Subject: National Hand Hygiene Initiative in Western Australian Healthcare Facilities

Compliance with this Operational Directive is mandatory for all Western Australian public healthcare facilities and those licensed private healthcare facilities, including satellite haemodialysis units, contracted to provide services to public patients.

This Operational Directive describes the minimum hand hygiene requirements and the key components of the National Hand Hygiene Initiative that are required to be implemented.

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1. DEFINITIONS

**Hand disinfection:** application of either an antimicrobial soap/solution and water or an alcohol based hand rub product, to the surface of the hands. This process reduces microorganism counts on hands.

**Hand hygiene:** a process that reduces the number of microorganisms on hands. Hand hygiene is a general term applying to the use of soap (non-antimicrobial and antimicrobial) and water or the application of an alcohol-based antimicrobial agent to the hands.

**Hand hygiene product:** any product used to perform hand hygiene, including soap.

**Healthcare facility:** includes all public hospitals, ambulatory or community services under the governance of specific Health Services and licensed private healthcare facilities funded to provide care to public patients.

**Healthcare worker:** includes all employees of the healthcare facility and all students, trainees, contractors and volunteers engaged at the facility.

2. PURPOSE

The purpose of this Operational Directive is to describe the minimum hand hygiene (HH) requirements and the key components of the National Hand Hygiene Initiative (NHHI) that Western Australian (WA) public healthcare facilities (HCFs) and licensed private HCFs funded to provide care to public patients in WA are required to implement.

3. INTRODUCTION

Infections resulting from the provision of healthcare are one of the most common causes of unintended harm suffered by health consumers and are associated with increased morbidity and mortality. It is increasingly recognised that healthcare associated infections (HAIs) are preventable adverse events, rather than an inevitable outcome of medical care.\(^1\)

The association between poor HH practices by healthcare workers (HCWs), the transmission of infection and the spread of antibiotic resistant microorganisms is well established. Despite this, it has been consistently demonstrated that compliance by HCWs performing appropriate HH is sub-optimal.\(^2-6\)

It has been established that a multifaceted, multidisciplinary, facility-wide hand hygiene program, which includes executive leadership, education, local ‘champions’ and environmental enablers can be effective at reducing the incidence of HAI’s and minimising transmission of microorganisms within HCFs.\(^7-11\)

4. THE NATIONAL HAND HYGIENE INITIATIVE

In December 2008, Australian Health Ministers endorsed the NHHI and a nationally coordinated approach to the monitoring of HH compliance by HCWs in Australian HCFs. Hand Hygiene Australia (HHA) was contracted by the Australian Commission on Safety and Quality in Healthcare to develop, monitor and report on the NHHI.

Participation in the NHHI was endorsed by the WA Director General of Health in the Operational Directive OD: 0197/09 Healthcare Associated Infection Surveillance in WA and has been a mandatory requirement for WA public HCFs and private HCFs contracted to provide care to public patients since February 2010.

The NHHI is based on the World Health Organization’s Global Patient Safety Challenge ‘Save Lives: Clean Your Hands’ and adopts the ‘5 Moments for Hand Hygiene’ framework. The primary aim of the NHHI is to improve HH compliance among HCWs, thereby reducing
the transmission of infection in HCFs throughout Australia. This involves a multi-interventional culture-change program to improve HH compliance via the increased use of alcohol based hand rub (ABHR).

The introduction of ABHR has played a key role in improving HCW compliance with HH and reducing HAIs. It is an integral component of the NHHI. ABHR is the gold standard of care for HH practices in HCFs, whereas hand washing is reserved for situations when hands are visibly soiled, contaminated with blood or body fluids or when gloves have not been worn following known or suspected exposure to bacterial spores (e.g. *Clostridium difficile*), non-enveloped viruses (e.g. norovirus), or parasites. ABHR is the recommended HH product for the prevention of intravascular catheter related infections.\(^\text{12}\)

The five key elements of the program are: system change; training and education; evaluation and feedback; workplace reminders and institutional safety climate. The outcome measures to be reported nationally for the NHHI are:

- the rate of HCW HH compliance and
- the rate of healthcare associated *Staphylococcus aureus* bloodstream infection.

5. IMPLEMENTATION

5.1 Compliance with this Operational Directive is mandatory for all public HCFs and licensed private HCFs funded to provide care to public patients. These facilities are required to align their HH program with the NHHI.

5.2 Each HCF is to ensure the five key elements described in Table 1 (Appendix 1) are incorporated into local policy as minimum requirements. In addition, local policy needs to incorporate uniform and procedure requirements where, for religious reasons, a HCW may wish to cover their forearms.\(^\text{13, 14}\)

5.3 Each HCF is to ensure there is a facility-wide approach to improving HH compliance that incorporates both clinical and non-clinical areas.

5.4 Public HCFs shall only utilise HH products that have been awarded under the mandatory ‘Whole of Health’ contract HCNS110809 for the supply of Antiseptics and Disinfectants to Western Australian Public Healthcare Units and the mandatory ‘Whole of Government’ contract CUA42309 for Cleaning, Kitchen and Bathroom Products. These awarded products have been evaluated on behalf of WA Health by clinical and technical representatives from various HCFs. There is an ability to purchase ‘off contract’ if new technology becomes available prior to refresh of contracts, however, any request for alternative HH products must be discussed with the infection control professional at the HCF and Health Corporate Network procurement officers.

Private HCFs funded to provide services to public patients are exempt from these contractual requirements. However, they must ensure there are rigorous product evaluation systems in place to cover the purchase of HH products for use in all areas of the HCF. Private facilities with limited resources to evaluate products may wish to be guided by choosing products awarded on government contracts.

Hand hygiene products used to disinfect hands in any HCF must be approved by the Australian Therapeutic Goods Administration (TGA) and be included on the Australian Register of Therapeutic Goods (ARTG). It is recommended that ABHRs also meet the EN1500 (European Committee for Standardisation) testing standard for bactericidal effect.\(^\text{12}\)
5.5 Mental health facilities are exempt from the routine compliance auditing component of the NHHI as meaningful data is unlikely to be obtained, however, the remaining key elements of the program are required to be implemented.

5.6 Ambulatory care settings which are under the governance of specific Health Services e.g. school clinics, community midwifery centres and home birthing services, are also exempt from the auditing component, however they are to ensure the remaining key elements of the NHHI are implemented.

6. RESOURCES

Educational resources and implementation tools to assist HCFs meet the requirements of this Operational Directive are available from the HHA website (www.hha.org.au).

7. ACCOUNTABILITY

7.1 Executive Directors of public HCFs and licensed private HCFs funded to provide care to public patients are responsible for ensuring implementation and compliance with this Operational Directive.

7.2 Each HCF is to ensure processes are in place to address non-compliance issues for HCWs failing to comply with hand hygiene requirements.

8. REPORTING

8.1 Each HCF is to report hand hygiene compliance to internal stakeholders and to the highest level of governance in the HCF.

8.2 Each HCF is to ensure compliance data for the three audit periods is submitted online to HHA as per the HHA schedules, which allows for timely collation and publication of national data.

8.3 Data submitted by HCFs will be integrated into the Healthcare Infection Surveillance Western Australia (HISWA) reports and other reports as directed by the Director General of Health WA. Publication of identifiable hospital hand hygiene compliance data will be available at http://www.health.wa.gov.au/handhygiene/home/

8.4 De-identified hospital healthcare-associated Staphylococcus aureus bloodstream infection data will be submitted to HHA by the Healthcare Associated Infection Unit (HAIU) to allow collation of national data.

8.5 The percentage of employed HCWs who have received HH education is to be reported annually by hospitals to the HAIU (with audit period three data) to permit comparison with HAI rates.

9. REFERENCES


TABLE 1: Minimum requirements for hand hygiene programs

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<th>Key Elements</th>
<th>Components</th>
<th>Minimum Requirements</th>
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| System Change | Product Selection and Availability | • All products utilised for HH shall meet the requirements of section 5.4 of this Operational Directive.  
• All products utilised for HH shall be assessed for compatibility with other HH products and gloves utilised in the HCF.  
• Infection Prevention and Control representatives shall have input into product selection.  
• ABHR shall be readily available at the ‘point of care’, including patient bed areas, preparation and treatment rooms.  
• ABHR at the foot of the patient bed is the preferred option.  
• In the minority of settings where placement of ABHR may constitute a risk e.g. deliberate ingestion, alternative point of care placement may need to be considered i.e. personal use bottles. |
| Education and Training | Education and Training | • All HCWs shall receive hand hygiene education on commencement of employment and at regular intervals e.g. via annual refresher / e-learning package, that incorporates:  
  • the WHO ‘5 Moments’ framework  
  • the various methods of HH, in which context they apply, and the correct procedure and products to use  
  • the non-clinical situations when HH is required to be performed e.g. before starting/leaving work, before and after eating, food /drink preparation (both own and patients), after removing gloves, handling laundry, equipment or waste, after visiting the toilet, after blowing/wiping/touching nose or mouth  
  • minimising skin irritation through correct product use, product compatibility, and glove and moisturiser usage.  
• HCFs are to have systems in place to monitor the number of HCWs who have completed education requirements i.e. % of employed HCWs who completed HH education each year. |
| Training and Education | Uniforms, Jewellery, and Nail Care | • Long sleeved clothing and wrist/hand jewellery can restrict the ability of HCWs to perform HH correctly. HCWs shall ensure hands and wrists are free of clothing (long sleeves must be rolled up) and jewellery (a simple band may be worn and medical alert necklaces are recommended over bracelets) prior to performing hand hygiene or having direct patient contact.  
• Finger nails should be kept clean and short and the use of nail polish avoided. Artificial nails/extenders are associated with higher levels of microorganisms than natural nails and have been implicated in the transmission of microorganisms in the healthcare setting. They are not to be worn by HCWs who have direct patient contact. |
| Skin Care | Skin Care | • All HCFs are to have procedures to monitor and manage HCWs who develop any skin conditions.  
• Hand moisturisers shall be provided for all HCWs and their use is recommended a minimum of 3 times per shift.  
• Any breached skin e.g. cuts, abrasions, dermatitis, must be covered with a semi-permeable film dressing.  
• HCWs who develop a skin condition e.g. dermatitis or are unable to perform HH e.g. due to the presence of a hand splint or plaster of Paris, must contact the HCF’s infection control professional or occupational safety and health coordinator for assessment and advice. |
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| Auditing                     | HH compliance audits are to occur as per the HHA audit schedule (3 times per year)  
                                | The HHA standardised audit tool shall be utilised.  
                                | Each HCF shall have an adequate number of HCWs credentialed in accordance with the HHA program to perform HH audits.  
                                | Mental Health and Ambulatory Care Facilities are exempt from this component of the NHHI. |
| Compliance                   | All HCFs are to perform regular ward / department surveys to ensure compliance with these minimum requirements is occurring within their hospital, for example:  
                                | - the availability of ABHR  
                                | - compliance with jewellery and nail requirements. |
| Feedback                     | HCFs are to ensure compliance data is fed back to stakeholders in a timely fashion.  
                                | HCFs are to ensure their hand hygiene compliance results are integrated into their quality improvement programs. |
| Signage                      | Workplace reminders are to be visible in all areas of the HCF and should be updated and refreshed regularly. |
| Patients and Visitors        | All HCFs shall have printed material / signage available for both patients and visitors informing them of the importance of hand hygiene.  
                                | Access to hand hygiene facilities are to be made available for visitors.  
                                | Visitors are to be instructed to perform hand hygiene before and after visiting a patient.  
                                | Hospitals need to enable HH for those patients who are unable to access hand washing facilities (e.g. hand wipes / ABHR). |