Pulse oximeters

What are pulse oximeters?

Pulse oximeters are non-invasive, painless, handheld devices that measure a person's blood oxygen level and heart rate. These readings can be used by health practitioners to help manage the care of a COVID-19 positive person from their home.

A pulse oximeter looks like a clothes-peg and attaches onto your fingertip. It operates by shining a light through your finger to a sensor on the other side of the clip.

Who needs them?

Most West Australians will be able to manage COVID-19 at home without the need for a pulse oximeter. Based on risk factors such age, vaccination status, severity of symptoms, medical history and social factors, a small group of people who test positive to COVID-19 will need to be monitored remotely through use of a pulse oximeter.

Please refer to WA COVID Care at Home or your health practitioner for more information.

IMPORTANT: If you have any underlying medical condition/s please consult your health practitioner to support interpretation of results.

How to use a pulse oximeter

Below is a list of general instructions for pulse oximeters. For WA COVID Care at Home patients, please refer here, How to use your monitoring equipment. For equipment oximeter instructions, please refer to the manufacturer's instructions provided for your pulse oximeter.

For more specific information, please refer to the instructions provided for your pulse oximeter.

1. Make sure batteries are in the battery compartment and cover is on.
2. Remove any nail polish or false nails (these can interfere with the device and give inaccurate readings).
3. Wash your hands with warm water and thoroughly dry them (the device works best when your hands are warm).
4. Sit in an upright position.
5. Give your fingers a wiggle and rub to get the blood flowing, then keep fingers still.
6. Attach the clip to one of your fingers so that the tip of your finger is touching the end of the device. The palm of your hand should be pointing down, and the screen of the pulse oximeter should be pointing up so you can read it.
7. Breathe normally.

8. Keep your hand and the pulse oximeter still for at least a minute, or longer, until the result has not changed for five seconds.

9. Once the reading has not changed for five seconds, write down the result. Note, the device will give you two readings, one for your pulse and the other for your blood oxygen level (the device instructions will tell you which is which).

10. If sharing the pulse oximeter with other people in the household, make sure to clean it down with an antiseptic wipe and each person should thoroughly wash their hands after use.

Smartphones and Smartwatches

Some smartphones and smartwatches have similar functions of a pulse oximeter. The Royal Australian College of General Practitioners have stated they are not accurate and should not be used [1, 2].

Further information

For more information, refer to WA COVID Care at Home and Managing COVID-19.

References

1. Greenhalgh, T., et al., *Remote management of covid-19 using home pulse oximetry and virtual ward support.* Bmj, 2021. **372**: p. n677.

2. RACGP, *The Royal Australian College of General Practitioners. Managing COVID-19 at home with assistance from your general practice: A guide, action plan and symptom diary for patients. .* 2021: East Melbourne, Vic.

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