## SBAR: Use of gloves for environmental cleaning

| Situation | The National Infection Prevention and Control Manual for NHSScotland – Chapter 1: Standard Infection Control Precautions (SICPs) Policy¹ was published in January 2012. This mandatory evidence based guidance is for use by all staff in all healthcare settings whether infection is known to be present or not to ensure the safety of patients, staff and visitors. They are the basic infection prevention and control measures necessary to reduce the risk of transmission of microorganisms from both recognised and unrecognised sources of infection. There are ten elements of SICPs one of which is Personal Protective Equipment (PPE).

Currently there is variation in practice between the nursing staff and domestic staff with respect to glove selection for environmental cleaning tasks. While within the majority of NHS boards, disposable non sterile latex/nitrile or neoprene gloves are used by domestic staff, in a small number of NHS boards reusable ‘marigold’ household type gloves are worn.

This SBAR aims to:

- examine the scientific evidence underpinning re-usable gloves (including cotton glove liners) within the healthcare setting and whether this poses a risk to patients, staff and visitors.

- determine whether consistent guidance across staff groups on glove selection for environmental cleaning can be established. |
**Background**

Discussion at the Domestic Services Advisory Group highlighted that there are a number of different practices in place across NHS Scotland with respect to the choice of gloves worn for environmental cleaning purposes.

One NHS Board subsequently sent their local Standard Operating Procedure (SOP) for PPE which recommends the use of reusable (Marigold type) gloves by domestic staff. The justification for reusable glove use based on the fact that they are worn when cleaning duties involve constant hand wetting. This SOP advises the use of single use disposable gloves for use in outbreak situations and isolation room cleaning.

**Assessment**

Gloves are worn during environmental and equipment cleaning:

- To provide protection from chemicals cleaning agents.
- To provide protection from microorganisms in the environment.

**Protection from chemicals (e.g. cleaning agents)**

The law necessitates that employers make appropriate assessments of the risks to health from exposure to chemical agents at work to comply with the Health and Safety at Work Act and Control of Substances Hazardous to Health Regulations (COSHH).2,3

Additional factors should also be considered when choosing an appropriate glove e.g. length of cuffs etc.2

- To protect the hands from ‘wet work’ the glove of choice must meet the European Standard EN374-2.4
- If exposure to chemical agents is anticipated the glove of choice must also meet EN374-3.

A review of single use disposable gloves highlighted that there are many gloves on the market which meet the appropriate EN standards. However it was recognised that marigold ‘type’ gloves which are marketed for household use, are not specifically promoted for use in healthcare.
For infection prevention and control i.e. to provide protection from microorganisms in the environment to prevent onward transmission

An evaluation of the issues and risks associated with the environment in terms of HAI demonstrated that 42.7% of microbiology reports within the HAI Prevalence survey\(^5\) were microorganisms known to survive for extended duration in environment conditions.\(^6\) Therefore organisms which have the ability to survive in the environment for extended periods can potentially be spread by gloves worn by staff during cleaning of the environment. There is a robust scientific evidence base which, irrespective of healthcare setting, glove type, clinical specialty, or procedure is consistent in its recommendations relating to when gloves should be changed or removed.\(^7\)\(^{-26}\) The relevant points are summarised below:

- Gloves are a single-use item and should be changed after each use or upon completion of a task e.g. when changing your cloth to move on to the next task.
- Gloves must never be decontaminated, for example with soap and water or alcohol based hand rub.
- Gloves must be changed if a perforation or puncture is suspected or identified.
- Gloves must be changed after contact with cleaning chemicals which may compromise the barrier integrity of the glove.

To ensure no cross transmission of micro-organisms during the process of cleaning the environment, single use disposable gloves should be used. This is consistent with the evidence based advice within the National Infection Prevention and Control Manual.

**Conclusion**

To ensure that there is no cross transmission of micro-organisms during the process of cleaning the environment, single use disposable gloves should be worn.
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<th>Recommendation</th>
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<td>• Worn for environmental cleaning.</td>
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<td>• Changed after each use or upon completion of a task e.g. when changing your cloth to move on to the next task.</td>
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Reference List


(10) Bernthal L. Two gloves or not two gloves: that is the question. Br J Perioperative Nursing 2000 Feb. 10(2).


(12) Flores A. Appropriate glove use in the prevention of cross-infection. Nurs Stand 2007 9 May. 21(35).


(15) Hampton S. The appropriate use of gloves to reduce allergies and infection. Br J Nursing 2002 26 Sep. 11(17).


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## Appendix 1 - Medline Search Strategy (Domestic Gloves & Outbreaks)

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