Overdose Response Training

In collaboration with the Massachusetts Department of Public Health, Bureau of Substance Abuse Services and Office of HIV/AIDS
The Overdose Problem
National & regional drug threat

Source: National Drug Intelligence Center’s National Drug Threat Survey 2009
Prescription opioid sales, deaths and treatment: 1999-2010

By 2010, drug overdose deaths outnumbered motor vehicle traffic deaths in 31 states

In 2012, 13 Massachusetts residents died each week from drug overdoses
DPH Overdose Education & Naloxone Distribution Program Sites

- AIDS Action Committee
- AIDS Project Worcester
- AIDS Support Group of Cape Cod
- Brockton Area Multi-Services Inc. (BAMSI)
- Boston Public Health Commission
- Greater Lawrence Family Health Center
- Holyoke Health Center
- Learn to Cope

- Lowell House/ Lowell Community Health Center
- Manet Community Health Center
- MAPS/ Health Innovations
- North Suffolk Mental Health
- Seven Hills Behavioral Health
- Tapestry Health

Site
Coming Soon
Learn to Cope
Naloxone Pilot Enrollments, Refills & Rescues: 2006-2014
(up through June 2014)

- Enrollments
  > 27,300 individuals
  > 28 per day in 2014

- Overdose Rescues
  > 3,131 reported
  > 2.8 per day in 2014
Governor declares an emergency on opiate abuse

March 27, 2014

The Governor’s Public Health Emergency declaration provided emergency powers to DPH Commissioner Cheryl Bartlett, RN. At the Governor’s direction, the Public Health Council passed a regulation that:

“Universally permits first responders to carry and administer Naloxone (Narcan), a safe and effective opioid antagonist that, when timely administered, can reverse an overdose and save a life.”
How Opioids Work and Overdose Risk Factors
• There were ads in papers and journals for Bayer’s many products, including aspirin and heroin.
What are opioids/opiates?

- Medications that relieve pain
- Attach to the opioid receptors in the brain and reduce the intensity of pain signals reaching the brain.
The term opiate is often used as a synonym for *opioid*, however the term *opiate* refers to just those opioids derived from the poppy plant either natural or semi-synthetic.

**All categories have overdose risk**
How do opioids affect breathing?

Opioid

Opioid Receptors

OVERDOSE
How Overdose Occurs

- Slow Breathing
- Breathing Stops
- Lack of oxygen may cause brain damage
- Heart Stops
- Death
What is Narcan® (naloxone)?

- Narcan knocks the opioid off the opiate receptor, blocking opiate receptors from the opiate
- *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
  - Only contraindication is known sensitivity, which is very rare
- *Too much* Narcan can cause withdrawal symptoms such as:
  - Nausea/vomiting
  - Diarrhea
  - Chills
  - Muscle discomfort
  - Disorientation
  - Combativeness
How does Narcan affect overdose?

Restores Breathing
What is an Opioid OD?

The brain has many, many receptors for opioids. An overdose occurs when too much of any opioid, like heroin or Oxycontin, fits in too many receptors slowing and then stopping the breathing.
Naloxone Reversing Overdose

Narcan has a stronger affinity to the opioid receptors than opioids like heroin or Percocet, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverses the overdose.
Common Risks for Opioid Overdose

**Opioid dose and purity**

**Mixing substances**
Alcohol, stimulants, marijuana, and prescription medications

**Polypharmacy**
Prescribed or non-prescribed

**Social Isolation**
Using alone

**Addiction history**

**Chronic Medical Illness**
Lung, liver, and kidney compromise

**Overdose history**

**Abstinence**
- Release from incarceration
- Completion of detoxification
- Relapse after abstinence
DEA Official Blames Fentanyl-Heroin Mixture from Mexico for Recent Fatal Overdoses

The fentanyl-laced dope plaguing the northeastern United States is being made south of the border, according to officials.
Mixing Opioids with Benzos

- Combining opioids with benzodiazepines or alcohol leads to a worse outcome
- Benzos are psychoactive drugs prescribed for sedation, anxiety, sleep and seizures
- The most commonly used benzos are: Klonopin, Valium, Ativan, Librium, and Xanax
Medications for Opioid Overdose and Treatment

• Narcan® = naloxone
  • Reverses opioid overdose
  • Short and fast-acting opioid blocker

• Vivitrol® = naltrexone
  • Treatment for opioid and alcohol addiction
  • Long-acting opioid blocker

• Suboxone® = buprenorphine + naloxone
  • Treatment for opioid addiction
  • The naloxone is added to discourage injecting or sniffing

• Subutex® = buprenorphine only
  • Treatment for opioid addiction in pregnant women

• Methadone aka dolophine and methadose
  • Treatment for opioid addiction or pain

No street value because they cause withdrawal symptoms

Street value because they can relieve withdrawal symptoms
Revolving door???

- As it is for tobacco and weight loss, it takes multiple attempts before achieving success
  - By definition, addiction is a chronic condition where people make risky choices despite negative consequences
- With time, treatment works and people get better
Administering Naloxone
Just high/overmedicated vs. overdose

**Just high/overmedicated**
- Small pupils
- Drowsy, but arousable
  - Responds to sternal rub
- Speech is slurred
- Drowsy, but breathing
  - 8 or more times per minute

>> Stimulate and observe

**Overdose**
- Small pupils
- Not arousable
  - No response to sternal rub
- Not speaking
- Breathing slow or stopped
  - < 8 times per minute
  - May hear choking sounds or a gurgling/snoring noise
  - Blue/gray lips and fingertips

>> Rescue breathe + give naloxone
Recognize Overdose

• If a person is not breathing or is struggling to breathe: call out name and rub knuckles of a closed fist over the sternum (Sternum Rub)

• Signs of drug use?
  – Pills, drugs, needles, cookers

• Look for overdose
  – Slow or absent breathing
    • Gasping for breath or a snoring sound
  – Pinpoint pupils
  – Blue/gray lips and nails

• Ensure EMS is activated
How to Respond to an Overdose

1. **CALL 911**
   - Call 911

2. **RESCUE BREATHING**
   - Perform Rescue Breathing to provide Oxygen

3. **Administer Naloxone if available**
How to respond to an overdose

• Place in the recovery position

• If possible stay with the person until help arrives
Intranasal Naloxone

- The intranasal naloxone needs to be dispensed with the mucosal atomization device
- If there is nasal trauma or bleeding, do not administer naloxone

Benefits of Intranasal Naloxone

- Nose is an easy access point
- Painless
- Eliminates risk of contaminated needle sticks and needle dispensing
Give Naloxone: Intranasal

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
4. Twist the naloxone on the other side of the syringe
Give Naloxone: Intranasal

- Push 1ml (1mg) of naloxone into each nostril
- Administer the entire contents of the 2ml syringe with approximately one half (1ml) administered in each nostril
- Administering one half in each nostril maximizes absorption
How does a person respond to Naloxone?

**Scenarios:**
1. Gradually improves breathing and becomes responsive within 3 – 5 minutes
2. Immediately improves breathing, responsive, and is in withdrawal
3. Starts breathing within 3 – 5 minutes but remains unresponsive
4. Does not respond to first dose and naloxone must be repeated in 3 – 5 minutes (keep rescue breathing)
Reactions to Naloxone

<table>
<thead>
<tr>
<th>Post-Naloxone Withdrawal Symptoms in First Responder Rescues: 2010-2013</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>None</td>
<td>47 (40%)</td>
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<tr>
<td>“Dope Sick”</td>
<td>27 (23%)</td>
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<tr>
<td>Irritable or Angry</td>
<td>33 (28%)</td>
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<tr>
<td>Physically Combative</td>
<td>6 (5%)</td>
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<tr>
<td>Vomiting</td>
<td>16 (14%)</td>
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<tr>
<td>Other</td>
<td>14 (12%)</td>
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</tbody>
</table>
After Administering Naloxone

• Continue rescue breathing with 1 breath every 5 seconds until emergency responders arrive.

• After 3-5 minutes, if the patient is still unresponsive with slow or no breathing, administer another dose of naloxone.
If victim is breathing, but unresponsive place in **recovery position**
Questions and Answers

• Will Naloxone work on an alcohol overdose?
  – No. Naloxone only works on opioids

• What if it is a crack/cocaine or speed/methamphetamine overdose?
  – No. Naloxone only works on opioids

• What is the risk period for an overdose to reoccur after giving Naloxone?
  – Depends on how long acting the opioid is and how much they took

• If the person isn’t overdosing and I give them Naloxone will it hurt them?
  – No. If in doubt give naloxone.
Reminder

• Naloxone is not a controlled substance but is a regulated substance (a prescription medication) that requires a licensed prescriber.

• Prescriptions for intra-nasal naloxone can be filled at many local pharmacies. Several pharmacies have standing orders for dispensing naloxone as well.
## Where to Get Naloxone in Massachusetts:

<table>
<thead>
<tr>
<th>Location</th>
<th>Address/Contact Information</th>
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<tbody>
<tr>
<td><strong>Boston</strong></td>
<td>Boston Public Health Commission, AHOPE 774 Albany Street, 617-534-3967 (Mobile Unit—call for locations and schedule 800-383-2437)</td>
</tr>
<tr>
<td><strong>Brockton</strong></td>
<td>Brockton Area Multi-Services, Inc. The COPE Center 81 Pleasant Street, 508-583-3405</td>
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<tr>
<td><strong>Cambridge</strong></td>
<td>AIDS Action Committee 359 Green Street, 617-599-0246</td>
</tr>
<tr>
<td><strong>Fall River</strong></td>
<td>Seven Hills Behavioral Health 310 South Main Street, 508-235-1012</td>
</tr>
<tr>
<td><strong>Greenfield</strong></td>
<td>Tapestry Health 80 Sanderson St., 413-773-8888</td>
</tr>
<tr>
<td><strong>Holyoke</strong></td>
<td>Holyoke Health Center 230 Maple Street, lower level 413-420-2276</td>
</tr>
<tr>
<td></td>
<td>Tapestry Health 15A Main Street, 413-315-3732</td>
</tr>
<tr>
<td><strong>Hyannis</strong></td>
<td>AIDS Support Group of Cape Cod 428 South Street, 866-990-2437 or 508-778-1954</td>
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<tr>
<td><strong>Lawrence</strong></td>
<td>Greater Lawrence Family Health Center 100 Water Street, 978-685-7663 X 8504</td>
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<tr>
<td><strong>Lowell</strong></td>
<td>Lowell Community Health Center 161 Jackson St., 978-746-6767</td>
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<tr>
<td></td>
<td>Lowell House, Inc. 555 Merrimack Street, 978-459-8656 Ext. 32</td>
</tr>
<tr>
<td><strong>Lynn</strong></td>
<td>Health Innovations, Inc Healthy Streets Outreach Program 100 Willow Street, 2nd floor, 781-592-0243</td>
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<tr>
<td><strong>New Bedford</strong></td>
<td>Seven Hills Behavioral Health 1173 Acushnet Avenue, 508-996-0546</td>
</tr>
<tr>
<td><strong>Northampton</strong></td>
<td>Tapestry Health 16 Center Street, Suite 423, 413-586-0310</td>
</tr>
<tr>
<td><strong>Provincetown</strong></td>
<td>AIDS Support Group of Cape Cod 336 Commercial Street, Unit #10, 866-668-6448, 508-487-8311</td>
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<tr>
<td><strong>Quincy</strong></td>
<td>Manet Community Health Center 1193 Sea St, 857-403-0803</td>
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<tr>
<td><strong>Revere</strong></td>
<td>North Suffolk Mental Health 265 Beach Street, Revere Tuesdays 5-8pm, 617-912-7554</td>
</tr>
<tr>
<td><strong>Springfield</strong></td>
<td>Tapestry Health, La Voz 130 Maple Street, lower level, 413-363-9472</td>
</tr>
<tr>
<td><strong>Worcester</strong></td>
<td>AIDS Project Worcester 85 Green Street, 508-755-3773 X 29</td>
</tr>
<tr>
<td><strong>Learn to Cope</strong></td>
<td>Naloxone is available at support groups for parents and family members dealing with a loved one suffering from addiction. Please go to <a href="http://www.learn2cope.org">www.learn2cope.org</a> for meeting locations and times.</td>
</tr>
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</table>
Good Samaritan & Naloxone Law

Passed August 2012
Importance of calling 911

Sometimes people are afraid to call 911. However, an overdose is a **medical emergency**. Remember:

- Narcan *only* works on opioids
  - not benzos, cocaine, alcohol or other drugs
- Person overdosing may have other medical issues
- Person can overdose *again* once narcan wears off
Acts of 2012, Chapter 192, Sections 11 & 32

Whereas, The deferred operation of this act would tend to defeat its purpose, which is to strengthen forthwith the laws relative to habitual offenders, update sentencing laws and to provide additional law enforcement tools, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same as follows:
(d) Naloxone or other opioid antagonist may lawfully be prescribed and dispensed to a person at risk of experiencing an opiate-related overdose or a family member, friend or other person in a position to assist a person at risk of experiencing an opiate-related overdose. (emphasis added)
(a) A person who, in good faith, seeks medical assistance for someone experiencing a drug-related overdose shall not be charged or prosecuted for possession of a controlled substance under sections 34 or 35 if the evidence for the charge of possession of a controlled substance was gained as a result of the seeking of medical assistance.

(b) A person who experiences a drug-related overdose and is in need of medical assistance and, in good faith, seeks such medical assistance, or is the subject of such a good faith request for medical assistance, shall not be charged or prosecuted for possession of a controlled substance under said sections 34 or 35 if the evidence for the charge of possession of a controlled substance was gained as a result of the overdose and the need for medical assistance.
(c) The act of seeking medical assistance for someone who is experiencing a drug-related overdose may be used as a mitigating factor in a criminal prosecution under the Controlled Substance Act, 1970 P.L. 91-513, 21 U.S.C. section 801, et seq.

(d) Nothing contained in this section shall prevent anyone from being charged with trafficking, distribution or possession of a controlled substance with intent to distribute.

(e) A person acting in good faith may receive a naloxone prescription, possess naloxone and administer naloxone to an individual appearing to experience an opiate-related overdose.
Thank You

Any questions?