

RESPIRATORY SELF HELP GUIDE

Most respiratory infections manifest in the following ways:

- microscopic collapse of the lungs air pockets (alveoli) and,
- air pockets filling up with secretions

Both prevents Oxygen from entering the blood stream

During an active lung infection, it is important to

- re-inflate collapsed air pockets ie. lung expansion, and
- shift secretions out of the air pockets ie. Airway clearance

Your lungs have the best potential to expand when you are in the upright position. Lying flat on your back in a bed prevents the air pockets on the back and in the bottom bases of your lungs from filling up with air. Therefore it is best to spend the day sitting up, moving about and if it is comfortable for you , to lie on your tummy for a bit with a pillow supporting your chest (the pillow should not reach the stomach, as it can inhibit movement of the diaphragm , an important breathing muscle)

Here are a few ways you can aid both lung expansion and airway clearance independently

EXERCISE:

Movement, or exercise of your large muscles ie. Lower limbs forces lung expansion to feed the need for oxygen. Regular walking during the day instead of lying will help the lungs re-inflate and move the secretions.

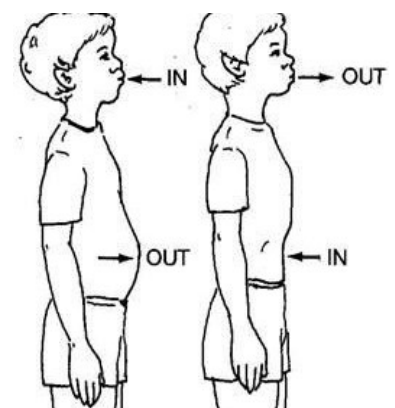
Exercises involving the trunk and upper limbs will assist in stretching and activating respiratory muscles and this will promote lung expansion

It is important to start these exercises by correcting your posture – push your shoulders back and down and lengthen your spine upwards as much as possible, use your arms to reach for the ceiling, trying to keep your shoulders down. Once you have reached your highest point you can drop your arms and start the exercise maintaining the length throughout. You may do these exercises in standing or sitting with your feet firmly planted on the floor.

Breathing Exercises:

Breath Stacking: take in 3 deep slow breaths, expiring all the air out after every breath. Feel and see your chest rise with every breath in. With the 4th breath in, hold it for 3 secs, and sniff in with a closed mouth and release-this is 1 set. If you managed to do this, attempt to follow it by another 3 sets adding 1 extra sniff with each set.

Active Cycle of Breathing: 3 x deep slow inspirations , each breath followed by blowing out an extended expiration, followed by 3 strong huffs and a cough (cough holding your hands or a towel creating a seal around your mouth-this may increase the pressure inside your lungs, forcing the air pockets open)



THORACIC MOBILITY EXERCISES

SIDE BENDING

AIM: to expand alternate lungs and stretch breathing muscles

ACTION:

- take a deep slow breath in through the nose whilst reaching down to the floor
- pause holding your breath, and then
- blow out through the mouth returning to the upright position repeat X 3. Switch sides

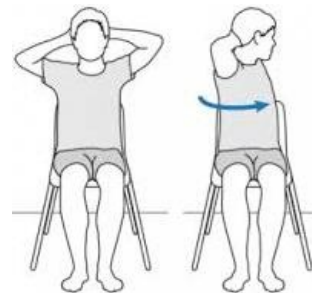


TWISTING

AIM: stretching the respiratory muscles

ACTION:

- with your arms up behind your head, breathe in slowly twisting to the side
 - blow out returning to centre repeat X 3
- Switch sides

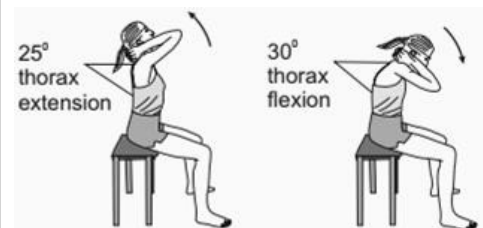


FORWARD LEANING

AIM: to expand, and squeeze dead space out of, the lungs

ACTION:

- with yours arms up, take a deep slow breath in extending your neck and upper back backwards
- blow out slowly bending your head, neck and upper chest forward. Repeat x 5



RESISTENCE BREATHING

AIM: to activate the breathing muscles (lateral costal muscles)

ACTION:

- place a belt (towel / sheet) around the lowest part of your rib cage (NOT ACROSS YOUR ABDOMEN)
- tighten the belt as you breathe in, trying to push the belt apart with your rib cage
- assist breathing out, with continued tightening of the belt.Repeat x 5

