



Hand Hygiene for Clinical staff

What is it??????????

Hand Hygiene is :

A process to reduce the number of micro-organisms on hands by

- using soap and water to wash and dry hands thoroughly

or

- using waterless hand rubs(eg. Alcohol based hand rub)



History of Hand Hygiene


- 👤 Doctors in Mesopotamia (circa 1750BC) lost their hands
- 👤 Disciples of Jesus lost their seat
- 👤 Semmelweiss lost his mind
- 👤 Onlookers encouraged to “have a feel”
- 👤 “House of Crime”
- 👤 Ruining medical practice.....
- 👤 Flo “cleanliness over Godliness”




Hand Hygiene

- 👉 Hand hygiene is generally poorly adhered to across the board from all levels of Health Care Workers
- 👉 Most staff underestimate the time and frequency they spend on hand hygiene
- 👉 What about you????

Everybody knows.....

 Healthcare associated pathogens are most often transmitted from patient to patient on the hands of healthcare workers.

 Cleaning your hands before & after touching a patient is one of the most important measures for preventing the spread of micro organisms.

Why bother????

- 👉 7-10% of patients will acquire 1 or more healthcare acquired infections (HCAI's)
- 👉 Contributes to 7,000 deaths per annum
- 👉 Fed Gov. spends >\$950M AUD annually on HCAI's
- 👉 Av. HCAI cost \$3500+ increases LOS 4+days
- 👉 MRSA BSI approx \$22,000 - high mortality rates 35%
- 👉 Increased LOS 14+ days. >\$108M AUD/annum
- 👉 Surgical site infections cost >\$268M AUD/annum
- 👉 Enormous problem: Approx. 6.1 infections/100pts
- 👉 Majority are preventable

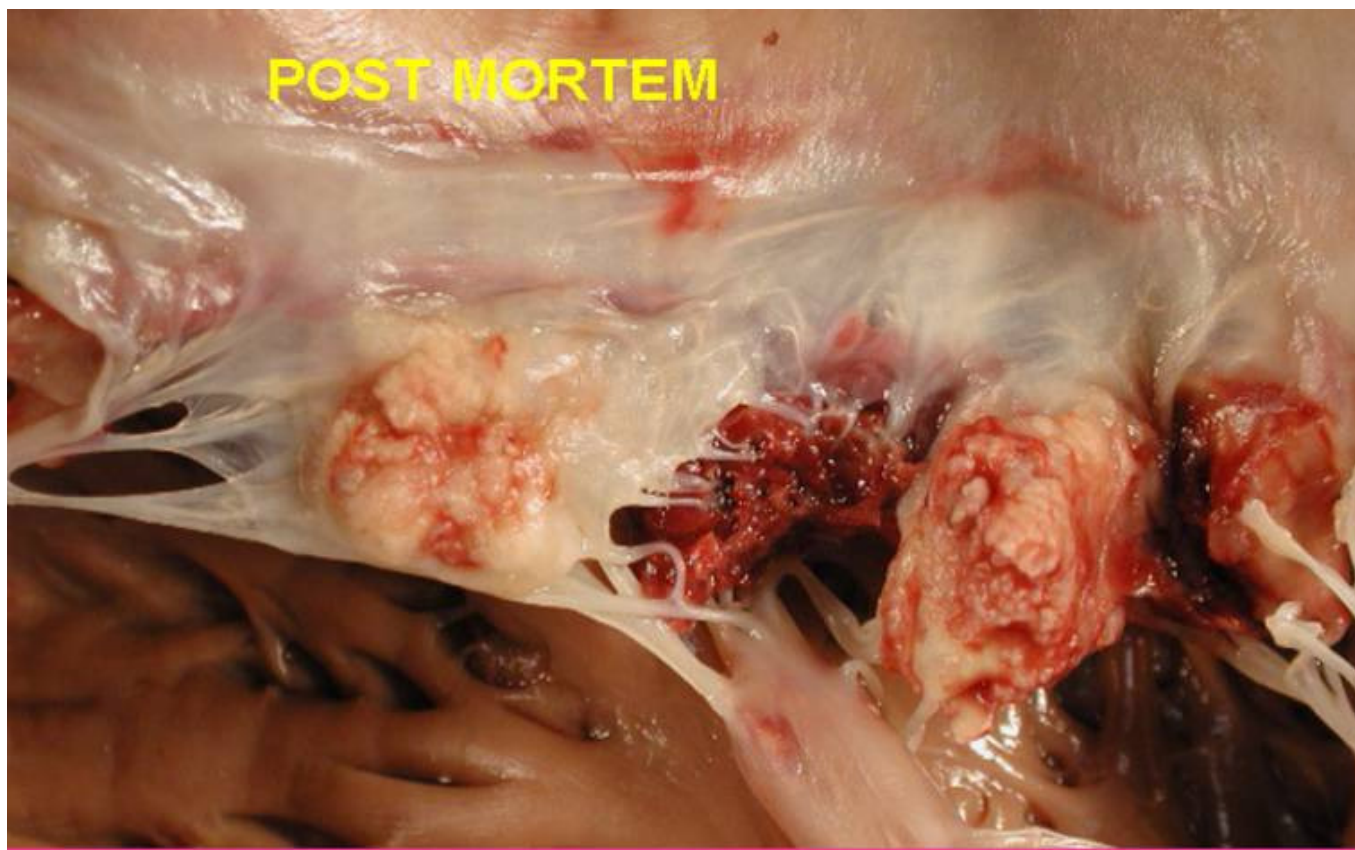
Source: Australian Council for Quality and Safety in Healthcare July 2003
Yung, McDonald, Spelman, Street & Johnson 2001
Victorian Surveillance System (VICNISS) Coordinating Centre Data 2007

WHAT HAPPENS WHEN SURGICAL WOUNDS GET INFECTED ...

66 YR OLD
TOTAL
KNEE REPLACEMENT
MRSA



WHAT CAN HAPPEN IF LINES GET INFECTED



**MRSA ENDOCARDITIS FOLLOWING
INFECTED CENTRAL LINE**



Hand Hygiene Australia

www.hha.org.au

What we did....

- Austin/Geneva template
 - VQC project
 - 6 Vic Pilot sites
 - Over 2 years
 - Pilots HH compliance increased from 21% to 47%
 - Pilots saved \$1.2M with 53 less than predicted MRSA BSI
- (statistically significant)**
- Statewide Roll out
 - 76 hospitals over 12 months
 - Stage 1 HH compliance increased from 18% to 51%
 - Stage 2 HH compliance increased from 21% to 54%
 - Reduction in both MRSA isolates and MRSA BSIs
 - National HH Initiative.....

Goals of National Hand Hygiene Initiative....

- ✎ Reduce HCAIs
- ✎ Change attitudes/culture
- ✎ Collect HH compliance data – 3 audits per year
- ✎ Collect SAB data
- ✎ HH products to be available in all public areas
- ✎ Develop consumer targeted HH campaign to raise awareness and expectations
- ✎ Sustain HH culture change
- ✎ Benchmark HH compliance nationally and internationally



How We Can Achieve These Goals.....

- Strong organisational leadership
- Leadership at every departmental level
- HH champions
- Mandatory annual HH on line learning package for all new and current employees
- Make HH core business for all HCWs
- Long term-open public reporting
- Hand hygiene is '***everyone's responsibility***'



Outcome Indicators

Hand hygiene compliance

Data collection

Data entry

Data analysis

Staphylococcus aureus Bacteraemia

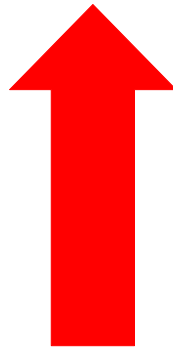
measurement of total MRSA/MSSA isolates & bacteraemia per 100 separations and/or 1000 occupied bed days per month

All collected locally by facility, by state and nationally with benchmarking possible with countries participating in the WHO “Clean care is Safer Care” initiative



Desired Outcome.....

INCREASE



HH Compliance

INCREASE



Awareness

DECREASE



Healthcare
acquired infections



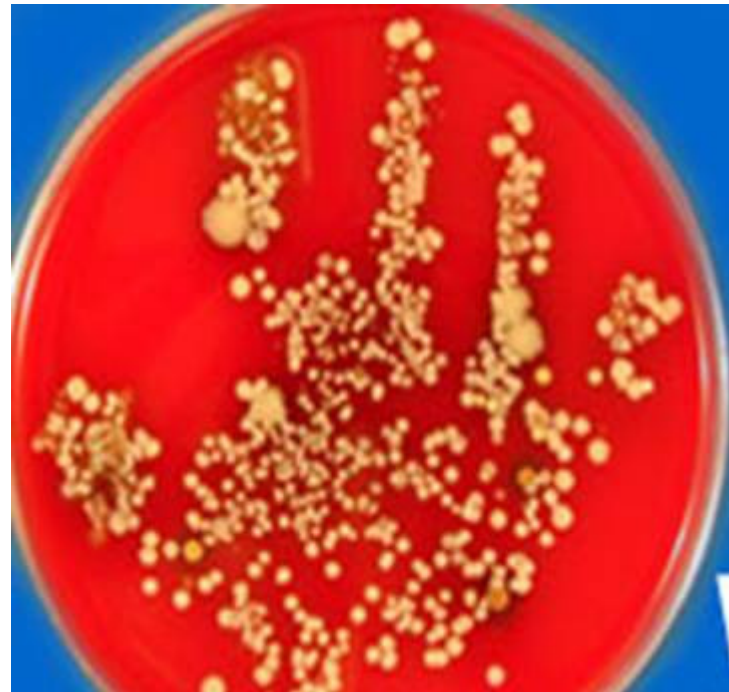
Reasons why we don't clean our hands....

- 🖐 Takes too long
- 🖐 Skin irritation
- 🖐 Sinks poorly located
- 🖐 Too busy
- 🖐 I only touched "it" a little bit
- 🖐 I forgot
- 🖐 I meant too/I thought I did
- 🖐 I will next time
- 🖐 I didn't know you were watching

EVERYBODY KNOWS ...

We can help prevent
hospital acquired
infections by cleaning our
hands

SO WHY
DON'T WE ?



What we did to help....

Introduced:

- 👏 Isopropyl Alcohol impregnated wipes/detergent wipes
- 👏 Alcoholic Chlorhexidine hand rubs(ABHR)
- 👏 Compatible moisturiser



Why use ABHR's????

- ✎ Reduces bacterial count on hands
- ✎ More effective for standard hand wash
- ✎ Reduces adverse outcomes and cost associated with HAI's
- ✎ Requires less time
- ✎ Less irritating contain an emollient
- ✎ Can be readily accessible/portable

When to use ABHRs????

- 👤 When hands are NOT visibly soiled
- 👤 Before and after touching a patient
- 👤 After glove use
- 👤 After contact with inanimate objects

👤 CDC; Guideline for hand hygiene in health-care settings,2002

What can I use????

HH means either:

👉 using soap and water to wash with thorough drying

👉 when your hands are visibly soiled

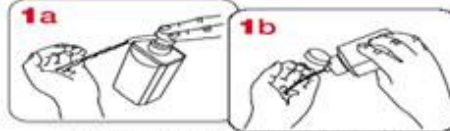
or

👉 using a waterless hand rubs (eg. ABHR)

👉 when your hands are visibly clean



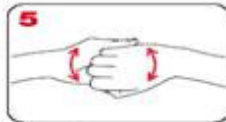
How to handrub? WITH ALCOHOL-BASED FORMULATION



Apply a palmful of the product in a cupped hand and cover all surfaces.



Rub hands palm to palm



backs of fingers to opposing palms with fingers interlocked



right palm over left dorsum with interlaced fingers and vice versa



rotational rubbing of left thumb clasped in right palm and vice versa



palm to palm with fingers interlaced



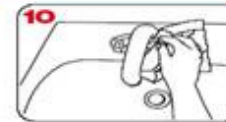
rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



rinse hands with water



dry thoroughly with a single use towel



use towel to turn off faucet



20-30 sec

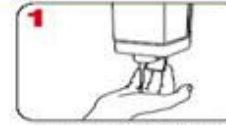


...once dry, your hands are safe.

How to handwash? WITH SOAP AND WATER



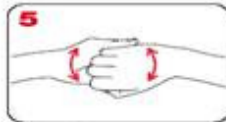
Wet hands with water



apply enough soap to cover all hand surfaces.



Rub hands palm to palm



backs of fingers to opposing palms with fingers interlocked



right palm over left dorsum with interlaced fingers and vice versa



rotational rubbing of left thumb clasped in right palm and vice versa



palm to palm with fingers interlaced



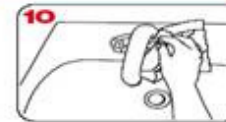
rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



rinse hands with water



dry thoroughly with a single use towel



use towel to turn off faucet



40-60 sec



...and your hands are safe.



Hand Hygiene

Hand Rubs

Soap & Water Hand Washing

Post
HH



Post
HH



Pre
HH



When do I do it at work....

| | |
|--|---|
| 1 BEFORE TOUCHING A PATIENT | WHEN: Clean your hands before touching a patient and their immediate surroundings WHY?: To protect the patient against acquiring harmful germs from the hands of the HCW. |
| 2 BEFORE A PROCEDURE | WHEN: Clean your hands immediately before a procedure WHY?: To protect the patient from harmful germs (including their own) from entering their body during a procedure. |
| 3 AFTER A PROCEDURE OR BODY FLUID EXPOSURE RISK | WHEN: Clean your hands immediately after a procedure or body fluid exposure risk WHY?: To protect the HCW and the healthcare surroundings from harmful patient germs |
| 4 AFTER TOUCHING A PATIENT | WHEN: Clean your hands after touching a patient and their immediate surroundings WHY?: To protect the HCW and the health care surroundings from harmful patient germs |
| 5 AFTER TOUCHING A PATIENT'S SURROUNDINGS | WHEN: Clean your hands after touching any objects in a patient's immediate surroundings when the patient has not been touched WHY?: To protect the HCW and the health care surroundings from harmful patient germs |



Gloves....

- ✎ Gloves should be used as an adjunct to, not a substitute for hand hygiene.
- ✎ Hand hygiene is to be used before & after all glove use.
- ✎ Gloves need to be changed & ABHR used after each pt procedure and when going from dirty to clean sites even on the same patient.
- ✎ Disposable gloves are to be used once only and not disinfected or washed.

“Clean Between”

- ✎ Use the alcohol impregnated wipes/detergent wipes on all shared non critical equipment
- ✎ Think about product placement to encourage use e.g near keyboards, on trolleys, in clinic areas, therapy rooms



Healthcare worker education

AIM:

To develop & maintain an ongoing education programme to initiate & **sustain** hand hygiene behaviour change.

Role Models....

- 👉 We are all role models all the time
- 👉 All our patients/clients/residents deserve to see us clean our hands
- 👉 Lead by example

Influence of role Models on hand hygiene of healthcare workers

“Healthcare workers in a room with senior staff member or peer who DID NOT wash hands were significantly less likely to wash their own hands” it read

EMERGING INFECTIOUS DISEASES FEB 2003


Who can use it????

 Health care workers

 Patients/Clients/Residents

 Visitors

 Place HH products in high traffic areas

 Educate everyone to use before and after each session/appointment

 Lead by example

Think about your patients

Remember many patients are bed bound and can't get up to perform HH so offer ABHR or soap and water basin and towel

✎ After a bed pan/urinal

✎ Before their meals

✎ After a physiotherapy session

✎ Before they retire for the night

✎ Before visiting hours

✎ Whenever they ask....

Compatible Moisturiser....

Used minimum of 3 times per shift

✎ At coffee break

✎ At meal breaks

✎ At home time

✎ All HCW's to use hospital supplied compatible moisturiser(boys included)

✎ Think about the whole 24 hours



Hand health....

Your skin is your 1st line of defence
against infections

👤 Cover cuts, scratches, rashes with
an water proof dressing

👤 Keep wounds clean

👤 Don't pick sores

👤 Don't touch open wounds

👤 Wear gloves the garden

👤 Wear gloves for the dishes

👤 Think about the whole 24 hours



Nails....

Don't bite your fingernails

✋ Keep nails short

✋ No chipped polish

✋ No acrylic nails in clinical areas

✋ Limit jewellery worn to work

✋ Jewellery should not inhibit your ability to correctly perform HH



At work.....

- 👤 At work we are in close contact with each other
- 👤 Have clean hands before you start
- 👤 Wipe down shared equipment e.g keyboards, phones, torches etc
- 👤 Wipe your lanyard daily
- 👤 Stay home if ill



Where we are now....



Hand Hygiene

SUSTAINABILITY



**This is not just an Infection Control problem it belongs
to the whole hospital**



Take home message....

- 👉 Look after your skin
- 👉 Remind others to practice healthy hands habits
- 👉 Use moisturiser (boys included)
- 👉 Wear gloves
- 👉 Don't bite your nails
- 👉 Make it an effective wash
- 👉 Stay healthy

References:

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The Lancet Infectious Diseases 2001:April:9-20

2. Centre for Disease Control and Prevention. "Guideline for Hand Hygiene in health care settings: recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIA/IDSA Hand Hygiene Task force",

Morbidity and Mortality Weekly Report, 2002:51(No.RR-16)

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5. Larsen EL. APIC Guideline Committee. APIC guideline for handwashing and hand antisepsis in health care settings. Am J Infect control 1995:23:251-69

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