



**GLOVES  
OFF!**

Clean hands.  
Safe for all.



# Why won't doctors wash their hands?

Dr Ebony Serone - JMO IPC Champion

Dr CJ Stolz - JMO IPC Champion

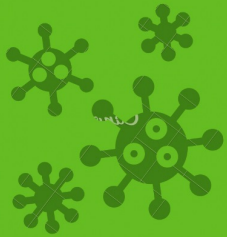
Dr Sarah Browning - Director, Infection Prevention Service

## Acknowledgement of Country

I would like to acknowledge the Traditional Custodians and Community members of the land we are meeting on today, the Awabakal People, and pay my respects to Elders past, present and emerging.

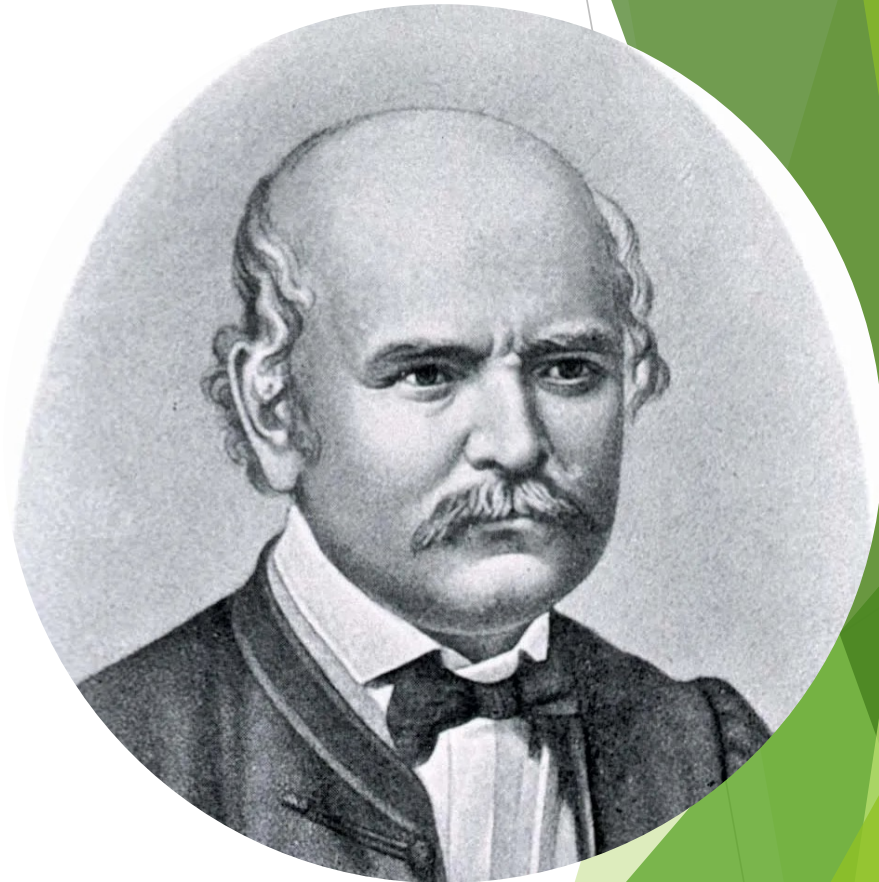
# JMO I.P.C. CHAMPIONS

- ▶ Who are we?
- ▶ CJ Stolz (JHH), Matthew Geytenbeek (JHH), Anne-Marie Aubin (Manning), Emma Watson (JHH), Ebony Serone (JHH), Sandrine Terry.



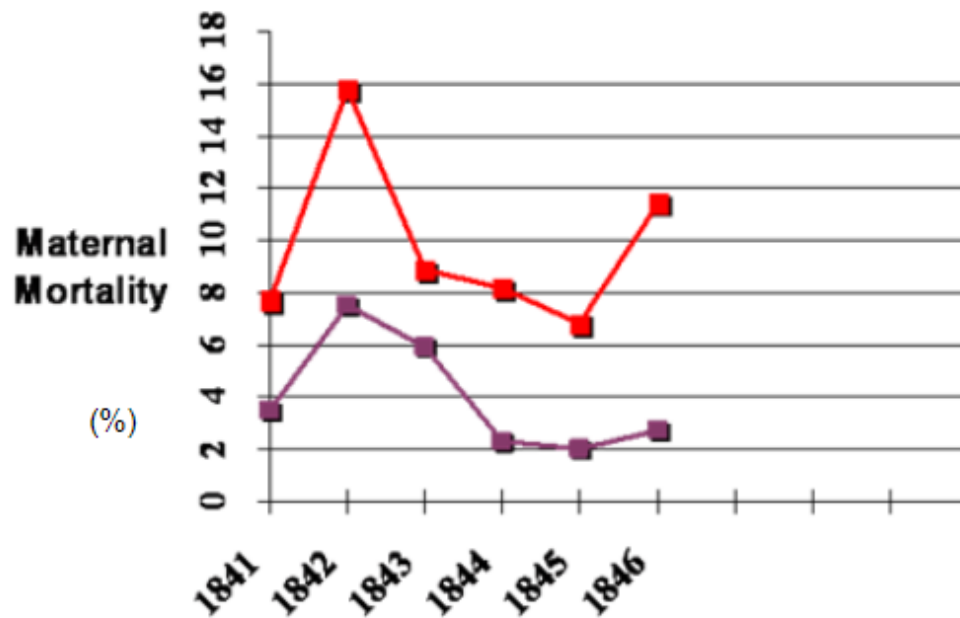
- ▶ What are we about?
  - ▶ IPC quality improvement across HNE hospitals
  - ▶ Increasing confidence in IPC areas for medical officers
  - ▶ Inspiring the next generation of leaders in IPC
  - ▶ Peer to peer education





**Semmelweis- releases today!!**

# Maternal mortality rates, First and Second Obstetrics Clinics, GENERAL HOSPITAL OF VIENNA, 1841-1846



—■ First  
—■ Second

Staffed by physicians and medical students

Staffed by midwives and midwifery students

*Semmelweis IP, 1861*

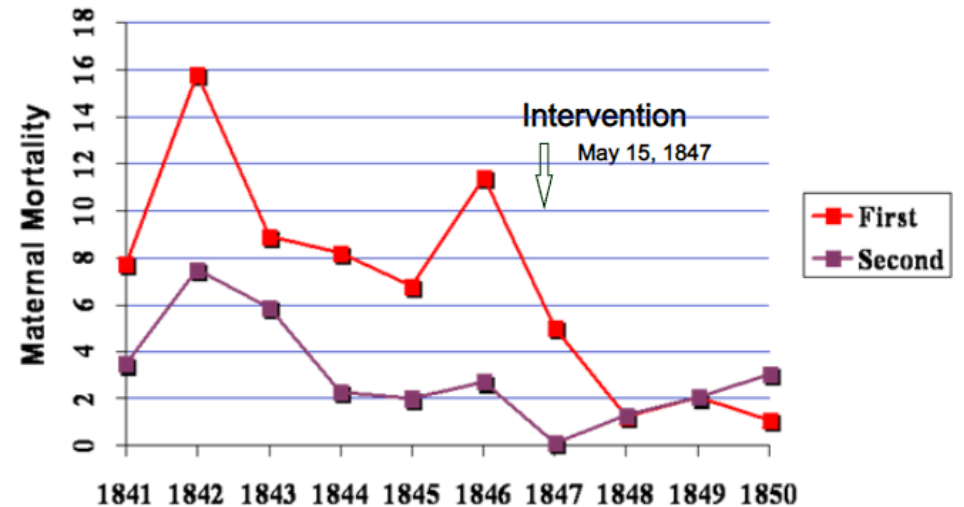
# Tragedy leads to important discovery

- Colleague cut by medical student's scalpel during autopsy
- Autopsy consistent with pathological condition like women dying from puerperal fever
- “unknown cadaverous material” being transferred to birth canal via hands



Ignaz Semmelweis washing his hands in chlorinated lime water before operating.

Maternal mortality rates,  
First and Second Obstetrics Clinics,  
GENERAL HOSPITAL OF VIENNA, 1841-1850



Semmelweis IP, 1861

# Effectiveness of a hospital-wide programme to improve compliance with hand hygiene

*Didier Pittet, Stéphane Hugonnet, Stephan Harbarth, Philippe Mourouga, Valérie Sauvan, Sylvie Touveneau, Thomas V Perneger, and members of the Infection Control Programme*

THE LANCET • Vol 356 • October 14, 2000

- ▶ 6 year before and after study in a Swiss teaching hospital (1994 - 1997)
  
- ▶ Outcomes
  - HH compliance
  - Nosocomial infection rates, MRSA attack rates
  
- ▶ Interventions
  - Bedside ABHR
  - HH poster campaign
  - Screening of patients and cohort
  - Visits of the infection control nurses
  - Contact isolation for those positive

# Results

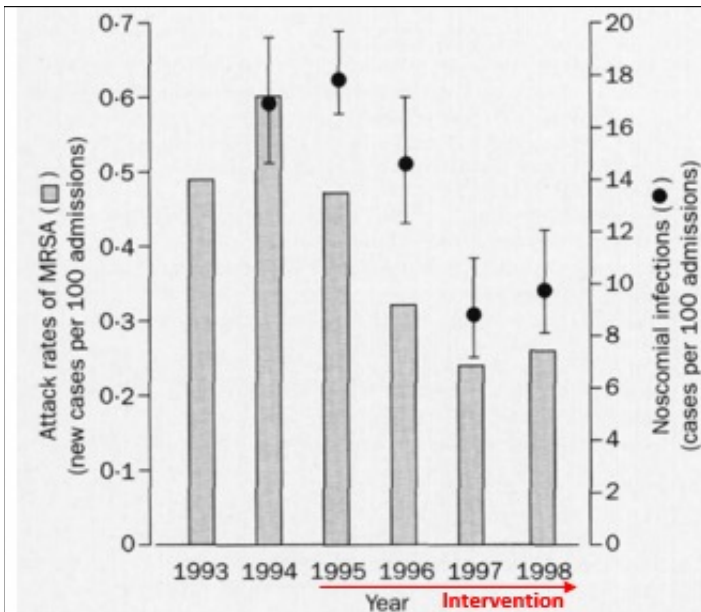


Figure 3: Trends in prevalence of nosocomial infections and annual attack rate of MRSA, 1993-98, University of Geneva Hospitals

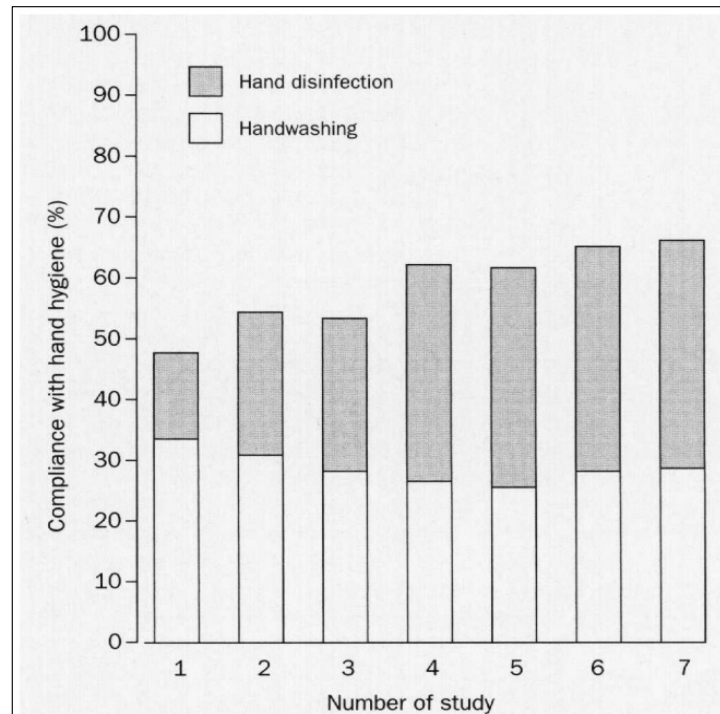
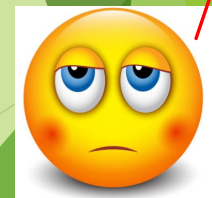
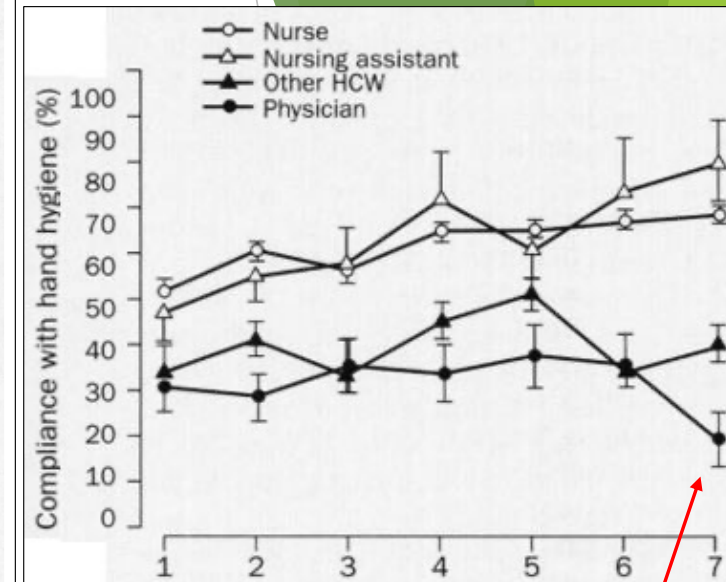


Figure 1: Hand-hygiene compliance trend during seven consecutive hospital-wide surveys, University of Geneva Hospitals, 1994-97



- Compliance with HH increased **48% to 66%** ( $p < 0.001$ )
- Nosocomial infections decreased from **16.9% to 9.9%** ( $p = 0.04$ )
- Incidence of MRSA infections **decreased from 2.16 to 0.93 episodes per 10,000 patient days** ( $p < 0.001$ )

# Hand Hygiene Compliance



slido



**What is the % compliance for HH among medical officers in greater metro hospitals?**

ⓘ Start presenting to display the poll results on this slide.

Greater metropolitan hospitals audit period 3			
Name	Correct Moments	Total Moments	Compliance Rate
Nurse/Midwife	8069	9023	89.40%
Medical Practitioner	1227	1606	76.40%
Allied Health Care Worker	830	889	93.40%
Invasive Technician	187	197	94.90%
Student Doctor	49	65	75.40%
Student Nurse/Midwife	601	704	85.40%
Student Allied Health	31	36	86.10%
TARGET IS >85%			

Organisation	# Observations	All	Allied	Medical Practitioner	Nursing/Midwifery
Armidale Hospital	666	86%	77%	63%	88%
Barraba (MPS)	51	80%	-	60%	86%
Bingara Health Service	109	93%	100%	100%	94%
Boggabri MPS	106	85%	75%	81%	89%
Denman MPS	110	91%	0%	-	93%
Emmaville/Vegetable Creek Hospital	162	80%	-	-	86%
Glen Innes District Hospital	201	83%	-	75%	89%
Gunnedah Health Service	664	89%	100%	84%	89%
Guyra District War Memorial Hospital	10	80%	-	-	60%
Hunter Valley Community Health	172	94%	87%	-	98%
Inverell Community Health	98	94%	100%	-	94%
Inverell District Health Service	231	77%	88%	89%	76%
Manilla District Hospital	260	96%	100%	100%	100%
Merriwa MPS	120	86%	-	50%	89%
Moree District Health Service	166	77%	-	63%	78%
Muswellbrook District Hospital	888	75%	71%	66%	78%
Narrabri District Health Service	187	84%	100%	64%	84%
Quirindi Hospital & Health Service	106	89%	-	100%	91%
Scone/Scott Memorial Hospital	748	84%	81%	78%	86%
Singleton District Hospital	818	93%	100%	87%	94%
Tamworth Base Hospital	2324	73%	72%	54%	83%
Tamworth Community Health	7	100%	-	-	100%
Tenterfield Community Hospital	11	91%	-	50%	100%
Walcha MPS	212	94%	100%	100%	98%
Wee Waa Community Hospital	225	86%	-	-	87%
Werris Creek District Hospital	107	86%	71%	67%	100%
Wilson Memorial Hospital	115	96%	-	-	95%

## Why is this data important?

Australian commission on  
Safety and Quality in  
Health care  
+ government, private  
sector, community

National Safety and  
Quality health Service  
(NSQHS) Standards

Standard 3: Preventing  
and Controlling  
Healthcare associated  
Infections

Action 3.1: Hand  
hygiene

**National standard 3.1 required for accreditation- aim >85% compliance**

- There are 8 total National Safety and Quality Health Service Standards.
- Reports to the National Hand Hygiene Initiative

Who collects the data?

- Trained hand hygiene auditors, typically infection control link nurses
- Any HCW can train as an auditor!



## How does glove use affect hand hygiene?

- ▶ Healthcare staff tend to wear non-sterile gloves when they aren't required (i.e. low likelihood of exposure to blood or bodily fluids)
- ▶ The 5 moments of hand hygiene are still required when gloves are worn
- ▶ Glove use is often associated with lower compliance with the 5 Moments for Hand Hygiene

# Research project JHH J3 and H3

Non-sterile gloves used annually = ~28.3 million

Gloves sent to landfill = 75 tonnes plus disposal costs

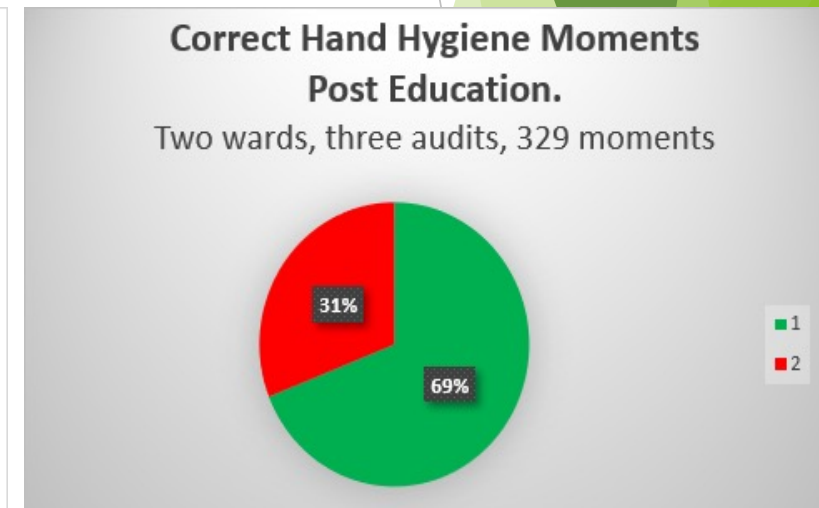
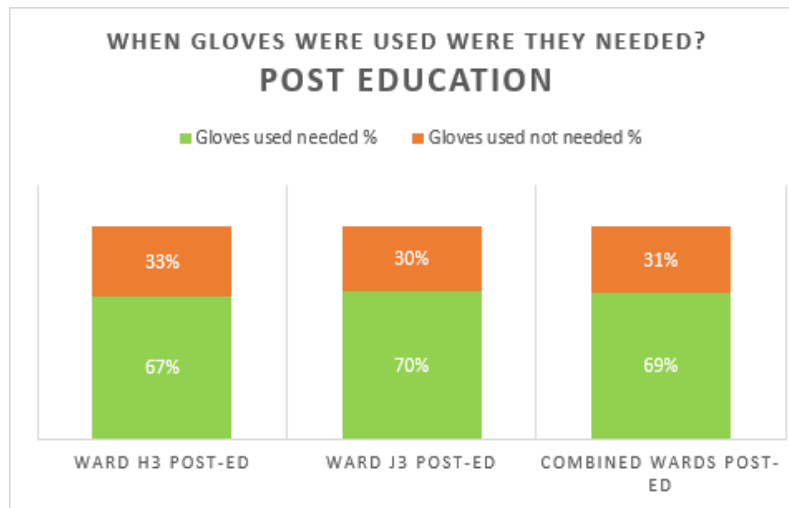
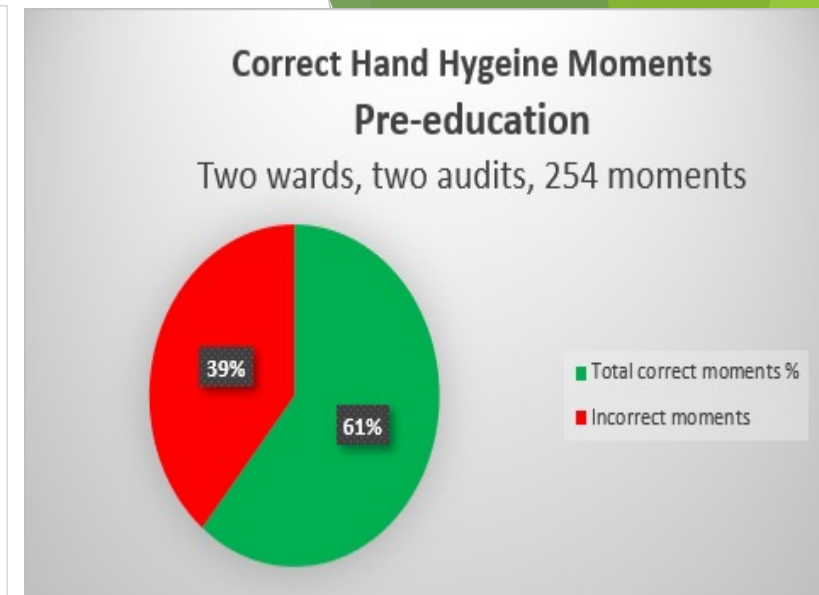
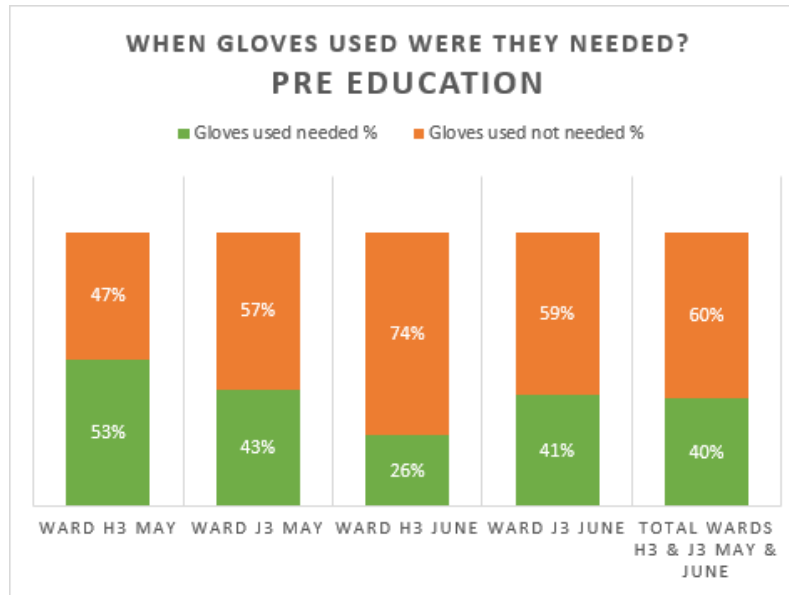
Carbon footprint = equivalent to driving an average petrol car around Australia 438 times

**Safe for all.**

Aim:

- ✓ Improve hand hygiene
- ✓ Reduce unnecessary glove use and waste

# Results

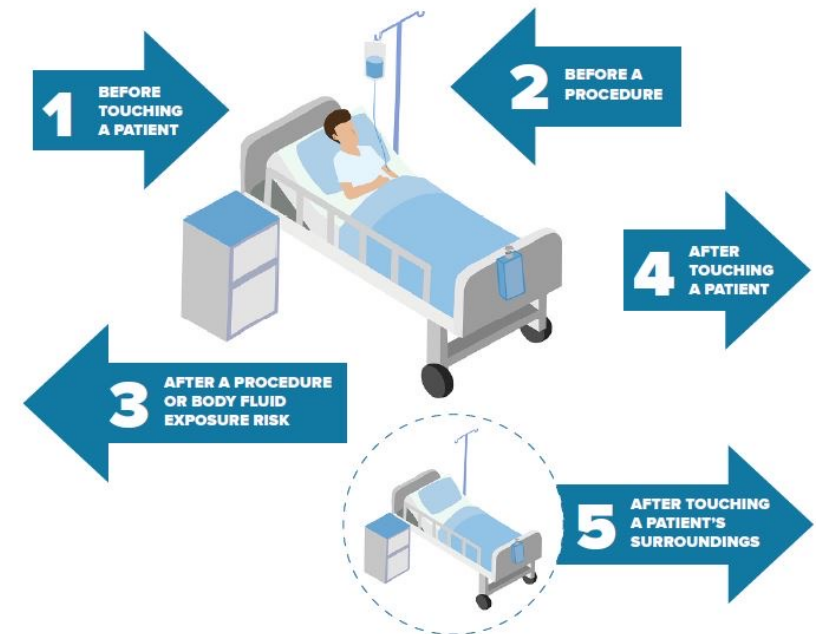


# ABHR Availability QI Project

- ▶ The Problem:
  - ▶ Compliance with hand hygiene reduces incidence of healthcare-associated infections
  - ▶ Availability of AHBR at the point of care encourages compliance
  - ▶ Anecdotal lack of availability of AHBR on the wards
  - ▶ Gold standard is to have AHBR on the end of every bed to meet the WHO 5 moments of hand hygiene
- ▶ How do we fare?







## 5 Moments for HAND HYGIENE





Alcohol Based Hand Rub – how far?



Date	 At the end of the bed	 Within reach: bed end OR pt zone (within curtains)	 Within the pt room (incl 4 bed room)	 Corridor close by outside the room
19/7/23	48%	59%	72%	100%
26/9/23	44%	66%	81%	100%
10/10/23	94%	94%	100%	100%
31/10/23	40%	73%	80%	100%
19/7/23	33%	48%	78%	100%
26/9/23	28%	59%	75%	100%
10/10/23	16%	38%	50%	88%
31/10/23	22%	44%	94%	100%

# ABHR Availability QI Project



	Hand Hygiene Audit											
	27/10/23		31/10/23		3/11/23		7/11/23		10/11/23		Average	
	No	%	No	%	No	%	No	%	No	%	No	%
End of the bed	7/30	23.3%	9/32	28.1%	6/31	19.4%	5/31	16.1%	9/31	29.0%	36/155	23.2%
Within patient zone	4/30	13.3%	5/32	15.6%	5/31	16.1%	3/31	9.7%	7/31	22.6%	24/155	15.5%
Within room	12/30	40.0%	13/32	40.6%	6/31	19.4%	4/31	12.9%	4/31	12.9%	39/155	25.2%
End of bed OR pt zone	10/30	33.3%	13/32	40.6%	10/31	32.3%	8/31	25.8%	14/31	45.2%	55/155	35.4%
End of bed OR pt zone OR within room	18/30	60.0%	19/32	59.38%	16/31	51.6%	12/31	38.7%	14/31	45.2%	79/155	51.0%
Outside room	32/32	100.0%	32/32	100.0%	31/31	100.0%	31/31	100.0%	30/31	96.8%	156/157	99.4%
AHBR available within bottle	8/10	80.0%	12/13	92.3%	10/10	100.0%	8/8	100.0%	14/14	100.0%	52/55	94.5%

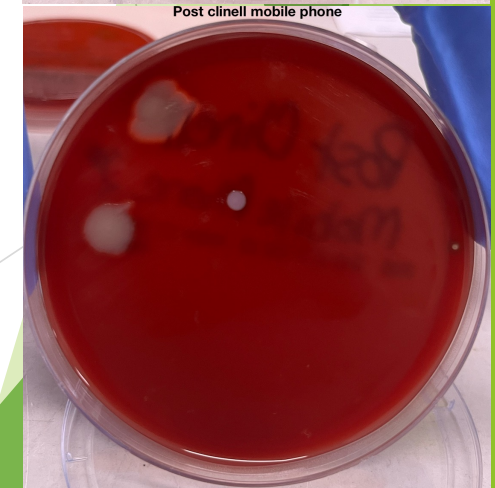
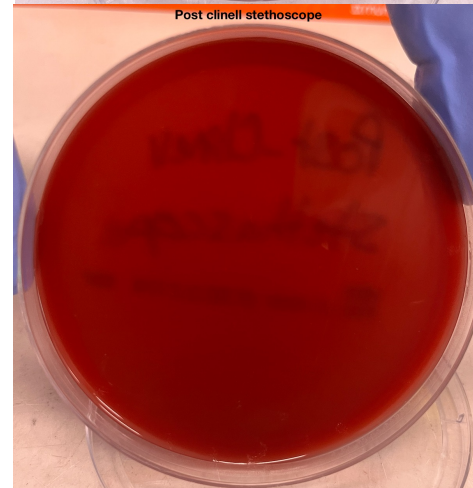
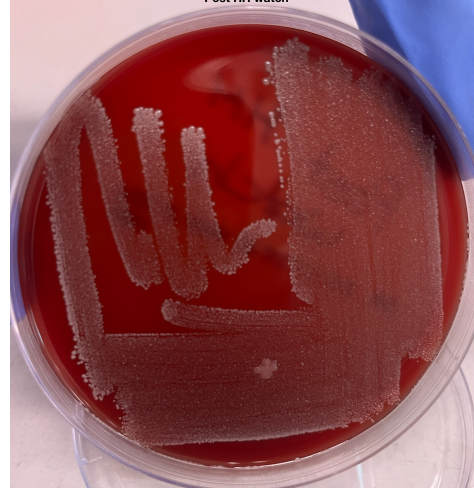
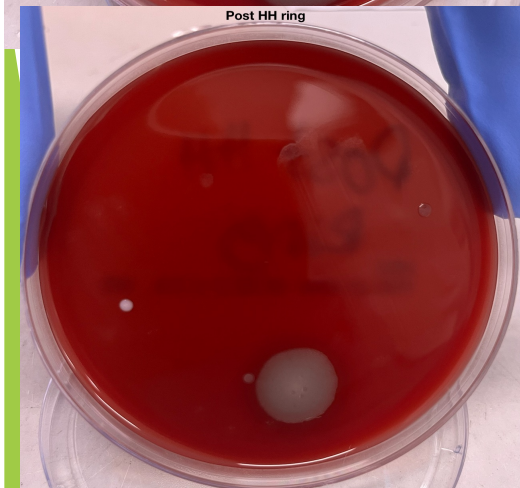
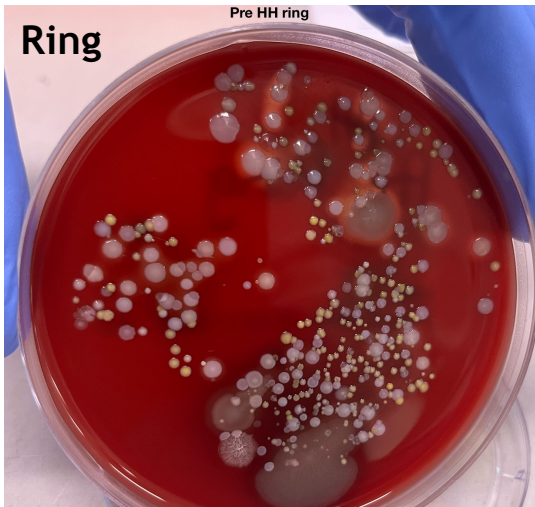
# ABHR Availability QI Project

- ▶ Intervention:
  - ▶ Cable-tie AHBR bracket holders to the end of the bed
- ▶ Advantages:
  - ▶ Low cost, Consistency of AHBR placement, ? Longevity
- ▶ Possible Issues:
  - ▶ Beds fitting in elevators, Difficulty stacking ends of the bed
  - ▶ Still requires restocking of AHBR when empty, Bed movements
- ▶ Other Possible Interventions:
  - ▶ Staff education package
  - ▶ Inter-ward competitions with prizes
  - ▶ Ideas? Contact me - [Christian.stolz@health.nsw.gov.au](mailto:Christian.stolz@health.nsw.gov.au)



# Bare below the elbows - worth pursuing?

- ▶ Essential for aseptic technique! Highly recommended for efficacious hand hygiene in healthcare workers





# Precautions

Standard + transmission based

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What PPE would you use for 'standard precautions'?

① Start presenting to display the poll results on this slide.

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Which of these are included in 'standard precautions'?

① Start presenting to display the poll results on this slide.

# Standard Precautions

Always follow these standard precautions



Perform hand hygiene before and after every patient contact



Clean and reprocess shared patient equipment



Use personal protective equipment when risk of body fluid exposure



Follow respiratory hygiene and cough etiquette



Use and dispose of sharps safely



Use aseptic technique



Perform routine environmental cleaning



Handle and dispose of waste and used linen safely

slido



**What PPE would you wear for a respiratory infection?**

① Start presenting to display the poll results on this slide.

Type of precautions	Examples of infectious agents	Patient placement	Gloves	Gowns	Mask	Protective eyewear
<b>Standard precautions</b>	Hepatitis B, Hepatitis C, Cytomegalovirus (CMV)	No restrictions on patient placement.	<p><b>PPE use:</b></p> <ul style="list-style-type: none"> <li>Gloves and gowns to be worn when there is potential exposure to blood or body substances</li> <li>Mask and protective eyewear to be worn when there is potential for blood or body substances exposure to mucosa (for example, attending to a patient who is coughing and sneezing).</li> </ul>			
<b>Contact</b>	Multidrug-resistant organisms, <i>C.difficile</i> , norovirus	Single room, or cohort with same strain of infectious agent.	Yes	Yes	As per standard precautions	As per standard precautions
<b>Droplet<sup>^</sup></b>	Norovirus, pertussis <sup>#</sup> , meningococcus	Single room with door open, or cohort with same strain of infectious agent.	As per standard precautions	As per standard precautions	Yes use surgical mask	
<b>Airborne</b>	Pulmonary TB, rubella <sup>#</sup> , measles <sup>#</sup> and chicken pox <sup>#</sup>	Single room with door closed. Use negative pressure room if available.			Use particulate respirator (P2 or N95 mask)	

# Standard precautions for medical staff - some take home points

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Ask yourself- am I likely to get sprayed?

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More than just hand hygiene

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What is our expectation of HNE clinical staff?  
Standard precautions every patient, every time

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Remember, the patient's space should be their safe space. Don't sit on the patient's bed or chair, or place notes or contaminated medical equipment on the bed.

# HNE Infection Prevention Service

- ▶ Our intranet page is full of useful resources - search “infection prevention service”
- ▶ All things COVID

The screenshot shows a web browser window displaying the HNE Infection Prevention Service intranet page. The browser address bar shows the URL: /intranet.hne.health.nsw.gov.au/hne\_infection\_prevention\_and\_... The page header includes the NSW Government logo and the text "Health Hunter New England Local Health District". A navigation menu contains links for Home, Site Index, Staff Directory, Communications, Services and Facilities, Application Portal, and Policies and C. The main content area features a breadcrumb trail: Home > Infection Prevention Service. Below this is a large heading "Infection Prevention Service" and a button labeled "COVID-19 Home" with a right-pointing arrow. The "WHO ARE WE:" section describes the service as a HNELHD wide service that assists health managers and staff to prevent and control healthcare-associated infections. It also lists the team members: an experienced infection prevention nurse professional, an Infectious Disease clinician, and an Epidemiologist. A sidebar on the right contains a list of links: Infection Pre, Aseptic Tec, Hand Hygie, Acute Resp Management, Multi-Resist Management, Outbreak M, and Reusable M. The Windows taskbar is visible at the bottom of the browser window.

And more...

https://intranet.hne.health.nsw.gov.au/hne\_infection\_prevention\_and\_... Infection Prevention Servic...

HNELHD Intranet Login Internet Logout Internet

Find: medical Previous Next Options

<b>Aseptic Technique</b> →	<b>Hand Hygiene</b> →	<b>Acute Respiratory Illness (ARI) Management</b> →
<b>Multi-Resistant Organism Management</b> →	<b>Outbreak Management</b> →	<b>Reusable Medical Devices</b> →
<b>Infection Prevention Link Nurse Resources</b> →	<b>Standard and Transmission Based Precautions</b> →	<b>IPS Governance</b> →
<b>Infection Prevention Service Resources</b> →	<b>Infection Control Clinical Indicators</b> →	<b>NS3 - Preventing and Controlling Healthcare-Associated Infection</b> →

Contact Tracing for COVID - 19 - FAQ

COVID-19 Contact Tracing ▾

Tuberculosis (TB) ▾

Catheter Associated Urinary Tract Infection (CAUTI)

Frequently Asked Questions

**HNELHD Infection Prevention Service - Executive**  
Top Floor, The Lodge, John Hunter Hospital Ph: (02) 4921 4473 or email: HNELHD-InfectionControl@health.nsw.gov.au

5:59 AM 9/11/2023

# Have an IPC question?

- ▶ Reach out to your JMO IPC Champions, hospital CNC/CNS or Sarah if you can't find the answers in our resources
- ▶ Keen to get involved? Help us expand our reach. JMO IPC champions (EOIs February 2024)
- ▶ Consider becoming an IPS Link Nurse and attend our Infection Prevention Link Nurse (IPLN) course
- ▶ [hnelhd-infectioncontrol@health.nsw.gov.au](mailto:hnelhd-infectioncontrol@health.nsw.gov.au)
- ▶ [Sarah.Browning@health.nsw.gov.au](mailto:Sarah.Browning@health.nsw.gov.au)