CHAPTER 2
Acting in an Emergency
(Video-Acting in an emergency and preventing disease transmission)
Lesson Objectives

1. Explain how bloodborne pathogens may be transmitted from an infected person to someone else.

2. List common serious bloodborne diseases.

3. Describe standard precautions to take when giving first aid to prevent disease transmission.
Lesson Objectives continued

4. Describe the step-by-step actions to take whenever you recognize an emergency.

5. List 8-10 types of dangerous emergency scenes you should not enter.

6. List signs of stress that may occur after an emergency, and describe how one can get help if needed.
Emergencies Vary

- Nature of injury or illness
- Severity of injury or illness
- Presence of other injuries or illness
- Scene of emergency
- The victim
Key Principles Apply to All Emergencies

- Take steps to prevent disease transmission
- Respond to all emergencies safely and efficiently
- Always check the scene for safety before entering
- Take care of yourself after an emergency
Preventing Disease Transmission

- Risk of disease from infected victim
- Taking steps to prevent infection reduces the risk
How Are Infectious Diseases Transmitted?

- Someone or something has infection
- Infectious pathogen leaves infected body
- Infectious pathogen reaches another by direct or indirect contact
- Second person develops infection
Transmission of a Pathogen

- Direct contact occurs with an infected person or with fluids or substances from that person
- Indirect contact occurs with contaminated objects, food or drink, droplets in the air or vectors such as insects (mosquito or tick)
Bloodborne Disease

- Caused by bacteria and viruses in blood and other body fluids
- Three serious bloodborne infections
  - HIV
  - Hepatitis B
  - Hepatitis C
HIV

- Virus that can eventually cause AIDS
- AIDS may be fatal
- Transmitted only through body fluids
- No vaccine
Hepatitis B (HBV)

- Viral infectious disease
- Transmitted through body fluids
- May cause liver damage or cancer
- Vaccine available
Hepatitis C (HCV)

- Viral infectious disease
- Transmitted through body fluids
- Can cause liver disease or cancer
- No vaccine
Protection Against Bloodborne Disease

- Avoid contact with all victims’ blood and body fluids
- CDC recommends standard precautions whenever giving first aid: all victims, all the time
Precautions

• Use personal protective equipment (PPE)
• If no gloves, use plastic bags
• Keep barrier between body fluids and yourself
• Wash your hands after giving first aid
• Cover any cuts or scrapes on skin
Precautions continued

- Do not touch mouth, nose or eyes when giving first aid
- Avoid being cut
- Use absorbent material to soak up blood or body fluids
- Dispose of contaminated material appropriately
If you are exposed to blood or body fluid:

- Wash immediately with soap and water
- Call your health care provider
- At work, report situation to your supervisor
Hand Washing

- Know location of nearest sink where soap is available
- Do not use food preparation area sinks
- Wash any exposed skin with soap and water as soon after exposure as possible
- Be gentle with scabs or sores
Hand Washing continued

- Wash all skin and nail surfaces
- Merely wetting hands will not prevent infection
- If waterless hand cleaner used, wash with soap and water as soon as possible
CHAPTER 2

Skill: Hand Washing
Skill: Hand Washing

1. Remove any jewelry and your watch. Use a paper towel to turn on water, and adjust the temperature to warm.
Skill: Hand Washing continued

2. Wet your hands to above the wrists and lather up with soap. Keep your hands below your elbows throughout the hand-washing process.
Skill: Hand Washing continued

3. Wash all areas of your hands and wrists. Interlace fingers to scrub between them. If your hands were exposed to infectious material, scrub beneath fingernails with a nail brush or nail stick.
Skill: Hand Washing continued

4. Rinse wrists and hands well. (Repeat soaping and washing if your hands were exposed to infectious material.)
Skill: Hand Washing continued

5. Dry hands thoroughly with paper towel, and dispose of it properly. Use a new, dry paper towel to turn off the water faucet and open the door, and dispose of it properly.
Personal Protective Equipment

- Medical examination gloves
- Barrier devices
- Other devices (eye protection, mask, gowns, etc.)
Gloves

• Check that gloves are intact
• Do not use petroleum-based hand lotions
• Remove contaminated gloves carefully
• Dispose of gloves properly
• Handle sharp objects carefully
• Watch for signs and symptoms of latex allergy
CHAPTER 2

Skill: Putting on Gloves
Chapter 2 • Acting in an Emergency

Skill: Putting on Gloves

1. Pull glove onto one hand.
Skill: Putting on Gloves  
continued

2. Pull glove tight.

Do not touch your ungloved hand to fingers of gloved hand.
3. Put on other glove.
CHAPTER 2
Skill: Removing Contaminated Gloves
Skill: Removing Contaminated Gloves

1. Hold your hands away from your body, with fingers pointing down.
Skill: Removing Contaminated Gloves  

2. With one hand, grasp your other glove at the wrist or palm, and pull it away from your hand. Then, pull the glove the rest of the way off.
Chapter 2 • Acting in an Emergency

Skill: Removing Contaminated Gloves  *continued*

3. Holding the removed glove balled up in the palm of your gloved hand, insert 2 fingers under the cuff of the remaining glove.
Skill: Removing Contaminated Gloves continued

4. Remove the glove by stretching it up and away from the hand and turning it inside out as you pull it off.
5. Dispose of gloves safely (in a biohazard container if possible) and wash your hands.
Barrier Devices

- Pocket face mask or face shield
- Used for rescue breaths during CPR
- Keep in first aid kit
- Greatly reduce chance of disease transmission
Other PPE

- Eye protection, masks, gowns or aprons not usually required for first aid
- OSHA requires such protections in some workplaces
Disposal and Disinfection of Supplies and Equipment

- Items may remain infectious for some time
- Never reuse disposable equipment or supplies
- Disinfect equipment and surfaces with bleach solution
- Double-bag wastes
Responding to Emergencies

1. Recognize the emergency
2. Check the scene
3. Check the victim
4. Call 9-1-1 (when appropriate)
5. Give first aid
6. Have victim seek medical attention (when appropriate)
Recognize the Emergency

- You often know it when you see one.
- You may see or hear something unusual.
- The victim’s life can depend on someone recognizing something is wrong and investigating.
Check the Scene

• Check for multiple victims
• Look for clues about what happened and what first aid may be needed
• Look for bystanders who can help
Check for Hazards

- Smoke, flames
- Spilled chemicals, fumes
- Downed electrical wires
- Risk of explosion
- Building collapse

- Roadside dangers
- High-speed traffic
- Deep water, ice
- Potential personal violence

If the scene is dangerous, stay away and call for help.
Hazardous Scenes

- Never enter a burning or smoky building unless you have special training and are functioning as part of the fire department.
- Downed electrical wires cause a risk to both victim and potential first aider. Never try to move downed wires, call 911 immediately. If downed wires are across a car, do not touch the car, and do not remove the victim from the car (no matter how serious the injuries).
Check the Victim

- For responsiveness
- For life-threatening conditions
- Do not move victim
Call 9-1-1

- For any life-threatening injury or illness
- For unresponsive victims
- Check responsive victims before calling
Give First Aid

- Give basic life support for life-threatening conditions
- Do not administer medications
- In some cases help a victim with his or her own medication
Have Victim Seek Medical Attention (When Appropriate)

- Often injury or sudden illness is not an emergency
- Victims with many injuries or illnesses still need to see a health care provider
After an Emergency

• Arriving professionals take over care of victim
• Fully describe to responders what you observed and the care you gave
• After giving first aid, clean area and wash your hands
• Answer all EMS responder questions
• Cooperate with other professionals such as police
Coping with a Traumatic Event

• Talk to someone
• Remind yourself your reaction is normal
• Seek help from student health center, employee assistance program or member assistance program
• It is normal to have a strong emotional reaction during and immediately after a stressful emergency. Often this reaction diminishes with time, but in some cases the stress remains and problems result
CHAPTER 2

Learning Checkpoint 2
Chapter - Opening Scenario

You are driving home from work when you see a vehicle swerve off the road. It strikes a telephone pole, which breaks off, and a power line falls down on top of the vehicle. You pull to a stop some distance back. You can see the driver inside, and he is not moving.

What do you do?
CHAPTER 2

Critical Thinking Challenge Questions
Scenario 1

While you are at a meeting at work, another employee cuts herself on a shard from a broken water glass. Blood is spurting from her hand. You’re not sure where the nearest first aid kit is and you know it is important to stop the bleeding as quickly as possible. But without the first aid kit, you have no gloves to wear to help stop her bleeding.

What are 2 possible ways to handle this situation without risking contact with her blood?
CHAPTER 2
Discussion and Questions