Pulse Oximeters: A guide

What is a pulse oximeter?

A pulse oximeter is a small medical device that shines light through the skin to estimate the oxygen saturation (SpO_2) of the blood, which will be displayed as a percentage. The device is also able to detect the pulse rate (i.e., heart rate) of the wearer.

COVID-19 monitoring

COVID-19 is known to cause respiratory symptoms which may impact blood oxygenation levels and may or may not cause an individual to feel breathless. A pulse oximeter can assist in monitoring the condition of people infected with COVID-19 by enabling the recording of a person's oxygen saturation levels from home.

How to use a pulse oximeter

1. Sit up, either in a chair or on the side of your bed

2. If required, turn the pulse oximeter on by pressing the button.
   Note: Some pulse oximeter devices will turn on automatically and, therefore, do not have a button

3. Open the device by squeezing the hinged end and place your middle or index finger into the finger-cot. The device should close gently around your finger when the hinged end is released.
   Whilst pulse oximeters may vary slightly across manufacturers the finger placement should in the device should be as pictured, with the pad of the finger sitting on the base.

4. Allow the device to take a reading for approx. 1 minute; ensure that you keep as still as possible while this is happening.

5. Once the numbers on the screen have <u>not</u> changed for at least 5 seconds you can record the pulse rate and SpO_2.

6. After you have finished, remove the Pulse Oximeter and store appropriately until the next time you need to use it
   Note: Most Pulse Oximeters will turn off automatically once they have been removed from the finger.

Recording the results

Record the pulse rate and SpO_2 each time you use take a reading so you can share this with your Healthcare provider. Please ensure that you take note of the date and time as well as the readings from the device.

Things to remember

- The device should fit comfortably on the finger being used – it should not feel too tight or too loose. If you experience these issues while wearing the device on your index finger, try moving the Pulse Oximeter to your middle finger instead – and visa-versa.
    - Pulse Oximeters are not hand-specific, so you are able to use your right or left hand; whichever is more suitable.

- Nail polish and artificial nails can impact the Pulse Oximeter's ability to accurately take readings. Where possible, nail polish and/or artificial nails should be removed before using the device.

- It is important that you are at rest when taking any readings. If you have been involved in any kind of activity, ensure that you rest for at least 5 minutes before using the Pulse Oximeter

- Bright lights shining directly onto the Pulse Oximeter can affect the accuracy of the readings. This does not mean that the device needs to be covered while using it but be sure to avoid any direct bright light (i.e., torch light)

When to seek help

If you are concerned about your pulse rate and/or SpO_2 readings, you should consult your Healthcare provider as soon as possible for advice.

If you feel that your condition is life-threatening, call 000 for an ambulance.

Disclaimer

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Sources

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