

Infection Prevention and Control

Standard Precautions

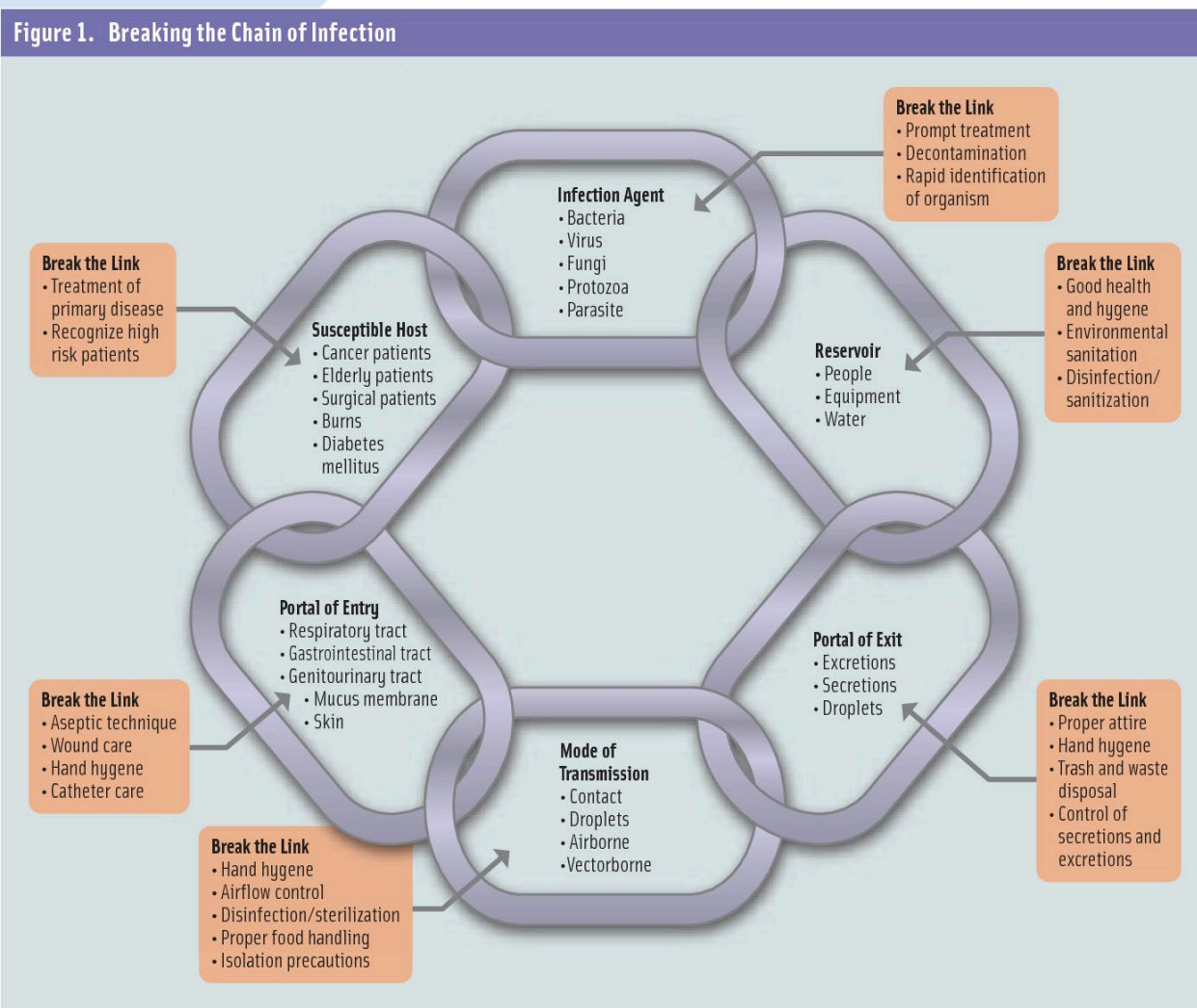
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Standard Precautions – Why do we need them?

Figure 1. Breaking the Chain of Infection



- Standard precautions are measures put in place to protect health care workers from infection and to prevent the spread of infection from patient to patient
- Our goal as a health care community is to protect ourselves and others by causing a break in one or more links in the chain of infection, disrupting the spread of disease and illness

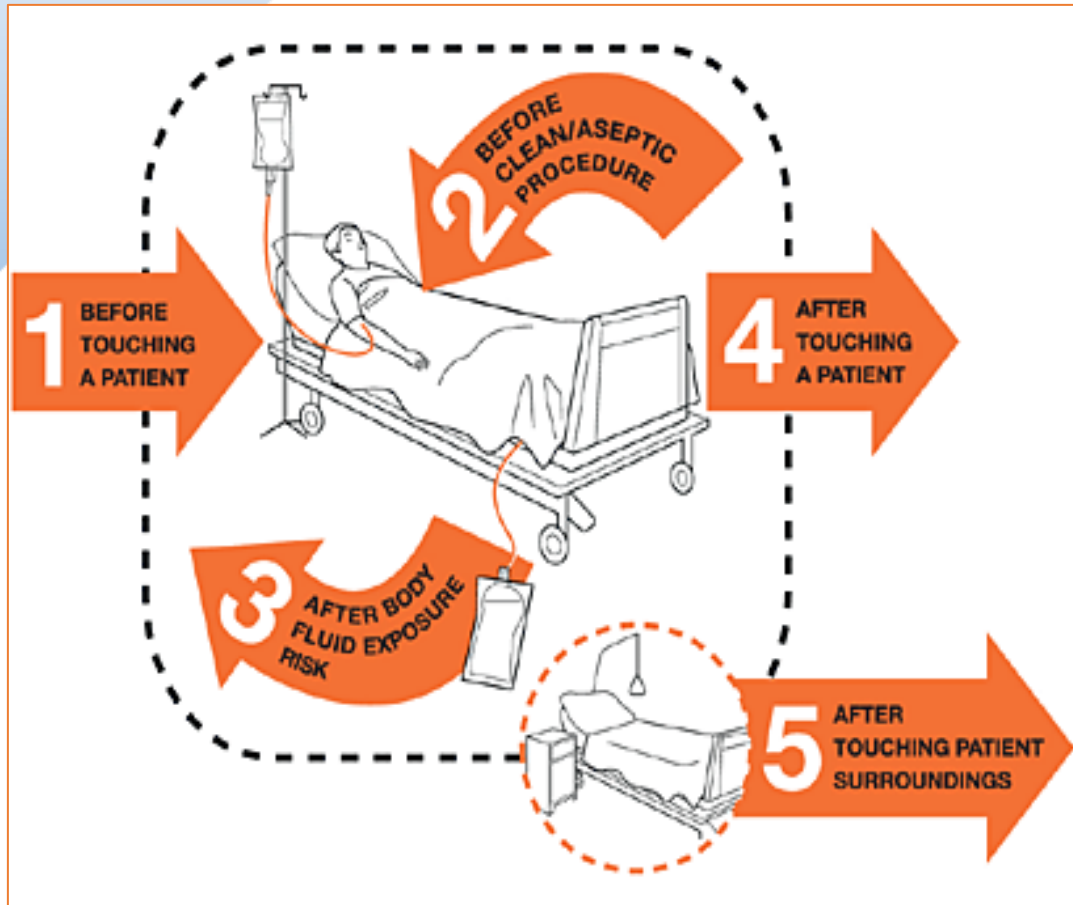
Standard Precautions – What are they?

- The 5 main components of Standard Precautions are:
 1. Hand Hygiene
 2. Environmental Hygiene
 3. Respiratory Etiquette
 4. Personal Protective Equipment (PPE)
 5. Sharps – Sharps Safety and Safe Injection Practices
- Standard precautions are to be used for all patient care based on risk assessment and common-sense practices
- Think **every patient, every time** - take the time to do it right without distraction or short-cuts

Standard Precautions - Hand Hygiene

- The #1 practice in preventing the transmission of pathogens and disease
- Everyone is responsible for practicing proper hand hygiene, it is not just for those who do direct patient care.

Hand Hygiene: When to perform hand hygiene



Also, please don't forget to wash your hands:

- Before eating
- After using the bathroom or any personal hygiene
- Before and After using PPE
- After using a tissue to sneeze, cough, or blow your nose

World Health Organization (WHO) 5 Moments for Hand Hygiene

Hand Hygiene: The basics

HAND HYGIENE MUST BE PERFORMED

- Before and after contact with a patient
- Before and after contact with patient's zone
- After contact with body fluids or excretions, mucous membranes, non-intact skin, or wound dressings.
- After contact with a patient's intact skin
- Before putting on and after removing any type of gloves.
- Before putting on and after removing personal protective equipment.
- Before/After carrying out an invasive or aseptic procedure, including insertion of invasive devices.
- After contact with inanimate surfaces and objects (including medical equipment) in the immediate vicinity of the patient.
- After personal use of bathroom, blowing/wiping nose, or other personal hygienic activities
- Before/ after eating and/or returning from break.
- Before/After handling medication or food.
- Between care and contact of different patients.

Hand Hygiene: The basics

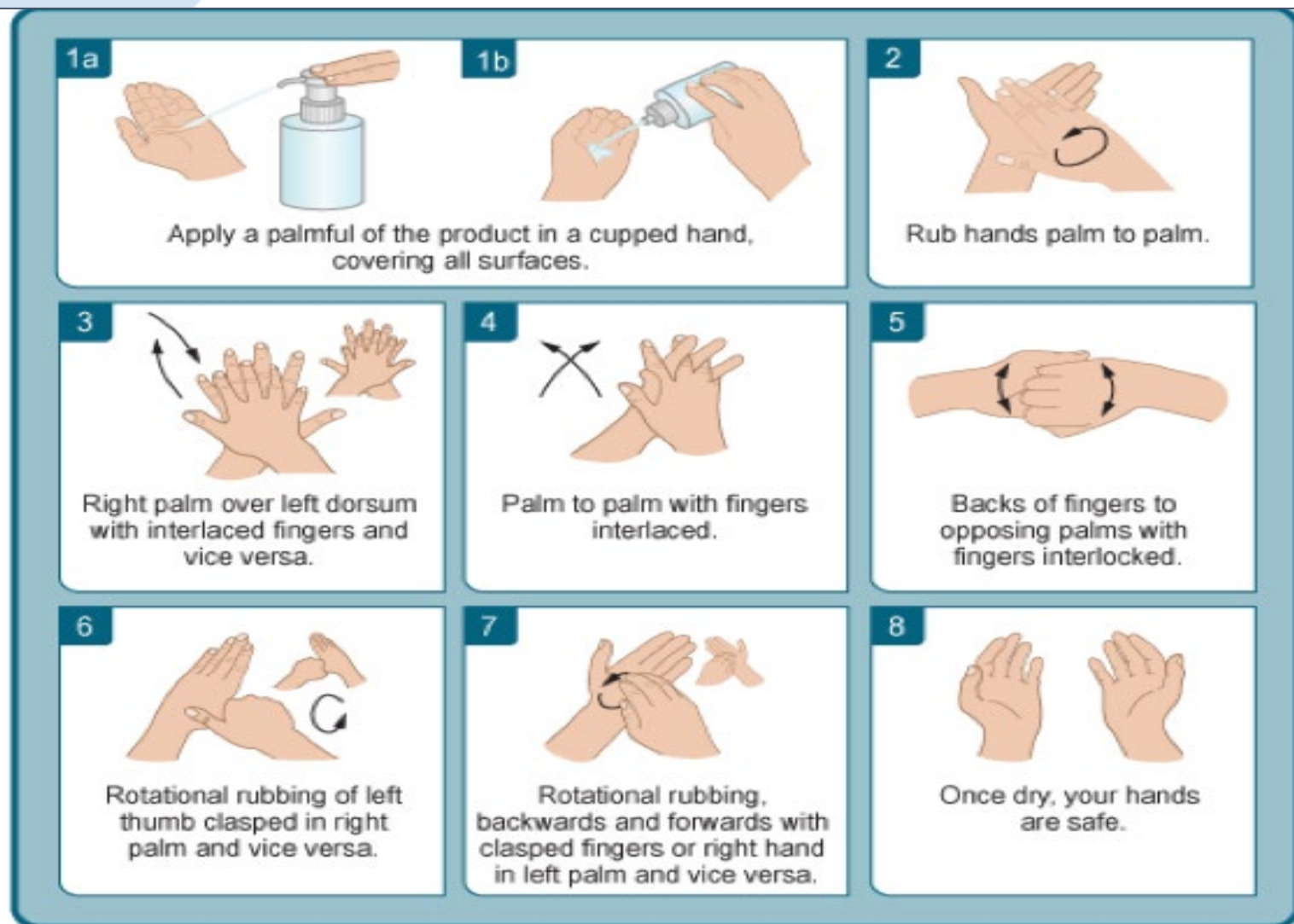
- The preferred method of hand hygiene is alcohol-based waterless hand rub

UNLESS

- a. Your hands are visibly soiled
- b. You are caring for a patient with an enteric pathogen (Gastrointestinal symptom causing germs such as *C. diff*, Sapovirus, Norovirus, and Hepatitis A)

Let's review how you wash your hands for both alcohol-based hand rub and soap and water....

Hand Hygiene Alcohol-Based Hand Rub



It's important to remember

- Please use hospital approved hand sanitizer
- Please use the full amount dispensed by the pump

Hand Hygiene Soap and Water

1 Wash

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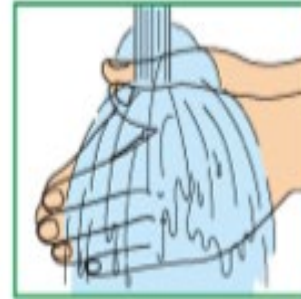
1 Wet the hands

2 Take an adequate amount of liquid soap

3 Rub hands to lather

4 Rub the back of each hand with the opposite palm

5 Rub palms with fingers interlaced



6 Rub each thumb clasped in the opposite palm

7 Rub fingertips in the opposite palm

8 Scrub the wrists

9 Rinse well with running water

Don't forget to

- Wash your hands for at least 20 seconds



- Use the same disposable towel you used to dry your hands to then turn off the faucet, then toss it in the trash

Hand Hygiene: Hand Hygiene Locations



Please use designated hand hygiene sinks in clinical areas for hand hygiene ONLY

- No emptying of medications in these sinks
- No rinsing instruments in these sinks
- No dumping patient waste in these sinks
- No liquids from meals, baths, oral care etc. in these sinks

Hand Hygiene: Nail Care

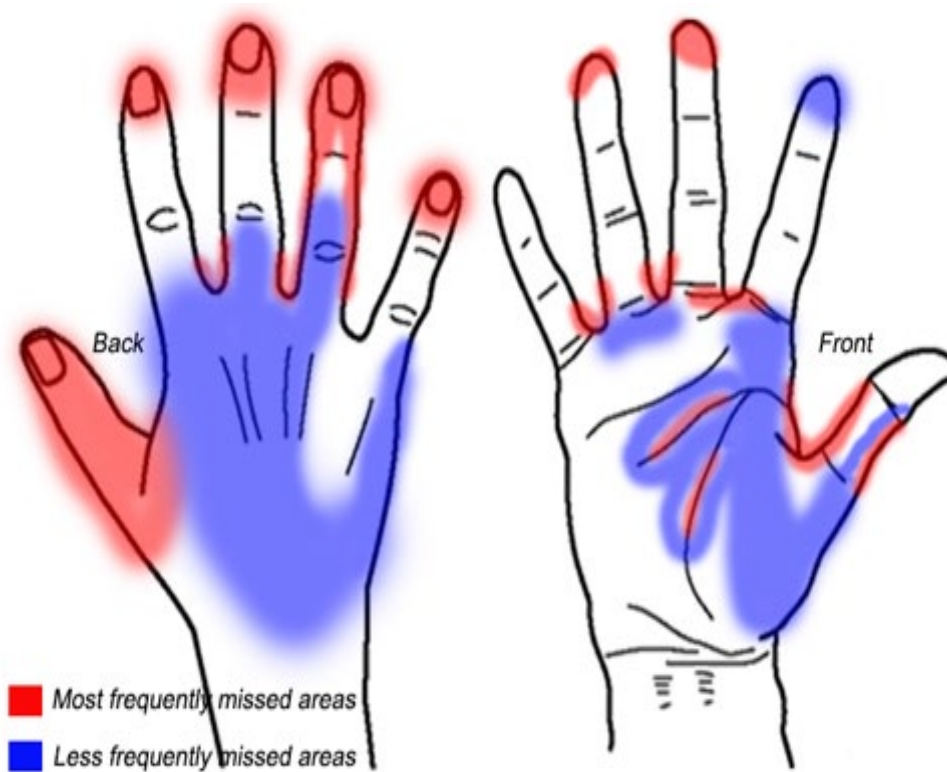
The condition of your fingernails is a key component to good hand hygiene, and it is Samaritan's Policy for those who provide direct patient care to:

1. Maintain regular light-colored nail polish (that can be removed with regular nail polish remover) in good condition with no chipping
2. Understand that those who perform direct patient care (those who directly touch the patient and those who come in contact with items that touch the patient) **CANNOT** wear artificial nails, gel or shellac polish, nail art, overlays, dips, or press-on/stick-on nails.
3. Specific rules regarding regular polish apply to those who are directly involved in procedures/surgical procedures.



Don't let this be you

Protect yourself, Protect your patient, Protect others by taking the time to wash your hands the correct way every time it is indicated.
You will save many lives by doing so!



Standard Precautions - Environmental Hygiene

Housekeeping is everyone's responsibility.

- Clean and disinfect the environment the environment appropriately
- Maintain a clean and sanitary workplace.
- Follow all written cleaning and decontamination schedules and procedures.
- Use Proper PPE to prevent direct contact with blood or other body fluids.
- Only use EPA registered, hospital approved disinfectants.
- Ensure you choose the right disinfectant



**If you touch it
or you use it,
CLEAN IT**



EPA-Registered Hospital approved disinfectant wipes



Oxivir1 Wipe

1 minute contact time

Most patient care equipment and work areas

Routinely used in procedural areas

Specific Organisms like *Cryptosporidium* and *C.aurus*



Sani-Cloth Bleach

4 minute contact time

Most patient care equipment

Enteric Organisms

BLEACH



Sani Cloth AF3

3 minute contact time

Utilized for specific care equipment

EVS will place these signs on the patient room if the patient has an organism that requires use of a specific disinfectant

PEROXIDE

EPA-Registered Hospital approved disinfectant wipes

Disinfection of the Patient Care Environment

Always use an approved EPA Hospital disinfectant.

Always follow manufacturers' guidelines for disinfecting patient care equipment.

Always follow manufacturers' required contact times for disinfection

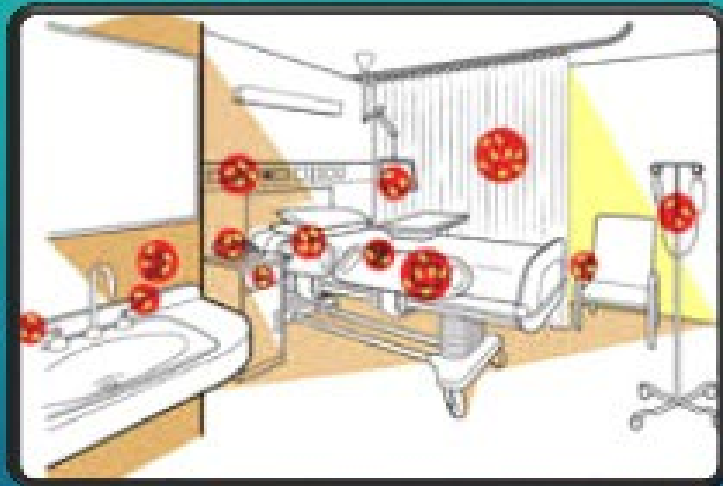
- Contact time is the duration of time the surface or item must remain wet, therefore re-wet surfaces and items to maintain the appropriate time for it to be considered truly disinfected.
- Avoid cross-contamination – use a new cloth for each surface/item

In Hospital: High-Touch Areas

Bed Rails



Hold rails



Intravenous poles



Call Buttons



Chair



Door handles

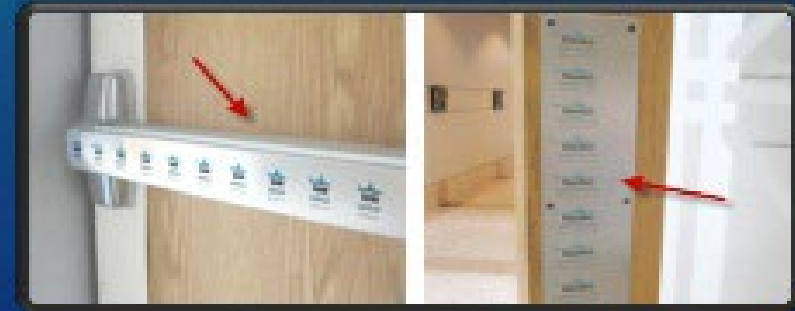


Light Switches



Other Common Infection Area:

Bathrooms



Doors around hospital

Clean these areas frequently – it is everyone's responsibility to maintain a clean environment

Environmental Hygiene: UV-C Light Disinfection

- Emits UV-C light shown to damage the cellular structure of pathogens, therefore reducing pathogens in the environment that may have been missed in cleaning or for those pathogens that are resistant to certain types of cleaning agents
- Utilized at SMC as an extra measure of environmental hygiene, the UV light is run after every discharge terminal cleaning on designated patient care departments and at least weekly in operating rooms
- Runs 3 five-minute cycles at each side of patient bed and in the bathroom



The Clorox Healthcare® Optimum-UV Enlight® has been validated by a 3rd party micro-efficacy laboratory to kill more than 30 HAI-causing pathogens in 5 minutes at 8 feet.

Environmental Hygiene: Waste

Blood and Body Fluids

- Solid Waste should be discarded in impervious plastic bags in appropriate waste receptacles
- Biohazardous waste (liquid blood, items saturated with blood/bodily fluids, containers of bloody body fluids, pathological waste, lab waste, micro waste, dialysis waste, and full closed sharps containers) should be discarded in red regulated plastic biohazard bags

Laundry

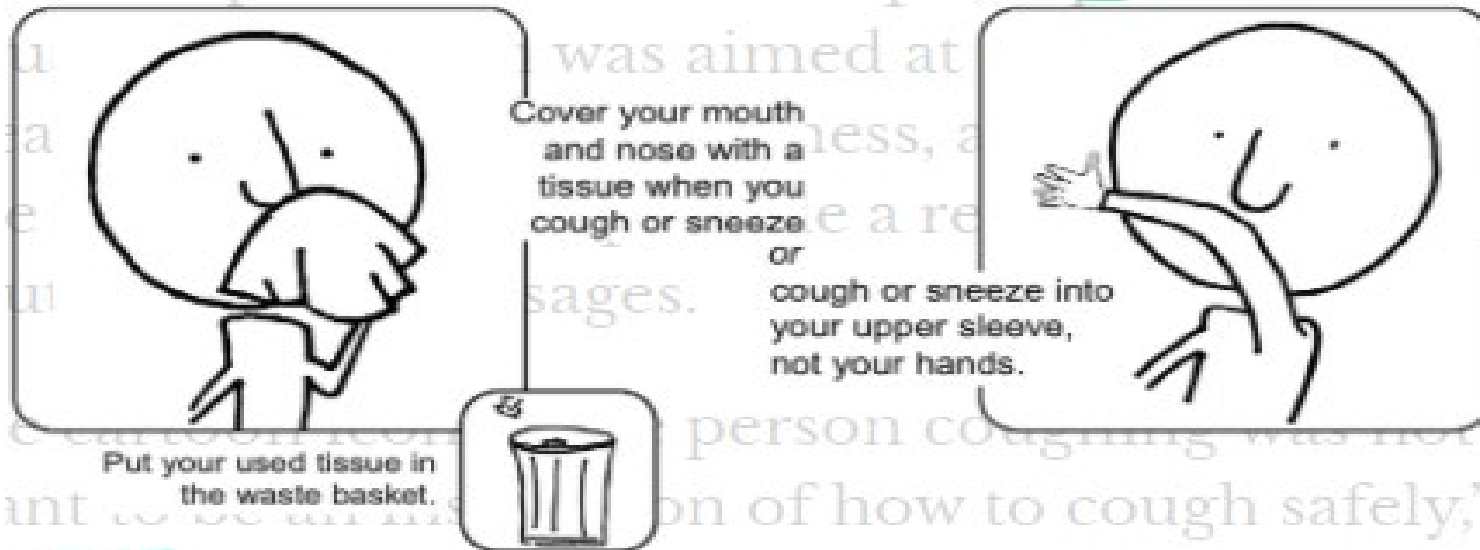
- Soiled linens are to be handled with minimum agitation to avoid contamination to air, surfaces, and persons.
- Gloves are to be worn to handle linen wet with blood or body fluids.
- Soiled linen is to be placed in the designated linen bags.



Standard Precautions - Respiratory Etiquette

Follow the principles of respiratory etiquette by these practices:

- a) Cover your mouth and nose with a tissue when coughing or sneezing, or cough/sneeze into the crook of your elbow/upper arm, *not* into your bare hands
- b) Use the nearest waste receptacle to dispose of the tissue after use
- c) Perform hand hygiene after having contact with respiratory secretions



Standard Precautions Personal Protective Equipment

Types: Gloves, Gowns, Aprons, Facemasks, High-level respiratory protection, Eye protection, and others types appropriate to specific work situations

- Use personal protective equipment (PPE) whenever there is an expectation of possible exposure to potentially infectious material
- PPE creates a protective barrier between infectious materials and the healthcare worker or in certain circumstances, the patient. It assists us in preventing the spread of pathogens to our patients.
- PPE is only as good as it is used, meaning it must be properly applied, used and removed to be effective. **Take your time and be intentional with your actions.**

Rules for Proper PPE Use:

- Use it every time.
- Use the right amount.
- Make sure it fits properly.
- Replace if torn or contaminated.
- Remove before leaving the work area.
- Dispose in proper receptacle.
- **NEVER REUSE PPE, ALWAYS REPLACE AFTER SINGLE USE.**

Goals of PPE

1. Provide Protection
2. Prevent Contamination
3. Reduce Transmission

How to select your PPE

- Familiarise with potential hazards and types of PPE available
 1. Anticipate exposure
 2. Durability and appropriateness of PPE to the task
- Consider the hazard association with Environment

BASIS FOR SELECTION OF PPE

- Institutional Policy and Procedure.
- Employee Judgment Regarding Potential Risk.
- Employee Responsibilities.
- Employee Compliance.

Personal Protective Equipment: Proper use

- Don before or upon entry of the patient's room
- Use carefully – **do not** contaminate self or others. When in doubt call for a buddy to help you in the proper sequence of donning and doffing and visualize breeches
- Remove carefully and discard prior to exiting the patient's room
- **Do not** wear PPE in the hallway, clean *or* dirty... exception high-level respiratory protection must be placed and fit checked just prior to entering the room and must be immediately removed after exiting the Airborne room (utilize anteroom if available for PPE donning and doffing)
- Always perform hand hygiene before and after donning and doffing PPE.
- **The front of PPE is considered contaminated**, and therefore special care should be given to free ties and straps behind the head/body and touch only the clean inside of PPE when removing

Remove your PPE!

It's important to remove your Personal Protective Equipment (PPE), like gloves and gowns, **immediately after use**. If you walk around the facility wearing any PPE, you will spread germs.



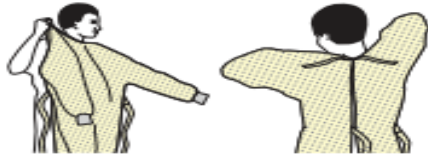
Standard Precautions: PPE Donning and Doffing

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

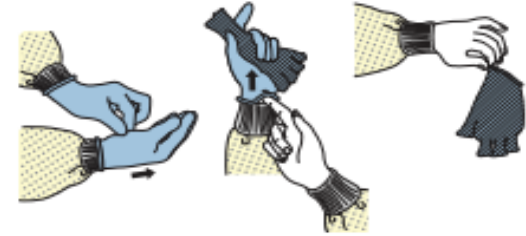


HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE) EXAMPLE 1

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**



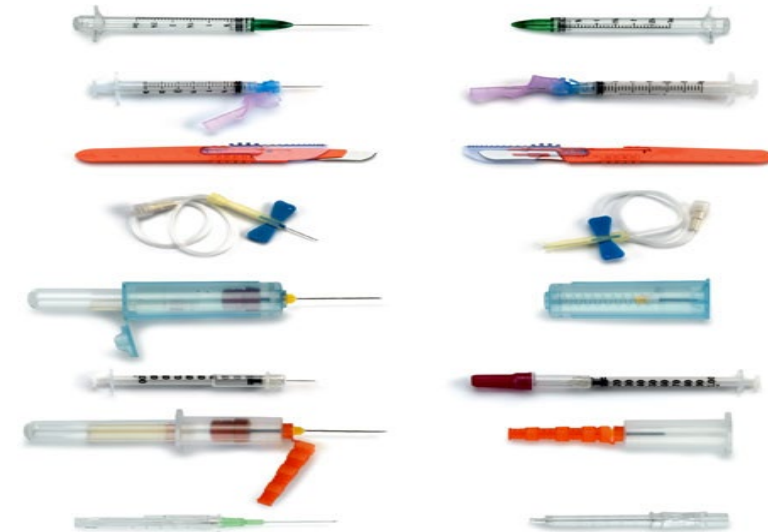
Standard Precautions - Sharps Safety

Always follow safe injection practices

Healthcare worker safety includes education on proper handling of needles and other sharps

There are a variety of ways to promote sharps safety within the healthcare environment

- **Needleless Systems** – utilizing IV route without the use of needles
- **Safer Needle Devices** – active or passive built in safety control device to prevent injuries before, during, and after use
- **Non-needle sharps protection devices** – such as for instruments/blades
- **Sharps disposal containers** – maintained in patient care areas to secure disposed sharps



Standard Precautions - Sharps Safety

Just as hand hygiene sinks are for hand hygiene only, **please use sharps disposal containers for sharps only!**



DON'T PUT THESE IN THE SHARPS CONTAINER



Standard Precautions - Safe Injection Practices

Safe injection practices assist the healthcare provider in preparing and administering parenteral medications (IV/Injections), following the set measures to protect the healthcare provider and the patient

According to the World Health Organization (WHO), a safe injection does not harm the recipient, does not expose the provider to any avoidable risks, and does not result in waste that is dangerous for the community

1. Use aseptic techniques and avoid contaminating sterile equipment
2. Use single-dose vials for parenteral medications whenever possible. Remember single-dose vials lack preservatives to prevent bacterial growth/overgrowth. They are truly for one patient, one use.
3. If using multi-dose vials, keep the needle and syringe sterile and cleanse the rubber septum of the vial appropriately
4. It may seem obvious, however it is important that we practice single patient use for IV administration sets, syringes, needles etc. These devices should be appropriately discarded after use.
5. Wear a surgical mask when performing or assisting with special procedures, such as lumbar punctures

Sharps Safety Point of Care Cleaning

- Prepzyme® *Forever Wet* is to be utilized for cleaning of soiled sterile instruments in the immediate period after use to pre-clean instruments before they are sterilized in central sterile
- The spray promotes a retention of moisture on soiled instruments and therefore assists those handling the soiled instruments, many of which have the potential to penetrate the skin, by preventing the adhesion of organic debris on the instruments
- Instruments should be sprayed at point of care or at the designated area for each department and then placed in a rigid container for transport to central sterile
- Hinged instruments should be in open position before sprayed

Standard Precautions - Review

- It is everyone's responsibility to practice and promote standard precautions
- Incorporate the principles of standard precautions with every patient encounter, every time
- Education to patients and visitors is a key component in reducing the spread of infectious diseases within the facility – include these education opportunities in your day-to-day care delivery
- Take the time to perform each facet of standard precautions with intent and discipline – shortcuts can cause harm to your patients or yourself
- If ever any questions or concerns, please contact the Infection Prevention and Control Department at 315-779-5185

