

Pulse oximetry to detect early deterioration of patients with COVID-19 in primary and community care settings

Annex 2: COVID-19 diary

11 June 2020, Version 1

This is suggested content for a COVID-19 diary that patients could use under clinical supervision to support the remote monitoring of those with confirmed or possible COVID-19.

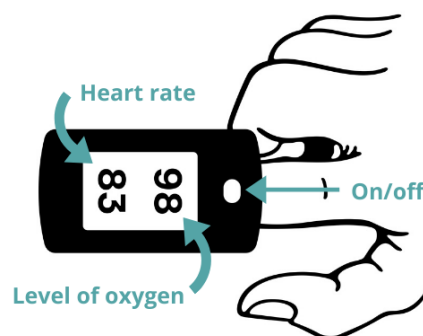
Pulse oximeter for heart rate and blood oxygen level

Your doctor has given you, or your carer, this **diary** and **pulse oximeter** because you have symptoms of COVID-19. A pulse oximeter helps you monitor how fast your heart is beating and the level of oxygen in your blood. Blood oxygen level is the most accurate way of keeping an eye on your progress with COVID-19. An ideal blood oxygen level is between 95% and 99%. An ideal heart rate is between 50 and 90 beats per minute (bpm).

How to use a pulse oximeter

Follow these instructions to make sure the pulse oximeter gives an accurate reading (image to right courtesy of Denis Barbulat):

- Remove any nail polish or false nails and warm your hand if cold.
- Make sure you have been resting for at least five minutes before taking your measurement.
- Rest your hand on your chest at heart level and hold still.



- Switch the pulse oximeter on and place it on your finger. It works best on your middle or index finger (see diagram). It should not be used on your ear.
- The reading takes time to steady. Keep the pulse oximeter in place for at least a minute, or longer if the reading keeps changing.
- Record the highest result once the reading has not changed for five seconds.
- Be careful to identify which reading is your heart rate and which is your oxygen level.

Decontamination: If you are handling equipment or items (eg pulse oximeters) used on/by patients with possible COVID, then please wash your hands carefully after touching the equipment, and if being used on different patients then ensure that it is cleaned between each patient, following the [published guidance](#).¹

Recording and acting on the results

Record your results in the diary below.

Your first measurement is your baseline – so record this in the highlighted blue area. Then take recordings three times a day, at the same time each day – for example, when you normally eat in the morning, at lunchtime and in the evening. Take extra measurements if you feel there has been a change in your health. Please also record changes in how you are feeling and your breathing.

Keep track of your temperature if you can. However, as long as your oxygen level and breathing are normal, you do not need to contact your GP/NHS 111 if you have a temperature or other symptoms, such as cough, muscle aches, tiredness and change in taste or smell. Paracetamol and regular fluids can help with these symptoms, and most people will get better by themselves within two to three weeks. Please see the [NHS website for information on self-isolation or how to access care](#).

What to do if you experience the following symptoms

- You are **unable to complete short sentences at rest** due to breathlessness.
- Your **breathing suddenly worsens** within an hour.

OR if these more general signs of serious illness develop:

- you are coughing up blood
- you have blue lips or a blue face

¹ Department of Health and Social Care:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/877533/Routine_decontamination_of_reusable_noninvasive_equipment.pdf

- you feel cold and sweaty with pale or blotchy skin
- you have a rash that does not fade when you roll a glass over it
- you collapse or faint
- you become agitated, confused or very drowsy
- you have stopped peeing or are peeing much less than usual

Ring your GP/NHS 111 as soon as possible if:

- You slowly start feeling **more unwell or more breathless** for two or more hours.
- You are having difficulty breathing when getting up to go to the toilet or similar.
- You sense that something is wrong (general weakness, extreme tiredness, loss of appetite, reduced urine output, unable to care for yourself – simple tasks like washing and dressing or making food).

Returning the pulse oximeter

When you no longer need the device, please return it to your GP surgery. If you are shielding please ask a friend or volunteer to do this for you. You should return it in the bag provided so that it can be safely cleaned and given to other patients.

You are likely to have it for 14 days from the onset of your illness. We do see some patients who feel unwell again after the first week of symptoms, so please keep the oximeter until the full 14 days have passed.

Please return the diary along with the pulse oximeter so you can help the NHS learn how best to help other patients with COVID-19.

Remote monitoring COVID-19 diary

First name _____

Surname _____

Date of birth _____

Age _____ NHS number _____

Live alone ☐

Carer at home ☐

Please record these three times a day

[illegible]

★ That is, if you start recording pulse oximetry five days after your first symptoms started, record '5' under Day.

* Record and fill in temperature if you have a thermometer.