
Breathing with Oxygen

To learn more about your baby's need for oxygen, you may need to learn what these words mean:

Retraction	When breathing is hard to do, the baby's chest appears to be sucked inward. Retractions are the sunken areas just below and in between the ribs.
Grunting	Your baby may make a grunting or crying sound when breathing out. This means your baby has to breathe hard to keep the lungs open.
Oxygen	Oxygen is a gas that our bodies need. It is found in the air we breathe. Our lungs move oxygen from the air into our blood, so our bodies can use it. The air around us, called room air, has 21% oxygen. Your baby may need up to 100% oxygen.
Carbon dioxide	This is a gas made by our bodies. Our lungs move carbon dioxide from the blood into the air through the lungs. Carbon dioxide leaves our bodies when we breathe out.
Blood gas test	Blood gases are blood tests that show how well oxygen and carbon dioxide are being exchanged or traded in the lungs. The results of these tests help the doctors and nurses decide how much oxygen your baby needs.
Oxygen saturation monitor	<p>This is a machine that shows how much oxygen is getting from the air in your baby's lungs, into your baby's blood. The monitor works by shining a red light through your baby's skin.</p> <p>This monitor is connected to your baby by a white cord going to your baby's feet or hands. The cord is held in place by a soft white cotton posy or tape.</p>
Meconium	Your baby's first stool or bowel movement.

What is oxygen therapy?

Oxygen therapy is giving a baby extra oxygen. Oxygen therapy is needed when there is a problem causing a lack of oxygen in the body.

The most common reasons that a baby has a lack of oxygen are:

- the baby is premature
- the baby's lungs are immature
- the baby's lungs are not formed properly
- the baby's lungs are collapsed
- the baby has an infection
- the birth was difficult
- fluid or meconium was breathed into the lungs before or at birth

How do I know that my baby needs more oxygen?

Some signs that your baby needs more oxygen are:

- grunting
- changes in skin colour, such as becoming dusky, dark or purple blue
- retractions
- rapid breathing
- apnea or long pauses in breathing

To decide if your baby needs oxygen therapy, doctors and nurses look for these signs and check the oxygen saturation monitor and blood gases.

How does my baby get more oxygen?

There is already 21% oxygen in the room air around your baby. Oxygen therapy can give your baby up to 100% oxygen.

Oxygen therapy can be given by one of these ways:

Through nasal prongs

Nasal prongs are tiny plastic tubes that are placed just inside your baby's nose. The prongs are taped in place on the baby's face. Oxygen gently flows through the tubes to the baby.

In an oxyhood

Oxygen can be concentrated around the baby's head by placing a plastic dome or hood over the baby's head. A mist of warm, humid oxygen is gently blown into the hood.

Through nasal CPAP

Nasal prongs that are large enough to fill both sides of the baby's nose are held in place with a special 'moustache' and tape. Oxygen and a small amount of pressure flow through the tubing to the baby.

By a ventilator

The ventilator is a machine that helps your baby breathe. The ventilator gently blows oxygen into your baby's lungs. The ventilator may do all or some of your baby's breathing.

How long will my baby need more oxygen?

Your baby will need extra oxygen until your baby has good colour, good oxygen saturation and normal blood gas results. Every baby is different and some will need oxygen for a longer time.

Things that affect how long a baby will need oxygen are:

- how premature the baby is
- how much lung damage the baby has
- how long the baby was on the ventilator
- how much oxygen the baby has needed

Sometimes babies need to go back into oxygen. This may mean the baby is sick and needs more oxygen to get better, or the baby was not ready to come out of oxygen yet.

The doctors and nurses will check your baby's breathing, oxygen saturation, colour, and blood gases to decide if your baby needs more oxygen.

Can I hold my baby during oxygen therapy?

If your baby is stable and can handle touching, you may be able to hold your baby. Talk with your baby's nurse to see how your baby is feeling.

If you have any questions about your baby's breathing or need for oxygen, please talk with your baby's nurse or doctor.