



# Notebook

## HLTINF004- Manage the Prevention and Control of Infection

This unit of competency describes the skills and knowledge required to manage the effective work practices of self and others within a nutritional medicine framework

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## **General**

Cleaning is important particularly in work areas because deposits of dust, soil and microbes on surfaces can transmit infection. Contaminated areas such as operating rooms or isolation rooms must be cleaned after each session and spot cleaned after each case or thoroughly cleaned as necessary.

The following basic principles should be followed:

- Written cleaning protocols should be prepared, including methods and frequency of cleaning. These should include policies for the supply of all cleaning and disinfectant products
- standard precautions (including wearing of personal protective equipment as applicable) should be implemented when cleaning surfaces and facilities (see appendix 3)
- cleaning methods should avoid generation of aerosols
- All cleaning items should be changed after each use and cleaned and dried before being used again. They should also be changed immediately following the cleaning of blood or body fluid/substance spills, cleaned and dried. Single use cleaning items are preferred where possible such as cleaning cloths which should be lint free
- Sprays should not be used as they can become contaminated and are difficult to clean. sprays are not effective as they do not touch all parts of the surface to be cleaned
- detergents should not be mixed with other chemicals
- All cleaning solutions should be prepared fresh before use.

## **Specific**

### **Surface cleaning**

- Floors in hospitals and day care facilities should be cleaned daily, or as necessary, with a vacuum cleaner fitted with a particulate-retaining filter, which should be changed in accordance with the manufacturer's instructions.
- The exhaust air should be directed away from the floor to avoid dust dispersal.
- A ducted vacuum cleaning system can also be used, as long as safe venting of the exhaust air is ensured.
- Damp dusting is essential using a lint free cloth. Brooms disperse dust and bacteria into the air and should not be used in patient/clinical areas. Dust-retaining mops, which are specially treated or manufactured to attract and retain dust particles, do not increase airborne counts as much as ordinary brooms and remove more dust from surfaces (Ayliffe et al 1999). However, brooms and dust-retaining mops should not be used in clinical areas where there is a high risk of infection associated with dust (e.g. burns units).

## **Procedure for routine surface cleaning**

- All cleaning solutions should be prepared immediately prior to use.
- Work surfaces should be cleaned (wiped over) with a neutral detergent and warm water solution, rinsed and dried before, and after, each session or when visibly soiled. Spills should be cleaned up as soon as practical.
- When a disinfectant is required for surface cleaning, the manufacturer's recommendations for use and OH&S instructions should be followed.
- Buckets should be emptied after use, washed with detergent and warm water, rinsed in hot water and stored dry - turn upside down.
- Mops should be laundered or cleaned in detergent and warm water, rinsed in hot water then stored dry. Mop heads should be detachable or stored with mop head uppermost.

## **Specialised areas**

- Isolation rooms and ensuite bathrooms should be cleaned at least twice daily dependant on the type of organism.
- Operating rooms and day procedure rooms including endoscopy rooms should be cleaned after each operating session and when visibly soiled. Thorough cleaning of the operating suite should be performed daily in addition to the cleaning performed after each operating session.
- Obstetric areas, particularly delivery suites should be cleaned after each delivery, when visibly soiled and at least daily.
- Oncology areas should be cleaned twice daily.
- Sterilising processing departments (SSDs) should be cleaned at least twice daily and when visibly soiled.

## **Wet areas**

Toilets, sinks, washbasins, baths, shower cubicles, all fittings attached to showers, baths and hand basins and surrounding floor and wall areas should be cleaned at least daily and more frequently as required.

## **Walls and fittings**

Walls and screens should be cleaned quarterly or if visibly soiled. Blinds and curtains should be cleaned quarterly or if visibly soiled. Carpets should be vacuumed daily and other floor surfaces washed daily and when soiled.

Bed and examination screens should be changed weekly and when visibly soiled.

## **Cleaning for Creutzfeldt-Jakob disease infectious agents**

Spills of central nervous system tissue or cerebrospinal fluid should be absorbed onto paper towels and disposed of by incineration. The surface should then be soaked with 1 molar sodium hydroxide or 2.0-2.5% sodium hypochlorite, left for one hour and cleaned again with paper towels that are disposed of by incineration. Spills of blood or other body fluids and tissues should be cleaned using standard spills management procedures. Personal protective equipment used when cleaning contaminated surfaces should be incinerated after use. Reusable eye protection should be cleaned as above.

## **Maintenance of cleaning equipment**

- Cleaning items (including solutions, water, buckets, cleaning cloths and mop heads) should be changed after each use. They should also be changed immediately following the cleaning of blood or body substance spills.
- These items should be washed in detergent and warm water, rinsed and stored dry between uses. Mops with detachable heads should be laundered between uses.

## **Spills of laboratory cultures of human pathogens**

Spills of laboratory cultures should be absorbed on to paper towels and disposed of as clinical

waste. The contaminated surfaces should be treated with 2.0-2.5% sodium hypochlorite, left for one hour and cleaned again with paper towels that are disposed of as clinical waste.

Laboratories should also refer to AS/NZS 2243.3:2002: Safety in laboratories - Microbiological aspects and containment facilities.

### **General**

All health care facilities should have policies and procedures in place for the correct management of all waste generated. The Environmental Protection Authority (EPA) has clear guidelines on how waste should be managed. The National Health and Medical Research Council (NHMRC) also has guidelines on the management of waste generated in health care facilities.

Waste is classified into three main groups of waste:

- general
- clinical
- pharmaceutical

All waste should be stored in secure areas until collected. Waste disposal companies licensed with the EPA will collect all clinical and pharmaceutical waste for disposal in specialised waste disposal facilities which are also licensed by the EPA.

Waste should be removed from clinical areas at least three times each day and more frequently as needed such as from specialised areas. Waste bags should be tied before removing from the area.

### **General waste**

Place in general waste bin for removal.

### **Clinical waste**

Place in biohazard bags as soon as possible. Biohazard bags have a biohazard symbol and are currently coloured yellow.

Single use sharps should be placed (by the user) into a sharps container that meets the Australian and New Zealand Standards AS 4031:1992 and AS/NZS 4261:1994.

### **Pharmaceutical waste**

When uncertain about how to dispose of leftover pharmaceuticals they should be returned to pharmacy for correct disposal.

Most disinfectants can be disposed of through the sewer system by running cold water into the sink prior to pouring the disinfectant into the sink. Leaving the cold water running for a few moments after the disinfectant has been disposed of as this dilutes the disinfectant.

It is clear that for the cleaning standards to prove effective and meet the needs of all potential users and stakeholders, they would need to satisfy scrutiny from five different perspectives:

- clarity for cleaners and contractors
- effective aid to contract management
- clear outcome statements that can be used as performance indicators and benchmarking
- patient and customer focus.

## **Clarity for cleaners and contractors**

The clarity of the cleaning standards is of paramount importance. Health care service staff and cleaning contractors need to have the same understanding of the standards and task requirements to ensure that they are working towards, and assessing, the same cleaning outcomes. At the same time, the cleaning standards must be realistically achievable. The cleaning standards should also ensure that cleaners are able to carry out their jobs safely and in a controlled environment.

## **Effective aid to contract management**

The standards are structured to aid in the process of contract management and can be used as a guide for developing service specifications. They should be clear and unambiguous so that both parties to a contract, or indeed an in-house service provider, can clearly interpret the obligations that are imposed on them to meet the requirements of the hospital.

## **Clear outcome statements**

The cleaning standards should reflect the outcomes required of a cleaning service wherever possible. They should avoid input and process measures and remain focused on the need to have a clean and safe environment. Most documents reviewed focused on cleaning methods rather than required outcomes.

## **Patient and customer focus**

Clearly the cleaning standards must focus on the needs of patients, as they are the ultimate client of the health care service and their cleaning services.

## **Many service providers**

In response to changes to the health care system, a range of cleaning service delivery models have been developed, including:

- cleaning services fully provided and managed in-house by health care service staff
- cleaning services completely purchased from an external provider
- hybrid models using a mix of the above models. The cleaning standards aim to improve quality health service provision by ensuring that all risks involving cleaning are identified and managed in an appropriate manner, irrespective of cleaning service provider arrangements.

## **Many stakeholders**

Within each health care environment there are many interested stakeholders. These include: patients

- general staff
- administrators
- the media
- clinical staff
- nursing staff
- the public
- government.

These stakeholders all scrutinised how clean individual health care services are. However, it became apparent that there was an absence of a uniform set of standards of cleanliness against which health care services could be assessed, or which could be used to demonstrate an adequate level of cleanliness.

The cleaning standards aim to provide stakeholders with a common understanding when they ask the question:

‘How clean is this health care service?’

### **Using this guide**

The cleaning standards are designed to be concise, flexible and easy to use. They are able to be used in several ways:

- as the basis for specifications if cleaning services are contracted out
- as a standard against which in-house services can be benchmarked
- as the framework for auditing cleaning services.

### **Outcome-focused targets**

To encourage innovative and efficient cleaning practices, the cleaning standards focus on outcomes, not methods. This means that the suitability or unsuitability of different methods can be measured by assessing the outcomes of their use. The cleaning standards are designed to focus users' attention on the outcome or output sought, rather than the method by which it is achieved.

### **Is this a cleaning manual?**

The cleaning standards do not comprise a cleaning manual. Because cleaning outcomes can be achieved in different ways technically, the cleaning standards avoid prescribing inputs, equipment or processes. This is not because there is no place for input measures in achieving outcome standards, but because the outcomes are the focus of the quality cycle in maintaining a clean health care service environment.

### **The concept of risk**

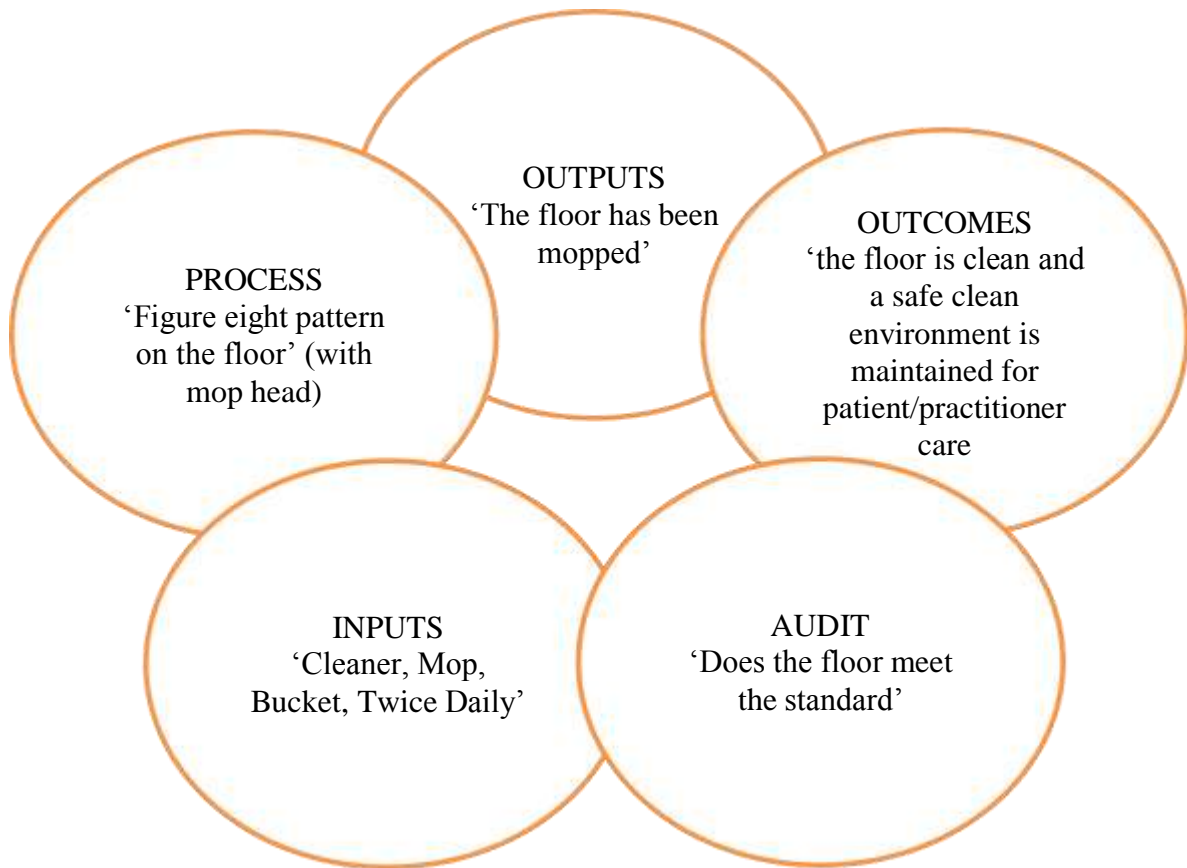
Throughout the cleaning standards the authors refer to the concept of risk. This approach was chosen because of the variety of problems that poor cleaning can cause within different areas of a health care service. Different types of risk include:

- the risk of infection for patients
- the risk of a poor public image for health care services and health authorities
- an occupational health and safety risk for health care service staff and the public
- the risk of a purchased cleaning service providing poor value for money.

The relationship of outcomes and inputs in the cleaning quality cycle

- Inputs – the resources used to produce and deliver outputs. Inputs may include staff, equipment and materials.
- Outputs – the actual product or service, for example, cleaning.
- Processes – the procedures, methods and activities that use the inputs to produce an output, for example, mopping a floor.
- Outcomes – the effect or consequence of the output; for example, cleaning produces a clean and safe environment for patient care.
- Quality systems – the organisational structure, procedures, resources and responsibilities required to implement quality management.

Figure 1 The cleanliness quality cycle



### Achieving high standards

Whether provided in-house or externally, a cleaning service is a vital component in the development and maintenance of a health care service's quality systems. However, health care services also need to demonstrate a commitment to continuous quality improvement. It is essential that each facility participates in the Australian Council on Healthcare Standards (ACHS) Evaluation and Quality Improvement Program (EQulP) process and, where appropriate, ISO accreditation.

Important quality issues that must be addressed in managing and providing cleaning services include:

- accountability
- quality improvement and accreditation
- service specification
- training and education
- infection prevention and control
- infrastructure, maintenance and facility management
- auditing processes to measure outcomes.

## **Accountability**

**In-house responsibility:** If cleaning services are provided in-house, the accountability for all aspects of cleaning and cleaning staff clearly lies with the management, that is, the CEO and the board of the health facility.

**Contracted responsibility:** Where the health facility purchases some or all of their cleaning service from an external provider, the roles, responsibilities and relationship between the purchaser and the provider become less clear. Defining these parameters at the start of the commercial relationship is essential to reduce the risk of later problems.

While a contractor may be responsible for providing cleaning services, the accountability relating to the cleaning service remains with the CEO and the board of the health facility. A well-defined relationship, with a delineation of roles and responsibilities between the purchasing health care service and the external cleaning service provider, is an essential component of any constructive working relationship. Achieving good cleaning outcomes is important to minimise the risks associated with poor cleaning, such as cross-infection, media attention, patient dissatisfaction and occupational health and safety problems.

## **Risk management programs**

A clearly defined relationship between a cleaning service provider and a health care service should form the foundation of a sound risk management program. It is vital that the relative risks and likelihood of occurrence of events associated with cleaning are identified, assessed and addressed.

A common approach to, and understanding of, risk forms a sound basis for any purchaser – provider relationship. Health care services use (and specify that cleaning service providers also use) the approach to risk management detailed in the standard AS/NZS 4360:2004.

## **Quality improvement and accreditation**

Accreditation became mandatory for all providers of acute health care services from 2000. Health care services may seek accreditation through the ACHS EQUIP, the ISO 9000 Quality Management System or other equivalent programs. An 'equivalent program' must comply with specific criteria to be deemed suitable. Hospitals electing to use such programs and wishing to receive funding must seek prior approval from the Department of Health. A health care services' expectation regarding the contribution and accountability of an external cleaning service provider in the accreditation process needs to be addressed at the earliest stage of specification.

Involving appropriate cleaning managers and staff (internal, non-external or external) in health care services quality processes, such as infection control committees, is one way of ensuring that the cleaning standards are met to the satisfaction of the accrediting body. Many cleaning service providers' own processes will mirror those undertaken by health care services and, where this synergy exists; the two organisations must coordinate their processes. A relevant professional within a health care service responsible for infection control should be involved in overseeing the outcome audits of cleaning services. This can be achieved through membership of a joint user – provider working group or some other mechanism that allows multidisciplinary input into how cleaning services are provided.

The ACHS summarises the responsibility for quality as follows:

*Responsibility to rest on the provider for controlling the processes and methods for consistently procuring the specified product or service quality and for offering to the health care organisation for acceptance only those products and services verified by documented evidence to conform to contract requirements.*

*Responsibility to rest upon the health care organisation for ensuring that the contract requirements have been complied with before acceptance of the product or the service.*

## **Service specification**

To discharge the responsibilities defined above, both parties need a common understanding of cleaning service outcomes. The basis for this understanding is a well-constructed cleaning service specification. This is the critical element of contracts or cleaning service agreements signed by healthcare services and

cleaning service providers. A quality cleaning service specification is essential if health care services are to obtain quality cleaning services from internal or external providers.

A succinct description of what service specifications must aim for is expressed by the ACHS:  
*A good contract is one in which the organisation knows what it wants and states it clearly. It contains quantitative and qualitative acceptance criteria for the service and provides thresholds for rejection.*

When a cleaning service is well specified, the risk to health care services of poor cleaning outcomes will be reduced through sound contract management and monitoring.

### **Training and education**

Where an external cleaning service provider employs cleaning staff, it is responsible for training them adequately and safely to meet the cleaning standards. This accountability includes the special training needed for health care settings, such as how to clean protective isolation areas.

The accountability for training needs to be clearly stated in the cleaning service specification and should include the type of person conducting training and education programs or the qualifications needed to be attained by cleaners or cleaning supervisors/managers. The recommended training standards have been the National competency standards for contract cleaning, developed by the Contract Cleaning Subcommittee of Property Services Training Australia.

### **Occupational health and safety responsibilities**

A well-constructed training program also assists in ensuring that cleaning service providers meets occupational health and safety responsibilities. These include legislative requirements as well as a responsibility to adopt and follow infection control guidelines.

The aim of infection control policies and procedures for health care facilities is to ensure the health and safety of all patients and provide a safe and healthy working environment for all employees. This commitment includes adopting an infection control policy position that minimises the risk of health care consumers and providers acquiring a health care associated or occupational infection. This goal is best achieved by having an evidence-based infection control program within each health care facility.

### **Purpose**

This document outlines the broad principles of infection control for public health care settings and licensed private hospitals, nursing homes, extended care facilities and day procedure centres. Variation in the type of public and licensed private health care facilities, and the range of clinical services provided in each facility, dictate that locally applicable infection control programs and policies be developed and implemented.

In this document the term:

- *must* indicates a mandatory practice required by Law or by Departmental directive. A directive is only issued where it is considered necessary in the interests of patient and health care worker safety
- *should* indicates a strongly recommended practice
- *patient* includes all consumers of health care.

Under the relevant Act, practitioners must comply with the infection control Regulations. The key elements constitute the minimum standard for infection control in all public and licensed private health care settings.

All health care facilities and health care workers have a Common Law duty of care to take all reasonable steps to safeguard patients, staff and the general public from infection. There are also

requirements for employers to provide the information, instruction, training and supervision necessary to ensure the health and safety of employees at work.

### **Local infection control program**

To facilitate implementation of this policy and a coordinated approach to infection control, public health care facilities and licensed private health care facilities must have an infection control program in place that includes the following:

- coordination by a suitably experienced and qualified health care worker
- development of an annual strategic plan for infection control that includes surveillance, education and staff health strategies
- strategies to modify procedures and equipment associated with increased risk of occupational exposure to blood and/or body substances and ensure management of such
- strategies to monitor the effectiveness of the infection control program
- contingency plans to manage outbreaks of health care associated infections and infection control critical incidents.

A variety of infection control measures are used for reducing the risk of transmission of micro-organisms in health care settings. The following are the fundamentals of 'standard precautions' :

- hand washing and gloving
- masks, respiratory protection, eye protection
- face shields
- gowns and protective apparel
- patient placement
- routine cleaning and cleaning on separation.

### **Infection control systems**

The two-tiered approach to infection control includes, firstly and most importantly, those precautions designed for the care of all patients, regardless of their diagnosis or presumed infection status. These precautions are known as **standard precautions** and constitute the minimum acceptable level of practice in infection control.

The second tier are known as **additional precautions** and are applicable only for the care of specified patients.

#### **Standard precautions**

Standard precautions apply to all patients receiving care in health care facilities, regardless of their diagnosis or presumed infection status.

Standard precautions apply to:

- blood
- all body substances, secretions and excretions except sweat
- non-intact skin
- mucous membranes.

Standard precautions are designed to reduce the risk of transmission of micro-organisms from both recognised and unrecognised sources of infection in health care facilities.

Standard precautions involve the use of safe work practices and protective barriers including those detailed below.

### **Hand washing**

Wash hands after touching blood, body substances and contaminated items, whether or not gloves are worn. Wash hands immediately after gloves are removed, between patient contacts, and when otherwise indicated to avoid transfer of micro-organisms to other patients or environments. It may be necessary to wash hands between tasks and procedures on the same patient to prevent cross-contamination of different body sites.

### **Gloving**

Wear gloves (clean non-sterile gloves are adequate) when touching blood, body substances, and contaminated items. Put on clean gloves just before touching mucous membranes and non-intact skin. Remove gloves promptly after use, before touching non-contaminated items and environmental surfaces, and before going to another patient, and wash hands immediately to avoid transfer of micro-organisms to other patients or environments.

### **Masking**

Wear a mask and eye protection or a face shield to protect mucous membranes of the eyes, nose and mouth during procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions.

### **Gowning**

Wear a fluid-resistant gown or apron made of impervious material to protect skin and prevent soiling of clothes during procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions or cause soiling of clothing.



### **Appropriate device handling**

Handle used patient care equipment soiled with blood and body substances in a manner that prevents skin and mucous membrane exposures, contamination of clothing and transfer of micro-organisms to other patients and environments. Ensure that reusable equipment is not used for the care of another patient until it has been appropriately cleaned and reprocessed, and that single-use items are properly discarded after use.

### **Appropriate handling of laundry**

Handle, transport and process linen soiled with blood, body fluids, secretions and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing and transfer of micro-organisms to other patients and environments.

### **Additional precautions**

Additional precautions are designed for patients known, or suspected, to be infected with pathogens for which extra precautions beyond standard precautions are needed to interrupt transmission in health care facilities.



## Types of additional precautions

There are three types of additional precautions:

- airborne precautions
- droplet precautions
- contact precautions.

Health care facilities should provide suitable accommodation with appropriate equipment and trained staff for the treatment of patients requiring additional precautions.

### 🚫 Airborne precautions

Airborne precautions apply to patients known, or suspected, to be infected with pathogens that can be transmitted by the airborne route.

Airborne precautions are designed to reduce the risk of airborne transmission of infectious agents. Airborne transmission occurs by dissemination of either airborne droplet nuclei (small particle residue [5 µm or smaller in size] of evaporated droplets that may remain suspended in the air for long periods of time) or dust particles containing the infectious agent. Patient placement and special air handling and ventilation requirements must be considered.

### 🚫 Droplet precautions

Droplet precautions apply to any patient known to be, or suspected of being, infected with pathogens that can be transmitted by droplet.

Droplet precautions are designed to reduce the risk of droplet transmission of infectious agents. Because droplets do not remain suspended in the air, special air handling and ventilation are not required to prevent droplet transmission.

### 🚫 Contact precautions

Contact precautions are designed to reduce the risk of transmission of micro-organisms by direct or indirect contact.

- **Direct contact** transmission involves skin to skin contact and physical transfer of micro-organisms to a susceptible host from an infected or colonised person, such as when health care workers reposition patients, bathe patients, or perform other patient care activities that require physical contact.

Direct contact transmission can also occur between two patients (e.g. by hand contact), with one serving as the source of infectious micro-organisms and the other as a susceptible host.

- **Indirect contact** transmission involves contact of a susceptible host with a contaminated intermediate object, usually inanimate, in the patient's environment.

### Contact precautions consist of the following:

- Appropriate patient placement in a single room. When a single room is not available, the infected patient should be placed with a patient(s) infected with the same micro-organism.
- Wearing of gloves (clean non-sterile gloves are adequate) when entering the room for cleaning or general patient care other than aseptic procedures where sterile items are used. During the course of providing care for a patient, change gloves after having contact with infectious material that may contain high concentrations of micro organisms (e.g. faecal material and wound drainage). Remove gloves before leaving the patient's room and wash hands immediately with an antiseptic agent. After glove removal and hand washing, ensure that hands do not touch potentially contaminated environmental surfaces or items in the patient's room to avoid transfer of micro-organisms to other patients and environments.

- Wearing a gown when entering the room if you anticipate that your clothing will have substantial contact with the patient, environmental surfaces, or items in the patient's room, or if the patient is incontinent, or has diarrhoea, an ileostomy, a colostomy, or wound drainage not contained by a dressing. After gown removal, ensure that clothing does not contact potentially contaminated environmental surfaces to avoid transfer of micro-organisms to other patients and environments.
- If the patient is transported out of the room, ensure that precautions are maintained to minimise the risk of transmission of micro-organisms to other patients and contamination of environmental surfaces or equipment.
- Ensuring that patient care items, bedside equipment and frequently touched surfaces receive daily cleaning.
- When possible, dedicating the use of non-critical patient care equipment and items such as stethoscope, sphygmomanometer, bedside commode, or electronic rectal thermometer to a single patient to avoid sharing between patients. If use of common equipment or items is unavoidable, then clean before use on another patient.

### **Routine use of airborne, droplet, or contact precautions**

The routine use of standard precautions for all patients should greatly reduce the risk for conditions other than those requiring airborne, droplet, or contact precautions.

While it is not possible to identify prospectively all patients needing airborne, droplet, or contact precautions, certain clinical syndromes and conditions carry a sufficiently high risk to warrant the addition of enhanced precautions while a definitive diagnosis is awaited.

### **Hand washing, hand cleaning and hand care**

Hand washing is the single most important procedure for preventing health care associated infections. It is prudent to encourage hand washing when health care workers are in doubt about the need to do so.

Health care workers should be able to easily access hand washing facilities.

When clean, running water is inaccessible, non-water cleansers or antiseptics, such as alcohol-based hand rubs or foam provide an appropriate alternative. However, hands should be washed with soap and water if visibly soiled.

### **Situations requiring hand washing**

Hands must be cleaned immediately before and after any direct patient care.

#### **Methods of hand washing**

Hands may be cleaned by:

- using washing facilities involving water and a soap or antiseptic
- or
- if any of the above items are unavailable, using non-water cleansers or antiseptics.

### **Contaminated hands or skin surfaces**

Hands or other skin surfaces that are contaminated with a patient's blood or body substances must be cleaned immediately or as soon as it is practicable to clean them.

### **Drying hands**

Paper towels or single-use cloth towel should be used to dry hands in patient care areas.

### **Glove usage and hand washing**

The requirement to clean hands applies regardless of whether gloves are also required to be worn.

## **Hand care**

Health care workers should cover cuts and abrasions on exposed skin with a water-resistant occlusive dressing which should be changed as necessary or when the dressing becomes soiled. Temporary redeployment of staff may be necessary based on the advice of the employee's medical practitioner or staff health service.

## **Protective gowns**

Gowns and protective apparel provide a barrier and reduce opportunities for transmission of pathogens in health care settings. Gowns can protect the health care worker's skin and clothing from exposure to blood and body substances.

## **Requirement to wear a protective gown or apron**

A fluid-resistant gown or apron made of impervious material must be worn during any procedure where there is a likelihood of splashes or contamination with blood or other body substances. Clothing contaminated with blood or body substances should be removed as soon as possible and before health care workers attend other patients. If skin is contaminated with blood or body substances, health care workers should wash their hands and all affected areas after the removal of clothing and/or personal protective equipment.

## **Gloves**

Gloves are worn as a barrier to protect the wearer's hands from contamination or to prevent the transfer of organisms already on the hands.

Gloves must be used in situations where the health care worker is potentially exposed to blood and/or body substances, in particular:

- during any procedure where direct contact is anticipated with a patient's blood or body substances, mucous membranes or non-intact skin
- while suctioning a patient
- while handling items or surfaces that have come into contact with blood or body substances
- while performing an invasive procedure, venepuncture or a finger or heelstick.

## **Glove selection and types**

Gloves must be appropriate to the type and risk of the procedure and be of suitable size for the user.

## **Sterile gloves**

Sterile gloves must be worn if the procedure involves contact with tissue that would be sterile under normal circumstances.

## **Medical examination gloves**

Medical examination gloves that meet the Australian/New Zealand Standard AS/NZS 4011: *Single-use examination gloves – specifications* should be used for all procedures that may involve direct skin or mucous membrane contact with blood or fluid capable of transmitting blood-borne pathogens. Use of medical examination gloves for reasons other than preventing the transmission of blood-borne pathogens may be indicated (e.g. procedures involving other infectious agents or contaminated equipment).

## **General purpose gloves**

For housekeeping activities, instrument cleaning and decontamination procedures, general purpose household gloves (e.g. neoprene, rubber, and butyl) are appropriate. These can be washed and reused but should be discarded when they become peeled, cracked, discoloured,

torn or punctured.

### **Gloves for food preparation**

Plastic or vinyl gloves should be worn during food preparation.

### **Subcutaneous, intramuscular or intradermal injection and glove use**

Gloves need not be worn for subcutaneous, intramuscular or intradermal injection unless exposure to blood is anticipated.

### **Changing and discarding gloves**

Gloves must be changed and discarded:

- as soon as they are torn or punctured
- after contact with an individual is complete and before care is provided to another
- when performing separate procedures on the same patient and there is a risk of transmitting infection from one part of the body to another.

Use of gloves does not eliminate the need for hand washing or cleaning. Hands should be washed or cleaned after removal and disposal of gloves.

### **Masks, face shields and protective eyewear**

A fluid-repellent mask or face shield must be worn while performing any procedure where there is a likelihood of splashing or splattering of blood or other body substances. The type of mask selected should be appropriate to the type and risk of the procedure. Non-disposable face shields should be cleaned according to the manufacturer's instructions prior to reuse.

### **Protective eyewear**

Protective eyewear must be worn while performing any procedure where there is a likelihood of splashing or splattering of blood or other body substances. In cases where protective eyewear is required, it must be worn and fitted in accordance with the manufacturer's instructions.

Protective eyewear that is reusable must be cleaned in accordance with the manufacturer's instructions after use.

### **Safe handling, use and disposal of sharps**

The potential for transmission of blood-borne diseases is greatest when needles, scalpels and other sharp instruments or devices are used. Special care should be taken to prevent injuries during procedures, when cleaning reusable sharp instruments and during disposal of used sharps.

### **Responsibility for sharps**

Health care facilities have a responsibility to ensure adequate and accessible resources for the disposal of sharps. Each health care worker is responsible for the management and disposal of the sharps they use.

### **Passing sharps**

Sharps must not be passed by hand between a health care worker and any other person. A puncture-resistant tray must be used to transfer sharps.

## Transportation of reusable sharps

Reusable sharps must be placed, immediately after use, in a puncture-resistant sharps container specially kept for that purpose. Special units must ensure that safe handling procedures are in place for the transportation of reusable sharps.

## Removing scalpel blades from scalpel handles

The procedures and devices specified in the Australian/New Zealand Standard AS/NZS 3825: *Procedures and devices for the removal and disposal of scalpel blades from scalpel handles*, should be followed for the removal and disposal of scalpel blades and other similar instruments, (e.g. stitch cutters), from scalpel handles.

## Removing and bending needles

A needle must not be removed from a disposable syringe for disposal, or be purposely broken or otherwise manipulated by hand, unless:

- it is necessary to remove the needle for technical reasons

or

- the practitioner is performing a procedure in which the needle is required to be bent.

A needle must not be bent after it is contaminated with blood or other body substances. If a practitioner is performing a procedure in which the needle is required to be bent, a suitable pair of forceps should be used.

## Re-sheathing needles

Needles should not be re-sheathed except in special circumstances (such as in a dental practice). If re-sheathing is required the sheath must not be held in the fingers; use either a single-handed technique or forceps or a suitable protective guard designed for re-sheathing purposes.

## Sharps containers

Sharps containers should:

- comply with Australian/New Zealand Standard AS/NZS 4261: *Reusable containers for the collection of sharp items used in human and animal medical applications*, if they are reusable and Australian Standard AS 4031: *Non-reusable containers for the collection of sharp medical items used in health care areas*, if they are non-reusable
- be puncture-resistant, waterproof and leak-proof
- have an opening that is wide enough to allow sharps to be dropped into the container by a single-hand operation
- be clearly labelled with black lettering on yellow background with the 'biohazard' symbol printed on the container
- never be overfilled
- be securely sealed with a lid before disposal.

Sharps containers should be placed so visitors, particularly children, cannot easily access them.

Sharps should never be forced into a sharps container. Reusable sharps containers should:

- be cleaned and disinfected before reuse
- be inspected before reuse to ascertain that they are clean, intact and without leaks
- if found to be defective, be repaired or taken out of service
- be resistant to leakage, impact rupture and corrosion.

## Management of clinical waste

Clinical waste must be managed in accordance with relevant state or territory Laws and guidelines.

Clinical waste is waste that has the potential to cause sharps injury, infection or offence.

Clinical waste includes the following types of waste:

- sharps
- human tissue (excluding hair, teeth and nails)
- bulk body fluids and blood
- visibly bloodstained body fluids and visibly bloodstained disposal material and equipment
- laboratory specimens and cultures, animal tissues, carcasses or other waste arising from laboratory investigation.

Clinical waste should be segregated (i.e. placed in appropriate leak-proof bags or containers) and contained at the source of generation.

Clinical waste bags must have sufficient strength to contain the waste safely.

Disposable sharps must be disposed of in a puncture-resistant container immediately after use.

Clinical waste bags and containers should not be overfilled. Overfilling will prevent closure and increase the risk of rupture in transit.

Clinical waste bags should be tied or sealed, then stored in a secure place for collection.

Clinical waste bags and containers should not be moved using chutes.

Clinical waste bags and containers should be coloured yellow with the 'biohazard' symbol printed on the bag or container.

Mobile garbage bins, trolleys, storage areas and protective personal apparel used for the transportation and storage of clinical waste should conform to state or territory requirements.

Workers involved in disposal of blood or body substances (including emptying of urine and other fluid collection bags) must:

- wear appropriate personal protective equipment
- slowly pour liquid wastedown a drain connected to a sanitary sewer system and flush immediately after disposal
- minimise splashing or contamination to mucosa or skin
- ensure that disposable products containing liquids (such as disposable suction liners) are sealed, not emptied, before disposal into clinical waste bags and containers.

## **Processing of instruments and equipment**

Be familiar with:

- Australian Standard AS 4187: *Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities*
- National Health and Medical Research Council. *Report of the NH&MRC panel on the re-use of medical devices labelled as single use, 1997.*

The Therapeutic Goods Administration (TGA) of the Commonwealth Government regulates the assessment and validation of various therapeutic goods and devices. These goods and devices include sterilants, disinfectants and bench top/portable sterilisers.

## **Disinfectants and sterilants**

Suppliers of disinfectants or sterilants are not required to document 'TGA approved' on the product label. However, TGA will issue a 'Listing Certificate' or 'Registration Certificate' to suppliers with disinfectants or sterilants.

## **Type of processing**

Any micro-organisms, including bacterial spores that come in contact with normally sterile tissue

can potentially cause infection. These must be eliminated from items intended for use in sterile sites by cleaning and sterilisation. Intact skin acts as an effective barrier to most micro-organisms and the other items that touch intact skin generally need only cleaning. If contaminated by blood and other body fluids or knowingly used on a patient with a multi-resistant organism, e.g. methicillin resistant *Staphylococcus aureus* (MRSA) or vancomycin resistant *Enterococci* (VRE), appropriate higher-level reprocessing is required.

To protect against splashes, sprays and aerosols, personal protective apparel is required when cleaning and processing equipment and instruments.

Consideration of the reprocessing requirements (i.e. cleaning, and disinfection or sterilisation) should be given when purchasing equipment.

### **Cleaning of instruments and equipment**

Any instrument or equipment that comes into contact with intact skin must be cleaned before it is used. Any instrument or equipment that is required under this section to be disinfected or sterilised must be cleaned before it is disinfected or sterilised. The process of cleaning must involve water and physical or mechanical action (such as an automated washer) and a cleaning agent such as detergent or proteolytic enzyme. All cleaning agents must be removed from instruments and equipment by rinsing prior to further processing.

### **Disinfection of instruments and equipment**

The minimum requirement for any instrument or equipment that comes into contact with non-sterile tissue (other than intact skin) is high-level disinfection before use.

Disinfection is not a sterilising process.

All instruments and equipment must be cleaned prior to disinfection.

Disinfection may be achieved by either thermal or chemical methods. Thermal disinfection (hot water/pasteurisers) must be used in preference to chemical disinfection. Chemical disinfection may only be used for items for which thermal methods are unsuitable.

The manufacturer's instructions must be checked for compatibility of the instrument or equipment with the method of disinfection.

Items are at risk of being contaminated if not used immediately following disinfection.

Items should not be stored in disinfectants before or after any form of disinfection.

Procedures should be in place to ensure that handling, packaging and storing techniques prevent contamination of the item.

### **Sterilisation of instruments and equipment**

The method of sterilisation must be compatible with the particular type of instrument or equipment. If a steriliser is used (whether it is a bench top/portable steriliser or a permanently plumbed or wired steriliser), the following criteria apply:

- relevant manufacturer's instructions must be followed
- an ongoing monitoring program which reflects the requirements of Table 7.1 'Steriliser Tests and Test Frequencies' of Australian Standard AS 4187 must be followed.

All instruments and equipment must be cleaned prior to sterilisation.

The manufacturer's instructions should be checked for compatibility of the instrument or equipment with the method of sterilisation.

Unless an instrument or equipment has been sterilised by the wrapped method and stored in a manner which maintains sterility, it can only be considered sterile if used immediately.

Sterilisation must be consistent with Australian Standard AS 4187: *Cleaning, disinfecting and*

*sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities.*

### **Steam under pressure (moist heat) sterilisation**

Ensure that the recommended temperature/pressure/holding time is reached when processing items. Manufacturer's instructions for effective and safe use of the steriliser must be followed. All packaged and wrapped sterile instruments and equipment must be stored in a manner that ensures sterility is maintained.

### **Dry heat sterilisation**

Manufacturer's instructions for effective and safe use of the steriliser must be followed.

#### **- Low temperature peracetic acid**

Manufacturer's instructions for effective and safe use of the steriliser must be followed. Moist, low temperature peracetic acid is used to achieve low temperature sterilisation in an environmentally sealed chamber within a cycle specified by the relevant manufacturer. Items that have been sterilised by low temperature peracetic acid are at risk of contamination if not used immediately after sterilisation.

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#### **- Ethylene oxide**

Manufacturer's instructions for effective and safe use of the steriliser must be followed. Ethylene oxide is used to sterilise heat-sensitive and moisture-sensitive items, which cannot withstand temperatures greater than 60°C.

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#### **- Categorisation of instruments and equipment**

Instruments and equipment are divided into three categories, based on the degree of risk of infection associated with their use.

### **Storage of sterilised instruments and equipment**

Sterilised items must be stored and handled in a manner that maintains the integrity of the packaging material and prevents contamination of the contents. Sterilised items should be stored so that packaging is not crushed, bent, compressed, punctured or held together with elastic bands or paper clips.

The contents of any sterilised package should be considered contaminated if the packaging is either damaged or becomes wet.

### **Shelf life and rotation of stock**

Factors which influence shelf life, are event-related and include:

- package design
- packaging material
- storage and handling conditions.

A stock rotation policy and procedure should be developed for all areas of the facility in which sterile supplies are stored.

### **Documentation**

Documentation should be maintained in relation to equipment validation, which incorporates the commissioning procedure, ongoing maintenance and performance testing using physical, chemical and biological means.

## **Instruments and equipment that require special processing**

### **Endoscopy**

Endoscopes and accessory equipment should be handled, reprocessed and stored in accordance with Australian Standard AS 4187: *Cleaning, disinfecting and sterilising reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care facilities*.

Accessory equipment such as biopsy forceps, which enter, or are capable of entering tissue that would be sterile under normal circumstances, must be sterilised before use.

### **Baby bottles/teats and breast feeding equipment**

Breast feeding equipment such as breast pump components must be cleaned between uses and sterilised between patient uses. All babies' bottles and teats should be cleaned then disinfected after each use.

### **Thermometers**

Between patients, glass thermometers and their containers must be washed in water and detergent and dried prior to cleaning with an alcohol preparation (80% ethyl alcohol or 60-70% isopropyl alcohol) and stored dry.

### **Tonometer**

Tonometers must be cleaned after each use prior to disinfection.

### **Loan instruments and equipment**

Any instrument or equipment on loan should be reprocessed according to the manufacturer's instructions, prior to use. On receipt into the health care facility, the loan item must undergo a complete routine cleaning and processing prior to disinfection or sterilisation.

Lack of time must not permit the cleaning process to be bypassed. Health care workers' 'personal' instruments or equipment come within the category of loan items.

### **Use of covers or sheaths on instruments and equipment**

The use of a cover or sheath must not substitute for cleaning and disinfection or sterilisation. An instrument or equipment for which a cover or sheath is used during procedures must be cleaned and disinfected or sterilised as appropriate after each use. The cover or sheath must be discarded after each procedure.

### **- Single-use items**

Reuse of medical devices labelled as single-use which enter or may entire sterile sites must not occur.

### **Release of sterilised items and contingency plan for retrieval of suspected unsterile or inadequately disinfected goods**

An instrument or piece of equipment should be determined to be sterile based on either the steriliser's physical or chemical process data and in some instances, both physical and chemical process data are required. This is the accepted method of determination in all types of health care facilities.

It requires:

- pre-use validation of sterilisation processes
- routine monitoring and recording of the sterilisation process
- maintenance of the steriliser as referred to in Australian Standard AS 4187.

In the event of a steriliser failure the machine must not be used again until satisfactory results are obtained from physical, chemical and biological monitoring.

If a usually sterile item is suspected of being unsterile, or its sterility is unable to be guaranteed, the item must not be used.

Health care facilities should have a contingency plan in place in the event of sterilisation or disinfection failure. The plan should include guidelines for informing appropriate personnel.

If any item(s) has been used prior to discovering it is unsterile or inadequately disinfected, the health care facility should determine the extent of the problem in accordance with state or territory guidelines. The incident must be fully documented and the health care facility's CEO or equivalent advised. The incident may need to be reported to the relevant Health Department.

## **Environmental cleaning**

This section should be read in conjunction with relevant state or territory guidelines.

Deposits of dust, soil and microbes on surfaces are a potential source of health care associated infection.

Cleaning items (including solutions, water, buckets, cleaning cloths and mop heads) should be changed routinely, and immediately following the cleaning of blood or body substance spills or of contaminated areas such as operating rooms or isolation rooms. These items should be stored dry between uses.

A neutral detergent should be used for general cleaning. Disinfectants should not be used for general cleaning.

Work surfaces should be cleaned regularly. Surfaces should be cleaned immediately following spills or when visibly soiled.

Walls, blinds and curtains should be cleaned regularly and when they are visibly soiled.

Curtains should be changed regularly and as necessary.

Disinfectant fogging must not be used.

Carpets should be vacuumed daily.

General purpose gloves should be worn when cleaning.

If there is a likelihood of splashing during environmental cleaning, then a fluid-resistant gown, protective eyewear and mask should be worn.

## **Blood and body substance spills**

In the event of spills of blood or body substances, staff involved in the management of spills should immediately:

- put on protective apparel including gloves
- confine and contain the spill
- cover the spill with absorbent material to absorb the bulk of the spill
- treat debris as clinical waste
- clean the spill site with a neutral detergent and water.

Products that can clean spills of blood or other potentially infectious materials on carpets often damage them. Spills on carpet should be managed as follows:

- mop up as much of the spill as possible using disposable towels

- clean with a neutral detergent and arrange for the carpet to be shampooed with an industrial carpet cleaner as soon as possible.

### **Food services**

Regardless of diagnosis, patients can use reusable eating utensils, crockery, cutlery and food trays.

Food preparation staff must:

- wash hands before handling food or utensils
- wash hands and clean nails after:
  - using the toilet
  - having contact with unclean equipment, work surfaces, soiled clothing or dishcloths
  - removing gloves
  - arriving for work
- wear a hair covering that completely covers hair
- avoid direct touching of 'ready to eat' food by following proper food handling technique and using clean implements or gloves
- advise their supervisor of any gastrointestinal illness
- not prepare food whilst suffering from any gastrointestinal illness until at least one full day after recovery
- not prepare food whilst suffering from any hand infection.

Staff members involved in either delivery or collection of food trays are not required to wear gloves.

### **Laundry and linen services**

The risk of disease transmission from soiled linen is negligible. However, employees involved in the handling, transport and processing of used linen soiled with blood, body fluids, secretions and excretions should carry out these tasks in a manner that prevents skin and mucous membrane exposure, contamination of clothing and transfer of micro-organisms to other patients and environments.

Laundry staff should wear appropriate protective apparel including general-purpose gloves when handling and sorting soiled linen. Clean and used linen should be transported and stored separately.

Soiled linen should be handled as little as possible and with minimal agitation to prevent gross contamination of the air and linen handlers. Used linen should be put in bags at the point of generation.

Linen bags should not be overfilled.

Used linen should not be rinsed or sorted in patient care areas.

Staff should ensure sharps and other objects are not discarded into linen bags.

Linen soiled with blood or body substances should be bagged, transported and stored in leak-proof bags. The laundering of linen must be consistent with Australian Standard AS 4146: *Laundry practice*.

### **Maintain personal hygiene**

Maintain hand hygiene by washing hands before and after client contact and/or after any activity likely to cause contamination

*Hand hygiene procedures may include:*

- Routine hand wash
- Surgical hand wash
- Use of antiseptic wipes and alcohol based preparations in specific situations where waterless hand hygiene is acceptable

Follow *hand washing procedures*

Implement *hand care* procedures

*Hand care may include but is not limited to:*

- Suitable water-based hand creams that are registered on the Australian Register of Therapeutic Goods
- Using warm water for hand washing
- Drying hands thoroughly after hand washing
- Wearing heavy-duty utility gloves when handling irritant chemicals

Cover cuts and abrasions with water-proof dressings and change as necessary

### **Use personal protective equipment**

Wear personal *protective clothing and equipment* that complies with Australian/New Zealand Standards, and is appropriate for the intended use

*Protective clothing and equipment may include but are not limited to :*

- Gowns and waterproof aprons that comply with Australian/New Zealand standards
- Examination gloves and surgical gloves that comply with current Australian/New Zealand standards
- Glasses, goggles or face-shields
- Surgical face masks that comply with current Australian/New Zealand standards
- Footwear to protect from dropped sharps and other contaminated items
- Guidelines for latex allergic clients and staff

Change protective clothing and gowns/aprons daily, more frequently if soiled and where appropriate, after each client contact

### **Implement infection control policy and procedures with members of the work group**

In order to integrate your organisation's infection control policies and procedures in to general work practice you need to develop them, disseminate the information to members of the work group and implement it through the efforts of others. Clear lines of responsibility and account ability need to be agreed upon in this process.

#### **Policy development**

The first step is policy development, so as a team or team leader you will need to be aware and alert to the fact that there are gaps in your existing policy. You then need to consult and set aside time to research and develop the policy. Preventative procedures and practices should be clearly outlined and developed in document form and circulated. It is the responsibility of the manager of each area to ensure that all the recommended procedures and practices are followed.

Policies need to have a clear statement of intent, Such as:

‘Our organisation is committed to the prevention of infection by the implementation and

monitoring of infection control and the implementation of immunisation, universal precautions, education, training and information'

### **Policy Review**

All policies should be constantly reviewed to ensure they are working.

#### Procedures

A procedure will look at the strategies, roles, responsibilities and work instructions that reflect the intent of the policy statement. It should outline and describe measures that should be taken on a routine basis, as well as what to do in the range of variables that may occur.

Procedure information sessions.

The team Leader or designated person will then need to ensure the policy and procedure is presented and decimated via whatever means is suitable to the work place, which often includes procedure information sessions to the members of the work group.

### **Supervised Practice and training**

To ensure appropriate skills acquisition, a period of supervised practice and training should be implemented, to ensure that the workers are well supported and given appropriate feedback.

### **Assessment of practice**

Assessment of the practice is important to ensure that an employee's competence (skill and Knowledge) is determined.

#### Independent Practice

Once they are deemed competent then independent practice follows.

### **Monitoring of Practice**

It is everybody's responsibility to ensure that the monitoring of practice occurs to prevent any problem arising.

### **Deal with issues raised through consultation and ensure they are resolved promptly or referred to the appropriate personnel for resolution**

Consultation is the sharing of information and the exchange of views between 2 or more parties. In the work place we are generally referring to the interaction between employers and employees.

Consultation between employers and employees is a fundamental element to a positive approach to health, safety and welfare in the workplace. Through consultation, managers and supervisors can become more aware of the infection hazards experienced by the workers dealing with these issues. Workers should be encouraged to provide suggestions about how to solve infection control concerns.

Consultation during the planning of new work or work processes and the identification, assessment and control of infection control risks provide practical and effective information for the prevention of work related illness and disease.

#### Who should be involved?

Consultation should take place between employers and employees, and/or their elected representatives.

Consultation should occur when:

- an employer is identifying hazards
- assessing the risk
- deciding on measures to control risks

- implementing controls
- reviewing the effectiveness of controls
- reviewing and developing policies
- investigating incidents
- changing work practices, procedures
- introducing new substances to the work place

Consultation with employees should take place in the initial stages of these processes, to enable their experiences and expertise to be taken in to account.

### **Procedure for consultation**

All Parties in a work place should develop agreed procedures for consultation to be effective, employees and their representatives should have access to relevant information, including information on hazards in the workplace, the act, regulations, Australian standards , statistics etc.

Enough time should be allowed for employees and their representatives to consider the implications of the information and to discuss it amongst themselves, and the appropriate personnel to be engaged to facilitate resolution.

To facilitate resolution, affected parties or their representatives should be engaged to consider the likelihood that someone may be affected by a particular risk of infection, and how they could be hurt, how much, how long and how often a person is exposed to that particular hazard.

They then need to go through the process of considering the best way of how to fix it and to reduce other potential risks.

Once the most appropriate fix has been selected it is important to evaluate whether the fix has been successful in controlling the hazard. Reassess the risk again in consultation with all affected parties and hopefully consensus can be reached on a best practice.

### **Reporting Infection risks**

Reporting of infection risks is critical so that action is taken promptly to prevent the spread of infection to others. Here we have a duty of care requirement to the clients we are supporting, and to the peers under health and safety legislation and the respective regulations.

### **Dangerous Occurrence**

A dangerous occurrence is an incident or event that arises from the operations carried on at a workplace and which causes an immediate and significant risk to a person. A person does not have to be injured – it is the risk which is important. The risk may arise if a person is or could have been in or near the incident or event.

### **Investigate infection control hazardous events to identify their cause in accordance with Organisation policy and procedure**

Many cases of infection caused illness occur with no obvious association with each other. It can be very difficult to identify a source of infection from an investigation from a single case.

However, every case of illness should be seen as having the potential to be part of an unrecognised cluster or outbreak and the investigation should be undertaken with this in mind.

Interviewing a number of sporadic cases may be useful in generating hypotheses about possible sources of infection amongst previously associated cases. This may lead to the identification of

clusters or outbreaks of illness.

The routine follow-up of sporadic cases of outbreaks of illness due to infection allows for:

- ② the prevention of further infections from the source
- ② the identification of cases amongst others and other close contacts of the affected source
- ② identification of disease amongst risk groups such as food handlers, care workers
- ② education and/or feedback to the appropriate health care professionals, and other contacts and premises
- ② The identification of promotional opportunities to inform and educate the community about preventing the spread of infectious diseases.

These key points should be considered when carrying out an investigation:

1. Does the illness or this infection pose a risk to others?
2. Is this case part of an outbreak?
3. Are there any other cases, perhaps asymptomatic or undiagnosed?
4. Is there any evidence for a particular source of this illness?
5. If so, who else is at risk and what is the susceptible population?
6. Should this case be further investigated? If so, how?
7. What is the public health significance of this case?

## Record keeping

During an investigation of an infection outbreak or risk it is crucial that clear notes be kept detailing all steps taken during the investigation. These notes should include completed questionnaires, assessment of all potential risk factors, details of any control measures implemented and any other action taken including a summary of findings. Check your policy to ensure you know when to notify local government authorities. Local government will keep their own records for future reference as the sporadic case may become part of a wider investigation.

Referral to other local government authority.

Cases for follow-up may also need to be referred to local government area in which the affected people reside. The investigating officer may need to refer investigation of food premises, special care facilities, care centres etc. to other municipalities when a need for follow-up is indicated as part of their investigation. In these circumstances, the investigation summary will include the municipality, the matter that is referred to and the investigating office.

## Steps in investigation

You will need to familiarise yourself within the procedures of your organisation to ensure you are on track with this.

The key principals to consider are:

- ☐ An infection outbreak or risk investigation must be conducted with care and tact and in a professional manner
- ☐ Ensure that confidentiality is maintained throughout the investigation process
- ☐ Work within the scope of your job role and perform your duties thoroughly

## Interviewing others

Clarify nature and timing of infection outbreak or risk symptoms and use the appropriate questionnaire to determine the following:

- ☐ Personal details of the source people of the infection outbreak or risk
- ☐ Clinical Symptoms
- ☐ Occupation
- ☐ Travel patterns
- ☐ Environmental exposures
- ☐ Other risk factors
- ☐ Case finding
- Food history – general and 4 day history

## Identifying the risk factor

There are certain risk factors which indicate that further investigation is required and may present educational opportunities.

These Risk factors can be broadly categorised as follows:

- ☐ Occupational
- ☐ Possible source
- ☐ Travel

## Regular Review and Adjust work Procedures To Ensure improvements in Infection control practice.

Even the best of work practices will need to change to meet new information and practices.

Sometimes this is the result of changes to current practices, either as a result of new community expectations or new standards to meet. More commonly these changes occur as the organisation finds, through the usual reporting processes, that some practices no longer meet the requirements they were designed for. This may then lead to a review of the current practice.

A far more satisfactory way to ensure that all procedures are up to date is to investigate a program of regular review. This can take the form of written reports, analysis of any incident report, or perhaps a roster to review a procedure per month.

Whatever method is chosen, it needs to be time efficient, easy to use and actually able to accurately assess the current practice.

### **Reviewing work procedures and policy**

Procedures need to be in plain English, easy to follow and all employees should understand them. Policies and procedures must be reviewed and updated to reflect any changes in legislation, plant and equipment, substances used in workplace, systems of work or the work environment.

In reviewing policies and procedures there must be a consultation with health and safety representatives, health professionals, employees, and at times, relevant unions and employer associations. Consultation must also occur when the policy is reviewed and up dated.

## **Further information**

- ② National Health & Medical Research Council 1999, National guidelines for waste management in the health industry  
[www.nhmrc.gov.au](http://www.nhmrc.gov.au)
  - ② NHMRC (2010) Clinical Educators Guide for the prevention and control of infection in healthcare. Commonwealth of Australia
  - ② Environmental Protection Authority Victoria 1993, Manual for the management and disposal of biomedical wastes in Victoria (under review)
  - ② Australian/New Zealand Standards AS/NZS 3816:1998, Management of clinical and related wastes
  - ② Australian/New Zealand Standards AS 4031:1992, Non-reusable containers for the collection of sharp medical items used in health care areas
  - ② Australian/New Zealand Standards AS/NZS 4261:1994, Reusable containers for the collection of sharp items used in human and animal medical applications
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