

Overnight Home Oximetry

What is home oximetry?

Overnight (nocturnal) home oximetry uses a small device to monitor and record oxygen levels in your blood. The test is done at home while you sleep for the night.

Why do I need it?

Your doctor may recommend overnight home oximetry:

- To assess your need to start, continue, or increase home oxygen for certain health conditions.
- To screen for obstructive sleep apnea (OSA). OSA is a sleep disorder that affects how you breathe when sleeping. If your oxygen levels repeatedly dip below a certain level, you might have OSA. Home oximetry can't be used to diagnose OSA, but it can show if you need urgent care or additional testing. For more information on this disorder, see the fact sheet on [Obstructive Sleep Apnea \(OSA\)](#).

What happens before the test?

- 1 Pick up the equipment.** The equipment may come from the clinic or from a home medical equipment provider. Equipment includes:
 - An **oximeter** — the device that records your blood oxygen level. Some oximeters are worn on your wrist like a watch.
 - An **oxygen sensor** that clips on your finger and the cable connecting it to the oximeter.
 - A **booklet** or paper to record when you start and stop the test as well as any times you remove the finger clip to get up during the night.
- 2 Prepare for the test.** You will likely follow your normal daily routine. Ask your doctor if you should stop taking any medicines before the test. If you use oxygen, your doctor will tell you whether or not to use oxygen during the test.



Overnight home oximetry measures and records the level of oxygen in your blood as you sleep. This photo shows an example of one type of home oximeter.

- 3 Set up the equipment and go to bed.** Get ready for bed at the usual time, with these added steps:
 - **Attach the oxygen sensor.** Most often, this will be a clip you place on your finger. You can wear it on either hand, and on any finger except your thumb. To make sure the sensor works, remove any nail polish or artificial nail from the finger wearing the clip. Also be sure to place your finger all the way into the clip.
 - **Attach and secure the cable.** Plug the cable into the oximeter. To help keep the clip from falling off your finger, you can use tape or a Band-aid to secure the cable to your finger. (Don't wrap the tape too tight.)
 - **Turn on the oximeter.** Some oximeter units turn on automatically when you plug them in. Others have a power button you need to press. When the oximeter turns on, you should see a screen come on with the date, time, and other readings. Make a note of the time in the booklet.

What happens during the test?

During the test, you will try to sleep as usual. The oximeter will display and record your oxygen saturation (O₂ sat) and your heart rate. Be sure to leave the device on all night. Remember:

- **If you get up during the night**, take the oximeter with you or unplug the cable and leave the oximeter by the bed. If you unplug the cable, remember to reattach it when you get back into bed, and **make a note of the time**.
- **If the sensor bothers your finger**, switch it to another one. **Make a note of the time you do this**.
- **If you usually use oxygen and you feel short of breath**, put your oxygen back on and continue the test. **Make a note of the time you do this**.

What happens after the test?

- **Turn off the oximeter and remove the finger clip** when you wake up in the morning. **Make a note of the time you do this**.
- **Do not remove the batteries**. Removing the batteries will erase the results.
- **Return the equipment and your notes**. Follow your healthcare provider's instructions.
- **Follow up with your doctor** to get the results and to discuss next steps. You may need to have additional sleep testing to confirm a diagnosis of sleep apnea and to decide on treatment.

Talking with your healthcare providers about home oximetry

The table below lists the most common possible benefits, risks, and alternatives for home oximetry. Other benefits and risks may apply in your unique medical situation. Talking with your healthcare providers is the most important part of learning about the risks and benefits. If you have questions, be sure to ask.

Possible benefits	Risks and possible complications	Alternatives
Home oximetry: <ul style="list-style-type: none">• Helps assess your need for home oxygen based on different health conditions.• Can be a first step in screening for obstructive sleep apnea (OSA).• Offers the convenience of being at home.	Home oximetry is safe. The most common problems come from not using the equipment properly, which can cause poor test results.	Alternatives to home oximetry include home sleep studies and in-lab sleep studies (PSG). Sleep studies use sensors placed on your body to measure and record detailed information while you sleep. The information can be used to diagnose OSA or other problems.

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