



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.™

Helping Hand™

Health Education for Patients and Families

Tracheostomy Care With an Air-filled Cuff

There are several kinds of tracheostomy (tray ke OS toe me) “trach” tubes. The type of trach tube your child has depends on the reason he needs the trach.

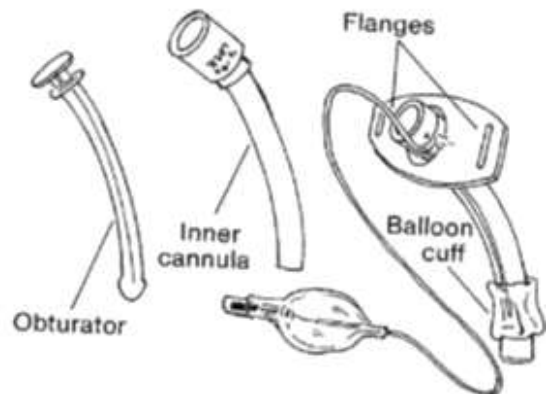
A cuffed trach tube (picture 1) has a balloon cuff around the lower end of the trach tube. It is often used for children who need to use a ventilator (breathing machine) or BiPAP machine. When the balloon is filled, air will not leak around the trach tube. This is important so your child gets the full benefit from the breathing device.

Supplies

- Tracheostomy tube
- 10 mL syringe
- Water-based lubricant

How to inflate cuff

1. Measure 5 to 10 mL of air into syringe to inflate cuff.
2. If using a neonatal or pediatric trach, draw 5 mL air into syringe. If using an adult trach, draw 10 mL air into syringe.
3. Attach syringe to outside balloon.
4. Inject air into the outside balloon until the balloon is firm but soft



Picture 1 A cuffed trach tube has a balloon that is filled after the tube is put into the child's trachea.

How to deflate cuff

- Attach syringe to outside balloon.
- Withdraw the air completely until the balloon is flat.

When to inflate and deflate the cuff

Talk to your child's doctor about when to inflate and deflate the cuff of the tracheostomy tube. Usually the cuff is inflated so air does not leak around the trach tube. The cuff is usually filled when your child is on a breathing machine (ventilator) or other positive pressure device, such as a CPAP or BiPAP machine. This helps your child get the full benefit from the breathing device.

However, an air-filled cuff can cause pressure on the wall of the trachea (windpipe) and cause damage if the cuff is not flattened regularly. Stay with your child and deflate the cuff every 8 hours, 15 to 20 minutes each time. If your child cannot tolerate having the cuff deflated, talk to your healthcare provider.

When your child is off the ventilator, deflate the cuff.

How to change a trach with a cuff

1. Wash hands, gather supplies.
2. Fill the syringe with the correct amount of air (5 mL child, 10 mL adult).
3. Attach syringe to new tracheostomy tube.
4. Inspect new trach tube for leaks while pushing air into balloon.
5. If cuff does not leak, remove the air from it completely.
6. Put obturator into trach tube.
7. Lubricate the balloon with a water-based lubricant.
8. Insert the new trach tube. Remove obturator.
9. Connect the ventilator tubing.
10. Reattach the syringe to the balloon.
11. Fill the cuff with air so it is soft, not firm.
12. Remove the syringe.
13. Secure the trach ties.