Passy Muir Troubleshooting and FAQ's

How do you clean the Passy-Muir Valve?

Note: The following cleaning instructions also apply to the PMA 2000 Oxygen Adapter and the PMV® Secure-It®.

1. Swish Valve daily in soapy, warm water (not hot water).
2. Rinse Valve very thoroughly in warm running water.
3. Allow Valve to air dry thoroughly before placing in storage container. Do not apply heat to dry Valve.
4. DO NOT use hot water, peroxide, bleach, vinegar, alcohol, brushes or cotton swabs to clean Valve.

Troubleshooting

When the Valve was put on the tracheostomy tube, it seemed to be harder to breathe. What do I do?

The Passy-Muir Valves open very easily. PMV007 (Aqua Color™) open with very little resistance on inhalation. The PMV2000 (clear) and PMV2001 (Purple Color™) open with an even lower resistance on inhalation. If it appears that you are having trouble breathing with the Valve in place, remove the Valve immediately. The following are several things you should consider trying before putting the Valve on again:

- Check your position and the position of the tracheostomy tube. If possible, sit upright in a chair or bed as this is generally most comfortable and will allow for full movement of your diaphragm and other respiratory muscles. It should also allow for air to pass easily around the tracheostomy tube and out of your mouth and nose. A small child may be most comfortable on a caregiver's lap. Also, make sure that the tracheostomy tube is not sitting crooked at the neck as this can mean that it is crooked in the airway too. If the tracheostomy tube is not sitting straight in the airway, it can block the air being exhaled as it tries to pass from the lungs up around the tracheostomy tube and out of the nose and mouth.

- Check to be sure that the tracheostomy tube cuff is completely deflated. If you have a cuffed tracheostomy tube, there may still be some air left in the cuff which can block airflow around the tracheostomy tube decreasing your ability to fully exhale. If you notice that air seems to slowly leak out of the cuff of your tracheostomy tube, it may mean that the cuff does not stay completely deflated either. You should have your tube evaluated and replaced as soon as possible by your doctor and/or healthcare professional.
- Suction airway through the tracheostomy tube and also the mouth again if needed. Secretions may have built up in the airway since you were suctioned. If excess secretions are not removed, breathing can become more difficult and make you uncomfortable while the Valve is worn.
- Check amount and type of secretions coming from the tracheostomy tube. A weak cough requiring frequent suctioning, or an infection that is causing secretions to be thicker than usual needs to be considered when using the Valve. These conditions should not stop you from trying the Valve, but you may want to wait to use the Valve until the secretions become thinner and more manageable. Consult your doctor and/or healthcare professional if your secretions have become thicker or have changed in any way.
- Anxiety. Feeling a certain amount of nervousness about doing anything different involving your tracheostomy tube is normal. Understanding what is happening when using the Valve will help to make you feel more comfortable while using the Valve. Reading the Valve Instruction Booklet, watching the video tape (available free of charge from Passy-Muir) and talking to your doctor and/or healthcare professionals will help you gain a better understanding of how the Valve works and will provide you with more confidence. You may also call our Clinical Specialists for assistance.

If you are still having problems, please see the next question for more information.

All of the steps in the above question have been checked, the Valve was put back on the tracheostomy tube and it was still harder to breathe. What could be causing this?

- If you are not able to tolerate the Valve you may need to be evaluated by your doctor or a specialist such as an Ear, Nose and Throat Doctor (ENT or Otolaryngologist) or Lung Doctor (Pulmonologist). The doctor will look for a narrowing or softening of the walls of the trachea (windpipe) that might make it collapse, a build-up of scar tissue, or problems with the vocal cords. Any of these things can make it difficult or impossible to use the Valve until the problem is corrected.
- Sometimes a tracheostomy tube is too big to allow the air to travel around the tube and into the upper airway through the vocal cords and out the mouth and nose to allow sufficient exhalation. The doctor may need to put in a smaller tracheostomy tube or a tracheostomy tube without a cuff in order for you to be able to use the Valve.
- Tracheostomy tube changes sometimes create swelling of the surrounding tissues in your airway. When you have your tracheostomy tube changed, you might find it helpful to wait a day or so before wearing the Valve again to allow any swelling to go down.

When the Valve is on the tracheostomy tube, I seem to start coughing and sometimes the Valve will pop right off of my tracheostomy tube. What should I do?

Valve users have reported that they will cough when wearing the Valve, especially when they first put the Valve on their tracheostomy tube. This is because the air being exhaled is going through the throat instead of out of the tracheostomy tube and they are feeling secretions that are in the throat. Sometimes they will cough hard enough that the Valve will pop off of the tracheostomy tube. When this happens, check to see if suctioning through the tracheostomy tube and/or mouth is needed. After suctioning, place the Valve back on the tracheostomy tube. Be sure to put the Valve on the tracheostomy tube using a firm quarter turn, but do not force the Valve onto the tracheostomy tube. Most Valve users have found that they are able to cough up secretions through the mouth when the Valve is on and that they don't need to be suctioned as often.

I coughed the Valve off my tracheostomy tube because I had secretions that needed to be removed and now my tracheostomy tube and/or mouth have been suctioned and the Valve is put back on my tracheostomy tube. As soon as the Valve is put back on my tube, I start to cough very hard and cannot seem to stop and/or the Valve pops off again. What should I do?

Initial placement of the Valve may stimulate a cough due to the reintroduction of airflow through the upper airway. When airflow is absent, as with an inflated cuff, there is a tendency for secretions to pool due to the lack of sensation. When secretions are not felt in the upper airway you may not spontaneously cough or swallow, therefore the secretions will pool in the airway. Placement of the Valve redirects air through the upper airway moving secretions upward. A cough is triggered due to the sensation caused by this movement of secretions. Coughing will continue until the secretions have settled or have moved into a position that will allow you to remove them. This is beneficial as you now have a more effective secretion clearing mechanism in place with Valve use. Usually, coughing subsides and use of the Valve becomes more comfortable. Keep in mind that more than one suctioning attempt may be required. When coughing persists and is not improved by suctioning or if it is uncomfortable to breathe while using the Valve, remove the Valve immediately and speak with your doctor regarding possible causes. There could be several causes affecting your ability to tolerate using the Valve due to persistent coughing and can include:

1. Thick, tenacious secretions that may require more aggressive pulmonary hygiene.
2. Changes in your airway that can cause air trapping making it difficult to breathe easily and stimulate a dry cough. Airway changes may be due to scar tissue development or narrowing of the airway and should be checked by a physician.
3. The tracheostomy tube is too large or the presence of a cuff on your tube takes up too much room in your airway. You may want to discuss with your physician downsizing the tracheostomy tube or changing to a cuffless tube.
4. Hypersensitivity that may benefit from medication to desensitize the airway.

It is important to note and tell your doctor when the coughing began. Did it start immediately the first time you wore the valve and has never improved? Did it begin several weeks after you first began to utilize the Passy-Muir Valve? Were there any changes made regarding your airway that may have triggered the coughing such as a tracheostomy tube change? Does your cough sound wet or dry? These questions will help you and your doctor to discover the possible causes of your discomfort and lead to remedies that will allow you to continue Valve use. Do not use the Passy-Muir Valve again until you receive clearance by your doctor.

The Valve is making a noise. What do I do?

The first thing you should do is clean the valve (see
How do you clean the Passy-Muir Valve?). If you have cleaned the valve and the noise continues, it could be a sign that the valve needs to be replaced. If the Valve you have has been used for two months or more, this noise would indicate that it is time to replace the Valve. If the Valve is less than two months old and continues to make noise after it has been properly cleaned, contact us for further information.

My tracheostomy tube does not have a 15mm hub to attach the Valve. What do I do?

Plastic Tracheostomy Tube - If you have a plastic tracheostomy tube, make sure that the inner cannula is in place. There are some plastic tubes that must have the inner cannula in place in order to have a 15mm hub. Some plastic tracheostomy tubes come in a low-profile model. If you have a low-profile model, it usually comes with a second inner cannula that has a 15mm hub. Remove the low-profile inner cannula and replace it with the inner cannula that has the 15mm hub.

Metal Trachestomy Tube - If you have a Jackson metal improved or Jackson metal tube in a size 4, 5, or 6, the PMV 2020 Tracheostomy Speaking Valve (clear) with PMA 2020-S adapter can be used. This tube is unique from the original metal tubes because it has a small hub (about 1/2 cm) that is attached to the inner cannula.

No voice or very little voice is being produced while the Valve is being worn. What do I do?

Airflow through the vocal cords is responsible for producing speech and sound. The vocal cords may be weak from not using them if the tracheostomy tube has been in place for a while. In addition, there may be weakness of the diaphragm which can reduce the amount of breath support you have when you speak which can make your voice sound soft and weak. If this is the first time the Valve is being used, remember that sometimes it takes time and practice to coordinate breathing with
voicing. The following exercises may be helpful to get you started:

- Take a breath in through the tracheostomy tube while your Valve is on and then open your mouth and say "ahhhh" while you exhale. Try this a few times.

- Count slowly from one to five, taking a breath before saying each number. Try this a few times. If no voice can be produced, an evaluation of the vocal cords by an Ear, Nose and Throat Doctor may be needed to rule out vocal cord damage and/or to assess the tracheostomy tube size to consider putting a smaller tube in the airway to allow more air to reach the vocal cords. A speech-language pathologist is often consulted to help improve voice and speech production. Young children should be encouraged to play games that help them practice blowing air through the mouth (e.g., blowing bubbles, whistles, horns, etc.). You can also encourage them to imitate sounds that you make while they are wearing the Valve.

Why is a doctor's prescription needed to obtain a Valve?
The Valves are devices regulated by the Food and Drug Administration and require a prescription. It is important that your airway status be evaluated carefully by a doctor to make sure that you have a properly sized tracheostomy tube, no significant blockage of the airway and/or that no other conditions exist that would keep you from being able to use the Valve safely. A doctor's order is required in obtaining reimbursement from Medicare, MediCal, Medicaid or private insurance.

Does insurance pay for the PMV?
The Valves are Medicare and Medicaid reimbursable using the prosthetic billing code L8501. The amount of reimbursement for Medicare varies depending on the region. The amount of reimbursement for Medicaid varies from state to state. Most private insurance companies generally follow similar reimbursement guidelines. The Valves are also reimbursable by California Children's Services using the code #7549. The Valves are
also reimbursable through MediCal by using Misc. Supply Code #9981K with modifier ZZ (include a copy of invoice with re-order number).

I have been using the Valve regularly for a few weeks or more and now, all of a sudden, I cannot tolerate wearing it for as long as I once did. What does this mean?
If there has been a sudden change in your ability to tolerate the Valve, this could indicate a change in your medical status, or the presence of a blockage (e.g., scar tissue or narrowing) in the airway that needs to be evaluated by your doctor or a specialist such as an Ear, Nose and Throat Doctor (ENT or Otolaryngologist) or Lung Doctor (Pulmonologist) before you continue wearing the Valve.

When I wear the Valve on the ventilator, there is a continuous rush of air through my mouth and nose and it is very annoying. What do I do?

There are different reasons why this may be happening. For instance, your vocal cords may be weak since they haven't been used much since you've had your tracheostomy tube and they may need to be strengthened. Another possible reason may have to do with your ventilator settings. If you are experiencing this problem, please have your clinician or caregiver contact our clinical specialists for additional information.

Do I have to have a fenestrated tracheostomy tube?

The Valve can be used with fenestrated tracheostomy tubes, although a fenestrated tube is NOT required. If you are using a fenestrated tube, it is important to ensure that the inner cannula is fenestrated in order to take advantage of the fenestrate. For any type of tracheostomy tube it is important to ensure that the cuff is completely deflated and sized appropriately so that the patient can sufficiently exhale around the tube. The clinician should never attempt to use a Valve on a fenestrated trach tube while the cuff is inflated.

Can I use a cool or warm mist aerosol with my Valve in place?

Yes, humidity via an aerosol (non-medicated) cool or warm can be applied at the tracheostomy site with the Valve in place via the use of the trach collar.

Can I take my nebulized medications with my Valve in place?

The PMV should be removed prior to delivery of medicated nebulizer treatments. If the Valve is inadvertently used during a medicated nebulizer treatment, it should be removed immediately and washed according to the cleaning instructions in our instruction booklet in order to remove medication residue, as some medications may adversely affect the function of the PMV diaphragm.

I got my Valve when I was in the hospital. Now I need a replacement. How do I get a new Valve?

If you are a patient at home using the Valve, you will need to call your physician and get a prescription for a new Valve. Most patients give the prescription to their home care supply company or durable medical equipment (DME) company. Usually, it will be the company who is providing you with tracheostomy tubes, suction catheters and other respiratory type of equipment. If you are having trouble locating a company to provide you with your PMV, or have other questions on this issue, please contact us.

What are the advantages of the PMV 2000/PMV 2001 over the PMV 005?

The PMV2000 (clear) and the PMV2001(Purple Color™) are Low Profile – Lower Resistance Tracheostomy &
Ventilator Swallowing and Speaking Valves. They are lightweight and smaller in size than the PMV007 (Aqua Color™), and open easier during inhalation. The PMV 2000/PMV 2001 can be used directly on the 15mm hub of a tracheostomy tube as well as in-line with the ventilator using non-disposable, flexible rubber tubing. These low profile valves can be used with the
PMV® Secure-It (packaged with each of the low profile valves). The Secure-It allows the PMV to remain connected to the tracheostomy tube tie to prevent loss. Patients who are on low flow oxygen also have the benefit of being able to attach the PMA 2000 Oxygen Adapter (sold separately) to the PMV2000 and PMV2001. This adapter clips onto the side of either valve and allows for delivery of oxygen up to 6 L/min.