

Cough assist T70 for the Tracheostomy Child

with or without a ventilator



Cough assist T70

What is a Cough assist device?

The Cough assist T70 device removes mucus (secretions) from your child's lungs through the use of mechanically applied pressure. The machine applies a positive pressure to the airway, then rapidly shifts to a negative pressure. The rapid drop in pressure forces air from the lungs, imitating a natural cough.

How do you connect the device to the trach?

The Cough assist can be attached directly to the tracheostomy tube with a trach elbow adapter (A) or to an inline suction catheter (B).



A. Tracheostomy tube with trach elbow adapter



B. Tracheostomy tube with in-line suction catheter

Always watch to see that your child is tolerating the treatment and getting good chest rise.

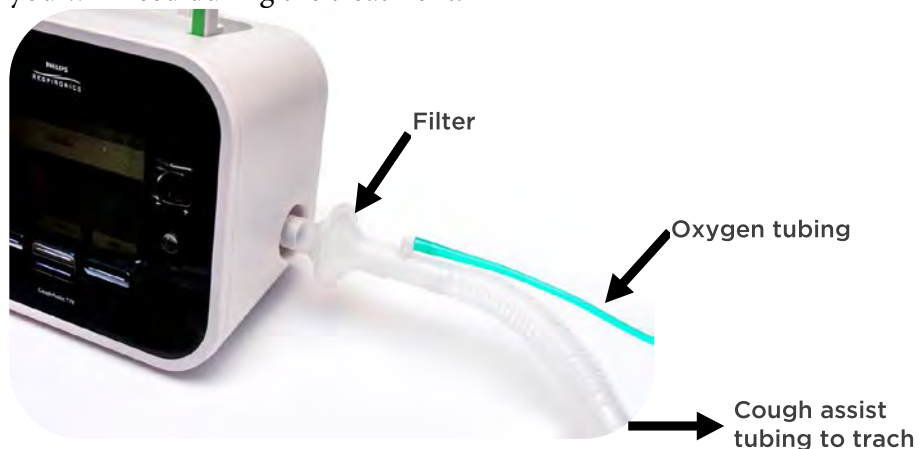
How to do a top suction

Using an inline suction allows for easy removal of secretions from the tracheostomy tube. When using an inline suction catheter only suction at the top of the trach during the cough assist treatment. See photo below.



How to add oxygen to the cough assist

Oxygen can be added to the cough assist tubing in between the filter and the tubing. Check your child's cough assist order to see what oxygen liter flow you will need during the treatment.



T For child with trach only:

Before doing treatment, give blow-by O₂ with resuscitator bag or increase the oxygen on the mist collar.

V For child on a ventilator:

Increase the oxygen setting before the cough assist treatment as directed.

Steps to using Cough assist

Get your child ready:

1. Gather suctioning supplies.
2. Place your child in an upright sitting position as tolerated.
3. If your child has a cuffed tracheostomy tube, inflate the cuff during the cough assist treatment.

Start the treatment:

1. **Turn on the cough assist** and check the settings and pressures. Turn on the oxygen to the cough assist device.

V **For child on a ventilator:** Put 3 to 4 drops of normal saline directly into the trach. Disconnect the ventilator circuit from the elbow of the inline suction at full inspiration (when lungs are full of air) and set aside in easy reach. Put 3 to 4 drops of normal saline directly into the trach.

Connect the cough assist tubing to the to the elbow of the inline suction and immediately start the treatment by pressing Therapy. The cough assist device will cycle automatically from inhalation (positive, pushing air in) to exhalation (negative, sucking air out). At the end of exhalation the machine will pause before the next breath.

2. Suction

T **Simple Suction:** If your child needs to be suctioned during the treatment, disconnect the cough assist tubing at the end of exhalation and suction as needed. Allow your child time to catch their breath and then resume the treatment if needed. If your child requires a simple catheter, use support with resuscitation bag and with O₂ between cough assist cycles.

V **Inline suction:** Suction just at the top of the tracheostomy tube if you see secretions during the cough assist treatment.

3. After 5 in/out breath cycles on the cough assist:

- Switch the cough assist device to standby.
- Disconnect the cough assist tubing from the trach.

T **For child with trach only:** Suction the trach and allow your child to resume normal breathing. Place your child back on the heated mist collar or current humidification device.

V **For child on a ventilator:** Place your child back on the ventilator. Suction the trach with the inline catheter and allow child to resume normal breathing.

4. Repeat the steps above 3 to 5 more times as needed to clear secretions. Do not keep your child connected to the cough assist device longer than the prescribed amount of time.

5. After complete treatment:

- Turn off the O₂ source to the cough assist.
- Return the oxygen setting back to the normal setting on the ventilator or mist collar.
- Discard used suction supplies. Turn off the Cough assist.

Information about cough assist settings

Settings

The cough assist T70 has the option to add up to 3 different settings for your child's needs. This will be on your home orders. To change the setting, press settings on the front and select Preset 1, 2 or 3.

Cough Trak

Cough Trak – If your child can easily trigger breaths on the cough assist, the Cough Trak setting will synchronize the breaths from the cough assist to your child as they take a breath.



Full cough assist set up.

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To Learn More

- Respiratory Care
206-987-2258
- Ask your child's
healthcare provider
- www.seattlechildrens.org

Free Interpreter Services

- In the hospital, ask
your child's nurse.
- From outside the
hospital, call the
toll-free Family
Interpreting Line
1-866-583-1527. Tell
the interpreter the
name or extension
you need.

Cough assist settings

(to be filled out by your healthcare providers and programmed into
your child's device)

Mode _____

Cough Trak _____

Flow _____

Inspiratory
pressure _____

Expiratory
pressure _____

Inspiratory
time _____

Expiratory
time _____

Pause _____

Oscillations _____

Oxygen _____ L/M (liters per minute flow rate)

Seattle Children's offers interpreter services for Deaf, hard of hearing or non-English speaking patients, family members and legal representatives free of charge. Seattle Children's will make this information available in alternate formats upon request. Call the Family Resource Center at 206-987-2201.

This handout has been reviewed by clinical staff at Seattle Children's. However, your child's needs are unique. Before you act or rely upon this information, please talk with your child's healthcare provider.

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