

Cough Assist Machine Using the T-70

Cough Assist Machine copies a natural cough. It slowly sends a large volume of air to the lungs, like a normal deep breath, when you breathe in (positive pressure). Then it will quickly reverse the flow of air and mucus (negative pressure). Cough Assist Machine makes your cough more effective. Your airways will stay clear to help reduce the chance of infection.

Getting Started

We will help set up the machine and teach you to make changes. You will start with lower pressures to become comfortable with the therapy. The lower pressures may not work well.

A cough machine breath is made up of an inhale time, an exhale time, and a pause time. Often, 4 sets of 5 breaths are a common treatment. This may change depending on how you are clearing your mucus. Between each set you may rest for 20-30 seconds or more. This resting time will allow you to remove any mucus in the mouth and nose.

Machine Set Up

- Wash your hands with soap and warm water. You can also use anti-bacterial hand gel.
- Plug the device into a power source or use the battery.
- Connect the filter and tubing to the machine.
- Connect the mask, mouthpiece, or trach adapter to the tube.

How to Use

- Press the start/stop button to turn on and press **therapy**.

- As you inhale, the machine will help by giving a big breath of air. This breath will end at the time set on your machine.
- As you exhale, the machine will help by sucking the air and mucus out. This will make the cough much stronger and will help to remove mucus.
- Keep taking a set of 4-6 breaths from the cough machine and then rest for 20-30 seconds and cough out any mucus.
- You may need nose clips when you use a mouthpiece.
- A well-fitting, soft seal mask is important, so it won't leak. Some patients may need to support their head from behind during breaths to help keep their airway open. They may need firm pressure for this to work well.
- If you have a cuffed tracheostomy tube, inflate the cuff during the treatment.

Changing Pressures

- Turn machine on and press **standby**.
- The T-70 has three (3) different prescription settings:
 - Left button: Choose display options or do what is shown on the screen.
 - Up/down button: Look through the display menu.
 - Right button: Select display options or do what is shown on the screen.
- Press right (standby) button to end therapy.

If you need to lower pressures at any time, you may change the pressure with help from your doctor or nurse.

Cleaning

The mouthpiece must be cleaned after every treatment. To clean the mouthpiece, mask, or trach adapter:

- Wash your hands.
- Take off the mouthpiece and wash in dish soap (Ivory®, Joy®, etc.) and hot water. **Do not** wash with dishes.
- Rinse with hot tap water.
- Air dry on a clean towel until your next treatment.
- The bacteria filter on the side of the machine cannot be washed. It should be replaced monthly or when blocked with mucus or trapped moisture.
- With normal use, the small square air filter in the back of the machine should be cleaned at least once every 2 weeks and replaced every 6 months.
- Unplug device and wipe outside surface using a clean cloth dampened with water and mild detergent, or 70% isopropyl alcohol.
- Replace the mask if it becomes torn or if you can no longer keep a good seal.

Controls on the T-70 Cough Assist Machine

- Power button.
- Inhalation pressure: Amount of pressure that will be given.
- Exhalation pressure: Amount of pressure that will be sucked out.
- Inhale time/exhale time: Amount of time for breath in and breath out.
- Manual: You must manually cycle breath to breath.
- Pause Time: Amount of time between the inhale and exhale.
- Flow Mode, usually set on high: T-70 will cycle from the inhale to exhale on its own.
- Cough-Trak: The patient makes a negative pressure to start a breath. This is used to help match the timing of the patient's inhale to better handle the therapy.
- External battery: The detachable battery charges when the battery in the machine is plugged in and in the Standby or OFF mode. You can get a battery charger if several batteries need to be charged.
- Oscillation: Helps move mucus with each breath from the cough machine.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 9/2022 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7745

Preset #1:

Mode: Auto, Manual

Cough trak: On, Off

Max pressure: _____ cmH20

Inhale Flow: High

Inhale time: _____ seconds

Max negative pressure: _____ cmH20

Exhale time: _____ seconds

Pause time: _____ seconds

Oscillation: On/Off

Frequency: _____

Amplitude: _____

Preset #2:

Mode: Auto, Manual

Cough trak: On, Off

Max pressure: _____ cmH20

Inhale Flow: High

Inhale time: _____ seconds

Max negative pressure: _____ cmH20

Exhale time: _____ seconds

Pause time: _____ seconds

Oscillation: On/Off

Frequency: _____

Amplitude: _____

Preset #3:

Mode: Auto, Manual

Cough trak: On, Off

Max pressure: _____ cmH20

Inhale Flow: High

Inhale time: _____ seconds

Max negative pressure: _____ cmH20

Exhale time: _____ seconds

Pause time: _____ seconds

Oscillation: On/Off

Frequency: _____

Amplitude: _____