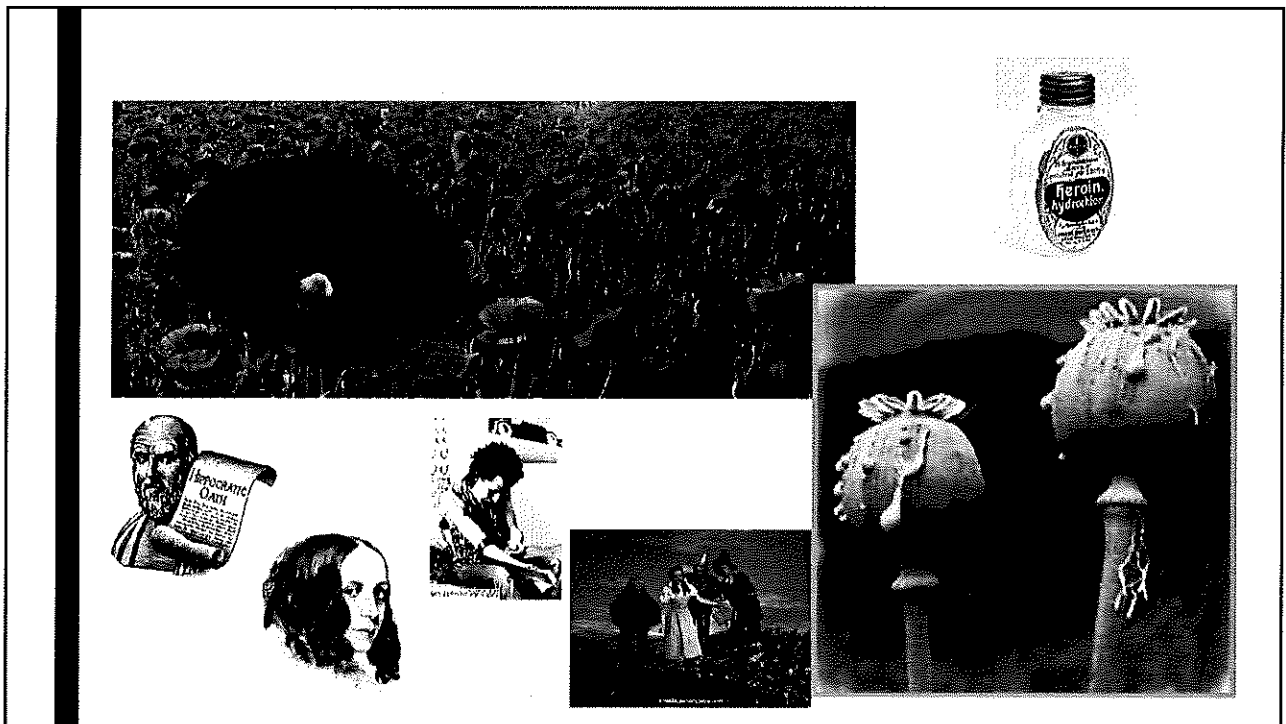
The Crisis – Closer to Home

- In Wisconsin 63% of the deaths from OD were from prescription drug misuse.
- **Between 2013-2015 Waukesha County had 219 Heroin and 540 Prescription Opioid related hospital encounters**
- **In 2016 Waukesha County had 60 drug related deaths.**
- **To date in 2017: 8 overdose deaths, 3 involve heroin, 5 involve opioids (rx & nonrx) and 52 “Naloxone run’s”**
- Not to mention the incalculable cost to families in emotional turmoil



Experts recommend Five KEY Opioid Overdose Prevention strategies:

- 1) Learn how to identify, prevent and manage opioid overdose**
- 2) Call 911**
- 3) Seek training on naloxone (Narcan) administration**
- 4) Understand treatment options for individuals who are misusing or are addicted to opioids**
- 5) Support the use of the Prescription Drug Monitoring Program (PDMP)**

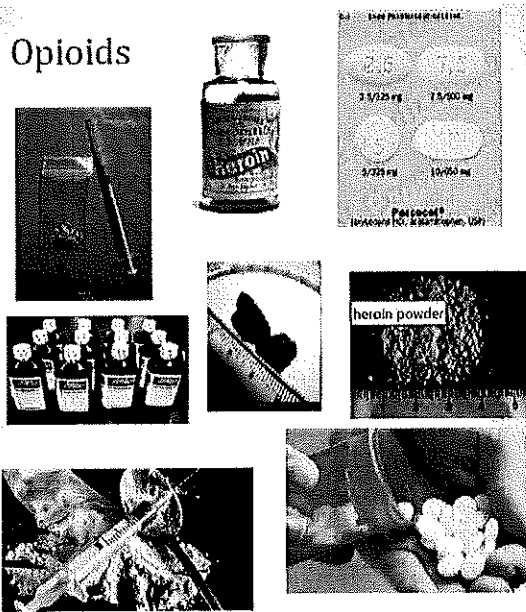


What is an Opiate

Produce a general calming and anti-depressing sensation

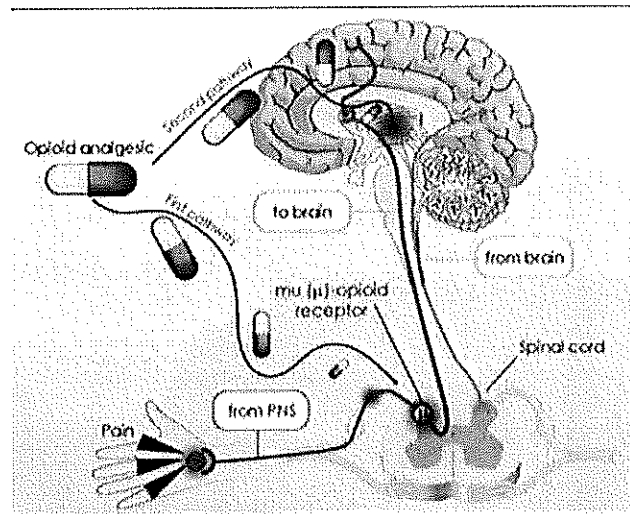
- Heroin
- Morphine (named after the Greek God of Sleep)
- Methadone
- Vicodin
- Hydrocodone
- Oxycodone
- Fentanyl
 - Fentanyl is 100 times stronger than morphine. Carfentanyl is up to 10,000 times stronger.
- Many others

Opioids

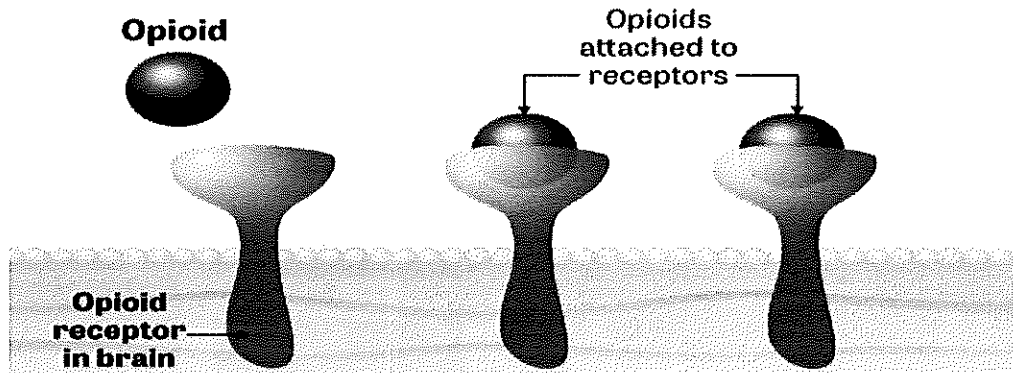


What is an Opiate

- Comes from the Opium poppy plant or can be made synthetically.
- All opioids act the same way:
 - **Opioids attach to specific receptors in the brain, spinal cord, and gut. And act in the same**
- Once attached:
 - **They reduce the sending of pain messages to the brain and reduce the feelings of pain.**
 - **They are depressants**
 - Cause drowsiness
 - Slow Heart rate
 - Slow breathing
 - Slow the gut -constipation



How can an Opiate Overdose occur?



When taking Opioids (even prescription opioid pain medication) people can develop:

■ Intolerance

- Allergic reaction, nausea, vomiting

■ Tolerance

- You need to take more or higher doses of the same medication in order to get the same relief.
- Tolerance begins with the first dose. (but may not become evident until 2-3 weeks)

■ Physical / Psychological Dependence

- You have symptoms of withdrawal when the medication is stopped.

How can an Opiate Overdose occur?

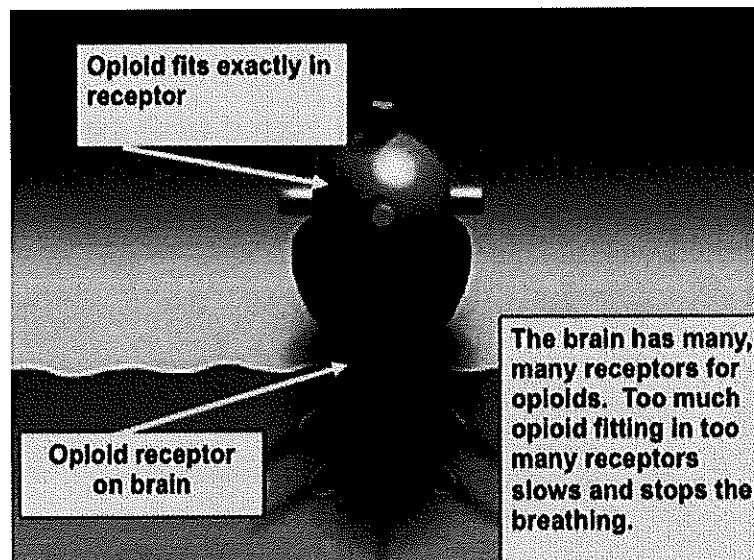
- Any Opiate, taken in **ANY** way
 - *Swallowed*
 - *Injected*
 - *Smoked*
 - *Snorted (sniffed)*
 - *Absorbed through the skin (patches)*
- Can happen instantaneously, within minutes or even hours after opiate is ingested

How can an Opiate Overdose occur?

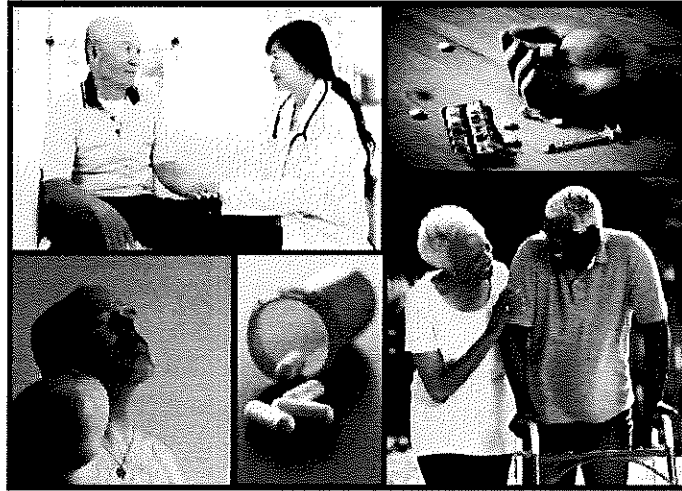
Too much opioid in too many brain receptors will slow or stop the urge to breathe.

The person's breathing can be so slow or stop to the point that they do NOT have enough Oxygen to survive.

This leads to death.



Who is at risk for an overdose



Who is at higher risk of opioid ~~overdose~~ ^{overuse}

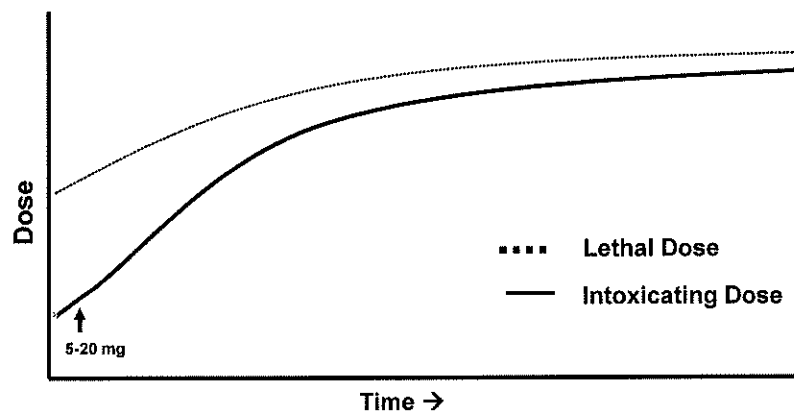
- people with an Opioid Dependence – Tolerance
- people who have had some **time away from the drug**
- people who inject opioids or **switch between modes of administration**
- **people who use prescription opioids** in particular those taking higher doses
- people who **use opioids AND have medical conditions** (HIV, liver or lung disease, dehydration, malnutrition)
- **household members** of people in possession of opioids (including prescription opioids).

OVERDOSE Risk Factors

- **Going above your tolerance**
- **Time not using aka: “clean time”** (incarceration, vacation, detox., no rx. refill)
- **Mixing with other drugs**
 - *Taking with benzodiazepines*
 - Aka: meds that end in “pam”
 - *Used to treat anxiety*
 - *Alcohol*
 - Beer, wine and hard liquor
 - *Antidepressants and sleepers*
- **Laced batches of drug**
 - *You NEVER know what you are buying on the street*
- **Using alone**

Dose, Time, and Tolerance

Hypothetical model of accrual of tolerance to the intoxicating and lethal effects of opioids (adapted from White& Irvine)



22

What is “overmedication ”

- **Shallow breathing**
- Drowsiness/ unusual sleepiness
- **Mental confusion**, slurred speech, intoxicated behavior
- **Snoring type breathing**
- **Lethargy** very hard to awaken
- Nodding out
- **Constricted pupils**

How to identify an “overdose ” situation

- **Unresponsive** even to sternal rub or pain
- **Agonal type breathing** often known as the “death rattle”
- **Extreme Lethargy** can’t wake the person
- Needles present or needle marks on arms or other parts of the body
- **Extremely small bilateral Constricted pupils**
- **Bluish Purple (grey) colored lips, fingers, nailbeds**
- **Slow heartbeat**

How Overdose Occurs

- ▶ Opioids repress the urge to breathe
- ▶ Carbon dioxide levels increase
- ▶ Oxygen levels decrease
- ▶ Process takes time
- ▶ There is time to respond, but no time to waste

1

• Slow breathing

2

• Breathing stops

3

• Lack of oxygen may cause brain damage

4

• Heart stops

5

• Death

Pictorial:

Breathing will be slow or gone



Lips and nails are blue



Person is not moving



Person may be choking



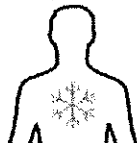
You can hear gurgling sounds or snoring



Can't be woken up



Skin feels cold and clammy



Pupils are tiny



Adapted with permission from The Ontario Harm Reduction Partnership Program

Am I covered?

- Good Samaritan Act (passed 1977)
 - Protects any bystander who in good faith renders aid at the scene of an emergency
- Act 200 (passed in 2013)
 - All certified first responders are authorized to administer naloxone or other antagonists as trained
- HOPE Legislation / Act 194 (passed 2013)
 - Grants "aiders" immunity from certain criminal prosecutions
 - Brings another to the emergency room
 - Summons law enforcement, ambulance or other EMT/health provider
 - Calls "911" for other emergency service

Regardless of "coverage" -only do what YOU are comfortable performing in that situation!

Always remember - secure your safety first - do not put yourself in Harm's way.

Perform Rescue Breathing and CPR

- Check for responsiveness. Shake and shout at the victim, if necessary.
- If you are the lone rescuer, use a cell phone to call for help if one is available.
- If more than one rescuer is available use a cell phone to call for help, retrieve naloxone and an AED.
- Check breathing and pulse for no more than 10 seconds.
- Perform rescue breathing on victims with a pulse and inadequate breathing. Perform CPR on victims without a pulse and inadequate breathing. If you are the lone rescuer, perform rescue breathing and/or CPR for 2 minutes before leaving the victim to get help and supplies (naloxone, AED).



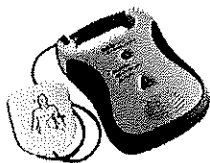
Naloxone: the antidote for overdose



Accidental Ingested Poisonings
may need – Syrup of Ipecac



Allergic Reactions needs –
Epinephrine (Epi-pen)



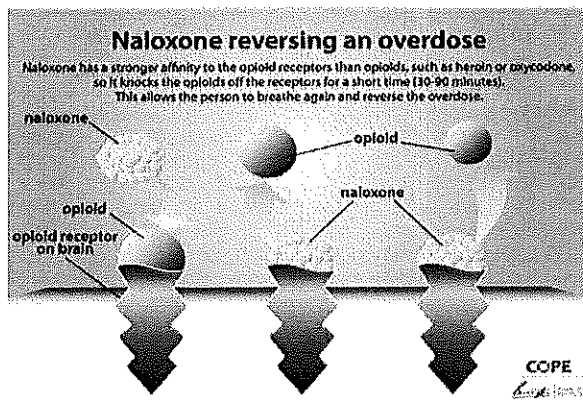
Heart Attack needs –
Automated External
Defibrillator (AED)



Opiate overdose needs
Naloxone

Items to remember

- Naloxone does **NOT** neutralize the opiate drug in the blood stream.

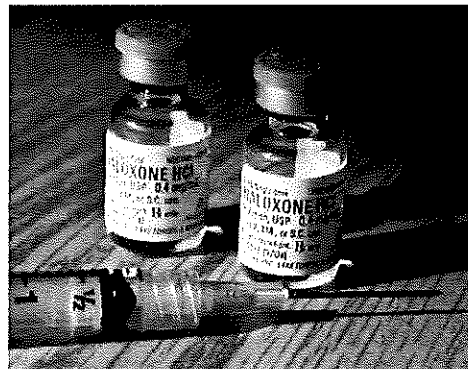


- Naloxone acts a “place holder” it kicks the opioid off the receptor
- It “hits the Pause button”

What is Naloxone (Narcan) and How does it work?

- Naloxone (also known as Narcan®) is a medication called an “opioid antagonist”
- Is used to counter the effects of opioid overdose **ONLY**. For example morphine and heroin overdose.
 - Specifically, naloxone is used in opioid overdoses to counteract life-threatening depression of the central nervous system and respiratory system, allowing an overdose victim to breathe normally.
- Naloxone only works if a person has opioids in their system; the medication has no effect if opioids are absent.
- Naloxone has no potential for abuse is NOT a scheduled/controlled substance.
- Naloxone may be injected in the muscle, sprayed into the nose
- Naloxone can be administered by minimally trained laypeople.,
 - Makes it ideal for treating overdose in people who have been prescribed opioid pain medication and in people who use heroin and other opioids.

Methods of Administration for Naloxone





Thank You

Questions and Next Steps

Demonstration

- Lee Clay, RN, BSN, Health Education Specialist
- WI-PDO Grant
- Waukesha County Dept. HHS / Preventive Health Strategies

**END OF EDUCATION
PROGRAM – NALOXONE
ADMINISTRATION IS NEXT**

Thank you

Do's and Do Not's of Naloxone (Narcan)

- Naloxone should be kept in an easily accessible place (NOT LOCKED up)
- Has not potential for abuse
- Naloxone should be keep at room Temperature
 - *DO NOT keep it in your car glove box*
 - *Kept away from direct sunlight*
 - *Keeps well in your purse or jacket pocket. (Eye glasses case)*
- Should be clear in color
- Has not effects on it's own
- Can be used past it's expiration date: will lose potency, replace before tossing

Steps to take if an Overdose happens



Based upon:

SAMHSA Opioid Overdose Prevention Toolkit

Aids Resource Center of WI

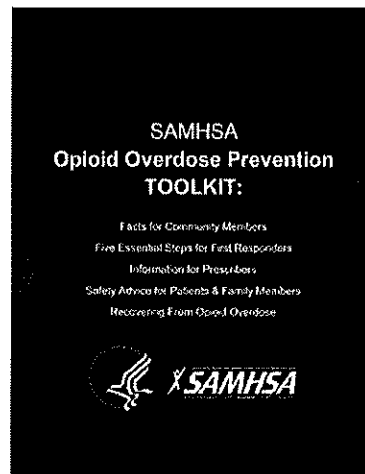
American Heart Association

New York State Trainer's Guide

International Overdose Awareness Day

Harm Reduction Coalition

US Department of Health and Human Services: National Institute on Drug Abuse



HOW OVERDOSE OCCURS

- Slow Breathing
- Breathing Stops
- Lack of oxygen may cause brain damage
- Heart Stops
- Death

- Scene: traffic, fire,
- Needles
- Protective equipment: gloves / barrier mask



Step One: Check for Signs of Responsiveness / Overdose

- Shake
- Shout
- Call out
- Knuckles to breastbone



Step Two: Call for Help

Dial 9 – 1 – 1

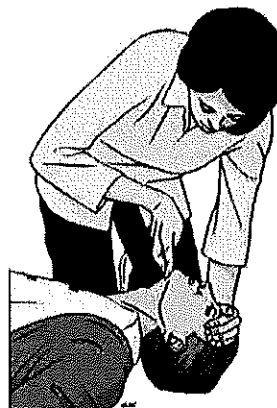
- Yell for help
- Assign specific someone to call 911
- Send specific someone to get Narcan Kit



Report someone is not breathing

Step Three: Check for Breathing

- Look
- Listen
- Feel

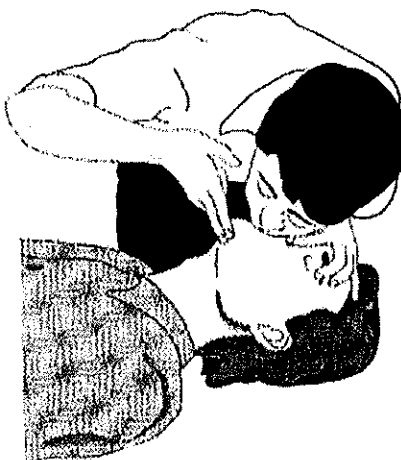


Support the person Airway -
Administer Mouth to Mouth
(if you are comfortable with this)

Check for Breathing Perform 2 Rescue breaths



Perform a pulse check



Gentle reminder: Check the person's mouth

- Food
- Gum
- If airway is open Great
- If not – reposition and try again
- If not – Look for object or do the Heimlich maneuver
- Perform mouth sweep

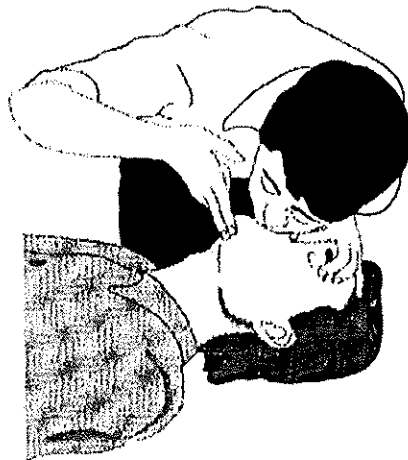
Perform Rescue Breathing – 2 minutes

Rate: 1 breath every 5-7 seconds.

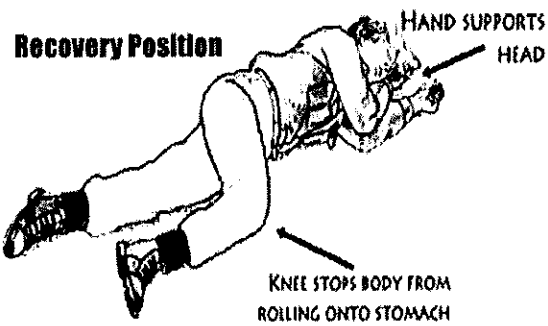
1 breath for you
1 breath for victim



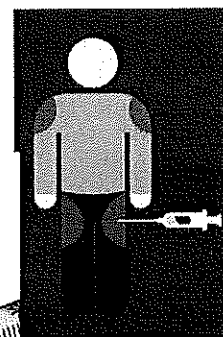
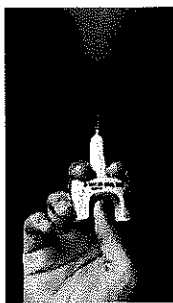
For every minute with O₂ chance of revival decrease by 10%



If you need to get the Naloxone: Place person in Recovery Position



Step Four: Administer Naloxone



Narcan is credited with reversing more than 10,000 overdoses from 1996 to 2010, according to the Centers for Disease Control.

Evaluate the victim

- Continuously check the person
- Are they responding in anyway?
 - Yes - *place in recovery position, continue to monitor and stay with*
 - No - *continue breathing checking for a pulse every 2 minutes if no pulse that start CPR chest compressions.*
- Repeat administration of Naloxone
- Continue until help arrives or you just no longer can continue

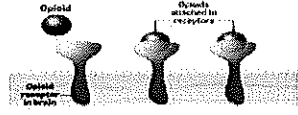
If needed: continue Rescue Breathing



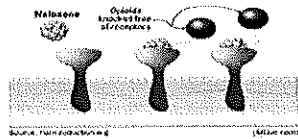
and chest compressions if needed

OPIOID OVERDOSE

The brain has many receptors for opioids. An overdose occurs when too much of an opioid binds to the brain's receptors, stopping the person's breathing.



Naloxone has a stronger affinity to the opioid receptors than opioid drugs, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverse the overdose.



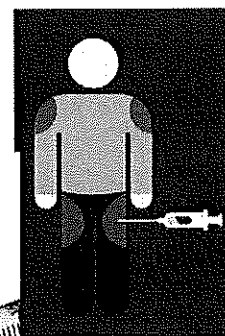
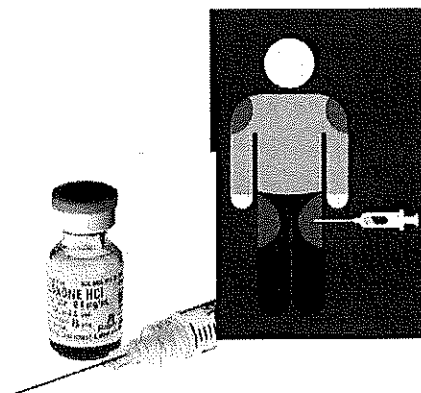
Depending on amount of opiate in the body, a second dose of Narcan may be needed.

If no response in 2 minutes administer second dose.

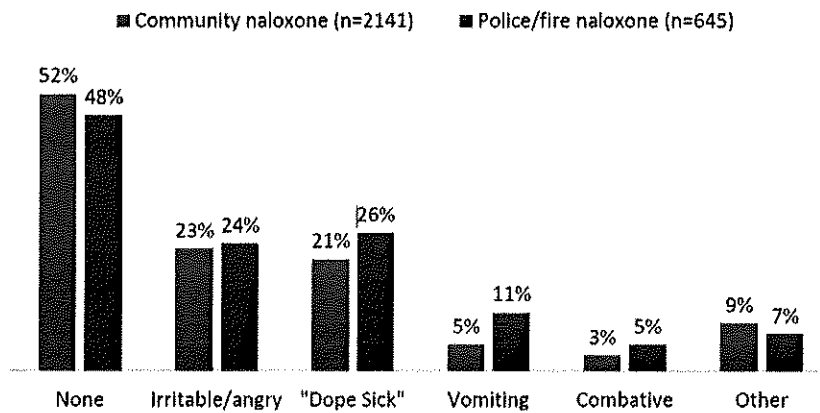
Narcan remains in the body's system for about 20 -30 minutes.

The **overdose can come back** and you must get help for the person.

Administer a second dose if needed:



Withdrawal symptoms after naloxone rescue 2010-2014



Program data – 2008-2014

Other = confused, disoriented, headache, aches and chills, cold, crying, diarrhea, happy, miserable



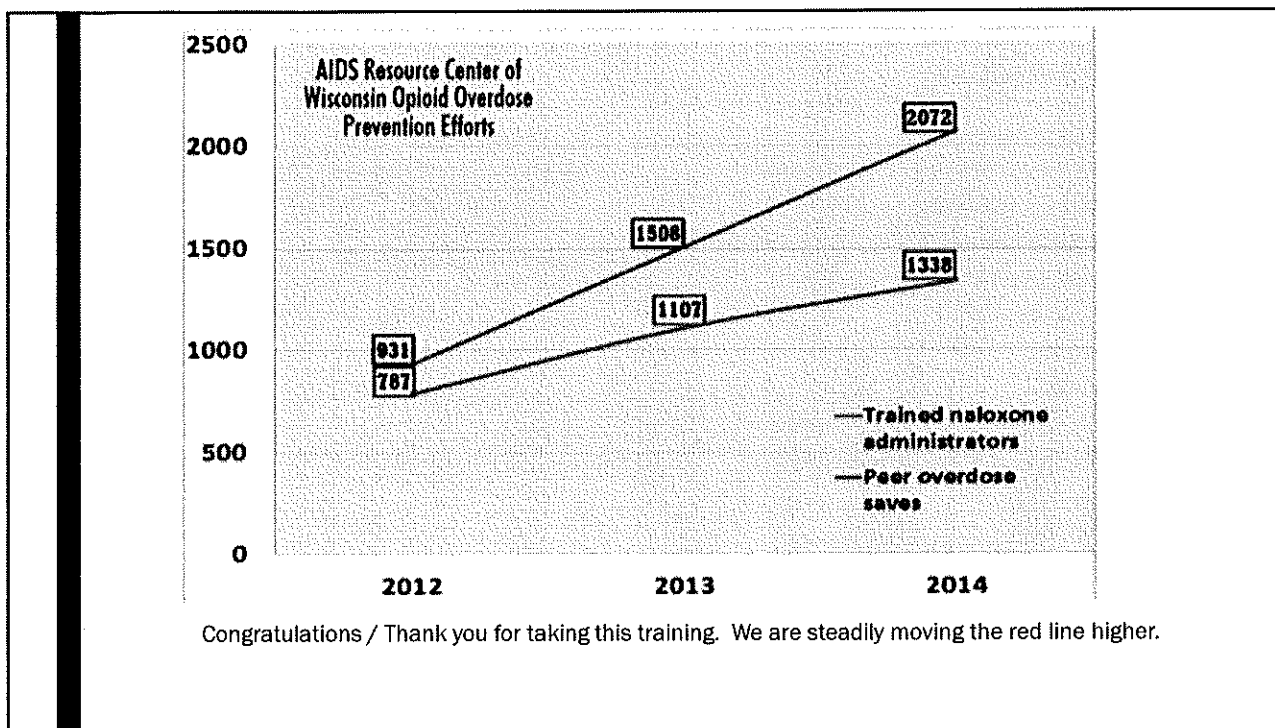
Step Five: Monitor response



If at all possible:

- Stay with the person until help arrives.
- Inform the person that they stopped breathing and needed Naloxone (Narcan).
- Be prepared that person may require another dose of Naloxone / Narcan.

When help arrives: give a "hand-off" report



SAMHSA
U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Thank You

Questions and Next Steps

- Lee Clay, RN, BSN, Health Education Specialist
- WI-PDO Grant
- Waukesha County Dept. HHS / Preventive Health Strategies

References

■ Web based resources

SAMHSA Opioid Overdose Prevention Toolkit
 American Heart Association
 New York State Trainer's Guide
 International Overdose Awareness Day
 Harm Reduction Coalition
 Naloxone.org
 Turn the Tide
 Centers for Disease Control and Prevention
 Health Department of Baltimore Maryland
 Naloxoneinfo.org
 Hope Foundation
 Wisconsin Department of Health Services
 OpiOneida-nsn.gov

■ Print materials

US Department of Health and Human Services:
 National Institute on Drug Abuse
 Aids Resource Center of WI
 Supporting Community-Based Substance Abuse
 Prevention
 Washington county Heroin Task Force

Heroin and fentanyl look the same

"Naloxone easily knocks morphine off of the receptor, but does that less so to fentanyl."



Equivalent Lethal Doses



The chemicals in both bind to the mu opioid receptor in the brain.

But fentanyl gets there faster than morphine —

the almost-instantaneous byproduct when the body breaks down heroin — because it more easily passes through the fat that is plentiful in the brain. Fentanyl also hugs the receptor so tightly that a tiny amount is enough to start the molecular chain of events that instigates opioids' effects on the body.

This tighter affinity for the opioid receptor also means more naloxone — or Narcan — may be needed to combat a fentanyl overdose than a heroin overdose.

"In a fentanyl overdose, you may not be able to totally revive the person with the Narcan dose you have," said Scott Lukas, director of the Behavioral Psychopharmacology Research Laboratory at McLean Hospital in Belmont, Mass.

Items to remember





Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least 1 other drug.

Heroin is highly addictive, often drug with a high risk of overdose and death for users.

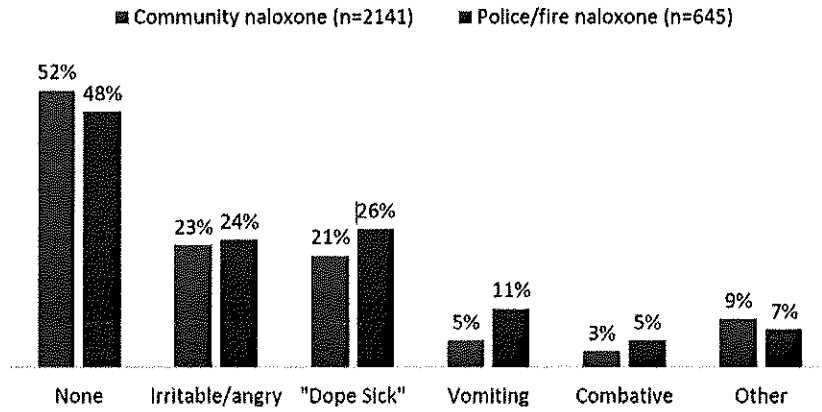
People who are addicted to...

 COCAINE	 MARIJUANA	 ALCOHOL	 BENZODIAZEPINES
2x	3x	15x	40x

...more likely to be addicted to heroin.

EDC *Vital*signs

Withdrawal symptoms after naloxone rescue 2010-2014



Program data – 2008-2014

Other = confused, disoriented, headache, aches and chills, cold, crying, diarrhea, happy, miserable



Place person in Recovery Position

Recovery Position

