

## Incentive Spirometry for Pediatric Patients

Deep breathing is important to your child's health and well-being. It expands the small air sacs of the lungs and helps keep the lungs and airways clear. Children take many deep breaths each hour, often without being aware of it. These deep breaths are routine and occur in the form of sighs and yawns.

At certain times, the normal breathing pattern can change. When a child is not active, on bedrest, or having pain after surgery, breathing tends to become shallow. We tend to avoid deep breaths to reduce pain. Full, deep breaths can help prevent pneumonia.

The nurse will explain the deep breathing and coughing exercises your child will need to do. The nurse will also show your child how to use an incentive spirometer, a device to help breathe deeply.

### Deep Breathing

- Place your child's hand on their belly.
- Have your child breathe in deeply and slowly through the nose. Then push the belly out while breathing in.
- Have your child hold a breath for 1-2 seconds.
- Ask your child to breathe out slowly and fully through the mouth.
- Repeat twice more.
- Have your child breathe in again, hold a breath, then cough (if told to do so) from deep in the lungs (not a shallow throat cough).
- Holding a pillow over the incision may help to decrease pain.
- Repeat the steps as instructed.

### How to Use an Incentive Spirometer

- With the unit in an upright position, have your child blow air out of the lungs (exhale).
- Place the lips tightly around the mouthpiece.
- Have your child take a deep breath (inhale) with enough air to raise the flow rate guide between the arrows.
- Have your child hold the deep breath.
- Your child should keep inhaling and keep the guide as high as they can for as long as they can.
- Have your child exhale and relax. After each deep breath, your child should take a moment to rest, relax, and breathe as normal. Then repeat the steps as directed.
- Cough after ten deep breaths.

