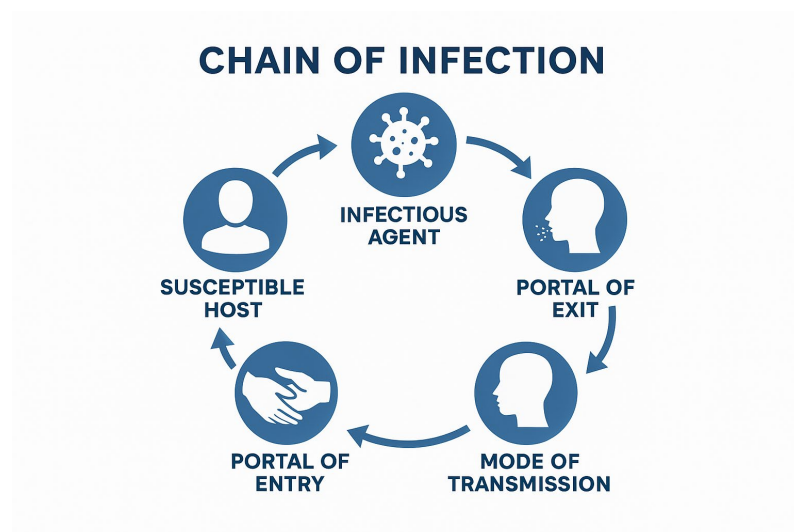


Infectious Disease, Bloodborne Pathogens, Precautions

Understanding Infectious Disease

- Caused by harmful agents: **bacteria, viruses, fungi.**
- Risk factors for susceptibility include:
 - Weakened immune system
 - Chronic conditions
 - Poor nutrition
 - High-exposure environments

Chain of Infection



1. Infectious Agent – bacteria, viruses, fungi, parasites
2. Reservoir – where the agent lives (people, animals, environment)
3. Portal of Exit – how the agent leaves the reservoir (e.g., coughing, bleeding)
4. Mode of Transmission – how the agent spreads (e.g., contact, droplets, airborne)
5. Portal of Entry – how the agent enters a new host (e.g., wounds, mucous membranes)
6. Susceptible Host – someone vulnerable to infection

Breaking the chain involves immunizations and infection prevention practices.

Infection Prevention Domains

Hand Hygiene

- Most effective method to prevent spread.
- Wash hands:
 - Before/after meals, care, medication, toileting, etc.
 - After coughing, sneezing, touching animals, garbage, or removing gloves.
- Use **soap and water** or **hand sanitizer** ($\geq 60\%$ alcohol) when appropriate.

Environmental Cleaning

- Clean frequently touched surfaces.
- Follow product instructions and safety precautions.
- Use PPE when handling disinfectants.

Personal Protective Equipment (PPE)

- Includes gloves, masks, gowns, goggles.
- Select PPE based on exposure risk.
- Proper glove use:
 - Change between individuals
 - Never reuse
 - Follow correct removal technique

HOW TO REMOVE GLOVES SAFELY



Injection and Medication Safety

- Use sharps for one person only.
- Wear gloves and dispose of sharps in puncture-proof containers.

Reusable Equipment and Laundry

- Prefer individual equipment.
- If shared, clean thoroughly following use of a contaminated person.
- Handle contaminated laundry with gloves and minimal contact.

Exposure Protocol

- Wash exposed skin
- Flush mucous membranes (eyes, nose, mouth)
- Report and seek medical attention
- Follow treatment protocols

What Are Bloodborne Pathogens?

- Microorganisms in human blood that can cause disease.
- Transmitted via contact with **infected blood** or **other potentially infectious materials (OPIM)**:
 - Saliva, semen, vaginal secretions
 - Cerebrospinal, synovial, pleural, pericardial, amniotic fluids
 - Any fluid visibly contaminated with blood

Common Bloodborne Pathogens

1. HIV (Human Immunodeficiency Virus)

- Attacks immune system
- Has three stages of symptoms
- Diagnosed via testing; managed with treatment

2. HBV (Hepatitis B Virus)

- Causes liver infection (acute or chronic)
- Transmitted through blood/body fluids
- Preventable with vaccine

3. HCV (Hepatitis C Virus)

- Causes liver infection
- Often asymptomatic
- Diagnosed and treated with antiviral medications

Transmission

- Through open skin contact
- Mucous membrane exposure
- Needle sticks or cuts from contaminated sharps

Standard Precautions

- Assume all individuals are potentially infectious
- When in doubt, use PPE
- Use sharps containers

Managing an Exposure

- Wash exposed area with soap and water
- Flush mucous membranes
- Irrigate eyes
- Report exposure and follow agency policy
- Seek medical follow-up

Cleaning and Laundry

- Use PPE during cleaning
- Disinfect contaminated areas with fresh solution
- Handle contaminated laundry minimally and wash promptly

Supporting Individuals with ID/A and Bloodborne Infections

- Demonstrate and model safe hygiene practices
- Remind caregivers to report injuries
- Teach not to share personal items (e.g., razors, toothbrushes)

Home Care Considerations

- Bloodborne viruses are **not spread** through air, food, water, dishes, or casual contact
- Infected individuals can use shared utensils and follow general food safety guidelines

EpiPen: Knowing When & How to Administer Safely

What is an EpiPen?

An EpiPen® (epinephrine auto-injector) is prescribed for emergency treatment of **anaphylaxis**, *a severe and potentially life-threatening allergic reaction*. It is used when someone is:

- At risk for anaphylaxis due to:
 - Food allergies (e.g., peanuts, shellfish)
 - Insect stings or bites
 - Medications (e.g., antibiotics, NSAIDs)
 - Latex
 - Exercise-induced anaphylaxis
 - Unknown triggers
 - Has a history of serious allergic reactions, even if the cause is not known.
-

To obtain an EpiPen, a person must:

1. Visit a healthcare provider:
 - A doctor, allergist, or nurse practitioner will assess the risk of anaphylaxis.
 - They may perform allergy testing or review medical history.
2. If warranted, an EpiPen will be prescribed:
 - EpiPen (0.3 mg) for adults and children over 66 lbs, or EpiPen Jr (0.15 mg) for children between 33–66 lbs.
3. Fill the prescription at a pharmacy:
 - Most pharmacies carry EpiPens or their authorized generics.
 - Patients are usually advised to carry two auto-injectors at all times.

Before You Need It

- Practice with a training device, available at most medical offices/or RHD office
- **Check the device regularly:**
 - Ensure the **blue safety cap is flat** (not raised).
 - Do **not use** if the solution is discolored, cloudy or the pen is expired.

When to Use It

Use EpiPen immediately if someone shows signs of **anaphylaxis**, such as:

- Difficulty breathing
- Swelling of face, lips, or throat
- Hives or rash
- Rapid heartbeat
- Dizziness or fainting

How to Use the EpiPen

◆ Step-by-Step Instructions

1. Remove from case:

- Slide the EpiPen out of its protective carrier tube.

2. Grip the device:

- Hold in your dominant hand with the **orange tip pointing downward**.
- Keep fingers away from both ends.

3. Remove the blue safety cap:

- Pull straight up—**do not bend, twist, or pull sideways**.

4. Administer the injection:

- Swing and push the orange tip firmly into the **outer thigh** (through clothing if needed).
- Hold in place for **3 seconds**.

5. After injection:

- Remove and massage the injection site for **10 seconds**.
- Call 911 or emergency services immediately.
- If symptoms persist or return, use the second EpiPen.



Important Safety Notes

- **Do not inject into hands, feet, or buttocks**—this can cause serious complications.
 - **Hold the leg firmly** when injecting into children to prevent injury.
 - **Seek emergency medical help** immediately following.
-

Common Side Effects

- Increased heart rate
- Nervousness or anxiety
- Sweating, nausea, dizziness
- Headache or shakiness

These usually resolve with rest but report any persistent or concerning symptoms to a healthcare provider.

A video training of how to administer an EpiPen can be found at the link below

<https://www.youtube.com/watch?v=eoueNli5SYE>