How to Use Your Incentive Spirometer (IS) 

Before Surgery

To better prepare you for your surgery, we are supplying you with an incentive spirometer (IS) to start using before your procedure. Your goal is to use this at least 30 times a day before your surgery. This information will help you learn how to use your IS.

About Your Incentive Spirometer (IS)

Your IS is a device that will expand your lungs by helping you to breathe more deeply and fully. The parts of your IS are labeled in Figure 1.

![Incentive Spirometer Diagram](image)

Figure 1. Incentive Spirometer

Use your IS before your surgery and do your deep breathing and coughing exercises. This will help keep your lungs active throughout your recovery and prevent complications such as pneumonia.
Setting Up Your Incentive Spirometer

The first time you use your IS, you will need to take the flexible tubing with the mouthpiece out of the bag. Stretch out the tubing and connect it to the outlet on the right side of the base (see Figure 1). The mouthpiece will be attached to the other end of the tubing.

Using Your Incentive Spirometer

When you are using your IS, make sure to breathe through your mouth. If you breathe through your nose, the IS will not work properly. You can plug your nose if you have trouble with this.

The goal is to use this incentive spirometer least 30 times throughout the day. Breathing in several times consecutively may leave you feeling dizzy. Stop, rest, and try again later.

To use your IS, follow the steps below. Sit upright in a chair or in bed and hold the device at eye level.

1. Close your lips tightly around the mouthpiece. Slowly breathe out (exhale) completely.
2. Breathe in (inhale) slowly through your mouth as deeply as you can. As you take the breath, you will see the piston rise inside the large column. While the piston rises, the indicator on the right should move upwards. It should stay in between the 2 arrows (see Figure 1).
3. Try to get the piston as high as you can while keeping the indicator between the arrows.
4. If the indicator does not stay between the arrows, you are breathing either too quickly or too slowly.
5. When you get the indicator as high as you can, hold your breath for 5-10 seconds, or as long as possible. While you’re holding your breath, the piston will slowly fall to the base of the spirometer.
6. Once the piston reaches the bottom of the spirometer, breathe out slowly through your mouth. Rest for a few seconds.
7. Repeat twice. Try to get the piston to the same level with each breath.
8. After each set of breaths, try to cough. Coughing will help loosen or clear any mucus in your lungs.
9. Put the marker at the level the piston reached on your IS. This will be your goal next time you use it.

Use your incentive spirometer every few hours. The goal is at least 30 times spread throughout the day. Do not use your IS more than 8-10 times per hour.

Deep Breathing Exercise

1. Sit upright.
2. Take a few slow breaths, then take a slow, deep breath in through your nose.
3. Hold your breath for 2-5 seconds.
4. Gently and slowly breathe out through your mouth making an “O” shape.
5. Repeat 10-15 times.

If you have any questions or concerns, contact The Joint and Spine Center at 443-849-6261.