

Use and Reuse of Eye Protection during the COVID-19 Pandemic

These infection prevention and control (IPC) recommendations were developed by a multi-disciplinary working group on the advice of the personal protective equipment (PPE) Task Group in accordance with organization-wide changes to continuous eye protection recommendations. The document updates and replaces the IPC COVID-19 PPE Recommendation for the Preservation and Reuse of Eye Protection. New information will be added as it comes available.

Note: Terms in bold are defined in the **Definitions** section.

If you have any IPC questions or comments contact IPC at ipcsurvstdadmin@ahs.ca.

Best practice recommendations

1. Wearing eye protection to stop the spread

- Facial (mask and eye) protection is PPE worn to protect your mouth, nose and eyes during activities likely to cause splashes or contact with droplets, and prevent exposure to blood or body fluids. AHS has updated the use of [continuous eye protection](#), i.e., safety glasses, reusable goggles, face shield, or procedure mask with built-in eye shield for healthcare workers.
- Continuous eye protection is required:
 - when providing care or services within two meters of a patient with confirmed or suspected COVID-19 or a patient experiencing symptoms consistent with a respiratory tract infection/influenza-like illness;
 - on COVID-19 units and in settings experiencing COVID-19 outbreaks.
- Eye protection remains part of PPE for all patients on contact and droplet precautions.
- For those AHS staff who are fully vaccinated, continuous eye protection may be discontinued. Sites or programs (such as ED/UCC) may have specific additional directions regarding continuous PPE. Full vaccination is reached two weeks after an individual completes their two-dose vaccine series.

Refer to Workplace Health and Safety [PPE Protocol for Healthcare Workers](#) poster.

- Regular prescription glasses do not meet Workplace Health and Safety regulations for eye protection.
- Face shields are the preferred option for eye protection and are readily available provincewide.
- Units, sites and clinics have adequate, safe PPE on hand for staff and others who may be on the unit, such as physicians, specialists and lab services.
- Workers need to know the location of PPE in all areas where they work. Work with your manager to find ways to make AHS supplied eye protection (non-prescription) work for you.

1.1 Eye protection is available to all frontline AHS staff through Contracting Procurement and Supply Management (CPSM) central inventory (not direct purchase) and includes:

- face shields (transparent window supported in front of the face);
- mask/face shield combinations (mask with transparent window attached);
- goggles (fit over the eyes and glasses if worn, to form a protective seal around the eyes); or
- safety glasses and safety eye wear (wrap around glasses/eye wear with solid side shield).

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- 1.2 Healthcare providers may choose to wear their own [prescription eye protection](#), e.g., **protective spectacles**, safety glasses or goggles dispensed by a **qualified professional** and:
- meet Canadian Standards Association (CSA) and/or American National Standards Institute (ANSI) standards for eye protection.
 - fit well (refer to 2.1 for details);
 - function as both glasses (with or without corrective prescription) and eye protection, i.e., protect the eyes from droplet exposure (eyes are protected from small particles by fitting closely to face at top/brow area and both sides);
 - compatible with frequent cleaning and disinfection using AHS provided disinfectant.

Refer to the [Personal Protective Equipment \(PPE\) - Frequently Asked Questions](#) for more information.

2. What should I look for in eye protection?




- 2.1 Wear eye protection to prevent exposure to splashes and sprays. Refer to Section 3: Table 1 for examples of eye protection. The best eye protection:
- extends from the eyebrow to the cheekbone and across the entire face;
 - securely and comfortably fits on your face, i.e., over the temples and ears and stays in place during activity, e.g., bending over;
 - offers good brow protection during movement, i.e., there is either no gap between the eye brows and the eye protection or only a small gap, e.g., <3mm;
 - allows you to see clearly in all directions;
 - is purchased through CPSM Central Inventories or meets equivalent criteria.
 - Additional features to look for:
 - fog reduction, e.g., in shield, lenses or through use of vents. Indirect venting is preferred in healthcare settings as it offers increased protection from splashing;
 - one-size or adjustable fit, e.g., temple length, to accommodate most faces.
- 2.2 Layering/wearing eye protection over other eye protection, such as wearing a face shield over goggles or face shield over safety glasses, is not recommended because it:
- is uncomfortable;
 - may decrease visibility;
 - makes doffing complicated;
 - increases risk of self-contamination.

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3. Table 1: Examples of eye protection, use and reuse

Product	Direct Patient Care, e.g., contact and droplet precautions	Indirect Patient Care, e.g., meal delivery, housekeeping, visitor screening	Description	Suitable for Reuse
 <p>Face shield</p>	Yes, preferred choice	Yes, preferred choice	Standard face shields are the preferred choice as they: <ul style="list-style-type: none"> can be worn over regular glasses cover the entire face i.e., minimum 7 ½ inches, or 19cm, in length CPSM offers several approved brands of face shield. Contact your local site services staff to order.	Yes. Dedicate to an individual healthcare provider. Discard if foam is damaged or visibly soiled otherwise clean and disinfect between uses, keep clean, e.g., in clean bag, when not in use.
Reusable or single-use goggles	Yes, acceptable choice	Yes, acceptable choice	Can be worn over regular eye glasses (depends on the glasses). Fit securely over eyes and brow area.	Reusable goggles Yes. Clean and disinfect between uses and keep clean for next use, e.g., store in clean container, bin or sealable bag. Single-use goggles e.g., secured with elastic strap. No. Discard after use.
Personal Prescription/ Non-Prescription Eye Protection	Yes, acceptable choice	Yes, acceptable choice	Purchased through qualified professional and has these qualities: <ul style="list-style-type: none"> fits well (refer to 2.1 for details); protects the eyes from droplet exposure (eyes are protected from small particles by fitting closely to face at top/brow area and both sides); compatible with frequent cleaning and disinfection using AHS provided disinfectant. 	Yes, Dedicate to an individual healthcare provider. Clean and disinfect between uses and keep clean for next users, e.g., store in clean container, bin or sealable bag.
Combination mask and face shield	May be acceptable choice May not be suitable if extensive splashing/spraying anticipated	Yes	Does not conform to brow. Mask and eye protection combination.	Discard after use.
 <p>Safety glasses</p>	May be suitable Depends on individual fit e.g., may move around during activity in which case it is not suitable	May be suitable Depends on individual fit e.g., may move around during activity in which case it is not suitable	Polycarbonate wrap-around with solid side shields. Temples are vented to reduce fogging	Yes. Clean and disinfect between uses and keep clean for next users, e.g., store in clean container, bin or sealable bag.
 <p>Safety eyewear</p>	May be suitable Depends on individual fit e.g., may move around during activity in which case it is not suitable	May be suitable Depends on individual fit e.g., may move around during activity in which case it is not suitable	Polycarbonate with anti-fog coating. Wrap around lens Soft nose piece may help eyewear to conform around nose and reduce slippage	Yes. Clean and disinfect between uses and keep clean for next users, e.g., store in clean container, bin or sealable bag.

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4. What is a PPE breach

4.1 A PPE breach occurs when:

- recommended PPE has not been worn resulting in exposure to COVID-19, e.g., mask or eye protection not worn as per continuous mask and eye protection guidance or fit-tested N95 respirator not worn during aerosol generating medical procedure (AGMP) on patient with respiratory symptoms;
- PPE worn has not prevented a blood or body fluid (BBF) exposure, e.g., splashes or sprays of blood or body fluid into eyes or mucous membranes despite use of facial protection;
- skin is penetrated, e.g., through gloves by a sharps injury such as needle-stick.

4.2 If a PPE breach occurs, notify WHS immediately and follow BBF exposure protocol. Call WHS at

1-855-450-3619 or use this [link](#) for Zone specific contact information.

4.3 If a small patch of intact skin is accidentally exposed, wash the area with soap and water or clean with alcohol-based hand rub (ABHR) and notify WHS. Call WHS at 1-855-450-3619 or use this [link](#) for Zone specific contact information.

5. Handling tips

5.1 You may safely wear the same eye protection for repeated patient encounters in some situations:

- [Cohorting for COVID-19 in Acute Care](#)
- PPE [Table for Assessment Centres during COVID-19](#)
- PPE [Table for Emergency Departments and Urgent Care Centres during COVID-19](#)

5.2 Change eye protection, i.e., either discard or clean and disinfect for reuse, every time you change your mask.

5.3 Discard mask/face shield combinations, eye protection with grooved elastic straps, and face shields with damage or visible soil immediately after use.

5.4 Clean and disinfect face shields, for use and reuse by an individual healthcare provider, after each use and store in a clean area, e.g., sealable bag when not in use. Refer to Section 7: Table 2.

5.5 Clean and disinfect reusable eye protection after each use and store in a clean area for reuse. Refer to Section 7: Table 2.

5.6 Regular prescription glasses do not meet WHS regulations for eye protection; are covered when eye protection is worn; and do not require cleaning and disinfection like eye protection.

5.7 Dedicate face shields and personal eye protection for individual use:

- Before using face shield, peel off the protective film from both the interior and exterior of the shield.
 - **Tip:** it may be easier to lift a corner of the film with slightly damp fingers, e.g., perform hand hygiene prior to the task.
- Label with name or identifier to prevent reuse by anyone else.

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6. Department/Unit considerations

6.1 Develop department or unit specific processes that define roles and responsibilities for managing eye protection including ordering/re-ordering, distribution, labeling, handling, cleaning and disinfection, discarding, and storage. Consider the following:

- Convenient place for healthcare providers to access clean eye protection and place used eye protection until it is cleaned and disinfected, e.g., labeled bins or containers.
- Space/area with required supplies for cleaning and disinfection of used eye protection.
- Storage for clean reusable eye protection, i.e., in a secure, clean location outside of a patient care space.

7. Table 2: Steps to clean and disinfect

Steps to clean and disinfect eye protection

1. Inspect for damage and soiling. Discard if damage is present or foam is visibly soiled.
2. Place eye protection on a clean surface.
3. Perform hand hygiene.
4. Put on gloves, if indicated by disinfectant label.
5. Clean and disinfect with an AHS provided disinfectant, e.g., wipe the inside and then the outside. Keep the surface wet enough to achieve the disinfectant contact time, e.g., Oxivir Tb™ contact time is one minute.
6. Allow to air dry or dry with a clean absorbent cloth.
7. Remove gloves and perform hand hygiene.
8. If needed, rinse eye protection with clean water to remove streaks. Allow to air dry or dry with a clean absorbent cloth.
9. Either put eye protection back on or put in a clean area, e.g., clean bin or bag for reuse.

8. Rationale for the IPC recommendations, e.g., cleaning and reuse of eye protection

- Judicious and appropriate use of [AHS approved](#) eye protection helps protect staff, conserve supplies and reduce waste.
- These recommendations are supported by experts including the World Health Organization, United States [Centers for Disease Control and Prevention](#) (CDC), [Public Health Agency of Canada](#), [Public Health Ontario](#) and [BC CDC](#).

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Definitions

Protective spectacles means a device that enhances eye protection and usually consists of two lenses in a protective frame; or a device with a single, larger lens in a frame to serve both eyes or a one-piece lens frame combination worn like conventional two-lens spectacles. The lenses may be either plano (zero power, non-corrective) or prescription.

Qualified professional means a person qualified to dispense ophthalmic products in a given jurisdiction.

Resources

- [Donning and Doffing Personal Protective Equipment \(PPE\) Video](#) (9 minutes) Updated video on PPE donning and doffing.
- [PPE Protocol for Healthcare Workers](#) poster.
- [Use and Re-use of Eye Protection](#) (video) Video demonstrates process for cleaning and reusing face shields and eye protection.

References

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