The answer is clear

A patient guide to CoughAssist
Why do we cough?

Coughing is a common occurrence that many people take for granted. The ability to cough is essential to life. Normally, the lining of the airways produces small amounts of mucus, which traps the dirt and bacteria. If allowed to accumulate, this can result in infection. Coughing is the body's way of removing mucus from the lungs, reducing the risk of infection.

A cough begins with a deep breath in. The glottis (the opening at the top of the voice box) closes, allowing the pressure to build up in the lungs. The respiratory muscles contract, and the glottis opens, forcing air back out of the lungs.

Muscles located in your rib cage, neck and abdomen play an important role during coughing. With many neuromuscular diseases, a loss of respiratory muscle strength results in a weakened ability to cough and an increased chance of respiratory infections.

Assisting your cough

If coughing becomes difficult, your physician may prescribe the use of manual and/or mechanical-assisted coughing techniques. A manual cough assist involves a caregiver applying firm and rapid pressure to the upper abdomen, forcing air out of the lungs. A respiratory therapist or other healthcare professional can provide training on this maneuver. CoughAssist, also known as a mechanical insufflation-exsufflation device, simulates a natural cough.

CoughAssist gradually delivers a large volume of air when you breathe in (positive pressure). Once the lungs have been expanded (similar to a normal deep breath), the device quickly reverses the flow to push secretions out (negative pressure). CoughAssist helps to make your cough stronger and more effective. And, CoughAssist helps keep your airways clear to reduce the chance of recurring respiratory infections. Users of CoughAssist report that it feels "easier to breathe" following treatment.
CoughAssist set-up

Whether you are an adult or a child, CoughAssist is a safe, noninvasive alternative to suctioning. It can be used with a mouthpiece, a mask or with an adapter to a tracheostomy tube.

**Manual/Auto control**
Allows you to choose whether you want to switch the pressures automatically or manually.

**Pressure gauge**
Reads the pressure during inhalation and exhalation.

**Inhale**
Determines how long the positive pressure will be blowing into the lungs.

**Exhale**
Determines how long the negative pressure will be forcing air out of the lungs.

**Pause**
Determines the time between inhalation and exhalation.

**Power**
Allows you to turn power on (I symbol) and turn power off (0 symbol).

**Inhale pressure**
Determines the amount of positive pressure that will be blowing into your lungs.

**Inhale flow**
Sets the amount of flow needed during inhalation. There are two settings: Full or Reduced.

**Circuit connection**
Pressure
Determines the amount of negative pressure that will pull air out of your lungs.
Getting started with CoughAssist

- Place the CoughAssist device on a clean, non-carpeted flat surface.
- Plug the power cord into a grounded outlet.
- Attach the filter and tubing to the front of the device.
- Press the power button to turn on the device.

Exhale pressure adjustment

Start with setting or checking your exhale pressure. Always use the settings that your physician has prescribed.

- Turn the Manual/Auto control to the Manual position.
- Block the end of the tubing with a gloved hand or a gauze pad.
- Push the Manual Lever to Exhale and hold while adjusting the pressure.
- While watching the Pressure Gauge, turn the Pressure Adjustment knob clockwise to increase the pressure and counterclockwise to decrease the pressure.

Inhale pressure adjustment

- Turn the Manual/Auto control to the Manual position.
- Block the end of the tubing with a gloved hand or a gauze pad.
- Push the Manual Lever to Inhale and hold while adjusting the pressure.
- While watching the Pressure Gauge, turn the Inhale Pressure Control on the right side of the unit clockwise to increase the pressure and counterclockwise to decrease the pressure.
- Inspiratory pressures cannot be set higher than exhaled pressures.

Settings confirmation

Once the Exhale and Inhale pressures are set, slide the Manual Lever between Inhale and Exhale several times to confirm that the pressures are accurately adjusted. Release the Manual Lever and observe that the Pressure Gauge returns to zero.
Time adjustment

Each cough cycle consists of one inhale, one exhale and one pause phase. The duration of each phase is set with the three knobs on the left side of the machine.

- Inhale time: 2 to 3 seconds for adults
  0.5 to 1.5 seconds for children

- Exhale time: 2 to 3 seconds for adults
  1 second or less for children

Adjusting flow

If you feel there is too much or too little air flow coming from the machine when you breathe in, you can adjust the inhale flow by adjusting the Inhale Flow control by turning it to the left for “Full” inhale flow or to the right for “Reduced” inhale flow.

CoughAssist treatment

Always follow the treatment plan that your physician prescribed. The following is an example of a standard plan.

- Inhal + Exhale + Pause = Cough Cycle
- 4 to 6 Cycles = Sequence
- 20 to 30 Seconds = Rest Period
- 4 to 6 Sequences = Full Treatment

Important: Always check the time and pressure settings before the start of each treatment.
You may have a manual version of the CoughAssist device

There are two different models of the CoughAssist, automatic and manual. If you have received the manual version pictured here, then your unit can only be cycled between Inhale and Exhale by sliding the control lever from side to side. There is no need to set inspiratory, expiratory or pause times. Otherwise, both units increase the effectiveness of your cough and the ability to clear secretions from your lungs.

Manual-assisted coughing

Your physician may prescribe a manual cough assist technique to be used along with the CoughAssist device. Use of both techniques has been clinically proven to increase peak cough flows, producing a stronger cough. A respiratory therapist or other clinician can provide training on this method.

My prescription information
Cleaning and maintenance

- The external surface of the CoughAssist device can be wiped clean with a damp cloth.
- After each use, the breathing hose and patient interface should be washed thoroughly with mild liquid detergent and water. The parts need to be completely dried before each use.
- Replace the mask if it becomes torn or if you can no longer maintain a good seal.
- The bacterial filter should not be washed and can be left in place as long as it is not blocked by sputum or trapped moisture.
- If the Pressure Gauge does not return to zero when the device is turned off, call your provider or refer to the operator manual for directions.

Safety precautions

- Check Time and Pressure settings before each treatment.
- Confirm that the air intake ports are not blocked.
- Keep CoughAssist away from the curtains, blankets or any heat-generating device.
- Never try to repair your CoughAssist yourself.
- Never immerse your CoughAssist in water.
- Always use a grounded outlet.
- Only use the CoughAssist with proper training.

Ordering information

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<thead>
<tr>
<th>Description</th>
<th>Item no.</th>
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<tbody>
<tr>
<td>Adult large circuit, includes: mask, 3 ft. flex tubing, bacteria filter and adapter</td>
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<tr>
<td>Adult medium circuit, includes: mask, 3 ft. flex tubing, bacteria filter and adapter</td>
<td>325-9234</td>
</tr>
<tr>
<td>Adult small circuit, includes: mask, 3 ft. flex tubing, bacteria filter and adapter</td>
<td>325-9235</td>
</tr>
<tr>
<td>Toddler circuit, includes: mask, 3 ft. flex tubing, bacteria filter and adapter</td>
<td>325-9236</td>
</tr>
<tr>
<td>Infant circuit, includes: mask, 3 ft. flex tubing, bacteria filter and adapter</td>
<td>325-9237</td>
</tr>
<tr>
<td>Trach circuit, includes: 3 ft. flex tubing, bacteria filter and adapter</td>
<td>325-9238</td>
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<tr>
<td>Mouthpiece circuit, includes: mouthpiece, 3 ft. flex tubing and adapter</td>
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<td>Adult mask only</td>
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<td>Adult small mask only</td>
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<td>Toddler mask only</td>
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<tr>
<td>Disposable filter (1 each)</td>
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<tr>
<td>Flex tube 9 in. (1 each)</td>
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For more information about CoughAssist, visit http://coughassist.respironics.com

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CoughAssist is a prescription device that is restricted to sale by or on the order of a physician.

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