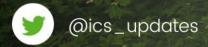


# Implementing Gloves Off in Critical Care

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X @clark\_samr









## Gloves Off in critical care



#### An implementation guide

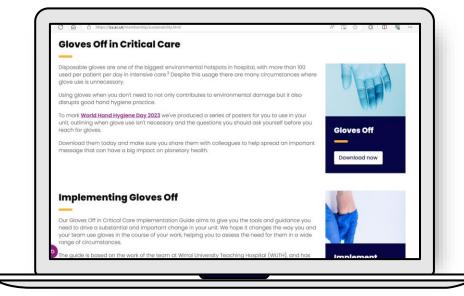
This guide is based closely the Keep it Simple Without Gloves project and supplementary implementation guide by Dr Sam Clark and the team at Wirral University Teaching Hospital (WUTH). It recounts the methods used by the team in their highly successful campaign to reduce unnecessary glove use at WUTH.

It is a guide for anyone looking to implement Gloves Off in Critical Care, Keep it Simple Without Gloves, or a similar change project, with a degree of success like that experienced by the WUTH team. You can find out more about the campaign at Wirral University Teaching Hospitals NHS Foundation Trust at the end of this document.

You can also find more information about our sustainability work, including Gloves Off in Critical Care, at ics.ac.uk/sustainability.





















# **Experience**









Intensive

Society

**Sustainability Project** 





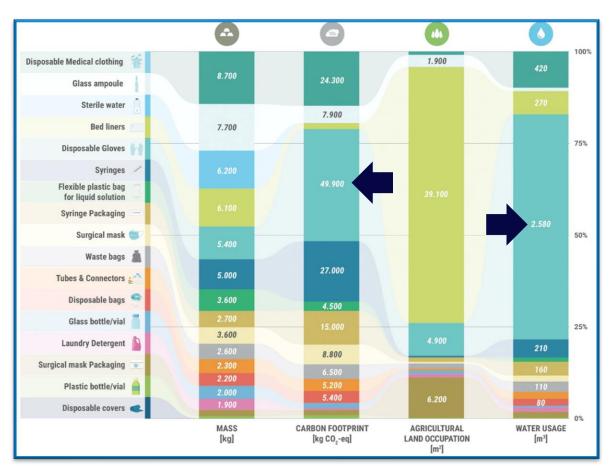




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# Why gloves?



The largest contributor to carbon footprint and water usage was disposable gloves

Hunfield et al, 2022











## Why gloves?

Smarter		R0 Refuse	Make product redundant by abandoning its function or by offering the same function with a radically different product
product use and manu- facture	and	R1 Rethink	Make product use more intensive (e.g. by sharing product)
		R2 Reduce	Increase efficiency in product manufacture or use by consuming fewer natural resources and materials
Extend lifespan of product and its parts		R3 Reuse	Reuse by another consumer of discarded product which is still in good condition and fulfils its original function
	span of roduct R5 Refu	R4 Repair	Repair and maintenance of defective product so it can be used with its original function
		R5 Refurbish	Restore an old product and bring it up to date
		R6 Remanufacture	Use parts of discarded product in a new product with the same function
		R7 Repurpose	Use discarded product or its parts in a new product with a different function
Useful application	9000	R8 Recycle	Process materials to obtain the same (high grade) or lower (low grade) quality
of mate- rials		R9 Recover	Incineration of material with energy recovery

Potting et al, 2017

## **Increasing circularity**











## **Guidance** is clear





The Royal Marsden Manual of Clinical and Cancer Nursing Procedures

Journal of Hospital Infection 86S1 (2014) S1-S70



Available online at www.sciencedirect.com

Journal of Hospital Infection

journal homepage: www.elsevierhealth.com/journals/jhin



epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England

H.P. Loveday<sup>a\*</sup>, J.A. Wilson<sup>a</sup>, R.J. Pratt<sup>a</sup>, M. Golsorkhi<sup>a</sup>, A. Tingle<sup>a</sup>, A. Bak<sup>a</sup>, J. Browne<sup>a</sup>, J. Prieto<sup>b</sup>, M. Wilcox<sup>c</sup>

- <sup>a</sup> Richard Wells Research Centre, College of Nursing, Midwifery and Healthcare, University of West London (London). <sup>b</sup> Faculty of Health Sciences, University of Southampton (Southampton).
- 6 Microbiology and Infection Control, Leeds Teaching Hospitals and University of Leeds (Leeds).













# Use a model for improvement





**Sus-QI Framework Centre for Sustainable Health Care** 













## Involve

## Patient Facing Colleagues

**Unit Leadership** 

Housekeeping Technical Pharmacy

**AHPs** 

HCA/ CSW Nursing Medical Clinical lead IPC leads Matron Educators <u>Link nurses:</u>

- IPC

- Sustainability

Visiting teams

Executive Team

Chief Nurses Medical Directors Finance Officer

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Trust Operations

Procurement
Facilities
Communications

Clinical Governance

IPCT & Directors
Sustainability
Improvement

Other Teams

IV access
Nutrition
Clinical skills
Occ. Health





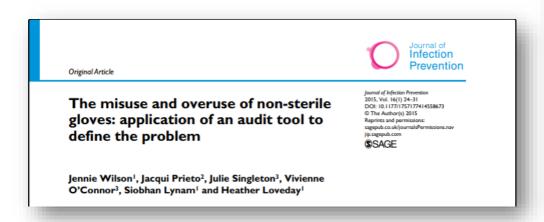








# Measure



Glove use audit tool			oool University Hos NHS Foundat
A. Observation			
1. Date		Location (Hospital & Ward/Area)	
2. Job role of pe	rson performing task		
□ Consultant	☐ Band 6+ nurse	☐ Pharmacist	☐ Other:
☐ Specialty doctor	☐ Band 5 nurse	□ Physiotherapist	
☐ Doctor in training	☐ Student nurse	☐ Dietician	
☐ Fellow/ Trust grade	□ CSW	□ SLT	
☐ Student doctor	☐ Domestic		
3. Location of ta	sk performed		
☐ Clean utility	☐ Sluice	☐ Side room ☐ Outside side room	□ Other:
☐ Under isolation precautions		☐ Bed space	











# Our baseline findings



	Before at WUTH
Gloves worn when not necessary	73%



	Before at LUHFT	Trust wide
Gloves worn when not necessary	60.4%	73%



Hands not washed after gloves off	87%
Cross contamination events	91%



Hands not washed after gloves off	50%	51%
Cross contamination events	98%	83%











# Roadmap to change

Spread and adoption













## Guidance

## Before you reach for gloves, stop and ask 'Am I at Risk?'

### The risks requiring you to wear gloves are:

- If direct contact with blood, bodily fluids, mucous membranes, or non-intact skin is likely.
- If contact with chemical hazards or harmful drugs is likely.
- If caring for a patient requiring specific IPC transmission-based precautions.

For most other tasks, gloves are not necessary and can result in more harm.

### Look after yourself and your patients:

- The most effective way to prevent infection is to observe the WHO five moments of hand hygiene.
- Wearing gloves when not necessary can result in higher rates of transmission of infection.









## When preparing and administering medicines, gloves are generally not required

#### Medicines that might be harmful and require you to wear gloves include:

- Cytotoxic medicines (i.e. chemotherapy).
- Mono-clonal antibodies (names end in '-mab').
- Immunotherapy agents (names end in '-ib').
- Medicine containing creams (such as antibiotic creams).
- Hormones/hormone modulating medicines.

#### You might also wear gloves if:

- Irritant injectable medicines (such as those with extremes of pH).
- You have a severe allergy to the medicine.
- You are pregnant (due to lack of robust data for most drugs).

#### Look after yourself and your patients

- If you are unsure whether the drug you are giving is harmful, please speak to the pharmacy or medical teams.
- Ensure that you clean your hands before and after handling medicines.



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#### Peripheral & Central Intravenous Medication Preparation & Administration using Standard ANTT





A red number denotes where Key-parts or Key-sites need protecting



Disinfect hands with alcohol hand rub or soap & water



Disinfect tray using a disinfectant wipe§ creating a General Aseptic Field



Gather| equipment place around tray



Disinfect hands with alcohol hand rub or soap & water\*



Apply non-sterile gloves if required\* & disposable apron if required

\*Gloves are generally not required Wear gloves if direct ontact with blood, bodily uids, mucous membranes, r non-intact skin is likely.

njectable medicines that night be harmful and equire you wear gloves include cytotoxic medicines and monoclonal antibodies.

Apply the same risk assessment to tasks requiring **ANTT** 



Prepare medicines protecting Key-Parts with non-touch technique (NTT) & Micro Critical Aseptic Fields



Remove gloves followed by apron (if either worn) & immediately disinfect hands with alcohol hand rub or soap & water



Assess vascular access device is appropriate and suitable for IV administration, and expose ready for use



Disinfect hands with alcohol hand rub or soap & water



Apply non-sterile gloves if required\* & disposable apron if required



Scrub the IV hub (Needle free connector)

#### 'Scrub The Hub'

- Use a 2% chlorhexidine/ 70% alcohol wipe§
- Open the wipe fully & use NTT
- Scrub the hub tip for 15 seconds, creating friction using different areas of the wipe
- Allow to dry completely before use



Flush device. administer drug or attach infusion using NTT protecting Key-parts. Flush after administration of



Dispose of sharps & equipment



Remove gloves followed by apron (if either worn) & then immediately.



Disinfect hands with alcohol hand rub or soap & water\*



Disinfect tray using a disinfectant wipe§



**Disinfect hands** with alcohol hand rub or soap & water

Some brands/ types of disinfectant wipes may require gloves to be worn when using. After using disinfectant wipes without gloves, we recommend disinfecting hands with soap & water.

This guideline is for use on Aintree Critical Care Unit as part of the Gloves off campaign pilot.

July 2023















# Follow-up Results



	Before at WUTH	After at WUTH
Gloves worn when not necessary	73%	53%



	Before at LUHFT	After at LUHFT
Gloves worn when not necessary	60.4%	33%



Hands not washed after gloves off	87%	26%
Cross contamination events	91%	58%



Hands not washed after gloves off	50%	18%
Cross contamination events	98%	77%

**Intensive** 

Care Society

**Sustainability Project** 











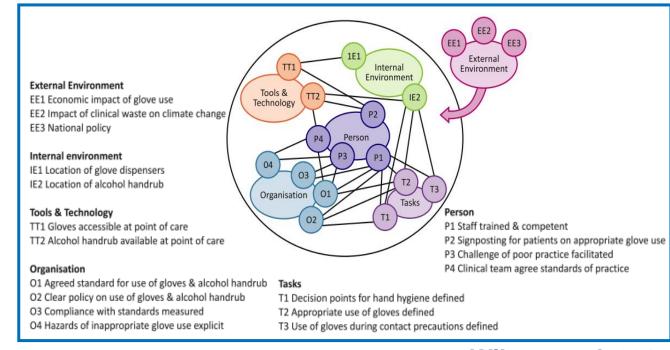
**Next steps for Gloves Off** 

Further improvements

- Education
- ABHR, surface wipes
- Waste management
- Disposable aprons

## Sustaining improvement

- Concerns & misconceptions
- Audit schedule
- University links
- Sustainable procurement



Sustainability in governance

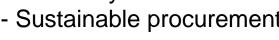


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Endorsed by

Cheshire & Mersey

Wilson et al, 2017



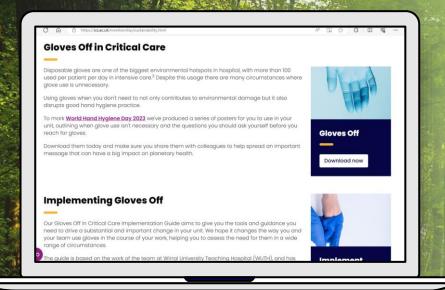












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