

**Personal Protective  
Equipment (PPE):  
Eye/Face Protection  
Literature Review.  
Executive Summary**

**Version 1.0  
21 February 2025**

## Executive Summary

This literature review informs the 'Personal Protective Equipment – Eye/Face Protection' content in the National Infection Prevention and Control Manual (NIPCM) and the Care Home Infection Prevention and Control Manual (CH IPCM). See [section 1.4 'Personal Protective Equipment'](#) in Chapter 1, [section 2.4 'Personal Protective Equipment'](#) in Chapter 2 of the NIPCM, and [section 4 'Personal Protective Equipment \(PPE\)'](#) in Chapter 1, and [section 4 'Personal Protective Equipment \(PPE\): Respiratory Protective Equipment \(RPE\)'](#) in Chapter 2 of the CH IPCM.

There are three documents to note:

- **Literature review** which provides a comprehensive systematic review of the evidence
- **Considered judgement forms** which outline the evidence base and expert opinion used to develop the recommendations and good practice points for each literature review research question. Also detailed are the benefits, potential harms, feasibility of implementation, value judgements, intentional vagueness, and exceptions associated with the recommendations and good practice points
- **Evidence tables** which detail all the included studies and provide an assessment of the evidence for each research question of the literature review

## Scope

### Research Questions

There are 11 research questions (RQ) in this literature review. Two new RQs were added in this update, which looked to define eye and face protection and establish when eye/face protection should be worn by a service user/visitor (RQ 1 and 5 respectively).

- RQ 1 and 2 defines eye and face protection, and the types recommended for health and care settings.

- Legislative requirements and standards are described in RQ 3 and throughout the review, where applicable.
- RQ 4 and 5 cover when eye/face protection should be worn by health and care staff and a service user/visitor, respectively.
- RQ 6, 7 and 8 cover where and how eye/face protection should be donned and doffed, and how this should be changed or removed, respectively.
- RQ 9 and 10 cover how eye/face protection should be disposed of and how reusable eye/face protection should be reprocessed/decontaminated, respectively.
- RQ 11 covers how eye/face protection should be stored.

## Change to Practice

All changes to the existing recommendations and the formation of new recommendations (R) and good practice points (GPP) reflect current practice and therefore no significant changes to practice are expected as a result of this 3-year update to the literature review.

## Change to Recommendations and Good Practice Points

Recommendations within the previous version (V1.0) of this literature review regarding the selection of certain types of eye/face protection for use against different types of anticipated exposure have been removed. This is due to a lack of evidence to support selection of specific types of eye/face protection for certain tasks or anticipated exposure. It is now a GPP that the following factors should be considered when deciding on the type of eye/face protection to wear, appropriateness for the task being undertaken, type of anticipated exposure, and fit of eye/face protection ([GPP4.2](#)).

The recommendation within the previous version (V1.0) of this literature review regarding all members of the surgical team wearing eye/face protection during all surgical procedures has been removed. It is now recommended that the decision to wear eye/face protection should be determined based on an anticipated risk of splashing and/or spraying of blood and body fluids ([R4.1](#)).

New good practice points have been made regarding the types of eye/face protection suitable for use in health and care settings ([GPP2.1](#)), extended use of eye/face protection ([GPP4.1](#) and [GPP8.3](#)), and the wearing of eye/face protection by visitors ([GPP5.1](#)).

## Summary of Recommendations (R) and Good Practice Points (GPP)

### Research question 2: What types of eye/face protection are recommended for health and care settings?

**GPP2.1** The following types of eye/face protection are suitable for use in health and care settings:

- goggles
- face shields/visors
- safety glasses with solid side shields
- eye protection which is built into surgical masks

**GPP2.2** Prescription eyeglasses and contact lenses should not be worn to provide eye/face protection.

**GPP2.3** Where prescription eyeglasses are required to be worn by the wearer, prescription protective eyewear which incorporates prescription lenses should be worn.

Or eye/face protection should be worn over prescription eyeglasses. The types of eye/face protection suitable for use over prescription eyeglasses include:

- goggles
- face shields/visors

**Research question 3: Are there any legislative requirements or standards (BS/EN/ISO) relating to the use of eye/face protection for infection prevention and control purposes?**

<b>R3.1</b>	<p>There is no direct legislative specific to the requirement to wear eye/face protection for the purposes of the prevention and control of infection, however, the Health and Safety at Work Act (1974), Control of Substances Hazardous to Health (2002 as amended) regulations and Personal Protective Equipment at Work Regulations 1992 (as amended) legislate that employers must provide PPE which affords adequate protection against the risks associated with the task being undertaken. Employers must provide clear instruction and information on how to use provided PPE and healthcare workers (HCWs) must ensure that suitable PPE is worn correctly and in line with manufacturer’s instructions for the task being undertaken.</p>
<b>R3.2</b>	<p>The following legislation must be adhered to when eye/face protection is worn in Scottish health and care settings:</p> <ul style="list-style-type: none"> <li>• The Health and Safety at Work etc. Act 1974</li> <li>• The Management of Health and Safety at Work Regulations 1999</li> <li>• The Control of Substances Hazardous to Health (Amendment) Regulations 2004</li> <li>• The Personal Protective Equipment at Work (Amendment) Regulations 2022 (PPER 2022)</li> </ul>
<b>GPP3.1</b>	<p>Eye/face protection intended for use in health and care settings should meet the relevant standards as detailed in Appendix 2 of the literature review.</p>

**Research question 4: When should eye/face protection be worn by health and care staff?**

<b>R4.1</b>	<p>Eye/face protection should be worn when there is an anticipated risk of splashing and/or spraying of blood or body fluids.</p>
<b>GPP4.1</b>	<p>Extended use of eye/face protection (worn for care of successive service users without removal between) should be applied during cohort isolation only.</p>

- GPP4.2** The following factors should be considered when deciding what type of eye/face protection to wear:
- the appropriateness for the task being undertaken,
  - the type of anticipated exposure,
  - and the fit of the eye/face protection.

### **Research question 5: When should eye/face protection be worn by a service user/visitor?**

- GPP5.1** Visitors should be offered eye/face protection when providing direct care if splashing and/or spraying is anticipated.

### **Research question 6: Where and how should eye/face protection be donned (put on)?**

- R6.1** Where two or more items of PPE are worn, these must be compatible with one another.
- GPP6.1** Eye/face protection should be checked for any damage or defects prior to donning (putting on).
- GPP6.2** Eye/face protection should be donned (put on) outside of the service user's room/care area, or within an ante room.
- GPP6.3** Hand hygiene should be performed prior to donning (putting on) eye/face protection, or all PPE when worn as part of an ensemble.
- GPP6.4** When eye/face protection is being worn as part of a PPE ensemble, eye/face protection should be donned (put on) after a surgical face mask or respirator and before donning gloves.
- GPP6.5** Eye/face protection should be worn in accordance with manufacturer's instructions, including use within expiration dates.
- GPP6.6** Once donned (put on), eye/face protection should not be touched or worn around the neck or on top of the head when not in use.

## Research question 7: Where and how should eye/face protection be doffed (taken off)?

<b>R7.1</b>	<b>Eye/face protection must be doffed (removed) “on leaving the work area”, in-line with COSHH legislation. This can be immediately before or after leaving the work area.</b>
<b>GPP7.1</b>	<b>Hand hygiene should be performed before doffing (removing) eye/face protection, and after doffing all other items of PPE when worn as part of a PPE ensemble.</b>
<b>GPP7.2</b>	<b>When eye/face protection is worn as part of a PPE ensemble, eye/face protection should be doffed (removed) after the doffing of gloves and doffing of a gown, apron or coverall, but before doffing a surgical face mask or respirator, to minimise the risk of cross-contamination.</b>
<b>GPP7.3</b>	<b>Eye/face protection should be removed using two hands and by only handling the part(s) that secure the equipment to the wearers head, for example by the headband or side arms.  Eye/face protection with a headband should be removed by using two hands to pull the elastic strap away from behind the wearer.</b>
<b>R7.2</b>	<b>Once removed, eye/face protection must be subsequently cleaned/decontaminated or, if necessary, disposed of, in-line with COSHH legislation.</b>
<b>GPP7.4</b>	<b>Reusable eye/face protection should be placed in a designated container for subsequent cleaning and/or decontamination, where necessary.</b>

## Research question 8: When should eye/face protection be changed or removed?

<b>GPP8.1</b>	<b>Eye/face protection should be changed or removed when vision is impaired due to visible soiling/contamination or damage.</b>
<b>GPP8.2</b>	<b>Eye/face protection should be changed or removed when a clinical procedure or task has been completed and/or there is no longer an exposure risk.</b>

- GPP8.3** Extended wearing of eye/face protection (worn for care of successive service users without removal between) should be changed or removed:
- when contaminated by blood or body fluids (after individual service user contact, before contact with the next service user)
  - when vision is impaired due to visible soiling/contamination or damage
- GPP8.4** Eye/face protection that is damaged should be discarded.

### **Research question 9: How should eye/face protection be disposed of?**

- GPP9.1** Eye/face protection labelled single use should be disposed of after use.
- GPP9.2** Eye/face protection should be disposed of in a waste container as clinical waste.
- GPP9.3** Hand hygiene should be performed after disposing of eye/face protection.

### **Research question 10: How should reusable eye/face protection be reprocessed/decontaminated?**

- R10.1** Employers should ensure that cleaning and/or disinfecting arrangements are in place for reusable eye/face protection.
- GPP10.1** Reusable eye/face protection should be cleaned and/or disinfected according to manufacturer's instructions, or in line with local policy or procedure.
- GPP10.2** Reusable eye/face protection should be cleaned and/or disinfected before being re-used or stored.
- GPP10.3** Hand hygiene should be performed after the cleaning and/or disinfecting of reusable eye/face protection.



## **Research question 11: How should eye/face protection be stored?**

**R11.1** When not being used, eye/face protection must be stored in a well-defined, safe storage place where it is protected from loss, contamination, and damage, such as from direct sunlight.