

Mucus plugs are dried or thick secretions in the airway. This occurs when there isn't enough moisture in the airway to keep secretions thin and pliant. Ordinarily, we breathe moisture into our lungs through our nose, and this keeps our secretions thin enough that we can easily cough them up.

People with tracheotomy tubes, however, breathe through their tracheotomy tube and their air does not pass through the nose and become moisturized. Because of this, people with a "trach" wear an artificial nose or they use a ventilator, which has its own humidifier to produce moisture for the lungs. Unfortunately, portable ventilators do not have a humidifier. While your child is on the portable ventilator their secretions can become drier and/or thicker than normal. This can lead to a trach "plug".

The danger of a trach plug is that it can block your child's air supply to his or her lungs, which can interfere with your child's ability to breathe.

## What signs indicate my child may have a trach plug?

- Persistent dry, nonproductive cough
- Child is irritable or fussy
- Area around child's lips is blue or gray
- Child is working harder than normal to breathe
- High pressure alarms on the ventilator

## What should I do if I suspect my child has a trach plug?

1. Suction child, using a lot of saline to help loosen secretions. Use resuscitation bag after inserting saline to help push the saline into the lungs.

At the same time do chest and back percussion to help loosen any secretions.

- 2. If your child continues to appear in distress, change the trach tube.
- 3. Continue inserting saline, bagging and suctioning and percussion until plug is removed.

## Important tips while your child is on the portable ventilator:

- 1. Carry a large supply of saline squirts, suction catheters and a charged suction machine with you whenever you travel away from home.
- 2. Instill saline into child's trach tube before you leave the house and every 30 minutes they are off the humidified ventilator. Do not suction this saline out. Let it sit in the airway for moisture.
- 3. Always have a spare trach and another one size smaller with you at all times.
- 4. If you have clinic or other appointment that takes several hours including the car ride to and from appointment do the following:
  - a. suction well before you leave home.
  - b. change your child's trach tube before you leave the appointment and head for home.
- 5. Always have a second person in the car when traveling in case of emergency.

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> Pediatric Home Ventilator Program Mucus Plug Prevention Plan