

## Reprocessing of Eye Protection Equipment during COVID-19 Pandemic Procedure

### **Summary of Changes**

	NEW	Previous
BC Cancer	April 14, 2020	

### **PREAMBLE**

Eye protection equipment provides a barrier to infectious materials entering the eye and is often used in conjunction with other personal protective equipment (PPE) such as gloves, gowns, masks or respirators (Centers for Disease Control and Prevention (CDC), 2013). Eye protection equipment includes goggles, face shields, visors and safety glasses. The term "Eye protection" will be used throughout this document to refer to different types of equipment used for eye protection.

Eye protection is an integral part of staff protection against transmission of microorganisms. Eye protection (i.e. goggles, face shields) is required PPE whenever Droplet Precautions are required including when aerosol-generating medical procedures (AGMPs) are performed.

The measures included in this document apply to this period of the COVID-19 pandemic when limited supplies may be available.

#### **Extended use:**

- Extended use of eye protection may be applied to single-use (disposable) and reusable eye protection
- Extended use is the practice of wearing the same eye protection for repeated close contact
  encounters with different patients, without removing it between patients unless it becomes
  damaged or contaminated.

#### Re-use:

- Reusable eye protection may be reused following appropriate reprocessing measures as outlined in this document.
- Eye protection that is designated as **single use** should not be re-used. If it becomes necessary to re-use items designated as single use, then follow the steps in this document to reprocess the item. Item must be re-used by the **same user and never shared**.

Eye protection that has become damaged or cannot be cleaned and disinfected should be discarded.

Appropriate donning, doffing, cleaning and reprocessing of these items are keys to maintaining a safe work environment.

### **PURPOSE**

To provide staff with clear directions in reprocessing eye protection in order to extend use and re-use. Reprocessing of eye protection requires clear guidelines for cleaning, disinfection, storage and reuse. To preserve supply, all eye protection should be reprocessed and made available for reuse as quickly as possible.

#### **DEFINITIONS**

**Single-Use (Disposable):** A device designated by the manufacturer for single-use only; after use it is discarded.

**Multi-use (Re-usable)**: A term given by the manufacturer of medical devices that allows it, through the selection of materials and/or components, to be re-used

**Reprocessing:** The steps performed to prepare used medical devices for reuse (e.g. cleaning, disinfection, sterilization).

#### **PROCEDURE**

	STEPS	DETAILS	RATIONALE/OTHER CONSIDERATIONS	RESOURCES
1.	Assess eye protection for ability to reprocess	Assess item for cracks, damage or pieces that might be un-cleanable (e.g. foam, fabric)  Single Use Items:  Items designated as single use should not be re-used.  If it becomes necessary to re-use items designated as single use, then follow the steps in this document to clean/disinfect and store the item. Item must be used by the same user and never shared.  Re-usable Items:  For items designated for multiple use, follow manufacturer's instructions for cleaning and disinfection.  If manufacturer's instructions are not available, then follow the steps in this document.	Damaged items or those with components that cannot be cleaned may not be amenable to proper cleaning and disinfection processes	
2.	When ready to exit room, follow all Doffing Procedure steps	The sequence of PPE removal should follow the defined procedure developed by Infection Prevention and Control (IPAC).  Doffing Procedure as set out by IPAC requires that eye protection be removed away from the patient's personal care area or outside the room (or in ante room where available).	Appropriate doffing of all eye protection will decrease the chance of cross contamination.	Doffing (Taking Off) Personal Protective Equipment
3.	Exit patient room and doff eye	Eye protection should be removed by handling only the portion of this equipment that secures the device to the head (i.e., plastic temples, elasticized bands, ties), as	The front and sides of the device (i.e., goggles, face shield) should not be touched,	Doffing (Taking Off) Personal Protective

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protection	this is considered relatively "clean." (CDC, 2013)  Place eye protection that is to be cleaned and reprocessed on a designated surface or receptacle in preparation to be cleaned (i.e. in a designated container, on a paper towel that will be discarded, or on a surface to be cleaned immediately after procedure).  Discard any eye protection that has become damaged or unusable.	as these are the surfaces most likely to become contaminated by sprays, splashes, or droplets during patient care.	<u>Equipment</u>
4. Prepare to clean eye protection	Step 4a:     Immediately after doffing eye protection, perform hand hygiene  Step 4b:  Identify appropriate location for equipment cleaning. This process should be carried out where other soiled equipment is handled. If unavailable, prepare a clean surface and lay out a clean piece of paper towel to clean the eye protection.  Step 4c:  Don clean gloves	Clean eye protection immediately after doffing to reduce the chance for cross contamination. If this is not appropriate or possible, place eye protection into designated soiled equipment container for later cleaning  Hand Hygiene reduces the contamination of cleaning supplies.  Gloves protect hands from chemical irritants in hospital grade disinfectant.	

#### Step 5a:

Clean all areas of the eye protection with soap and water or a hospital grade cleaner/disinfectant to remove any soil.—Apply light friction to any areas that are visibly contaminated.

Carefully wipe the *inside*, *followed by the outside* (*moving from clean to dirty*) of the face shield or goggles ensuring all surfaces are covered.

NOTE: If using a combined cleaner/disinfectant Hospital-grade product, use one wipe to clean and a second wipe to disinfect (Step 5b).

If using a disinfectant only, ensure item is cleaned with soap & water/detergent prior to disinfection.

Cleaning is the process of removing soil to enable an item to be disinfected.

\*Note Accelerated Hydrogen Peroxide based products have been known to degrade plastics if used too often.

Any surfaces touched by soiled eye protection should be disinfected in between uses to avoid cross contamination.

Any disposable receptacles designated for soiled eye protection should be discarded to avoid cross contamination.

# 5. Clean and disinfect eye protection

#### Step 5b:

Use a second hospital grade cleaner/disinfectant wipe to disinfect the item. Follow the manufacturer's recommended wet contact time to achieve disinfection. Wet contact time will vary by product, refer to product label.

- Hospital grade wipes will contain a quaternary ammonium compound, (e.g. Cavi-wipes) or accelerated hydrogen peroxide-AHP\*(e.g. Accel Prevention, Oxivir) or a hypochlorite solution, aka bleach (e.g. Clorox-Healthcare Bleach wipes).
- Alcohol may also be used to

		disinfect once the cleaning		
		has been done.		
		Step 5c:  Discard paper towel (if used) and ensure all contaminated surfaces in which soiled eye protection have touched have been cleaned (repeat steps 4a and 4b as above).  Designated soiled equipment containers should be cleaned and disinfected after use.  Step 5d:		
		Doff soiled gloves and don a new pair of gloves before proceeding to next step		
6.	Dry eye protection	Place eye protection on a clean, dry surface and allow to air dry ensuring contact times are followed according to manufacturer's instructions.  Ensure that all surfaces of the eye protection are fully dry before donning again.	A wet or contaminated surface may lead to contamination of clean eye protection.	
7.	Store eye protection	Store eye protection for available re-use (as per area specific appropriate location).	Store eye protection in an area to protect against damage and contamination.	
8.	Re-use of eye protection	Reusable eye protection that has been appropriately cleaned and disinfected may be made available for use by other staff members.  GOGGLES/GLASSES SAFETY PROTECTIVE PLASTIC CLEAR EYEWEAR UVEX (Item ID: 00009380)	Where possible, staff should be provided dedicated eye protection to ensure appropriate fit and to minimize the potential of exposing the next wearer.	

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Single-use (disposable) eye protection

that has been appropriately cleaned and disinfected should be used by the same staff member only and should not be made available or used by other staff.

- ☐ Staff should clearly identify any single-use (disposable) eye protection with their name (i.e. label with name)
- VISOR FACESHIELD FULL FACE (Item ID: 00024198)



 SHIELD FACE FULL FACE TRUTEST (Item ID: 00032410)





VISOR FACE 3/4LENGTH (Item ID: 00088666)

Items designated as single use must be cleaned and disinfected when it has become contaminated and at the end of each day and stored in a manner that it will not become contaminated.

Note: these are just some examples, if you are uncertain about reuse, please contact Work Place Health

9.	Discarding eye protection	Eye protection should be discarded if damaged (i.e. if visibility is obscured and cleaning does not restore visibility, face shield can no longer fasten securely to the provider, etc.) or if it cannot be cleaned adequately.	Damaged eye protection no longer provides a barrier to infectious materials entering the eye.	

### **REFERENCES**

- □ Donning (Putting On) Personal Protective Equipment
- □ <u>Doffing (Taking Off) Personal Protective Equipment</u>
- ☐ Personal Protective Equipment (IPAC)
- □ National Institute for Occupational Safety and Health (2013). Eye safety, https://www.cdc.gov/niosh/topics/eye/eye-infectious.html

#### **DISCLAIMER**

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