

USING Pulse Oximeter DURING AN OVERDOSE RESPONSE



What is a pulse oximeter?

Pulse oximeters are small devices that are used to measure the **pulse rate** (heart rate) and the **oxygen level** in a person's blood. Oximeters are useful when responding to an overdose because they can give you more information about the condition of the person you're responding to. **However, they do not replace your usual steps in evaluating the person.**

How do I use it?

Open the clip and place the index finger in the oximeter. Be sure that the fingernail is on the same side as the red light and that their finger is inserted all the way into the oximeter as light beams must pass through the nail bed to give the reading.



Once clipped on the finger, the oximeter gives you two sets of readings:

- a) Oxygen level in the blood (**%SpO₂**) on the **LEFT** side

95 - 100%

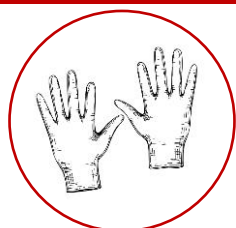
- b) Heart Rate (**PR_{BPM}**) on the **RIGHT** side

60 - 100 BPM

Note: Pulse oximetry readings are **not always accurate**. Readings may not show if a person has one or more of the following: a low body temperature, a lot of motion (e.g., they're shivering or seizing), a low blood pressure, a very low heart rate, dirty hands or dehydration. Also, the effectiveness of pulse oximeters in detecting low oxygen saturation differs across races. According to a [recent study](#), pulse oximeters were three times less likely to detect low oxygen saturation among Black patients than among White patients. **Use the oximeter readings with caution and always use your own judgement during an overdose response!**

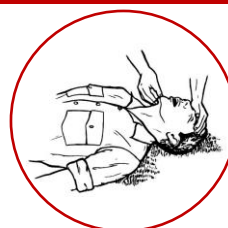
How do I use it when responding to an overdose?

1



Put on gloves and a mask (if available), stimulate the person, and call 911 if they are unresponsive.

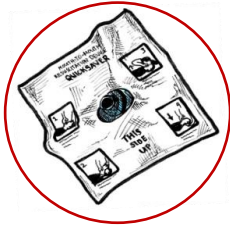
2



Tilt their head back and check their airway for obstruction.



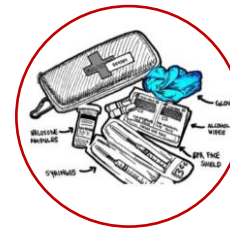
3



According to best practice guidelines for overdose response, the next step is to give rescue breaths (use CPR face shield). **However, if you don't feel comfortable providing breaths, skip this step and proceed to Step 4.** If you are comfortable providing breaths, use the following to help you decide whether breaths are needed:

- Is the person breathing slowly? (less than 10 breaths per minute)?
- Are their lips or tongue blue?
 - **If yes to any of the above, give rescue breaths (1 breath every 5 seconds).**
- Supplement your assessment of the person's breathing and colour using your oximeter:
 - **If the SpO2 reading is under 92%, continue giving rescue breaths.**

4



The next step is to administer naloxone, but its use depends on the substance used:

- If you know the substance consumed is an opioid or you're not sure, administer naloxone (give 2 doses if necessary). When in doubt, always administer naloxone; naloxone is safe. Monitor the person's breathing rate, colour and blood oxygen levels using your oximeter until help arrives.
- If you are sure that the substance consumed is a non-opioid, naloxone administration is not necessary. Monitor oxygen levels and provide breaths (if comfortable) until help arrives. Note: A person who has used a benzo may remain unresponsive for longer. Monitoring oxygen levels will help determine whether giving breaths is necessary.

Repeat the steps indicated above, as necessary, until paramedics arrive!

Note:

- Chest compressions may be needed if the person has no pulse. To check a pulse, place two or three fingers on the person's upper neck to the side of their windpipe/airway, or on the person's wrist on the thumb side for 10 seconds. You may also use the oximeter reading for PR_{BPM}: if it continually fails to register a reading, the person may not have a pulse.
- If you have access to an oxygen tank, **the safest intervention is to provide oxygen first**, then provide naloxone, then rescue breaths (if needed).

How do I clean the oximeter?

Properly cleaning your oximeter at the beginning and end of your shift and after each use is critical to decreasing the spread of infectious diseases, including COVID-19. To clean your pulse oximeter, **use an alcohol wipe (70% isopropanol alcohol)** and follow these steps:

1

Thoroughly clean the interior surface of the oximeter.

2

Thoroughly clean the exterior surface of the oximeter.

3

Allow the oximeter to dry thoroughly before use.

Other Resources

Responding to Overdoses During Covid-19

