After deep inhalation, cough forcefully using the abdominal and other accessory respiratory muscles;

If you have an incision, you can provide support by placing your palms on either side of the incision during coughing;

For patients with abdominal incision, splint the abdomen with a rolled pillow held against it.

Deep breathing exercises

There are two types of deep breathing exercises,

- Diaphragmatic Breathing Exercise;
- Purse-lip breathing;

Diaphragmatic

Breathing can relax muscles, improve oxygen levels and provide a feeling of release from tension.

- Place one hand on the abdomen, the other on the chest;
- Inhale concentrating on pushing the abdominal hand outward while the chest hand remains still;
- Hold air in your lungs for five counts;
- Exhale slowly, while the abdomen hand moves inward and the chest hand remains still. Let all the air out slowly through your mouth;

Pursed-lip Breathing

- Help maintain open airways by maintaining positive pressure longer during exhalation;
- Inhale through nose with mouth closed;
- Exhale slowly through purse-lips, as though whistling or blowing out a candle, making exhalation twice as long as inhalation.

For more details, please contact

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This brochure provides information on Deep Breathing and Coughing Exercises. It is designed to respond to the questions most frequently asked by patients. This information should help you to have a better understanding of how to perform these exercises.
Why Should I Do These Exercises?

Deep breathing and coughing exercises facilitate the respiratory function by helping in removing secretion from the airway tract. Voluntary coughing in conjunction with deep breathing facilitates the movement and expectoration of secretion in the respiratory tract. Frequent deep breathing exercise automatically initiates the cough reflex.

How Are These Exercises Helpful?

- These exercises facilitate a wide exchange of gases.
- They maximise the amount of oxygen available to the cells.
- They prevent orthostatic pneumonia.
- They make you relaxed.
- They help you cope with pain.
- They help reduce the chances of chest complications after surgery.

Who Should Perform These Exercises?

- Patients on bedrest or those who have undergone any surgical procedure, for example abdominal or chest surgery.
- Patients prone to pulmonary problems.
- Patients susceptible to accumulating respiratory secretions.

How Frequently Should These Exercises Be Performed?

- Deep breathing should be performed every hour while awake.
- Patients who have had abdominal or chest surgery need to perform deep breathing at least three to four times daily. Each session should include a minimum of five deep breaths.
- Deep breathing exercise may be performed every hour, specially by patients who are prone to pulmonary problems.

How Should These Exercises Be Performed?

Voluntary Coughing:

- The coughing needs to be deep, reaching into the lungs and not merely the throat;
- Effective coughing is best achieved in the sitting position;
- Hold your breath for about three seconds.