



## Using a Pulse Oximeter

Every system in the body needs oxygen to function. Pulse oximeters are devices that measure the amount of oxygen in our blood using small beams of light that pass through the finger, ear or toe. This is also known as our oxygen saturation level. Most over-the-counter pulse oximeters use our finger to measure the amount of oxygen in our blood.

### What can make a reading inaccurate

- Anything that might limit light going through your finger or fingernail: nail polish, grease, oil or dirt, henna pigment, etc
- Moving around or shivering
- Cold fingers from poor circulation or recent exposure to cold, like holding a cold beverage
- Bright direct light shining directly on the pulse oximeter
- Dusty environment
- Improper cleaning: clean your device following the packaging directions. Never submerge it in water or a cleaning solution. You can usually safely use a soft damp cloth and mild soap or detergent and wait until it is dry before turning it on again.

### How to use a pulse oximeter

- Start by turning the pulse oximeter on and putting your finger inside. Wait for the numbers to appear.
- If the reading looks abnormal, check to see if the numbers are upside down. On some devices you can turn the numbers around by pressing the power button again. For example, 99 looks like 66 upside down, but you would not be very functional at a 66% oxygen saturation level. Looking at your heart rate or pulse rate will also give you a sense of whether you're looking at the numbers the right way.

### What the numbers mean

- We want the oxygen saturation level to be as high as possible. Normal range is between 95 and 100%.
- When these numbers dip into the low 90s or even lower, we get concerned about how well your body is able to deliver oxygen from the lungs to the rest of the body.
- Low oxygen saturation can feel like difficulty breathing, rapid breathing or shortness of breath, confusion, dizziness, headache, a racing heart or even chest pain.
- Pulse oximeters are usually accurate within 2 digits, and the pulse rate is usually accurate within 3 digits.

You can use a pulse oximeter to monitor yourself if you find you are short of breath when exercising or when doing activities around the house.

**If you notice that the numbers are low: take a rest break, work on the breath control techniques described on the website and make sure the device is operating properly. If the numbers are still low, contact your medical provider with your concerns.**

It will also be helpful for your medical provider to know your heart rate, temperature, blood pressure and how fatigued or tired you are feeling so they have a more accurate picture of how you are doing. Pulse oximetry is one of many useful tools to tell us about how our bodies are functioning.