Oxygen Use: After surgery, in the hospital, and planning for home

What is oxygen?
Oxygen is a gas found in the air around us. Room air (the air we breathe every day) contains about 21% oxygen.

Why do I need oxygen after surgery?
Many patients need extra oxygen after surgery to help with healing. Some patients need oxygen longer than others. How long you need it will depend on your unique situation.

There are several common reasons you may need oxygen after surgery:
• Medicines given to you during and after surgery can affect your breathing.
• A condition called atelectasis [at-uh-LEK-tuh-sis] can make your airways and the air sacs in your lungs collapse or not expand properly.
• Pain after surgery may change how you breathe.
• Secretions (fluid) or mucus can block your airways.

How will I get extra oxygen?
Oxygen can be delivered to your lungs through a number of different devices that fit on your nose and mouth.

• A cannula is a narrow tube made from soft plastic. It has two small openings (prongs) that are put into your nostrils.

• A reservoir cannula can deliver higher concentrations of oxygen. It is only for people who cannot use a regular cannula or mask and are going home with oxygen.

• A non-rebreather mask also fits over your nose and mouth. A small bag, called an oxygen reservoir, is attached to the mask. This allows very high concentrations of oxygen to be delivered.

• A high-flow nebulizer is a device used when you need a lot of oxygen. It adds moisture to the oxygen, and also allows your healthcare team to see how much oxygen you use.
What can I do to breathe better and stop using oxygen sooner?

There are several things you can do after surgery to help improve your breathing and decrease the likelihood you will need oxygen when you go home:

• **Practice coughing and taking deep breaths several times a day.** Using a device called an incentive spirometer [spy-ROM-uh-tur] can help you monitor how deeply you are breathing. Your nurse or respiratory therapist will show you how to do this.

• **If you had abdominal (belly area) surgery and it hurts to breathe deeply, try holding a pillow tightly against your abdomen while you take deep breaths.** This may decrease the pain.

• **Walk as soon as possible after surgery.** Make sure your doctor or nurse says it is okay for you to walk beforehand, then get help, especially at first.

• **Sit upright as much as possible and spend time out of bed.** For example, move from the bed to a chair or wheelchair when you can.

What if I need oxygen at home?

Some patients need oxygen at home after surgery. Your doctor will prescribe oxygen for home use if you need it. Your healthcare team will work with you and your insurance provider to get the oxygen equipment you need, such as a portable oxygen tank that you can carry with you, or an oxygen concentrator.

Unfortunately, some insurance plans do not pay for home oxygen after surgery. If your medical condition does not qualify you for insurance coverage, there are self-pay options available for home oxygen. Your respiratory therapist or case manager will answer your questions about home oxygen and give you a cost estimate based on your oxygen needs.

What precautions should I take while I am using oxygen?

**Oxygen can explode and start fires.** Do not smoke while you are on supplemental oxygen or let anyone around you smoke. Do not use oxygen near flames or anything that could cause a spark, including candles, heaters or fireplaces. Keep oxygen equipment away from oil, grease, and petroleum-based products such as Vaseline. These could cause a fire.

Always store your oxygen tank upright and secured. It should be kept in a place where it won’t be knocked over. If it does fall over and the valve breaks off, the tank could shoot across the room and hurt someone.

When should I call my doctor?

If you think that you need more oxygen or no longer need oxygen, call your doctor’s office. **Do not stop using oxygen or adjust your oxygen equipment without talking to your healthcare team first.**