

# Infection Control Management Plans for Non-Hospital Healthcare



## Infection Control Management Plans for Non-Hospital Healthcare Facilities

Published by the State of Queensland (Queensland Health), March 2019



This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit <https://creativecommons.org/licenses/by/3.0/au>

© State of Queensland (Queensland Health) 2017

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Queensland Health).

For more information contact:

Communicable Diseases Branch, Department of Health, GPO Box 48, Brisbane QLD 4001,  
email [CDIM\\_Infection\\_Management@health.qld.gov.au](mailto:CDIM_Infection_Management@health.qld.gov.au).

An electronic version of this document is available at <https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/infection-prevention/management-plans-guidance/icmp>

### **Disclaimer:**

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

# Contents

---

|   |           |
|---|-----------|
| <b>Infection Control Management Plans</b>                                 | <b>3</b>  |
| The ten core elements in an ICMP are:                                     | 4         |
| <b>Scope of this document</b>   | <b>4</b>  |
| Section 1: Steps in developing an ICMP                                    | 5         |
| Section 2: Resource information to support the development of the ICMP    | 5         |
| Section 3: Frequently asked questions                                     | 5         |
| <b>Section 1: How to develop the ICMP</b>                                 | <b>6</b>  |
| Resources:  | 6         |
| Developing the ICMP – 7 Steps   | 6         |
| Step 1. Who is the owner/operator of the healthcare business?             | 6         |
| Step 2. Services offered by the healthcare facility or service.           | 7         |
| Step 3. Assess the level of risk  | 8         |
| Step 4. Manage the risk   | 11        |
| Step 5. Monitor risk management measures                                  | 13        |
| Step 6. Staff training  | 15        |
| Step 7. Responsibility for Infection Risk Management                      | 19        |
| <b>Ensuring compliance</b>  | <b>21</b> |
| <b>The importance of an ICMP in delivery of high quality patient care</b> | <b>22</b> |
| <b>Further Information</b>  | <b>22</b> |
| <b>Section 2: Resource Information</b>                                    | <b>24</b> |
| Basis of infection prevention and control                                 | 24        |
| Infection Risk situations in healthcare                                   | 33        |
| Occupational exposure incident  | 34        |
| Recording an occupational exposure  | 34        |
| Contracting a vaccine preventable disease                                 | 35        |
| <b>Section 3: Frequently Asked Questions</b>                              | <b>35</b> |
| Hand hygiene  | 35        |
| Environmental and equipment cleaning                                      | 37        |
| Patients/clients with symptoms of communicable diseases                   | 38        |
| Infection Control Management Plans  | 38        |

# Infection Control Management Plans

The purpose of developing an Infection Control Management Plan (ICMP) is to prevent or minimise the risk of infection in relation to the provision of declared health services at a healthcare facility, for:

- persons receiving services at the facility
- persons employed or engaged at the facility
- other persons at risk of infection at the facility.

Chapter 4 of the *Public Health Act 2005* (Qld) (the Act) requires that people who deliver declared health services as defined under the Act take reasonable precautions and care to minimise the risk of infection to other persons. A declared health service is defined in the Act as a service that is intended to maintain, improve or restore a person's health AND involves an invasive procedure or activity that exposes the person, or another person, to blood or another bodily fluid.

The Act places the onus on the owner/operators of healthcare facilities to have an ICMP for the facility. The ICMP must identify the infection risks associated with procedures and activities undertaken at the facility and must detail the measures taken to prevent or minimise the risks of infection transmission.

All healthcare facilities that provide declared health services as defined under the Act must have an existing ICMP. The ICMP must be reviewed and updated before offering any new declared health services. New healthcare facilities must have an ICMP prior to providing any declared health services.

## The ten core elements in an ICMP are:

|               |  |
|---------------|--|
| <b>ICMP1</b>  | <b>Handwashing and hand hygiene</b>  |
| <b>ICMP2</b>  | Personal protective equipment  |
| <b>ICMP3</b>  | Management of blood/body fluid exposures   |
| <b>ICMP4</b>  | Infection control and employee health  |
| <b>ICMP5</b>  | Immunisation   |
| <b>ICMP6</b>  | Environmental hygiene  |
| <b>ICMP7</b>  | Pre-treatment assessment of infection control risk   |
| <b>ICMP8</b>  | Appropriate use of single-use medical devices and reprocessing of reusable medical devices |
| <b>ICMP9</b>  | Delegation of responsibility for infection control   |
| <b>ICMP10</b> | Process for the investigation of infection control incidents                               |

## Scope of this document

This document provides guidance for owners and operators on infection risk and management issues that are likely to be encountered in non-hospital healthcare facilities. Healthcare services are rapidly expanding in the range of services they offer in response to technological advancements and patient demand.

Therefore, this document refers to infectious risks in general and does not include specific information relating to every healthcare activity and/or type of healthcare facility. The owner or operator of a healthcare facility must critically assess and identify all risks associated with any activity undertaken within that healthcare facility.

This document consists of three parts.

|                  |  |
|------------------|--|
| <b>Section 1</b> | Steps in developing an ICMP                                |
| <b>Section 2</b> | Resource information to support the development of an ICMP |
| <b>Section 3</b> | Frequently asked questions                                 |

## Section 1: Steps in developing an ICMP

An ICMP requires the owner or the operator of a healthcare facility to identify each infection control risk and outline a plan of action to minimise these risks. Risks may include, but are not limited to:

- transmission of infection from contaminated hands or objects
- direct exposure to blood or bodily fluids
- exposure to a vaccine preventable disease
- cross-infection and direct exposure to infectious droplets or aerosols from patients/clients with symptoms of communicable diseases, e.g. influenza and measles
- transmission of infection due to incorrect or inappropriate cleaning, disinfection or sterilisation of re-useable medical devices or incorrect use of single-use medical items.

## Section 2: Resource information to support the development of the ICMP

This section contains a summary of the information that should be used as the primary resource material when developing an ICMP. The source document used to develop this guide is the *Australian Guideline for the Prevention and Control of Infection in Healthcare* (2020) that is available online on the Australian Commission on Safety and Quality in Healthcare website at: <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/australian-guidelines-prevention-and-control-infection-healthcare-february-2020>

## Section 3: Frequently asked questions

This section provides answers to common questions about:

- hand hygiene practices
- environmental and equipment cleaning
- patients with symptoms of communicable diseases
- what might happen if the facility does not have an adequate ICMP.

# Section 1: How to develop the ICMP

The aim of this section is to step through what needs to be included in the ICMP (7 steps). The activities in this section will help the person responsible to think through what infection control strategies need to be in place to ensure safe practice and minimise the risk of transmission of infection between persons in the facility. The activities will also help the person responsible to complete the documentation necessary to meet the minimum requirements of an ICMP as specified in the legislation.

## Resources:

The requirements for some healthcare service providers in relation to ICMPs is explained on the Queensland Health website at:

<https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/infection-prevention/management-plans-guidance/icmp>

Use the Queensland Health ICMP template, or similar, as the starting point for developing the ICMP. The Department of Health template can be accessed at:

[https://www.health.qld.gov.au/\\_data/assets/word\\_doc/0036/.../icmp-template.doc](https://www.health.qld.gov.au/_data/assets/word_doc/0036/.../icmp-template.doc)

## Developing the ICMP – 7 Steps

### Step 1. Who is the owner/operator of the healthcare business?

It is important to establish who the owner of the healthcare facility or service, is whether there is also an operator, whether the owner and operator are the same person.

The owner or owner/operator of the healthcare facility or service must:

- be named in the document
- is responsible for ensuring that the ICMP meets the legislative requirements of the Act
- is the person who signs and dates the ICMP and sets the review date.

The owner can be held legally responsible for the work practices of all people delivering healthcare services to clients. The owner may be a company entity. If so, a key person, in a position of authority, will sign the ICMP on behalf of the company.

The operator of a healthcare facility is the person who has the day to day operation and control of the facility. If the owner and operator are separate people, or there are multiple operators within a larger organisation, then both the owner and the operator/s are responsible for ensuring the safety of the public from an infection control perspective and to minimise risk in the workplace. The operator/s do not need to be identified in the ICMP. It is the owner who signs the document.

## Activity 1

Who is the owner of the business? There may be more than one owner.

Who is the operator of the business? The owner may also be the operator or there may be multiple operators.

| Owner/s | Operator/s |
|---------|------------|
|         |            |
|         |            |
|         |            |
|         |            |

## Step 2. Services offered by the healthcare facility or service.

A healthcare facility or service provider may offer a range of services, some of which may be defined as 'a declared health service' according to the Act and some may not.

A declared health service is one that is intended to maintain, improve or restore a person's health AND involves an invasive procedure or activity that exposes the person, or another person, to blood or another bodily fluid. An invasive procedure is one involving the insertion of an instrument, appliance or other object into human tissue, organs, body cavities or body orifices that exposes the person or another person to blood or another bodily fluid.

For example, noting these examples are not exhaustive lists for these types of healthcare providers:

- A dental surgeon may list the following procedures with an infection risk (exposure to blood and body fluids) that need to be managed in the ICMP including dental extractions, dental restorations, dental implants, and gum surgery.
- A podiatrist may list foot surgery, toenail excision and injections.
- A homebirth midwifery service may list normal delivery, episiotomy, injections, venepuncture, IV insertion, heel puncture, blood glucose monitoring, suturing, bladder catheterisation.
- A home nursing service would include some of the same procedures as the homebirth midwifery service (refer to previous point) and may also include other procedures such as wound debridement, surgical drain removal etc.
- An acupuncturist may list needle insertion as an invasive procedure.
- A medical radiation service may list injections, intra-cavity ultrasound, biopsy, endoscopy.

Remember, the above are only examples and not a definitive list. If you are unsure as to whether a procedure is invasive or not or if a procedure is a declared health service seek expert guidance.



## Services and level of risk

Some professional peak bodies have developed comprehensive guidelines to assist health practitioners with developing an ICMP. The [Australian Dental Association](#), and the [Royal Australian College of General Practitioners](#) have guidelines that cover all aspects of infection management for the types of invasive procedures likely to be delivered in the non-hospital setting. It is essential that the ICMP lists the invasive procedures that are performed by the healthcare provider. The ICMP must be updated if a new type of service is to be provided, even if the infection risk and management strategies are the same as for services already being offered. If a new procedure involves an increased level of infection risk, then appropriate management strategies will need to be added.

### Activity 2

What invasive procedures are offered as part of the healthcare service?

|   | Invasive procedures undertaken by the healthcare service. |
|---|---|
| 1 |   |
| 2 |   |
| 3 |   |
| 4 |   |

## Step 3. Assess the level of risk

Most procedures undertaken in non-hospital settings are considered low risk in terms of transmission of infection BUT any invasive procedure that interrupts the integrity of the skin or mucous membrane puts the patient at risk of infection and exposes others to potentially infectious blood and bodily fluids. Healthcare workers (and others) are at risk of contracting blood borne viruses such as hepatitis B, hepatitis C and HIV from patient interaction if standard precautions for infection prevention are not adhered to.

Each procedure has a level of risk associated with it. Healthcare facility personnel need to be aware of the risks associated with each of the procedures that they undertake, in the context in which the healthcare is delivered, and have strategies that address and manage the risks adequately.

A decision about level of risk and ways to manage risks will be made by the clinician at the time of each encounter. Many of the risks that are identified will apply across all the procedures: e.g. risk of infection transmission from contaminated hands. Other risks may be procedure-specific.

**Standard precautions are best practice.** Implementing [standard precautions](#) in all invasive interactions with patients is the recommended infection management approach. **Standard precautions protect everyone.**

Patients and visitors to the healthcare facility share a responsibility to minimise transmission of infections between themselves and other people. They may need to be reminded to follow basic hand hygiene, respiratory hygiene (including correct disposal of tissues) and cough etiquette. They should be encouraged to inform staff if they have an illness or have a blood borne virus that may put others at risk.

## Resources

Please read this section in conjunction with the following resources:

- National Health and Medical Research Council, Australian Guidelines for the Prevention and Control of Infection in Healthcare 2019 <https://nhmrc.gov.au/about-us/publications/australian-guidelines-prevention-and-control-infection-healthcare-2010>
- Australian/New Zealand Standard on Risk Management AS/NZS ISO 31000:2009
- Workplace Health and Safety Queensland: How to manage work health and safety risks Code of Practice 2011. Access at: [https://www.worksafe.qld.gov.au/\\_data/assets/pdf\\_file/0003/58170/Manage-WHS-risks-COP-2011.pdf](https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0003/58170/Manage-WHS-risks-COP-2011.pdf)

## Activity 3

List the infection control risks associated with any invasive procedures that are undertaken in the facility or during service provision.

|   | Infection control risks identified |
|---|------------------------------------|
| 1 |                                    |
| 2 |                                    |
| 3 |                                    |
| 4 |                                    |
| 5 |                                    |
| 6 | <b>Add more lines if necessary</b> |

## Analyse the level of risk

Infection risk has two components:

1. the likelihood of an injury (or exposure)
2. the seriousness of the consequences (or impact).

The likelihood of risk can range from rare to almost certain and the impact or consequences can range from *insignificant* to *catastrophic*. There is a matrix commonly in use to help you

to assess the level of risk. Think about the source of the risk, the consequences, the likelihood of the consequences occurring and any other factors affecting the risk, such as any management strategies that are already in place.

| Likelihood     | Consequences  |        |          |         |              |
|----------------|---------------|--------|----------|---------|--------------|
|                | Insignificant | Minor  | Moderate | Major   | Catastrophic |
| Almost certain | Medium        | High   | High     | Extreme | Extreme      |
| Likely         | Medium        | Medium | High     | High    | Extreme      |
| Possible       | Low           | Medium | Medium   | High    | High         |
| Unlikely       | Low           | Low    | Medium   | Medium  | High         |
| Rare           | Low           | Low    | Low      | Medium  | Medium       |

|                |  |
|----------------|--|
| Almost certain | Manage by routine procedures.  |
| Likely         | Manage by specific monitoring procedures   |
| Possible       | This is serious and must be addresses immediately  |
| Unlikely       | The magnitude of the consequences of an event, should it occur, and the likelihood of that event occurring, are addressed in the context of the effectiveness of existing strategies and controls. |

**Figure 1: Risk analysis and management matrix** (Source: NHMRC 2010)

Next—see how the risk is assessed for a possible infection exposure through a needlestick injury (NSI)

### Assessing the level of risk for a needlestick injury (NSI)

Occupational exposure to blood borne viruses is a risk in any clinical practice that involves an invasive procedure. Large scale studies in the United States have shown that the transmission rate of HIV through NSI from a known HIV infected person to a healthcare worker is less than 0.2% - that is 2/1000 injuries (Wicker et al. 2008). The risk would be zero from a non-HIV infected patient. The transmission rate of HCV (hepatitis C virus) through NSI from a known HCV infected person is 1.8% but HBV (hepatitis B virus) ranges from 1–30% depending on the actual HBV status of the patient (Zingman 2013).

Even though the risk of transmission of a blood borne virus through an NSI is **rare**, the consequence (or impact) of this transmission may be considered **major**. Therefore, the overall risk is rated as **medium** (pink circle in Figure 2). The management strategy for assessed level of risk for NSI would need to be adequate i.e. specific monitoring or auditing and be evident in the ICMP.

| Likelihood     | Consequences  |        |          |         |              |
|----------------|---------------|--------|----------|---------|--------------|
|                | Insignificant | Minor  | Moderate | Major   | Catastrophic |
| Almost certain | Medium        | High   | High     | Extreme | Extreme      |
| Likely         | Medium        | Medium | High     | High    | Extreme      |
| Possible       | Low           | Medium | Medium   | High    | High         |
| Unlikely       | Low           | Low    | Medium   | Medium  | High         |
| Rare           | Low           | Low    | Low      | Medium  | Medium       |

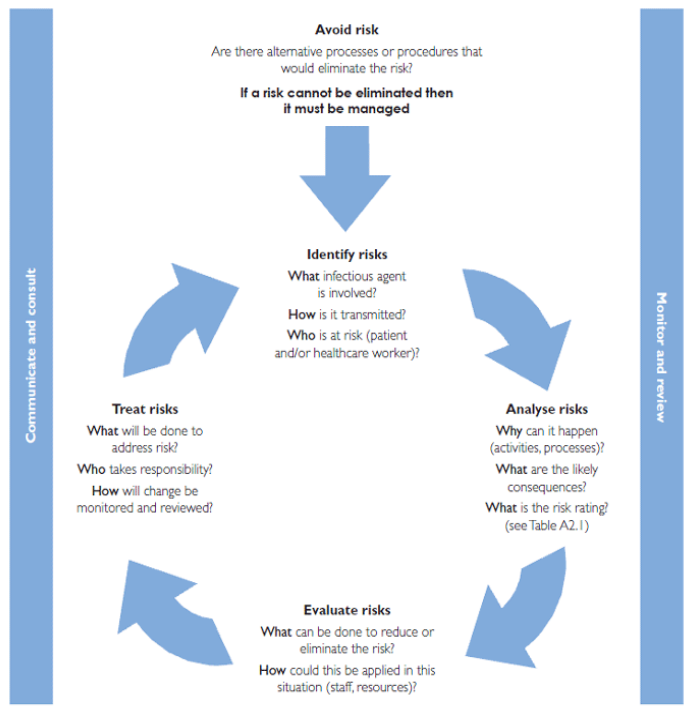
|                |  |
|----------------|--|
| Almost certain | Manage by routine procedures.  |
| Likely         | Manage by specific monitoring procedures   |
| Possible       | This is serious and must be addressed immediately  |
| Unlikely       | The magnitude of the consequences of an event, should it occur, and the likelihood of that event occurring, are addressed in the context of the effectiveness of existing strategies and controls. |

**Figure 2: Analysis of risk for needlestick injury**

The basis of good infection control practice is to assume that everyone is potentially infectious. Pre-procedure screening of patients for blood borne viruses is not routine so **standard precautions are essential during every clinical encounter.**

### Step 4. Manage the risk

The following flowchart outlines the thinking process about how best to manage infection control risks in the healthcare facility. **Figure 3:**



Risk management follows an established hierarchy of controls. See Table 1 that lists the hierarchy of control and gives examples of how effective risk management may be demonstrated in relation to the risk of infection transmission through needlestick injury and other general hazards.

|          | <b>Hierarchy of controls</b>  | <b>Management Strategy</b>  |
|----------|---|---|
| <b>1</b> | Eliminate the hazard or threat  | Do not use sharps   |
| <b>2</b> | Minimise or replace the hazard or threat                                      | Vaccination of staff (for example: vaccination against hepatitis B) Staff with illness to stay at home  |
| <b>3</b> | Control the risk using engineered devices that do not require human actuation | Use of 'passive' self-retracting needles (automatically retract the needle)   |
| <b>4</b> | Control the risk using devices that require human actuation                   | Use of 'active" self-retracting needles (requires staff member to activate the needle retraction mechanism  |
| <b>5</b> | Control the risk with procedures  | Aseptic non-touch technique<br>Correct disposal of sharps   |
| <b>6</b> | Control the risk with personal protective equipment                           | Use gloves, apron, eye protection   |
| <b>7</b> | Control the risk through administrative means                                 | Staff managing sterilization processes are adequately trained<br>Cleaning schedules documented and followed   |
| <b>8</b> | Control the risk with warnings and by raising awareness                       | Handwashing posters displayed near sinks<br>Alcohol based hand rub available at all room entry and exit points<br>Cough etiquette posters displayed |

**Table 1: Risk management hierarchy of controls and examples in relation to needlestick injury and other general hazards**

## Activity 4

Using the list of identified infection transmission risks that are listed in Activity 3, what measures could be put in place to eliminate or minimise the risk? Use information supplied in Section 2 of this booklet—where Standard Precautions are explained in more detail—to determine appropriate management strategies.

|   | Identified risk               | Risk management strategy |
|---|-------------------------------|--------------------------|
| 1 |                               |                          |
| 2 |                               |                          |
| 3 |                               |                          |
| 4 |                               |                          |
|   | (Add more lines if necessary) |                          |

## Step 5. Monitor risk management measures

The ICMP should include evidence that infection management strategies are working. Measures may include observation, surveys and inspections, outcomes and critical incident reviews, and audits. How and when monitoring will take place should be included in the ICMP.

A healthcare facility or service could utilise one of the many self-audit tools that are available online to guide monitoring and evaluation of infection management practice (such as, the Dental Board of Australia's [self-audit tool](#)). Self-audit tools help owner/operators to recognise what is working well and to identify areas where infection control practice can be improved. Monitoring can be carried out on a specific practice, procedure, or in a discrete clinical area. If a problem is identified additional risk management strategies may be considered, such as new equipment, new procedures, or education and training of staff followed by additional surveillance. If the same audit tool is used pre-and post-training then changes in outcomes can be measured.

Some professional peak bodies provide infection management guidelines for practitioners/members and audit tools to monitor practice against minimum infection control standards.

|   | <b>Risk Management Strategy</b>   | <b>Examples of Evidence</b>   |
|---|---|---|
| Hand hygiene                            | Alcohol based hand rub available at point of care/Handwashing facilities/Posters/Staff training/Peer review of practice | Hand-rub invoices/Audit records   |
| Use of PPE                              | Policy/Peer review of practice (3 monthly)  | Documentation/staff training records/Audit records                        |
| Environmental cleaning                  | Policy/Procedures/Environmental cleaning schedules/Quality cleaning products and equipment                              | Documentation/staff training records/Daily/ weekly schedules and sign-off |
| Handling of sharps                      | Policy/Sharps containers at point of care/Peer review of practice (6 monthly)   | Audit records   |
| Reprocessing of medical equipment       | Trained staff/Functional equipment/Policies and procedures  | Sterilisation equipment records/Staff training records                    |
| Respiratory hygiene and cough etiquette | Posters/Placement of tissues, hand rub and waste bins/Regular audits/Cleaning procedures                                | Audit records   |
| Aseptic technique                       | Peer review - Observed practice (3 monthly)/Staff training  | Audit records   |
| Waste management                        | Policies/Procedures/Trained staff /Review of waste segregation practices (monthly)                                      | Minutes of meetings/Audit records   |
| Employee health                         | Orientation/Safe work culture/HR Policies   | Staff vaccination records/ Sick leave records                             |
| Management of incidents/exposures       | Orientation/Safe work culture/HR Policy/Response plan   | Meeting minutes/ Needlestick injury records                               |
| Patient pre-treatment assessment        | Trained staff/Triage/No show policy for ill patients  | Patient appointments and 'no-shows' records                               |
| Linen management                        | Policies/Procedures/Industry standards  | Laundry invoices/contractor credentials                                   |

**Table 2: Risk management strategies and types of evidence**

## Activity 5

List all the **risk management strategies** you have in place and the types of evidence you collect in the facility to manage the following infection risks.

| Infection risk  | Risk management strategy | Evidence |
|---|--------------------------|----------|
| Transmission of infectious illness between people by direct contact |                          |          |
| Transmission of droplet spread infection between people             |                          |          |
| Exposure to infection from blood and body fluids                    |                          |          |
| Exposure to infection from contaminated environment or equipment    |                          |          |

## Step 6. Staff training

Effective infection control practice in a healthcare setting requires ensuring that people have both the knowledge and the skills required to minimise risk. Healthcare facilities should provide specific education and training for all persons employed or otherwise engaged at the facility including healthcare workers, non-clinical staff, students, etc. about infection prevention and control principles, any policies and procedures that are relevant to the facility.

This information should be provided in the context of staff roles in the organisation or practice, and with a focus on respecting and maintaining patient confidentiality always.

The aim of staff training is two-fold:

1. inform healthcare workers and other staff about the infectious hazards they will face during their employment
2. educate them about their role and responsibilities in minimising the spread of infection to others.



Under the legislation (*Public Health Act 2005*) the obligation to minimise risk applies as follows:

“(1) persons involved in the provision of a declared health service must take reasonable precautions and care to minimise the risk of infection (the infection risk) to other persons.”

At a minimum, all staff (clinical and non-clinical) should be educated about:

- modes of transmission of infectious agents
- risk identification, assessment and management strategies including standard and transmission-based precautions
- the importance of staff vaccination and the process for recording vaccination histories
- orientation to the physical work environment with a focus on its risks for infection
- safe work procedures
- correct use of standard precautions
- correct choice and use of PPE, including procedures for putting on and removing PPE
- appropriate attire (shoes/hair/nails/jewellery)
- hand hygiene practices
- levels of cleaning required for clinical areas and equipment
- how to deal with spills
- safe handling and disposal of sharps
- reporting requirements of incidents such as sharps injuries and exposures
- waste management
- antibiotic policy and practice.

Healthcare workers may also require job or task-specific education/training in:

- instrument cleaning and sterilisation competency testing
- risks and prevention of multi-resistant organism transmission
- insertion and management of peripheral lines.

Training should be provided as part of orientation, with periodic updates and refresher courses as required for their specific jobs with refresher training and assessment of key skills annually. Additional training may be required when a different procedure or new equipment is introduced into practice. Records of training should be kept as evidence of ongoing infection control education.

Education strategies could include:

- educational meetings, presentations, workshops or and case discussions,
- printed or audio-visual resources
- presentations from visiting infection prevention and control expert
- continuing professional education available from peak bodies and professional associations
- on-line learning modules from government agencies, e.g. Australian Commission on Safety and Quality in Healthcare <https://www.safetyandquality.gov.au/our-work/healthcare-associated-infection/infection-prevention-and-control-online-modules/>

## Activity 6

The practice manager of a busy dental surgery has developed the annual infection control training plan for the facility. The training plan includes hand hygiene training and assessment as part of the orientation for all new staff. The practice employs 3 full-time dentists (one of which is the practice owner), a part-time dentist, a dental hygienist, 5 dental assistants, 3 reception staff, 1 part-time accounts clerk, and the practice manager.

**Note:** This activity has been structured around a dental practice as an example. Positions itemised in the following table should be adjusted to reflect the staff actually employed in the healthcare facility.

Who should attend the annual refresher training for hand hygiene? Why or why not? (Tick all that apply)

| Who?              | Tick if applies          | Why or why not? |
|-------------------|--------------------------|-----------------|
| Practice owner    | <input type="checkbox"/> |                 |
| Full-time dentist | <input type="checkbox"/> |                 |
| Part time dentist | <input type="checkbox"/> |                 |
| Dental hygienist  | <input type="checkbox"/> |                 |
| Dental assistant  | <input type="checkbox"/> |                 |
| Reception staff   | <input type="checkbox"/> |                 |
| Accounts clerk    | <input type="checkbox"/> |                 |
| Practice manager  | <input type="checkbox"/> |                 |

## Activity 7

Suggest a reasonable strategy to effectively train and assess staff hand hygiene practice.

|                    |
|--------------------|
| <b>Training:</b>   |
|                    |
|                    |
|                    |
| <b>Assessment:</b> |
|                    |
|                    |
|                    |

## Activity 8

Who should attend the training relating to the purchase of a new sterilising unit? (tick all that apply)

**Note:** This activity has been structured around a dental practice as an example. Please adjust the positions in the table to reflect the staff employed in the healthcare facility.

| Who?              | Tick if applies          | Why or why not? |
|-------------------|--------------------------|-----------------|
| Practice owner    | <input type="checkbox"/> |                 |
| Full-time dentist | <input type="checkbox"/> |                 |
| Part time dentist | <input type="checkbox"/> |                 |
| Dental hygienist  | <input type="checkbox"/> |                 |
| Dental assistant  | <input type="checkbox"/> |                 |
| Reception staff   | <input type="checkbox"/> |                 |
| Accounts clerk    | <input type="checkbox"/> |                 |
| Practice manager  | <input type="checkbox"/> |                 |

## Activity 9

Suggest a reasonable strategy to effectively train and assess sterilising operation and practice.

|                    |
|--------------------|
| <b>Training:</b>   |
|                    |
|                    |
|                    |
|                    |
| <b>Assessment:</b> |
|                    |
|                    |
|                    |

## Activity 10

Here is a list of other people who are not regular staff of the healthcare facility who might need to be included in the infection control training plan. Provide a rationale as to why infection control training for them is necessary.

| Who?                          | Why?   |
|-------------------------------|--|
| Students                      | Will be developing essential clinical skills |
| Contractors                   |  |
| Cleaners                      |  |
| Work Experience               |  |
| Locum staff (relieving staff) |  |

## Step 7. Responsibility for Infection Risk Management

Chapter 4 of the *Public Health Act 2005* is clear. The responsibility for infection risk management in healthcare facilities sits with the owner, owner/operator and the operator of the facility.

**The owner:**

The owner of the facility may or may not be the operator. Section 153 of the *Public Health Act 2005* states that:

“...if the owner and the operator of a healthcare facility are different persons:

The owner must ensure—

- (a) there is an ICMP for the healthcare facility that complies with section 155(1) and includes matters prescribed under section 155(2);
- (b) declared health services provided at the healthcare facility are provided in compliance with the ICMP; and
- (c) the operator reviews the effectiveness and implementation of the ICMP at intervals of not more than 1 year.”

For example: a large national healthcare and insurance company owns at least 15 dental practices in Queensland. As the owners of the business the senior management have overall responsibility for the quality of care that is provided by all sections of the company.

**The operator:**

In relation to each healthcare delivery site, the person who operates the practice is directly responsible for ensuring staff and patient safety in that practice. That person will most likely be either the senior clinician or the practice manager. In addition, all APHRA registered health professionals (doctors, midwives, dentists, podiatrists, acupuncturists, chiropractors, physiotherapists, occupational therapists, optometrists, osteopaths, paramedics, pharmacists, radiographers and Aboriginal and Torres Strait Islander Health Practitioners) have a professional responsibility (duty of care) to patients that includes protecting patients from harm.

The operator of the facility is defined as: “the person who has the day to day operation and control of the facility”.

Section 155 of the *Public Health Act 2005* states that:

“(3) The ICMP must be written in a way likely to be easily understood by persons employed or otherwise engaged at the facility.

(4) The operator of the facility must—

- (a) sign and date the ICMP; and
- (b) sign and date the ICMP each time it is reviewed.

(5) The operator must keep a copy of the ICMP at a place at the facility that is readily accessible to persons employed or otherwise engaged at the facility.

(6) If, after developing an ICMP for a healthcare facility, the operator of the facility intends to provide a declared health service not identified in the ICMP, the operator must, before providing the service, review and amend the ICMP to address the infection risks associated with the service.”

In addition, it is important to remember that all people have a responsibility to ensure safe workplace and work practices under Workplace Health & Safety legislation and to comply with safety policies and procedures of the facility.

Remember that the owner/s and operator/s of the health facility were identified in **Step 1 (Activity 1)** in this workbook. Consider who is accountable for what activities in terms of infection control management and who is responsible for the ICMP and its regular review.

### Activity 11

Whose signature must appear (as the responsible person) on the ICMP document if the facility is owned by a:

|  |  |
|--|--|
| Large national company?                    |  |
| Business partnership between 4 people?     |  |
| Sole owner/operator (health professional)? |  |
| (Non-clinical) practice manager?           |  |
| Family trust?                              |  |

### Activity 12

List two instances when the ICMP should be reviewed and by whom?

1. \_\_\_\_\_
2. \_\_\_\_\_

By whom? \_\_\_\_\_

## Ensuring compliance

The object of the *Public Health Act 2005* is to protect and promote the health of the Queensland public. One aspect of the Act (Chapter 4) imposes obligations on persons and some healthcare facilities that provide declared health services to minimise infection risks. Administration of the Act falls to Queensland Health.

Section 390 of the Act provides authority for a Public Health Unit authorised person to enter a healthcare facility to investigate a complaint or monitor compliance with the Act. When deemed necessary the authorised person may undertake appropriate action to address an infection risk or an identified non-compliance with the requirements of the Act.

In this instance, an authorised person may ask to see the facility ICMP. They may take a copy of the ICMP and other supporting documentation for review. The ICMP should include detailed information about infection risk management strategies relevant to the declared health services being delivered within the facility.

An authorised person may ask questions of the operator and staff about infection control practices and take photographs of the premises. An authorised person is not permitted to enter any part of the facility where a patient is being interviewed, assessed or receiving treatment by a health practitioner.

On entering the premises, the authorised person must:

- produce or display the authorised person's identity card for the occupier's inspection; and
- inform the occupier about the reason for entry.

## The importance of an ICMP in delivery of high quality patient care

A facility infection control program should be structured, implemented and managed to:

1. reduce the incidence and risk of preventable healthcare associated infection
2. prevent infection transmission within healthcare facilities and to the community at large
3. create an organisational framework that promotes the use of resources for the delivery of safe and cost-effective healthcare services.

The facility Infection Control Management Plan details infection risks and strategies to minimise risks for services that the healthcare facility provides.

## Further Information

For further information refer to the following:

1. Australian Commission on Safety and Quality in Healthcare, 2010, The OSSIE Toolkit for the implementation of the Australian guidelines for the prevention of infection in healthcare 2010, Commonwealth of Australia, Canberra. Access at: <https://www.safetyandquality.gov.au/wp-content/uploads/2012/02/ImplementationActionPlan.pdf>
2. Chinese Medicine Board of Australia, 2017, Infection prevention and control guidelines for acupuncture practice. Access at: <https://www.acupuncture.org.au/wp-content/uploads/2017/04/Chinese-Medicine-Board-Guidelines-Infection-prevention-and-control-guidelines-for-acupuncture-practice.pdf>

3. Dental Board of Australia, 2010, Guidelines on infection control. Access at: <http://www.dentalboard.gov.au/Codes-Guidelines/Policies-Codes-Guidelines.aspx>
4. Dental Board of Australia 2015, Self-audit tool – Infection control obligations of dental practitioners. Access at: <http://www.dentalboard.gov.au/Codes-Guidelines/Infection-control-obligations-of-dental-practitioners.aspx>
5. Hand Hygiene Australia. Access at: <https://www.hha.org.au/>
6. National Health and Medical Research Council, 2010, Australian guidelines for the prevention and control of infection in healthcare, Australian Commission on Safety and Quality in Healthcare (ACSQHC), Canberra, Available from: <https://nhmrc.gov.au/about-us/publications/australian-guidelines-prevention-and-control-infection-healthcare-2010>
7. National Health and Medical Research Council, 2013, The Australian immunisation handbook 10th edition. Australian Government: Canberra. Available from: <https://immunisationhandbook.health.gov.au>
8. Queensland Government, Workplace Health and Safety Act 2011. Access at: <https://www.legislation.qld.gov.au/browse/inforce#/act/title/w>
9. Queensland Government, *Public Health Act 2005*. Access at: <https://www.legislation.qld.gov.au/view/pdf/2016-07-01/act-2005-048>
10. Royal Australian College of General Practitioners, 2014, Infection prevention and control standards for general practices and other office-based and community-based practices. 5th ed. East Melbourne, Vic: RACGP. Access at: <https://www.racgp.org.au/running-a-practice/practice-standards/standards-for-other-health-care-settings/view-all-health-care-standards/infection-prevention-and-control>
11. Wicker S, Cinatl J, Berger A, Doerr HW, Gottschalk R and Rabenau HF, 2008, Determination of risk of infection with blood borne pathogens following a needlestick injury in hospital workers, *Annals of Occupational Hygiene*, 52(7):615-22
12. Workplace Health and Safety Queensland, 2011, How to manage work health and safety risks: Code of Conduct 2011, Office of Industrial Relations, Brisbane. Access at: [https://www.worksafe.qld.gov.au/\\_data/assets/pdf\\_file/0003/58170/Manage-WHS-risks-COP-2011.pdf](https://www.worksafe.qld.gov.au/_data/assets/pdf_file/0003/58170/Manage-WHS-risks-COP-2011.pdf)
13. Zingman B, 2013, Occupational exposure to hepatitis B and C, *Medscape Perspectives* online at: [https://www.medscape.com/viewarticle/778035\\_11](https://www.medscape.com/viewarticle/778035_11)



# Section 2: Resource Information

## Basis of infection prevention and control

Healthcare associated infections (HAIs) can occur in any healthcare facility or during any service provision activity. Infection prevention and control is fundamental to providing safe clinical care and should be embedded in daily practice. It is not a set of guidelines for selected activities only.

For infectious agents to be transmitted three main elements are required to be present.

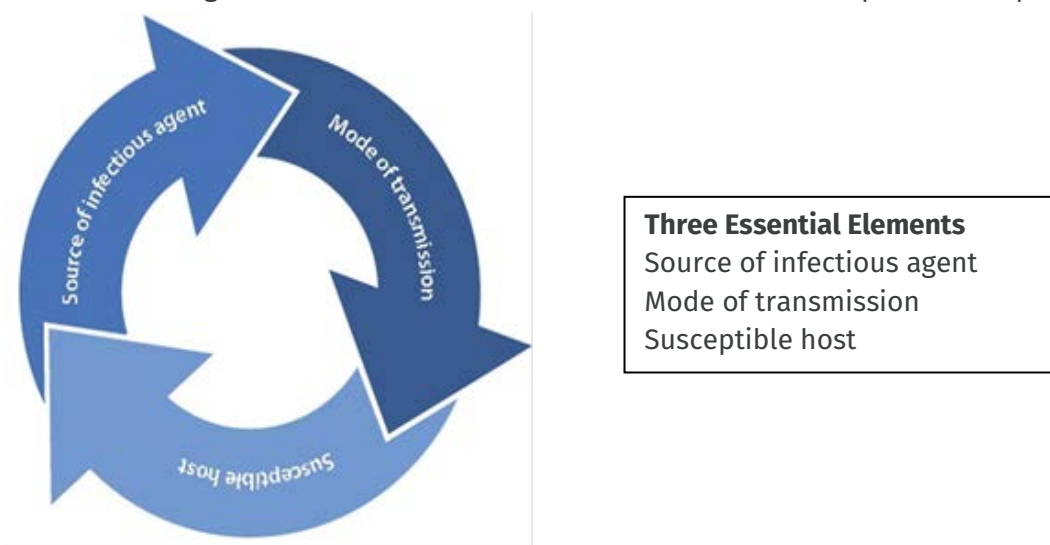


Figure 4: Chain of infection (NHMRC 2010)

### A source of the infectious agent

Patients, healthcare workers and visitors are most likely sources of infectious agents. These individuals may be:

- displaying symptoms of the infectious agent
- in the incubation period of the infection and show no symptoms
- chronic carriers of an infectious agent with or without symptoms.

Other sources of infection may include but are not limited to, air, water, or medical equipment and devices that have been contaminated.

### Mode of transmission

**Contact:** may be direct; transferred from one person to another or indirect transfer occurring from an environmental surface.

For example, direct contact may involve the blood from one person having contact with another person's bloodstream via, a penetrating injury or a mucosa splash.

Indirect contact occurs, for example, when a person coughs or sneezes into their hand and then touches a door handle to open the door. The door handle is now contaminated.

Indirect contact occurs when the next person touches the door handle and then their face.

**Droplet:** Can occur when an infected person coughs, sneezes or talks or when certain procedures are performed (e.g. respiratory function test or sputum sample collection). Transmission may follow when the droplets are expelled from the infected person travel through the air and contact the mucosa of another person. The distribution of infection via droplets is limited by the force of the explosion and gravity.

**Airborne:** Small-particle aerosols are created through breathing, talking, coughing or sneezing. Due to the small particle size these infective agents may be dispersed over long distances and remain airborne for an extended period (compared to droplets). Transmission occurs when the susceptible host inhales the particles. Examples of infectious agents that may be transmitted via inhalation include: measles virus, chicken pox virus, and tuberculosis (TB).

**Vehicle:** Infection may also be transmitted via other common sources such as contaminated food, water, devices or equipment. These are termed 'vehicles'.

## Susceptible host

A number of factors can impact on susceptibility to infectious organisms. These include: specific immunity, age, health status, and genetics. Specific immunity can render a patient or healthcare worker non-susceptible to a particular disease. Immunity may be generated by prior infection or vaccination. Advancing age and co-morbidity can increase susceptibility to infection. Very young patients may also be at particular risk.

The chain of infection may be broken by implementing standard and transmission-based precautions.

## Standard Precautions

Standard precautions refer to the work practices that are applied to all patient interactions regardless of their perceived or confirmed infectious status. This ensures a basic standardised level of infection prevention and control. Standard precautions are used by healthcare workers to prevent or reduce the risk of transmission of infectious agent from:

- a person to another person
- a person to the environment
- the environment to a person.

[Standard precaution strategies](#) include, but are not limited to: hand hygiene, personal protective equipment, environmental cleaning, sharps-handling and disposal, reprocessing of reusable medical devices.

## Hand hygiene

Hand hygiene is one of the principal strategies to limiting the transmission of infection. Hand hygiene is required to be performed before and after every occurrence of patient contact or contact with the patient's environment. **This includes immediately prior to glove placement and upon removing of gloves.**

A range of hand hygiene products are available for use in a healthcare services environment, these include:

- Plain soaps - for general routine/social contact and cleaning visibly soiled hands.
- Antimicrobial soaps - for use prior to performing invasive surgical procedures.
- Alcohol based hand rub – for use when hands are visibly clean.
- Hand lotion – to protect the integrity of the skin, the use of a compatible hand lotion is suggested.

The correct hand hygiene product to be used is dependent upon the situation that has occurred or is about to occur. Hand hygiene products for clinical use are required to be registered with the Therapeutic Goods Administration (TGA).

Further information regarding hand hygiene is available from Hand Hygiene Australia: <http://www.hha.org.au>

## Personal protective equipment

Personal protective equipment (PPE) refers to an assortment of equipment that can be used individually or in combination to protect the mucous membranes, airways, skin and clothing from contact with infectious agents.

Personal protective equipment includes: surgical masks, protective eyewear and face shields, gloves, gowns, aprons.

Factors to be considered when choosing appropriate PPE are:

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

PPE is to be put on in a sequence that maintains sterile and clean fields. Remove PPE in a manner that reduces the risk of any contamination to the person and/or the surrounding environment.

PPE must conform to legislative, Australian Standard and/or industry standards or guidelines.

## Environmental cleaning

Infectious agents may contaminate surfaces in any healthcare facility. As a risk management strategy, environmental surfaces should be decontaminated using the cleaning method aligned with the level of contamination and the item to be cleaned.

To ensure that cleaning occurs on a regular basis, a **cleaning schedule** detailing the method of cleaning and the timeframe for completion should be implemented.

For routine environmental cleaning general surfaces may be divided into two types:

**Minimal touch surfaces:** Surfaces that have limited contact with hands. This includes areas like ceiling, floors, and non-clinical areas such as administration offices. These surfaces can be cleaned with a pH neutral detergent and water solution. It is recommended that dusting with a damp cloth is used over dry dusting or mopping. A damp cloth will limit the amount of dust and other possible microbes being inhaled.

**Frequent touch surfaces:** These are surfaces near the patient as well as frequently touched areas. The examples include but not limited to: doorknobs, light switches, and some wall areas. These areas of contamination are required to be risk assessed to decide the correct cleaning solution. If the risk has been identified as low a detergent and water solution is recommended. However, if the infection risk has been assessed as high the surfaces will require to be cleaned with detergent and water, followed by a disinfectant solution. Please ensure that the manufacturer's instructions are followed.

Environmental cleaning includes the cleaning of patient equipment that does not require sterilisation. For cleaning of clinical equipment always follow the manufacturer's instructions.

## Sharps-handling and disposal

The risks associated with the use of sharp devices in a healthcare facility relate to the possible injury and potential exposure to blood borne infectious agents. These include the blood borne viruses (BBV)—hepatitis B virus, hepatitis C virus and human immunodeficiency virus (HIV). **Injuries from needles and other sharp instruments carry the highest risk of potential BBV transmission in any healthcare facility.** Most sharps injuries can be prevented through effective handling and disposal of sharps.

Examples of devices that may be associated with a sharps injury:

- hollow bore sharps: disposable needles/syringes, injector pens
- non-hollow bore (solid) sharps: glass vials, dental probes, scalpel blades, suture needles, acupuncture needles, other sharp solid instruments.

### Handling sharps

Precautions to prevent sharps injuries should be embedded in daily practice. These may include, but are not limited to:

- use of personal protective equipment
- establishing a neutral drop zone
- using instruments to retract tissues, to grasp needles, to load and unload scalpels
- avoid hand to hand passing of sharp instruments
- avoid re-capping needles
- availability of point of use sharps containers for immediate disposal of sharps
- care during the reprocessing of reusable medical devices.

## Disposal of single-use sharps

The person who has used a disposable (single use) sharp instrument must be responsible for the safe management and disposal after use.

Single use disposable sharps are to be placed into a container that is compliant with [Australian Standard 4031](#) or [AS/NZS 4261](#). These containers are to be clearly labelled, puncture and leak proof. The location of the sharps containers should be as close as practical to the patient treatment area, out of reach of children in a secure position, preferably wall mounted to prevent tipping.

## Staff training

- Single-use sharp devices

All clinical staff should be trained in the healthcare facility's policies and procedures on the safe disposal of single use sharps. This includes the compliant sharps container being placed as close as practical to the point of use, and that the person that uses the sharp is disposing it into the sharps container.

- Reusable medical devices

All clinical staff should be trained in the procedure for safe handling of reusable medical devices. This includes the safe transfer of devices from the clinical environment to the reprocessing/sterilization area and correct PPE to handle devices throughout the reprocessing cycle.

## Reprocessing of reusable medical devices

Single-use items are never to be reprocessed. The packaging of single-use items will display the following symbol:



Single-use device symbol

However, equipment and devices designed for 'single patient use' can be used multiple times on the one patient. Single patient use devices may be reprocessed and reused on the same patient in accordance with the manufacturer's instructions. Single patient use device packaging will not display the symbol shown above. Healthcare facilities should develop and implement local procedures relevant to their facility.

Any instrument or equipment that is intended to be used on multiple patients is required to be reprocessed. The level of reprocessing will depend on the procedure the item was used for; and the intended use of the item on future patients.

To identify the correct level of reprocessing required for an individual item, engagement with all relevant documents is necessary. These may include but are not limited to; manufacturer's instructions and industry guidelines.

The NHMRC Guidelines (reference) identify three core elements to reprocessing:

**Cleaning:** is the removal of all foreign matter from the device; this includes non-organic and organic material. This is normally accomplished using detergent solution. Thorough removal

of all matter from the device is essential, any organic or non-organic material that is left on the device will impede the disinfection and or sterilisation processes that may follow.

**Disinfection:** is a process that uses thermal or chemical procedures to disinfect medical devices. Disinfection is not a sterilisation process.

- **Thermal disinfection:** is a process that uses heat and water, at temperatures high enough to destroy infectious agents. An automated washer disinfector is the most common device used to achieve thermal disinfection.
- **Chemical Disinfection:** can be achieved with a compatible TGA registered clinical grade disinfectant. This may be used alone or in a thermal disinfector. However, whenever possible medical devices if possible are to be sterilised.

**Sterilisation:** this process is intended to prevent disease transmission associated with the use of reusable medical devices. The most common method used in healthcare facilities is steam sterilisation. Appropriate reprocessing systems are to be aligned with state and federal legislation. **Acceptable methods of sterilisation Australia is either steam or dry heat sterilisation.**

Details of acceptable sterilisation practices, testing and supporting documentation can be found in:

- [Australian Standards AS/NZS 4815](#) Office-based healthcare facilities - Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment.
- [Australian Standards AS/NZS 4187](#) Reprocessing of reusable medical devices in health service organizations.

## Key principles of sterilisation processes for office-based healthcare facilities

Reprocessing is a term which includes all steps necessary to make contaminated (dirty/used) reusable devices ready for its intended use as a clean or sterile instrument. The process is required to occur in an area separated from the patient treatment areas. The process is also to occur in a flow that only ever moves in a continuous one-way directional flow.

The sterilisation starting point is the zone where contaminated instruments are placed: the endpoint is where reusable medical devices are cooled after the sterilisation process is complete. After instruments have entirely cooled they are then able to be placed in a suitable storage area.

### Functional areas of a sterilisation zone in a small office situation

**Receiving zone:** A dedicated zone where contaminated instruments are placed prior to the decontamination process. All processes after this zone are required to move in a forward only direction (one-way flow).

**Decontamination zone:** A sink that is used for the removal of gross debris (organic and or non-organic). PPE is to be used by the operator. The clean instruments may then be placed in an automated cleaner.

**Packing/Wrapping zone:** A clear dry space that allows for the correct packing technique of critical instruments.

**Loading zone:** A zone where the clean dry instruments are placed on the sterilisation trays and then loading into the steriliser.

**Steriliser unloading zone:** A clear dry space where the hot instrument trays are placed to allow to cool to room temperature prior to storage.

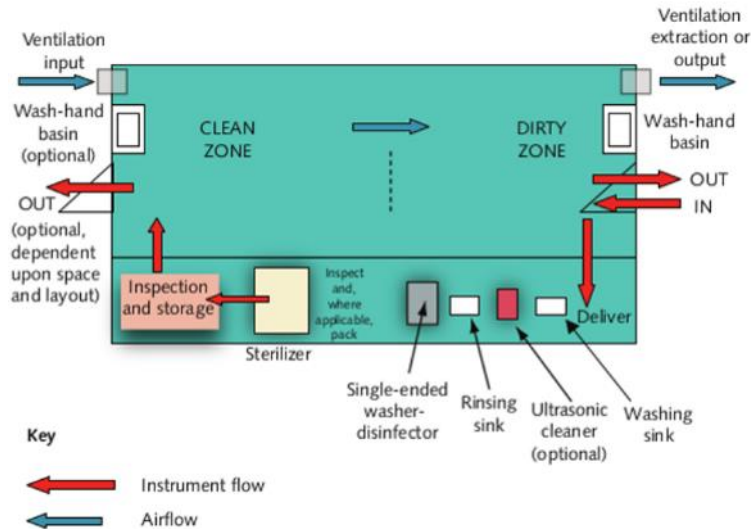


Figure 5: Example of sterilisation flow in a small office facility

## Statement of limitations

This document provides basic information on sterilisation processes undertaken in healthcare facilities.

Each healthcare facility should base their sterilisation and instrument reprocessing policies and procedures outlined in the following Australian Standards:

- [AS/NZS 4187:2014](#) Reprocessing of reusable medical devices in health service organizations
- [AS/NZS 4815:2006](#) Office-based health facilities – Reprocessing of reusable medical and surgical instruments and equipment, and maintenance of the associated environment.

Please note: that the Standards are reviewed periodically and updated with amendments. It is important that the most current versions are referenced. These can be accessed from Standards Australia at: <https://www.standards.org.au/standards-catalogue/sa-snz/health>

## Respiratory hygiene and cough etiquette

To stop the spread of infection through coughing and sneezing, each facility should implement policies to limit droplet and airborne transmission. This is achieved by ensuring staff are trained in the following:

- Covering mouth and nose with a disposable single use tissue when coughing or sneezing.
- Coughing or sneezing into the inner elbow rather than using their hand.
- Using disposable tissue to contain secretions, blowing nose etc.
- Ensuring that the tissue is placed in the waste and hand hygiene is performed immediately.
- Hand hygiene performed after contact with respiratory secretions (contact with a tissue), this can be using soap and water or alcohol based hand rub.

Supporting patients and visitors by:

- Offering to re-book an appointment for when they feel symptoms have passed (except where the appointment was originally booked to obtain treatment for the symptoms).
- Placing posters in waiting areas to raise awareness of respiratory hygiene and cough etiquette.
- Providing tissues, waste bin and hand hygiene products for patients and visitors.

## Aseptic technique

Aseptic technique protects patients during invasive clinical procedures by employing infection control measures that minimise, as far as practicably possible, the presence of pathogenic microorganisms (NHRMC Guidelines).

Correct aseptic technique prevents contamination and transfer of pathogens from hands, surfaces and equipment to patient during procedures. This is achieved by identifying key parts, key sites and protecting them at all times.

Key parts are the sterile components of equipment used during the procedure. Key parts must only come into contact with other key parts and/or key sites

Key sites include any non-intact skin and the insertion or access sites for medical devices connected to the patient.

### Aseptic fields

Aseptic fields are controlled working spaces that ensure the integrity of asepsis during clinical procedures. Aseptic fields must be 'fit for purpose' and are controlled by the clinician.

**Critical aseptic field:** guaranteeing asepsis. Critical aseptic fields are used in surgical procedures using an aseptic technique. The aseptic field must be properly managed by the clinician to ensure that all key sites are protected.

**General aseptic field:** promoting asepsis. General aseptic fields are used in general invasive procedures. Asepsis of the immediate procedure environment is protected by the clinician exercising appropriate field management.



**Non-touch technique:** there is evidence to show that hand hygiene is not always correctly performed and that even when performed correctly hand hygiene does not always remove all pathogenic organisms from the field. Therefore, non-touch technique is a vital component of achieving asepsis. Non-touch technique is a technique where healthcare workers hands do not touch the equipment and products, and thereby do not contaminate the zone, other key parts and sites. The safest way to protect a key part is not to touch it.

**Glove use:** Gloves are single-use items. In aseptic technique sterile gloves are used to minimise the risk of contamination if it is necessary to touch key parts or key sites directly. In non-aseptic techniques non-sterile single-use gloves can be used or not. The clinician will assess and manage the infection risk depending on patient and procedure factors.

## Waste management

Healthcare facilities are to follow state legislation and local council requirements for clinical and related waste.

When handling waste there are several recommendations to follow:

- Apply PPE when handling waste. PPE is to be appropriate for the type of waste being handled.
- Waste should be contained in appropriate receptacles that are clearly identifiable by colour and label:
  - yellow bag to indicate clinical waste
  - sharps container that conforms with [AS4031](#) or [AS/NZ4261](#)
  - black or white bag/container to indicate general waste
  - purple bag/container to indicate toxic waste.
- All waste should be disposed of according to the facility waste management plan.
- Healthcare workers should be trained in correct handling procedures for waste disposal for their facility.

## Transmission based precautions

Transmission based precautions are applied in addition to standard precautions. These work practices are implemented where standard precautions alone may be insufficient to contain and prevent further infection.

Transmission based precautions should be tailored to the mode of transmission of the infectious agent. A combination of approaches is necessary and may include the following:

- allocating a single room/space with a closing door to the patient
- wearing specific personal protective equipment
- providing patient dedicated equipment
- using TGA registered disinfectant- following manufacturer's instructions
- restricting movement of patient and healthcare worker.

In addition to these general requirements, the below are specific to the three (3) types of transmission-based precautions.

Transmission based precautions may include the following:

**Contact precautions:** include continued use of standard precautions, patient isolation, placement of PPE prior to entering the patient room (with attention to the placement of gowns and gloves), removal of PPE without causing environmental contamination, adherence to hand hygiene procedures, limited patient movement within the healthcare facility, special handling of patient equipment, environmental cleaning of the patient setting.

**Droplet precautions:** include continued use of standard precautions, patient isolation, placement of PPE prior to entering the patient room (with attention to the placement of surgical mask and contact with the patient environment), removal of PPE without causing environmental contamination, adherence to hand hygiene procedures, limited patient movement within the healthcare facility, special handling of patient equipment, environmental cleaning of the patient setting.

**Airborne precautions:** include continued use of standard precautions, patient isolation, placement of PPE prior to entering the patient room (with attention to the placement of a P2/N95 respirator), removal of PPE without causing environmental contamination, adherence to hand hygiene procedures, limited patient movement within the healthcare facility, special handling of patient equipment, environmental cleaning of the patient setting. In some clinical settings the use of a negative pressure room may reduce the transmission of infection.

Further information may be obtained from sections A1.2.2, B2, B3 and B5 of the Australian Guidelines for the Prevention and Control of Infection in Healthcare (NHMRC).

## Infection Risk situations in healthcare

Some more common infection risk situations in healthcare include: exposure to blood or body fluids, and cases of vaccine preventable diseases. These risks should be addressed in an ICMP. Further information to guide the thinking follows here.

### Exposure to blood/body fluids

Blood and/or body fluids is defined as any fluid that originates from within a person. For example: blood, vomitus, faecal matter, urine, tears, saliva. All organic bodily substances are to be treated as potentially contaminated.

Occupational exposures may include, but are not limited to:

#### Exposure to blood

This may occur through direct contact via an injury sustained with a sharp device i.e. needle or sharp instrument. This may arise during a procedure, while disposing of a sharp device or during the reprocessing of the reusable medical device. Other exposures may occur via direct blood to blood contact, blood contact with the mucosa i.e. blood contacting; eyes, nose, mouth.

#### Exposure to body fluids

Body fluids include, saliva, mucus, vomitus, faecal matter, semen and tears. Contact with these bodily fluids with non-intact skin, or the mucosa of another person is considered an occupational exposure.

## Occupational exposure incident

Healthcare workers face the risk of injury from needles and other sharp instruments during many routine procedures. Each healthcare facility is required to have policies and procedures aligned to their facility. This includes an Incident Exposure Procedure and a complete record of the incident.

Each facility is required to have an exposure procedure to apply first aid to the affected area; this may include the following.

- Stop work immediately.
- Penetrating injuries: allow wound to bleed and clean it thoroughly with soap and lukewarm water.
- Splash events: flush the mucous membranes/conjunctiva with normal saline or water. If contact lenses are worn remove after flushing the eye and clean as usual.
- Further wound management is dependent on the individual nature of the injury.

## Recording an occupational exposure

All occupational exposures are to be recorded in a facility register. This register is to be used as a tool to investigate why the incident occurred and how it may be prevented or minimised in the future.

This approach to risk management requires identification, analysis, and evaluation of the event and review of risk management strategies. Action may include modifying facility procedures, policies or enhancing staff training.

Information may be required later to assist with:

- the analysis and evaluation of the incident
- employee health reports and/or legal proceedings.

Record the following in the register:

- the name of the person injured
- how the incident occurred
- time the injury occurred
- what action was taken
- type of exposure (i.e. mucosal splash, deep penetrating skin injury)
- presence of visible blood
- type of sharp (i.e. a solid sharp object or hollow bore object)
- gauge of needle
- who was informed and when

- details of the patient treatment.

## Contracting a vaccine preventable disease

Healthcare facilities should take reasonable steps to ensure that employees are protected against vaccine-preventable diseases. This may be achieved through routine screening at the start of employment. This often occurs by, personal assessment (a questionnaire), immunisation records or laboratory testing.

**All personal information must be stored in accordance with confidentiality and privacy laws.**

When developing an ICMP, the risk posed by vaccine preventable diseases needs to be considered and how they may be managed through the implementation of a vaccine preventable immunisation program. The program should include:

- a facility immunisation policy
- a current immunisation register
- information about relevant vaccine-preventable diseases
- the management of vaccine refusal (including the reduced risk of healthcare worker transmitting disease to a vulnerable patient).

For further information please refer to the Australian Immunisation Handbook:

<https://immunisationhandbook.health.gov.au>

# Section 3: Frequently Asked Questions

## Hand hygiene

### Is the ICMP the same as an Infection Control Manual?

The Infection Control Manual **is not the same** as the Infection Control Management Plan. The ICMP is a short document that demonstrates that the facility has processes in place to manage various levels of risk relating to infection. An Infection Control Manual will have detailed evidence of all procedures relating to infection management. Ideally, both the Infection Control manual and the ICMP will be read by all employees. These documents should be introduced as part of the orientation of new clinical staff and be readily available for all staff as use a reference at all times.

### Where should we keep our procedures/policies for hand hygiene?

Policies for hand hygiene could be incorporated into the clinical policies and procedures manual or the Infection Control Manual, or both. The policies would not be required to be included in the ICMP.

### **Do we need to provide workplace training in hand hygiene?**

Each healthcare facility should have a process for ensuring that staff are trained in effective hand hygiene procedures and show evidence of that training. Training may include formal study, attendance at conferences, online learning, and self-education activities.

For the ICMP there should be some indication that onsite training in routine infection control practices occurs, including hand hygiene. Infection management procedures should be part of the induction process for new staff, and consideration of infection control issues may be evident in records of staff meetings. Clinical staff should be required to undergo annual hand hygiene education and/or one-on-one staff training. Hand Hygiene Australia (HHA) has online training packages for healthcare workers <https://www.hha.org.au/>

### **Where could we document and record infection management training?**

Evidence that training has occurred is essential so all training should be documented, who when, where etc. Informal training in facility procedures may be documented in various formats; e.g. signing off an induction booklet upon completion of hand hygiene assessment, keeping minutes of staff meetings (complete with attendance record), documenting one-on-one staff training. Hand Hygiene Australia offers a certificate for participants upon completion of the online training package.

### **Does there need to be a separate hand washing sink in the facility?**

Yes, hand washing must take place in a dedicated handwashing sink that is not used for cleaning of reusable medical devices or equipment, not used for any other cleaning activity, or exposed to other cleaning agents.

### **Is there a protocol for drying hands?**

Hands should be patted dry with a single use disposable hand towel to maintain the integrity of the skin. If hands are rubbed dry with hand towel the skin may be damaged allowing an entry point for microorganisms. Used towels should be disposed of into a waste bin.

### **What hand hygiene products should be used?**

A range of hand hygiene products are available for use in a healthcare facility. It is important to choose the correct product before or after a clinical intervention or procedure. For example, hand washing is required after using the bathroom. ABHR is recommended before placing on non-sterile single use examination gloves.

All hand hygiene products are required to be 'fit for purpose':

- Plain soap is sufficient for non-clinical situations (general social contact).
- Antimicrobial liquid soap is to be used for clinical situations (exposure prone procedures).
- Antimicrobial liquid soap and alcohol-based hand rub (ABHR) for clinical use should be TGA approved.

For further information see: <https://www.hha.org.au>

### **Why should the use of hand cream be encouraged in a healthcare facility?**

The frequency that with which it is necessary for health care workers to wash their hands can sometimes lead to irritant contact dermatitis. Symptoms include dryness, irritation, itching and sometimes cracking and bleeding. Intact skin is a natural defence against infection. Cuts and abrasions reduce the effectiveness of hand hygiene practices. Breaks or lesions of the skin are a possible source of entry for infection.

This can be addressed through the regular use of an emollient hand cream. Hand cream should be regularly applied after performing hand hygiene, before going on a break or going off duty.

## **Environmental and equipment cleaning**

### **Why is it important to clean the environment correctly?**

Infection can occur from contaminants on surfaces in the environment or from shared clinical equipment that has not been correctly cleaned between patients. Indirect transmission occurs when a person touches contaminated surfaces and/or equipment and then touches a patient, another person or other surfaces.

### **What indicates good cleaning practice?**

A rigorous routine cleaning schedule that defines the responsibilities of staff, including the frequency of cleaning and which product, should be in place to reduce the risk indirect transmission of infection to staff, visitors or patients. Auditing of cleaning schedules to confirm compliance is recommended. Any detected non-compliance may be used to initiate training of individuals and/or for the whole facility.

Refer to the NHMRC Guidelines for the prevention and control of infection in healthcare. Access at: <https://www.nhmrc.gov.au/guidelines-publications/cd33>

### **Why do different areas in the healthcare facility have different cleaning schedules?**

Depending on the policies and procedures at the healthcare facility, cleaning schedules can either be written according to transmission risk, for example:

- minimal touch surfaces; floors, walls, administrative areas, sinks, washbasins.
- frequently touched surfaces; patient areas and shared clinical equipment, doorknobs, light switches,
- and/or by clinical risk associated with the type of activity that occurs in the area, such as:
  - sterilisation areas (critical risk)
  - treatment areas (high risk)
  - bathroom (depending on the type of facility and the services provided the bathroom could be low to high risk area)
  - administration (low risk)
  - reception and patient waiting area (low risk, but may involve a higher than low risk where a patient presents with a highly transmissible illness, e.g. measles)
  - staffroom (low risk).

### **What evidence is required to demonstrate that reusable instruments are being reprocessed correctly?**

If disinfection and sterilisation of reusable instruments is required, then processes must comply with minimum Australian Standards (AS/NZS 4815 and AS/NZS 4187). The level of processing is dependent on how the device will be used in future medical procedures. The Spaulding method of instrument classification defines the level of cleaning required to ensure that the device is fit for required use. The Spaulding Classification has been used in healthcare for over 60 years.

See the ACSQHC website for more information:

<https://www.safetyandquality.gov.au/standards/nsqhs-standards>

## **Patients/clients with symptoms of communicable diseases**

### **What happens when a patient presents for treatment and they are obviously unwell with symptoms of a potentially transmissible disease, such as influenza?**

The ICMP requires the owner/operator to investigate the risks associated with having a patient at the healthcare facility with a communicable disease. While some communicable diseases are difficult to identify, all staff should be trained in recognising possible signs and symptoms of the most likely diseases to occur in their facility. This training would be recorded in the training section of the ICMP.

### **What infection management strategies should we have in place, when treatment of the patient is a priority and cannot be rescheduled?**

The facility ICMP should include information about managing this level of risk. Appropriate **transmission-based precautions** should be implemented when treating infectious patients. These may include:

- continued application of standard precautions
- additional PPE (gloves, apron or gowns, surgical mask, P2/N95 respirators and protective eyewear)
- patient dedicated equipment
- enhanced cleaning and disinfecting of the patient environment
- restricted movement of patient within the facility
- awareness of persons (other patients or staff) that may be higher risk, i.e. pregnancy or immune compromised persons.

## **Infection Control Management Plans**

### **Why do non-hospital clinical settings need to have such a comprehensive approach to infection control?**

The *Public Health Act 2005* is designed to protect and promote the health of the Queensland public. The Act provides the basic safeguards necessary to protect public health through cooperation between the State Government, local governments, healthcare providers and the community.

Amongst other things, the Act defines obligations on persons and on particular healthcare facilities involved in the provision of declared health services to minimise infection risk.

Chapter 4 of The Act requires that the owner/operator of the healthcare facility have a comprehensive infection control management plan in place and to review its effectiveness on a regular basis (at least once every 12 months).

To be compliant with legislative requirements the healthcare facility will:

- identify the infectious risks associated with the procedures offered at the facility
- implement strategies (policies, procedures and practice) to minimise risk of healthcare acquired infection
- regularly evaluate infection management practices
- provide relevant infection control training to staff.

**What can happen if a healthcare facility is not compliant with Chapter 4 of *J5 aap Gdaisg Abs 5338*?**

Queensland Health can appoint appropriate staff as ‘authorised persons’ under the *Public Health Act 2005* (the Act). These authorised persons have the authority to enter a healthcare facility to determine whether reasonable precautions and care are being undertaken at the facility to minimise infection risks for patients, staff or other persons at risk of infection at the facility (e.g. a parent who is present while their child undergoes a procedure). An authorised person may enter the healthcare facility to investigate a complaint regarding infection control risks or as a part of a regulatory compliance program to determine the level of compliance with the requirements of the Act.

Where infection control risks are not being appropriately managed, the authorised person may undertake appropriate action to address the infection risk or identified non-compliance with the requirements of the Act. The regulatory action undertaken will depend upon the scope and seriousness of the non-compliances identified. This could include:

- requiring the infection control management plan to be amended
  - issuing an ‘improvement notice’ to address identified non-compliances
  - where there is a serious risk of harm to a person, issuing a ‘directions notice’ to require the healthcare facility to stop providing declared health services at the facility
  - a prosecution for breaches of the Act.
-