Emergency Medical Services Program

Recognition, Response and Administration of Naloxone

Opioid Overdose 101





Recognition, Response and Administration of Naloxone

Opioid Overdose 101

LEARNING OBJECTIVES

- Obtain baseline understanding of the prescription drug overdose problem
- Understand how opioids work
- Identify an opioid overdose
- Learn how to respond to an opioid overdose
- Learn how to administer naloxone, an opioid antidote

Recognition, Response and Administration of Naloxone

Opioid Overdose 101

UNIT ONE

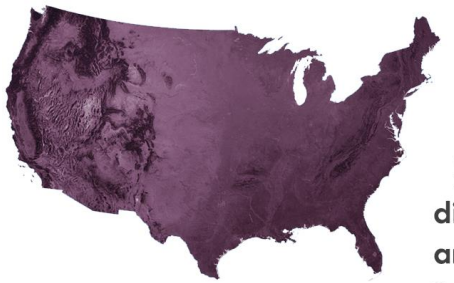
Importance of Overdose Prevention



Recognition, Response and Administration of Naloxone

Opioid Overdose 101

Scope of the Problem

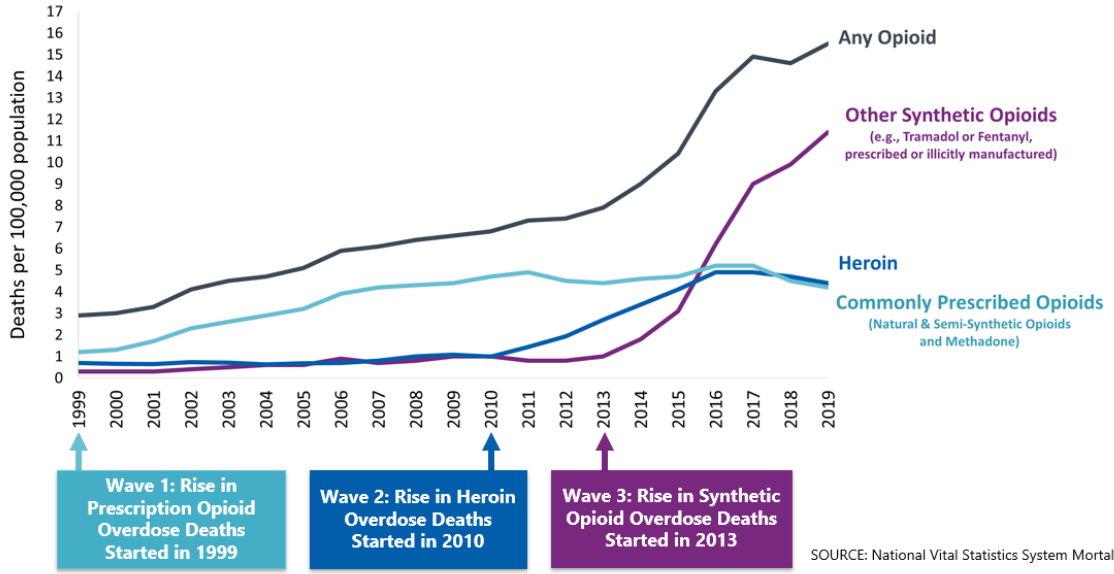


136 PEOPLE

die every day from an opioid overdose

(including Rx and illicit opioids)

Three Waves of the Rise in Opioid Overdose Deaths



SOURCE: National Vital Statistics System Mortality File.

Recognition, Response and Administration of Naloxone

Opioid Overdose 101

County	OD Deaths	Drug OD Mortality Rate
Statewide	**14870**	**13**
Alameda	481	10
Alpine		
Amador	19	16
Butte	178	26
Calaveras	23	17
Colusa		
Contra Costa	399	12
Del Norte	11	13
El Dorado	108	19
Fresno	377	13
Glenn	10	12
Humboldt	131	32
Imperial	100	18
Inyo	18	33
Kern	662	25
Kings	47	10
Lake	90	47
Lassen	22	24
Los Angeles	2726	9
Madera	49	10
Marin	110	14
Mariposa		
Mendocino	86	33
Merced	111	14
Modoc		
Mono		
Monterey	145	11
Napa	41	10

County	OD Deaths	Drug OD Mortality Rate
Nevada	50	17
Orange	1203	13
Placer	133	11
Plumas		
Riverside	1205	17
Sacramento	689	15
San Benito	18	10
San Bernardino	569	9
San Diego	1398	14
San Francisco	607	23
San Joaquin	375	17
San Luis Obispo	132	16
San Mateo	196	9
Santa Barbara	207	15
Santa Clara	482	8
Santa Cruz	133	16
Shasta	105	19
Sierra		
Siskiyou	29	22
Solano	187	14
Sonoma	207	14
Stanislaus	217	13
Sutter	36	12
Tehama	18	9
Trinity		
Tulare	130	9
Tuolumne	34	21
Ventura	393	15
Yolo	81	12
Yuba	46	20

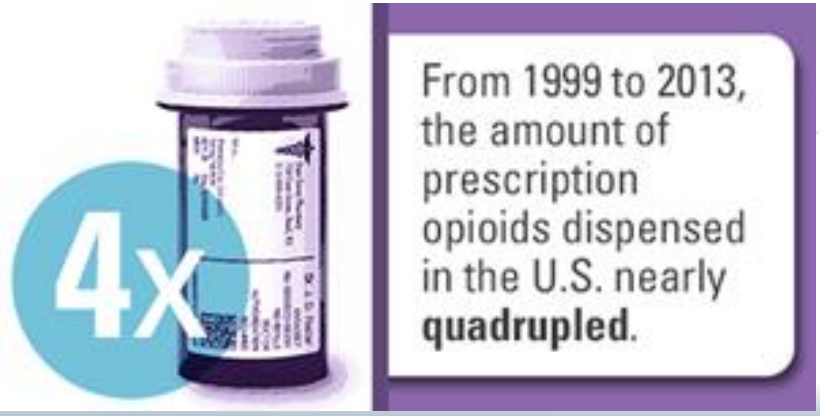
2020 California Deaths
All Opioid Overdoses by County

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UNIT TWO

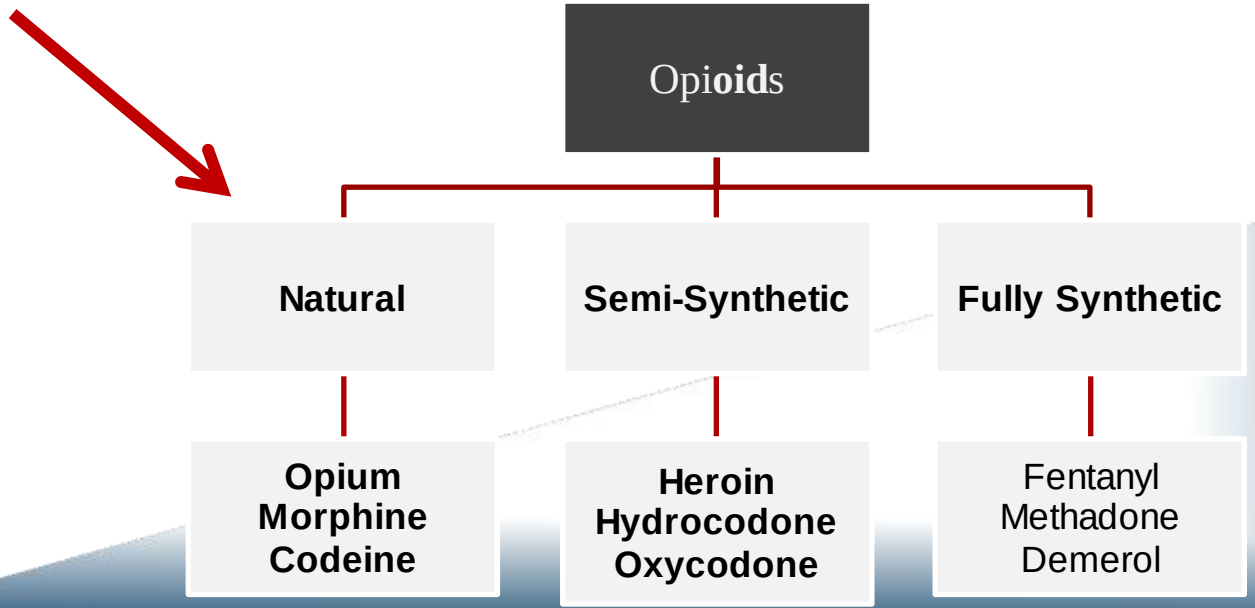
Opioid Basics



Recognition, Response and Administration of Naloxone

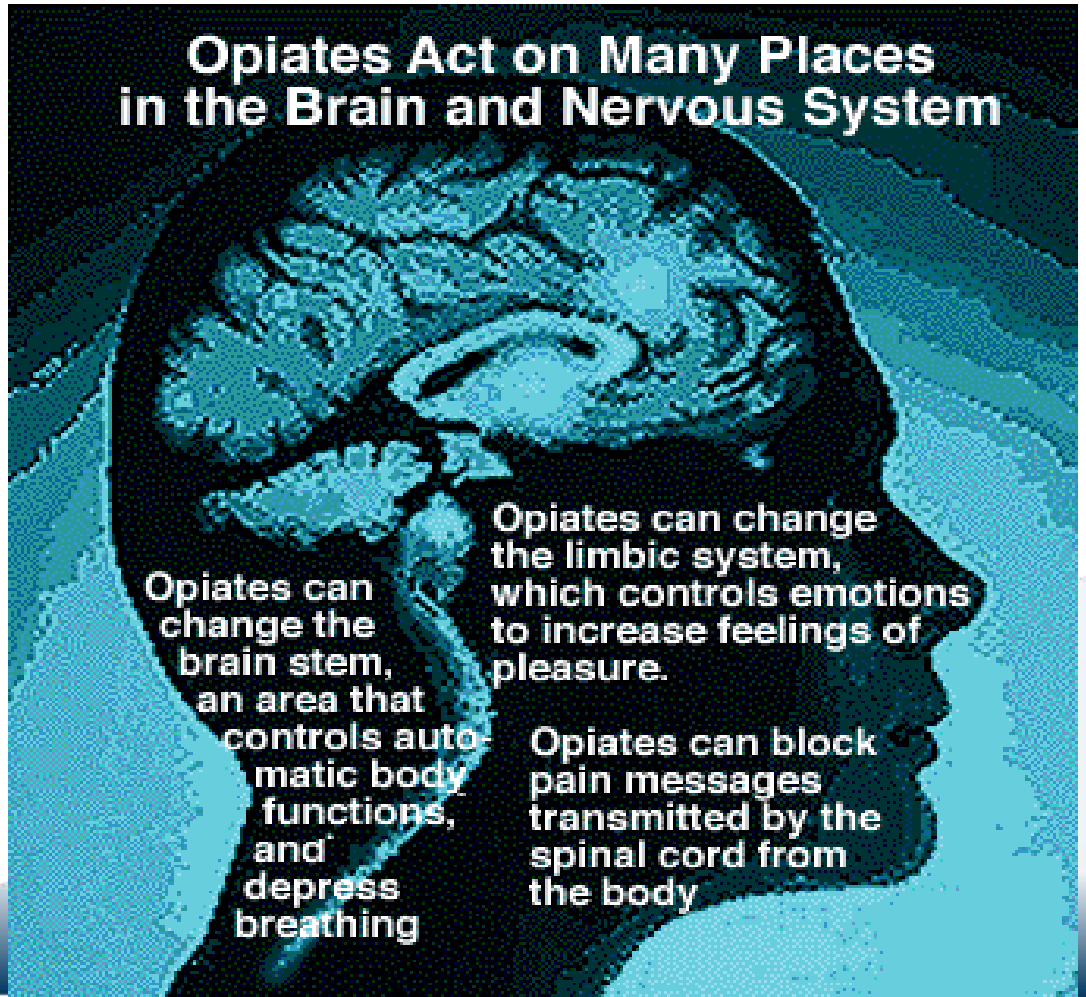
Opioid Overdose 101

Opioids are used primarily in medicine for pain relief, treatment of opioid use disorders, general anesthesia, and cough relief.



Recognition, Response and Administration of Naloxone

Opioid Overdose 101



Recognition, Response and Administration of Naloxone

Opioid Overdose 101

Naloxone

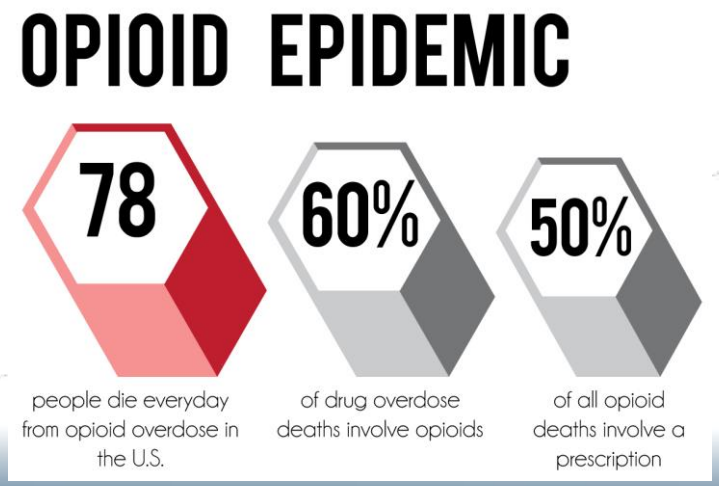
- Knocks the opioid off the opioid receptor
- Only blocks opioid receptors; no opioids = no effect
- Not harmful if no opioids in system
- *Temporarily* takes away the "high," giving the person the chance to breathe
- Works in 1 to 3 minutes and lasts 30 to 90 minutes
- Can neither be abused nor cause overdose
- Only known contraindication is sensitivity, which is very rare
- Can cause withdrawal symptoms such as:
  - ✓nausea/vomiting
  - ✓diarrhea
  - ✓chills
  - ✓ muscle discomfort
  - ✓ disorientation
  - ✓ combativeness

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UNIT THREE

Identifying an Opioid Overdose



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Opioid Overdose 101

Identify an Opioid Overdose

REALLY HIGH	OVERDOSE
Pupils pinned	Pupils pinned
Nodding, but rousable (responds to sternal rub)	Not rousable (no response to sternal rub)
Speech is slurred	Very infrequent or no breathing
Sleepy, intoxicated, but breathing • 8 or more times per minute	Breathing slow or stopped • Less than 8 times per minute • May hear choking sounds or gurgling/snoring noises • Blue lips, blue fingertips
Stimulate and observe	*Rescue breathe + give naloxone*

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UNIT FOUR

Naloxone Intervention



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RESPOND TO AN OPIATE OVERDOSE

1. Stimulate
2. Alert EMS and 911 system
3. Administer naloxone
4. CPR – Rescue breathing/ventilations
5. Repeat 3 & 4, if necessary
6. Recovery position, if breathing

Recognition, Response and Administration of Naloxone

Opioid Overdose 101

RESPOND TO AN OPIATE OVERDOSE

Safety Precautions

- Prior to administration of naloxone, review ABCs
- Assess for other causes of altered mental status and/or respiratory depression
- The half-life of naloxone is relatively brief
- Monitored closely for recurrent symptoms
- Altered mental status, respiratory depression, etc.

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Opioid Overdose 101

RESPOND TO AN OPIATE OVERDOSE

Safety Precautions Continued

The Medical Director should include parameters within the protocols for EMS personnel on how to address these adverse effects:

- ✓ Agitation
- ✓ Tachycardia
- ✓ Pulmonary edema
- ✓ Nausea
- ✓ Vomiting
- ✓ Seizures

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RESPOND TO AN OPIATE OVERDOSE

Risk Factors with Opioid Overdose

- **Hypercarbia**
- **Aspiration**
- **Cardiopulmonary arrest**
- **Incidence of risk factors increases with use of other substance**
  - ✓ **Alcohol, benzodiazepines, or other medications**

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Opioid Overdose 101

RESPOND TO AN OPIATE OVERDOSE

Respond: Stimulate and Alert EMS

1. **Stimulate victim with a *sternal rub***
2. **If no response, delirious, or altered consciousness, call for *EMS support***



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RESPOND TO AN OPIATE OVERDOSE

Naloxone can only be administered if authorized by your Local EMS Agency Medical Director

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RESPOND TO AN OPIATE OVERDOSE

Respond: Administer Naloxone

If no response from stimulation, administer Naloxone

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RESPOND TO AN OPIATE OVERDOSE

Respond: Administer Naloxone - Atomizer



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RESPOND TO AN OPIATE OVERDOSE

Respond: Nasal Naloxone

Intranasal delivery route has advantages:

- **Uncomplicated and convenient**
- **Nose is an easy access point for medication delivery**
- **It is painless**
- **No shots needed**
- **It eliminates any risk of a needle stick**

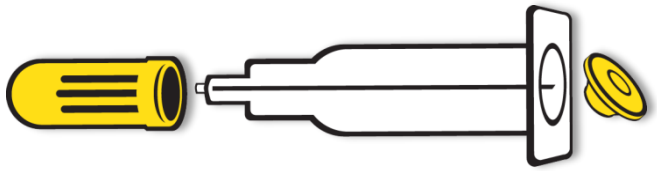
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Opioid Overdose 101

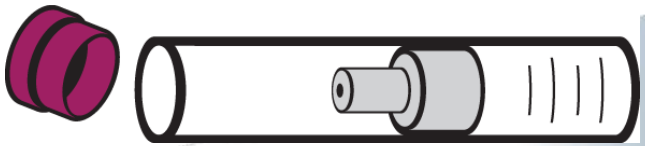
RESPOND TO AN OPIATE OVERDOSE

Respond: How to Administer Nasal Naloxone

1. Remove yellow caps from delivery device



2. Remove purple cap from medication vial



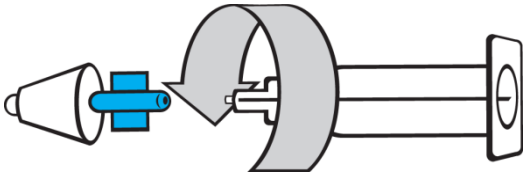
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Opioid Overdose 101

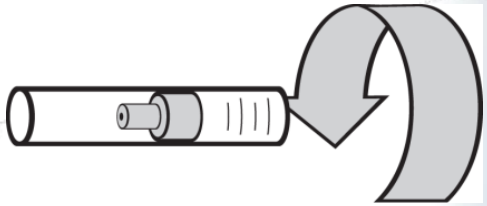
RESPOND TO AN OPIATE OVERDOSE

Respond: How to Administer Nasal Naloxone

3. Thread atomizer on to the top of the delivery device



4. Gently screw the medication vial into the delivery device until you feel it catch



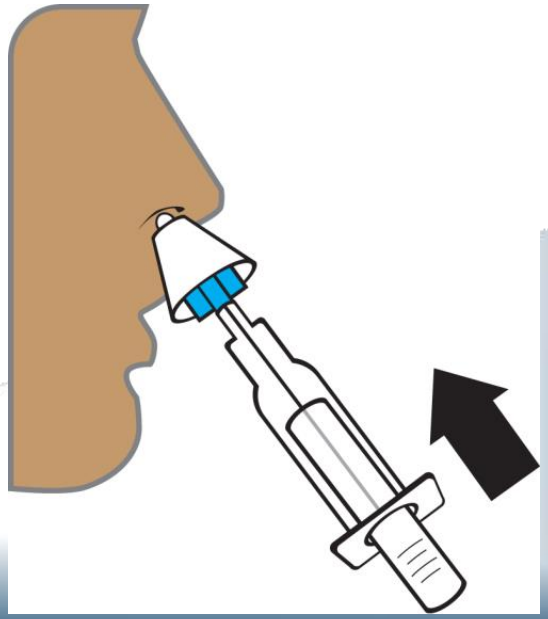
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Opioid Overdose 101

RESPOND TO AN OPIATE OVERDOSE

Respond: How to Administer Nasal Naloxone

5. Spray half (1 ml) up one nostril and half up the other nostril.



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RESPOND TO AN OPIATE OVERDOSE

Respond: Administer Naloxone - Intramuscular



Recognition, Response and Administration of Naloxone

Opioid Overdose 101

RESPOND TO AN OPIATE OVERDOSE

Respond: Intramuscular Naloxone

Intramuscular delivery route has advantages:

- **Consistent delivery**
- **Similar to other auto-injectors used by pre-hospital personnel**
- **Fast acting**

Recognition, Response and Administration of Naloxone

Opioid Overdose 101

RESPOND TO AN OPIATE OVERDOSE

Respond: How to Administer Intramuscular Naloxone

1. Ventilate patient
2. Remove auto-injector from case
   (voice prompt is now activated)
3. Pull off Safety Guard



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RESPOND TO AN OPIATE OVERDOSE

Respond: How to Administer Intramuscular Naloxone

4. Black end of auto-injector on thigh
5. Press firmly and hold in place for five (5) seconds
6. Remove auto-injector and dispose properly using Sharps Container



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ADDITIONAL TRAINING RESOURCES

3-minute video

“Naloxone Administration for Opioid Overdose”
https://www.youtube.com/watch?v=vV3HR_J3Ws8

11-minute video

“Opioid Medication Safety: The Role of Naloxone”
http://vimeo.com/37778160

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Opioid Overdose 101

QUESTIONS?

