

Home aerosol treatment with a tracheostomy (trach)

A nurse or respiratory therapist will show you how to prepare and give aerosol treatments before your child goes home. Talk with the doctor about how often to give them and how to dilute medicines if needed.

What is an aerosol treatment?

An aerosol treatment:

- Helps your child breathe better.
- Delivers the medicine straight to your child's lungs.
- Is sometimes called a breathing treatment.

Your child breathes in a fine mist of medicine from a small cup called a nebulizer.

- A tube connects the cup to a machine, and the machine turns the medicine into a mist.
- This is the medicine your child breathes in during treatment.

Your child's care team will work with a home health company to help make sure you have the right supplies at home.

What goes in the nebulizer?

The doctor will prescribe aerosol medicine for the nebulizer. Aerosol medicines work in different ways. Your child may need more than one.

- Medicines like albuterol and Xopenex (levalbuterol) help open the airways.
- Medicine like Pulmicort (budesonide) decreases swelling and irritation in the lungs.
- Medicine like Tobramycin inhaled antibiotics for an infection in the lungs.
- Medicine like 3% hypertonic saline helps with thinning and loosening mucus in the lungs.

You may need to add a small amount of saline (salt water) to some medicines. You can buy saline at a pharmacy or grocery store.

What can I expect with an aerosol treatment?

- Most aerosol treatments last 10 to 20 minutes. This depends on the amount of medicine in the nebulizer (cup).
- It is normal for your child to cough during and after the treatment. Coughing helps clear their lungs.

How do I give an aerosol treatment with a trach?

There are 2 ways to give an aerosol treatment with a trach. Talk with the care team about which way is best for your child.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

Home aerosol treatment with a tracheostomy (trach), continued

Using a trach collar

1. Your child can sit in an upright position, on your lap, their bed or a chair.
2. Prepare medicine and supplies as advised by the care team.
3. Place the trach collar around your child's neck, and attach the nebulizer.
4. Start the treatment.
5. Remove the trach collar with nebulizer after the treatment is complete.



Using an Optiflow interface

1. Your child can sit in an upright position, on your lap, their bed or a chair.
2. Prepare medicine and supplies as advised by the care team.
3. Attach the Optiflow interface to the trach.
4. Attach the other end of the Optiflow interface to the nebulizer.
5. Start the treatment.
6. Remove Optiflow interface from the trach after the treatment is complete.



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Home aerosol treatment with a tracheostomy (trach), continued

What if my child is on a ventilator (vent)?

1. Have your child in an upright position.
2. Prepare medicine and supplies as advised by the care team.
3. Using an adaptor called a T-piece:
 - Connect the nebulizer to the bottom of the “T”.
 - Connect one side of the “T” to the right-sized adaptor to the trach.
 - Connect the other side of the “T” in line with the exhalation valve on the vent circuit.
4. Start the treatment.
5. After the treatment is complete, remove the T-piece and re-connect the vent to trach as usual.



When to consider changing the trach

Secretions may mobilize, or move, as a result of aerosol treatments. This may result in thick secretions lodging in the trach tube, or even plugging. Be ready to change the trach at all times.

When should I call the doctor?

Call the doctor if your child has:

- Increased oxygen requirement.
- Increased work of breathing.
- An unusual amount of secretions from the tracheostomy.

Also call if you have any questions or concerns about how your child looks or feels.

Call 911 **right away** if your child:

- Has blue or dark purple nails, lips or gums.
- Stops breathing for more than 10 seconds.
- Has any breathing problem that needs care **right away**.
- Needs aerosol treatments more often than prescribed.

How do I care for supplies?

Follow the manufacturer’s instructions for how to clean and when to replace your trach collar, Optiflow interface, nebulizer and nebulizer compressor.

This teaching sheet contains general information only. Talk with your child’s doctor or a member of your child’s healthcare team about specific care of your child.

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