Santa Barbara County
Public Safety First Aid Provider
Optional Skills Agency

Naloxone Administration Training
Video of Narcan Use by Police in the Field
Course Objectives

- **Recognize** the signs and symptoms of a potential opioid overdose
- **Identify** appropriate health care interventions for possible overdose situations
- **Identify** the indications and contraindications of administering naloxone (Narcan)
- **Demonstrate** competency in preparing and administering naloxone via intranasal
- **Describe** the on-going patient management after the administration of naloxone
In 2016 there were 32,445 deaths involving prescription opioids, equivalent to about 89 deaths per day. This was an increase from approximately 22,598 in 2015.
SW Ohio
- Population of apx 61,000 in city, 138,000 total in metropolitan area
- Public safety responded to at least 130 drug overdoses in January 2017 and EMS administered 250 doses of nasal naloxone
- 18 suspected drug overdose deaths in January 2017
- Majority of drug deaths involved multiple drugs including synthetic fentanyl
# Central Coast Opioid Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>CA</th>
<th>SBC</th>
<th>Ventura</th>
<th>SLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opioid overdose deaths per 100K residents</td>
<td>4.9</td>
<td>6.9</td>
<td>4.7</td>
<td>6.4</td>
</tr>
<tr>
<td>Opioid overdose ED visits per 100K residents</td>
<td>NA</td>
<td>14.4</td>
<td>9.9</td>
<td>15.1</td>
</tr>
<tr>
<td>Opioid inpatient hospitalizations per 100K residents</td>
<td>NA</td>
<td>8.2</td>
<td>12.3</td>
<td>8.8</td>
</tr>
<tr>
<td>Opioid prescriptions per 1K residents</td>
<td>562.3</td>
<td>595</td>
<td>608.2</td>
<td>649.9</td>
</tr>
</tbody>
</table>

California Opioid Overdose Surveillance Dashboard: [https://pdop.shinyapps.io/ODdash_v1/](https://pdop.shinyapps.io/ODdash_v1/)
Prescriptions: Santa Barbara County vs CA
Crude Rate: Opioid Prescriptions (excl bup).

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>SBC</td>
<td>701.2</td>
<td>645.62</td>
<td>663.56</td>
<td>629.36</td>
<td>633.36</td>
<td>638.26</td>
<td>595</td>
</tr>
<tr>
<td>CA</td>
<td>614.02</td>
<td>599.85</td>
<td>613.82</td>
<td>596.09</td>
<td>609.63</td>
<td>619.19</td>
<td>562.3</td>
</tr>
</tbody>
</table>

Source: California Department of Justice - Controlled Substance Utilization Review and...
Santa Barbara County 2017 Totals

- EMS Response with Narcan Administration: (2)  
  *(Source: ImageTrend EPCR Reports, Santa Barbara County EMS Agency)*

- Coroner death report with toxicology indicating opioid found: (43) *(Source: Santa Barbara County Coroner’s Office)*

- 2015: 193 Narcan administrations & 53 Opioid related deaths
- 2016: 255 Narcan administrations & 47 Opioid related deaths
Narcan can be administered for several reasons:
- First responder on scene determines the patient not breathing and decides to administer
  - Recreational narcotics use – IVDU, snorting, ingestion
  - Accidental drug overdose due to confusion of being on several medications

<table>
<thead>
<tr>
<th>Year</th>
<th>Total 911–Transported Patients</th>
<th>Narcan Administered 911 Calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>26269</td>
<td>193</td>
</tr>
<tr>
<td>2016</td>
<td>26497</td>
<td>255</td>
</tr>
<tr>
<td>2017</td>
<td>26664</td>
<td>243</td>
</tr>
</tbody>
</table>
Opioids

- Act on the central nervous system as a depressant to:
  - Decrease the perception of pain
- May be prescribed for acute, debilitating, or chronic pain
- May be abused to induce euphoria or a “high”
- May be injected, taken orally or intranasally
# Types of Opioids

<table>
<thead>
<tr>
<th>Generic</th>
<th>Brand</th>
<th>Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin (illegal)</td>
<td>Brown sugar, China White, Dope, H, Horse, Junk, Skag, Skunk, Smack, White Horse</td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td>Colrex, Tylenol with Codeine #3/4, Phenflu CDX, Maxiflu CD, Rolatuss</td>
<td>Captain Cody, Cody, Lean, Schoolboy, Sizzurp, Purple Drank</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Actiq®, Duragesic®, Sublimaze®</td>
<td>Apache, China Girl, China White, Dance Fever, Friend, Goodfella, Jackpot, Murder 8, Tango and Cash, TNT</td>
</tr>
<tr>
<td>Hydrocodone or dihydrocodeinone</td>
<td>Vicodin®, Lortab®, Lorcet®</td>
<td>Vike, Watson–387</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>Dilaudid®</td>
<td>D, Dillies, Footballs, Juice, Smack</td>
</tr>
<tr>
<td>Meperidine</td>
<td>Demerol®</td>
<td>Demmies, Pain Killer</td>
</tr>
<tr>
<td>Methadone</td>
<td>Duramorph®, Roxanol®</td>
<td>M, Miss Emma, Monkey, White Stuff</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>OxyContin®, Percodan®, Percocet®</td>
<td>O.C., Oxycet, Oxycotton, Oxy, Hillbilly Heroin, Percs</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>Opana®</td>
<td>Biscuits, Blue Heaven, Blues, Mrs. O, O Bomb, Octagons, Stop Signs</td>
</tr>
</tbody>
</table>
People at higher risk of opioid overdose

- Individuals with opioid dependency, especially following detoxification, release from incarceration, cessation of treatment
- Intravenous drug users
- Users of prescription opioids, especially higher doses
- Users who combine opioids with other sedating substances (benzodiazepines)
- Users with medical problems (HIV, liver/lung disease, depression)
- Household members of users
Opioid Overdose Triad

- Pinpoint Pupils
- Unconsciousness
- Respiratory Depression
# Recognizing an Opioid Overdose

<table>
<thead>
<tr>
<th>REALLY HIGH</th>
<th>OVERDOSE</th>
<th>CARDIAC ARREST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscles become relaxed</td>
<td>Deep snoring or gurgling (death rattle)</td>
<td>No muscle control</td>
</tr>
<tr>
<td>Speech is slowed/slurred</td>
<td>Minimal or no verbal response</td>
<td>No verbal response</td>
</tr>
<tr>
<td>Sleepy looking</td>
<td>Pale, clammy skin</td>
<td>Pale, may be cyanotic</td>
</tr>
<tr>
<td>Nodding</td>
<td><strong>Heavy</strong> nod</td>
<td>Apnea</td>
</tr>
<tr>
<td>Respond to stimulation: yelling, sternal rub, pinching,…</td>
<td><strong>No response to stimulation</strong></td>
<td><strong>No response to stimulation</strong></td>
</tr>
<tr>
<td>Breathing rate 12/min or more, pulse present</td>
<td>Breathing rate <strong>less than 12/min</strong>, slow heart beat/pulse</td>
<td>No Breathing No Pulse</td>
</tr>
</tbody>
</table>
Description:
Intranasal Opioid Antagonist

Pharmacology:
Competitive narcotic antagonist, which reverses all effects of opioids ONLY (morphine, fentanyl, etc.) such as respiratory depression and central and peripheral nervous system effects.
Naloxone

**Indications:**
To reverse respiratory depression and central nervous system depression induced by opioids.

**Onset:**
Within 1–3 minutes.

**Duration:**
Approximately 30–60 minutes. (Then what happens?)
Naloxone

Contraindications:
- Nasal trauma
- Nasal obstruction
- Seizure activity
- Cardiac arrest

Adverse Reactions (due to rapid opioid withdrawal):
- Nausea/ Vomiting
- Tachycardia
- Hypertension, hypotension
- Cardiac disturbances (i.e.: cardiac arrest)
- Epistaxis
- Violent Behavior
Narcan is for opioid OD only

- NARCAN WILL NOT HAVE AN AFFECT ON OTHER DRUG OVERDOSES
  - However, **no harm** will be done to patient if administered without opioids onboard
NARCAN WILL NOT RESTART THE HEART

- **Always** respond to a potential drug overdose with your AED
- Only give Narcan to a patient with depressed respirations
- **No pulse? No respirations?** Perform CPR!
On Scene

- Track Marks
- Heroin Balloons
- Drug Paraphernalia
- Bystander Report
- Balloons
1. Scene Approach
   - Scene safety
   - AED and Narcan kit in hand
   - Personal protective equipment

2. Stimulate the person
   - Verbal
   - Sternal Rub

3. No response
   - Ensure EMS enroute. Open Airway Shark Hook

4. Respirations <12/min & suspicion of OD
   - Ensure EMS enroute and administer NARCAN

5. NO respirations, NO pulse
   - Place AED: CPR as directed
   - No CPR directed, administer Narcan

https://youtu.be/pCJrgcC3sgl?t=63
Open Airway Using “Shark Hook” Technique

Look for Respiratory Effort

https://www.youtube.com/watch?v=Xb_S1AMSVdC
Look for Respiratory Effort ~

**Is it 12/minute or more?**
Request EMS, Maintain Airway Support, Monitor Rate

**Is it Less than 12/minute?**
Request EMS, Administer Narcan, Maintain Airway Support, if breathing improves, position on side

**Is it ABSENT?**
Request EMS, place AED, follow AED commands
* if compressions not directed, administer Narcan and maintain airway support
Agonal Breathing

JOE
https://youtu.be/pioQSVEUpP0?t=12
Agonal Breathing

ACTOR
https://youtu.be/CBMxH4xtE8w?t=14

https://www.youtube.com/watch?v=q-1T5AXDVPo
Agonal Breathing – For Real!

Dispatcher
https://youtu.be/w32PUDL2lb8?t=145

Bondii Beach
https://www.youtube.com/watch?v=FnSfHVMP9M
Chest Compressions

- Continuous High Quality Chest compressions
  - **Rate****-Optimal is 110 CPM
  - **Depth****-At least 2 inches
  - **Recoil****-Fully off the chest

- Perfuses Heart and Brain
  - Increases likelihood of successful defibrillation
  - Maintains brain viability – Cerebral Performance
  - Think “Brain-Heart-Brain-Heart”

- Get the AED!!
The goal of Naloxone administration is to **improve respiratory drive**, **NOT** to return patient to their full mental capacity.

If Naloxone administration is indicated, EMS *must* be requested.

- Second dose may be administered **3 minutes** after the first dose if the following conditions are present:
  - Fire and EMS resources have not arrived on scene to take over medical care of the patient.
  - The patient is still unconscious
  - Patient has less than 12 respirations per minute or inadequate respiratory effort.
  - If respiratory drive is not present, deputies should transition to CPR protocols

If respiratory drive becomes adequate – ABC’s until arrival of EMS
Skill Competency
Intranasal Naloxone Administration

- Assess the patient to ensure his/her nasal cavity is free of blood or mucous

- Control patient’s head with one hand

- Gently but firmly place atomizer within one nostril, carefully occluding the opposite nostril
Intranasal Naloxone Administration, continued

- Aim slightly upwards and toward ear on same side as the nostril
- Briskly compress syringe to administer the total dose (4mg in 0.4cc of atomized spray)
Post–Narcan Position

- As you wait for ALS, place patient in recovery position
- Continue to monitor frequently to ensure patient is still breathing
Candidates for intranasal (IN) administration of naloxone are:

- Adults with suspected narcotic overdose and respiratory depression only.
- Patients must meet both of the following criteria to be eligible for IN naloxone administration:
  - Unconscious.
  - Respiratory depression defined as a respiratory rate < 12 or inadequate respiratory efforts.
Administration Procedure (continued):

- Monitor and support ABC’s until ALS arrival.
- **Provide details directly to the responding EMS Paramedic including:**
  - Respiratory rate upon arrival
  - Time and amount of Narcan administered
  - Any changes to patient condition following Narcan administration
Documentation:

◦ Utilize SB County PSFA Optional Skills Patient Care Report

◦ Document demographics, basic assessment and treatment on the patient care report.

◦ Record time of administration/dose.

◦ A copy of the PSFA PCR must be submitted to the SB County EMS Agency within 24 hours *(so report can be attached to patient’s hospital Medical Record appropriately.)*

◦ It must be secure emailed to phdems@co.santa-barbara.ca.us or secure faxed to 805 681 5142
Thank You!

Any Questions ???

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