

Module 1. Infection Prevention and Control (IPC)

Ministry of Health Liberia
Division of Environmental & Occupational Health

WASH Package – Early recovery & Resilience Building from EVD outbreak

This module is an adaptation from the Safe & Quality Health Services (SQS) Package, 2015



Learning Objectives

1. Describe IPC and explain its importance
2. Discuss how infections spread
3. Introduction to standard precautions



What is Infection Prevention & Control?

- IPC helped to prevent health worker infections during the EVD outbreak
- BUT...IPC is much more than just EVD



Infection Prevention & Control (IPC)



Protecting yourself



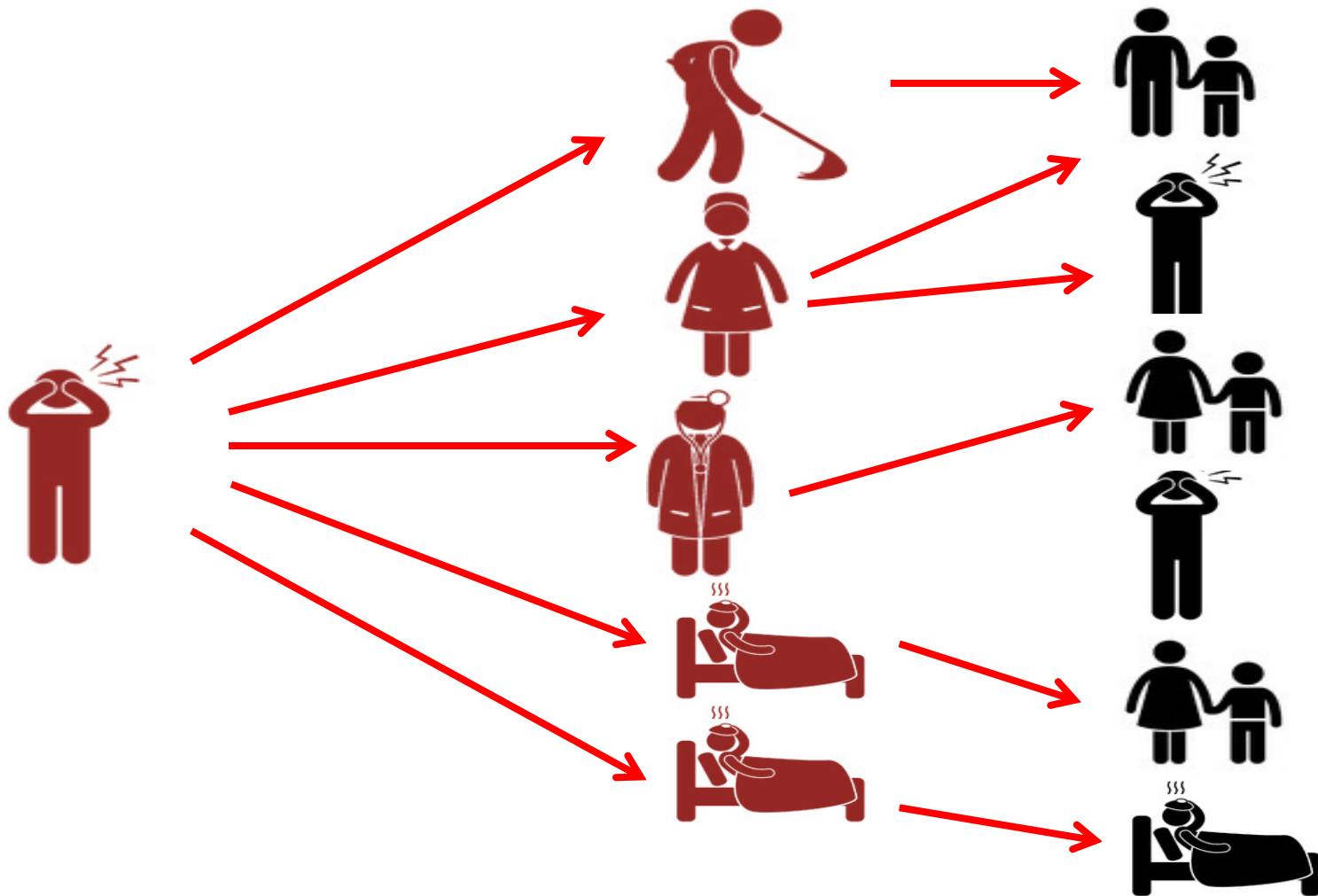
Protecting your
patients



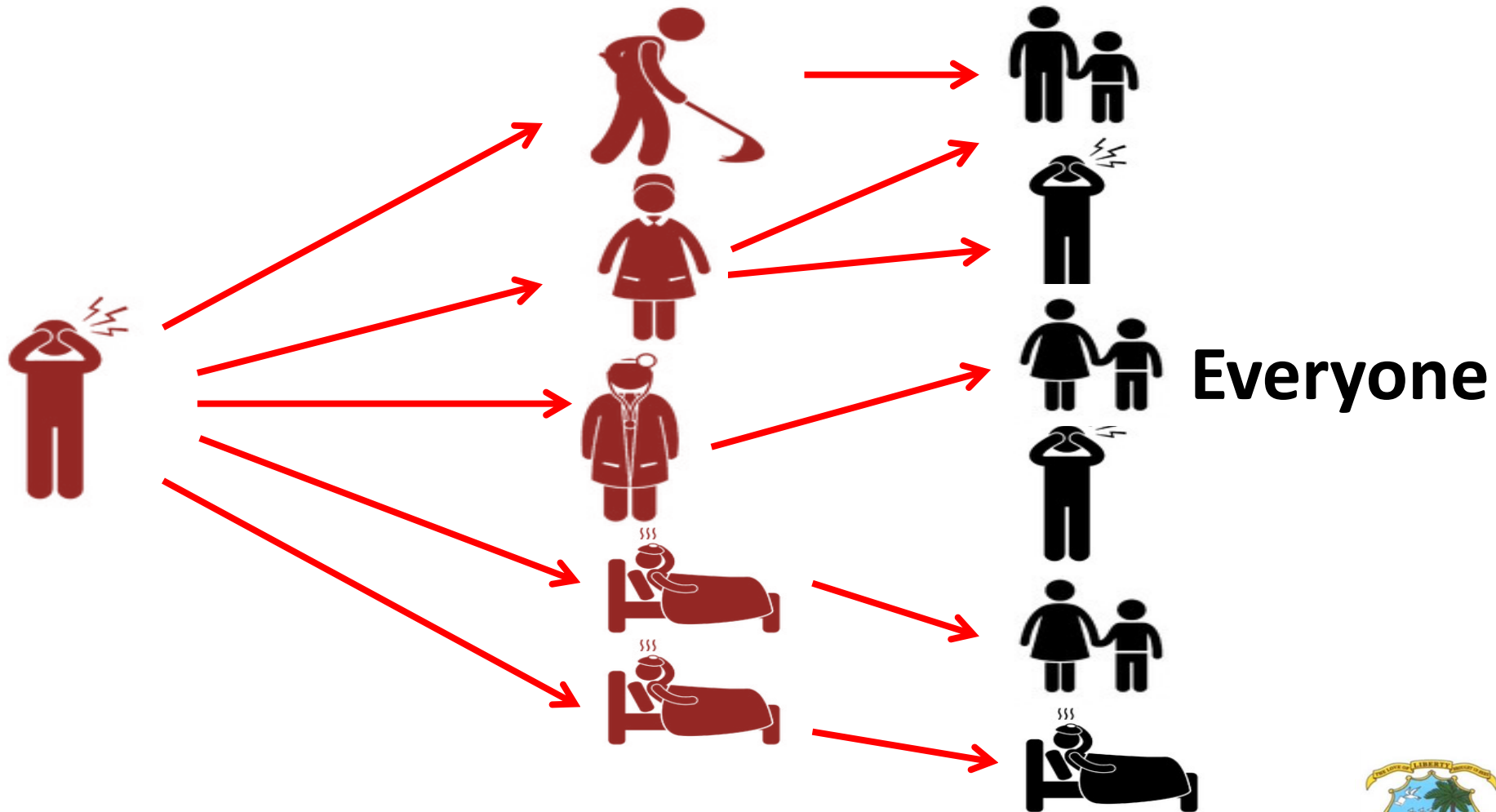
Protecting your
family & community



Who is at risk of infection?

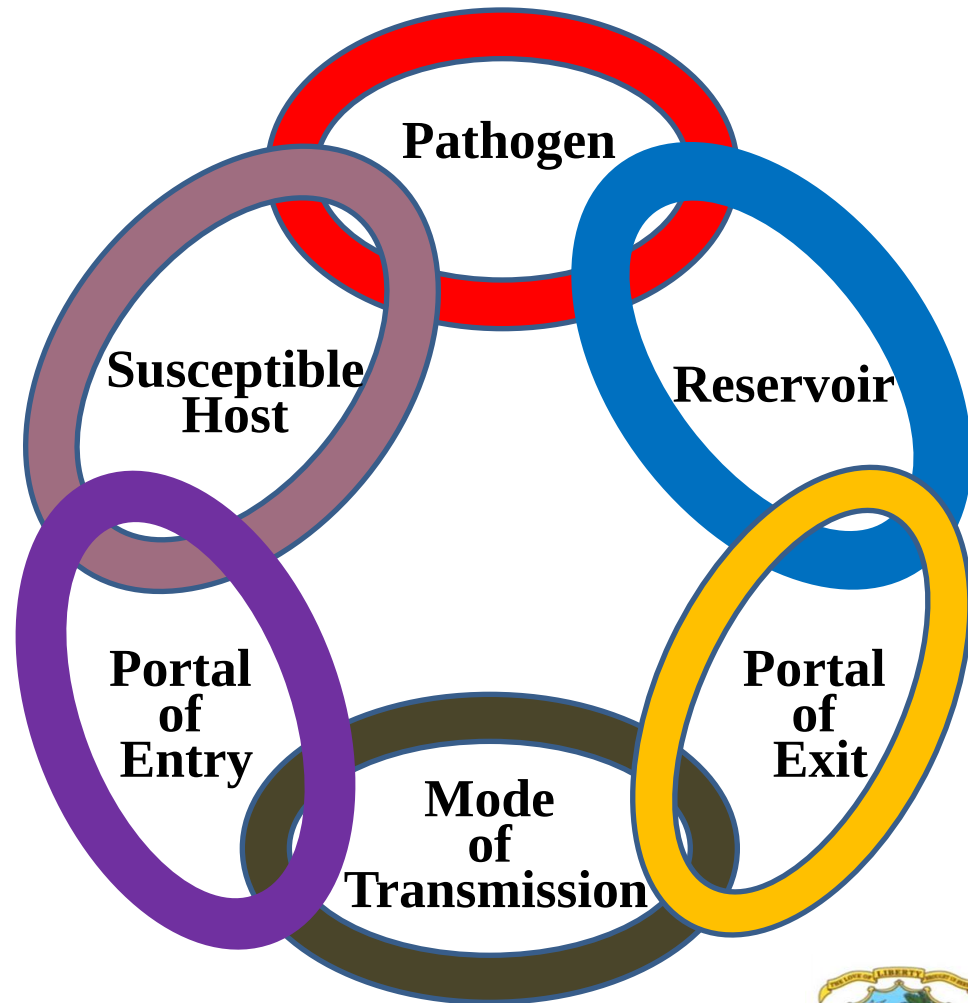


Who is at risk of infection?



Chain of Disease Transmission

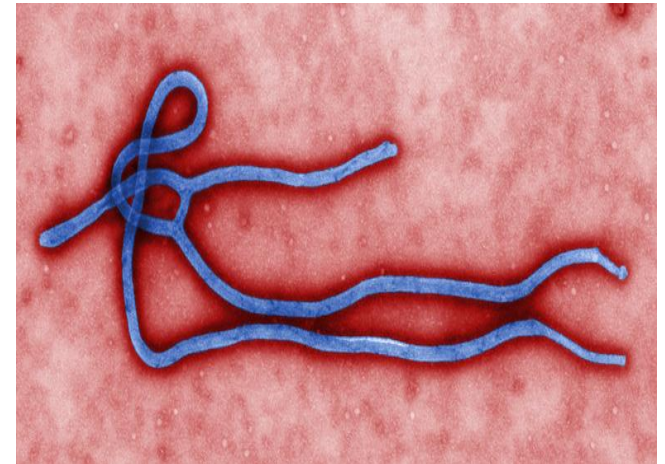
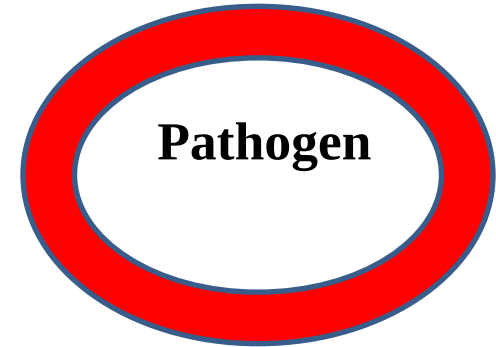
- For an infection to spread, all links must be connected
- Breaking any one link, will stop disease transmission!



Pathogen

A pathogen is a germ that causes disease, e.g.

- Bacteria
- Viruses
- Fungi
- Worms
- Parasites

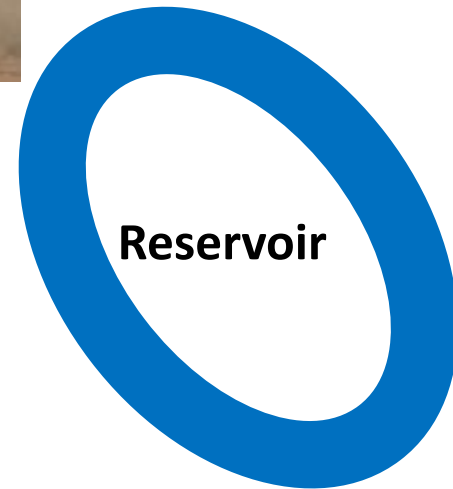


Reservoir

A place where a germ can live comfortably

Examples:

- Human body
- Animals and insects
- Water and soil
- Equipment and tools (e.g. mattress, stethoscope)

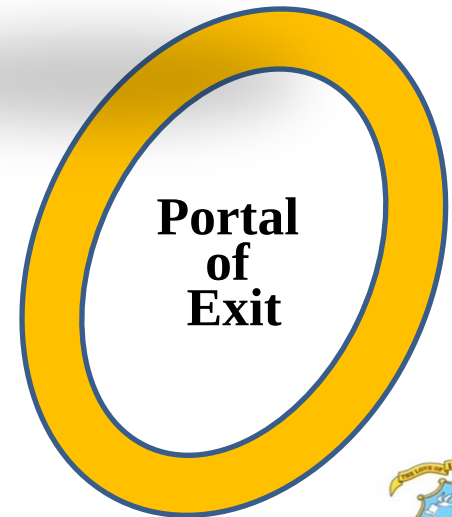
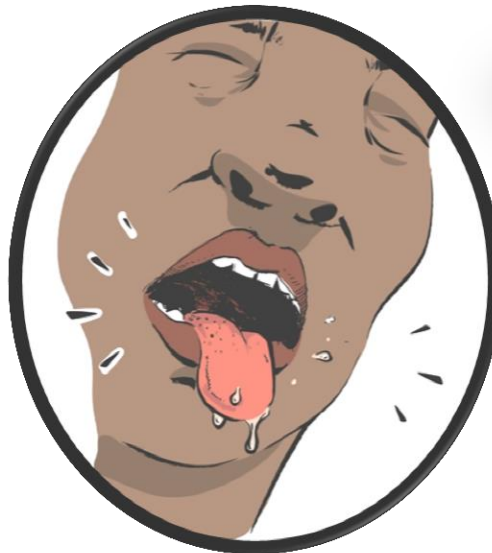


Portal of Exit

The point where a germ leaves the reservoir

Examples:

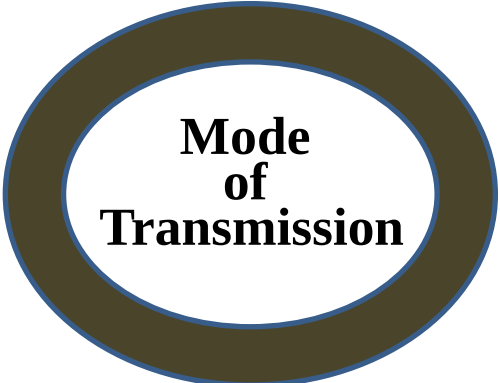
- Diarrhea and vomiting
- Bleeding
- Coughing
- Wounds



Mode of Transmission

How a germ travels from one host to another

- Contact – spread by touch (e.g., cholera)
- Droplet – spread by large droplets (e.g., meningitis)
- Airborne – spread by tiny droplets (e.g., TB, measles)
- Common vehicle
- Vector



**Mode
of
Transmission**

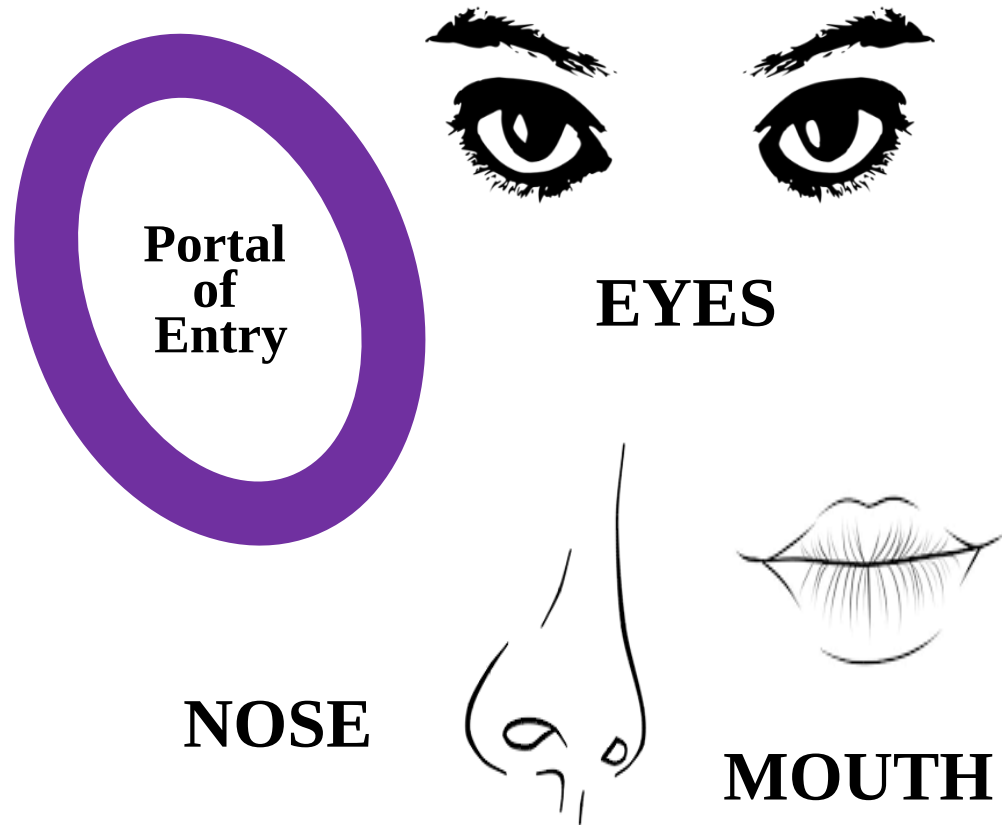


Portal of Entry

The point where a germ enters a person

Examples:

- Mucous membranes (e.g. eyes, nose and mouth)
- Eating or drinking contaminated food or water
- Open skin
- IV and Injections

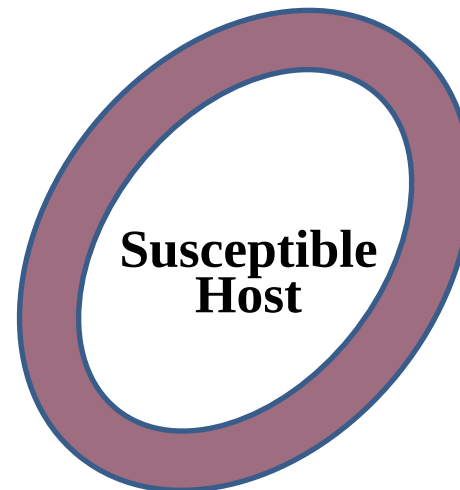


Susceptible Host

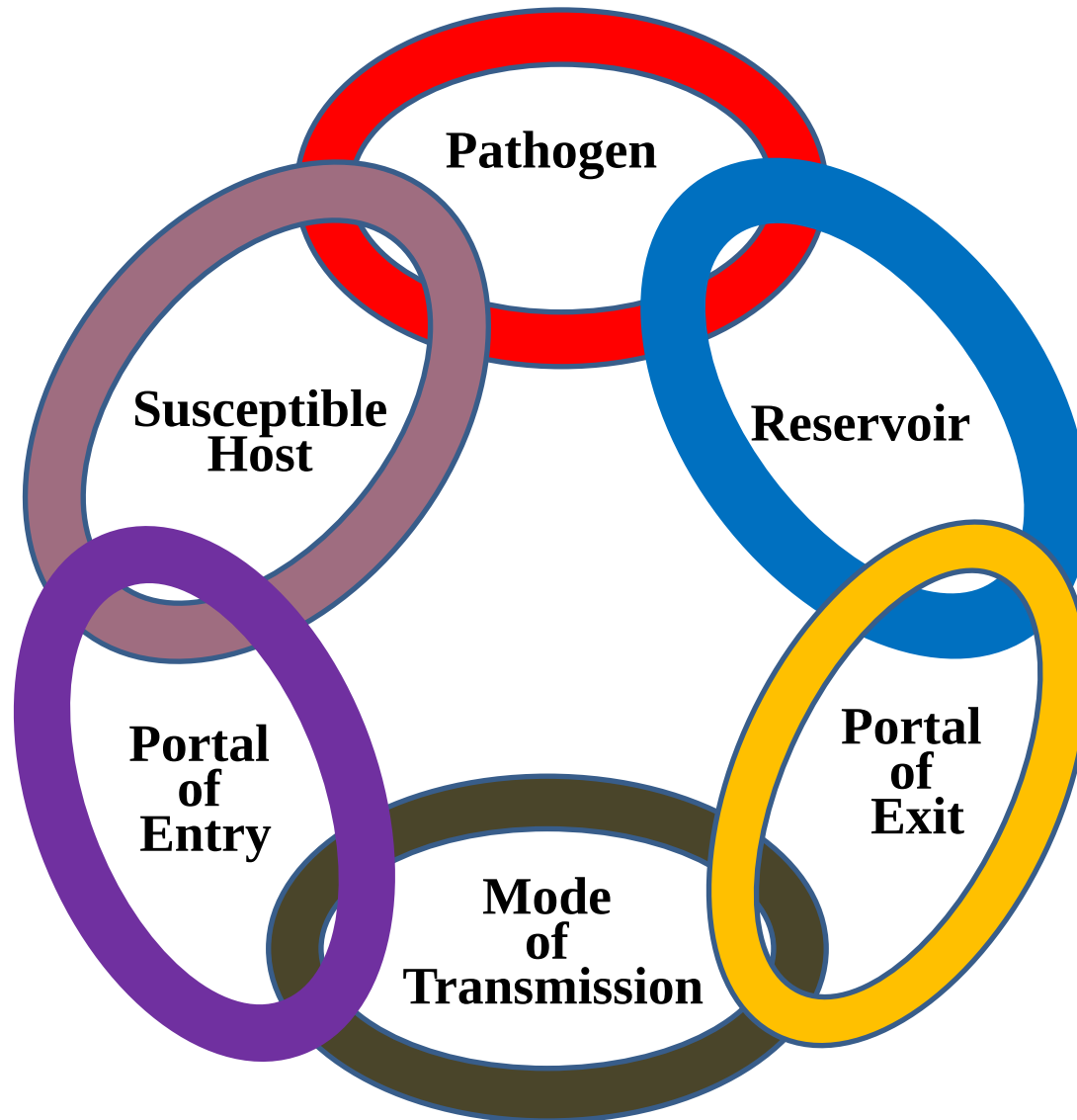
Any person is at risk for infection. These categories of people are at higher risk of infection.

Examples:

- Pregnant women
- Infants, elderly
- HIV patients
- Diabetic patients
- Surgical patients (wounds)
- Malnutrition

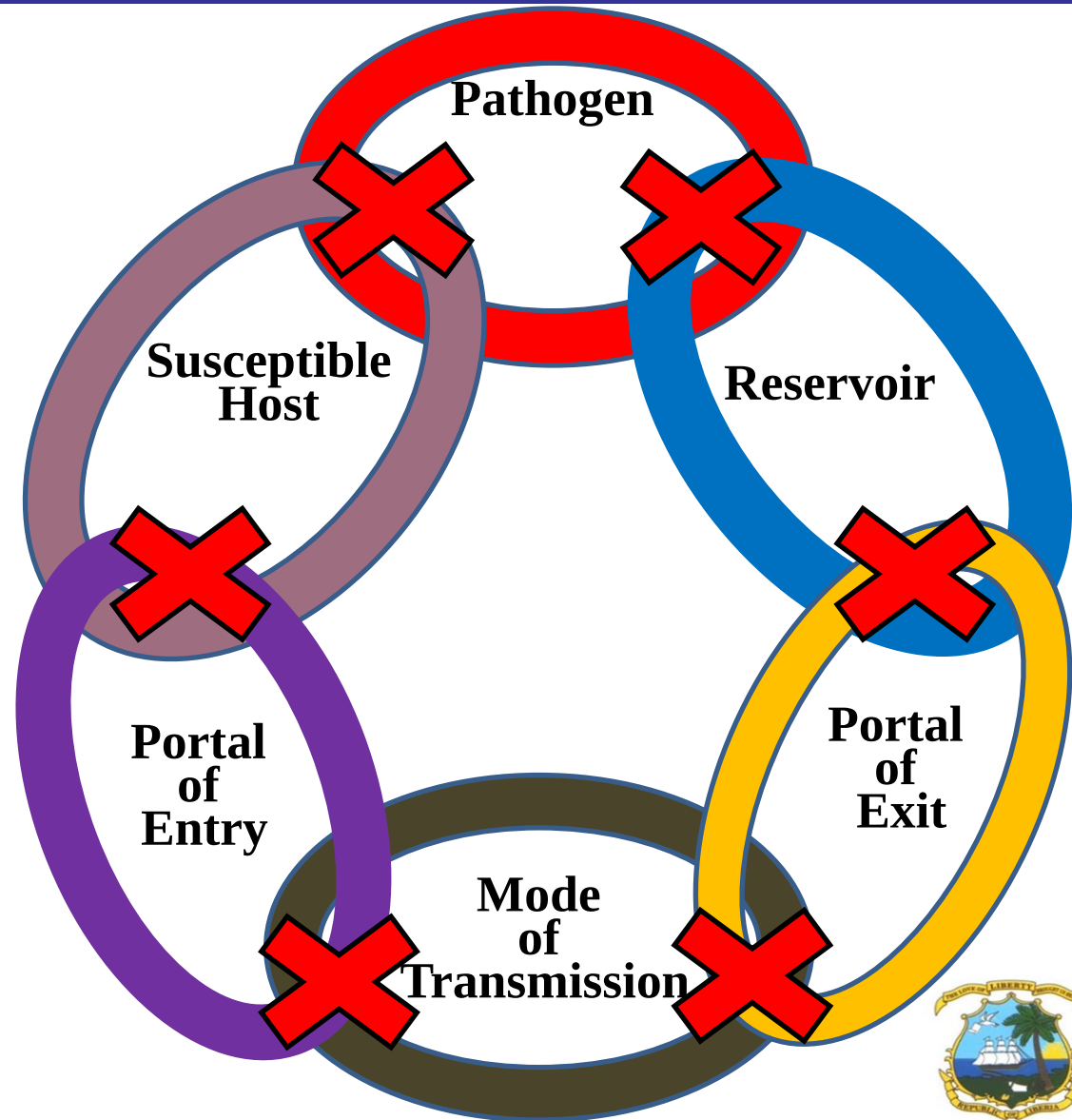


How do you break the links of the chain?



How do you break the links of the chain?

STANDARD
PRECAUTIONS!



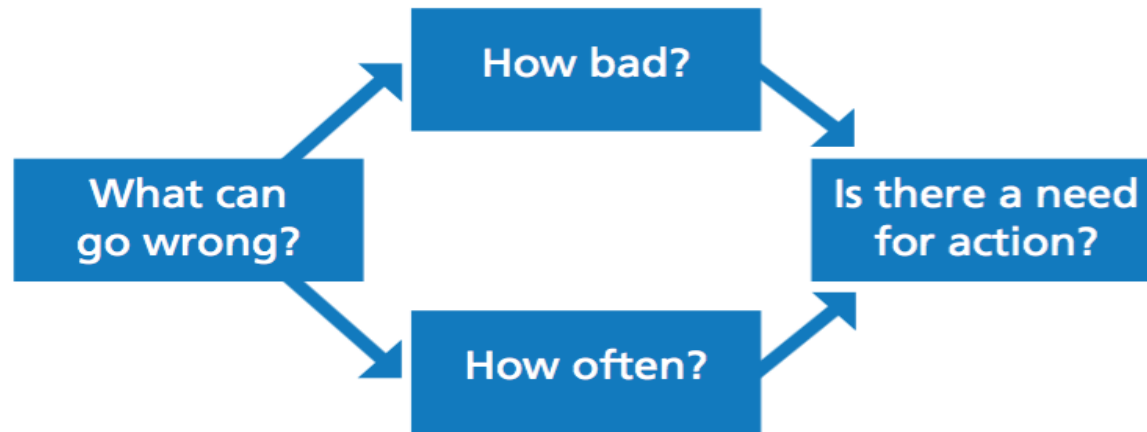
Standard Precautions

- The *basic level of infection control precautions*, to be used for **ALL** patients at **ALL** times
- Risk assessment is critical for all activities
- Additional precautions may be needed in addition to standard precautions based on the risk assessment



What is risk assessment?

A risk assessment seeks to answer four simple, related questions:



First, look at your workplace to identify those things, situations, processes, that may cause harm, particularly to people;

Then, evaluate how likely and severe the risk is, and decide what measures should be in place to effectively prevent or control the harm from happening.



What is risk assessment?

It's not possible to eliminate all risks but healthcare workers (HCWs) have a duty to protect themselves and others.

This means: HCWs must avoid any unnecessary risk by using the appropriate PPE. It is best to focus on the risks that really matter - those with the potential to cause harm.



Case scenario #1 for risk assessment

1. Look at your workplace, what can harm you?
2. Which part of your body can be exposed to the harm?
3. Which PPE items can protect you?



Case scenario #1 for risk assessment

1. Look at your workplace, what can harm you?
 - Clinical waste (used cooton wool swaps)
2. Which part of your body can be exposed to the harm?
 - Hands
3. Which PPE items can protect you?
 - Gloves



Case scenario #2 for risk assessment



1. Look at your workplace, what can harm you?
2. Which part of your body can be exposed to the harm?
3. Which PPE items can protect you?



Case scenario #2 for risk assessment

1. Look at your workplace, what can harm you?
 - Body fluid (blood, pee pee, poo poo, vomit)
2. Which part of your body can be exposed to the harm?
 - Hands, feet and body
3. Which PPE items can protect you?
 - Gowns, Gloves and boot or cover shoes



Case scenario # 3 for risk assessment

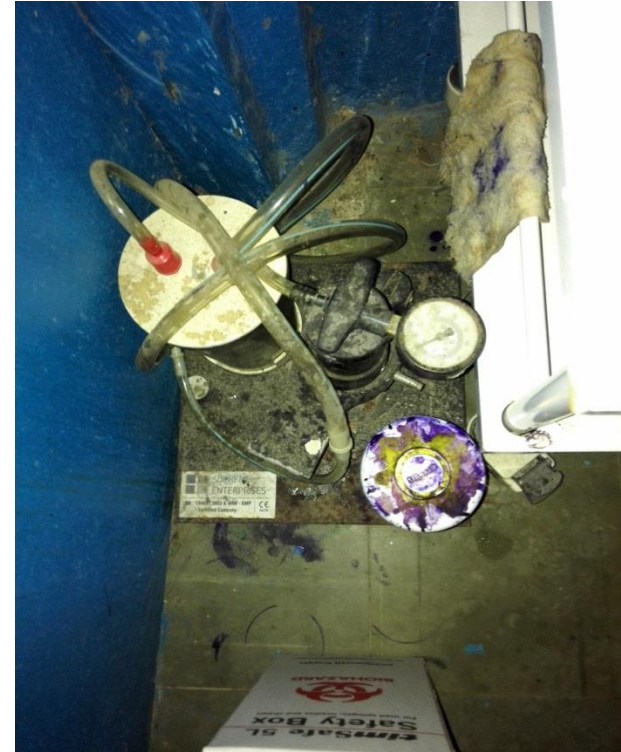


1. Look at your workplace, what can harm you?
2. Which part of your body can be exposed to the harm?
3. Which PPE items can protect you?



Case scenario # 3 for risk assessment

1. Look at your workplace, what can harm you?
 - Body fluid (blood, pee pee, poo poo, vomit)
 - Spill of contaminated body fluid
2. Which part of your body can be exposed to the harm?
 - Face, hands, body and feet
3. Which PPE items can protect you?
 - Mask and goggles (face shield), gowns, apron, gloves and boot or cover shoes



Standard Precautions

Key Components

- To prevent the spread of infection, you should always do the following:
 - Practice good hand hygiene
 - Wear appropriate personal protective equipment (PPE)
 - Practice good respiratory hygiene
 - Conduct environmental cleaning and disinfection
 - Properly dispose of waste
 - Disinfect patient care equipment
 - Practice sharps safety



When do I need gloves?

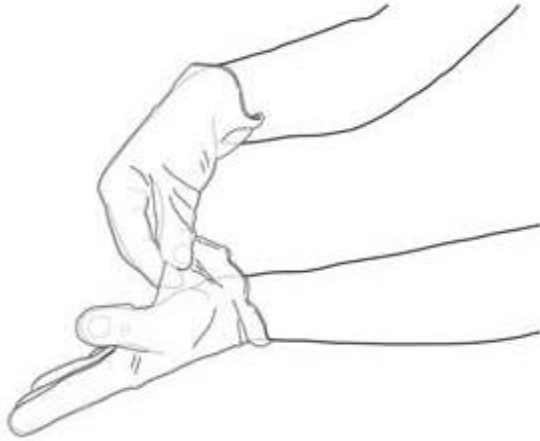
- Gloves are put on for a specific purpose like cleaning bathroom, then removed afterwards. Wash your hands again.
- Wearing gloves "just in case" gives false sense of protection and can spread other germs between surfaces as you do not wash gloves.
- Gloves alone is not sufficient PPE to assist a sick person with an infectious disease or to clean up body fluids from sick person.
- If you see a person wearing gloves in the office ask them "why".



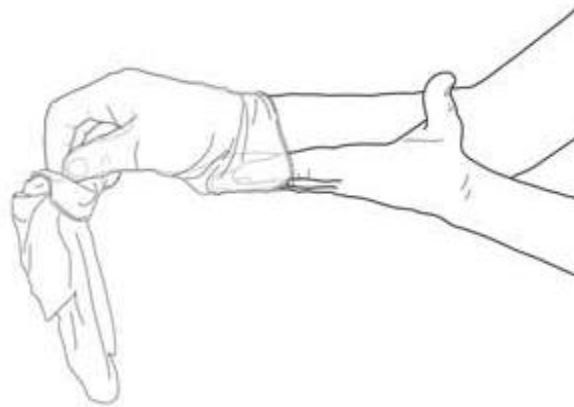
Gloves: how to remove them

(before putting on gloves: hand hygiene and no jewellery)

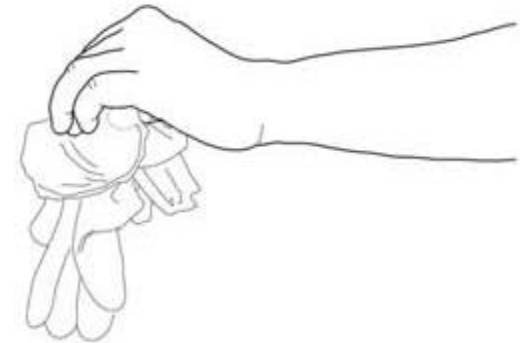
II. HOW TO REMOVE GLOVES:



1. Pinch one glove at the wrist level to remove it, without touching the skin of the forearm, and peel away from the hand, thus allowing the glove to turn inside out



2. Hold the removed glove in the gloved hand and slide the fingers of the ungloved hand inside between the glove and the wrist. Remove the second glove by rolling it down the hand and fold into the first glove



3. Discard the removed gloves

4. Then, perform hand hygiene by rubbing with an alcohol-based handrub or by washing with soap and water



How to protect yourself in the community settings

If the task you are supposed to perform involves a possibility of physical contact with a person who may be infected or has died with an infectious disease:

- Do not do it, if you are not properly trained in IPC, including use of PPE and other IPC precautions.
- Consult your coordinator and/or IPC professional.



Questions?

