

IPAC for Health Care Workers in Hospital Settings

In-Person Training Course

Module 2: Foundational Elements in Routine Practices

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Course Overview

This course consists of four modules covering essential Infection Prevention and Control (IPAC) topics, with opportunities for practical application.

- Modules 1–3 include:
 - presentation slides
 - practice activities
- Module 4 includes:
 - practical scenarios with multiple-choice questions
 - final quiz

Module Overview

- Module 1: Introduction to IPAC and Routine Practices
 - Chain of Transmission and point-of-care risk assessments
 - Personal protective equipment (PPE)
- **Module 2: Foundational Elements in Routine Practices**
 - Hand hygiene
 - Environmental controls
 - Occupational health and safety programs
- Module 3: Additional Precautions in IPAC
- Module 4: Applying IPAC Principles in Hospital Settings

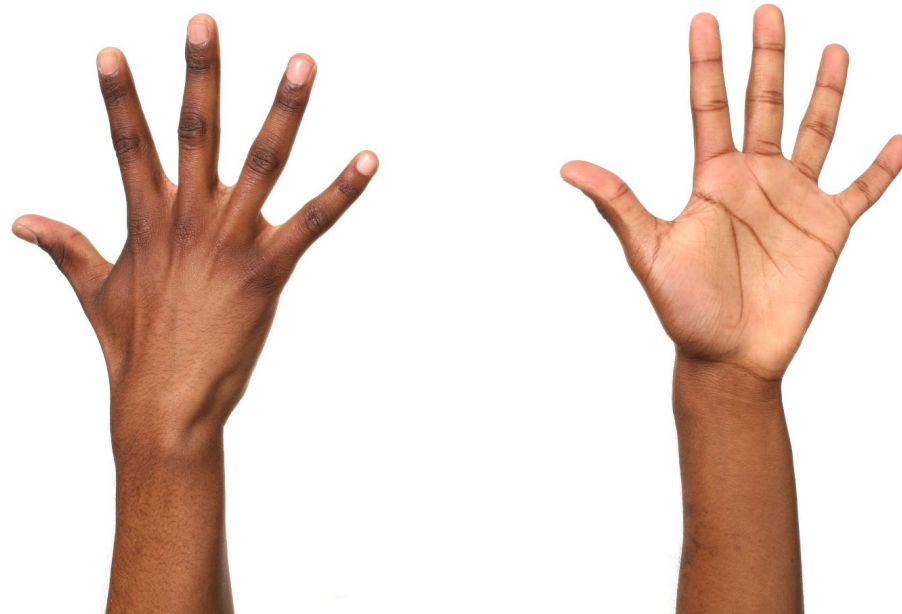
Learning Objectives

By the end of module two, you will be able to:

- Identify when and how to perform hand hygiene.
- Use appropriate environmental cleaning, linen and waste management strategies.
- Describe appropriate cleaning, disinfecting and sterilizing processes for health care equipment.
- Explain the occupational health and safety responsibilities of health care worker.

Hand Hygiene

Hand hygiene is an important component of routine practices. It helps prevent and control the spread of infections by killing or removing infectious agents from your hands.



Hand Hygiene Basics

Anyone can carry infectious agents on their hands. This is why all individuals in health care settings have a responsibility to practice hand hygiene. This includes:

- health care workers
- patients
- family and visitors



Hand Hygiene Discussion Question (1 of 2)

How does hand hygiene work as an IPAC strategy?



Hand Hygiene Discussion Question (2 of 2)

When do you typically clean your hands in your day-to-day life?



The Four Moments for Hand Hygiene (1 of 2)



1

Before initial contact
with the patient or their
environment



2

Before an aseptic procedure



3

After body fluid
exposure risk



4

After contact with the patient
or their environment

The Four Moments for Hand Hygiene (2 of 2)

In addition to these Four Moments for Hand Hygiene, also perform hand hygiene before and after using personal protective equipment, including gloves.



Is Hand Hygiene Required? (1 of 2)



Before putting on gloves



After putting on gloves



After touching used
bandages

Is Hand Hygiene Required? (2 of 2)



After contact with blood
and/or body fluids



After contact with
medical equipment



After direct contact with a
patient

Alcohol-Based Hand Rub (ABHR)

- Use ABHR with an alcohol concentration of 70% - 90%.
- Preferred hand hygiene method when hands are not visibly soiled.



Soap and Water

- Hand hygiene with soap and water should be performed at a dedicated hand hygiene sink.
- Preferred method when hands are visibly soiled or after contact with a spore-forming microorganism such as *Clostridioides difficile*.



Hand Care

- Keeping your skin healthy and free from damage and irritation is important.
- Prevent your skin from becoming dry and cracked.



Hand Care Programs

Your organization's hand care program may include:

- Skin assessment and skin health surveillance.
- Occupational health support for skin integrity issues.
- Education and training about proper hand care.
- Providing skin moisturizing products.
- Providing ABHR with emollients to promote skin health.



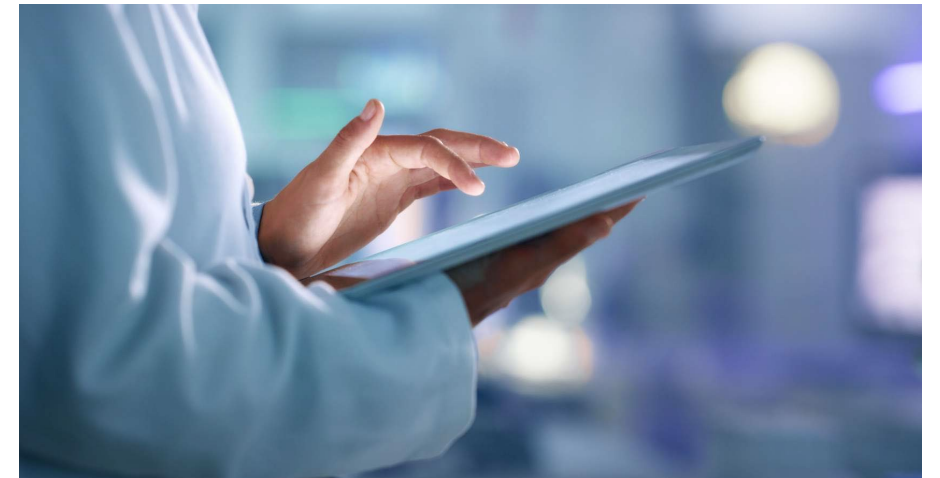
Hand Hygiene Programs (1 of 2)

Your organization may have processes to monitor hand hygiene practices. These may include:

- Observing health care workers to ensure that practices are consistent with the Four Moments for Hand Hygiene.
- Providing health care workers with constructive feedback with recommendations for improvement.
- Evaluating the impact of improvement interventions to ensure health care workers are protecting themselves and others.

Hand Hygiene Programs (2 of 2)

- Promoting hand hygiene practices by patients and visitors/families is another important part of preventing infections.
- Patients and visitors/families should be taught:
 - The importance of performing hand hygiene.
 - When and how to perform hand hygiene.



Hand Hygiene Programs Discussion Question

What are some approaches you can take to educate patients and visitors/families about the importance of hand hygiene?



Environmental Controls

- Infectious agents may live and multiply on surfaces, medical equipment and devices in the health care environment.
- Strategies used to limit the contamination of surfaces, equipment, and devices in the health care environment are another type of Routine Practice known as Environmental Controls.



Environmental Controls Discussion Question (1 of 2)

What are some examples of environmental controls used in hospitals?



Environmental Controls Discussion Question (2 of 2)

What environmental cleaning and disinfection responsibilities do you have in your role?



Cleaning versus Disinfection

Cleaning

The physical removal of foreign material (e.g., dust, soil), organic material (e.g., blood, body fluids) and microorganisms. Cleaning must always be performed prior to disinfection.



Disinfection

The killing of microorganisms. Low-level disinfection kills vegetative bacteria, some fungi and enveloped viruses and is used for disinfecting the environment. A higher level of disinfection or sterilization is required to kill all fungi, mycobacteria and spores.



Use Products Approved By Your Hospital

- Use cleaning and disinfectant products that have been approved for use in your hospital.
- Disinfectants should have a drug identification number (DIN) from Health Canada indicating that they are approved for use in health care settings.



Follow the Manufacturer's Instructions for Use

Follow the manufacturer's instructions for use, including contact time.



Prioritize High Touch Surfaces

Clean and disinfect high touch surfaces (i.e., those surfaces in frequent contact with hands) regularly and when visibly soiled.



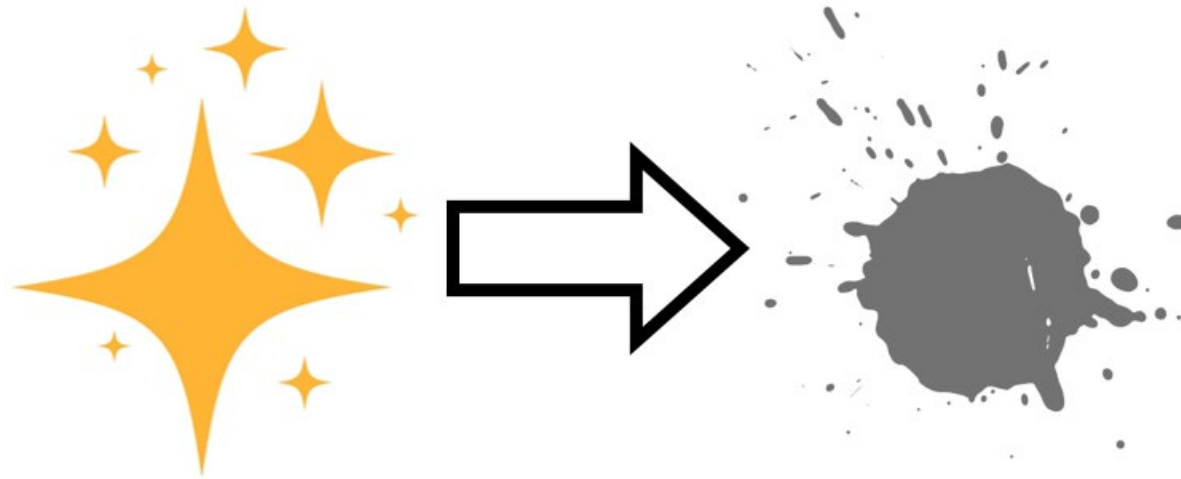
High Touch Surfaces Discussion Question

What are some examples of high touch surfaces?



Work from Visibly Clean to Dirty Areas

- Work from visibly clean to dirty areas to avoid moving dirt and microorganisms from dirty surfaces to cleaner surfaces.
- Toileting areas should be cleaned last.



Avoid “Double-Dipping”

Do not dip a used cloth into disinfectant to avoid contaminating the disinfectant solution (i.e., do not “double-dip”).



Laundry and Linen Management

- Proper handling is needed to maintain a safe environment.
- Soiled laundry and linen may be contaminated with blood and body fluids.
- Handle with the same precautions regardless of health care setting.



Handling of Laundry and Linen

- Follow all policies and procedures for handling clean and soiled linen.
- Perform a point-of-care risk assessment prior to handling linen to determine the need for PPE.
- Use the same precautions regardless of whether the patient is on Additional Precautions or not.



Handling Soiled Linen

- Remove gross soiling from linen and dispose of properly (e.g., toilet or hopper).
- Handle soiled linen away from the body.
- Roll up soiled linen and place in a bag.



Safe Practices for Handling of Laundry and Linen

- Do not overfill linen bags and tie securely when filled.
- Handle bag by the tie to minimize contact.
- All linen can be managed together regardless of Additional Precaution type.



Laundering Soiled Linen

- Items should be washed and dried according to recommendations of the manufacturer for:
 - the washer
 - the dryer
 - materials being laundered
 - detergent
- Transport and store in a manner that prevents contamination.



Categories of Waste

Health care waste may be classified into different categories, each with specific requirements for disposal:

- General waste:
 - Makes up 60% of the waste in health care settings.
 - Is non-hazardous.
 - Can be placed in garbage bags and collected by regular waste programs.
- Biomedical waste:
 - Makes up 7% of waste in health care settings.
 - Is considered hazardous and needs to be incinerated or treated before disposal.
- Other types of waste:
 - Is not considered biomedical or general waste.
 - May require special handling.

Safe Handling of Sharps (1 of 2)

- Sharps are devices that are capable of cutting or puncturing the skin.
- Many sharps are disposable and single-use.
- Staff in health care areas need to be aware of the risk of sharps when handling waste and/or linen.

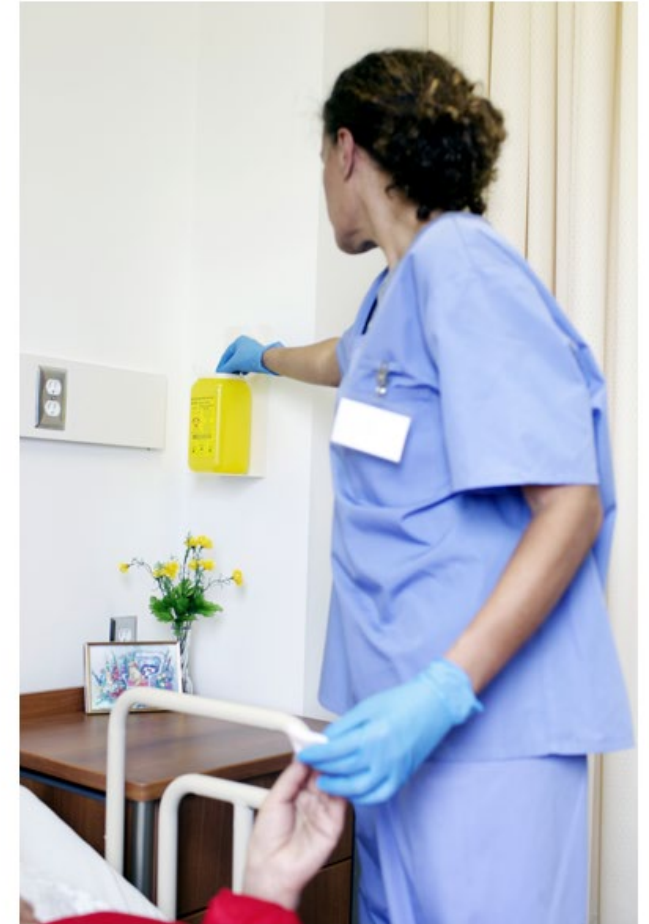
Types of devices categorized as sharps:

- needles and syringes
- blades (e.g., lancets, scalpels, surgical blades)
- sutures



Safe Handling of Sharps (2 of 2)

- Single-use disposable sharps are disposed of in sharps containers.
- Approved sharps containers need to be:
 - puncture-resistant
 - available at all points-of-care
 - replaced when at the fill-line



Sharps Injury Prevention Program

Sharps injury prevention programs include:

- The use of safety-engineered needles and medical devices.
- The availability of sharps containers.
- Education and training related to safe practices such as:
 - Disposal of sharps immediately after use.
 - Avoiding unsafe practices such as recapping needles.



Reprocessing (1 of 2)

- Reprocessing is the term for preparing shared medical equipment and devices for safe reuse.
- Reprocessing responsibilities may vary by role within your organization.



Reprocessing (2 of 2)

Reprocessing of medical equipment and devices must:

- Include cleaning plus disinfection or cleaning plus sterilization, depending on the equipment and intended use.
- Be performed on all equipment that is reused between patients.
- Follow the manufacturer's instructions for:
 - The reprocessing equipment (e.g., the autoclave).
 - The equipment and devices being reprocessed.
- Involve a plan for proper storage and to prevent contamination.

Reprocessing Level

- The level of reprocessing is determined by the intended use of the equipment or device.
- The classification system divides equipment and devices into three categories:
 - Critical
 - Semi-critical
 - Non-critical



Critical Equipment

- Enters sterile tissues and/or the vascular system.
- Requires cleaning followed by sterilization.
- Sterilization is the destruction of all infectious agents including bacteria, viruses, spores, and fungi.

Can you think of any more examples of critical items?



Semi-Critical Equipment

- Comes into contact with non-intact skin or mucous membranes but does not penetrate the skin.
- Requires cleaning followed by high-level disinfection at a minimum.
- Sterilization is preferred and should be performed, if possible.

Can you think of any more examples of semi-critical items?



Non-Critical Equipment

- Touches only intact skin or does not directly touch the patient.
- Requires cleaning followed by low-level disinfection.

Can you think of any more examples of non-critical items?



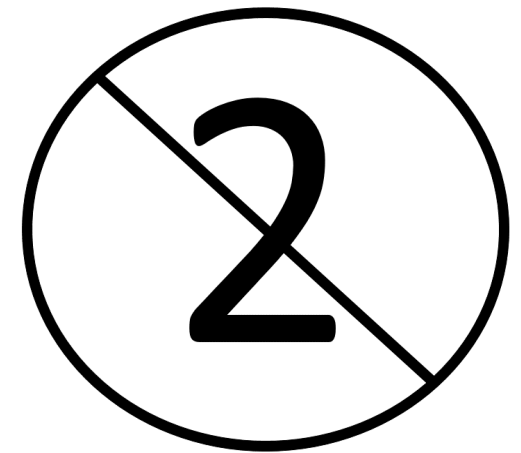
Reprocessing Level Consideration

If there is a discrepancy between the level of reprocessing indicated in the manufacturer's instructions for use and the intended use of the equipment/device, it is best practice to follow the higher level.



Single-Use Equipment/Devices

- Some equipment/devices are designed to be single-use and are disposed of immediately after use.
- Single-use medical equipment and devices are labelled as single-use.
- Some single-use devices may be reprocessed by a licensed reprocessor who is required to follow strict regulatory requirements.



IPAC and Occupational Health and Safety

- IPAC practices can prevent occupational exposures to infectious agents.
- Employers, supervisors and workers all have occupational health and safety responsibilities in the workplace.



IPAC Occupational Health and Safety Discussion Questions

Take a moment to think about your own workplace.

1. Have you or someone you know ever suffered an illness or sustained an injury related to work?
2. What kind of illness or injury was it and how could it have been prevented?



What is Occupational Illness and Injury?

- **Occupational illness** is defined as “a condition that results from exposure to a physical, chemical or biological agent to the extent that the health of the Worker is impaired and includes an occupational disease for which the worker is entitled to benefits under the Workplace Safety and Insurance Board.”
- **Occupational injury** is an injury that occurs at the workplace and may need to be reported. Employers are required to report incidents to the Joint Health and Safety Committee or Health and Safety Representative, the trade union, if any, and the Ministry of Labour, Immigration, Training and Skills Development of Ontario.

Source: Occupational Health and Safety Act, R.S.O 1990, c.O.1

How Can you Protect Yourself from Illness?

- Receive all recommended vaccinations, including seasonal vaccinations as per workplace and public health recommendations.
- Maintain your vaccination history and ensuring you are up to date.
- Follow all IPAC best practices.



Health Care Worker Responsibilities

- Follow all relevant policies and procedures.
- Participate in education and training.
- Report missing or broken equipment or devices, or other hazards.
- Report injuries or illnesses related to your work.
- Perform self-assessments for signs and symptoms of infections prior to work and staying home when ill.

Summary

In this module, we discussed:

- How to perform hand hygiene properly according to the Four Moments.
- Best practices for handling laundry and waste, including sharps.
- When high and low-level disinfection or sterilization are required.
- The importance of participating in your organization's occupational health and safety program.

