

Sustainable glove use for healthcare workers

Gloves should be worn as part of standard precautions when there is a risk of contact with blood, body fluids or surfaces and equipment contaminated by infectious agents.¹

The inappropriate use or overuse of gloves leads to missed opportunities for hand hygiene, increases the risk of infection transmission and occupational dermatitis, and creates additional waste.^{2,3,4}

Sustainable glove use

Hand hygiene is essential before and after glove use

Hand hygiene must be performed immediately before putting on and after removing gloves.^{3,4}

Gloves **do not** provide complete protection from contamination. Gloves may have microscopic defects that allow microorganisms to contaminate hands.

To protect the wearer, open cuts and abrasions on hands should be covered with an occlusive dressing before putting on gloves.

Inappropriate glove use can increase the transmission of infectious agents

Gloves become contaminated with microorganisms after touching patients, contaminated environmental surfaces, and used equipment.

If gloves are not changed and hand hygiene is not performed between patient care activities, the risk of cross contamination and healthcare-associated infections is increased.³

Gloves are single use items

All gloves commonly used by healthcare workers for patient care are defined as single use disposable gloves.

Environmental impact of single use gloves

- Healthcare contributes to 7% of Australia's overall carbon footprint.¹
- On average, 30 pairs of gloves are used per patient per 12-hour shift in Australian and New Zealand intensive care units.⁵
- Plastics used in healthcare organisations contribute to increasing environmental costs.²
- One third of waste generated in healthcare is single use plastics, including gloves.^{6,7}

Checklist for glove use

Before putting on gloves, consider:

Why are you wearing gloves?

- Is there a risk of blood or body fluid exposure?
- Is there a risk of touching contaminated environmental surfaces or equipment?
- Is there a risk of exposure to an infectious condition, such as varicella or scabies?¹

Who or what are you trying to protect?

- The patient, the environment, equipment or yourself?

Are gloves the best choice?

- Would performing hand hygiene be as effective or better at reducing the risk of cross contamination?³

You don't need gloves for

Direct patient contact when:

- Taking observations, including temperature, pulse, and blood pressure
- Giving subcutaneous and intramuscular injections
- Bathing and dressing (unless contact with blood or body fluids is anticipated)
- Transporting a patient
- Applying non-invasive ventilation or oxygen equipment
- Providing patient care where there is no contact with blood or body fluids.

Indirect patient contact when:

- Making beds
- Using the telephone
- Writing in the patient chart or electronic medical record
- Distributing or collecting patient meal trays
- Moving patient furniture
- Preparing medication, unless when specific handling requirements apply, such as for hormones, therapeutically active creams, and cytotoxic medications.

When to change gloves

Contaminated gloves will transfer infectious agents in the same way as contaminated hands. Change both gloves and perform hand hygiene:

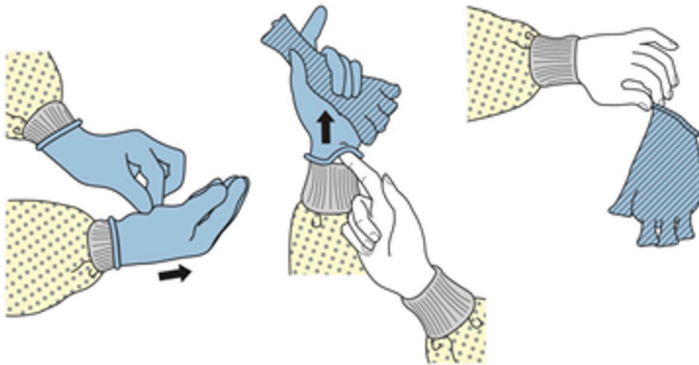
- When moving from one body site to another on the same patient, including mucous membranes, non-intact skin, or a medical device
- After each episode of patient care is completed
- When gloves become soiled (for example blood and body fluids) or damaged
- When hands become sweaty, to reduce the risk of dermatitis.

Never wear the same pair of gloves when moving from one patient to another.

How to remove gloves

Using the correct technique when removing gloves will help to protect you from contamination. **Figure 1** shows the steps to safely remove gloves to reduce the risk of self-contamination.

Figure 1: Removing gloves.



REMOVE GLOVES

1. Outside of gloves is contaminated!
2. Grasp outside of glove with opposite gloved hand; peel off.
3. Hold removed glove in gloved hand.
4. Slide fingers of ungloved hand under remaining glove at wrist.
5. Peel the second glove off over the first glove.
6. Discard gloves in appropriate waste container.¹

Perform hand hygiene after removing both gloves.

Additional resources and support

[Appropriate Glove Use in Health Care](#) factsheet, and [Know when to wear gloves](#) poster, South Australia Health. Information for healthcare workers on the appropriate use of non-sterile gloves.

[‘Gloves off!’ campaign](#), Hunter New England, NSW Health. A research project to improve hand hygiene and reduce unnecessary non-sterile glove use.

[‘The gloves are off’ campaign](#), National Health Service – England. An education and training awareness program to address the overuse of gloves by healthcare workers.

[Glove use information leaflet](#), World Health Organization. Information on the appropriate use of gloves to prevent the transmission of infections.

For more information, please visit: safetyandquality.gov.au/NHHI

You can also contact the HAI/ IPC project team at: HAI@safetyandquality.gov.au

References

1. National Health and Medical Research Council, Australian Commission on Safety and Quality in Health Care, (ACSQHC). Australian Guidelines for the Prevention and Control of Infection in Healthcare. Canberra: 2019.
2. Infection Control Service. Fact sheet for health care professionals: Appropriate Glove Use in Health Care. Version 2.1 ed: Department for Health and Ageing, South Australia; 2019.
3. Bellini C, Eder M, Senn L, Sommerstein R, Vuichard-Gysin D, Schmiedel Y, et al. Providing care to patients in contact isolation: is the systematic use of gloves still indicated? *Swiss Med Wkly* 2022 Jan 31;152:w30110.
4. WHO Guidelines Approved by the Guidelines Review Committee. WHO Guidelines on Hand Hygiene in Health Care: First Global Patient Safety Challenge Clean Care Is Safer Care. 2009. Geneva: World Health Organization
5. Matthew HA, Louise T, Deepak B, Naomi EH, Serena K, Forbes M, et al. How much do we throw away in the intensive care unit? An observational point prevalence study of Australian and New Zealand ICUs. *Critical Care and Resuscitation*. 2023;25(2):78-83.
6. Malik A, Lenzen M, McAlister S, McGain F. The carbon footprint of Australian health care. *The Lancet Planetary Health* 2018 2018/01/01;2(1):e27-e35.
7. NSW Health. Plastics in healthcare: The case for circularity. October 2021.

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