Grampians Health

Gloves Off: Reducing Inappropriate Glove Use Through Targeted Education and Engagement

Protecting our staff, patients and the environment

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Grampians Health

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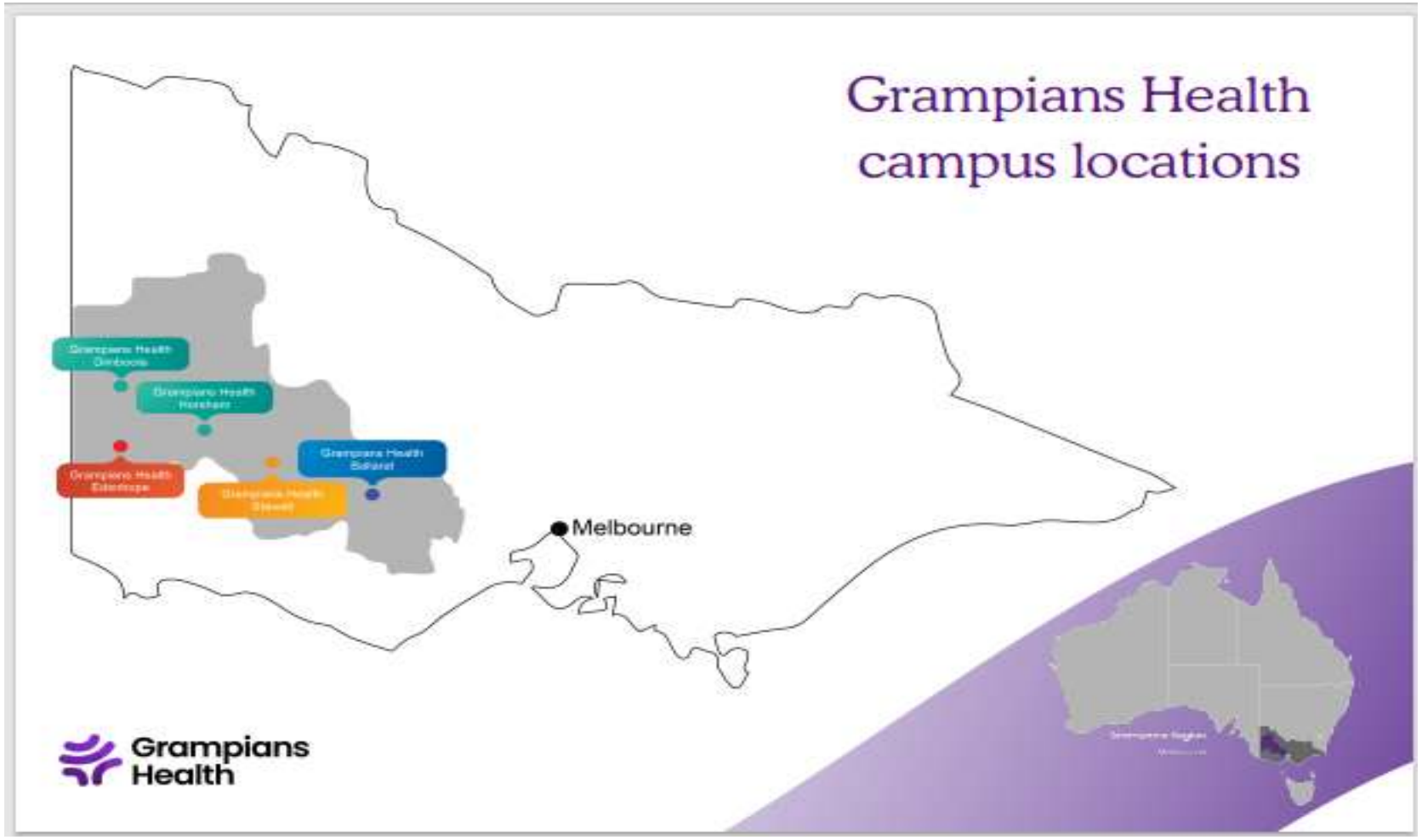
Acknowledgement of the country

Where is Grampians Health Located?



Grampians Health

“What you do makes a difference, and you have to decide what kind of difference you want to make.” – Jane Goodall

Introduction

- Studies have shown that healthcare workers are less likely to adhere to hand hygiene practices when wearing gloves, increasing the risk of infection transmission [1,2].
- Data from the National Hand Hygiene Initiative (NHHI) from 2014 to 2024 revealed that glove use at Grampians Health rose from 17% in 2014 to 40% in 2020, likely due to the COVID-19 pandemic, and stabilised at 26% in 2024.
- The Grampians Health Gloves Off campaign was adapted from the John Hunter Hospital's "Gloves Off" project and with permission, using their published guidelines.

Reference: 1.Lindberg et al, (2020). Continued wearing of gloves: a risk behaviour in patient care.

2.Peters et al, (2025). Quick & Dirty: improper glove use increases infection risk and has global consequences.

Gloves and Infection Prevention and Control

- Gloves do not provide complete protection against hand contamination.

Studies show:

- Hand hygiene compliance as low as 41% when gloves are utilised[3].
- 49% of healthcare workers do not perform hand hygiene when removing gloves[3].
- 37% of glove usage leads to cross contamination with healthcare workers touching multiple surfaces whilst wearing the same gloves[3].

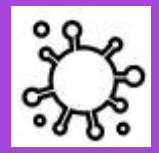
Reference:

3 Fuller et al, (2011). “the dirty hand in the latex glove”: a study of hand hygiene compliance when gloves are worn

Why Introduce a Gloves Off Program?

Cross-contamination risk: Gloves can give a false sense of security. If not changed between tasks or patients, they can spread pathogens just like unwashed hands.

Reduced hand hygiene compliance: Staff may skip hand hygiene if they're wearing gloves, gloves can have micro-tears or become contaminated during use.



Incorrect glove use: Using gloves when not indicated (e.g., for non-clinical tasks) increases the risk of contamination rather than reducing it.

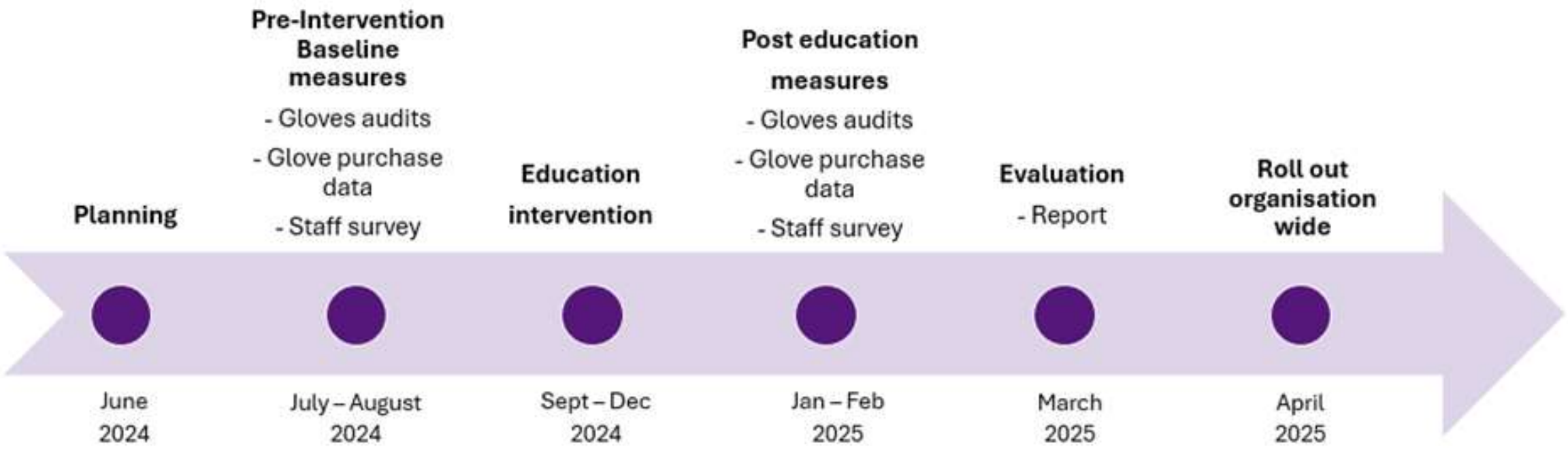
What did we know?

Baseline data on the carbon footprint

Nonsterile glove usage data for the two pilot wards A & B & the Carbon footprint:

- GHB Ward A Total Glove Use for this period, 76,800.
  - The Carbon footprint KG CO2e measurement totals 2611kg.
- GHB Ward B Total Glove Use for this period, 130,200.
  - The Carbon footprint KG CO2e measurement totals 4426kg.

Timeline for the “Gloves Off” Campaign



Project Aims

Improve hand hygiene compliance

Reduce hospital acquired infections

Reduce unnecessary use of nonsterile gloves

Decrease the Grampians Health environmental impact

Design and deliver a quality improvement package which could be rolled out more widely across GH

Has this program been implemented at other hospitals?

Education Intervention

- Education Sessions
- Posters and Promotional Materials
- Q&A Sessions
- SharePoint Page Development

Are gloves really needed?

Gloves Off

- Everyday activities for living (e.g. giving medicines, serving food, using a phone or computer, moving beds or trolleys)
- Routine observations (e.g. blood pressure, temperature)
- Giving injections and drawing IV medications
- Touching a patient when yours and their skin is intact

Gloves On

When taking transmission-based precautions, including:

- Contact with body fluids, mucous membranes, or non-intact skin
- Handling contaminated waste, linen or surfaces
- Handling cytotoxic medications
- Performing invasive procedures

CLEAN HANDS SAFE gloves HANDS off

CLEAN HANDS SAFE gloves HANDS off

You don't need to wear gloves when...

1. Touching a patient or resident

2. Moving a patient or resident in a chair or bed

3. Serving & clearing drinks and meals

4. Checking routine observations

5. Dispensing medication to a patient

6. Giving IM injections & Drawing IV medication

What did we find?

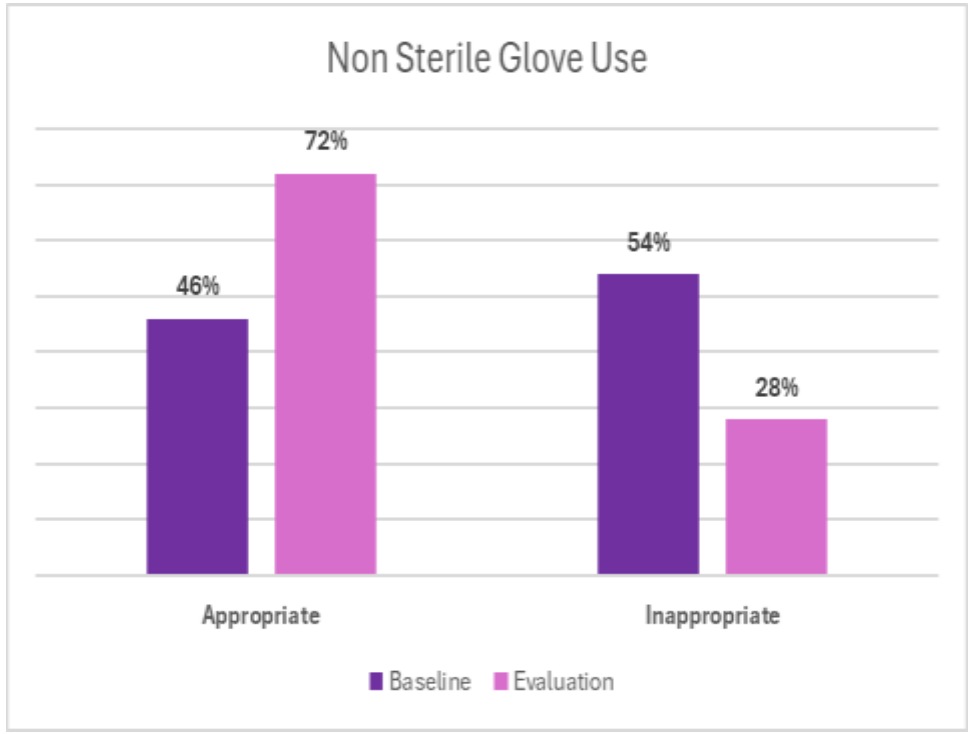
Pre & Post ‘Gloves Off’ Campaign Staff Survey

- A staff survey was completed by staff from pilot wards A and B.

Appropriate Glove Use-Observational Audit

Auditors recorded instances where gloves were used, as either appropriate or inappropriate.

Observational Audit Results



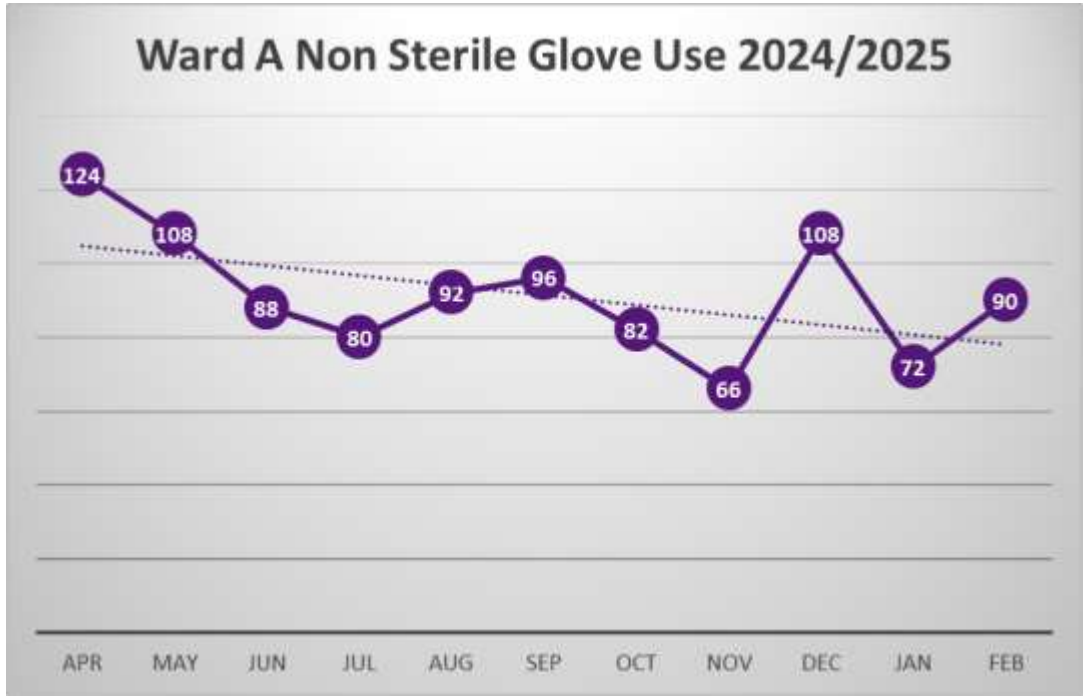
Baseline

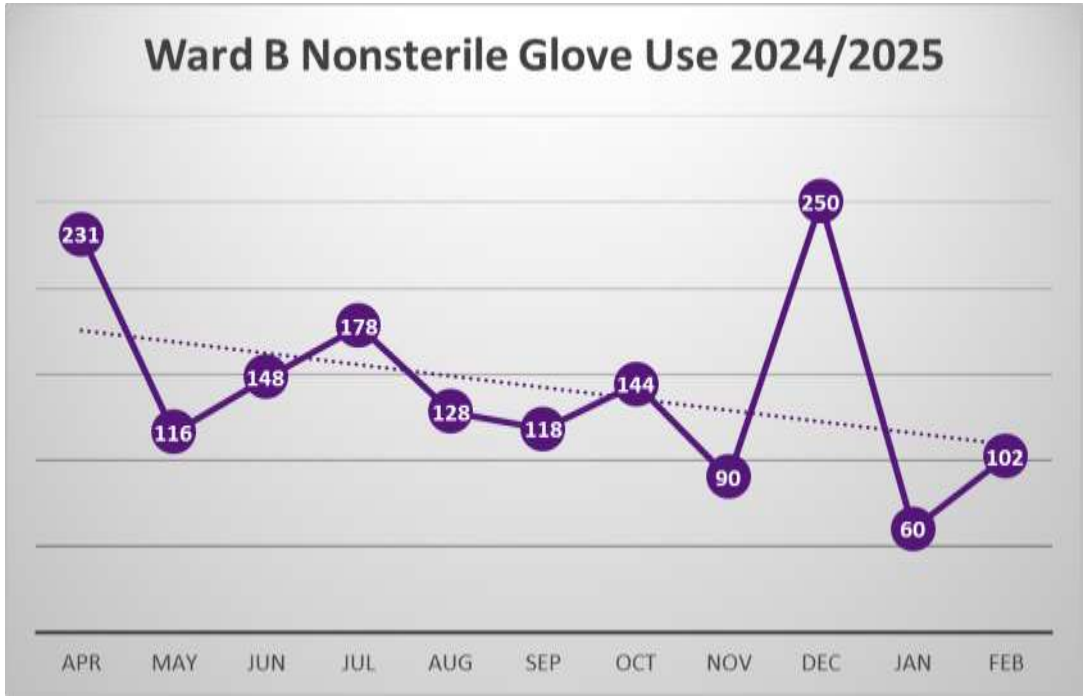
There were 103 instances of glove use recorded during baseline auditing.

Post Implementation

There were 46 instances of glove use recorded during post implementation.

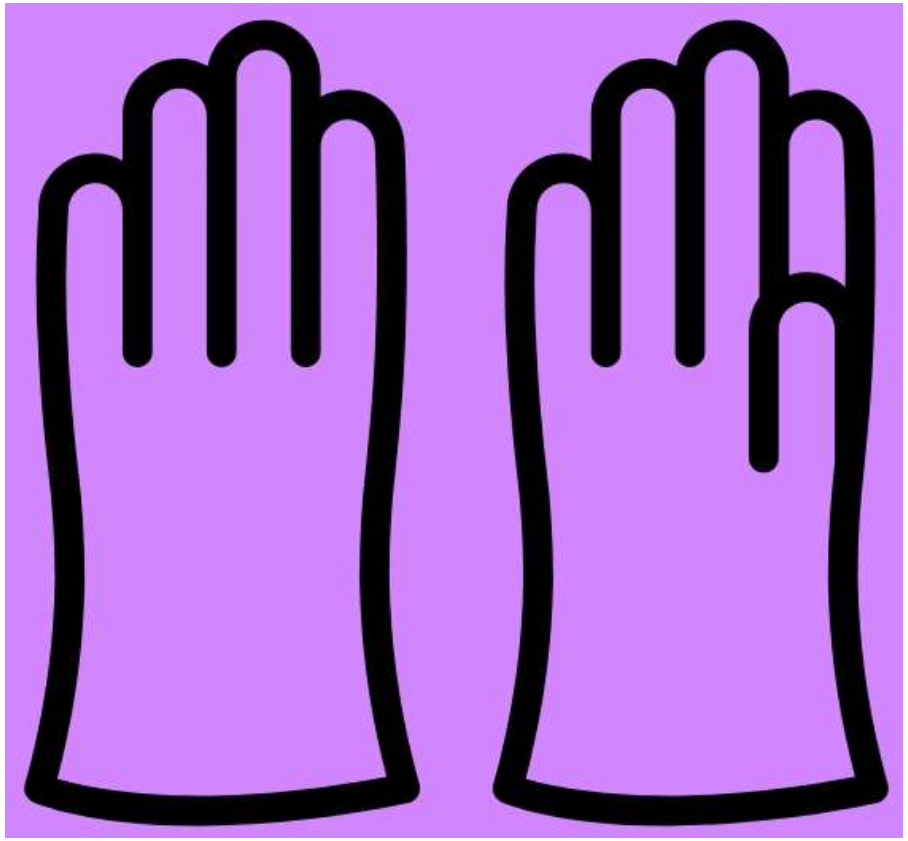
Results-Nonsterile Glove Use-2024/2025





Appropriate Glove Use

- 26% reduction in inappropriate glove use.



Cost Savings

- **Ward A** saved an average of $96 per month ($1154 per year).
- **Ward B** saved $244 per month ($2930 per year).

Carbon Footprint Reduction

Ward A reduced their average CO2 emissions per month by 67,600g.

Over the course of a year, this is equivalent to saving the emissions from driving 3,050kms.

Ward B reduced their average CO2 emissions per month by 171,600g.

Over the course of a year, this is equivalent to saving the emissions from driving 7,741kms.

Conclusion

Notable improvement in staff knowledge regarding appropriate nonsterile glove use.

Both pilot wards demonstrated a higher rate of appropriate nonsterile glove use.

This shift resulted in a reduction of C02 emissions.

Downward trend in the number of gloves ordered from Supply.

Financial savings

Hand hygiene? Was there significant change?

Acknowledgements

- John Hunter Hospital, Hunter New England Local Health District
- Grampians Health Ballarat-Ward A
- Grampians Health Ballarat-Ward B
- The ‘Gloves Off’ Campaign Project Group members

References

1.Lindberg M. Continued wearing of gloves: a risk behaviour in patient care. Published December 2020. https://www.sciencedirect.com/science/article/pii/S259008892030055X

2.Peters A. Quick & Dirty: improper glove use increases infection risk and has global consequences. Published May 15, 2025. https://aricjournal.biomedcentral.com/articles/10.1186/s13756-025-01563-0

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5.Hunter New England Health. (n.d.). Gloves Off program. Hunter New England Health. 6.Rizan C. 2021. Environmental impact of personal protective equipment distributed for use by health and social care services in England in the first six months of the COVID-19 pandemic. Journal of the Royal Society of Medicine, 114(5), 250–263. https://doi.org/10.1177/01410768211001583

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“We don’t have to engage in grand, heroic actions to participate in change. Small acts, when multiplied by millions of people, can transform the world.” - Howard Zinn

Thank you

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