HealthStream Regulatory Script

Rapid Regulatory Compliance: Non-clinical: Part II:

Version: September 2006

Lesson 1: Introduction
Lesson 2: Safety
Lesson 3: Emergency Preparedness
Lesson 4: Infection Control
## Introduction

Welcome to Rapid Regulatory Compliance: Non-clinical: Part II.

This course has been designed to rapidly review and update your knowledge of:
- Safety
- Emergency preparedness
- Infection control

Note: This course provides essential information for non-clinical healthcare staff. If you are new to any of the topics presented here, consider taking the full-length course on that topic.

As your partner, HealthStream strives to provide its customers with excellence in regulatory learning solutions. As new guidelines are continually issued by regulatory agencies, we work to update courses, as needed, in a timely manner. Since responsibility for complying with new guidelines remains with your organization, HealthStream encourages you to routinely check all relevant regulatory agencies directly for the latest updates for clinical/organizational guidelines.

If you have concerns about any aspect of the safety or quality of patient care in your organization, be aware that you may report these concerns directly to JCAHO.
Welcome to the lesson on safety.

This lesson covers:
- General safety
- Fire safety
- Electrical safety
- Ergonomics
- Back safety
- Slips, trips, and falls
- Hazard communication
- Security and workplace violence
- Reporting incidents
Healthcare facilities have many potential hazards. **OSHA** separates hazards into five categories:

- Biological
- Chemical
- Psychological
- Physical
- Environmental / mechanical

As shown in the table on the next screen:

- Eliminate as many of these hazards as possible.
- Safeguard against exposure to the hazards that cannot be eliminated.

Note: Many of the hazards in the table are addressed in greater detail later.
<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Definition</th>
<th>Examples</th>
<th>Safeguards</th>
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<tbody>
<tr>
<td>Biological</td>
<td>“Germs”</td>
<td>HIV, VRE, MRSA, HBV, HCV, TB</td>
<td>Infection control</td>
</tr>
<tr>
<td>Chemical</td>
<td>Toxic or irritating materials</td>
<td>Detergents, solvents, disinfectants, sterilizing agents, waste anesthetic gases, hazardous drugs, mercury</td>
<td>Engineering controls, work-practice controls, personal protective equipment (PPE)</td>
</tr>
<tr>
<td>Psychological</td>
<td>Factors that cause emotional stress or strain</td>
<td>Working with terminally ill patients, patient deaths, overwork, understaffing, tight schedules, equipment malfunctions</td>
<td>Stress management, relaxation exercises, meditation</td>
</tr>
<tr>
<td>Physical</td>
<td>Agents that can cause physical harm</td>
<td>Radiation, lasers, noise, electrical equipment, extreme temperatures</td>
<td>Dependent on hazard</td>
</tr>
<tr>
<td>Environmental &amp; mechanical</td>
<td>Factors that increase risk of accident, injury, strain, or discomfort</td>
<td>Lifting and moving patients, tripping hazards, poor air quality, slippery floors, clutter</td>
<td>Maintenance of a safe work environment, prompt reporting of hazardous conditions</td>
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</table>
Prevention is the best defense against fire.

To help prevent fires related to the common cause of smoking:
- Follow your facility’s smoking policy.
- Smoke only in designated areas.
- Instruct visitors and authorized patients to smoke only in designated areas.

To help prevent fires related to the common cause of electrical malfunction:
- Remove damaged or faulty equipment from service.
- Submit malfunctioning equipment for repair.

To help prevent fires related to the common cause of equipment misuse:
- Do not use any piece of equipment before being trained.
Not all fires can be prevented.

Therefore, your facility has fire safety features.

These features include:
- Fire alarm systems
- Fire extinguishers
- Emergency exit routes and doors
- Smoke and fire doors and partitions
- A fire plan

Be familiar with the location and use of each of these.
When in doubt, respond to fires using the RACE protocol:

- R: Rescue
- A: Alarm
- C: Confine
- E: Extinguish or evacuate

Click on each item for a brief review.

**R: Rescue**
Rescue all patients from the immediate area of the fire.

**A: Alarm**
Give the alarm by:
- Calling out for help,
- Using a manual pull station, and/or
- Phoning the fire department.

**C: Confine**
Confine the fire by closing the door to the room where the fire started.

**E: Extinguish or evacuate**
If the fire is small enough to put out with a single portable extinguisher, attempt to *extinguish*. Use the PASS protocol:
- Pull the pin.
- Aim the nozzle.
- Squeeze the trigger.
- Sweep back and forth across the base of the fire.

Otherwise, prepare to *evacuate* patients to a safe area.
Most equipment in the healthcare setting is electric. This means there is risk of electric shock.

Electric shock can cause:
- Burns
- Muscle spasms
- Ventricular fibrillation
- Respiratory arrest
- Death

Electric shock happens when electricity flows through the body.
To help prevent electrical accidents in your facility:
- **Remove and report electrical hazards.**
- **Use electrical equipment properly.**
- **Maintain, test, and inspect equipment.**

Click on each of these for a brief review of key points.

<table>
<thead>
<tr>
<th>CLICK TO REVEAL</th>
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**Remove and report hazards**
Remove electrical equipment from service if it:
- Malfunctions
- Shows signs of damage
- Shows signs of unusual heating
- Produces a burning smell when used
- Shocks staff or patients

Report the hazard according to facility protocol. Submit the equipment for repair.

**Use equipment safely**
- Learn how to use equipment before using it.
- Do not use damaged equipment.
- Do not use equipment on which liquid has been spilled.
- Do not operate electrical equipment with wet hands or when standing in water.
- Do not stack anything on or behind electrical equipment.
- Turn equipment off before plugging in or unplugging.

**Maintain, test, and inspect**
All medical equipment should be inspected and tested on a regular schedule.
Other best practices for preventing electrical accidents in your facility are:

- **Use power cords and outlets properly.**
- **Use circuits safely.**
- **Protect patients from electrical shock.**

Click on each of these for a brief review of key points.

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**CLICK TO REVEAL**

**Use cords and outlets properly**
- Do not use outlets or cords with exposed wiring.
- Report damaged outlets or cords.
- A hot outlet can be an indication of unsafe wiring. Unplug cords from the outlet. Report the hazard.
- Do not bend, stretch, or kink power cords.
- Do not jerk cords from outlets. Pull on the plug.
- Do not staple, tack, or nail power cords to walls or floors. Use tape, if necessary.
- Do not rest equipment on power cords.
- Use only power cords with three-prong plugs. Never use adapters, two-prong plugs, or broken three-prong plugs.

**Use circuits safely**
- Do not overload circuits.
- Label each circuit breaker.
- Breaker boxes should be accessible at all times.

**Protect patients**
- Place electrical equipment at a distance from patients.
- Maintain patient areas. Keep floors dry at all times.
- Do not touch patients and electrical equipment at the same time.
**Ergonomics**

The term “ergonomics” comes from two Greek words: 
- *Ergon*, meaning work 
- *Nomos*, meaning natural laws 

Ergonomics means designing work to fit the “natural laws” of the human body.

Good ergonomic practices can lead to fewer work-related injuries.
Ergonomic best practices are:
- Avoid fixed or awkward postures.
- Avoid lifting without using proper devices or equipment.
- Avoid highly repetitive tasks.
- Provide support for your limbs.
- Use proper posture and body mechanics when sitting, standing, or lifting.
- Avoid reaching, twisting, and bending for tools. Keep tools close to you.
- Use supportive equipment (e.g., wrist supports for keyboards).
- Respond promptly to aches and pains. This can help you take care of slight injuries before they become severe.
Healthcare is a high-risk setting for back pain and injury. Healthcare workers who lift and move patients are at especially high risk for injury.

Injury may be prevented through:
- Proper care of the spine
- Proper posture
- Regular exercise

On the following screens, let’s take a closer look at each of the above.
Back Safety: Proper Care of the Spine

Take proper care of the spine while:
- **Sleeping**
- **Standing**
- **Sitting**
- **Lifting a static load vertically**

Click on each item for a brief review of key points.

**CLICK TO REVEAL**

**Sleeping**
- Sleeping on the back is best for back health.
- Sleeping on the side is next best.
- Sleeping on the stomach is least healthy for the back.

**Standing**
- Wear good comfortable shoes.
- Stand up straight.
- Keep the knees flexed.
- If you must stand for long periods of time, put one foot on a footrest. Alternate feet every few minutes.

**Sitting**
- Form 90-degree angles at the knees and the hips.
- When the hands are on a desk or keyboard, also form 90-degree angles at the elbows. The wrists should be kept straight.

**Lifting a static load vertically**
- Bend at the hips and knees.
- Keep the head up.
- Maintain the three natural curves of the spine.
- Hold the load close to the body.
- Lift with the muscles of the legs.
To stand with proper posture, imagine a cord dropped through the center of your head to your feet.

If the spine is properly aligned, the cord should pass through the center of the body, in the right-to-left plane.

In the front-to-back plane of the body, the cord should pass through:
- The ear
- The front of the shoulder
- The center of the hip
- the area behind the kneecap
- The ankle
Regular exercise can help prevent back injury.

Exercise should include:
- **Aerobic exercise**
- **Stretching exercise**
- **Strengthening exercise**

Click on each for a brief review of key points.

Consult your physical therapist or physician to find out appropriate exercises for your back.

**Aerobic exercise**
Do aerobic exercise [glossary] at least three times a week. This contributes to overall fitness and increases blood flow to the spine.

**Stretching exercises**
Stretches are gradual, gentle exercises that lengthen important muscles. This increases the ability of muscles to use their full range of motion. Stretch seven days a week.

**Strengthening exercises**
Strengthening exercises help build muscle mass by forcing the muscles to work against weight or resistance. Do strengthening exercises four to five days a week.
Slips, trips, and falls in the workplace cause injuries and deaths every year.

On the following screens, let’s look at tips for preventing:

- Slips
- Trips
- Falls
To help prevent slips:
- Keep floors clean and dry.
- Increase the friction of floors with abrasive coatings, non-skid strips, or rubber mats.
- Secure rugs with skid-resistant backing.
- Choose slip-resistant shoes. Look for:
  - Soft rubber soles
  - A large amount of surface area in contact with the floor (no high heels!)
  - Patterned soles that increase friction
- Post safety signs around slip hazards (icy sidewalks, wet floors, etc.).
To help prevent trips:
• Keep floors clear and uncluttered.
• Repair uneven flooring, or post safety signs.
• Use proper lighting (not too bright and not too dim).
## Slips, Trips, and Falls: Preventing Falls

Danger zones for falls are:
- **Stairs**
- **Ladders**
- **Vehicles and equipment**

Click on each for strategies to prevent falls.

### CLICK TO REVEAL

#### Stairs
- Keep staircases clean and well lit
- Staircases should have sturdy handrails on both sides. When using the stairs, keep one hand free to hold the handrail.

#### Ladders
- Use a ladder of the height you need.
- Lock the spreader into position before climbing the ladder.
- Climb straight up. Do not lean to either side.
- Hold onto the side rails with both hands while climbing up or down.

#### Vehicles and equipment
- Keep steps clean and dry.
- To board a vehicle, take a firm grip on a sturdy handle to pull up.
- Step down backward to get off the vehicle.
When conditions are hazardous (icy sidewalks, wet floors), avoid slipping and falling by walking like a duck:
- Keep your feet flat and slightly spread apart.
- Point your toes slightly outward.
- Take slow, short steps. Keep your center of balance under you.
- Make wide turns at corners.
- Keep your arms at your sides. This gives additional balance. It also keeps your arms available for support if you fall.
To protect workers from exposure to hazardous chemicals, the following groups of people have duties related to communicating information about hazardous materials:

- Manufacturers
- Employers
- Employees

Click on each for a review of key duties.

**CLICK TO REVEAL**

**Manufacturers**
Manufacturers of a hazardous chemical must:
- Research, create, and distribute a material safety data sheet (MSDS), which lists the specific hazards of the chemical.
- Label all containers of hazardous materials with the name of the product, hazard warnings, and the name and address of the manufacturer.

**Employers**
Employers whose employees work with hazardous chemicals must:
- Maintain a file of MSDS’s for all hazardous chemicals used by workers.
- Inspect incoming chemicals to verify proper labeling. If a chemical is transferred to an unlabeled container at the facility, the new container must be labeled.
- Train employees in the use of hazardous chemicals.

**Employees**
Employees who work with hazardous chemicals must:
- Know which hazardous chemicals are used in their work area.
- Know where MSDS’s are located on their unit.
- Know how to read an MSDS.
- Read all relevant MSDS’s before starting a job that may require the use of a hazardous chemical.
- Read product labels carefully. Follow all instructions. Heed all warnings.
- Attend all required hazardous chemical training sessions.
Workplace violence is any violence in a work setting.

To help keep your workplace safe from violence:
- **Recognize** aggressive behavior and warning signs of potential violence.
- **Respond** appropriately to the level of aggressive behavior (see graphic).
- **Report** all unsafe situations immediately.

![Diagram showing Aggressive Behavior and Response](IMAGE: 2022.JPG)
Reporting Incidents

A breach in safety is referred to as an incident.

Common examples of incidents have been mentioned in this lesson:
- Equipment malfunction
- Back injury
- Slip, trip, or fall
- Exposure to hazardous chemicals
- Workplace violence

All incidents should be reported immediately.

Check with your supervisor if you are not familiar with facility procedures for reporting incidents.
Lesson 3: Emergency Preparedness

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<th>Introduction</th>
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<tr>
<td>Welcome to the lesson on emergency preparedness.</td>
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<tr>
<td>This lesson covers:</td>
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<tr>
<td>- Disaster events</td>
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<tr>
<td>- Emergency response plans</td>
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IMAGE: 3001.JPG
### Types of Disaster Events

Healthcare organizations must be prepared to respond to disasters such as:

- Natural disasters
- Technological disasters
- Major transportation accidents
- Terrorism
- Nuclear, biological, and chemical events

To prepare, each facility must:

- Identify events that could occur.
- Determine the probability that each event will occur.
- Develop strategies for dealing with each event.
Emergency Response Plans

Facilities document how they will deal with disaster in an Emergency Response Plan.

A written plan alone is not enough for an effective response.

Staff must be:
- Educated on the procedures in the plan.
- Trained and drilled to respond to disaster according to the plan.

Make sure that YOU are ready to respond to disaster:
- Know the disaster events that pose a risk for your facility.
- Participate in all emergency response training and drills.
Welcome to the lesson on infection control.

This lesson covers:
- Healthcare-associated infection (HAI)
- Hand hygiene
- Antibiotic resistance
- Airborne pathogens
- Bloodborne pathogens
- Personal responsibility
<table>
<thead>
<tr>
<th>Healthcare-Associated Infection: Impact</th>
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<tbody>
<tr>
<td>Healthcare-associated infection (HAI) is an infection that develops after contact with the healthcare system.</td>
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<td>HAI can be very costly, in terms of:</td>
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<tr>
<td>- Patient life and health</td>
</tr>
<tr>
<td>- Healthcare dollars</td>
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<tr>
<td>NO IMAGE</td>
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</tbody>
</table>
HAI: Cause

HAIs may be caused by bacteria, viruses, fungi, or parasites. These "germs" may come from:
- Environmental sources (dust, etc.)
- Patients
- Staff members
- Hospital visitors
Best practices for preventing HAI are related to:
- Hand hygiene
- Environmental hygiene
- Antibiotic use
- Airborne pathogens
- Bloodborne pathogens
- Personal responsibility

Let’s take a closer look at each.
Hand Hygiene: When and What

The single most important factor for preventing the spread of infection is proper hand hygiene.

Hands should be washed or decontaminated before and after each direct patient contact.

Current CDC guidelines recommend the use of:
- Soap and water for washing visibly soiled hands
- Alcohol-based hand rubs for routine decontamination of hands between patient contacts, when hands are not visibly soiled
For good environmental hygiene:
- Maintain a clean environment. There should be no visible dust or soiling.
- Clean, disinfect, or sterilize medical equipment after each use.
- Dispose safely of clinical waste.
- Launder used and infected linens safely and effectively.
- Follow appropriate guidelines for kitchen and food hygiene.
- Maintain an adequate pest-control program.
Widespread use of antibiotics began in the 1940’s. Penicillin and other antibiotics were hailed as miracle drugs. They were able to cure previously untreated bacterial illnesses.

However, bacteria are very adaptable. They have the ability to change genetically to resist the effects of antibiotics.

The more antibiotics are used, the more common resistant strains of bacteria become.
## Antibiotic Use: Impact of Resistance

Antibiotic resistance is a significant health problem

It affects:
- **Drug choice**
- **Patient health**
- **The healthcare system**

Click on each for a brief review of key points.

### CLICK TO REVEAL

#### Drug choice
When an infection is resistant to the antibiotic of choice, other antibiotics must be used instead. These second-choice drugs are typically:
- Less effective against the bacteria
- More toxic to the patient
- More expensive

#### Patient health
Patients with resistant infections tend to have:
- Lengthier illness
- Higher medical bills
- Greater risk of death

#### The healthcare system
- Antibiotic-resistant strains contribute significantly to HAI.
- More than 70% of all bacteria that cause HAI are found to be resistant to one or more commonly used antibiotics.
Airborne diseases are transmitted from person to person via tiny particles.

These particles:
- Are produced when an infected person sneezes, coughs, or talks
- Can remain suspended in the air for long periods of time
- Can travel long distances on air currents

Transmission occurs when a healthy person inhales an infectious particle.

Infection and disease symptoms then may occur.
### Airborne Pathogens: Diseases

Important airborne (or potentially airborne) diseases include:

- Chickenpox and shingles
- Measles
- Tuberculosis (TB)
- SARS [glossary](#)
- Smallpox
Airborne Precautions are used to prevent the spread of airborne diseases in the healthcare setting.

Healthcare staff must wear personal respirators whenever they enter an airborne isolation room. This protects staff members from spread of the infection.

Staff who have not been trained in Airborne Precautions and respirator use should NOT enter airborne isolation rooms.
Bloodborne diseases are spread from person to person when there is exposure to:
- Infected blood
- Certain other body fluids and tissues

Important bloodborne diseases include:
- AIDS
- Hepatitis B
- Hepatitis C
The Bloodborne Pathogens Standard helps protect workers from bloodborne diseases.

One of the key parts of the Bloodborne Pathogens Standard is the use of Standard Precautions.

Standard Precautions protect healthcare workers from exposure to patient:
- Blood
- Body fluids, secretions, and excretions (except sweat)
- Non-intact skin
- Mucous membranes

Standard Precautions must be used in the care of all patients.
As a healthcare worker, you have personal responsibilities for infection control in your facility.

Maintain immunity to vaccine-preventable diseases such as:
- Hepatitis B
- Measles
- Varicella (chickenpox)
- Rubella
- Mumps

Report all unprotected exposures, such as accidental needlesticks.

Stay home from work when you are sick.
## Course Glossary

<table>
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<tr>
<th>#</th>
<th>Term</th>
<th>Definition</th>
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<tr>
<td></td>
<td>aerobic exercise</td>
<td>continuous activity that requires the use of increased oxygen to maintain the function of the body’s cells</td>
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<td></td>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<tr>
<td></td>
<td>CMS</td>
<td>Centers for Medicare and Medicaid Services</td>
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<tr>
<td></td>
<td>JCAHO</td>
<td>Joint Commission on the Accreditation of Healthcare Organizations</td>
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<td></td>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td></td>
<td>SARS</td>
<td>severe acute respiratory syndrome</td>
</tr>
</tbody>
</table>
1. An example of a biological hazard is:
   a. Mercury
   b. Radiation
   c. Slippery floor
   d. The AIDS virus (HIV)

   Correct: The AIDS virus
   Rationale: Viruses and other "germs" are biological hazards.

2. The single best defense against fire is:
   a. Prevention
   b. Fire extinguishers
   c. Fire alarm systems
   d. Smoke and fire barriers

   Correct: Prevention
   Rationale: The best defense against fires is prevention.

3. In the RACE protocol for responding to a fire, “R” stands for:
   a. Resist
   b. Retreat
   c. Rescue
   d. Relocate

   Correct: Rescue
   Rationale: “R” stands for “rescue.” Rescue all patients from the immediate area of the fire.
4. The worst that can happen as a result of an electric shock is:
   a. Death
   b. Being startled
   c. Having muscles spasms
   d. Feeling a tingling sensation

Correct: Death
Rationale: Electric shock can cause death.

5. Choose the true statement about electrical equipment and power cords.
   a. It is okay to use damaged equipment. However, you must report that it is damaged.
   b. It is okay to attach power cords to walls or floors. However, you must use tape, and not staples, tacks, or nails.
   c. It is okay to use electrical equipment when your hands are wet. However, you must be wearing rubber-soled shoes.
   d. It is okay to unplug equipment without turning it off. However, you must jerk the cord from the outlet, rather than touching the plug.

Correct: It is okay to attach power cords to walls or floors. However, you must use tape, and not staples, tacks, or nails.
Rationale: Do not staple, tack, or nail power cords to walls or floors. Use tape, if necessary.

6. To lift an object from the floor, lift using the muscles of the:
   a. Legs
   b. Back
   c. Arms
   d. Stomach

Correct: Legs
Rationale: Always lift with the muscles of the legs.

7. One technique to prevent slipping is to keep floors clean and dry.
   a. True
   b. False

Correct: True
Rationale: This statement is true.
8. If you work with hazardous chemicals as part of your job, your employer should:
   a. (a) Train you in the safe use of hazardous chemicals.
   b. (b) Make hazardous chemical MSDS’s available to you.
   c. (c) Make sure that all hazardous chemicals are labeled properly.
   d. Both A and B
   e. All of the above

Correct: All of the above
Rationale: All of these are responsibilities of the employer.

9. All incidents should be reported immediately.
   a. True
   b. False

Correct: True
Rationale: This statement is true.

10. Disaster drills:
    a. Are an unnecessary annoyance.
    b. Should be conducted once, when the Emergency Response Plan is first written.
    c. Help ensure that all employees know what to do in the event of an emergency or disaster.
    d. None of the above

Correct: Help ensure that all employees know what to do in the event of an emergency or disaster.
Rationale: Disaster drills should be conducted on a regular basis, so that employees will know what to do if a real disaster happens.

11. Hands should be decontaminated:
    a. Only when visibly soiled
    b. Before and after each direct patient contact
    c. Only before the first patient contact of the day

Correct: Before and after each direct patient contact
Rationale: Hands should be decontaminated before and after each patient contact.

12. Proper hand hygiene is an important weapon in the fight against healthcare-associated infection.
Correct: True

Rationale: Proper hand hygiene is the single most important strategy for preventing the spread of infection.