

HOW TO USE CONTINUOUS PULSE OXIMETRY

A step-by-step guide for how to use and troubleshoot continuous pulse oximetry, created by peer researchers. (N.B. this guide applies to the specific continuous oximeter make and model used in this study.)

Get started

- Turn on the remote monitor by pressing the round button on the screen.
- Ask the person to wash their hands and nails. Make sure there is no grease or dirt on the nail. If sink and water are not available, use disinfectant wipes.
- Ensure that the monitor is on the correct sensitivity mode for blood oxygen level reading (normal to maximum sensitivity mode). **TIP:** *If the person's nails are dirty or have nail polish, place the monitor on maximum sensitivity mode to increase blood oxygen level reading signal.*
- Ask the person to start preparing their drugs.

Attach the sensor

- Open a new pack of disposable oximeter sensors and place the wrist band around the person's wrist.
- Attach the sensor to the nail that has the longest and widest nail bed. **TIP:** *Typically, this is the thumb, middle or ring finger.* Ensure that the sensor is as close to the nail bed as possible and wrap the sensor tape tightly around the finger. **TIP:** *When attaching the sensor, try to keep the person's hand as steady as possible. Make sure that the red light from the sensor is not shining through the finger.*
- Take the Bluetooth chip from the monitor holder and tap it onto the Bluetooth adaptor. Next, place the Bluetooth chip in the red holder on the person's wristband. A blue light will appear on the Bluetooth adaptor. **TIP:** *If a red or white light appears on the Bluetooth adaptor this means that the sensor is faulty and needs to be replaced.*
- Blood oxygen level and heart rate readings should appear on the monitor screen within one minute. **TIP:** *If no reading is visible, switch the monitor to the maximum sensitivity mode to increase the blood oxygen level reading signal.*
- If the connection becomes lost, check on the person to ensure that the sensor is still correctly placed on the person's finger, and advise them to limit hand movement if possible.

Monitor for low blood oxygen levels

- The alarm will sound if the person's blood oxygen levels fall to 90% or below for 15 consecutive seconds.
- If the alarm goes off, assess the individual. They are potentially at risk for overdose.
- Respond as promptly as possible to a person experiencing a potential overdose using a step-wise approach to assessment and interventions (e.g., verbal or tactile stimulation if minimally responsive; supplemental oxygen and/or naloxone if level of responsiveness and blood oxygen levels remain low).

End monitoring session

- Return the Bluetooth chip to staff for cleaning. Place the Bluetooth chip back on the remote monitor holder.
- Dispose of the wristband and oximeter sensor.

