Module for
Contract Staff, Students, and Volunteers

Corporate Safety Organizational Development

This self-directed learning module contains information you are expected to know to protect yourself, our patients, and our guests.

Target Audience: Contract Staff, Students, & Volunteers

Contents

Instructions ........................................................ 2
Learning Objectives ............................................. 2
Module Content .................................................. 3
Posttest .............................................................. 74

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Instructions:

This module is an introduction to important information and procedures for your safety and security at work. After completing this module, contact your supervisor if you have any questions about the material or to obtain additional information specific to the department where you will be working.

- Read the module.
- Complete the posttest at the end of the module and give it or a copy of your online transcript to your supervisor.

Learning Objectives:

When you finish this module, you will be able to:

- Describe ways to protect yourself from exposure to *bloodborne pathogens*.
- Describe the steps to follow in an *emergency* (i.e., internal disaster).
- Describe the steps to follow in the event of a *fire*.
- Describe ways to help reduce the risk of accidents and injuries at CHS (i.e., *general safety*).
- Define the Right-to-Know/Hazard Communication standard.
- Identify ways to prevent *infant abduction*.
- Describe ways to prevent the spread of *infection*.
- Describe your role in the *Medical Equipment Management* Program.
- Describe the *utility* systems at CHS and steps to take if these systems fail.
- List three situations when *CHS Security* must be contacted.
- Describe ways to arrange the work environment to reduce stress (i.e., *ergonomics*).
- Identify the CHS mission and *Performance Improvement* model.
Purpose of the Education Module
The purpose of the annual safety education module is to provide contract staff, students and volunteers at CHS information they need to assure their safety in the work environment through making them aware of the most significant hazards they may encounter while here. Please remember the material contained in this module is intended only as an introduction. After completing this module, contact the supervisor of the area to which you are assigned to obtain additional education specific to the needs of that department.

Remember:

--YOU play the biggest part in the Carolinas HealthCare System (CHS) safety program by following current policies and procedures.

➢ Bloodborne Pathogens

**Bloodborne Pathogens** are disease-producing organisms in the blood and other body fluids causing illness and sometimes death. CHS has a Bloodborne Pathogen policy including an **Exposure Control Plan** that follows regulations (29 CFR 1910.1030) set up by the federal Occupational Safety and Health Administration (OSHA) that explains how to work safely and how to protect yourself and others from bloodborne pathogens. It also tells you what to do if you are exposed to bloodborne pathogens or **Other Potentially Infectious Materials (OPIM)** and to reduce your risk from these exposures.

The Bloodborne Pathogen Policy CHS 7.01 can be found in the Safety Management Program Manual (SMPM). The plan must be accessible to employees and describes how your facility will use engineering and work practice controls, ensure use of personal protective equipment, provide training, provide medical surveillance, provide Hepatitis B vaccinations, and use hazard signs and labels. A copy of the regulatory text of the OSHA Bloodborne Pathogen Standard (29 CFR 1910.1030) will also be attached to the policy. You may obtain a copy from your supervisor or by accessing the SMPM on Synapse.

Common Bloodborne Diseases

Approximately 5.6 million workers in health care and other facilities are at risk of exposure to bloodborne pathogens such as:

- Human immunodeficiency virus (HIV-the virus that causes AIDS)
- The Hepatitis B virus (HBV)
- The Hepatitis C virus (HCV)

Symptoms of HIV

- Flu-like symptoms
- Fever
- Headache
- Weakness
- Sore throat
- Diarrhea
The majority of people infected with HIV do not show symptoms for many years. Later, the victim may develop types of cancer or infections, including pneumonia that the body can no longer fight off.

**Symptoms of Hepatitis B & C**
- Mild flu-like symptoms
- Fatigue
- Nausea
- Loss of appetite
- Stomach pain
- Jaundice (yellowing of the skin and eyes)
- Darkening of the urine

Hepatitis B & C infects the liver and can develop serious or fatal problems such as cirrhosis, liver cancer, or chronic liver disease.

**Transmission of Bloodborne Pathogens**

**OPIM** are body fluids which may transmit bloodborne pathogens. Common examples of OPIM are:
- Blood
- Amniotic fluid
- Semen
- Cerebrospinal fluid
- Vaginal secretions
- Any body fluid visibly contaminated with blood

**Exposure**
You may be exposed to bloodborne pathogens in a healthcare setting through:
- Needle-sticks during a procedure or clean up
- Cuts from other contaminated object(s) that may penetrate the skin (scalpels, broken glass, etc.)
- Splashes to your eyes, nose, or mouth.
- Dry, cracked, or broken skin that comes in contact with contaminated blood and other potentially infectious materials

You may also be exposed to bloodborne pathogens away from work if you have direct contact with blood or body fluids, or have unprotected sex.

**Hepatitis B Vaccine**
The Hepatitis B vaccine is available through Employee Health to employees and CHS affiliated students who are at risk of exposure to blood or OPIM. It is offered free of charge and is a safe, three-dose series vaccine given via injection that is 80-95% effective in preventing Hepatitis B. After completion of the Hepatitis B series Employee Health will draw a titer (6-8 weeks after series completion to test for antibody to Hepatitis B). Employees and CHS affiliated students who decline the Hepatitis B vaccine and/or the Hepatitis B titer testing must sign a declination statement. Contract staff and volunteers are to produce documentation of receiving the vaccine or a signed declination.
Personal Protective Equipment (PPE) is equipment or specialized clothing that protects you from contact with blood or OPIM. Wearing appropriate personal protective equipment is not only your best option – it’s your only option. WEAR IT!

Use PPE appropriate for the situation. Some PPE includes:
- Gloves
- Eye wear (goggles)
- Masks
- Face shields
- Gowns
- Shoe covers
- Headcovers
- Disposable mouth pieces and resuscitation devices

If you do not use your PPE correctly, then it will not protect you like it should.

- Use appropriate PPE each time you perform a task, where it is reasonable to anticipate exposure to blood or OPIM (e.g. contact with contaminated laundry).
- Be trained to use the equipment properly and do not wear anything that is damaged (e.g. gloves torn or punctured)
- Gloves and other PPE must fit properly.
- Do not use petroleum or mineral oil-based skin care products, such as Vaseline when wearing latex gloves. These products can cause gloves to break or lose their protective barrier and may allow germs to contact your skin.
- Remember to cover eyes, nose, and mouth when a splash to the face may occur.
- Make sure the eye protection used has side panels and that masks are secured on the nose and tight against the side of the face. Gaps between the face and the mask mean that germs may pass unfiltered through the open spaces.
- If, when wearing equipment, it is penetrated by blood or other potentially infectious materials, remove it as soon as possible.
- Before leaving the work area, remove all protective equipment and place it in the designated area or container for washing, decontamination, or disposal.

Standard Precautions

Many people carry bloodborne infections without even knowing it, so it is difficult to identify patients who may transmit infection.

Standard Precautions requires you to treat all human blood and body fluids as if they were infected with a bloodborne pathogen.

Use Standard Precautions to Protect Yourself from Exposure to Blood and Body Fluids.

Adopt these practices to protect yourself from exposure to potentially harmful blood or body fluids:

1. Take care of yourself with good personal hygiene at work.
   - Check your hands for any cuts, scrapes, or broken skin and cover, if possible.
Module for Contract Staff, Students, and Volunteers

- DO NOT store food, eat, drink, apply cosmetics or lip balm, or handle your contact lenses in work areas where you could be exposed to blood or body fluids.
- DO NOT store your food or drinks in refrigerators or freezers used for blood or body fluids.
- DO NOT touch your nose, eyes, or mouth when you are in a contaminated work area.
- Use tongs, forceps, broom, and dust pan to clean up broken glass. NEVER use your hands.
- Remove all PPE as soon as the procedure is completed.
- Always perform hand hygiene after you remove PPE.
- Always minimize splashing, spraying, spattering, and generation of droplets.

2. Clean blood or body fluid spills correctly.
   - Wear gloves and/or other personal protective equipment.
   - Remove the visible material and then clean the surface with a premixed 1:10 bleach solution or an EPA/hospital approved disinfectant such as Sanimaster 4.
   - Large blood spills must be dry wiped first to remove major spillage before cleaning with disinfectant.
   - **Notify Environmental Services for the cleaning of large blood spills or cleaning of blood spill from carpet or upholstery.**

3. Dispose of Regulated Medical Waste (Biohazard Waste) items correctly.
   - Place contaminated items in red trash containers or the small cans labeled "biohazard." Contaminated items refer to those having the presence of liquid, semi-liquid, or caked/dried blood or OPIM on an item or surface. Refer to the CHS Waste Disposal Guide, available on Synapse, for appropriate disposal instructions for various medical waste items.

4. Use and dispose of needles and sharps correctly.
   - Do not bend, recap, or remove contaminated needles.
   - **NOTE:** exceptions only apply to circumstances where the action is required for a specific medical procedure. These specific actions require written justification and recapping must be accomplished through a recapping device or a one-handed technique (hand-to-hand recapping is prohibited).
   - Safety device must be engaged every time a sharp is used.
   - Place sharps and needles in appropriate sharps containers or needleboxes as soon as possible after use.
   - Discard glass vials, medicine containers, and blood tubes in sharps container.
     **NOTE:** Do not dispose of broken mercury thermometers in the sharps container. Follow your facility’s mercury spill clean-up procedure.
   - Do not overfill needle boxes. When the box is two-thirds full, use a new box.
   - Do not pass individual instruments by hand. Instead pass trays of surgical instruments implementing a hands-free zone or a neutral zone.
5. **Safety Devices MUST be used.**

Based on the OSHA Bloodborne Pathogens standard and the CHS Bloodborne Pathogen Policy, the use and activation of engineering controls is **MANDATORY** when it will reduce the employee exposure either by removing, eliminating, or isolating the hazard. Engineering controls used within CHS include, but are not limited to the following:

- Retractable fingerstick devices
- Blood Tubes
- Retractable IV start needles
- Safety scalpels
- Self-sheathing syringes
- A needleless IV System
- Blunt suture needles
- Sharps disposal containers
- And other **Sharps with Engineered Sharps Injury Protections (SESIP)** or non-needle sharps specific to a department – “Non-needle sharp or a needle with a built-in safety feature or mechanism effectively reducing the risk of an exposure incident”.

**WHEN** using SESIP remember the acronym **“SAFER”**

- **S** is for Select the correct device
- **A** is for Ask (if you do not know how to use a device)
- **F** is for Focus and think through the procedure before you do it
- **E** is for Execute the procedure; remember to trigger the safety characteristics
- **R** is for Remove the device after activating the safety feature

The CHS Employee Product Safety Committee *(Sharps Safety Committee, Infection Control Committee, and the Patient Safety Committee at CMC-NE)* ensures that a systematic process is in place, involving both management and front-line employees (“end users”) in the identification and selection of appropriate and effective engineering controls. As new engineering control technologies become available, CHS will continue to evaluate and select appropriate engineering controls to further reduce exposure incidents.

1. **Be careful with contaminated linen.**
   - Handle contaminated linen as little as possible.
   - DO NOT rinse soiled linen before bagging.
   - If linen is very soiled and wet, place it in a leak-proof bag and take it to the linen holding area or linen chute immediately.

2. **Watch for bloodborne pathogens warning labels which are orange or orange-red with the biohazard symbol.**
   - Bags or containers labeled with the biohazard warning label contain blood or OPIM.
   - The label may also be on contaminated equipment, or on doors leading to contaminated areas such as a biohazard storage room.
   - Warning labels must be posted on refrigerators and freezers containing blood
and OPIM and other containers used to store, transport, or ship blood or OPIM.
• Remember to wear gloves if you need to open a contaminated container or if you have to handle contaminated equipment.

If you are exposed to blood or body fluids...
• Wash the area with soap and water.
• If your nose, mouth or eyes have been splashed, flush these areas with water immediately.
• Notify the area supervisor immediately.
• Complete the online Report of Occupational Injury and Illness (ROII).
• If you have been exposed to blood or body fluids of a known HIV positive or highly suspected patient, report your exposure immediately (within 2 hours) to Employee Health. Any other exposures to blood and body fluids must be reported within 24 hours.
• Employee Health will provide you with a confidential medical evaluation; and, with your consent, this evaluation will include blood tests, post exposure preventive treatment, and follow-up counseling.

REPORT ALL EXPOSURES! THIS IS VERY IMPORTANT FOR YOUR HEALTH!

If you have any questions about Standard Precautions or Bloodborne Pathogens, call the Infection Control office or Employee Health at your facility.

➢ Emergency Management

*Emergency Management is the ability of an organization to prepare for, respond to, mitigate against, and recover from an emergency or disaster outside the facility, in the community, or inside the facility.*
All CHS employees must know their assigned roles and perform them efficiently. A carefully planned and fully implemented Emergency Operations Plan is the key to saving lives.

If you have a designated role in emergency management you must take the separate Emergency Management ACE Module. If you have any questions about your role in emergency management ask your supervisor.

➢ Fire Safety

*Good News: Fires in Healthcare Facilities Are Rare*

Almost half of the medical, mental health, and substance abuse facility structure fires occur in hospitals or hospice facilities. Approximately 43% of medical, mental health, and substance abuse facility structure fires occur in hospitals or hospice facilities. Another 39% of structure fires occur in mental health or substance abuse
facilities and finally, 19% occur in clinics or doctor’s offices. Seventy percent of the direct property damage in health care facilities occurs in clinics or doctor’s offices.

Statistics for hospital or hospice facilities continue to decline. From 2003-2006, of the 1,600 structure fires in hospital or hospice facilities, there was only 1 civilian death, 29 civilian injuries, and $5.5 million in direct property damage. The leading causes for fires included cooking equipment, contained trash, and electrical distribution & lighting equipment. The area of origin was mostly kitchen or cooking area and bedrooms. The first item attributed to ignition was cooking materials. Only 2% of fires in these properties extended beyond room of origin. For the properties protected with automatic sprinkler protection, the sprinkler system successfully controlled or contained the fire 96% of the time. The peak time for fires occurs during the week between 8 AM and 1 PM. ¹

To help prevent fires in healthcare facilities, CHS has adopted a strict Tobacco-Free Workplace Policy. CHS expects everyone--patients, staff, and visitors--to comply with this policy.

CHS Tobacco-Free Workplace Policy

The purpose of the Tobacco-Free Workplace Policy is to establish a tobacco-free environment throughout CHS.

- Tobacco use is not permitted on any CHS property, or portion thereof, occupied by CHS functions and activities. (except as specifically described in CHS HR Policy 5.15 Tobacco-Free Workplace.). This ban applies to all employees, visitors, patients, and contractors

- Smoking is permitted ONLY for certain residents at CHS Long Term Care locations and for inpatients at Behavioral Health.]

- Inpatient and outpatient adolescents under age 18 are restricted without exception from smoking at any time, regardless of facility.

Use of Space Heaters

- Space heaters are prohibited within smoke compartments containing patient sleeping areas and treatment areas (including Nursing Stations).

Decorations

- Combustible decorations that are not flame retardant may not be used. Exception: Combustible decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present
Four Elements of Fire Safety

- Prevention
- Detection
- Containment
- Evacuation

Fire Prevention
The best way to deal with fire is to prevent it. To help prevent fires at CHS:

- Recognize and eliminate potential fire hazards in your area such as improper storage of combustibles.
- Report hazards beyond your immediate control to your supervisor, your Facility Safety Officer, or the Support Center at 704-446-6161.
- Pay particular attention to halls and stairways. Keeping them clear ensures a faster evacuation in the event of fire. It is critical that all hallways and stairwells are kept clear for fast, efficient evacuation routes, as well as for fire fighter activities.
- In sprinklered areas, keep stored items at least 18” below sprinkler heads and in unsprinklered areas keep stored items at least 24” below the ceiling at all times.
- Insure that trash and linen chute doors are self closing and positive latching and are not blocked open by linen or trash bags.
- Do not block Fire Extinguishers, Fire Pull Stations, EXIT signs or other fire-related devices.
- Ensure that a 36 inch clearance is maintained around Electrical Panels.
- Always observe the Tobacco-Free Workplace Policy
- Know your department’s Fire Plan, which is to include:
  1. fire alarm procedures;
  2. fire escape routes;
  3. patient/staff evacuation procedures; and
  4. the location of fire extinguishers in your immediate area.

Fire Detection
The smoke or fire detection systems at most CHS facilities are smoke detectors and are designed with one goal in mind: to detect smoke and fires as rapidly as possible. Because fires spread very quickly and double in size every 30 seconds, knowing this information may make the difference between a close call and a tragedy.

Accomplishing this goal helps ensure the safety of patients, visitors, and staff at CHS by providing fire safety professionals the time they need to put out the fire.
Fire Alarm Signals (where applicable)
The fire alarm system will sound an alarm ONLY in the building in which the fire is located. The alarm will sound and, where provided, the strobos will flash throughout the entire building.

- In the event of a fire, the overhead paging system, where provided, will announce “Attention please, Code RED,” [this is repeated three times, along with the location of the fire. Chimes and strobe lights will also be activated where located.]

- The fire alarm may continue to sound until it is determined it is safe to return to “business as usual.” Note: Some fire alarms will not sound continuously; however, strobe lights will flash until the building is safe, as announced by “Code Red All Clear” on the overhead page. Check your facility’s Fire Safety Plan for more details.

- All staff within a building “in alarm” must follow the respective department’s Fire Plans.

Never enter a building if the fire alarm is sounding or the strobe lights are flashing. It is safe to enter the building ONLY after the termination of all audible and visual alarm signals or notification from an authorized representative. The only exception to this rule is staff members performing duties critical to patient care.

What to do in Case of FIRE
- Stay calm. **DO NOT** run or shout “fire”.
- Keep clear of building entrances and corridors, so the fire department may access the area.
- Finally, commit the following steps to memory: **R-A-C-E**.

**R-A-C-E**

**RESCUE** (Rescue) Remove anyone in immediate danger to the nearest safe location.

**ALARM** (Alarm) Pull the closest fire alarm. Then call the appropriate telephone extension to report the fire and its location.

**CONTAIN** (Contain the fire) by closing all doors and windows tightly.

**EXTINGUISH** (Extinguish) Use the proper fire extinguisher only after
the alarm has been sounded, only if you have been trained to use an extinguisher, and only if it is safe to do so. Or Evacuate if so instructed by Fire Department or Administration.

Key Points

NEVER attempt to fight a fire, if any one of the following statements is true:

- The fire is spreading beyond the immediate area where it started, or is already a large fire.
- The fire could potentially spread and block your escape.
- You are not trained or feel comfortable operating a fire extinguisher.
- You are in doubt about whether the extinguisher is designed for the type of fire at hand or if it is large enough to fight the fire.

*It is reckless and unsafe to fight a fire with an extinguisher if any of the above statements are true for you. Instead, leave immediately, close the doors, activate the pull station, and warn others.*

How to Use a Fire Extinguisher

**Pull the Pin**
This will release the lock latch.

**Aim Low**
Point the extinguisher nozzle (horn or nozzle) at the base of the fire.

**Squeeze the Handle**
This action releases the extinguishing agent.

**Sweep from Side-to-Side**
Keep the extinguisher aimed at the base of the fire until the fire appears to be out. If fire breaks out again, repeat the process.

Types of Fire Extinguishers

**Multi-Class/Multi-Purpose Extinguishers**
You may use most extinguishers in your building on different types of fires. The most common type of extinguishers will be labeled A-B-C, appropriate for use on most types of fires including wood, paper, grease, gasoline, oil, or electrical fires.

Your building or area may have a limited number of special extinguishers such as clean agent (Halon, CO2 or FE-36), combustible cooking, or water-based. Do not use a special extinguisher unless you are aware of the special uses of each type.
Fire Containment in Hospitals
Because hospital in-patients may have to be defended-in-place, the hospital is designed, constructed, and maintained to limit the rapid spread of fire, smoke, toxic gases, and heat. There are five basic features built into CHS’s hospital buildings to provide a series of physical barriers between patients and the fire and smoke and to maintain a smoke-free way to escape from the hospital buildings should evacuation become necessary.

The five basic features built into CHS’s hospital buildings to provide fire protection and allowing patients to be defended-in-place are:

- Rooms
- Smoke compartments
- Floor assemblies
- Buildings
- Exits

Rooms
Corridor walls, doors, and windows—the basic components of a room—provide the initial barrier against smoke. Since rapid evacuation is often impossible when a fire breaks out, closing doors and windows helps form a sealed compartment that prevents the spread of smoke and other gases into patient rooms. Be sure to close all doors when leaving an area. Preventing the spread of fire and smoke beyond the point of origin is the first—and often best—line of defense.

Smoke Compartments
The second level of defense is achieved by smoke compartments. Smoke compartments are comprised of barriers called smoke partitions that physically separate each floor of the building into at least two sections.

Floor Assemblies
The third level of defense is floor assembly—physical barriers between floors that resist the vertical spread of fire and smoke.

Buildings
The building structure itself is the fourth level of defense. Hospital buildings at CHS are constructed to remain structurally intact during a fire, containing the fire within its boundaries.

Exits
There are at least two approved exits, remote from each other, provided for each floor or fire section of CHS’s buildings.
Evacuation
Do not evacuate until the Fire Department or Administrator for your building has authorized evacuation. Know your departmental evacuation plan ahead of time, and know where to find it.

Evacuation Plans for Patient Care Buildings

Horizontal Evacuation
1. Remove patients in immediate danger first, including patients who might be separated from safety, if the fire enters the corridors.
   • Ambulatory patients are moved first.
   • Most critical patients are moved next.
2. Check all rooms and close every door securely after checking room.
3. Recheck patients’ conditions once they have reached the safe area.
4. Stay alert for any changing conditions that necessitate further movement.

Vertical Evacuation
1. Vertical, or downward, movement to a safe area will be ordered after further horizontal movement is judged by the Fire Department unsafe or not practical.
2. Patients will be moved to a lower floor. Two floors below the fire is recommended for safe refuge.
3. Follow horizontal evacuation steps 1-4.

Site Evacuation Plans for Primary Care & office buildings (not hospitals)
1. Evacuate by the nearest EXIT to the outside.
2. Stay clear of the building and await further instructions.
3. Re-enter the building ONLY after the alarm signals have stopped sounding

Staff Member Responsibility

• Review the Fire Plan for your facility and the CHS Code Red: Fire Emergency policy 10.02(c) for details.

• The hospital incident commander and the highest-ranking nurse staff member in the area(s) at the time of the incident are responsible for the safety of patients, visitors, and staff members.

• The nursing manager, or designee, is responsible for removal of patients’ medical records at the time of total evacuation of the facility.
• Each medical center department head, or designee, is responsible for the safety of personnel under his/her care, custody, and control.

It is the responsibility of all CHS employees to know their department’s fire evacuation plan. This information may be obtained from your supervisor.

Interim Life Safety Measures for Hospitals and One-Day Surgeries

Interim Life Safety Measures (ILSM) are a series of administrative actions whose purpose is to compensate temporarily for hazards posed by ongoing construction activities or existing Life Safety Code deficiencies. These measures apply to all personnel, including construction workers. A verbal or e-mailed notification of an ILSM project is considered education and training. Employees are responsible for awareness of the need for an alternate emergency response in a fire situation. For questions regarding an ILSM project, please consult your supervisor.

ILSM must be evaluated during project development, implemented when indicated and continuously enforced through project completion to provide CHS personnel, their patients and visitors, and other workers with a safe environment. Interim Life Safety Measures consist of selection from fourteen (14) potential actions to help make the building safer during the temporary hazardous period until the hazard can be corrected. Your safety officer, maintenance staff, and administration are responsible for assuring the evaluation and appropriate measures are implemented.

➢ Ergonomics

Ergonomics is the science of fitting the work environment to the people doing the job, rather than the people to the work environment. Ergonomics involves workplace design and arrangement of work activities to help prevent injury.

An ergonomic program hopes to:
• Prevent musculoskeletal disorders (MSDs),
• Increase comfort and safety, and
• Increase productivity and job satisfaction.

Ergonomics interventions allow employees to work safely and reduce the risks of MSDs. Also ergonomics can help reduce the high costs of work-related injuries by improving the work or the job before injuries occur. Ergonomics benefits employees, supervisors, and managers.

What are Musculoskeletal Disorders (MSD)?

Musculoskeletal disorders (MSDs) are injuries that involve the muscles, tendons, or nerves. They occur over time and can take a long time to heal. MSDs most commonly occur in the neck, shoulder, elbow, hand, wrist, or back.
Risk Factors for MSDs
Multiple factors increase the risk of developing an MSD. Some common risk factors include:

**Force** is physical effort needed to perform a task (e.g. moving equipment and supplies, hitting the keys harder than necessary while doing data entry or typing, etc).

**Awkward Postures and Positions** place increased demands on the body (bending your wrists while typing, sitting or standing with your back rounded or your shoulders slumped forward, making long reaches for material, etc).

**Repetition** occurs when the same task or series of motions are performed over and over with little variation (e.g. keyboarding and typing, sorting, etc). **NOTE:** Repetition itself may not be harmful, but combined with awkward postures and high force, the risk of injury increases.

Signs and Symptoms of MSDs
- Pain
- Numbness
- Aching or tingling
- Burning
- Cramping
- Stiffness
- Decreased range of motion
- Deformity
- Decreased grip strength
- Loss of muscle function

Preventing MSDs
A basic ergonomic principle uses good body positions that keep you working in neutral. This means keeping your joints in their strongest, most stable and least stressful positions. Some general ways to prevent MSDs using ergonomic principles includes:

- Review work methods and procedures regularly to identify risk factors.
- Look for ways to improve ergonomics and reduce MSDs by changing:
  - work area organization and layout;
  - work environment (i.e. lighting);
  - tools and equipment;
  - reduce or avoid repetitive motions;
  - reduce the amount of force needed to perform a task;
  - reduce awkward or difficult movements, reaches, or stretches by reorganizing the work area- move parts closer to the worker, change the work surface height, etc.;

How to Set Up an Ergonomically Correct Workstation
1. Use chair backrest to provide full support to low back. Adjust lumbar support to support curvature of low back (inward curve of spine).
2. Place monitor so top of screen is at, or slightly below eye level. If you wear bifocals, lower monitor to a comfortable reading level. Eyes should look forward most of time.

3. Tilt monitor slightly down to eliminate glare and reflections. Optical glass glare or light filter may be needed.

4. To adjust distance, begin by sitting at arm’s length from monitor, then move it forward or backward to obtain clearest image.

5. Rest feet flat on the floor or on a stable footrest.

6. Use an adjustable document holder; preferably in-line with the computer screen. Or if possible, wedge documents between the keyboard and monitor.

7. Keep wrists flat or straight to the forearms when using keyboard or mouse. Do not rest wrist on the rest (if provided) while keystroking or using mouse. Use it between keystrokes or mouse activities.

8. Relax arms and elbows close to body. Relax shoulders. Thighs should be roughly horizontal, with about 90° to 110° between thigh and calf.

9. Place monitor directly in front of keyboard and position yourself so shoulders are square to monitor.

10. If using keyboard tray, set angle so your wrists are straight while keying. This might require tilting front of tray up to create negative tilt; tilting front of tray down is not recommended because it puts wrists in an uncomfortable position. If your keyboard is on the desk, leave it flat, or tilt the front up slightly to keep wrists straight.

11. Make sure the work surface is stable and the keyboard tray if used does not bounce.

12. Take frequent short breaks or mini-breaks to stretch. A rule of thumb is to take a five minute stretch break for every hour of continuous seating. And change posture. Glance away from the screen after every 30 minutes of continuous computer use.

If you experience pain or discomfort after adjusting your workstation as described, you may request an evaluation through the Corporate Safety website (on Synapse).

Monitor Quick Tips:
• Provide adequate desk space between the user and the monitor (table depth). If there is not enough desk space, consider:
  ➢ Make more room for back of monitor by pulling desk away from wall or divider; or
  ➢ Provide a flat-panel display, which requires less desk space, or
  ➢ Install an adjustable keyboard tray to create a deeper working surface.
• Place monitor perpendicular to window.

Wrist Rest Quick Tips
• Use a wrist rest to maintain straight wrist postures and to minimize contact stress during typing and mousing tasks.
• Your hands should move freely and be elevated above the wrist/palm rest while typing. When resting, the pad should contact the heel or palm of your hand, not your wrist.

Chairs

Chair Quick Tips
• Learn how to adjust your chair. Instructions for current standard CHS chairs can be found at Corporate Safety’s webpage.
• Backrest should conform to the natural curvature of your spine, and provide adequate lumbar support. If your current chair does not have a lumbar support, use a rolled up towel or a removable back support cushion to temporarily provide support and maintain the natural curve of the spine.
• Seat should be comfortable and allow your feet to rest flat on the floor or footrest. If seat cannot be lowered (for example, it would make keyboard or monitor too high), use a footrest to provide stable support.
• Armrests, if provided, should be soft, allow your shoulders to relax and your elbows to stay close to your body. If your armrests cannot be properly adjusted, or if they interfere with your workstation, remove them, or stop using them.
• Chair should have a five-leg base with casters that allow easy movement.

Telephones

Telephone Quick Tips
• Keep it close enough to avoid repeated reaching.
• Use a “hands-free” head set or speaker phone if you plan to spend a lot of time on the phone.
Basic Rules of Good Body Mechanics
Remember these principles apply at home as well as at work. If you keep these principles in mind, you will not only reduce the risk of injury, your job will be easier and less tiring.

Lifting with Proper Posture
Lifting is strenuous—it requires proper training and technique. By lifting with your large, strong leg muscles instead of the small muscles of the back, you can prevent back injuries and reduce low back pain. There are five steps to follow when lifting an object:

1. **GET CLOSE TO THE LOAD** Get as close to the load as possible—as if you’re hugging the object. Having the object close to your body put less force on your low back.

2. **MAINTAIN YOUR CURVES**
   Keep yourself in an upright position while squatting to pick up

3. **TIGHTEN YOUR STOMACH MUSCLES**
   Tightening the stomach helps support the spine. Don’t hold your breath while tightening the muscles.

4. **LIFT WITH YOUR LEGS**
   Your legs are the strongest muscles in your body—so use them.

5. **PIVOT - DON'T TWIST**
   Turn with your feet, not your back. Your back isn't built for twisting from side to side.

Large or Heavy Loads
If a load is too heavy to lift alone, ask for help. Pick one person to coach the lift—this way you lift and lower at the same time.

Overhead Loads
If a load is above your shoulders, use a step stool to elevate yourself until the load is at least chest level—preferably waist height. Pull the object close to your body and then lift. Remember to maintain your curves—use your arms and legs to do the work.

Tips for Keeping Your Back Safe
- Plan the transfer or lift ahead of time.
- Have all the necessary equipment; use mechanical means to assist.
- Place your feet in a position that gives you a wide, solid base of support.
- Keep your head and shoulders upright.
- Use your body weight and momentum to move the object, rather than just using muscle strength.
• Make sure all work heights require the least amount of lifting and do not force bending at the waist.
• Set up your work area to limit reaching.
• Stand with one foot in front of the other and your knees slightly bent, or with one foot on a footrest such as a box, or bottom shelf.
• Exercise for a stronger back, heart, improved strength, fitness, flexibility, stamina, endurance, posture, and to control weight.

Reporting Signs and Symptoms of MSDs
If you suspect you have an ergonomically related injury, you should:
1. Notify your supervisor or manager
2. Complete the online Report of Occupational Injury and Illness (ROII) prior to seeking medical attention for an ergonomic injury.

Request Ergonomic Services
Before requesting a computer workstation evaluation, please review the preceding diagram and guide which offer commonly recommended solutions during an evaluation. Also you can find other suggestions and tips on the Corporate Safety webpage via Synapse. We encourage you to make the appropriate changes and see if this improves your comfort level.

You can use the request form on Corporate Safety’s webpage (on Synapse) to request an onsite ergonomic evaluation. If you have questions, contact Corporate Safety at 704-512-7283.

General Safety

The Role of Accreditation and Regulatory Agencies
The content of this training module was developed to meet criteria established by The Joint Commission. Founded in 1951, The Joint Commission’s primary mission is to standardize practices and ensure a minimum standard for the quality of care for patients in American healthcare facilities. This accreditation process has yielded many helpful suggestions for what should be included in an overall safety program, including enhancing the quality of patient care and increasing employee safety awareness and education. In developing its inspection criteria, The Joint Commission incorporates the regulations and standards of agencies, such as the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and other organizations such as National Fire Protection Association (NFPA). Compliance with the above federal laws and standards provides the foundation for Joint Commission accreditation.

The Joint Commission
The Joint Commission accreditation process is beneficial to healthcare facilities in numerous ways: healthcare professionals learn important strategies for limiting
occupational health & safety risks to themselves and coworkers, financial losses may be greatly reduced, patient care may be improved, and most importantly, our facilities become safer places to work. The Environment of Care standards provide an effective resource for ensuring the safety of our employees, patients, and visitors.

Environment of Care

- Safety and Security Management
- Hazardous Materials and Waste Management
- Medical Equipment Management
- Fire Safety
- Utilities Management

Environment of Care (EC) Safety Committee Responsibilities

An EC Safety Committee consists of representatives from administration, clinical services, and support services. The EC Safety Committee roles and responsibilities include but not limited to:
1. Promoting awareness and focusing attention on safety issues;
2. Developing facility-specific policies and procedures;
3. Reviewing reports regarding occupational injury and illness trends;
4. Evaluating the overall effectiveness of the safety program.

Facility Safety Officer (FSO) Responsibilities

The Facility Safety Officer’s responsibilities include but not limited to:
1. Overseeing Facility EC Safety Committee and Safety Program implementation and enforcement;
2. Monitoring and evaluating policies and procedures;
3. Evaluating the effectiveness of the safety program;
4. Overseeing the facility Environmental Tour program.

Safety Management Program Manual (SMPM)

Sections of the CHS Safety Management Program Manual are as follows:

- Section 1 Administrative Management
- Section 2 General Safety
- Section 3 Electrical and Equipment Safety
- Section 4 Life Safety/Fire Prevention
- Section 5 Hazardous Materials and Waste Management
- Section 6 Hazard Communication
- Section 7 Bloodborne Pathogens
- Section 8 Tuberculosis (TB) Plan
- Section 10 Emergency Management
The electronic document on Synapse serves to replace the paper copies of the Safety Management Program Manual formerly maintained in all departments. However, your department must maintain a hard copy of the Emergency Management section (Section 10.00) of the Safety manual. *Please refer to your Facility Specific Safety Management Program Manual if you are not yet utilizing the CHS Safety Management Program Manual.

CHS Policies
The information provided in the Safety Management Program Manual reflects policies and procedures which apply throughout CHS.

Facility-Specific Policies
CHS facilities may have facility specific safety policies which are customized by each facility. Questions regarding facility-specific policies should be directed to the respective facility’s Facility Safety Officer.

An Introduction to Injury Prevention
Knowing the most prevalent types of injuries, their causes, and the locations in which they are most likely to occur may help you avoid being injured on-the-job.

CHS Risk Profile
The majority of injuries that occur at CHS fall into the following categories:
   1. Slips, trips, and falls;
   2. Sharps injuries; and

Slips, Trips, and Falls
Employees frequently suffer injuries when they slip on wet floors or icy surfaces, trip over objects such as electrical cords and hospital carts, or fall because they are carrying heavy or bulky items.

Sharps Injuries
Sharps injuries are punctures or cuts to the skin caused by sharp objects, including needles, syringes (with or without an attached needle), scalpel blades, surgical wire, utility or razor blades, blood tubes, slides and cover slips, glass and rigid plastic pipettes, or broken glass.

CHS employees who have the highest frequency of on-the-job injuries related to sharps are:
   1. Nurses,
   2. Doctors, and
   3. Certified Nurse Aides (CNAs)
Nursing personnel, according to standard clinical practice, are responsible for sealing sharps containers that are 2/3 full and ready to be disposed of, and placing them with the biohazard waste to be picked up by Environmental Services. Nursing personnel are also responsible for immediately replacing the discarded container with a new one. Proper disposal of sharps helps reduce the number of accidental injuries to patients and CHS employees. If you work in areas where sharps are used, please take the necessary steps to ensure your personal safety and the safety of others.

**NOTE:**
- Notify your supervisor **immediately** if you encounter blood or other OPIM contaminated sharp objects which have not been disposed of in designated containers. **Only** employees appropriately trained in Bloodborne Pathogens specified practices and procedures are to dispose of the equipment and/or article.

**Strains**
The term “strain” is typically used to describe overexertion injuries, such as certain types of back injuries, carpal tunnel syndrome, and ankle sprains. Repetitive tasks and improper lifting techniques cause many of these injuries, which may lead to musculoskeletal disorders (MSDs). **MSDs** are disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels or spinal disks. MSDs often involve overuse of muscles, **repeated** strains of joints, or inflammation of tendons or tendon sheaths. **Cumulative Trauma Disorders (CTD)** are disorders of the musculoskeletal and nervous system due to motion, strong exertion, vibration, and mechanical pressure.

**Injury Prevention Tips**

**To help prevent Slips, Trips, and Falls...**
Some of the best ways to prevent slips, trips, and falls may include the following:
- Maintain a clean work area.
- When walking ensure your pathway is clear of debris.
- Close drawers after every use.
- Avoid bending, twisting, and leaning backwards while seated.
- Secure electrical cords and wires away from walkways.
- Always use an appropriate stepladder for overhead reaching.
- If you see objects on the floor, even a pen or a paper clip, **pick them up**!
- Clean up spills immediately. If the contents of the spill are unknown or hazardous do not attempt to clean the spill yourself. Contain the spill and notify your supervisor immediately.
- Report loose carpeting or damaged flooring to your supervisor.

**To help prevent Sharps injuries:**
Many sharps injuries may be avoided simply by following proper handling and disposal procedures. Place all sharps in designated containers found within your department. In addition, proper work technique and layout of workstations may reduce the likelihood of cuts and punctures during the handling and disposal of sharp objects.
Never...

- throw sharps into the regular trash or recycling containers;
- recap needles unless no alternative is feasible or recapping is required by a specific medical procedure. If recapping is necessary, use a recapping or re-sheathing device or a safe one-handed recapping technique, but never direct the needle toward you, the patient, or anyone else;
- force objects into a sharps container since doing so may cause a puncture in the wall of the container which increases the risk of injury for everyone. Instead, drop it in!
- cut, bend, or break needles;
- strike or shake sharps containers;
- place needles or other sharps on food trays, in bed linens, or in uniform pockets;
- leave sharps unattended, especially in patient care areas; or
- overfill sharps containers, and keep your fingers out of them. If a sharps container is more than 2/3 full, properly seal the container, place it with other biohazardous waste pending disposal, and replace the container with a new one, according to department and facility policy.

Always...

- use the proper size sharps container, matching it to the size of the sharps being disposed; and
- report all needle sticks and/or other sharp object injuries to your supervisor immediately, whether you think the object is contaminated or not. Complete the online **Report of Occupational Injury and Illness (ROII)**, according to the instructions, if injured on the job and call Employee Health immediately. Then, go directly to Employee Health for evaluation and treatment.

INJURY AND UNSAFE CONDITION REPORTING

**Steps to follow if you are injured** while working (other than by needle stick):
- Notify your supervisor.
- Complete the online **Report of Occupational Injury and Illness (ROII)**.
- If medical treatment is needed print off the Authorization for Treatment and take with you to your assigned treatment facility.
If the injury occurred because of a broken piece of equipment or a hazard in the workplace, take the hazard/equipment out of service, label it “DO NOT USE”, and remove from the work area. Do not manipulate any part of the equipment / product. Do not attempt to troubleshoot the equipment. Do not throw any of the pieces away. Save all the parts, and hold for Risk Management or Clinical Engineering to pick up.

**Steps to follow if a patient or visitor is injured:**
- If a patient or visitor is injured, notify a supervisor and complete the online Incident Report, according to the instructions.
- Offer assistance, if necessary.
- If a patient/visitor suffers major injuries, report this to the supervisor on duty, notify Risk Management, and fill out an Incident Report.
- If the injury is caused by a hazard in the workplace, including an equipment malfunction, remove the hazard, but do not throw away any broken or defective parts. Save all parts and retain for Risk Management or Clinical Engineering to pick up.

**Steps employees may take** to reduce the risk of injuries:
- Report unsafe conditions to your manager and/or the appropriate department manager where the condition exists.
- Contact your Facility Safety Officer or Corporate Safety (704-512-7283) to report unsafe conditions. The Employee Safety line is available to employees who would like to report a safety issue or concern:
  - By phone (704-355-SAFE or 704-355-7233); or
  - Online: Synapse/Reference/Corporate Safety/Contact Us

If you use the Employee Safety Line, please state your concern and location.

- Take immediate actions to prevent injury. Examples are removing broken equipment from service and keeping visitors and employees out of unsafe areas (i.e., wet floors).
- Talk about problem situations at department meetings.
- Discuss the situation with your department safety representative or Facility Safety Officer
- Encourage the Facility EC Safety Committee to discuss employee safety concerns
Follow correct policies and procedures at all times.

Hazard Communication

Hazard Communication Standard
The federal government passed a law to protect employees who work with materials that may be unsafe or harmful to their health. This is the U.S. Department of Labor Occupational Safety & Health Administration’s (OSHA) “Hazard Communication (HazCom) Standard” (29 CFR 1910.1200).

HazCom (also known as Right-to-Know) is an informational system that alerts employees to the dangers of exposure to chemicals in the workplace. Your health and safety depend on knowing the correct way to handle, store, transport, and dispose of chemicals. Understanding Right-to-Know information may help prevent injuries, serious illness, even death due to explosions, fire, or overexposure to chemicals.

FACT:
You may think you are not at risk because you work in a healthcare facility, instead of a chemical or manufacturing company. However, CHS currently uses over 10,000 chemical substances. Exposure to commonly used chemicals such as Cidex OPA, bleach, alcohol, hydrogen peroxide and cleaning solutions can be dangerous if used inappropriately.

Hazard Communication Program
The most important elements of an effective HazCom/Right-to-Know program include:
- Initial training for new employees regarding the proper handling, use, storage, transportation, and disposal of chemicals
- Annual refresher training for existing employees
- Training on any new class or type of chemical purchased
- Departmental chemical inventory
- Material Safety Data Sheets (MSDS) for each hazardous chemical in use in the work area
- Special procedures and supplies required for hazardous chemical emergencies and spill management
- Personal protective equipment (PPE) and safety measures required when using each type of chemical
- Written HazCom program, addressing specifics for each of the above elements

Refer to the Hazard Communication section of your department’s Safety Management Program Manual (SMPM) and the online version of the manual, available on “SYNAPSE”.
Your Responsibility
Your responsibilities, as contract staff, students, or volunteers, begin with familiarizing yourself with specific chemicals which will be used in your work area. Next, you must carefully read the important information on all chemical labels, MSDS, and educational materials provided during orientation, department / job specific education and subsequent annual refresher educational sessions if applicable, including this module. If you do not understand a feature of CHS’s HazCom/Right-To-Know, ask your supervisor or facility safety officer in the department or facility to which you are assigned.

Material Safety Data Sheet (MSDS) Information
An MSDS contains detailed written information prepared by the manufacturer, importer, or distributor and is designed to help protect you from overexposure to each chemical used in the workplace.

An MSDS should accompany all commercially prepared chemicals. In the event that an MSDS does not come with a particular chemical product, you should alert your supervisor. He/She will then contact the manufacturer or distributor to obtain one. An MSDS is good forever, as long as the following conditions exist:

- The chemical name does not change.
- The chemical composition does not change.
- The manufacturer does not change.
- The potential hazards posed by the chemical do not change.
- The MSDS itself remains legible. If faded, torn, or otherwise damaged, a new one must be obtained.

While the formats may vary, the MSDS for each hazardous material should contain details regarding the chemicals:

- product identity
- hazardous ingredients
- physical data
- fire and explosion hazard data
- health hazard data
- reactivity data
- spill or leak procedures
- special protection information (i.e. PPE)
- special precautions

A chemical inventory, or list of all hazardous materials in your department, and corresponding copies of MSDS are located in the departmental SMPM. Included in this manual is a section on the proper disposal of materials which are harmful to the environment, people, or property.
Chemical Warning Labels

Elements of Chemical Warning Labels
One very important component of most warning labels is a signal word indicating how hazardous the chemical is.

- "DANGER" means the chemical is very hazardous and that misuse or over exposure could prove deadly.
- "WARNING" and "CAUTION" statements are used to indicate somewhat less hazards; however, chemicals labeled "CAUTION" may be harmful to your health, if you do not follow proper procedures.

The National Fire Prevention Association (NFPA) provides a hazard and labeling system that rates chemicals on a scale of 0 (non-hazardous) to 4 (extremely hazardous) in three categories: health, flammability, and reactivity. A fourth category may be required to identify specific, unusual hazardous properties of the material.

NFPA hazard “Diamond”
Required Labeling
By law, chemical manufacturers must label all chemical containers leaving their facilities with the following information:

- Identity of the hazardous chemical(s)
- Name and address of the chemical manufacturer, importer, or other responsible party
- Appropriate hazard warnings

If you pour a commercially prepared chemical into another container, called a "secondary container", you must label the second container with the following information:

- Identity of the hazardous chemical(s)
- Appropriate hazard warnings* (e.g., “flammable”, “corrosive”, “causes Lung damage”)

Torn or Missing Labels

The most dangerous chemical is one without a label.

- Never handle a chemical unless you know what it is.
- If a label is missing, immediately tell your supervisor or their designee. He or she will identify the chemical and label it appropriately, or dispose of it, according to regulations, following analysis to determine general hazard class.

If a label is torn or damaged, it may lead to serious consequences. For example, the critical information you need to protect yourself may be torn off or illegible. Employees should replace the label immediately. Hazardous chemical labels are available through Carolinas HealthCare System Distribution Center (3”x4” label, Item #6700 and 6” x 6” label, Item #6701).

Chemical Storage and Transportation
Proper storage of chemicals is always a major concern. Improperly stored chemicals could react, forming hazardous products. In addition, individuals transporting chemicals must know the precautions to take to avoid or manage spillage of a chemical.

- Chemicals in storage and in use must be regularly monitored for proper labeling and conditions
- Do not store chemicals that are expired or no longer needed, properly dispose of unwanted chemicals
- Do not store chemicals above eye level
- Do not store chemicals on bench tops or under hoods, unless it is being stored temporarily for working chemicals or solutions
- Chemical storage areas must be neat, orderly, and clearly identified
Module for Contract Staff, Students, and Volunteers

- Use secondary containers, such as plastic bottle carriers, to transport glass containers of chemicals
- If transporting more than 500mL of a flammable or corrosive liquid, a bottle carrier must be used
- Never transport or store incompatible chemicals in the same secondary containment or in any way that might allow the chemicals to combine or react
- Containers must be properly sealed
- Appropriate PPE must be worn when handling chemicals

Mercury
Mercury spills require the use of a mercury spill kit. These kits may be obtained from the CHS Distribution Center and must be available in every department that uses mercury-containing devices, such as thermometers and blood pressure cuffs. Since there are many types of spill kits available, the directions for use should be reviewed before attempting to clean up a spill. Do not dispose of broken thermometers or spilled mercury in sharps, biohazardous, or regular waste containers. Do not use red bags, but double-bag the securely sealed used spill kit and dispose of it as hazardous waste, per departmental procedures.

Acids and Bases
Spills involving acids and bases require special consideration when cleaning them up. Acids and bases may react violently with water; therefore...

**WATER MUST NEVER BE USED TO CLEAN UP AN ACID OR BASE SPILL.**

Departments using acids and bases must have neutralizing solutions available in case of spills and staff must be trained, in advance, in their use. Corporate Safety may assist with the review of department specific procedures regarding spill management.

Flammable Materials
Flammable materials must be handled carefully when a spill occurs. Ignition sources, such as Bunsen burners, must be extinguished immediately. Flammable liquids give off a vapor that will ignite if they encounter an open flame. Absorb spilled chemical with a material, such as kitty litter or commercial absorbent, to contain the spill. Place the used materials in an appropriate hazardous waste container. Label as “waste” and specify the identity of the contents. Work with your supervisor or Hazardous Materials Coordinator to arrange for proper disposal.

Ethylene Oxide (ETO)
Hazardous materials may also come in the form of a gas. One of the most common gaseous hazardous materials in the healthcare setting is ethylene oxide (ETO). ETO is used to sterilize equipment that cannot be steam sterilized. ETO is colorless and odorless, even at dangerous levels, so it is difficult to know if it has been released. Since it is difficult to determine a release, most facilities have an ETO alarm in areas where it is used. If the alarm goes off, there are emergency procedures in place for
employees and others in the area to follow. These procedures are known as the ETO Emergency Action Plan. Employees who work with ETO should review this plan annually and become familiar with its directives.

Responding to a Chemical / Hazardous Material Spill

Read and understand your department spill clean up procedures BEFORE an emergency occurs!

There is always the possibility of accidentally spilling a hazardous material. If a spill occurs, the material must be cleaned up properly to ensure no harm occurs to the environment, humans, or property. One source of information for spill cleanup procedures is the MSDS. It will also provide telephone numbers to call, if additional assistance is needed. If you work with a chemical, make sure you know where your departmental MSDS are located (usually located in the SMPM or in a specific notebook in your department).

For a chemical spill, notify your supervisor immediately. Clean up the spill yourself, only if you have proper training and are wearing the proper PPE.

Personnel working with the hazardous material when a spill occurs are expected to contain and clean up the spill, as long as:

- The identity of the spilled material is known;
- Staff are familiar with the substance;
- The quantity of the spilled material is manageable;
- Staff are familiar with spill management procedures for the material; and
- Appropriate PPE and spill management supplies are available.

If any of the above criteria are not met (i.e. spill is too large to manage safely, spilled material is extremely dangerous, or the identity of the spilled material is unknown), an employee must contact his or her supervisor or designee immediately and follow the facility’s internal disaster plan for a “Code Orange”.

Facilities do NOT have spill response teams. CHS calls an emergency spill response contractor if needed.

Do not contact the Environmental Services Department to perform initial spill cleanup. Instead, Environmental Services should be contacted, once the spill has been cleaned up, and only general housekeeping services are required to return the area to normal, working condition.
Use of Personal Protective Equipment for Spills
Most chemical spills require the use of PPE to ensure employees, contract staff, or students are not exposed to hazardous materials. Departments must maintain appropriate PPE for both routine use and for dealing with chemical spills. The proper PPE for cleaning up hazardous materials spills include, but are not limited to, chemical goggles and chemical resistant gloves. Although they are used throughout the healthcare setting, latex exam gloves offer limited chemical protection. To determine what type of gloves should be used, consult the MSDS or ask your supervisor.

Many MSDS may also specify the use of respirators when cleaning up a spill, particularly a large spill. **Respirators used for protection from airborne infectious diseases (TB, SARS, etc.) are NOT to be used for chemical protection.** If spill response requires a chemical respirator, contact your supervisor or designee immediately and follow the facility's internal disaster plan for a “Code Orange”. Additionally, make sure you have adequate ventilation when using chemicals or cleaning up a spill. Contact Maintenance with questions regarding ventilation before an “emergency” occurs.

Hazard Assessment
Hazard assessments are completed for job assignments or tasks which present a potential hazard. Based upon the assessment, appropriate PPE will be required. If you need assistance with PPE selection, or you experience problems with the performance of PPE provided, contact your supervisor or Corporate Safety.

Completing the online Report of Occupational Injury and Illness (ROII)
After a chemical spill has been properly cleaned up, employees and other healthcare workers must consult with their supervisor regarding any necessary incident or exposure documentation (i.e. “Incident Report” or “Report of Occupational Injury and Illness”). Employees needing medical attention must complete the online Report of Occupational Injury and Illness (ROII). If you are suffering from exposure to a material, seek assistance from the Emergency Department or an urgent care center immediately.

Disposal of Hazardous Wastes
For questions concerning the proper disposal of a hazardous material, consult the material's MSDS, the CHS Waste Disposal Guide (available on Synapse), your supervisor, or Facility Hazardous Materials Coordinator.

More specific information about hazardous waste can be found in the ACE module - Hazardous Materials: Hazardous Waste Management.

CHS facilities produce several types of waste materials (“waste streams”).

- Disposable sharps
- General waste
- Radioactive waste
- Multi-hazard or mixed waste
Module for Contract Staff, Students, and Volunteers

- Infectious waste
- Hazardous chemical waste
- Chemotherapeutic/cytotoxic waste
- Batteries
- Mercury-containing devices

Most of these waste streams are not “hazardous wastes”, but certainly are regulated. If you are unsure of the classification of a waste (i.e. hazardous versus non-hazardous), store the waste material in an appropriate container and contact your supervisor, Facility Hazardous Materials Coordinator, or Corporate Safety as soon as possible.

**Awareness is the most important point of this section!**

- **Infant Abduction**

Healthcare providers must understand the dynamics of hospital abductions to help prevent them.

**Incidence**

*From 1983 - 2011, there have been 278 reported newborn/infant (birth to 6 months) abductions by non-family members (not parent or legal guardians). 128 or 46% of these have occurred from healthcare facilities, 112 or 40% occurred from homes, and 38 or 14% occurred from other places. Of the 278 abductions, 5 occurred in North Carolina with 3 of these from healthcare facilities.*

**Of the 128 that occurred from a healthcare facility:**
- 74 were taking from the Mother's room (10 involved violence to the Mother/care-giver)
- 17 were taking from the Nursery (2 involved violence to RNs)
- 17 were taking from Pediatrics (0 involved violence)
- 20 were taking “On premises” (8 involved violence)

*The September 2011 Report shows an introduction to violence against Mother/care-givers as the January 2009 Report showed no use of violence (or attempts) against mothers within healthcare facilities. However, there had been several cases where assault and battery had occurred against nursing staff members during abduction attempts and abductions. In addition there is clear evidence of increasing violence by abductors when the abductions move outside of the healthcare setting.*

**Abductor Profile**

This “typical abductor” profile, while considered accurate by many Law Enforcement agencies, should not be considered the only profile of a potential abductor. Anyone, including persons not fitting this general profile, could be involved in an infant abduction.
Use the proper precautions when dealing with all visitors, patients, and staff members in an infant or pediatric healthcare setting.

Most abductors fit this profile (developed from an analysis of 278 cases occurring 1983 – 2011):

1. Female of “childbearing” age (range now 12 to 53), often overweight.
2. Most likely compulsive; most often relies on manipulation, lying, and deception.
3. Frequently indicates she has lost a baby or is incapable of having one.
4. Often married or cohabitating; companion’s desire for a child or the abductor’s desire to provide her companion with “his” child may be the motivation for the abduction.
5. Usually lives in the community where the abduction takes place.
6. Frequently initially visits nursery and maternity units at more than one healthcare facility prior to the abduction; asks detailed questions about procedures and the maternity floor layout; frequently uses a fire-exit stairwell for her escape; and may also try to abduct from the home setting.
7. Usually plans the abduction, but does not necessarily target a specific infant; frequently seizes any opportunity present.
8. Frequently impersonates a nurse or other allied healthcare personnel.
9. Often becomes familiar with healthcare staff members, staff members work routines, and victim parents.
10. Demonstrates a capability to provide “good” care to the baby once the abduction occurs.

In addition an abductor who abducts from the home setting

11. Is more likely to be single while claiming to have a partner.
12. Often targets a mother whom she may find by visiting healthcare facilities and tries to meet the target family.
13. Often both plans the abduction and brings a weapon, although the weapon may not be used.
14. Often impersonates a healthcare or social-services professional when visiting the home.

Common Methods of Abduction

An individual who abducts a newborn may:

- Pretend to be a healthcare or social worker, enter the mother’s room, and give a medical reason for taking the baby to the nursery, (nearly 57% are taken from mother’s room), or
- Take the baby from the nursery when nursery staff is not in the immediate area.

Code Pink

CHS uses the term “Code Pink” to announce that a suspected infant abduction has occurred. To initiate a Code Pink, employees should call the hospital switchboard and report the abduction. The employee must give his or her name and unit.
Module for Contract Staff, Students, and Volunteers

Staff Responsibilities

Although CHS newborn areas are protected by technology safeguards (baby tags also known as the Hugs system), staff members are the most critical component to prevention and response.

If an infant abduction occurs, **RAPID RESPONSE IS CRITICAL.**

- Commence specific **duties** listed in your department’s **Infant Abduction Plan**.
- Staff must go to the nearest elevator(s), and push the button to call the elevator to the floor in order to observe who is in it and to prevent an abductor from using the elevator. **Release the elevator after checking.**
  - Staff should remain at the elevator until the Code Pink is cancelled, or
- Post at perimeter doors to look for possible suspects, or
- Head to a window if that window provides a view of building exit(s), sidewalks or parking areas, and look for possible suspects/vehicles.

Abduction Prevention

When entering or leaving security sensitive areas (such as the Maternity Department or Nursery areas), monitor the immediate area as you leave/enter and confront anyone who does not have authorized access and offer assistance.

No one should be transporting a baby unless they have a special, color-coded CHS ID badge. (Typically, either a pink border around the employee’s picture or similar variation to indicate their specialized department status).

If you see an unidentified individual in scrubs, a white lab coat, or an oversized coat, and/or the individual is carrying a large bag, ask to see his/her CHS identification badge (including temporary staff and construction workers, etc.).

- If he/she refuses, do not try to detain the individual.
- Direct the person to leave through the main lobby or employee entrance.
- Call CHS Security immediately on 704-355-3333.
- Give a complete description of the person, including the last direction of travel.

If you do not feel the person should be approached, call Security immediately and give a physical description and last known direction of travel.

**Remember - Be Alert!**

- Infants are to be transported in **bassinets only! Infants are never carried.**
- If a bassinet is seen anywhere with or without an infant, immediately call Security (704-355-3333). Provide security the alphabet lettering on the shelf of the crib. Stay with the bassinet until staff/security arrives.
- **Please note:** Young children are also at risk, so be alert in pediatric areas as well.
Infection Prevention

Who Should Be Concerned about Infection?

Everyday, people are exposed to germs that may make them sick. People who work in healthcare, such as: nurses, laboratory technologists, and environmental service workers, have a greater risk of exposure in the workplace.

Patients may also be exposed to germs found in healthcare facilities. When a patient gets an infection while in a healthcare facility, it is called a healthcare associated infection (HAI).

People working in healthcare facilities frequently have questions about preventing the spread of infection between staff and patients. Many of these questions will be answered in this module.

What does Infection Prevention mean?

Infection Prevention means preventing healthcare associated infections and reducing the likelihood employees, patients, or visitors will be exposed to germs in a healthcare facility. Education should be provided to all staff, students, and volunteers and to the patient regarding the reasons for isolation and the importance of preventing the spread of infection. All such education should be documented.

Where can I learn more?

Your supervisor and/or preceptor reviews basic infection control principles with you during your departmental orientation. If you have questions about specific departmental or area infection control measures, or high-risk patients or procedures, be sure to ask about these issues before beginning work.

Additional resources include:

- Exposure control plans (Sections 7.00 and 8.00, Safety Management Program Manual)
- Infection prevention Manual – available on Synapse
- Departmental policies and procedures
- Infection Control Preventionist in your facility
- Employee Health
- Corporate Safety
What is my role in Infection Prevention?

- **Stay healthy**
  It is very important for you to stay healthy, so you do not infect anyone with germs that may make them sick. If you become sick with an infectious illness, such as a bad cold or pink eye, stay home so you do not infect others.

- **Help keep others healthy**
  Many diseases are easily spread to others, and some people are very susceptible to germs. Some germs are much harder to contain or kill than others. In these difficult situations, special precautions must be used.

  Routine measures that may help protect you and your patients include:

  - Performing hand hygiene according to approved guidelines
  - Using **Standard Precautions** for patient care
  - Using **Transmission-Based Precautions** when needed

### Hand Hygiene

**Who?**
Everyone is responsible for performing proper hand hygiene.

**What?**
In most settings a liquid soap is provided at each sink and an alcohol based hand rub is provided in each clinical setting.

**When?**
People who work in healthcare facilities should perform hand hygiene often.

**Wash your hands with soap and water:**
- After personal activities such as using the restroom, sneezing, or blowing your nose.
- Before preparing and/or serving food.
- When your hands are visibly dirty.

**Use an alcohol based hand rub:**
- Before and after having direct contact with the patient or their environment.
- Before donning sterile gloves for performing an invasive procedure such as inserting a central intravascular catheter.
- Before inserting any invasive device such as an indwelling catheter, peripheral vascular catheter, or any other device which does not require a surgical procedure.
- After contact with body fluids or excretions, mucus membranes, non-intact skin, and wound dressings if hands are not visibly soiled.
• When moving from a contaminated body site to a clean body site during patient care.
• After contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient.
• After removing gloves.
• Before leaving the job site.
• After washing your hands with soap and water when they have been contaminated with proteinaceous material or blood or body fluids.

How?
The steps to use to wash your hands with soap and water include:

1. Rinse hands, from fingertips to wrist, under warm running water.
2. Spread soap on your hands using circular motion for at least 15 seconds making sure to clean between fingers.
3. Rinse hands thoroughly under running water.
4. Use a paper towel to blot your hands dry. Turn off the faucet using a clean paper towel to prevent contaminating your hands.

The steps to use an alcohol based hand rub are:

1. Place a small amount (golf ball size) of foam in the palm of your hand.
2. Rub together all surfaces of your hands vigorously for 10 – 15 seconds until dry.

Artificial nails have been implicated in the transmission of infection. All healthcare workers providing direct patient care are restricted from wearing artificial nails.

Standard Precautions

Many people carry bloodborne infections without even knowing it, so it is difficult to identify patients who may transmit infection.

Standard Precautions requires you to treat all human blood and body fluids as if they are infected with a bloodborne pathogen.

Use Standard Precautions to Protect Yourself from Exposure to Blood and Body Fluids.

Treat all blood and other body substances as if they could spread infection.

• Dress for the occasion! Depending on the task, use appropriate PPE including:
Module for Contract Staff, Students, and Volunteers

- gowns and/or aprons
- masks and/or face shields or NIOSH-approved respirators
- eye wear such as special glasses, goggles, or face shields
- gloves

**Standard Precautions away from Work**

You should always practice **Standard Precautions** as a way to protect yourself and others. If you are exposed to blood or other body fluids when you are away from work, assume there is a possibility of contact with a bloodborne pathogen.

Protect yourself by:
- Using barriers. If an unexpected or emergency situation occurs, use whatever protection you can find to create a barrier between yourself and the possible source of infection. Examples of barriers may include a towel, clothing, plastic bag, or newspapers.
- Washing your hands according to the previously described guidelines.
- If you are exposed to human blood or body fluids outside of work, call your personal doctor for follow-up instructions.

**Transmission Based Precautions**

Transmission Based Precautions mean the patient has an illness that may not be contained by using Standard Precautions alone. Additional control measures are needed to prevent the spread of infection. Transmission Based Precautions are often referred to as **Isolation**.

Acute care facilities will identify special precautions by placing a sign outside the patient room.

**Examples of Signs**

![Signs Diagram](image)

There are six Isolation categories.

- Airborne
• Airborne NIOSH-Approved Respirator Required
• Droplet
• Contact
• Highly Resistant MDRO
• Protective Environment

Isolation policies are located in the Infection Prevention Manual on Synapse and/or the individual department/facility policy manuals.

The Transmission Based Precaution policy includes additional information on the different isolation categories. The policy, “Diseases-conditions requiring Transmission Based Precautions” lists all possible infections alphabetically, the type of isolation required for each infection, the length of time a patient should remain on isolation, and other special considerations.

Patients with suspected or known communicable diseases must not wait in common areas and must be placed on isolation as soon as the infection is suspected.

Airborne Precautions

Airborne Precautions means the patient may have an infectious disease that may be spread through the air.

Conditions associated with Airborne transmission:

• Chickenpox
• Measles
• Disseminated shingles
• Shingles in an immunocompromised patient

Special considerations:

• Place patient in a negative pressure room.
• In inpatient facilities without negative air-flow rooms, place a mask on the patient and transfer to a facility with negative air-flow rooms.
• In an ambulatory clinic setting, the patient must wear a surgical mask and be placed in a private room with the door closed.
• Keep patient’s door and windows closed at all times to maintain negative airflow.
• Healthcare workers with a negative history for chickenpox must wear a surgical mask when entering the room or avoid contact with patients diagnosed with chickenpox or disseminated shingles.
• Dispose of the mask immediately after leaving the room.
• When appropriate, consider varicella immunization.
• Place surgical mask on patient when transporting through facility.
• Notify the receiving department prior to transporting the patient.
• Minimize the need for the patient to be transported within the facilities by performing procedures in the patient’s room whenever possible.

**Airborne Precautions - NIOSH Approved Respirator Required**

"Airborne Precautions NIOSH-Approved Respirator Required" means the patient may have active tuberculosis of the lung or respiratory tract, smallpox, SARS, or Avian influenza.

**Special Considerations:**

• Place patient in a negative pressure room.
• In inpatient facilities without negative air-flow rooms, place a mask on the patient and transfer to a facility with negative air-flow rooms.
• In an ambulatory clinic setting, the patient must wear a surgical mask and be placed in a private room with the door closed.
• Keep patient’s door and windows closed at all times to maintain negative pressure in room.
• Personnel must wear NIOSH-approved respirators. These respirators require FIT TESTING. The respirator is not removed until the staff person or visitor leaves the room.
• Place surgical mask on the patient when transporting within facility.
• Minimize the need for the patient to be transported within the facility by performing procedures within the room.
• Notify the receiving department prior to transporting the patient.
• Isolation for tuberculosis may be discontinued by a physician following three AFB negative sputums and positive response to therapy.
• SARS and smallpox will require both Contact and Airborne-NIOSH precautions.

**Droplet Precautions**

**Droplet Precautions** means a patient may have an infectious disease that is spread by droplets in the air when the patient coughs, sneezes, or talks.

**Common conditions associated with Droplet transmission:**

• Influenza
• Mumps
• Bacterial meningitis
• Strep throat
• Pertussis (whooping cough)

**Special considerations:**

• Healthcare personnel wear a surgical mask when within three feet of patient.
• Place surgical mask on patient while transporting through the facility.
• Notify the receiving department when transporting the patient.
• Make sure the patient is in a private room. A negative airflow room is not required.
• Patient door may remain open.

Contact Precautions

Contact Precautions means a patient may have a germ that may be spread by the hands of workers or visitors. These germs may be spread by touching the patient or his belongings, equipment, etc.

Common conditions associated with Contact transmission:
• MRSA (Methicillin Resistant Staph aureus)
• VRE (Vancomycin Resistant Enterococcus)
• Chicken pox
• Shingles
• RSV (Respiratory Syncytial Virus)
• Lice
• Scabies
• Clostridium difficile (antibiotic-associated diarrhea)
• Multi-drug resistant organisms
• Viral pneumonia (SARS)
• Smallpox

Special considerations:
• Gloves required to enter room.
• Gowns are worn with any physical examination of the patient. This includes physical assessment, dressing changes, feeding the patient, IM injections, blood draws, etc.
• Visitors must wash their hands upon entering and before leaving the room.
• Instruct visitors to wear gloves throughout the visit.
• Assist patient with hand washing.
• The following patient dedicated equipment must be kept in patient's room:
  o disposable thermometer
  o disposable blood pressure cuff
  o disposable stethoscope

  Note: If disposable equipment is not available, use a barrier between the patient and equipment. Clean the equipment after use with an appropriate disinfectant.
• At discharge, discard thermometer, blood pressure cuff, and stethoscope.
• Placement of a patient on Contact Precautions in a private room is optimal. When a private room is not available, cohorting of patients with the same microorganism is appropriate. Consult with Infection Control for difficult triage situations.
• Educate family member about contact precautions at home.
• Notify the receiving department when transporting the patient.
MRSA and VRE

What is MRSA?

*Staphylococcus aureus* or “*Staph*” is a very common germ that about 1 out of every 3 people has on their skin or in their nose. This germ does not cause any problems for most people who have it on their skin. But sometimes it can cause serious infections such as skin or wound infections, pneumonia, or infections of the blood. Antibiotics are given to kill *Staph* germs when they cause infections. Some *Staph* are resistant, meaning they cannot be killed by some antibiotics. “Methicillin Resistant *Staphylococcus Aureus*” or “MRSA” is a type of *Staph* that is resistant to some of the antibiotics that are often used to treat *Staph* infections.

Who is most likely to get an MRSA infection?

In the hospital, people who are more likely to get an MRSA infection are people who:

- Have other health conditions making them sick.
- Have been in the hospital or a nursing home.
- Have been treated with antibiotics.

People who are healthy and who have not been in the hospital or a nursing home can also get MRSA infections. These infections usually involve the skin. This type of MRSA infection is known as “Community-Associated MRSA” (CA-MRSA) infection.

People who have MRSA germs on their skin or who are infected with MRSA may be able to spread the germ to other people. MRSA can be passed on to bed linens, bed rails, bathroom fixtures, and medical equipment. It can spread to other people on contaminated equipment and on the hands of doctors, nurses, other healthcare providers and visitors.

Use **Contact Precautions** when caring for patients with MRSA.

What is VRE?

*Enterococcus* is a germ that lives in the digestive tract of people. Vancomycin is an antibiotic, and *Enterococcus* is a germ that is sometimes resistant to vancomycin. Resistant means that the germ is not killed by vancomycin, which is commonly used to treat it. VRE stands for “Vancomycin Resistant Enterococcus.”

Who is most likely to get VRE?

In the hospital, people who are more likely to get VRE are people who:

- Have other health conditions making them sick.
- Have been in the hospital frequently or in the Intensive Care Unit.
• Have been in a nursing home.
• Have been treated with many antibiotics.

Healthy people are usually not at risk of getting VRE.

Where is VRE found?

VRE is usually found in the stool. It can also be present in urine, or other areas of the body. It can cause infections, but most people are just “carrying” the germ and do not need any special treatment. VRE may also be found on surfaces in hospital rooms near patients with VRE, especially if the patient has loose stools or can’t control their bowels.

Use Contact Precautions when caring for patients with VRE.

Clostridium Difficile

What is Clostridium difficile infection?

Clostridium difficile, also known as “C. diff”, is a germ that can cause diarrhea. Most cases of C. diff infection occur in patients taking antibiotics. The most common symptoms of a C. diff infection include:
• Watery diarrhea
• Fever
• Loss of appetite
• Nausea
• Belly pain and tenderness

Who is most likely to get C. diff infection?

The elderly and people with certain medical problems have the greatest chance of getting C. diff. C. diff spores can live outside the human body for a very long time and may be found on things in the environment such as bed linens, bed rails, bathroom fixtures, and medical equipment. C. diff infection can spread from person-to-person on contaminated equipment and on the hands of doctors, nurses, other healthcare providers and visitors.

Can C. diff be treated?

There are antibiotics that can be used to treat C. diff. In some severe cases, a person might have to have surgery to remove the infected part of the intestines. This surgery is needed in only 1 or 2 out of every 100 persons with C. diff.

What can be done to prevent C. diff infections?

To prevent C. diff infections, healthcare providers should:
• Clean their hands with soap and water or an alcohol based hand rub before and after caring for every patient. This can prevent C. diff and other germs from being passed from one patient to another on their hands.
• Carefully clean hospital rooms and medical equipment that have been used for patients with C. diff.
• Use Contact Precautions to prevent C. diff from spreading to other patients.

What happens if there is an outbreak or cluster of C. diff infections on a hospital unit?

In the event of an outbreak or cluster of C. diff infections:
• Hand hygiene will be performed using soap and water instead of using the alcohol hand rub (as the primary means of hand disinfection).
• A special sign reminding health care providers to use soap and water for hand hygiene (in addition to following Contact Precautions) will be posted in the patient room.
• All routine environmental cleaning, excluding floors, is done using a 1:10 dilution of bleach and water.

Highly Resistant MDRO Precautions

Highly Resistant MDRO Precautions means a patient is infected or colonized with an organism that is susceptible to two or fewer antibiotics. These germs may be spread by touching the patient or his belongings, equipment, etc.

Special considerations:
• Gloves and gown required to enter room.
• Visitors must wash their hands upon entering and before leaving the room.
• Instruct visitors to wear gloves and gown throughout the visit.
• The following patient dedicated equipment must be kept in patient’s room:
  o disposable thermometer
  o disposable blood pressure cuff
  o disposable stethoscope

  Note: If preference is to use a personal stethoscope, clean with alcohol foam or an EPA approved hospital disinfectant prior to leaving patient room.
• At discharge, discard thermometer, blood pressure cuff, and stethoscope.
• Placement of a patient on Highly Resistant MDRO Precautions in a private room is required.
• Notify the receiving department when transporting patient.
• Patients on Highly Resistant MDRO Precautions will remain on isolation for the duration of their hospitalization and also for subsequent readmissions.
Protective Environment

*Protective environment is used for* patients with decreased ability to fight infection who may be easily infected.

**High risk patients may include:**

- premature babies
- HIV patients
- people with diabetes
- chemotherapy or radiation therapy patients
- the elderly
- patients taking steroids for a long time
- transplant patients

**Special considerations:**

- The following patient dedicated equipment should be used:
  - disposable thermometer
  - disposable blood pressure cuff
  - disposable stethoscope

  **Note:** If disposable equipment is not available, use a barrier between the patient and the equipment. Before and after use of equipment, clean with appropriate disinfectant.

- Screen visitors or ask patient to receive only healthy visitors.
- Caregivers who participate in the care of the immunocompromised patient must be healthy (free of colds, etc.).
- Use a private room, if available.
- Minimize travel through the facility to other departments.
- Consider no live plants, cut flowers, or fresh fruit in the room.

Transmission Based Precautions

**When isolation is ordered,** nursing personnel must do the following:

- Place the appropriate sign outside the patient's door. A patient may be on more than one category of isolation.
- In acute care facilities, enter the isolation category in the computer. This will help to alert receiving departments who will not see a sign on the patient's door and risk possible exposure.
- Notify receiving departments when transporting a patient on Transmission Based Precautions, so all employees may be protected, and contagious patients are not placed in waiting rooms.
• Explain the reason for isolation and how to prevent the spread of infection to others.
• Document all training.

To discontinue precautions for a patient with MRSA:
• Obtain an MD order for “nares swab for MRSA culture”
• Patient must be off appropriate antibiotics for at least 48 hours prior to culture
  o Adults – one negative culture required to clear patient
  o Pediatrics – weekly negative cultures x 3 to clear patient
  o Neonates – once positive for MRSA, must remain on Contact Precautions
• Lingering MRSA is most often found in the nares

To discontinue precautions for a patient with VRE:
• Obtain an MD order for “stool specimen or rectal swab to rule out VRE”
• Patient must be off appropriate antibiotics for at least 48 hours prior to culture
• One negative culture required to clear patient (adult, pediatric, and neonate)
• Lingering VRE is most often found in the stool

If a patient is on Contact Precautions for MRSA or VRE at discharge, the medical record will be flagged by Infection Control.

If that patient is re-admitted, the patient will immediately be placed on Contact Precautions. Follow instructions above to obtain cultures for discontinuing isolation.

Reporting Communicable Diseases

Physicians are responsible for notifying the county health department of reportable communicable diseases. This can be done by phone or by completing the communicable disease report form. Report forms are available on the physician portal on Synapse and the Infection Control webpage. The reporting of communicable diseases should not be delayed for laboratory confirmation when a reportable disease is suspected. Physicians may request assistance with reporting from the Department of Infection Prevention at 704-355-2459.

The following are examples of reportable communicable diseases:
• Whooping Cough (pertussis)
• Tuberculosis
• Meningococcal Disease
• Salmonella
• Shigellosis
• Hemolytic Uremic Syndrome (HUS)

Use of Equipment and Supplies

Items used for patient care must be clean and, in some cases, sterile. When using any equipment, supplies, or products:
• Make sure the package has no holes, tears, or small openings.
• Check for an expiration date (if applicable). Do not use expired products.
• Do not use an item if it is damaged, wet, or soiled, or if the packaging is damaged, wet, or soiled.
• Keep clean equipment and supplies separate from used equipment and supplies.
• Do not use one patient's supplies or equipment for another patient; this action may transfer germs and cause infection.
• Discuss the proper cleaning of equipment in unit meetings to make sure everyone follows policy/procedures.

**Infection Prevention and Construction**

It is important to prevent and control infections that could be caused by construction or renovation projects. The dust that occurs during construction can contain spores. Aspergillus is a type of fungal spore found in dust. Fungal spores may be harmful to some people.

**Aspergillus**

• Is a fungus (mold) that occurs in nature
• Can be found in decaying leaves, plaster and drywall and settled dust.

**Who may be harmed by aspergillus and other fungus?**

• Premature babies
• Transplant patients
• Cancer patients
• Immunocompromised patients

One way to control dust during construction is through the use of barriers. It is important to maintain the integrity of these barriers by keeping doors or barriers closed and not walking through construction areas.

**Moisture Management**

Molds occur all around us in nature. The presence of mold does not necessarily create a hazard. Mold does not adversely affect the health of all individuals. Pre-existing health conditions, such as allergies, can be exacerbated or aggravated by the presence of molds. This is the most common response to mold. Molds can cause serious infections in people who are immunocompromised, such as those with cancer, organ transplants, AIDS, or on steroid type medications.

To grow, molds need:
1) Oxygen  
2) Food (organic material)  
3) Water  

We cannot control the first two factors, but we can control factor #3. Mold growth can occur within 48 hours of a water leak or moisture accumulation.

**What should you do when you find water leaks, water damage or mold?**

- Clean-up spills or leaks promptly  
- **Notify the call center at 704-446-6161 or 866-446-6161**  
- Report these promptly to your supervisor, maintenance or property manager, or your safety officer.  
- Assist as needed with drying and repairs to prevent the growth of mold.  
- Avoid disturbing the mold – do not pull wallpaper back, or lift ceiling tiles. This may release thousands of mold spores.

**Should I come to work if I am sick?**

Some infections may be readily transmitted to patients, family members, and others. If you suspect you have an infection or have been exposed to an infection or infectious illness, call Employee Health before coming to work. The following are examples of infectious illnesses or exposures employees report to Employee Health:

- Conjunctivitis (pink eye)  
- Viral hepatitis  
- Herpes Whitlow (herpes of the fingers)  
- HIV  
- Meningococcal meningitis  
- Varicella (chicken pox)  
- Pertussis (whooping cough)  
- Tuberculosis (TB)  
- Salmonella  
- Shigella  
- Influenza

**Health Screening**

Employee Health will assess the health of our employees to make sure they are not infectious to others. Your supervisor may help if you are ill. **Remember!** You may do more harm than good if you do not have your own illness checked or treated. You may place patients, co-workers, and family members at risk of catching your illness.
To avoid becoming ill, take the following precautions:

- keep immunizations up-to-date
- maintain a healthy lifestyle
- exercise
- eat fruits and vegetables
- practice good personal hygiene

➢ Compressed Medical and Industrial Gases

Definitions
Gases stored under pressure in cylinders are called **compressed gases**. These include oxygen, nitrous oxide, and other gases. The gas comes out of the tank through a regulator to reduce and control the pressure of the discharged gas.

1. **Cryogenic gas** - A gas with a boiling point below minus 150 degrees F is usually considered a cryogen.

2. **Industrial gas** - Industrial gases are produced to varying degrees of purity. Industrial gases include oxygen, nitrogen, argon, carbon dioxide, helium, hydrogen, and numerous others.

3. **Medical gas** - Medical gases are produced to strict levels of purity.
   A medical gas is manufactured in accordance with the FDA's current Good Manufacturing Practice (cGMP), and is listed in the US Pharmacopoeia (USP) or the National Formulary (NF).

**Note**: Carbon dioxide, which has a boiling point of minus 109º F, is not considered a cryogen; however, its low temperature hazards are similar to a true cryogen.

Key Points
Cylinders must be constructed, tested, and maintained in accordance with the US Department of Transportation and FDA specifications and regulations.

1. Manufacturers/suppliers must identify contents by attached labels or stencils naming the components and stating the proportions.
2. Users must identify contents by reading the labels before use. Labels must not be defaced, altered, or removed. Labels must be legible.
3. Users must make sure the threads or pins on the regulator-to-cylinder valve connections are properly mated.
4. Connections are designed with one of **two different types of safety systems**:  
   a. **Pin Index Safety Systems OR**
b. **Diameter Index Safety Systems.**

5. **Never** force connections that do not fit, and **never** change adapters to force them to fit.

**Hazards**

If a cylinder without a valve protection cap falls, the cylinder valve could break off. Depending on cylinder size, quantity of gas within the cylinder, and the size of the break, the cylinder could be propelled rapidly and/or violently after landing on the floor. This may cause the damaged cylinder to act as a missile or projectile. It may be so forceful that it may actually go through a concrete wall causing injuries and/or property damage.

Carefully review the following safe practices presented in this module for:

- Handling Cylinders
- Using Gases
- Moving Cylinders
- Transporting Gases
- Storing Cylinders
- Non-Interchangeable Connectors

**Safe Practices for Handling**

1. Never permit oil, grease, or other readily combustible substances to come in contact with cylinders, valves, regulators, gauges, hoses, and fittings. Oil combined with certain gases such as oxygen or nitrous oxide may create explosive violence.
   
   a. Do not handle cylinders or apparatus with oily hands or oily gloves.
   
   b. Do not lubricate any part of a compressed gas cylinder with oil or any other combustible.

2. Keep connections to piping, regulators, and other appliances tight to prevent leakage. Keep apparatus connections in good condition.

3. Identify the contents of a compressed gas cylinder or cryogenic liquid before handling the cylinder or connecting it to a system. Discharging a gas or cryogenic liquid into a system not intended for the material could cause a fire, explosion, equipment failure, gas leak or other hazard resulting in serious or fatal injury.

4. Sparks and flames shall be kept away from cylinders.

5. Do not subject any part of any compressed gas cylinder to a temperature above **125 degrees Fahrenheit** or to artificially created low temperatures.

   > Do not place cylinders where they might become part of an electric circuit.
   > The cylinder valve shall be opened slowly, with the face of the indicator on the regulator pointed away from all persons.
   > The cylinder valve must be fully **open** when the cylinder is in use. Valves are to be closed at all times, except when gas is actually being used.

6. Identify the contents on the label before use. If not identified, return to the supplier without using.
7. Before placing cylinders into service, remove any paper wrapping so the label is visible.
8. Do not deface or remove any markings used for identification.
9. A cylinder shall never be draped with any materials such as hospital gowns, masks, or caps.
10. When replacing or returning an empty cylinder, close the valve and before shipping replace valve protective caps or plugs, if used.
11. Never bleed a cylinder completely empty; leave some residual pressure.
12. Only the supplier may perform repairs, alterations, refilling, and repainting of cylinders.
13. Notify gas supplier if any abnormal condition occurs that might allow any foreign substance to enter the cylinder or valve. Give details and serial number to supplier.
14. Only experienced and properly instructed persons may handle compressed gases.

**Safe Practices for Moving Cylinders**

1. Use only approved carts, handtrucks, and appropriate holders when moving cylinders.
2. When moving cylinders keep caps on cylinders where caps are provided for valve protection.
3. Never drop cylinders or permit them to strike each other.
4. Avoid dragging or sliding cylinders. It is safer to move large cylinders with a suitable approved handtruck, ensuring the cylinder is restrained with a chain, strap, or hook.
5. Never use the cylinder valve as a handle.

**Safe Practices for Storing and Labeling Cylinders**

The following are important general recommendations for storage and labeling:

1. Store cylinders in an approved location that is secure and accessible only to authorized personnel. Protect cylinders against tampering by unauthorized individuals.
2. Store empty cylinders in a separate area from full cylinders, and label areas appropriately.
3. Storage rooms must be dry, cool, and well ventilated.
4. Protect cylinders from excessive increases in temperature. Do not store cylinders near radiators or other sources of heat.
5. Do not store cylinders near flammable substances such as oil, gasoline, waste, and similar substances. Keep sparks and flame away.
6. Store all cylinders in an upright position and restrained from being knocked over and damaged. Using storage bins, chains, straps, and hooks will help prevent accidents.
7. NEVER use cylinders as a support, doorstop, or a coat rack.

**Safe Practices for Connecting Cylinders**

Before attempting to connect a cylinder to a system, be certain of the following:

1. Personnel using the cylinder are trained and knowledgeable regarding the product, cylinder, fittings, equipment, and proper connection procedures.
2. The cylinder is clearly and properly labeled with the identification of the contents, and there are no conflicting markings, labels, or coloring. *Do not rely solely on the color of the cylinder to identify the contents.* If there is any conflict or doubt about the contents, do not use the cylinder.
3. Make sure the contents are the correct product for use in the system.
4. The connection(s) on the cylinder and the system must fit together properly, without being too loose or too tight. A proper connection will go together smoothly. Do not use adapters or excessive force.

**Safe Practices for Using Gases**

The release of high-pressure gas may be hazardous unless adequate means are provided for reducing the gas pressure to usable levels and for controlling the gas flow. **Pressure-reducing regulators** must always be used when withdrawing contents from cylinders. Such devices deliver a constant safe working pressure.

**Needle valves** without regulating mechanisms must not be used in place of pressure reducing regulators because excessive pressures may develop downstream of such devices and result in damage to equipment or injury to personnel.

When using gases,

1. Do not remove valve protection cap until ready to withdraw contents or to connect to a manifold.
2. On all cylinders, with the exception of those containing flammable gas (i.e., acetylene), After removing the valve protection cap, and prior to putting on the regulator, slightly open the valve for an instant to clear the opening of possible dust and dirt.
3. When opening the valve, point the outlet away from yourself and others.
4. Never use wrenches or tools to open valves, except those provided or approved by the gas supplier. Never hammer the valve wheel to open or to close the valve.
5. Make sure the threads or pins on the regulator-to-cylinder valve connections are properly mated.

Connections are designed with one of two different types of safety systems:

- **Pin Index Safety Systems**
- **Diameter Index Safety Systems**.

Never force connections that do not fit, and never change adapters to force them to fit.
6. Never permit gas to enter the regulating device suddenly. Always **open** the cylinder valve **slowly**.
7. Before disconnecting the regulating device, close the cylinder.
8. Valves must be closed at all times except when the gas is actually being used.

**Signs**

A precautionary sign, readable from a distance of five feet will be displayed on each door or gate of the storage room or enclosure. Locations containing only oxygen or medical air shall have their door(s) labeled as follows:

**CAUTION:**

Medical Gases
No Smoking or Open Flame

Locations containing positive pressure gases other than oxygen and medical air shall have their door(s) labeled substantially as follows:

**CAUTION**

Positive Pressure Gases
No Smoking or Open Flame
Room May Have Insufficient Oxygen
Open Door and Allow Room to Ventilate Before Entering

**Safe Practices for Transporting**

When using and transporting compressed gases, follow these guidelines:
1. Make sure the cylinder is secure in an approved holder or transported with an approved handtruck, and secured with a chain, strap, or other approved device.
2. When transporting a patient using compressed gas, keep the cylinder secured in the holder found on the patient stretcher, wheelchair, or in a portable tank carrier. **NEVER** put the cylinder in the bed with the patient.
3. When transporting cylinders, keep them upright in the cylinder approved for this purpose.
4. Make sure the regulator is securely on the cylinder.
5. Do not carry or hold the cylinder by the regulator.
6. If a small (size E or D) cylinder must be transported by hand, **always use both hands**. One hand must firmly hold the yoke or neck and the other hand must hold the body or base of the cylinder.

CHS has a policy on the safe use of compressed gases. It is found in the Safety Management Program Manual. Go to the manual and review the CHS Policy 5.10. Ask your manager if you have any questions.
Medical Equipment and Utilities Management

Medical Equipment Management
The Medical Equipment Management program promotes safe and effective use of medical equipment. The program ensures all medical equipment is properly selected, inventoried, maintained, and replaced and that users are trained to safely operate equipment and properly report equipment failures/incidents.

The primary purpose of the Medical Equipment Management Program is to:
1. Ensure all equipment has been properly inspected; and
2. Provide information and instruction regarding the proper use of equipment, equipment maintenance requirements, and the risks associated with the use of various medical devices to contribute to patient and staff safety.

Examples of Electrically Operated Equipment
Three types of electrically operated equipment are used at healthcare facilities:
1. Medical equipment used in patient care areas,
2. Medical equipment used in non-patient care areas (i.e., lab and CRC), and
3. Non-medical equipment used by an employee or a patient.

Patient care medical equipment may include:
- Ventilators
- IV Pumps
- Heart Monitors
- Suction Machines
- Warming Blankets
- Thermometers

Other medical equipment may include:
- Centrifuges
- Lab analyzers

Non-medical equipment may include:
- Vacuum Cleaners
- Pencil Sharpeners
- Radios
- Refrigerators
- Coffee Makers (Commercial grade)
- Microwaves
- Desktop Computers

There are times when a patient may want to bring his or her own medical equipment to use in the hospital. It is best to substitute CHS-owned equipment for use in the hospital.

If substitution is not possible:
- Notify the manager of the area where the item will be used.
- Obtain a doctor’s order for a patient to use his/her own medical equipment.
- Call the CHS Support Line at 704-446-6161 or 866-446-6161 to have the item inspected BEFORE it is used in the hospital. It may NOT be used until this
inspection has occurred. Clinical Engineering will apply a “Non-Hospital Owned Equipment” label on the item after completing the safety inspection.

All electrical items, both medical and non-medical, must be inspected and listed for safety by an outside listing organization (i.e. UL, MET, CSA, ETL/ITS, and Entela). All listed items will have a label with these letters, or similar ones of a different agency, on the equipment.

If you have questions about whether an item is approved, please call Clinical Engineering.

**Electrical Equipment Prohibited from Use at CHS Facilities**
Some types of electrical equipment may not be used in CHS facilities. A complete listing of electrical equipment prohibited from use at CHS facilities may be found in the Safety Management Program Manual.

Some examples of equipment that may not be used are:
- Coffee pots (non-commercial grade)
- Heating pads
- Clothes irons
- Electric blankets
- Hotplates
- Popcorn poppers
- Radiant heaters

A nurse manager, a charge nurse, or your supervisor must inspect each piece of personal electrical equipment. If a piece of equipment looks unsafe, it may **NOT** be used and should be taken home.

**Inspect Electrical Equipment Before Use**
One of your most important roles for safety in the hospital is to inspect electrical equipment before each use. Look for frayed cords, broken or bent prongs, missing “ground” prongs, exposed wires, equipment that causes a tingling sensation when plugged in, or other obvious hazards.

If any equipment is defective or does not work properly, **DO NOT USE IT!**

**Instructions for Handling Defective Equipment**
If a piece of electrical equipment does not work properly, follow these guidelines:

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1. Place a red “DEFECTIVE” tag on the equipment. Labels may be obtained from your supervisor, the distribution center, or Clinical Engineering. On the label, describe the nature of the problem, enter the current date, and then print your name so you may be contacted if additional information is required.

2. Remove the equipment from the work area so it will not be used and place it where it may be picked up by Maintenance or Clinical Engineering.

3. Call the CHS Support Line at 704-446-6161 or 866-446-6161. Explain the problem and where to find the equipment.

4. To get the repair completed as quickly as possible, be prepared to give the information listed below to the Dispatcher:
   - Your name.
   - Your department.
   - Department telephone number.
   - LOCATION OF THE EQUIPMENT.
   - Name of equipment/device (i.e., Dinamap, ECG monitor, etc.)
   - A brief description of the problem.
   - Clinical Engineering (CE) number. The CE number is located on a white or silver label or the asset tag located on the back of the equipment, either near the serial number or on the right front or side of the piece of equipment.
   - Priority of the problem.

CE Labels Used on Medical Equipment at CHS

Potential Hazards
In modern healthcare facilities, the use of electrical equipment is essential to perform most aspects of our work, but it may be dangerous if not used properly. According to the National Safety Council, approximately six percent of work-related deaths result from electric shock. Learning about the hazards associated with the use of electricity, maintaining electrical equipment in good working order, and following safe work practices will help prevent most electric shock injuries.
Electric Shock

Electric shock occurs when your body becomes part of an electrical circuit. Shocks usually occur when a person touches exposed electrical wires (i.e., wires exposed in a damaged or frayed electrical cord or plug). Shocks may also result from the dangerous combination of water and electricity.

One painful consequence of electric shock is burned skin and other tissue. Depending on the amount of current and duration of exposure, the burns resulting from electric shock may be as deadly as the shock itself. Also, be aware that most electrical equipment contains a heating element. Contact with these heated surfaces (e.g., blood warmers, incubators, and coffeepots) may produce serious burns.

Fire

An overlooked hazard associated with the use of electrical equipment is fire. Since heat is generated from the passage of electric current, an overloaded circuit or a spliced or frayed wire may generate enough heat to cause a fire.

Electrical Safety Tips

- When unplugging an electrical device, pull the plug, not the cord. Over time, pulling the cord may result in damage to both the cord and plug, leading to exposed wires.
- Inspect all electrical equipment prior to use. Report any frayed cords, broken adapters, or equipment without proper labels immediately to your supervisor, safety officer, or the Corporate Safety Department.
- Never use an adapter, doing so may overload the circuit, which may result in a fire. “Cheater plugs” or adapters that allow three-pronged (grounded) plugs to be used in two-pronged outlets should never be used.
- Always follow manufacturers' directions for proper and safe use of equipment.
- A surge protector outlet strip must only be plugged directly into an electrical wall receptacle. Strips in patient care use must be hospital grade and UL (or other agency) listed. These outlet strips are prohibited in certain high risk areas (wet areas) such as the OR.
- Extension cords may only be used temporarily in non-patient care areas. Extension cords must be plugged directly into an electrical wall receptacle (not into another extension cord), and must never be used for refrigerators, microwaves, heaters, or coffee pots, or in designated high risk areas. Extension cords may only be used on a temporary basis.

Steps to Take if a Person Has Been Injured or in an Accident Involving Medical Equipment

If a person is injured or involved in an incident involving medical equipment:
1. Offer to get treatment for the injury (i.e., visitors will go to the Emergency Department; physicians will be notified for in-patients).
2. If a person is badly injured or dies, inform your supervisor immediately.
   • If the injured person is an employee: Complete the online Report of Occupational Injury and Illness.
   • If the injured person is a patient or visitor: Completed the Incident Report.

4. If the injury is serious call Risk Management immediately at 704-512-3410. If the injury happens after hours, tell your supervisor, who will then call the Administrator On-Call.

5. If the injury possibly happened because the equipment did not work properly, save all the parts, including disposable ones. Do not change the control settings on the equipment. Tag the equipment as “defective,” remove it from service, and hold it for Risk Management or Clinical Engineering to pick up. Be sure to let Clinical Engineering know the equipment is involved in an incident. Be prepared to provide additional details to assist in the evaluation of the potential device malfunction.

Use of Wireless Communication Devices
The widespread use of wireless communication devices has created a potential hazard to hospital patients attached to clinical monitoring devices, such as heart monitors, pacemakers, apnea monitors, defibrillators, infusion pumps, ventilators, and infant incubators.

Cellular phones, two-way pagers, internet accessible PDAs, two-way radios, and other wireless devices emit radio frequency energy that may interfere with clinical patient monitoring equipment when used in close proximity to the clinical equipment. The effect of the radio frequency energy is greatly diminished as the distance between the radio frequency source and the clinical equipment is increased.

An effective way to manage radio frequency interference is to regulate the use of wireless communication devices inside the hospital and/or patient care facilities. **Wireless communication devices shall not be used in restricted areas.** Reference your facility policy 3.09 in the Safety Management Program Manual for restricted areas. The policy applies to staff, patients, visitors, contractors, vendors, volunteers, emergency personnel, and anyone who enters a CHS facility.

Restricted Use of Cellular Phones and Two-Way Radios
Two-way radios may interfere with patient monitoring devices when they are used to transmit messages. Therefore, they should **not** be used to send messages in spaces near clinical monitoring equipment. However, two-way radios may be safely used to monitor incoming messages.

In the event of emergency, individuals such as EMS, Fire Department, Police Department, and hospital personnel are allowed limited use within patient care areas. If a cellular phone or two-way radio must be used in an emergency, the users must be **at least 3 feet away** from the patients and/or clinical equipment.

Each employee should be watching for potential interference when a wireless communication device is near clinical equipment. If any irregularities or other
interference is noted, move away from the equipment, turn off the device, and notify Clinical Engineering.

Utilities Management
CHS’s vast system of utilities include the electrical system, heat and air conditioning systems, plumbing, boilers and steam plant, medical gases, emergency power, and the communications systems. The primary function of the Utilities Management Program is to ensure all elements of the utilities system at CHS are maintained and properly operated. Another important function of the program is to ensure the loss of one or more elements of the system does not adversely affect the smooth operation of patient care processes in the CHS facility.

Two Types of Electrical Systems
Under normal conditions, Duke Energy supplies electricity to all electrical outlets. "Normal" outlets are brown, ivory, or gray. In the event of a power failure, "normal" outlets may be without electricity, and electricity is supplied to the red outlets by emergency generators.

Equipment that should always be plugged directly into emergency, or red outlets, include the following: ventilators, specialty beds, defibrillators, patient monitoring systems, UPS, other life support equipment and communications systems.

Steps to Take if the Electrical System in Your Area Fails:
1. Notify the CHS Support Line on 704-446-6161 or 866-446-6161.
   - Note: All facilities managed by Lincoln Harris are to notify the Lincoln Harris Response Center at 1-800-933-4357.
   - Note: All facilities managed by Healthcare Realty are to notify Healthcare Realty Building Maintenance at 704-542-5877.

2. Notify the clinical supervisor of the area.
3. Verify life-support equipment is on emergency power or staff is providing interim life support.

Elevator Safety
Vertical transports or elevators are used to move people and equipment vertically in the building. Follow these tips if an elevator stops between floors while you are in it:
1. Remain calm.
2. Use the emergency phone in the elevator. Tell the operator what elevator you are on, if there is a medical emergency, how many people are on the elevator, and the floor closest to you.
3. Activate the alarm, usually a red button or switch.
4. Stay on the elevator. Do Not try to exit an elevator stuck between floors.
Pneumatic Tube System
The pneumatic tube system transports a variety of materials including pharmaceuticals, laboratory specimens, and other critical patient care items. When maintained and used properly, this system allows staff members to concentrate on the patient without having to walk floor to floor to obtain the information or medical supplies required for the patient.

Every employee using the pneumatic tube system has the responsibility of keeping the pneumatic tube system running. The number one cause for the tube system stopping is user error. User error includes overstuffed carriers, improper packaging of carriers, and sending broken carriers throughout the system. These conditions can cause blockages or spills in the system.

The Plant Operation and Maintenance Department maintains the tube system. Users should contact the maintenance department at 704-446-6161 to report any spills or blockages as soon as possible, and to report any broken carriers.

Heating Ventilation Air Conditioning (HVAC)
A variety of air-handling systems (HVAC) help to maintain a safe and comfortable environment for patients, visitors, and staff.

The thermostats should be set at a comfortable setting, usually between 72-75 degrees. If a situation requires the temperature be outside the 72-75 degree range, reset the thermostat within the normal range as soon as the situation has been corrected. Do not adjust locked thermostats. If the HVAC system fails or is not working correctly, notify the CHS Support Line on 704-446-6161 or 866-446-6161, or, where applicable, contact the Lincoln Harris Response Center on 1-800-933-4357 or Healthcare Realty Building Maintenance at 704-542-5877.

Plumbing Safety Tips
- Do not pour hazardous chemicals or unknown substances into a sink or floor drain until you have checked the container for the disposal instructions. Check department specific procedures for handling of hazardous chemicals and/or waste. If you have any questions or concerns regarding proper disposal of waste, read the label, ask your supervisor, and check the Material Safety Data Sheet (MSDS), or call the Corporate Safety Department on 704-512-7283.
- Carefully dispose of chemical and biological waste according to departmental procedures.
- Contain the flow of any water leaks by wrapping a towel around the source of the leak, closing a valve, or placing a trash can to catch the flow.
- Notify maintenance immediately to correct the cause of leaks.
- If a drain becomes backed up, STOP the flow into the drain.
- Secure the area around a wet floor until it can be cleaned.
- Attempt to contain the water, if safely possible.
- Block off the area from traffic flow.
• Notify Environmental Services, so a clean-up crew can be dispatched.

Steam Safety
A boiler system provides steam used for heating, sterilization, humidity controls, and cooking. Steam piping is located throughout most facilities. If you notice a leak or any other problem, call the CHS Support Line on 704-446-6161 or 866-446-6161, or, where applicable, contact the Lincoln Harris Response Center on 1-800-933-4357 or Healthcare Realty Building Maintenance at 704-542-5877.

DO NOT ATTEMPT TO ADJUST OR REPAIR THE PROBLEM YOURSELF.

Steam is under high pressure and may cause serious burns.

Communication Systems Safety
The communication system includes telephones, nurse call systems, pagers, overhead paging, code alpha systems, and computers.

CHS Overhead Paging Systems
This paging system is used to page persons without a beeper and notify staff of emergencies such as Code Red and system failures. The hospital operator makes overhead pages.

Departmental Paging
These systems are operated from the respective departments and are heard only by staff members in that department.

Steps to take if the Pager System Fails
If the overhead paging system is out of order, a computer message will be sent out to all areas having a HBOC STAR computer terminal. Selected managers will receive the notice in voice mail. Beepers should then be utilized when possible. If the person needing notification does not have a beeper, the department should send an employee as a "runner" to deliver the message.

If the paging system fails (i.e. beepers), the operator will call a, "Paging Conference" on the overhead paging system. This alerts the staff to listen to overhead pages, since that will become the primary means of communication.

If an individual pager (beeper) is not working, check to see if the battery is low. If this is the problem, obtain a replacement battery from your department. If this action does not solve the problem, contact the CHS Support Line on 704-446-6161 or 866-446-6161.
Security in the Healthcare Setting

The goal of the CHS Security Department is to provide a **safe and secure environment** for all patients, visitors, and employees.

The Security Department operates 24 hours a day, 365 days a year. Security provides on-site support at designated facilities and indirect support to other areas. Shifts are managed by Lieutenant or Sergeant level supervisors and are supported by the **Security Communications Center (SECOM)**. Security personnel cooperate with local law enforcement agencies as needed.

- Security officers continuously patrol campuses and change patrol patterns frequently.
- Officers immediately respond to emergency calls. Response to non-emergent calls such as door unlocks, motorist assists, and personal escorts are usually within minutes.
- The Security Department monitors the speed and efficiency of their officers’ response to service calls. This information is used to improve service.
- A detailed tracking system is used to assist in reducing potential security risks.
- Security Officers work each shift to assist visitors, guests, and employees with:
  - Routine patrols,
  - Information and directions,
  - Motorist assists (e.g., battery boosts, flat tire assists, door unlocks),
  - Personal escorts,
  - Traffic direction, and
  - Investigating and reporting security related incidents.

Security Communications Center

The **Security Communications Center** provides support to officers in the field. This centralized dispatch center monitors and responds to calls for service including:

- Information and directions
- Closed circuit television monitoring (at designated facilities)
- Alarm monitoring (at designated facilities)
- Dispatching personnel to emergency situations (i.e., disasters, bomb threats, fire, etc.)
- Record keeping and incident report tracking

To contact the Security Department, call 704-355-3333, 24 hours a day.

Tips to Keep Us Safe

*Who is responsible for Security?*

*Everyone in the Carolinas HealthCare System is responsible for Security.*
Basic strategies all employees, contract staff, students, and volunteers may use to maintain security in their work areas include:

1. Be aware of your surroundings. Your personal safety and the safety of patients and visitors are influenced more by your awareness than by any single factor.
2. All employees, contract staff, students, and volunteers are required to display the proper System Identification Badge at all times while on CHS property. Anyone observed in restricted areas without the proper identification should be reported promptly to Security.
3. Do not wait for a problem to develop. Immediately contact Security whenever you have any problem or concern about safety issues. Call 704-355-3333 from any System location and report your concern to the Security Communications Dispatch Center. Appropriate personnel will be dispatched to your area to assist.
4. Report all incidents. The information you provide helps CHS Security detect patterns of problems and may be used in prevention.
5. Keep personal items and System equipment in a secure area. Bring to work only the items you need. An abundance of anything invites theft.
6. Take the time to assist our patients and guests. They are in a strange environment and often feel vulnerable. If visitors or guests are experiencing difficulties, feel free to contact Security for further assistance. All visitors are encouraged to check in at the information desk and obtain a Visitor's Identification Badge, if required at the facility.
7. Politely, and firmly, challenge individuals in and around your work area if they seem suspicious or do not have proper identification. Simply by asking, “May I help you?” you may determine what business the individual has in your area. If the person refuses to cooperate or seems agitated, contact Security immediately. (Refer to next section entitled Visitor Control Procedures.)
8. Contact the Security Department for assistance with escorts to and from your vehicle, assistance with providing information and directions to visitors or patients, and setting up Security related educational programs for yourself and other personnel in your department or facility.
9. Verify the number to call for security when you arrive at your assigned unit or department.

Visitor Control Procedures
Your CHS identification badge is an integral part of security measures. It allows authorized access to secure areas, and quickly identifies the wearer as an individual functioning on behalf of CHS.

Visitor identification passes provide the same function. If you encounter someone in your work area who does not have a proper CHS identification badge or valid visitor’s pass, you are expected to politely challenge the person by asking, “May I help you?”

This should help to determine why the person is in your area. If the person is reluctant to speak with you, seems suspicious when responding, or is openly belligerent, contact CHS Security immediately. A CHS Security Officer will then be dispatched to your area to speak with the individual.
While this is a good rule to follow at all times, it is especially critical after normal visiting hours. You are expected to immediately ask anyone without proper identification observed in your work area (particularly patient care areas) if you may help him/her. This will allow you to direct the person to the proper place, and identify any suspicious activity, or potential security problems.

Visitors should always be encouraged to wear a visitor’s identification badge (especially after normal visiting hours). These badges may be obtained from the nursing staff at all Acute Care Facilities or by contacting the Carolinas HealthCare System SECOM.

Since visiting hours for CHS facilities may vary, contact your facility’s Nursing Administration office for details.

For example, Carolinas Medical Center’s Labor and Delivery department is open for visitation from 12:00 pm until 8:30 pm. Since babies are born at all times of the day and night, these visiting hours are adjusted depending on the needs of the patients and families (CHS Policy PR 160.00).

**Law Enforcement Officers and Forensic Information**

Anytime a law enforcement officer is accompanying a patient at a CHS facility, that officer should be provided a Forensic Information orientation with details such as emergency codes used in the facility, appropriate use of restraints, lines of communication within the organization, etc. Just call the Security Communications Center and a CHS Security representative will meet with the law enforcement officer and provide this important information.

**Types of Situations to Report to Security**

Certain situations should always be reported to CHS Security.

- Disruptive behavior of any type
- Any suspicious activity
- Destruction or damage to property
- Any type of theft or attempted theft
- Bomb threats or suspicious packages
- Assaults
- Attempted suicide

**Information to Provide**

The Security Communications Dispatcher will obtain information from the caller in order for System Security Officers to properly respond. The following questions will be asked and should be answered as completely as possible:

- Where do you need Security?
- What is the nature of your problem?
- What is your name?
- How can you be contacted?

When reporting a suspicious person, or an incident involving an unfamiliar subject, the following information is very useful in describing the person to Security:

- Gender
Unattended and Unsecured Items
Statistically, the majority of items reported as stolen from CHS facilities have two things in common; they are left unattended and unsecured. Please take the time to lock unattended offices and properly secure valuables, such as purses and wallets, while at work. Certain items, such as laptop computers and other portable electronic devices (especially those that contain Protected Healthcare Information) should always be equipped with proper security hardware and never left unattended and unsecured. All PCs and related equipment should be outfitted with a locking security cable and any theft of a device containing PHI should be reported promptly.

Suspicious Letters or Packages
- When delivery personnel bring packages, check for an identification badge or ask to see identification.
- Check the name and address on packages before accepting delivery.
- If a delivery is left outside the door or department, check the address and vendor before opening it.
- Do not open unexpected packages or ones without a correct address.
- Call Security if you have any doubts. Some common indicators of a suspicious letter or package include the following:
  - No return address/excessive postage
  - Excessive packing materials, such as paper wrappings, large amounts of tape or string
  - Rigid sides or lopsided package
  - Package’s weight is particularly heavy for its size
  - Any strange odors coming from the package
  - Any unusual sounds coming from the item, such as beeping, ticking, etc.
  - Oily stains on the outside of package or signs of any crystallized or powdery substances
  - Wires / aluminum foil showing through the outside of package
  - Restrictive markings on package such as “Attention to___” or “Confidential: Do Not Open”
  - Package is addressed to a title, rather than an individual (such as “Director of Security”)
  - The package/letter was found or delivered in an unconventional manner (not US Postal, FedEx, regular courier, etc.)

If You Discover a Suspicious Letter or Package:
- Treat the letter or package with care. DO NOT SHAKE OR BUMP UNNECESSARILY!
• DO NOT tear open, smell, taste, or touch the item unnecessarily.
• Isolate the item and look for any additional signs (see indicators above).
• If additional signs are present, or the package seems suspicious, treat the letter or package as suspect and immediately call Security for assistance.

**Bomb Threats (Code Yellow)**
If a **bomb threat** is called in to your area:
• Remain calm.
• Write a note and give it to another staff member to notify your manager immediately.
• Keep the caller on the line and obtain as much information as possible. Ask for information in this order:
  → When is the bomb going to explode?
  → Where is it right now?
  → What does it look like?
  → What type of bomb is it?
  → What will cause it to explode?
  → Did you place the bomb?
  → Why did you place the bomb?
  → What is your address?
  → What are your name, sex, age, and race?
• Try to write down the length of the conversation, unusual background noises from the caller’s location, and anything you notice about the caller’s voice or language. All of this information should be given to Security.
• Preserve any evidence, such as notes of letters. Isolate these items and limit the amount of contact with them. Turn such items over to Security or law enforcement immediately.

**Workplace Violence Awareness and Prevention (Code Gray)**
There are various levels of workplace violence. Most levels are included in one of three categories:

1. Harassment or actions designed to torment and worry the intended victim. This is considered a non-lethal form of workplace violence. This is the most common form, and may be harmful to both the victim and work team morale.

2. Threats or declarations of intent to inflict injury are the second most common form of workplace violence. Threats do not have to be direct, and may be as subtle as body language used to intimidate a co-worker. Threats are usually veiled (“Sometimes things happen to people”), conditional (“If you..., then I will...”), or direct.

3. Attacks or the use of physical force against another with the intent to inflict injury are the most dangerous of these three. Attacks include **battery, assault, and, in some cases, homicide.**
Employees are requested to promptly report any incidents and to work with their managers and Security to reduce/eliminate risks.

Some factors increasing the risk of workplace violence are:

- Lay-off or termination
- Unresolved conflicts with coworkers
- Organizational changes
- Disciplinary actions
- Poor performance reviews
- Psychological issues
- Family/personal problems
- Financial difficulties
- Being passed over for promotion
- Discrimination (real or perceived)
- Alcohol or drug dependency
- Ignored grievances

Carolinas HealthCare System has a policy of zero tolerance for workplace violence, verbal and non-verbal threats, and related actions (CHS Policy 2.10).

Contract staff, students, and volunteers also have a role in preventing workplace violence. Notify the supervisor, Human Resources, and Security of any violent or potentially violent situations. If you withhold information relating to violence, threats, or harassment, you will be subject to discipline up to and including not being allowed to continue at a CHS location.

An important part of avoiding violence in the workplace is the establishment of a healthy work environment. This includes, and is not limited to,

- Open communication with employees
- Following complaint/grievance procedures
- Using the Employee Assistance Program (EAP)
- Maintaining a drug and alcohol free workplace
- Enforcing policies and procedures consistently
- Respecting your coworkers

Workplace Violence or Presence of a Weapon

In the event a weapon is involved during a Workplace Violence incident, or a hostage situation occurs staff should always retreat to safety (when possible) and contact Security and/or the local Police Department and give them the following information:

- Location of the incident, including exact area where the armed subject was last seen
- Description of the subject, including their relative position in the area
- Information on what type of weapon they are armed with (knife, handgun, rifle, etc.)
- Your name, telephone number, and how many people are involved

The affected area is to be immediately be evacuated and bear in mind the armed subject is in control of the situation. Do not attempt to intimidate, threaten, or challenge the individual’s authority. Give them plenty of room, and do not block their route if they are attempting to leave the area. Note their last direction of travel, and contact Security and/or the local Police with this information. In the event you cannot leave the area remember the following:

- Try to talk to the subject, convincing them that a non-violent solution is the best alternative for them. Show a commitment that you will assist them in any way to
reach a peaceful settlement, but do not stop communicating with the individual no matter what the outcome.

- Never take a surrendered weapon from a subject, even if it is offered to you. Instead, have them place it in a neutral location, and back away from it. This will decrease the chances of an accidental injury or sudden “second thoughts” on the part of the subject.
- When a surrendered or confiscated weapon is present, always use extreme caution and contact Carolinas HealthCare System Security immediately. Do not leave a weapon unattended until security and/or local police arrive to secure the area.

Workplace violence is traumatic and affects everyone. By preparing strategies and heightening awareness of potential danger signs, we may prevent workplace violence from occurring.

If you are scheduled to work in an area identified as a security sensitive area (e.g., pharmacy, emergency department, nursery, pediatrics), be sure to obtain further information on security issues from your supervisor.

Parking and Parking Lot Safety at Carolinas HealthCare System
Employees, Contract staff, students, and volunteers of Carolinas HealthCare System are required to observe the proper parking procedures for their individual facility and department. Individuals should park only in the areas designated for his or her role and never park in unauthorized areas such as fire lanes or similar Emergency Vehicle Access areas. If an individual is discovered parked in an unauthorized area, they will be issued a parking citation.

After the first offense, the individual’s vehicle is entered into the parking department’s database and a letter is sent to the employee as well as their supervisor explaining the violation. Subsequent violations will result in notices being sent again to the offender’s supervisor and / or department head. This will then result in disciplinary action up to and including ending the relationship with CHS.. An individual’s vehicle may also be immobilized in certain circumstances, and either Security or Parking personnel must be contacted to remove the immobilizing device from their vehicle. Remember, park in authorized Parking areas only. Vehicles are required to be registered with the Photo ID office and a valid CHS Parking Sticker must be displayed prominently on all such vehicles.

The following are some parking lot / deck safety tips that all should observe when exiting from or returning to their vehicle:

- Remember where you parked, especially which level when in a parking deck. This will help you to quickly find your vehicle and prevent unnecessary searching.
- Always use the buddy system or travel in a group when going to a parking area. If you are working odd hours or cannot find anyone to walk with you, contact the Security Communications Center (SECOM) at 704-355-3333 and request an escort to your vehicle (be advised that it may take a few minutes for an Officer to arrive at
your location so be patient, or call ahead if you know when you are planning on leaving).

- Always pay attention to your surroundings in parking areas, and report any suspicious behavior immediately. Keep the vehicle’s door key in your hand and immediately lock your doors after entering your vehicle.

- To avoid any problems with your parked vehicle, always keep your doors locked and keep any valuables out of sight by either locking them in the trunk or securing them properly inside the vehicle (such as in a console or glove compartment). Never leave valuables on the dash or in plain view while you are away from your vehicle.

- At certain Carolinas HealthCare System facilities, H.E.L.P. (Hospital Emergency Locator Phone) stations are available to summon security assistance immediately. Take notice of the locations of these stations when parking inside a parking deck.

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**Performance Improvement**

**Carolinas HealthCare System Mission Statement**

*Performance Improvement* is an important part of the CHS mission statement. The mission of the Carolinas HealthCare System is to create and operate a comprehensive system to provide health care and related services, including education and research opportunities, for the benefit of the people it serves.

**CHS Model for Performance Improvement**

The Joint Commission requires each facility to have an organization-wide approach to performance improvement that is planned and systematic. Carolinas HealthCare System utilizes the **Plan, Do, Study, Act** (PDSA) cycle for performance improvement activities.

**PDSA**

1. **Plan** the improvement
2. **Do** the improvement
3. **Study** what happened
4. **Act** to hold the gains

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70
Steps in the Process:

1. **Plan** – identify the problem, plan the improvement
2. **Do** – implement a chosen solution, do the improvement
3. **Study** – Study (analyze) the results and, if unsuccessful, repeat cycle
4. **Act** – Take action to hold the gains

Performance Improvement Plan

∧ The leaders of the organization, with input from physicians, staff, and managers, develop a Performance Improvement Plan annually. The Performance Improvement Plan is approved and supported by the Hospital Board.

∧ The Performance Improvement Plan outlines the current performance improvement activities for the year and identifies the top four PI priorities for the year. These priorities are developed to be consistent with the corporate goals of Carolinas HealthCare System.

Four Performance Improvement Priorities for 2011

Carolinas HealthCare System’s top four PI priorities are:

1. Patient Safety
2. Clinical Outcomes
3. Service Excellence
4. Clinical Efficiency

Do you know what your department is focusing on for performance improvement? If not, talk with your Supervisor or facility Performance Improvement Coordinator.

Information Flow

∧ The Hospital Board is ultimately responsible for all Performance Improvement activities. Performance Improvement results are reported to the Hospital Board in the following way:
Sentinel Event
A sentinel event is an unexpected occurrence involving death or serious physical – including loss of limb or function - or psychological injury, or the risk thereof.

Examples of sentinel events include:
- Patient suicide in a setting where the patient receives around the clock care
- Unanticipated death of a full term infant
- Infant abduction or infant discharge to the wrong family
- Patient rape (by another patient or staff)
- Hemolytic transfusions reaction involving administration of blood or blood products
- Surgery on the wrong patient or wrong body part
- Patient death or permanent injury / loss of function as a result of a nosocomial (hospital acquired) infection
- unintended retention of a foreign object after surgery or other procedure

Your Responsibility
If a sentinel event occurs in your area, immediately report it to your supervisor or manager. Any staff member identifying a sentinel event must report it.

After notifying your supervisor or manager, complete an incident report/Care Event. The appropriate process to follow is outlined in administrative policy ADM 200.03 Sentinel Events.

Continuous Quality Improvement (CQI)
CQI is based on taking actions designed to produce measurably better outcomes. Typical measures include:
- Development of quality indicators – quantifiable measures of the process or the outcome of a medical treatment or procedure.
- Collaboration with physicians and hospitals that provide care related to specific quality measures.
- Baseline measurements to determine the quality of current care.
• Analysis of the baseline data, feedback and education of providers.
• Structured intervention.
• Re-measurement of data.
• Evaluation to determine effectiveness of the intervention.

**LEAN Methodology**

LEAN is a process improvement methodology that increases process efficiency by reducing the waste in processes. This helps in reducing cycle times and better utilization of resources. LEAN utilizes the voice of the customer to define the waste and then special tools and techniques to reduce or eliminate the waste.

In LEAN there are 8 categories of waste:

1. **Waiting:** (i.e., idle time, time delays, non-value added time)
2. **Over-production:** (i.e., making more than the customer requires)
3. **Rework/Defects:** (i.e., making errors, producing something that requires rework or is thrown away)
4. **Motion:** (i.e., actions of people that is not value added)
5. **Processing/Over-processing:** (i.e., unnecessary processing steps)
6. **Inventory:** (i.e., storing or purchasing unnecessary supplies)
7. **Intellect/People:** (i.e., not utilizing the skills, ideas and suggestions of employees)
8. **Transportation:** (i.e., moving items, multiple handling, unnecessary handling)
Module for Contract Staff, Students, and Volunteers

Posttest

Name: _____________________________________________

Date: _____________________________________________

Circle the correct answer.

1. The three (3) most common bloodborne diseases you could be exposed to in a health care setting are:
   a. Legionnaire’s Disease, Hepatitis C, TB
   b. Hepatitis B, Hepatitis C, HIV
   c. TB, HIV, Hepatitis C
   d. TB, Hepatitis B, Hepatitis C

2. Which of the following cannot be used to clean up a blood spill?
   a. EPA / hospital approved disinfectant
   b. Sanimaster 4
   c. A premixed 1:10 bleach solution
   d. Soap and Water

3. What is CHS’s Tobacco-Free Workplace Policy?
   a. Tobacco use is not permitted on any CHS property, or portion thereof, occupied by CHS functions and activities, except as specifically described in CHS Administration Policy – ADM 270.04. This ban applies to all employees, visitors, patients, and contractors.
   b. Smoking is permitted ONLY for certain residents at CHS Long Term Care locations and for inpatients at Behavioral Health.
   c. Inpatient and outpatient adolescents under age 18 are restricted without exception from smoking at any time anywhere on CHS properties.
   d. All the above

4. In sprinklered areas, keep stored items at least _____ below sprinkler heads and in unsprinklered areas keep stored items at least _____ below the ceiling at all times.
   a. 24 inches, 36 inches
   b. 18 inches, 24 inches
   c. 6 Inches, 12 inches
5. A good description of “Ergonomics” is:
   a. Improving the speed at which the job is done
   b. Science of fitting the work environment to the people doing the job
   c. Monitoring telephone conversations made by employees.
   d. Selecting the right people to do the job.

6. If you experience numbness in your fingers related to the constant use of the computer keyboard:
   a. Tell your supervisor and complete a ROI.
   b. Keep quiet about it because it will probably go away
   c. Complain about the problem in a staff meeting
   d. Seek medical care before completing a ROI

7. Which one of the following is not a safe way to lift?
   a. Brace lower back
   b. Bend knees
   c. Hug the load
   d. Twisting
   e. Avoid twisting

8. Who would you call to report unsafe conditions?
   a. Your manager
   b. Your Facility Safety Officer
   c. Corporate Safety (704-512-7283)
   d. Employee Safety Line (704-355-SAFE)
   e. Any of the above

9. When you pour a hazardous chemical from its original container into a second container, the second container must be labeled with at least the identity of the hazardous chemical(s), and appropriate hazard warnings.
   a. True
   b. False
10. A signal word on the warning label indicating how hazardous the chemical is could include:
   a. Danger
   b. Warning
   c. Caution
   d. All of the above

11. Most babies are taken from the:
   a. Nursery
   b. Corridor
   c. Cafeteria
   d. Mother’s Room

12. Employees without bassinets may not transport infants.
   a. True
   b. False

13. Which of the following are true about droplet precautions?
   a. You must wear a surgical mask when within 3 feet of the patient.
   b. The patient’s door may remain open.
   c. Dedicated patient equipment is necessary
   d. A & B
   e. A & C

14. You should use the alcohol based hand rub to wash your hands:
   a. Before and after touching a patient
   b. When your hands are soiled with blood or body fluids
   c. After using the restroom
   d. All of the above

15. Standard Precautions are used:
   a. With every patient regardless of condition/illness
   b. Only when you know or suspect a patient has an infection
   c. Only when ordered by the physician
   d. When a “required” sign is posted on the door
16. When hands are visibly soiled, use soap and water to wash your hands.
   a. True
   b. False

17. When transporting a patient, how must the cylinder be carried?
   a. In a portable carrier secured in a holder found on the patient’s stretcher, wheel chair, or in a portable cylinder carrier
   b. In an employee’s hands
   c. In the bed with the patient
   d. b and c

18. Cylinders must be kept in what position?
   a. On their side at all times
   b. Upright
   c. Leaning against a wall

19. What type of electrical equipment may not be used at CHS facilities?
   a. Coffee pots (non-commercial grade)
   b. Radiant heaters
   c. Hot plates
   d. All of the above
   e. None of the above

20. If the power goes out in your department, you must:
   a. Notify the clinical supervisor
   b. Ensure all life support equipment is on emergency power
   c. Call the CHS Support Line or, where appropriate, the Lincoln Harris Response Center
   d. All of the above

21. If an elevator stops between floors, you must NOT:
   a. Use the emergency phone
   b. Activate the alarm
   c. Exit the elevator
   d. Stay calm
22. Which of the following are ways employees can maintain security in their area:
   a. Be aware of their surroundings
   b. Keep personal items in a secure area
   c. Wear the proper System ID Badge while on CHS property
   d. All of the above

23. The proper procedure to follow during a bomb threat is:
   a. Call Security
   b. Notify your supervisor
   c. Remain Calm
   d. Get as much information as possible from the caller and give it to Security
   e. All of the above

24. What are the three components of the CHS mission statement?
   a. Healthcare and related services, education, and research
   b. Quality, education, and research
   c. Improvement, healthcare, and research
   d. None of the above

25. What is the CHS model for performance improvement?
   a. PACI (Plan, Assess, Check, Improve)
   b. ADAI (Assess, Design, Analyze, Improve)
   c. DCAA (Design, Check, Assess, Act)
   d. PDSA (Plan, Do, Study, Act)

26. What is an example of a Sentinel Event?
   a. Patient suicide in a setting where patient receives around the clock care
   b. Patient death or injury as a result of a hospital acquired infection
   c. Unanticipated death of a full-term infant
   d. All of the above
   e. None of the above

27. The LEAN methodology focuses on creating waste.
   a. True
   b. False
28. The following are types of waste defined in LEAN:
   a. Processing, Over-production, Rework, and Intellect
   b. Motion, Inventory, Transportation and Waiting
   c. None of the above
   d. a and b

29. The following is an example of a waste as defined by LEAN:
   a. Incorrect or incomplete information on forms
   b. Moving a patient multiple times
   c. Searching for a patient’s chart
   d. All of the above
   e. None of the above

Score: __________

Manager’s Initials: __________