

Canadian Centre for Occupational Health and Safety * Centre canadien d'hygiène et de sécurité au travail

Prevention and Control of Hazards

Routine Practices

On this page

What are routine practices?

Are routine practices different from universal precautions, body substance isolation, and standard precautions? What are the components of routine practices?

What are additional precautions?

Are routine practices required by law?

Where can I find more information?

What are routine practices?

Routine practices are a set of infection control strategies and standards designed to protect workers from exposure to potential sources of infectious diseases. Routine practices are based on the premise that all blood, body fluids, secretions, excretions, mucous membranes, non-intact skin or soiled items are potentially infectious. These practices, while mainly adopted by healthcare providers, apply to all professions in which workers may become exposed to infectious microorganisms through contact with blood and body fluids. Examples of these professions may include police officers, trauma/crime scene clean-up crews, zookeepers, laboratory technicians, and embalmers.

Are routine practices different from universal precautions, body substance isolation, and standard precautions?

Universal precautions are a set of strategies developed to prevent of transmission of blood borne pathogens. The focus of universal precautions is on blood and selected body fluids such as cerebrospinal fluid, pleural fluid, and amniotic fluid. Body secretions such as urine, vomit, feces, or sputum are not controlled under universal precautions, and are instead usually covered under a set of guidelines called body substance isolation.

Routine practices are a combination of universal precautions and body substance isolation. Routine practices have a much bigger scope and aim to protect against the transmission of all microorganisms through contact with all body fluids, excretions, mucous membranes, nonintact skin and soiled items in addition to precautions for blood. Standard precautions is a term widely adopted in the United States and convey the same set of principles as routine practices.

What are the components of routine practices?

There are 5 major components to routine practices. They are risk assessment, hand hygiene, environmental, administrative controls, and personal protective equipment.

Risk Assessment

Before any task is performed, conduct a risk assessment to evaluate the risk of disease transmission. The risk assessment should take into account the following:

- Time it takes to complete the task.
- Type of body fluids that the worker may come into contact with.
- Presence of microorganisms in the bodily fluids.
- Route of potential exposure to these microorganisms.
- Susceptibility of the worker to these microorganisms.
- Environment in which the task is carried out.

Appropriate strategies such as hand hygiene, waste management, and the use of personal protective equipment are then selected to reduce the risk of exposure and disease transmission.

The Ontario Provincial Infectious Diseases Advisory Committee suggests the following questions for healthcare providers to ask while assessing the risk:

- 1. What task am I going to perform?
- 2. What is the risk of exposure to:
 - Microorganism, or infectious agent?
 - Blood and body fluids including respiratory secretions?
 - Non-intact skin?
 - Mucous membranes?
 - Body tissues?
 - Contaminated equipment?
- 3. What resources are available to control exposure?
- 4. How competent or experienced am I in performing this task?

5. Will the patient be cooperative while I perform the task?

Hand Hygiene

Hand hygiene is the act of removing or destroying microorganisms on the hands while maintaining good hand integrity (keeping the skin healthy). Hand hygiene can be performed with an alcohol-based hand sanitizer (when hands are not visibly soiled) or with soap and water (especially when hands are visibly soiled).

In healthcare settings, alcohol-based hand sanitizer is preferred when hands are not visibly soiled. For healthcare providers, using sanitizer is said to take less time than hand washing, and the mechanical rubbing action is important to kill transient bacteria. The sanitizer should contain at least 60% alcohol.

Please see the OSH Answers document for more information about general hand washing.

Engineering and Environmental Controls

Engineering controls refer to those measures taken to protect workers by removing hazardous conditions or by placing a barrier between the worker and the hazard. Environmental control refers to controlling and minimizing the level of microorganisms in the environment. These control measures include:

- Consistent and stringent equipment and work area cleaning, including laundry, food preparation and dishware protocols and schedules.
- Proper disposal of waste such as sharps, biomedical, and pathological waste.
- Appropriate ventilation and other engineering controls such as barriers (acrylic, polycarbonate, vinyl, screens, curtains, etc.)
- Installation of easily accessible and clearly identified waste containers, hand hygiene product dispensers, and dedicated hand wash sinks.
- Effective placement and segregation of sources of contamination This control includes using single room and private toileting for patients, or using a "blood work only" biological cabinet for laboratory work associated with blood samples.

Administrative Controls

Administrative controls include employee training, supervisory competency, immunization, cough etiquette, workplace policies and procedures that are strictly enforced, and sufficient staffing. Administrative controls are critical to ensure that the principles of routine practices are effectively and properly executed in the workplace.

Personal Protective Equipment (PPE)

PPE includes gloves, gowns, lab coats, shoe covers, goggles, glasses with side shields, masks, and resuscitation bags. PPE is particularly needed when disease transmission may occur through touching, spraying, aerosolization, or splashing of blood, bodily fluids, mucous membranes, non-intact skin, body tissues, and contaminated equipment and surfaces. PPE can help create a barrier between the exposed worker and the source of microorganisms.

In all cases, the type of protection used will depend on the type of activity, risk of exposure, and if other control measures or personal protection equipment are being used.

When using personal protective equipment, their use should be implemented as part of a complete PPE program. Please see the OSH Answers "<u>Designing an Effective PPE Program</u>" for more information.

Gloves

Gloves are for single-patient and single-procedure use only. Use the glove appropriate to the task – the integrity of gloves varies with the type and quality of the glove material, the type of use, the length of time used, and methods used to detect damage or leaks.

The use of gloves does not replace the need for hand hygiene. Gloves often create a moist environment that facilitates the growth of microorganisms. Hands should be properly washed before the gloves are put on and after the gloves are removed. Hand hygiene is also needed before and after the replacement of gloves during a procedure or in between tasks.

Gowns

Gowns should be selected based on anticipated contact with infectious material, the potential for blood and body fluid penetration, and the need for a sterile item. Gowns should offer full body coverage (in the front) from the neck to at least mid-thigh. Clinical and laboratory coats are not a substitute for gowns.

Gowns should be worn when providing care. Put the gown on immediately before the task, and remove it immediately after. Do not re-use a gown. Do not wear the same gown for patient-to-patient care.

These steps of gown donning and removal should be followed:

Gown Donning

- 1. Perform hand hygiene.
- 2. Put gown on, opening to the back.
- 3. Fasten both the neck and waist ties.

Gown Removal

- 1. Unfasten ties and peel gown away from neck.
- 2. Slip fingers of one hand under the wrist cuff and pull hand inside.
- 3. With inside hand, push sleeve off with the other arm.
- 4. Fold dirty-to-dirty and roll into bundle (do not shake).
- 5. Discard in appropriate receptacle.
- 6. Perform hand hygiene.

Face and Eye Protection

Face and eye protection can provide an effective barrier to protect a worker's eyes, nose or mouth from coming into contact with sprays or aerosolized body fluids. There are different types and combinations of face protection, such as a mask with safety glasses, goggles, face shield (with safety glasses or goggles), or a mask with an attached visor (and safety glasses or goggles).

Prescription eye glasses are not considered eye protection (but may be worn underneath face shields and some types of protective eyewear).

Respiratory Protection

Masks help to protect the mucous membranes of the nose and mouth. Masks should securely cover the nose and mouth, and be able to prevent droplet penetration.

Respirators (such as a N95) are used to prevent inhalation of small particles that may contain infectious agents.

For more information, please see the following OSH Answers documents "<u>Respiratory</u> <u>Protection Against Airborne Infectious Agents for Health Care Workers</u>" and "<u>Respirators -</u> <u>Respirators Versus Surgical Masks Versus Non-medical Masks</u>".

Steps to remove PPE

The proper steps when removing PPE are critical to prevent contamination of the worker with soiled PPE. The removal of PPE should be performed in the following order:

- 1. Remove gloves.
- 2. Remove gown.
- 3. Perform hand hygiene.

- 4. Remove eye protection.
- 5. Remove mask or respirator.
- 6. Perform hand hygiene.

What are additional precautions?

In addition to routine practices, some workplaces apply additional precautions to prevent and control specific infectious agents. The methods of additional precautions are based on the mode of transmission -- contact, droplet, and airborne. Some microorganisms that require additional precautions include <u>Methicillin-Resistant Staphylococcus Aureus (MRSA)</u>, Vanomycin-resistant enterococci (VRE), <u>Clostridium Difficile</u> (C. difficile), or other diseases caused by antibiotic or antimicrobial resistant bacteria or organisms, as well as diseases such as <u>anthrax</u>, malaria, and <u>west nile</u>.

Additional precautions include following routine practices, plus:

- Having specialized accommodation and appropriate signage.
- Using barrier equipment (specific PPE).
- Having dedicated equipment and additional cleaning measures.
- Limiting the transport of patients.
- Having good communication between departments or units.

Are routine practices required by law?

Occupational health and safety is regulated in Canada in each of the fourteen jurisdictions (provincial, territorial, and federal). Some jurisdictions may have also developed specific modifications of infection control guidelines. For more information on these, contact the <u>departments responsible for occupational health and safety</u> or for <u>public health</u> in your province.

Where can I find more information?

More information is available from:

• <u>Routine Practices and Additional Precautions In All Health Care Settings, 3rd edition.</u> <u>Provincial Infectious Diseases Advisory Committee (PIDAC)</u>, Public Health Ontario • <u>Routine practices and additional precautions for preventing the transmission of infection</u> <u>in healthcare settings</u>. Public Health Agency of Canada

(*We have mentioned these organizations as a means of providing a potentially useful referral. You should contact the organization(s) directly for more information about their services. Please note that mention of these organizations does not represent a recommendation or endorsement by CCOHS of these organizations over others of which you may be aware.)

Fact sheet last revised: 2023-02-08

Disclaimer

Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.