



# **Peninsula Dental Social Enterprise (PDSE)**

## **Decontamination, Storage and Maintenance of Reusable Respirators Version 3.0**

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Policy will be updated as required in response to a change in national policy or evidence-based guideline.

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## Decontamination, Storage and Maintenance of Reusable Respirators

### 1. Introduction

The associated procedures for the decontamination, storage and maintenance of reusable respirators are set out in this standard operating procedure. This procedure applies to any persons that have been issued with a personal half face respirator or powered air unit, working in an environment where aerosol generating procedures are taking place.

The guidance set out in this policy should be used in conjunction with the associated PDSE policies:

- Hand hygiene policy
- Waste policy
- Disposal of clinical waste SOP
- Infection prevention and control policy

### 2. Reusable Respirators

Prior to being issued with a personal respirator, all users must have completed the relevant fit testing procedure with a competent fit tester.

Users will be issued with either:

- **P3 Stealth half mask respirator** (click [here](#) for manufactures information)
- **JSP Force 8 half mask respirator** (click [here](#) for manufactures information)
- **3M Versaflo M-306 Helmet** (click [here](#) for manufactures information) **and TR-315 Powered Air** (click [here](#) for manufactures information)

### 3. Appropriate Selection

Respirators should be worn by all clinicians, assisting clinicians, dental nurses or supervisors in any environment where an Aerosol Generating Procedure is being carried out. Exposure to aerosol and the appropriate personal protective equipment to be worn should be assessed by the clinician prior to the appointment. Please refer to *Aerosol and Non-Aerosol Generating Procedures* (appendix 2)

3M Versaflo M-306 Helmet and TR-315 Powered Air will only be provided for individuals that have had an unsuccessful attempt at fitting a single use or reusable half mask respirator. Further information regarding the suitability of 3M Versaflo M-306 Helmet and TR-315 Powered Air can be accessed [here](#)

## PPE Overview Table:

### 4. Pre-Use Checks, Donning and Doffing Instructions

Prior to wearing any type of personal respirator, it is the responsibility of the wearer to conduct thorough pre-use checks to ensure the mask is in a usable condition and is being worn correctly.

	Non-Aerosol Generating Procedures	Aerosol Generating Procedures
Hand Washing	X	X
Forearm & Elbow Washing	X	
Gloves	X	X
Plastic Apron	X	
Plastic Sleeves		
Fluid Resistant Full Length Gown		X
Eye Protection	X	X
Face Visor	X	X
Fluid Resistant IIR Face Mask	X	
FFP3 Respirator Mask		X

### Pre-Use Instructions: All reusable respirators

- Carefully remove the mask from the storage container
- Visually inspect elasticated straps for any visual wear and tear. Check for any deterioration in elasticity
- Check all filters and valves are seated correctly
- Before donning, the user should ensure that they are not wearing heavy facial make up or any heavy moisturising creams. Where applicable, users must also be cleanly shaven. Any facial hair that protrudes beyond the borders of the mask will render the seal ineffective

### Donning: Stealth P3 Respirator

- Grasp the mask in one hand and the elasticated, upper headband in another. Put the mask to your face and place the headband over the crown of the head
- Pull the straps evenly and simultaneously at each buckle to ensure a comfortable and sealed fit
- When in position, cup the respiratory valve in your hands and breathe out. If the mask is correctly fitted, the mask will bulge a little. If air escapes from the mask, it will need to be re-adjusted and this check should be repeated until an adequate seal is achieved.

### **Donning: JSP Force 8 mask**

- Grasp the mask in one hand and the elasticated, upper headband in another. Put the mask to your face and place the headband over the crown of the head
- Pull the straps evenly and simultaneously at each buckle to ensure a comfortable and sealed fit
- Press the front and backs of both filter covers together to stop air entering the mask through the filters
- Inhale. No air should come through the mask. Air entering the mask is an indicator that the mask is not fitted correctly. Adjust the mask and repeat the test until no air is entering the mask at point of inhaling.
- When a suitable seal has been established, release both filters to allow air into the mask

### **Doffing: All reusable respirators**

- Masks should be doffed in a pre-defined area
- Wearing clean gloves, grasp the front of the mask in one hand, upper headband in another and pull away from the face
- Place the mask down on a clean surface

### **Donning: 3M Versaflo M-306 Helmet and TR-315 Powered Air**

- Place headpiece on with the visor in the raised position and adjust sizing by turning the ratchet. The height of the headband can also be adjusted by adjusting the relevant straps
- When fit has been established, remove the headpiece and connect the breathing tube
- Place the headpiece on with the visor in the raised position, switch on the air supply and pull the visor down over the face, ensuring the seal fits around the face

### **Doffing: 3M Versaflo M-306 Helmet and TR-315 Powered Air**

- Wearing clean gloves, switch off the air supply
- Immediately break the face seal and lift the visor into the up position
- Carefully remove the headpiece and place it down onto a clean surface

## **5. Infection Control and Maintenance**

Half mask respirators and 3M Versaflo M-306 Helmet and TR-315 Powered Air units must be decontaminated appropriately after each use. Deep cleaning and filter changes should be

completed and recorded as specified by the manufacturer. All decontamination procedures should be completed wearing standard PPE:

- Apron
- Fluid resistant surgical mask
- Eyewear/Visor
- Gloves

### **Stealth P3 Respirator**

#### **Immediately after use:**

- Remove the filters and place to one side for re-insertion after cleaning.
- Using a non-alcohol surface wipe, thoroughly wipe the respirator to remove any debris or residue
- Allow mask to air dry
- Once dry, reinsert or replace filters as required

#### **Deep cleaning and filter changing – After 37 days of clinic use**

- Remove the grill, filters, head and neck strap from the mask body. Filters must be discarded as clinical waste.
- Wipe the mask body with a non-alcohol surface wipe.
- Immerse the mask body and grill in a neutral detergent solution as per manufacturers instruction
- After contact time with solution, remove components and rinse with clean water. Allow to air-dry
- Reassemble and replace with new filters

### **JSP Force 8 mask**

#### **Immediately after use:**

- Using a non-alcohol surface wipe, thoroughly wipe the main body of the respirator and the exterior of the filter housing to remove any debris or residue
- Allow mask to air-dry

#### **Deep cleaning and Filter changing – After 28 days of use or before use by another individual**

- Remove the filters attached to the Force™8 Half-Mask and dispose of as clinical waste. Remove the exhalation cover allowing you to remove the mask's harness and diaphragm.
- Wash the main body, exhalation valve and diaphragm using non-alcohol surface wipes. Once you are confident that all of these parts are clean then dry them off using a lint-free cloth.
- After cleaning, reassemble the mask. Start by re-inserting the diaphragm, thread through the front of the mask and pull the diaphragm through until it is in place. Then place the harness over the front of the mask (make sure it is the correct way up), and finally lock it into place with the valve cover.
- Place the valve cover onto the front of the mask and twist to lock.

### **3M Versaflo M-306 Helmet and TR-315 Powered Air unit**

#### **Immediately after use:**

- Using a non-alcohol surface wipe, thoroughly wipe the entire unit to remove any debris or residue
- Allow all components to air dry

#### **Deep cleaning – After the end of each sessional use:**

- Detach the battery pack, breathing tube and headgear from the motor/blower.
- Motor/blower: Clean the outer surfaces of the assembly and battery pack with a non-alcohol surface wipe  
Do not immerse the motor/blower or battery pack in water.
- Breathing tube: Clean the connection sites on the breathing tube with a non-alcohol surface wipe. The breathing tube can be immersed in a solution of neutral detergent and water for cleaning. The inside of the tube must be completely dried prior to use or storage.
- HE filter: Open the filter cover and inspect the HE filter Replace if excessively dirty, wet or damaged. Each user is assigned their own filter which must be stored in a designated area. The filter is not interchangeable between individuals. The personal filter must be changed after 30 days of clinical use. The HE and TR-3600 pre-filter cannot be cleaned and must be properly disposed of according to local regulations.
- The TR-362 spark arrestor/pre-filter can be cleaned using the water and detergent solution. Completely dry the spark arrestor with a clean cloth. If the spark arrestor cannot be cleaned, or is damaged, replace with a new spark arrestor

## 6. Storage

Reusable half mask respirators and the 3M Versaflo M-306 Helmet and TR-315 Powered Air unit must be fully decontaminated before storage.

All wearers will be issued with individual reusable, plastic containers for storage of respirators. Each container must be labelled with the following information:

- Wearers name
- Date filters were placed
- Number of clinical days worn
- Date of clean/last use
- Date of last deep clean

Respirators and powered air units should be stored in an appropriate area, ready for use as required.

Respirators or powered air units that are not assigned to a wearer are to be secured in an appropriate area until they are allocated to a wearer.

Respirators and powered air units can only be accessed and allocated by a fit test trained member of staff.

Appendix 1

**Respirator Log:**

**Name:**

**Date of Fit Test:**

**Date of filter installation:**

**Number of clinical days worn:**

**Date of last use:**

**Date of deep clean:**

Appendix 2

Aerosol and Non-aerosol generating procedures

Dental procedure	AGP Classification	Considerations
<b>Clinical Examination</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Avoid use of high volume 3 in 1</li> <li>○ Use low pressure water or air separately</li> <li>○ Assessment of gag reflex</li> <li>○ Natural respiratory exposures e.g. Hayfever</li> </ul>
<b>Intra-oral radiography</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Assessment of gag reflex</li> <li>○ Previous poor tolerance</li> <li>○ Natural respiratory exposures e.g. Hayfever</li> </ul>
<b>Extra-oral radiography/CBCT</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Previous poor tolerance</li> <li>○ Natural respiratory exposures e.g. Hayfever</li> </ul>
<b>Dental photography Extra-Oral</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Natural respiratory exposures e.g. Hayfever</li> </ul>
<b>Oral hygiene instruction</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Natural respiratory exposures e.g. Hayfever</li> <li>○ Avoid use of spittoon, use disposable cardboard bowl to be disposed of in the clinical waste.</li> <li>○ <a href="#">Delivering Better Oral Health</a></li> </ul>
<b>Fluoride varnish application</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> <li>○ <a href="#">Delivering Better Oral Health</a></li> </ul>

<p align="center"><b>Impressions</b></p>	<p align="center">Non-AGP / Low risk</p>	<ul style="list-style-type: none"> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Assessment of gag reflex / tolerance levels</li> <li>○ Natural respiratory exposures e.g. Hayfever</li> </ul>
<p align="center"><b>Hand scaling and other periodontal procedures using hand instruments</b></p>	<p align="center">Non-AGP / Low risk</p>	<ul style="list-style-type: none"> <li>○ Use hand instruments ONLY</li> <li>○ Avoid use of the ultrasonic</li> <li>○ Avoid polishing teeth</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use high volume suction</li> <li>○ Assessment of gag reflex</li> <li>○ Natural respiratory exposures e.g. Hayfever</li> <li>○ <a href="#">Management of Periodontal Treatment (Non AGP)</a></li> </ul>
<p align="center"><b>Cavitron, Piezo or other sonic scaler</b></p>	<p align="center">AGP / High risk</p>	<ul style="list-style-type: none"> <li>○ Only to be undertaken in single surgery / POD environment</li> <li>○ Non-AGP methods should be attempted in first instance (as above)</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> </ul>
<p align="center"><b>Fissure Sealants</b></p>	<p align="center">Non-AGP / Low risk</p>	<ul style="list-style-type: none"> <li>○ Use of rubber dam – where possible / tolerated</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> <li>○ <a href="#">(AMIRD) Non-invasive prevention principles</a></li> </ul>

<b>Restoration</b>	Non-AGP / Low risk if temporary restoration using hand instruments or slow speed including polishing	<ul style="list-style-type: none"> <li>○ Use rubber dam</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> <li>○ <a href="#">(AMIRD) Caries Management</a></li> </ul>
	AGP / High risk if permanent restoration using high-speed handpiece	<ul style="list-style-type: none"> <li>○ Only to be undertaken in single surgery / POD environment</li> <li>○ Use rubber dam</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> </ul>
<b>Extraction (non-surgical)</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Avoid use of surgical handpiece - bone removal and/or sectioning.</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> </ul>
<b>Extraction (surgical)</b>	AGP / High risk	<ul style="list-style-type: none"> <li>○ Where possible, use slow-speed with saline irrigation</li> <li>○ If using surgical handpiece for bone removal and/or sectioning – treatment must be completed in single surgery or POD</li> <li>○ Use high volume aspiration</li> <li>○ Consider temporisation and referral</li> </ul>

<p><b>Endodontic procedures (Reference SOP cohort specific Endo protocol)</b></p>	<p>Non-AGP / Low risk if accessing carious tooth with hand excavation or removing temp dressing with slow speed</p>	<ul style="list-style-type: none"> <li>○ Pre-op mouthrinse with 1%–1.5% hydrogen peroxide for one minute</li> <li>○ Avoid use of spittoon, use disposable cardboard bowl to be disposed of in the clinical waste.</li> <li>○ Isolation of tooth using rubber dam placed prior to access covering oral cavity.</li> <li>○ Use of caulking cement to improve seal (Oraseal/Opaldam)</li> <li>○ High volume aspiration (HVA) is mandatory.</li> <li>○ Removal of dentine to refine access cavity can be undertaken with slow speed handpiece with minimal or no coolant required.</li> <li>○ Avoid use of 3 in 1 syringe, use of NaOCl in Monoject syringe to remove debris favourable.</li> <li>○ Complete treatment as non AGP-hand filing only</li> </ul>
	<p>AGP / High risk if removal of restorative material / access through enamel with high speed electric or turbine</p>	<ul style="list-style-type: none"> <li>○ Only to be undertaken in single surgery / POD environment</li> <li>○ Where possible, limit AGPs to the start of the appointment to minimise fallow period.</li> <li>○ Removal of restorative material / access through enamel with high speed electric or turbine handpiece, reduced coolant can be used.</li> <li>○ High volume aspiration (HVA) is mandatory.</li> <li>○ Avoid use of 3 in 1 syringe, use of NaOCl in Monoject syringe to remove debris favourable.</li> </ul>
<p><b>Cementing or re-cementing a crown, bridge, veneer, inlay or onlay etc</b></p>	<p>Non-AGP / Low risk if temporary cementation using slow-speed</p>	<ul style="list-style-type: none"> <li>○ Use slow speed handpiece only</li> <li>○ Use rubber dam – where possible</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> </ul>

	AGP / High risk if permanent cementation using high-speed	<ul style="list-style-type: none"> <li>○ Only to be undertaken in single surgery / POD environment</li> <li>○ Use rubber dam – where possible</li> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> <li>○ Use of dry guards &amp; cotton wool rolls to achieve moisture control</li> </ul>
<b>Incise and drain abscess</b>	Non-AGP / Low risk	<ul style="list-style-type: none"> <li>○ Use high-volume aspiration.</li> <li>○ Avoid use of high volume 3 in 1,</li> <li>○ Use low pressure water or air separately</li> </ul>
<b>Denture stages</b>	Non-AGP / Low risk (avoiding use of high-speed)	<ul style="list-style-type: none"> <li>○ Denture must be dry when trimming</li> <li>○ Disinfect between alterations</li> <li>○ Cutting rest seats with fast handpiece should be avoided</li> <li>○ Assessment of gag reflex / tolerance</li> <li>○ Natural respiratory exposures e.g. Hayfever</li> </ul>