



#### **Executive Summary**

This literature review informs the 'Personal Protective Equipment – Personal Protective Equipment (PPE) Footwear content in the National Infection Prevention and Control Manual (NIPCM) and the Care Home Infection Prevention and Control Manual (CH IPCM).

- NIPCM section 1.4 'Personal Protective Equipment (PPE)' in Chapter 1.
- CH IPCM section 4 'Personal Protective Equipment (PPE) in Chapter 1

#### There are three documents to note:

- The 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 nine research questions (RQ) in this literature review.

- RQ 1 Are there any legislative requirements or standards (BS/EN/ISO) for the use of footwear as PPE for infection control purposes?
- RQ 2 What type(s) of footwear are suitable for health and care settings?
- RQ 3 Should overshoes be used?
- RQ 4 When should specialist footwear be worn?
- RQ 5 Where and how should footwear be donned?
- RQ 6 Where and how should footwear be doffed?
- RQ 7 When and how should footwear be cleaned?
- RQ 8 How should footwear be stored?
- RQ 9 When and how should footwear be disposed of?

#### **Change to Practice**

There is no significant change to practice expected as a result of this literature review update. It is understood that recommendations (R) and good practice points (GPP) developed are reflective of current practice.

## **Change to Recommendations and Good Practice Points**

The following questions were updated from the previous review,

- Are there any legislative requirements for the use of footwear as PPE for infection control purposes? (modification: added the phrase "or standards (BS/EN/ISO)")
- Should overshoes be used? (modification: removed the word "when")
- When should specialist footwear be worn? (modification: previously "When/Where should dedicated footwear be used)



#### **NHS Scotland Assure**

- Where and how should footwear be donned? (modification: previously "How should dedicated footwear be donned?")
- Where and how should footwear be doffed? (modification: previously "How should dedicated footwear be doffed?")
- When and how should footwear be cleaned? (modification: combined the two separate questions "When should footwear be cleaned?" and "How should footwear be cleaned?")
- How should footwear be stored? (modification: previously "How should dedicated footwear be stored?")
- When and how should footwear be disposed of? (modification: previously "How/when should footwear be disposed of?")

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

# Research Question 1: Are there any legislative requirements or standards (BS/EN/ISO) for the use of footwear as PPE for infection control purposes?

- R1.1 The following legislation and policy must be adhered to by employers and employees when providing and wearing footwear in Scottish health and care settings.
  - The Health and Safety at Work etc. Act 1974
  - The Control of Substances Hazardous to Health (Amendment)
     Regulations 2004
  - The Personal Protective Equipment at Work (Amendment)
     Regulations 2022 (PPER 2022)
- R1.2 Those procuring footwear for use as PPE for IPC purposes in Scottish health and care settings should ensure that the items are UK Conformity Assessed (UKCA) marked
- GPP 1.1 Where there is a need for footwear to be procured specifically for use as PPE for IPC purposes in Scottish health and care settings, it



should be ensured that the items comply with the relevant standards as outlined in Appendix 2

# Research Question 2: What type(s) of footwear are suitable for health and care settings?

GPP2.1 Footwear used within health and care settings should be:

- Comfortable: Soft-soled, low-heeled, and designed for long shifts.
- Protective: Able to protect the foot against spills, dropped sharps, and contamination.
- Have closed toes.
- Slip-Resistant: With various sole patterns/materials to prevent falls.
- Easy to clean and maintain

#### Research Question 3: Should overshoes be used?

No Recommendation

#### Research Question 4: When should specialist footwear be worn?

- **GPP4.1** Dedicated footwear should be used in the theatre environment.
- GPP4.2 Dedicated footwear should be worn within the theatre department only and not out with the department.

# Research Question 5: Where and how should footwear be donned?

GPP5.1 Footwear designated for use in operating theatres should be put on within the changing room (or a similar designated area) prior to entering the operating theatre



GPP5.2 Footwear should be donned after removing personal items and before donning any other items of PPE

### Research Question 6: Where and how should footwear be doffed?

GPP6.1 Theatre footwear should be removed in a designated area within the operating theatre complex prior to exiting the area.

### Research Question 7: When and how should footwear be cleaned?

- GPP7.1 Dedicated theatre footwear should be cleaned daily when in use and if contaminated.
- GPP7.2 Cleaning facilities should be located near or within changing areas to facilitate regular cleaning.
- GPP7.3 Reusable theatre footwear should be cleaned according to local policy or as per manufacturer's instructions.

### Research Question 8: How should footwear be stored?

R8.1 Dedicated footwear worn as PPE must be stored in a designated storage facility that protects it from contamination, loss, or damage by harmful substances, dampness, or sunlight.

# Research Question 9: When and how should footwear be disposed of?

GPP9.1 Reusable footwear used as PPE in health and care settings should be replaced when its protective functions are compromised and be



#### NHS Scotland Assure

disposed of into appropriate waste receptables in accordance with local waste management protocols.

GPP9.2 Disposable shoe covers should be discarded after each use in appropriate waste receptacles in accordance with local waste management protocols.

