

Guideline for use of Passy Muir Valve

The Passy Muir Valve (PMV) is a speaking valve which can be used with ventilated and self ventilating patients with a tracheostomy. The PMV is always in a closed position until the patient inhales, and thus allows air to reach the vocal cords, nose and mouth on exhalation. The design of the valve restores the positive airway pressure in the lungs.

Indications for use

- ☐ Patient awake and trying to communicate
- ☐ Manageable tracheal secretions
- ☐ As part of a weaning plan for difficult to wean patients

Patients are assessed on an individual basis as to whether the PMV would be of benefit. This can be carried out with senior nursing or physiotherapy staff. Plans to use PMV should then be discussed with the consultant in charge.

Contraindications and cautions to use

- ☐ Severe upper airway obstruction
- ☐ No/inadequate cuff leak
- ☐ Cardiovascular instability

- ☐ Less than 48 hours post tracheostomy insertion/change
- ☐ Drowsy patients/low GCS
- ☐ Bronchospasm
- ☐ Thick or excessive secretions
- ☐ Patient unable to tolerate cuff deflation
- ☐ Vomiting/high aspirates/risk of aspiration
- ☐ Need for nebulised medication- nebulisers should not be given through the PMV as they can affect the function of the membrane within the valve
- ☐ Patients requiring high level ventilator support e.g. high levels of FiO₂ or PEEP
 - As a guide, if PS > 15cmH₂O PMV may be poorly tolerated

Equipment required

- ☐ PMV
- ☐ Suction equipment
- ☐ Appropriate connectors (see appendix)
- ☐ Syringe to deflate cuff
- ☐ Green safety label to attach to cuff

Patient assessment and preparation

Patient observations should be monitored before, during and after PMV placement

- ☐ Explain the procedure to the patient
- ☐ Suction oral secretions and through the tracheostomy
- ☐ Suction via the tracheostomy while deflating the tracheostomy cuff and assess for audible leak at mouth- the patient **must** have a cuff leak to be able to proceed with PMV.
- ☐ **If the patient does not have a cuff leak PMV is not appropriate and should not be used-** inform the MDT and re-inflate the cuff.

**Critical Care Guidelines
FOR CRITICAL CARE USE ONLY**

- ☐ If a cuff leak is present, leave cuff deflated
- ☐ Further suctioning as required
- ☐ Place the PMV (see appendix)
- ☐ If using in-line with ventilator, adjust ventilator alarm settings
 - Draeger- switch flow alarms off
 - Servo- alarms cannot be switched off but tidal volume, minute volume and apnoea alarms can be adjusted
- ☐ Once PMV session finished remove PMV, inflate tracheostomy cuff and suction patient as indicated.
- ☐ Return patient to baseline therapy, adjusting ventilator alarms/settings to pre-PMV settings if using in-line with ventilator.

General principles

- ☐ Humidification should always be included in PMV set up
 - Via heated humidified circuit (T-piece or Y-piece) as picture 1
 - Or as part of ventilator circuit as picture 2
- ☐ Closed suction can be incorporated into PMV set up

Discontinuing treatment

- ☐ Signs of increased work of breathing- increased respiratory rate, increased use of accessory muscles, changes in colour, becoming clammy/sweaty
- ☐ Desaturation
- ☐ New cardiovascular instability

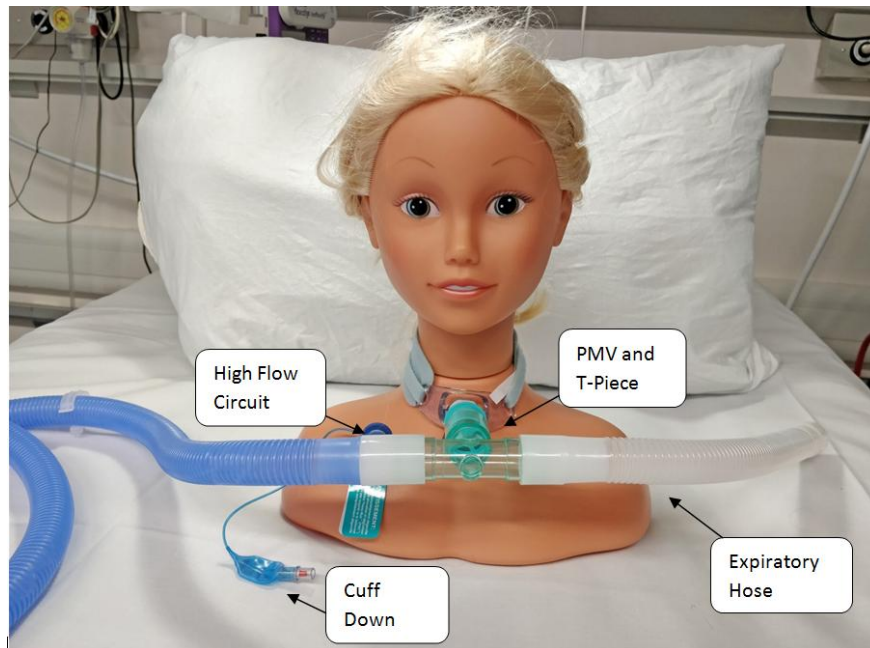
Cleaning

- ☐ After each use the PMV should be cleaned in warm soapy water, rinsed thoroughly and left to air dry.
- ☐ The device is single patient use and should be stored in a pot with date of issue clearly indicated.
- ☐ The PMV can be used for at least 2 months before it should be replaced.

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	Authors: Ian Cornwall, Debbie Deas, Janis Harvey, Karen McLoone
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**Critical Care Guidelines
FOR CRITICAL CARE USE ONLY**

PMV set up- tracheostomy with humidified oxygen therapy via T-piece



**PMV set up- tracheostomy with humidified oxygen therapy via Y-piece
or in line with ventilator circuit**

