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Pulse Oximetry



If you have a symptom of shortness of breath or a known lung or heart condition, your doctor may use a pulse oximeter. The pulse oximeter, or Pulse Ox, is an electronic device that measures the saturation of oxygen carried in your red blood cells. Pulse oximeters can be attached to your fingers, forehead, nose, foot, ears or toes. The device may then be reused or disposed of. If using this in a home setting, you should ask your healthcare provider before disposing of a pulse ox device, as it can be expensive and reusable.

The pulse oximeter, for example, a finger probe, uses a cold light source that shines a light through the fingertip, making the tip appear to be red. By analyzing the light from the light source that passes through the finger, the device is able to determine the percentage of oxygen in the red blood cell.

What to Expect?

You can expect a simple, quick and safe measure of the oxygen saturation level in your body. The probe will be positioned and within a few seconds, the oximeter will provide a readout of your heart rate and your oxygen saturation level, as in the picture above.

If you are wearing dark fingernail polish, long, artificial nails or if your fingers are not clean, the pulse oximeter may not work properly. There are no needles and no pain involved in oximetry measurement. Some hospitals also use disposable tape probes that wrap around your finger, nose or toe.

Understanding the Results

The pulse oximeter observes a rapid measurement of oxygen saturation level in your body without using needles or taking a blood sample. The measured amount shown on the screen reflects the saturation of your red blood cells with oxygen. This number gives your doctors and nurses an idea of what your treatment will be. The oxygen level may also help to determine if you need to receive [supplemental oxygen](#). This saturation number (a good number would be over 90-92%) differs from a value called the pO₂ (a good number would be over 60-65) which is measured by obtaining blood from an artery. Your doctor can clarify the significance of your value related to your particular situation.

What Are the Risks?

There are no known risks or dangers of using a pulse oximeter when the values are reviewed and monitored by a competent health professional.

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