

Opioid-Associated Life-Threatening Emergencies

Deaths related to opioid use are increasing. The World Health Organization estimates that 27 million people suffer from opioid use disorders. Most use illicit drugs, but an increasing number are using prescribed opioids. In the United States, drug overdose involving opioids is a leading cause of injury-related death. About 130 Americans die every day from an opioid overdose. Opioid overdose does not just occur in addicts; it can occur in anyone who takes opioids or has access to opioids. Unintentional overdose can happen at any time, to any person, of any age, and in any place.

Given this ongoing crisis, it is important to know what to do if you suspect an opioid-associated life-threatening emergency (opioid drug overdose) in an unresponsive adult victim.

Learning Objectives

In this Part, you will learn

- How to recognize an opioid-associated life-threatening emergency
- The importance of administering naloxone in opioid-associated life-threatening emergencies
- The steps in the opioid-associated life-threatening emergency response sequence

What Are Opioids?

Opioids are medications used primarily for pain relief. Common examples are hydrocodone, morphine, and fentanyl. Heroin is an example of an opioid that is illegal in the United States.

Problematic Opioid Use

Many people think that problematic opioid use happens only when someone takes an illegally produced or obtained opioid. Yet problems can occur when someone

- Takes more drug than is prescribed (either purposely or accidentally)
- Takes an opioid that was prescribed for someone else
- Combines opioids with alcohol or certain other drugs, such as tranquilizers or sleeping pills
- Has certain medical conditions, such as reduced liver function or sleep apnea
- Is older than 65 years of age

Too much opioid in the body can overwhelm the brain and depress the natural drive to breathe. This respiratory depression can result in respiratory arrest and cardiac arrest.

Identifying an Opioid Emergency

Scene Assessment

Scene assessment is an important tool for identifying whether opioids may be involved in a life-threatening emergency. To evaluate the scene for potential opioid overdose, use these strategies:

- Communicate with bystanders: Ask questions such as, "Does anyone have any information about what happened? Do you know if the victim took anything?"
- Observe the victim: Look for signs of injection on the skin, a medication patch, or other signs of opioid use.
- Assess the surroundings: Look for medication bottles or other signs of opioid use.

Signs of an Opioid Overdose

Look for the following signs of an opioid overdose:

- Slow, shallow, or no breathing
- Choking or gurgling sounds
- Drowsiness or loss of consciousness
- Small, constricted pupils
- Blue skin, lips, or nails

Do not delay lifesaving actions. After confirming scene safety, rescuers may perform the assessment at the same time as the resuscitation attempt.

Antidote to Opioid Overdose: Naloxone

The drug naloxone can temporarily reverse the effects of respiratory depression that opioids can cause. If available, give naloxone quickly by one of these delivery routes: intramuscular, intranasal, or intravenous (given by advanced providers).

Naloxone Autoinjector

Naloxone handheld autoinjectors deliver a single dose via an intramuscular injection.

Intranasal Naloxone

An easy-to-use atomizer device delivers intranasal naloxone into the nose. There is no risk of needle-stick injuries with this method. The body quickly absorbs intranasal naloxone because the nasal cavity has a relatively large surface of mucus membranes rich in capillaries.



Critical Concepts: **What to Do for an Opioid-Associated Life-Threatening Emergency**

If you suspect an opioid-associated life-threatening emergency, do the following:

- **If the victim has a definite pulse but is not breathing normally:** Provide rescue breaths and give naloxone according to package directions and per local protocol. Monitor for response.
- **If the victim is in cardiac arrest and you suspect an opioid overdose:** Start CPR. Consider giving naloxone per package directions and per local protocol. Note that for victims who are in cardiac arrest from opioid overdose, the effect of administering naloxone is not known.

Opioid-Associated Life-Threatening Emergency Response Sequence

The first rescuer who arrives at the side of an unresponsive victim and suspects opioid use should quickly follow these steps. *As with any life-threatening emergency, do not delay lifesaving actions.*

Step 1: If you suspect opioid poisoning:

- Check to see if the person responds.
- Shout for nearby help.
- Activate the emergency response system.
- If you are alone, get naloxone and an AED if available. If someone else is present, send that person to get them.

Step 2: Is the person breathing normally?

- If the person is breathing normally, proceed with Steps 3 and 4.
- If the person is not breathing normally, go to Step 5.

Step 3: Prevent deterioration.

- Tap and shout. Check for responsiveness by tapping the victim's shoulders. Shout, "Are you OK?"
- Open and reposition the airway if needed to maintain normal breathing. This may be necessary if the victim is unresponsive or is responsive but unable to maintain an open airway due to a depressed level of consciousness.
- Consider administering naloxone, if available. If you suspect an opioid overdose, it is reasonable to give naloxone according to package directions and per local protocol. Monitor for response.
- Transport to the hospital. If the victim is not already in a healthcare setting, they should be transported by EMS to a hospital.

Step 4: Assess for responsiveness and breathing.

Continue to assess responsiveness and breathing until the victim is transferred to advanced care. Victims with opioid-associated emergencies may not be able to maintain an open airway or breathe normally. Even those who receive naloxone may develop respiratory problems that can lead to cardiac arrest.

Step 5: Does the person have a pulse?

Assess for a pulse for no more than 10 seconds.

- If yes (a pulse is felt), go to Step 6.
- If no (a pulse is not felt), go to Step 7.

Step 6: Support ventilation.

- Open and reposition the airway before giving rescue breaths.
- Provide rescue breathing or bag-mask ventilation. This can help prevent cardiac arrest. Continue until spontaneous, normal breathing occurs. Reassess the victim's breathing and pulse every 2 minutes. If there is no pulse, provide CPR (see Step 7).
- Give naloxone according to package directions and per local protocol.

Step 7: Start CPR.

- If the victim is not breathing normally and no pulse is felt, provide high-quality CPR, including ventilation. Use the AED as soon as it is available.
- Consider naloxone. If naloxone is available and you suspect an opioid overdose, it is reasonable to give it according to package directions and per local protocol. High-quality CPR should take priority over giving naloxone.
- Refer to the BLS protocol (see Figure 4).

For more information, see Figure 45 in the Appendix.