



Misericordia Community Hospital  
Respiratory Therapy

## LUNG VOLUME RECRUITMENT WITH VOLUME AUGMENTATION BAG

### WHY?

- ❖ Improve chest movement, stretching.
- ❖ Prevent and clear phlegm from collecting in your lungs.
- ❖ Prevent small areas of the lung from collapsing.
- ❖ Improve cough.
- ❖ Increase speaking volume.

### WHEN?

- ❖ 3 to 5 maximum breaths equals one treatment, this is repeated four times per day.
- ❖ If phlegm is present, treatment may be performed frequently but not more often than every 10 minutes to avoid hyperventilation.
- ❖ It is best to perform before meals and at bedtime.
- ❖ This technique can be combined with an assisted cough twice a day or more if phlegm is present.

### WHAT?

- ❖ It is a modified resuscitation bag with a one way valve in line used to deliver air into your lungs beyond what you can achieve on your own.
- ❖ Once modified, the bag is **not to be used for resuscitation** in an emergency when you are unable to breathe on your own.
- ❖ If used for resuscitation you may damage your lungs.

### The volume augmentation bag consists of:

- ❖ Resuscitator bag (hand ventilator)
- ❖ 50cc corrugated tube
- ❖ One way valve closest to the bag
- ❖ One way valve with the latex valve removed closest to the patient (looks like a cage)
- ❖ Mouthpiece, mask or trach adapter
- ❖ Nose clip

## **HOW?**

1. Place nose clips on the nose and take a deep breath and hold it.
2. Place your lips tightly around the mouthpiece to prevent air from escaping.
3. As you or your assistant gently squeeze the bag, breathe in, making sure your lips are tight around the mouthpiece. Squeeze the bag 2 to 3 times or until your lungs are full. You may feel a stretch in your chest.
4. Once your lungs feel as full as possible, take the mouthpiece out of the mouth and gently exhale.
5. Repeat the above steps 3 to 5 times.
6. If you have secretions, instead of gently letting the air out, do one strong cough to clear any phlegm.

## **HELPFUL HINTS**

- ❖ If having difficulty, review your timing while squeezing the bag and accepting the air into your lungs, also check for possible leaks around the mouthpiece, mask or trach adaptor.
- ❖ If air continues to escape you may need different adaptor.
- ❖ With practice the nose clips may not be necessary.
- ❖ Can be combined with an assisted cough when your lungs are fully inflated to increase the strength of your cough.

## **REMEMBER THIS IS A LIFE TIME SKILL**

**Lung Volume Recruitment with Resuscitation Bag  
INSTRUCTION /VIDEO ONLINE GO TO:**

<http://www.irrd.ca/education/presentation.asp?refname=e2r4>