
FUNCTION: Clinical – Infection Prevention and Control

TITLE: Standard Precautions

VERSION DATE: February 2014

POLICY STATEMENT:

To implement appropriate infection prevention and control practices that minimise the risk of transmission of infections between people within the operations of Benalla Health.

PRINCIPLES:

Standard precautions are the primary strategy for minimising the risk of transmission of healthcare-associated infections. Standard precautions are work practices that provide a basic level of infection prevention and are applied to everyone, regardless of perceived or confirmed infectious status.

OBJECTIVES:

Standard precautions will be consistently implemented to minimise the risk of transmitting Hospital Acquired Infections (HAI's) between patients, Health care workers (HCW's), visitors and others at Benalla Health.

DEFINITIONS:

Standard precautions consist of the following elements:

- hand hygiene, before and after every patient contact and every contact with the patients surrounds; as per the 5 moments of hand hygiene. (*refer to Benalla Health Policy*)
- the use of personal protective equipment (PPE);
- the safe handling and disposal of sharps;
- routine environmental cleaning;
- reprocessing of reusable medical equipment and instruments; (*refer to Benalla Health Policy*)
- respiratory hygiene and cough etiquette;
- aseptic non-touch technique (ANTT); (*refer to Benalla Health Policy*)
- waste management;
- appropriate handling of linen.

Standard precautions should be used when handling: blood (including dried blood); all other body substances, secretions and excretions (excluding sweat), regardless of whether they contain visible blood; non-intact skin; and mucous membranes.

Transmission-based precautions are used in addition to standard precautions, where the suspected or confirmed presence of infectious agents represents an increased risk of transmission (see the Transmission Based Precautions policy).

Uniforms

In areas of clinical practice where there is a high risk of repeated exposure to blood and other body substances, it is recommended that uniforms be worn as well as the appropriate PPE. Uniforms should be washed daily (please note: this also applies to nurses utility belts [used for carrying equipment tapes, scissors etc], which are worn as an item of clothing on the outside of the uniform, in contact with the patients and their environment).

Personal Protective Equipment (PPE)

PPE refers to a variety of barriers, used alone or in combination, to protect mucous membranes, airways, skin and clothing from contact with infectious agents.

Examples of PPE used as part of standard precautions includes: aprons, gowns, gloves, surgical masks, protective eyewear, and face shields etc. Selection of PPE is based on the type of patient interaction, known or possible infectious agents, and/or the likely mode(s) of transmission. Selection of protective equipment must be based on assessment of the risk of transmission of infectious agent(s), and the risk of contamination of the clothing or skin of healthcare workers with blood, body substances, secretions or excretions.

Factors to be considered are:

- probability of exposure to blood and body substances;
- type of body substance involved;
- probable type, and probable route of transmission of infectious agents.

Where to wear PPE

PPE and operating suite attire is designed and issued for a particular purpose in a designated environment and should not be worn outside that environment. PPE that has been worn in a contaminated environment should be discarded into appropriate receptacle prior to moving to a cleaner zone.

Protective clothing which is provided for staff in areas where there is high risk of contamination (e.g. operating suite/room) must be removed before leaving the designated area. Inappropriate wearing of PPE and specialist attire (e.g. wearing operating suite/room attire in other wards, public areas of the hospital, or outside the facility) may contribute to a public perception of poor practice.

Face and eye protection

The mucous membranes of the mouth, nose and eyes are portals of entry for infectious agents, as are other skin surfaces if skin integrity is compromised (e.g. by acne, dermatitis). Face and eye protection reduces the risk of exposure of

healthcare workers to splashes or sprays of blood and body substances and is an important part of standard precautions. Procedures that generate splashes or sprays of blood, body substances, secretions or excretions require either a face shield or a mask worn in addition to protective eyewear.

Masks

Surgical Masks: are loose fitting, single-use items that cover the nose and mouth.

They are used as part of standard precautions to keep droplets, splashes or sprays from reaching the mouth and nose of the person wearing them. They also provide some protection from respiratory secretions and are worn when caring for patients on droplet precautions.

- masks should be changed when they become soiled or wet
- masks should never be reapplied after they have been removed
- masks should not be left dangling around the neck
- touching the front of the mask while wearing it should be avoided
- hand hygiene should be performed upon touching or discarding a used mask.

Gloves

Gloves can protect both patients and healthcare workers from exposure to infectious agents that may be carried on hands. Gloves are worn as part of standard precautions to prevent contamination of healthcare workers' hands when:

- anticipating direct contact with blood or body substances, mucous membranes, non-intact skin and other potentially infectious material;
- handling or touching visibly or potentially contaminated patient-care equipment and environmental surfaces.

Immunocompromised patients

Patients who have congenital immune deficiencies or acquired disease (eg. treatment-induced immune deficiencies) are at increased risk for numerous types of infections while receiving healthcare. The specific defects of the immune system determine the types of infections that are most likely to be acquired (e.g., viral infections are associated with T-cell defects and fungal and bacterial infections occur in patients who are neutropenic). As a general group, immunocompromised patients can be cared for in the same environment as other patients; however, it is always best practice to minimize and prevent exposure to other patients with transmissible infections.

Immunocompromised patients require a patient centred risk management approach. A single room is preferred if available. If a single room is not available, avoid placing these patients with other patients who have transmissible infections of any type,

open wounds, are colonised with resistant organisms, or have prolonged lengths of stay.

Safe handling and disposal of sharps

- Safety engineered devices are used where available
- No recapping or needles is to occur
- Sharps removal systems are used when required – ie scalpel blade/needle remover tool
- Sharps are not to be passed by hand. If necessary to pass a sharp, it must be via a designated sharps tray/kidney dish
- Sharps are disposed of in AS 4031 or AS/NZS 4261 compliant containers as close to the point of use as possible.
- The person generating the sharp is responsible for the safe disposal of sharps
- Occupational exposures/needle stick injuries and identified risks are reported through the riskman system as per Benalla Health policy.

Blood and body substance spills – Cleaning and Disinfection

Prompt removal of spots and spills of blood and body substance followed by cleaning and disinfection of the contaminated area is a sound infection control practice to meet occupational health and safety requirements.

Strategies for decontaminating spills of blood and other body substances (e.g. vomit, urine) differ based on the setting in which they occur and the volume of the spill. If spillage has occurred on soft furnishings use a detergent solution to clean the area thoroughly. Furnishings, must be made to allow the furnishing to dry before reuse.

Appropriate PPE should be worn at all times and alcohol solutions should not be used to clean spillages.

Disinfection

The use of sodium hypochlorite is not necessary for routinely managing spills but it may be used in specific circumstances and should be based on assessment of risk of transmission of infectious agents from that spill.

When disinfection is required, ensure appropriate PPE and use Domestos 4% available Chlorine (stored in the cleaners room), hospital grade disinfectant when prepared to the below concentrations:

Volume of water	500PPM General isolation & disinfecting	1000PPM Gastro, Clostridium difficile, VRE, influenza, MROs
5litres	75ml	125ml
10litres	125ml	250ml

METHOD: Use the 'Generic spills kit' located in the pan room of each clinical area which contains disposable equipment and instructions to manage the spill.

<p>Spot cleaning</p>	<ul style="list-style-type: none"> • Select appropriate PPE • Wipe up spot immediately with a damp cloth, tissue or paper towel and • Clean the area with warm detergent solution, using disposable cloth or sponge • Discard contaminated materials • Perform hand hygiene
<p>Small spills (up to 10cm diameter)</p>	<ul style="list-style-type: none"> • Select appropriate PPE – position hazard sign and restrict access are required • Wipe up spill immediately with absorbent material • Place contaminated absorbent material into impervious container or plastic bag for disposal • Clean the area with warm detergent solution, using disposable cloth or sponge • Wipe the area with sodium hypochlorite and allow to dry • Perform hand hygiene • If a spill occurs on a carpeted area, remove most of spill with absorbent towels then clean with cold water. Restrict access until area suitable for use again. • Contact Environmental Services to shampoo/steam clean carpet.
<p>Large spills (greater than 10cm diameter)</p>	<ul style="list-style-type: none"> • Select appropriate PPE – Position hazard sign and restrict access • Cover area of the spill with an absorbent clumping agent and allow to absorb • Use disposable scraper and pan to scoop up absorbent material and any unabsorbed blood or body substances • Place all contaminated items into impervious container or plastic bag for disposal • Discard contaminated materials • Mop the area with detergent solution • Wipe the area with sodium hypochlorite as per risk assessment and allow to dry • Perform hand hygiene • If a spill occurs on a carpeted area, remove most of spill with absorbent towels then clean with cold water. Restrict access until area suitable for use again. • Contact Environmental Services to shampoo/steam clean carpet.

Environmental Cleaning

Infectious agents can be widely found in healthcare settings and there is a body of clinical evidence suggesting the association between poor environmental hygiene and the transmission of infectious agents in healthcare settings. Transmission of infectious agents from the environment to patients may occur through direct contact with contaminated equipment, or indirectly, for example, via hands that are in contact with contaminated equipment or the environment and then touch a patient.

All surfaces require regular thorough cleaning. Most hard surfaces can be adequately cleaned with warm water and detergent as per manufactures instructions. Allowing the cleaned surface to dry is an important aspect of cleaning.

- Frequently touched surfaces – clean with detergent solution at least daily, and when visibly soiled and after every known contamination.
- General surfaces and fittings – clean when visibly soiled and immediately after spillage.
- Shared clinical equipment – clean touched surfaces of shared clinical equipment between patient use with detergent solution if visibly soiled, alcohol impregnated wipes or a combination detergent/disinfectant product.
- Surface barriers – (e.g. clear plastic wrap, bags, sheets, tubing or other materials impervious to moisture) help prevent contamination of surfaces and equipment. Surface barriers may be used in specific instances (in consultation with Infection Control) to protect clinical surfaces (including equipment) that:
 - are touched frequently with gloved hands during the delivery of patient care
 - are likely to become contaminated with blood or body substances
 - are difficult to clean.

All exceptions to these conditions should be justified by risk assessment.

When Multiple Resistant Organisms (MROs) are suspected or known to be present, cleaning frequency is intensified and the use of a disinfectant is added to the cleaning regime. ***Cleaning and disinfection of environmental surfaces and equipment with a sodium hypochlorite is undertaken as a 2 or 3 step process at Benalla Health.*** Specific cleaning requirements are identified in the policies for individual infectious conditions and the Transmission Based Precautions Policy.

3 step cleaning process

Step 1: Surfaces are firstly cleaned with a general detergent – such as Viva general detergent.

Step 2: Surfaces are then disinfected using a disinfectant product such as (*hospital grade domestos*) mixed to the specified strength as per supplier guidelines .

Step 3: Rinsing of chemical residue (when 1000ppm available chlorine is used) after appropriate contact time (10 minutes) to prevent corrosion of material.

Appropriate Handling of Linen

- Standard Precautions are to be maintained during the handling of all linen
- Clean and dirty linen is segregated at the point of generation – with wet linen placed in a meltaway bag when required to prevent leakage of fluids.
- Linen bags are filled only $\frac{3}{4}$ as per OH&S recommendation.
- Dirty linen is stored in the designated area for collection
- Linen processing services comply with AS/NZS4146.

Refer to linen management policy

Waste Management

All waste shall be segregated according to their category at the time and source of generation and contained/ packaged as appropriate. Approved containers for the disposal of clinical and related waste are puncture resistant, leak proof and clearly labeled using colour coding and symbols as per waste management policy. Once full, containers are to be securely closed and transported to the designated waste storage area. Standard and transmission based (if required) precautions will be used during all waste handling activities. Hand hygiene is to be performed after handling and disposing of all waste products.

Refer to Waste Management Chart and Waste Management Policy

Evaluation

Incidents associated with non compliance of the policy and transmission of infections will be recorded and managed through the Riskman System. Incidents are reviewed on a monthly basis to identify opportunities for continuous improvement.

REFERENCES:

1. Australian Government National Health and Medical Research Council (NHMRC) and Australian Commission on Safety and Quality in Health Care (2010) *Australian Guidelines for the Prevention and Control of Infection in Healthcare* <http://www.nhmrc.gov.au/node/30290>
2. Centre for Disease Control and Prevention. "Guidelines for Hand Hygiene and in health-care settings: Recommendations of the Healthcare Infection Control Practice Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force", *Morbidity and Mortality Weekly Report*, 2002; 51 (No. RR-16).
3. Centre for Disease Control and Prevention, (2010) *Sharps safety for healthcare settings*, <http://www.cdc.gov/sharpssafety/index.html>
4. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings*. <http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf>
5. CHRISP Queensland Health, *Sharps safety program*, August 2012 http://www.health.qld.gov.au/chrisp/resources/sharps_safety.asp

NSQHS Standard 3 – Preventing and Controlling Healthcare Associated Infections

- 3.1.1 A risk management approach is taken when implementing policies, procedures and protocols
- 3.7.1 IP&C consultation related to OH&S policies, procedures and/or protocols are implemented
- 3.11.1 Standard and transmission based precaution consistent with the current National Guidelines are in use

Acknowledgements

1. Hume Region Infection Control Resource and Consulting Service – Infection Prevention and Control Manual 2012.

Related Benalla Health Documents

1. Transmission Based Precautions Policy
2. ANTT policy
3. Hand Hygiene Policy
4. Environmental and Routine Cleaning Policy
5. Reprocessing of Clinical Equipment Policy
6. Linen Handling guidelines
7. Waste Management Policy

Author:	Author
Validated by:	Occupational Health and Safety Officer
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Authorised by:	Director of Clinical Services
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Janine Holland