

Universal Precautions - Infection Control - Needlestick Injuries - & Personal Protective Equipment (PPE)

Updated: March 2020

Learning Outcomes: After completing this course, you will be able to:

- Define Universal Precautions
- List methods of disease transmission
- Identify methods of risk transmission
- Demonstrate <u>effective hand</u> <u>washing</u>
- Describe situations in which to use universal precautions
- Identify when to use gloves & what type.





* Remember* You are responsible for You, in the workplace

- Universal Precautions are BASIC ROUTINE PRACTICES designed to prevent transmission of disease.
- Universal Precautions are based on the assumption that All Blood and Certain Body Fluids are Potentially Infectious



 Staff must use these practices at all times to greatly reduce the health risks associated with exposure to blood and bodily fluids.





Immunizations can help prevent risks, as well as using Universal Precautions



What is a Universal Precaution?

It means that you treat every person as if they were potentially infectious. When you use Universal Precautions – you DO NOT need to take special precautions for people with HIV or Hepatitis because you treat everyone the same – as if they are ALL infectious

Blood Born Pathogens

Hepatitis B, C, and HIV (Hep B: 6-30% risk; Hep C: 3-6% risk; HIV 0.3% risk) – according to Canadian Center for Disease Control

Universal Precautions

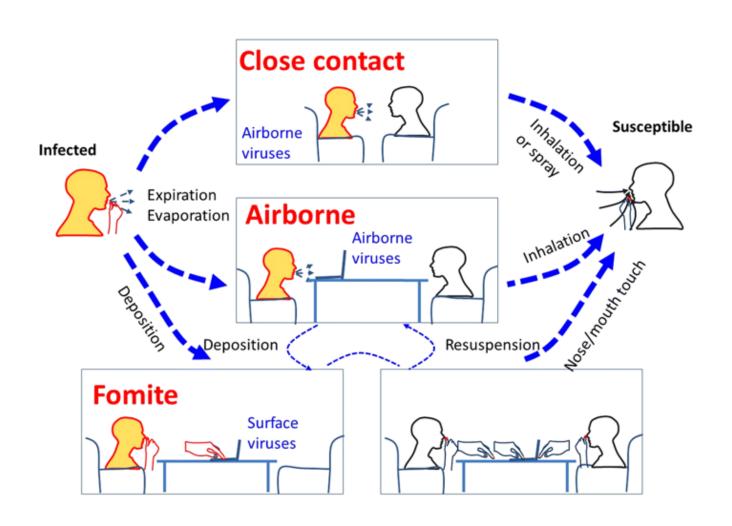
- Cleaning and Disinfection
- Personal Care
- Waste Management
- Laundry
- Sharps Management







Chain of Bad Bug Spread



Process of Disease Transmission (taken from Alberta Health Services)

- Contact Transmission: This includes direct and indirect contact: 1. Direct Contact occurs when microorganisms are transferred from direct physical contact or body surface to body surface contact, between an infected person and a susceptible person.
- Indirect Contact: Occurs when microorganisms are transferred to a susceptible person on an intermediate object, such as contaminated equipment, objects in the environment.
- Droplet Transmission: This is a type of indirect contact and happens when someone talks, coughs, or sneezes, creating large droplets that are propelled up to 2 meters through the air. The droplets can land on environmental surfaces, in the mouth, nose, or eyes, of a susceptible person.
- Airborne Transmission: This type of infection transmission, occurs when microorganisms, are contained in small droplets, or in dust particles, that remain suspended in the air for long periods of time. These particles can be inhaled or deposited a long distance away from the infected person.

Bad Bugs Exit and Enter the Body Through: Every Body Opening

Germs Travel in Body Fluids:

- Eyes
- Nose
- Mouth
- Ears
- Breaks in Skin
- Rectum
- Urethra
- Vagina

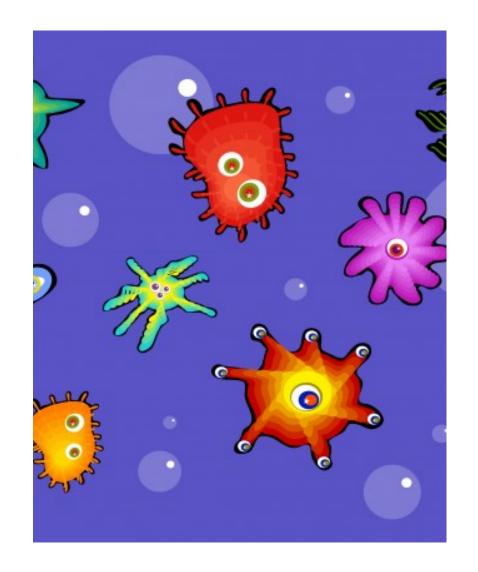
- Mucus
- Feces
- Urine
- Vaginal Secretions
- Cerebral / Spinal Fluid
- Nasal Fluid

Avoid handshaking in the flu season. Practice using verbal greetings or gestures. Social Distancing is another encouraged practice. Social Distancing as defined by Health Canada, "as maintaining a distance of 2 meters or 6 feet.

Getting an Infection

Taken from Alberta Health Services

A person who is at risk for getting an infection (Susceptible Host): Not everyone will get sick if they come in contact with a disease-causing microorganism and, if they do, some people will get sicker than others. Everyone has natural defenses against disease-causing microorganisms, but some people will have poor defenses because they are very young or very old, they have another illness, their natural immune systems aren't working well, or they are experiencing a lot of stress.



Proper Use of Protective Personal Equipment

(referenced from: Alberta Health Services – Infection Protection and Control)

- <u>PPE (Protective Personal Equipment):</u> protects you from blood and body fluids and disease-causing microorganisms by putting an extra barrier in front of clothing, skin, and mucous membranes. The most common PPE work by healthcare workers are:
- Gloves: Vinyl, latex, or nitrile disposable gloves protect hands from exposure to body fluids, blood, or chemicals. You'll wear gloves when there is any risk of contact with these hazards. This includes, but is not limited to: changing a dressing, performing mouth care, hygiene practices with a incontinent person, testing blood sugar, obtaining urine samples, or bathing. [Gloves should be changed after bathing and bathroom hygiene regardless of what the next hygiene task is. ie. After assisting with washroom hygiene Change Gloves before assisting with oral hygiene] Don't use gloves when touching someone in a social manner including, but not limited to: pushing a wheelchair, serving meals, passing mail, playing a board game, typical daily tasks.
- Gloves worn for personal care, are different than those worn for general cleaning tasks; general cleaning gloves should be kept with household cleaning supplies.
- **Gowns:** protect your exposed skin and clothing from splashes, sprays, or soiling during procedures and individual care activities.
- Wearing eye protection and surgical / procedure masks, protects mucous membranes of your eyes, nose, and mouth from splashes and sprays of blood, body fluids, and respiratory secretions. They should be worn when you are within 2 meters of person with a respiratory illness and / or when assisting with a procedure that may produce splashes.

Fingernails, Hand Jewelry & Ability to Perform Hand Hygiene

- When providing personal direct care supports, preparing medications, or handling food, the following is highly recommended:
- Artificial nails, nail enhancements (including gel & acrylic nails & chipped nail polish), must not be worn
- Your fingernails should be natural and short
- Rings worn on your hands, should be limited to plain bands
- If you work or provide supports in one of the above areas, and must wear casts, splints, or dressings – that interfere with proper hygiene – contact your direct supervisor. They will contact the Occupational Health Specialist at RHA.
- (referenced from Alberta Health Services)



Handwashing Practice Checklist

(Hint** Sing 'Happy Birthday')

- Push up sleeves, remove watch and jewelry
- Use warm water
- Wet hands BEFORE using soap
- Wash hands for at least 20 seconds
- Interlace fingers
- Wash palms, back of hands, thumbs, fingernails
- Rinse well, keeping hands below elbows
- Dry hands, then use paper towel to turn off taps



Glove Use - Choose the Right Type of Glove for the Task (Hygiene vs. Cleaning Tasks)

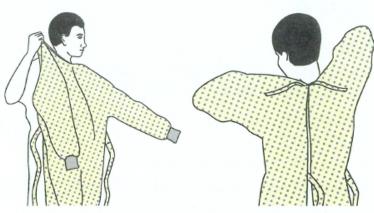
- Always wash hands before donning Gloves
- Gloves should fit well (loose gloves allow entrance to germs)
- If Gloves are torn, replace immediately
- Do Not Reuse Gloves they are one use only
- If you have an open sore on your hands, place a leak proof Band-Aid on the area before the glove.
- (In class Glove activity)
- Wash hands thoroughly after Glove use

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- · Fit-check respirator





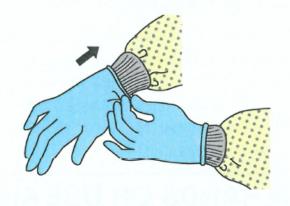
3. GOGGLES OR FACE SHIELD

Place over face and eyes and adjust to fit



4. GLOVES

Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- · Keep hands away from face
- · Limit surfaces touched
- · Change gloves when torn or heavily contaminated
- · Perform hand hygiene



Cover Your Cough Stop the Spread of Germs that Make You & Others Sick

- Cough or Sneeze into your upper arm or sleeve..... NOT your hands...... OR
- Cover your mouth and nose with a tissue and put used tissue in waste basket
- Place tissue immediately in waste basket after use
- Clean your hands after coughing or sneezing, with soap and water
- Use hand sanitizer..... & keep with you in the event there is not ready access to soap and water





Use of Hand Sanitizer

referenced from AHS – Infection Prevention & Control

- Ensure that your hands are not visibly soiled and are dry before use
- Apply enough product to the palm of one hand to cover all hand surfaces (e.g. 2 – 3 pumps)
- Vigorously rub product over all the surfaces of the hands and wrists; including: palms, spaces between fingers, back of hands and wrists, fingers, fingertips and thumbs
- Your hands must remain wet with the product for a minimum of 20 seconds
- Continue rubbing product over hands until hands are completely dry





Responding to Needlestick Wounds

- Don gloves
- If the skin is broken, encourage the area to bleed by applying pressure
- Wash thoroughly with soap and water. If exposure is to a mucous membrane, flush the area with running water for 15 minutes
- Call immediate supervisor
- Staff member will be directed to go to nearest Hospital Emergency
- Supervisor will contact guardian to inform them of situation; they will obtain consent from individual / guardian for any necessary testing
- Supervisor will facilitate relief staffing if required
- All required documentation will be completed (ie. Employee Incident Report) & event will be reported to the Occupational Health & Safety Specialist

Responding to Human Bites

- Don gloves
- Flush the area immediately with soap and water
- Rinse the mouth of the person who has bitten
- Supervisor will report incident to guardian and/or speak with the Independent Adult
- Staff member will be directed to the nearest Hospital Emergency Room for treatment as soon as possible.
- Supervisor will facilitate relief staffing if required
- Inform your supervisor and fill out an employee incident report
- The event will be reported to the Occupational Health & Safety Specialist

Needle stick Injuries

Robin Hood Association has a Needle Stick and Bodily Fluid Protocol

This Protocol is located in RHA Central

Go to the Policies and Procedures section; at the P & P, go to the Needlestick & Bodily Fluid Protocol

Instructions located therein



<u>Using Needles or Syringes (Sharps) Safely.....Tips</u>

- Used needles may contain small amounts of blood that can be carrying viruses and disease. If a person accidentally pokes themselves with a needle, infection can result.
- Needles may be used for Insulin, to test blood, and when using an EpiPen





- Always store sharps in a proper container
 & do not fill more than three quarters, or past the fill line
- NEVER RECAP a needle
- Hold the needle down & pointed away from your body
- The sharps container should be close to where the injection is given
- Never leave the sharp near the person's bed or point of care
- Needles are used <u>only once</u> and then disposed of properly – never in garbage
- Sharps containers are to be stored in a safe place

Personal Protective Equipment Demonstration - in class



- Gown: Fully cover torso from neck to knees, arms to end of wrists and wrap around the back, fasten at neck and waist
- Mask: Prep the mask, put over nose and mouth, pinch nose wire to fit. Top elastic or string first over ears, bottom – at bottom of head level
- Safety Glasses: Wash hands (sanitize). Make sure they fit properly

• When Removing PPE:

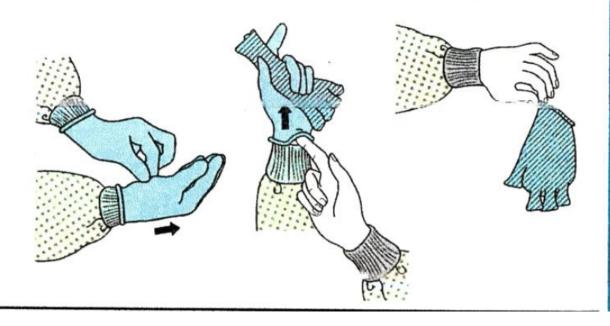
- 1. Gloves first
- Gown turn inside out and roll off from top to bottom, roll in bundle and discard.
- 3. If safety glasses are used, wash with soap and water, then disinfect
- 4. Mask last, bottom string up and over head then top string & discard (double bag and place in trash immediately)

HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator **after** leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES

- Outside of gloves are contaminated!
- If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove
- Discard gloves in a waste container



2. GOGGLES OR FACE SHIELD

- Outside of goggles or face shield are contaminated!
- If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Remove goggles or face shield from the back by lifting head band or ear pieces
- If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container



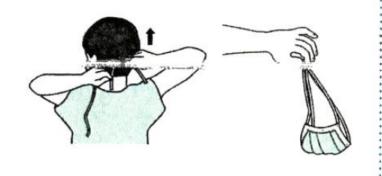
3. GOWN

- · Gown front and sleeves are contaminated!
- If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Unfasten gown ties, taking care that sleeves don't contact your body when reaching for ties
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard in a waste container



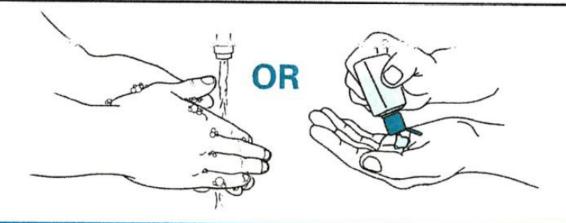
4. MASK OR RESPIRATOR

- Front of mask/respirator is contaminated DO NOT TOUCH!
- If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
- Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
- Discard in a waste container





5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE



PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE



Clean Up Procedure:

Cleaning Blood and Bodily Fluid Spills – All body fluids including blood must be treated as infectious and handled cautiously.

Referenced from Health Canada

- 1. Restrict access to area & do not leave contaminated area.
- 2. Wear gloves & other Personal Protective Equipment PPE (depending on type of spill) <u>Important:</u> If you have an open sore on your hands, cover with a waterproof band-aid under the gloves
- 3. Blot excess fluids place soaked towels in garbage
- 4. Apply spill clean up kit (located in First Aid Kit)
- 5. Remove all organic matter, so the disinfection will be effective
- 6. Disinfect area with Purell all towels from disinfection are placed in garbage. All cleaning towels are to be double bagged
- 7. Discard gloves worn during clean up procedure
- 8. Wash hands thoroughly with soap and water when disinfection is complete. Use hand sanitizer

Waste Management



- Used Incontinence products are to be bagged, and then placed into the garbage
- All household garbage is to be placed in outside garbage containers. Garbage should not to be left sitting in porch, hallway etc.
- Any garbage that contains bodily fluid or fecal matter, should be removed to the outside can / dumpster – immediately
- If the inside garbage receptacles contain human waste, they should be cleaned at minimum, once a day.



Laundry Best Practices

- All Individual's laundry is completed independent of any roommates.
- Each individuals laundry should be separated into towels, clothing, bedding and soiled laundry and then washed separately
- Any laundry that is soiled by any bodily fluid should be laundered immediately
- When removing soiled laundry staff should don the PPE that is appropriate to the amount and / or type of soiling that has occurred.
- Once the laundry is safely placed in the washing machine, all used PPE should be discarded (safety glasses can be cleaned & disinfected)
- Hands should be thoroughly washed with soap & water; followed by the use of hand sanitizer

& Not to be Forgotten.....



- If an individual requires a bath / shower after cleaning up from a bodily fluid spill – ensure the bath / shower is cleaned and ready for next person to use
- It is best practice that a commode chair, which has a covering for the individual's use and comfort, is used <u>only by that person</u>. No other person should sit on that same cover to receive personal care.
- Thank you, for your effort and diligence in ensuring the health and safety of individuals and your colleagues ©
- Any questions?

