



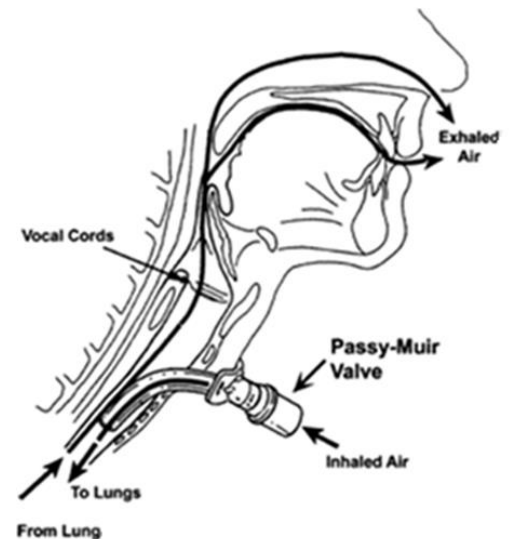
Passy-Muir Speaking Valve for a Tracheostomy Tube

The Passy-Muir speaking valve is a small device that attaches to your child's tracheostomy (trach) tube. It allows your child to make sounds and use speech.

A speaking valve allows your child to breathe in through his or her trach tube. After he inhales, the speaking valve closes. Air is breathed out (exhaled) up through the vocal cords, then through the mouth and nose. This allows your child to produce sound (Picture 1).

A child who needs to be on a ventilator may use a speaking valve. Talk to your child's healthcare provider to find out if he is able to use a speaking valve while on the ventilator. Ventilator settings may need to be adjusted so that your child can use a speaking valve.

Your child needs to be assessed to see if he or she is able and ready to use a speaking valve.



Picture 1 Inhaled air is exhaled through the vocal cords, mouth and nose to allow sound.

Evaluation for PMV use

At Nationwide Children's Hospital, an advanced practice Nurse (APN) tests your child to see if he or she has enough airflow around the trach tube to safely use a speaking valve. This test will be done either while your child is in the hospital or at an outpatient clinic visit.

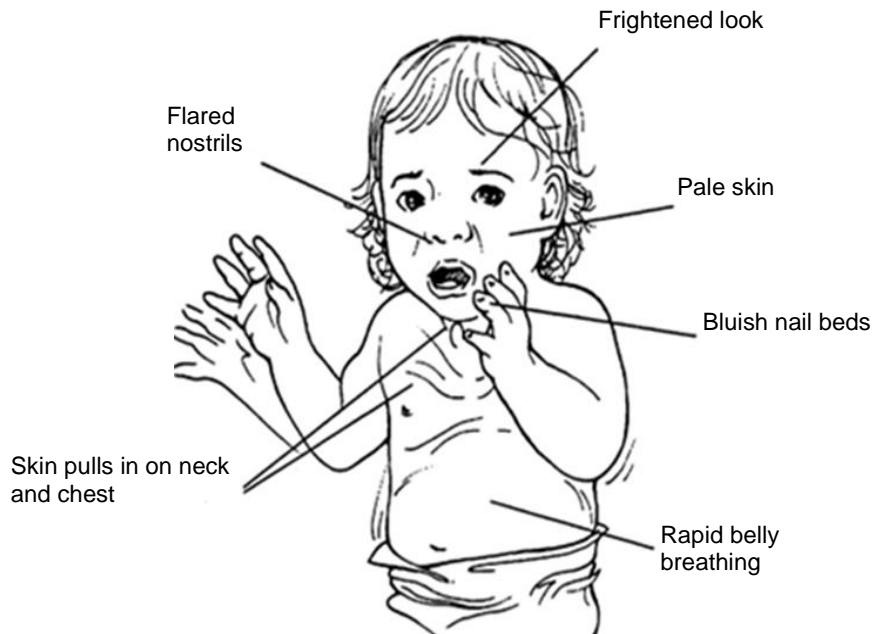
If your child is in the hospital during the evaluation, a speech therapist or respiratory therapist may also see him. When your child uses the speaking valve for the first time, the APN and speech therapist will observe him for signs of difficult breathing. If your child can safely use the PMV, the speech therapist will closely observe his use of the device for 3 to 5 days while he is in the hospital. As your child uses the PMV successfully, his time using it will be increased.

If your child receives the PMV during a clinic visit, the APN will observe him for signs of difficult breathing. If he does well, you will be taught how to use the PMV. It is important that all caregivers understand the risks and benefits before the child uses the speaking valve. You will be taught what problems to watch for when he wears the speaking valve at home.

Wearing a speaking valve

The speaking valve may be placed only on an uncuffed trach tube, or a cuffed trach tube with a completely deflated cuff. Your child may wear the speaking valve only while awake. An adult needs to observe him for difficult breathing or signs of distress and remove the valve if needed.

What to watch for when your child is wearing the PMV



Picture 2 Some signs of respiratory distress.

Watch for signs of increased effort in breathing such as:

- faster rate of breathing
- skin pulling around neck or ribs
- more pale skin color than normal, especially bluish color around the mouth

Your child's healthcare provider may provide more specific symptoms to watch for if your child is on an apnea monitor or pulse oximeter.

If it is harder than usual for your child to breathe, or there are other signs of respiratory distress (Picture 2), remove the speaking valve immediately.

A child using a speaking valve should be medically stable. Your child may need to stop using the speaking valve while he is sick.

Restart its use after he returns to normal health.

Secretions and suctioning

Suction your child as needed. He may need suctioning before putting on the PMV. Some children may need periodic suctioning while using the PMV. A benefit of the speaking valve is that it encourages the patient to clear his own secretions. This reduces the need for suctioning. Ask your child's care provider about suctioning recommendations for your child.

Cleaning the PMV

- Swish the PMV in a mild, fragrance-free soap.
- Use warm, not hot water.
- Rinse the valve completely with water.
- Allow the valve to air dry before placing in the storage container.
- Do not use heat to dry it.
- Do not use any harsh soaps, peroxide, bleach, vinegar, alcohol, brushes or swabs on the device.

The PMV usually lasts several months. If it becomes sticky, noisy, or it vibrates, a new one may be needed.

Benefits of a PMV

A PMV may:

- Improve your child's speech and tone
- Improve your child's swallowing
- Improve secretion management
- Improve sense of smell and taste
- Help with infection control
- Assist with ventilator weaning
- Assist weaning from a trach tube (decannulation)
- Improve quality of life
- Improve overall development

Enjoy your time with your child while he is using the speaking valve.

Talk to your child's speech therapist or healthcare provider if you have any questions.