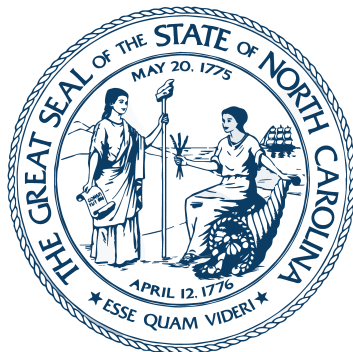


# North Carolina State Employee **Safety & Health Handbook**



**Last Revised: February 2017**





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# North Carolina State Employee Safety & Health Handbook

The N. C. Industrial Commission Safety Department has accepted for filing the rules in this handbook as the official safety and health rules under G.S. 97-12 N.C. Workers' Compensation Act, for all state agencies and universities.

Prepared by: State Safety and Health Steering Committee

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## Purpose

This handbook is designed to give state employees a firm understanding of the state's concern for protecting its employees from job related injuries or illnesses. The handbook has been developed to provide employees with answers to general questions regarding safety in the workplace. This handbook affirms that most hazards are created by personnel and thus personnel are responsible for following procedures and being mindful of their surroundings to prevent hazards from developing.

Each new employee should attend New Employee Orientation within 30 days of hire. During this orientation you will be given facility-specific information regarding how to respond during various emergencies. Your supervisor or Human Resources representative will also discuss site-specific safety policies and programs for your work area. Your supervisor must inform you of safety procedures and required training you will need to do your job.

Additionally, you should keep this handbook available for immediate access, as you would any important job related personal property. If you are confronted with a situation not covered in this document, consult your supervisor before making a decision.

The following pages contain only some of the highlights of the Safety and Health Regulations for general industry and construction under the North Carolina Occupational Safety and Health Act (NCOSHA) and other regulatory groups. **It is not intended as a complete manual on safety and health, but should be used as a guide to help prevent common hazards that might develop in the workplace.** For specific standards applicable to your agency or university, contact your safety and health leader or your supervisor.

All employees are required to read and be familiar with the contents of this Safety and Health Handbook.

**If you have questions about this handbook or any other safety-related issues. Contact your agency's safety or human resources personnel.**

**Safety Leader:**

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**Human Resources Representative:**

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# General Responsibilities

## Employee Responsibilities

- Employees have the right to report work-related injuries and illnesses. Employers are prohibited from discharging or in any manner discriminating against employees for reporting work-related injuries or illnesses.
- All injuries, including minor first aid treatment, occurring on the job and any illness associated with the job shall be reported promptly and in writing to your supervisor. Questions concerning medical treatment of these injuries/illnesses should also be addressed to the supervisor and your Worker's Compensation Administrator.
- The protection of employees and the public on state property is a shared responsibility of every employee.
- Working while impaired by alcohol or drugs is strictly forbidden. The use of prescription drugs, which may affect your alertness or work abilities, must be reported to your supervisor or HR Department prior to beginning work.
- Failure to comply with or enforce Safety and Health Rules and Regulations may result in disciplinary action up to and including dismissal. Violation of work rules is a job performance issue and shall be dealt with through the job performance disciplinary process.
- Part of each employee's job is to make recommendations to improve the safety and health in the workplace.
- Employees shall wear, clean, maintain, and use prescribed personal protective equipment (PPE) for work that requires such equipment.
- Employees should refrain from operating any equipment without proper instructions, training, and authorization.
- Employees should only use properly guarded equipment. They should not remove or attempt to defeat safety devices.



## Hazard Hint

**Make sure you immediately report the following to your supervisor:**

- **Injuries**
- **Near hits**
- **Hazardous conditions**
- **Burning odors**
- **Fires**
- **Damage to property**
- **State vehicle accidents**
- **Hazardous material spills**
- **Unsafe behaviors**
- **Violations of procedures**

**Let's keep everyone safe!**

- Employees should not indulge in any form of “horseplay”, which is strictly prohibited.

### **Supervisor/Manager Responsibilities**

Supervisors and managers should:

- Recognize that the most valuable asset in state government is employees and protecting employee safety and health is the greatest responsibility of state government.
- Remind employees to report all hazards, near hits, property damage, incidents, and injuries to their supervisor immediately. Workplace hazards shall be reported by using the “Be a Hazard Hero” form or at [hazards.nc.gov](http://hazards.nc.gov).
- Investigate near hits, property damage, incidents, and injuries as soon as possible, first determining whether a hazard is still present that could injure others. Eliminating or guarding against the hazard is a first priority after providing medical attention to the employee (if injured).
- Investigate reported hazards and document results through the Hazard Hero reporting system. Send the completed form to the safety and health leader for your agency.
- Follow all reporting and documentation requirements found in the [Incident Investigation and Reporting Program](#).
- Identify corrective actions and interim controls put in place for hazardous work environments under their control.
- Know and understand safety procedures and ensure that employees receive proper safety and health training.
- Start each day/shift with a short safety and health debriefing to review hazards associated with daily assignments, discuss injuries, or general safety topics.
- Lead or participate in hazard assessments and implement required engineering controls, administrative controls, and provide required personal protective equipment to employees.
- Ensure that notification to the agency’s designated person occurs when regulatory (i.e., OSHA, EPA, DEQ) inspections occur at their agency sites.

### **Safety and Health Leader Responsibilities**

- The safety and health leader for each agency is responsible for ensuring that the State Employee Workplace Requirements Program for Safety, Health and Workers’

Compensation and OSHA regulations are created and implemented, along with associated training classes.

- The safety and health leader should develop a risk assessment-based methodology to be used in correcting workplace hazards on a priority basis throughout the agency, development of an agency safety and health documentation system for review of effectiveness, and establishment of long-range safety and health performance goals.
- The safety and health leader should submit a report annually to the agency head indicating achievements, identifying major problem areas, annual goals and objectives, long-range plans, and funding needs.

### **Agency/University Responsibilities**

- The agency or university shall develop and maintain an effective occupational safety and health program, including life safety and property protection.
- No agency or university shall knowingly require an employee to work in conditions that are hazardous without proper training and personal protective equipment (PPE).
- Frequent and regular inspections of the workplace, materials, and equipment shall be made by trained persons designated by each agency or university.
- Unsafe tools, materials, or equipment shall be tagged, locked, or removed from the workplace to prevent their use.
- The agency or university shall instruct each employee on how to recognize and avoid unsafe conditions, unsafe work practices, and the regulations and/or standards applicable to their work environment to control or eliminate any hazards.
- The agency or university shall provide medical services required for on-the-job injuries or illnesses. The agency or university is responsible for compensation to the employee for wages lost from work and/or any disability rating as a result of the on-the-job injury/illness. For more information, see the [Worker's Compensation website](#).
- All employees, escorted visitors, and contractors shall be informed of hazards before entering a designated hazardous, caution, or restricted area; shall use required PPE; and shall adhere to safety and health procedures immediately upon access to the area.
- The agency or university shall provide appropriate PPE, conduct a hazard assessment, develop engineering controls, and/or provide training in the use of PPE whenever there is exposure to hazardous conditions.



- The agency or university will designate safety and health committees as required, assuring equal representation in the composition of the committees between management and employees.

## Incident Investigation and Reporting

If you have an accident, near hit, or if you are injured on the job, you must notify your supervisor. See the Employee Responsibility section of this handbook.

Employees and supervisors should work together to complete the [Incident Reporting and Investigation forms found on the OSHR website](#).

If your injury requires medical treatment, follow the agency or university procedures regarding medical treatment. With reference to occupational disease, an employee must give notice to the employer when the employee is first informed by a competent medical authority of the nature and work related causes of the illness.

If you have questions about coverage or benefits under workers' compensation you should contact your Workers' Compensation Administrator.

## Complaint Procedure

The complaint procedure is established to ensure open communication between all levels of employment to foster a safe and healthful workplace. There will not be reprisals nor sanctions taken against any employee for bringing management's attention to a safety and health problem. If after registering a complaint or concern with your supervisor you feel the need to process the complaint further, contact your safety leader or human resources representative.

## First Aid

First aid is the immediate emergency treatment provided for injury or sudden illness before professional medical care is available. First aid kits are required in all workplaces. **First aid kits should be available for treatment of minor cuts and scratches; however, they are not a substitute for obtaining medical treatment.** Routine administration of first aid for other than



### Hazard Hint

To improve workplace safety and health, we must collect useful, accessible, and specific injury and illness information.

Employees and supervisors are required to document any incident using forms found on the Office of State Human Resources website and work together to develop corrective actions that will prevent injuries. With this information we can work together to be proactive in preventing workplace hazards.

minor cuts and scratches must be performed by certified first aid personnel (i.e. American Red Cross, National Safety Council, etc.) or licensed medical personnel.

Every facility must have a Bloodborne Pathogen Exposure Control Plan that describes who is responsible for cleaning up blood and body fluids and methods to do this safely. Normally, the First Aid Team for the building, the clinic in the building or housekeeping would be responsible.

If an employee has the symptoms of a medical emergency (i.e. stroke, heart attack, etc.) the employer has the obligation to call 911 immediately even when the employee does not want to be transported. The employee will be evaluated by EMS and can decide the next step after the evaluation.

It is recommended that an Automated External Defibrillator (AED) be installed in each building, when possible. The OSHA First Aid standard (29 CFR 1910.151) requires trained first-aid providers at all workplaces of any size if there is no “infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees.” A voluntary first aid team should be trained in First Aid, CPR, AED use, and Bloodborne Pathogens. Never minimize the seriousness of an injury or illness. If in doubt, seek medical attention.

In the event of an emergency, immediately call for emergency services, locate someone trained in first aid, obtain the AED, and send someone to the front door to direct EMS staff to the scene.

## Hazard Recognition Program (Be a Hazard Hero)



To prevent injuries a Hazard Recognition Program has been developed to train workers on how to identify, correct and report unsafe behaviors and unsafe conditions. Hazards can be reported online at [hazards.nc.gov](http://hazards.nc.gov) and copies of the form can be obtained from your Safety and Health Leader or by printing directly from the website.

Employees are empowered to correct the unsafe condition immediately, if it is under their span of control. Supervisors will involve employees in identifying solutions to the unsafe act or condition, therefore creating a culture of caring.



### Hazard Hint

**Over 90 percent of all injuries are caused from unsafe acts. To prevent injuries:**

- Check your surroundings before entering.
- Look for hazards and unsafe conditions.
- Ask your supervisor if you don't know how to do the job safely.


Safety Committees will be involved in reviewing the Hazard Hero reports, ensuring that hazards are communicated across the agency to prevent similar hazards and possible injuries from occurring in other locations.

Notify your supervisor and safety committee representative of any known hazards immediately and complete the hazard report.

## Slips, Trips, and Falls Prevention

Slips, trips, and falls in state government are the number one cause of injuries. Many of these incidents can be prevented by following these procedures:

- Keep work spaces, floor surfaces, walkways, and similar locations free of hazards (i.e. carpeted areas secured to floor, free of worn or frayed seams, tiles lying flat on the floor) and don't present a tripping hazard.
- Chairs must be in safe, operable condition and designed to support the weight of the individual. Broken chairs should be tagged "Do Not Use" until repaired or discarded.
- Sit in the center of a chair and not on the edge. Watch out for chairs on casters which can be inadvertently pushed from under you when you attempt to sit down. Place your hand behind you to make sure your chair is in place before you settle into it.
- Do not stand or climb on a desk, chair, stool, or other unstable surface to reach for an object; always use a ladder.
- Place wastebaskets, briefcases, umbrella stands, and similar objects where they will not present a tripping hazard.
- When walking, maintain an erect posture, and watch where you are going.
- To prevent slips and falls, select shoes that are slip-resistant, comfortable, supportive, and compatible with your work environment. Wear shoes at all times.
- To prevent trips, do not wear pants that drag the ground.
- When stepping down from a height of more than eight inches, step down backwards, not forward.



**Hazard Hint**

Many slips, trips and falls are caused by being distracted while walking, using a cell phone, or carrying belongings that block your view of the walkway.

- Always use handrails when using stairways.
- Proper attention should be given to the act of going up and down stairs. Falls on stairs occur when people are distracted while ascending and descending.
- Use caution when walking on uneven surfaces or surfaces which contain ice, snow, rock, oil, water, or other adverse or unstable material.
- Immediately clean spills.

## **Back Injury Prevention Through Safe Lifting**

Serious strains often result from improper lifting and handling of boxes, office supplies, and equipment. Such objects should be moved with a hand truck or unpacked and handled in smaller parcels.

- Bulky objects shall be carried in such a way as not to obstruct the view ahead or interfere with the use of handrails on stairways.
- Avoid placing heavy objects on bottom shelves or the floor if they must be picked up again later. Heavy items should be stored near waist height and lighter objects on bottom or upper shelves.
- Use a mechanical device for heavy items, if possible, and inspect the device before use. If the object is too heavy, large, or awkward, get help.
- Avoid lifting above your shoulder height. Use a ladder or step stool to move objects at these heights.
- Push rather than pull an object. While pushing, maintain your lumbar curve and push with your legs.
- Check the path before moving the load to ensure the path is clear and well-lighted, and determine where to put the load.
- To lift safely, spread your feet apart to keep a wide base of support, bend at your knees instead of at your waist and maintain your lumbar curve at all times, hold the object you are lifting as close to your body as possible and lift slowly, smoothly without jerking.
- Avoid a long reach to pick up an object and unnecessary twisting. Turn your feet, not your hips or shoulders. Leave enough room to shift your feet so as not to have to twist.

- Take your time and use the same techniques when setting down the object.

## Muscle Injury Prevention through Ergonomic Interventions

Ergonomics is the science of fitting the job to the worker. Where feasible, the workplace should be

evaluated to reduce the following risk factors:

- Repetition
- Inadequate work/rest scheduling
- Forceful exertions
- Awkward and extreme positions of the body
- Sustained or static positioning of the body.

Be sure to report to your supervisor any work-related discomforts. If you and your supervisor are unable to identify the source of the discomfort or find a solution, contact your Safety and Health Leader for assistance. For workers who sit the majority of the day, it is a good idea to stand up every hour and move around and stretch.

As a state employee, you are in the best position to evaluate the tasks you do each day whether it is data entry, microsurgery, or plumbing. The tips provided below are intended to provide you with the information and basic tools necessary to assess and correct your own job.

- If a repetitive job is awkward, try to find a better way to accomplish it.
- When using vibrating tools, try to insulate the vibration from your hands with gloves, padding, etc.
- Keep your wrists in a neutral position as much as possible, not bent or twisted.
- Use your whole hand to grasp objects, not just your thumb and index finger.
- Alternate easy and hard tasks that require the use of your hands.



### Hazard Hint

**Muscle-related injuries are the Number Two reported injury in state government. Employee Ergonomic teams are encouraged in working groups that lift, push or pull frequently.**



### Hazard Hint


**Musculoskeletal disorders (MSDs) are a category of injuries that affect the body's muscles, bones, ligaments, tendons, and nerves. When there is a mismatch between the physical requirements of the job and the physical capability of the worker, MSDs can result.**

- Give your hand and wrist time to recover after forceful movements.
- Don't carry heavy objects for long periods. Use jacks, carts, or dollies whenever possible.
- Increase the diameter of the handles of tools and equipment with tape, foam or other materials to help reduce the force of your grip and to spread the pressure more evenly over the hand.
- Sit with your knees slightly higher than your hips, with lower back against a firm backrest or pillow and feet flat on the floor or foot rest. Avoid leaning forward and try to allow your hips to support your torso.
- When standing, stand straight and maintain lumbar curve. Avoid bending at the waist. For prolonged standing, use a low footstool for alternate resting of your legs and altering your stance.

### Computer Workstations


Here are some suggestions for setting up your computer workstation properly:

- Adopt a neutral posture. Sit with your lower back against the chair, your upper legs parallel to the floor and your feet flat on the floor or on a footrest.
- Adjust your desk height or keyboard tray so that your elbows are bent at right angles and your forearms are approximately parallel to the floor.
- Keep your wrists neutral (straight) by using a wrist rest that is the same height as the keyboard.
- Place your mouse (or other pointing device) on a surface close to and at the same height as your keyboard.



**Hazard Hint**

To avoid sprains and strains, exercise every day, warm up and stretch prior to physical exertion. Eat a well-balanced diet to keep muscles strong and maintain a healthy weight.



**Hazard Hint**

Employees working at a desk should get up every hour and move and stretch to prevent discomfort.

- Position your monitor directly in front of you, approximately an arm's length away, with the top of the screen at or slightly below eye level.
- Use a document holder to position work at eye level and close to the screen.
- Adjust your lighting and monitor to prevent glare or use an anti-glare filter.
- When performing tasks involving repetitive motions or awkward positions, take periodic stretching breaks or alternate with other tasks.



**Hazard Hint**

**Use extra caution when removing staples from a jammed stapler or eye injuries may result.**

## Office Safety Injury Prevention

Many state employees work in office environments. Following safe work procedures in the office can prevent many accidents.

- Do not attempt to carry stacks of materials which are high enough to obstruct your vision.
- Close file drawers when not in use to avoid a trip hazard.
- Close cabinet doors to avoid head or leg injuries.
- Accidents can result when you stand in front of doors, so stand away from the path of the door swing.
- Use razor blades, knives, scissors, and other objects with sharp edges or points with caution. Keep razor blades in protective containers. Never keep loose razor blades in desk drawers.
- Exercise care when loading or using staple machines to avoid eye injuries and puncture wounds. Use a proper staple remover for removing staples. Properly dispose of broken staple removers.
- Keep fingers away from the sharp edge of paper cutters. Never leave a cutting knife in a raised position. All paper cutters should have proper finger protection.
- Do not store anything within 24 inches of the ceiling per fire code.

## Office Equipment

- Do not wear ties, loose fitting clothing, or long jewelry when using paper shredders to avoid accidentally being fed into the paper entry port.
- Do not place computers or other office equipment too close to the edge of a desk or other surface.
- Outlet or light switch covers must be present and free from cracks.
- Office equipment should be properly grounded or double insulated to safeguard against electrical shock.
- Do not use two-pronged extension cords or outlet adapters in the workplace. Three pronged extension cords can ONLY be used as "temporary wiring" for up to 90 days and must not be plugged into another extension cord. Notify your supervisor if additional outlets are required. Extension cords should be protected from accidental damage which may be caused by traffic, sharp corners, or pinching in doors or elsewhere.
- Surge protectors must be plugged directly into the wall and not into extension cords, another surge protector, or uninterruptible power supply (UPS). This practice is called "daisy chaining" or "piggy backing" and can lead to a short circuit or electrical fire.



### Hazard Hint

**Use only surge protectors or power strips that have an internal circuit breaker. These units will trip the breaker if the power strip is overloaded or shorted to prevent overheating and fire and are listed by a national testing laboratory such as Underwriter Laboratories (UL). The UL label must never be removed from the unit. On the underside of the casing, there should be the manufacturer's name and the name of the testing lab where the unit was tested.**



- Refrigerators, microwaves or equipment that pulls high amperage must be plugged directly into a wall outlet.
- Do not place a surge protector or power strip in an area where the unit would be covered with carpet, furniture, or any other item that will limit or prevent air circulation.
- Worn, frayed or damaged electric cords or connectors should not be used and should be tagged “Danger, Out of Service, Do Not Use” until replaced.
- If at any time the surge protector or power strip is hot to the touch, remove and replace the unit.

## Medical Surveillance to Prevent Workplace Illnesses

When you work with certain toxic chemicals, infectious diseases, biological agents, excessive noise, or wear respiratory protection, you are required to be medically evaluated. This evaluation may include periodic physicals, blood or other biological testing, and other tests such as audiometric or pulmonary evaluations. If you work with any of these, check with your supervisor and your safety and health leader for specific requirements in the North Carolina Occupational Safety and Health Standards.

## Motor Vehicle Requirements and Injury Prevention

Employees may not operate a state vehicle or other means of state-owned motorized conveyance unless you possess and can present a valid driver’s license. Agencies are required to conduct motor vehicle license checks for all drivers at regular intervals, and all drivers should attend defensive or safe driving training courses. If you are required to drive a state vehicle or



### Hazard Hint

**Never use a cord or plug with evidence of burning, melting, or any other visible damage. If the insulation is damaged or missing, or the cord has come loose from the plug, replace the unit. Never use a cord repaired with electrical tape.**



### Hazard Hint

**Distracted driving, alcohol, and speeding are the leading causes of vehicle accidents.**

**Talking “hands free” does not eliminate the hazard of distracted driving. The brain loses information that is needed to see, hear, and discern upcoming changes.**

**Silence your phone before you start your drive. Allow enough time during your commute for stops so you can pull over and park in a safe location to check email and voicemail messages.**

personal vehicle for state business and have had your driving privileges suspended or license revoked, you must report this condition to your supervisor immediately.

Any accident involving a state vehicle, regardless of the extent of the damage, is to be investigated by a police officer with jurisdiction in the area.

Consult with your agency's requirements related to vehicle use.

## Fire Prevention

You have a personal responsibility to prevent and control fires. Obey all rules, regulations, and signs for fire safety such as those controlling:

- Smoking
- Open flames
- Other sources of ignition
- Storage
- Handling
- Use of flammable liquids or other hazardous materials

Familiarize yourself with the location of fire suppression equipment in the area where you work and the proper method of turning on a fire alarm. You should be trained on how to use portable fire protection equipment (such as fire extinguishers) in order to properly use them, but in the event of an emergency any one can use a fire extinguisher as long as they remember to PASS: Pull, Aim, Squeeze, and Sweep. If you use a fire extinguisher or any other fire equipment, notify your supervisor at once so that it can be immediately replaced and serviced. Keep hand-operated fire equipment such as extinguishers and hoses fully accessible, mounted, and unobstructed at all times.

Before using any decorative electric lighting device, check for loose connections, frayed wiring, broken sockets, or other defects. Any defective electrical device should be replaced or repaired. Electrical devices should bear the listed label, i.e. UL, FM, etc.



### Hazard Hint

The best way to practice fire safety is to make sure a fire doesn't break out in the first place. This means being aware of potential hazards in your home and in your workplace:

- Be proactive by changing your batteries in your smoke detectors once a year.
- Have a fire extinguisher in your home.
- Plan escape routes, have a meeting place outside, and practice.

## General Housekeeping/Sanitation/General Waste

Good housekeeping is essential to maintaining safe working conditions:

- Keep your work area clean and material properly stored; keep walkways and floor areas clear of slip, trip, and fall hazards.
- Clean up all water or beverage spills.
- If hazardous chemical spills are identified, evacuate the immediate area, barricade the spill area, and notify your agency's safety and health leader or designated person for clean-up.
- Maintain three feet clearance from all electrical panels, 150 volts or less. Do not store materials in or near switch boxes, switchboards, in mechanical equipment rooms, attics, in stairwells, and telephone switch gear rooms.
- Keep tools stored neatly in designated area and materials securely racked or stored.
- Employees should never block or lock emergency exits, fire alarm pull stations, or fire extinguishers.
- Employees should not store combustibles in exit aisles. They should maintain a 36-inch aisle clearance.
- Store oily waste or rags and other flammable waste in approved metal self-closing waste cans that have lids and properly dispose of contents daily.
- Sharp items, such as razor blades, should be disposed of in an impermeable, closed container.
- Medical waste sharp items require immediate deposit in biohazard sharps containers and hazardous materials control for disposal.



### Hazard Hint

**Storing any combustible material in a stairwell is prohibited since this is a primary exit route.**



### Hazard Hint

**If you are a diabetic, do not put used needles in the regular trash. These must be collected in a hard-walled container and properly labeled.**

## Emergency Response Plan

Obtain and learn your agency's specific emergency response plan for your workplace for fire, chemical release, severe weather, bomb threat, etc. The following general rules and actions should be learned before an emergency and followed in the event of an emergency.

### Before an Emergency

Obtain a copy of your agency's Emergency Action Plan from your supervisor.

- Learn how to contact emergency services.
- Locate local fire alarms or other emergency alarm systems and learn how to operate them.
- Learn the location of all exits, from your work area, and determine a primary and alternate exit route.
- Know your designated assembly areas for fire alarms, bomb threats, and severe weather.
- Learn and become familiar with the signaling methods/devices used in emergencies by your agency. If distinct signals are used based on an emergency, know the distinction, so you may react appropriately during a given emergency.

### When an Emergency Occurs

- If a fire alarm sounds, evacuate the building immediately.
- Do not run. Do not use elevators. Use stairwells in multi-story buildings. Report to your designated meeting area outside the building immediately.



### Hazard Hint

Be prepared for emergencies by practicing all emergency drills and thinking:

- Where are the exits?
- Where are tornado shelters?
- Is there a fire alarm pull station in my building?
- Where is the nearest automated external defibrillator (AED)?
- What details should I record during a threat?
- If there is workplace violence, do I know how to respond?



### Hazard Hint

Almost every stairwell in North Carolina is approved as an *Area of Refuge* for people to stay in if they can't walk down the stairs during a fire evacuation. The fire department must be notified if any occupant remains.

- If you have a visitor, escort them to your designated meeting area. Do not re-enter the building after an emergency evacuation until you have been instructed by management.
- Do not leave your designated meeting area until instructed to do so by emergency services personnel.

## Workplace Violence

Every agency and university is dedicated to providing a work environment that is free from violence or threats of violence by or against employees and the public we serve.

Your agency or university has developed policies and procedures for the prevention and management of violence or threats of violence, this includes but is not limited to holding perpetrators accountable and providing assistance and support to victims.

Workplace violence can take a range of forms. It can include, but is not limited to, emotional abuse, intimidation, bullying, harassment, threats, stalking, domestic violence, and physical assaults.

Violence or threats of violence are prohibited. Such behavior on the part of any individual in or on any state government/university property, including but not limited to, buildings, grounds, and vehicles, will not be tolerated. Employees who violate this policy will be subject to disciplinary action up to and including termination.

If you are a victim of workplace violence, which includes domestic violence, your agency or university will make every effort to provide support and reasonable security measures for you. You are encouraged to talk with your supervisor, human resources representative, or you may contact the [Employee Assistance Program](#).



## Hazard Hint

**Employees should be alert to the possibility of incidents and threats of violence. You are encouraged to report any violence or threats of violence you have received or witnessed. If your supervisor is the source of the threat, then the report should be made to your human resources representative. Every effort will be made to protect the safety and anonymity of anyone who reports such concerns. NC Statutory regulations protect against retaliation for any employee who, in good faith, reports a violation.**

# Specific Safety and Health Programs

## Asbestos

Employees shall not remove or disturb asbestos or material suspected of containing asbestos. Asbestos may be contained in materials such as:

- Adhesives and mastics ceiling areas
- Duct work
- Flooring and/or floor tiles
- Insulation
- Piping in lab fume hoods
- Vented enclosures

If there is any damage to materials or items suspected of containing asbestos, contact your safety and health leader immediately.

Employees should be notified of procedures related to asbestos, if relevant for their facility.

## Biological Hazards

Biohazards are biological agents or substances present in or arising from the work environment which present or may present a hazard to the health or well-being of employees or the community.

Biological agents and substances include, but are not limited to, infectious and parasitic agents, toxins derived from organisms, or non-infectious microorganisms such as some mold, fungi, and/or other plant or animal products that cause diseases.

Generally, biohazards are either:

- Infectious microorganisms;
- Toxic biological substances;
- Allergens; or
- Any combination of these.

Biological agents can be found in numerous settings, but are primarily found in training, clinical, and laboratory settings or the result of infectious agents brought into the areas as a contaminant.



### Hazard Hint

**Intact and undisturbed asbestos containing materials (ACM) do not pose a health risk to building occupants. When ACM is properly managed, release of asbestos fibers into the air is minimized, and the risk of asbestos-related health problems is negligible.**

Employees must be trained on what biological hazards may be encountered and which control measures and work practices must be used in order to have a safe work place. In addition, employees should be familiar with and refer to other documents such as the Exposure Control Plan, a Laboratory Safety Manual, or the Biosafety Control Plan that identifies the hazards as well as specific practices and procedures designed to minimize or eliminate risk.

### **Bloodborne Pathogens**

Employees who have occupational exposure to human blood, body fluid, pathogens, or body parts are required to have a written Exposure Control Plan and receive training in work practices, methods of exposure, and universal precautions, initially and annually thereafter.

Employees exposed to blood or other body fluids should contact their supervisor and safety and health leader immediately and request information on the agency or university Exposure Control Plan and the employer-provided hepatitis or other applicable vaccinations.

The most important thing to remember is a strict adherence to the specified practices and procedures and use of universal precautions when interacting with all human blood or body fluids. These include a system of administrative controls and use of personal protective equipment (PPE) at all times.


Immediate washing of hands and contaminated areas of the body shall be implemented should an exposure to bodily fluids occur.

### **Confined Spaces**

OSHA defines a confined space as a space that is large enough for an employee to enter or break the plane of entry, has restricted means of entry or exit, has unfavorable natural ventilation, and is not designed for continuous employee occupancy.

Examples of confined spaces include, but are not limited to:

- Digester
- Manholes
- Sewers
- Silos
- Tanks
- Tunnels
- Trenches
- Vaults



## **Hazard Hint**

**Washing hands with warm soapy water for 30 seconds prevents colds and other illnesses. Some state facilities provide hand sanitizers to help prevent spreading illnesses.**

Do not enter a confined space or break the plane of entry with any part of your body if you are not trained. Entry into confined space can be extremely dangerous. Possible hazards can include:

- Oxygen deficiency
- Exposure to dangerous vapors and toxic gases
- Fire, explosion hazards
- Physical hazards

All personnel involved with or having responsibility for entry into confined spaces must be thoroughly familiar with permit entry and rescue procedures. Detailed agency or university procedures are issued in a separate document. Regulations governing entry into confined spaces are specified by [OSHA 29 CFR 1910.146](#).

## Electrical Safety

Training by your supervisor is essential for all work environments. It shall include basic information on electrical safety as it relates to that environment. Employees whose jobs require them to work on or near exposed energized parts are required to be trained in electrical-related safety practices that pertain to their respective job assignments.

Electrical work must follow all federal and state requirements and good industry practices. To the maximum extent possible, work on electrical equipment or circuits should be done with the power off.

A safety warning and tagging system should be used to ensure that all power is removed from the system. (See the Lock-out/Tagout section for more information). Circuits must be checked with the proper equipment before work is started to ensure that no voltage is present.

Extension cords used with portable electric tools and appliances should be three-wire grounded type and protected by Ground Fault Circuit Interrupters (GFCIs).

### Ground Fault Circuit Interrupters (GFCIs)

GFCIs should be used on power circuits serving outlets in damp, wet, or outdoor locations and in any other areas where people using electrical equipment may become grounded.



## Hazard Hint

**Ground Fault Circuit Interrupters (GFCI) constantly monitor current flowing through a circuit. If there is a small difference of current, the GFCI will interrupt power before you are exposed to the current and get shocked. A GFCI works even on two-slot receptacles. If you own an older home, consider adding a GFCI to possible wet locations such as the kitchen, bathroom, laundry room, garage, outdoors, or crawl spaces.**



## Hazard Communication Program

The [OSHA Hazard Communication Standard](#) has been revised and now meets the provisions of the United Nations “Globally Harmonized System of Classification and Labeling of Chemicals” (GHS). Two significant changes contained in the revised standard require the use of new labeling elements and a standardized format for Safety Data Sheets (SDSs), formerly known as Material Safety Data Sheets (MSDSs). The new label elements and SDS requirements will improve worker understanding of the hazards associated with the chemicals in their workplace.

The [NCOSHA Hazard Communication Standard](#) requires employers to provide employees with information concerning the hazards associated with the chemicals in their workplace. This standard requires:

- A written hazard communication program;
- Labels on containers;
- An inventory of chemicals;
- Posting area warning signs;
- Availability of Material Safety Data Sheets/Safety Data Sheets; and
- Chemical safety training and information sessions upon initial assignment and when new chemicals are introduced into the workplace.

Laboratories with a Chemical Hygiene Plan are exempt from the OSHA Hazard Communication Standard requirements except:

- Labels are not to be removed or defaced;
- Maintain SDS/MSDS for each chemical;
- SDS/MSDS should be readily available; and
- Provide information and training, except location and availability of written program.

A laboratory that ships chemicals is considered to be a distributor or manufacturer and must ensure that containers are appropriately labeled prior to shipment and a SDS is provided to other distributor(s) or employer(s).

Laboratories must comply with all Hazard Communication elements for non-lab chemicals being used e.g. housekeeping, maintenance activities.

## Chemical Inventory

A current inventory of all hazardous chemicals present in the workplace must be maintained. The inventory should be kept with the SDS/MSDS file.

State agencies and universities must maintain received SDSs/MSDSs and make them readily available to employees in a file, notebook, computer directory, or by fax upon request. If a SDS/MSDS for a chemical is not received, contact the chemical manufacturer or distributor to obtain the SDS/MSDS. Efforts to obtain the SDS/MSDS must be documented by either a telephone log or with copies of correspondence.

Your supervisor or the safety and health leader may be contacted for Hazard Communication Program Training for new employees.

## Contractors

The safety and health leader or project coordinator will be notified when contractors are to work in areas covered by the Hazard Communication Program. The safety and health leader or project manager will inform the contractor that they may encounter hazardous chemicals at their work location and the name of the agency or university person(s) from whom chemical safety information is available.

Contractors who use hazardous chemicals at state facilities must provide a list of the chemicals that are brought on the property and to maintain a copy of the SDSs at the work-site.

## Lockout/Tagout – Control of Hazardous Energy

The control of hazardous energy is required before service, repair, maintenance, inspection, or exposure to equipment or areas where a hazard may be presented by uncontrolled energy, including the flow of solids, liquids, or gases into confined spaces or environments. Equipment that has more than one energy source or multiple hazards (pneumatic, steam, chemical, or hydraulic) must have written procedures for shut down and start up.



### Hazard Hint

To prevent chemicals from becoming outdated and possibly unstable, expiration dates should be written on the label or included in the inventory list.



### Hazard Hint

Lockout/Tagout (LOTO) is a fairly simple process, yet shortcuts are statistically the second most common source of violations. A key component of LOTO is identifying and locking out all energy sources prior to starting work.

All employees who will be working on equipment where the unexpected energizing, start-up, or release of hazardous energy could cause injury shall be trained and follow the Lockout/Tagout (LOTO) procedure that follows [NCOSHA 29 CFR 1910.147](#).

## **Machine Guarding**

Safeguards on machines are designated to protect you from injury. The basic types of hazardous mechanical motions and actions are:

### ***Motions***

- rotating (including in-running nip points)
- punching
- reciprocating
- transverse

### ***Actions***

- cutting
- shearing
- bending

To reduce a potential injury, follow these basic rules:

- Safeguard any machine part, function, or process which may cause injury.
- Never start a machine unless you have been trained in the use of the machine.
- Never start a machine unless required personal protective equipment (PPE) is on, in use, and you are wearing appropriate clothing. (See PPE section).
- Do not wear loose clothing, neckties, rings, or other jewelry. If your hair is long, tie it back.
- Never start a machine unless guards are in place and in good condition.
- Report all missing guards to your supervisor immediately.
- No guard barrier or enclosure should be adjusted or removed for any reason, unless you are trained to do the work, have the permission of your supervisor, and adjust machines as part of your job.
- Never service or perform maintenance on a machine without disconnecting power and implementing the lockout/tagout procedure.

## Noise

Excessive noise levels may exist when operating certain equipment or machinery. Exposure to high noise levels could result in a gradual loss of hearing which may not be noticeable to the individual.

If noise levels exceed safe limits as prescribed by NIOSH, employees must be protected by either engineering control or by a hearing conservation program which includes hearing protection (ear plugs or ear muffs) and appropriate hearing tests.

If you suspect you are exposed to high noise levels in the workplace, contact your supervisor so that the noise level can be measured by trained individuals.

## Personal Protective Equipment (PPE)

Your supervisor's annual hazard assessment of the job will be used to identify required PPE, according to [ANSI-Z-89.1-1997](#):

- **Head Protection** is required to protect employee's head where there is a danger of head injury from impact and falling or flying objects.
- **Ear Protection** must be used as required to protect employees from noise when engineering controls cannot reduce noise to acceptable levels.
- **Eye and Face Protection** must be used when exposed to hazards such as flying particles, molten metal, dust, chemicals, gases, steam, vapors, objects, biological hazards, potentially injurious glare, light or heat radiation, or other potentially harmful exposures which may cause injury to the eye or face. All eye & face protection must meet or exceed the requirements specified in the most current ANSI Z 87.1 standard.
- **Respiratory Protective Equipment** must be used as part of a comprehensive respirator



## Hazard Hint

Hearing loss can happen very slowly or very suddenly: it can be temporary or permanent. NIOSH states that workers exposed to an average of 85 dBA or more over an eight-hour period (a normal conversation is 50-60 dBA) must be involved in the hearing conservation program.

Remember this...Wearing hearing protection is a sound investment.



## Hazard Hint

Personal protective equipment, or PPE, is designed to protect workers from serious workplace injuries or illnesses. If such hazards are present in your workplace you are required to wear the appropriate PPE.

program when required to protect employees from airborne contaminants which, when measured, are above the Threshold Limit Value in NIOSH Standards.

- **Foot Protection (safety shoes)** is required to protect employees working in areas where there is a danger of foot injuries due to falling or rolling objects, exposure to piercing of the sole, or where protection is needed against electrical or chemical hazards. Protective footwear must comply with [American Society Testing Materials \(ASTM\) F-2413-05](#).
- **Hand Protection** is required by established standards to protect employees from physical, biological, chemical, radiation, or electrical hazards.
- **Fall Protection** (safety harness, lifelines and lanyards) is required to protect employees from falling while working at heights of six feet or more not protected by standard guardrails or safety nets or as required when working in confined spaces.

Your agency or university may have specific requirements; therefore, contact your supervisor to determine the equipment needed to perform your job safely.

### Portable Ladders

- All ladders must be inspected frequently and rechecked for soundness and proper working condition prior to daily use.
- Ladders which have developed defects must be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."
- Do not use ladders on or near power lines or other electrical devices.
- Straight and extension ladders must be tied off and secured to the upright structure against which they lean.
- Non self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter (1/4) of the working length of the ladder (the distance along the ladder between the foot and the top support).



## Hazard Hint

**Choose the right ladder for the job. Not sure how to pick the right ladder? Ask these questions:**

- **Is the ladder positioned properly?**
- **Does the ladder have proper feet?**
- **Does the ladder show no signs of damage?**
- **Is the ladder clearly marked with the weight limit?**

**Think safety before you start because "chance takers are accident makers."**

- Non self-supporting ladders must extend three feet above the point of support of eaves, gutters, or roof line and should be tied off.
- Use a ladder with safety feet which are suitable and positioned firmly on the floor, ground, or concrete, which provides a stable, flat, and level surface.
- Work facing the ladder with both feet on the rungs.
- Only one person is permitted on a ladder at a time unless ladder design specifies otherwise.
- Ladders must be maintained free of oil, grease, and other slippery hazards.
- Ladders must not be loaded beyond the manufacturers' maximum rated capacity.
- Maintain a three-point contact by gripping the side rails with both hands at all times when climbing a ladder. Raise and lower tools or equipment by a hand line and canvas tool bag.
- Do not reach out more than an arm's length from a ladder. If necessary, descend the ladder and move the ladder to a better location.
- Step ladders must be fully opened and set level, spreaders locked, and all four legs set level on the ground.
- Do not stand on the top step or top cap of a stepladder.
- Do not use the bracing on the back legs of a stepladder for climbing.
- Ladders shall be maintained in good condition at all times, the joint between the steps and side rails should be tight, all hardware and fittings securely attached, and the movable parts should operate freely without binding or undue play.

Reference: OSHA General Industry Standards [1910.25](#), [1910.26](#), and [1910.27](#) and [Construction. Std. 1926.1060](#).

## **Scaffolds**

The use and construction of scaffolds must follow all federal, state, and local legal requirements and good industry practice.

Only competent employees authorized by the supervisor should erect scaffolds, platforms, and staging. Scaffolds and their parts must be sound, rigid, and capable of supporting at least four times their maximum intended loads.

All scaffolds, platforms, and staging shall comply with [OSHA General Industry Standard 1910.28-29](#) and [Construction Standard 1926.451-453](#).

### Powered Industrial Trucks/Material Handling Equipment

When using heavy equipment, remember:

- Do not operate equipment unless you have been trained or are receiving training from a qualified person.
- Operators of forklifts and other specialized vehicles must be properly licensed for the equipment being operated. This license is in addition to a NC vehicle operator's license.

Your safety and health leader, supervisor, or designated trainer will provide you with additional information on particular machines. However, remember that your own good judgment as well as common sense are important in the safe operation of your equipment.

### Tools – Hand and Power

Any use of hand and power tools shall be both coordinated with and have the authorization of your supervisor and the supervisor of the area in which the tool will be operated and the Safety and Health Leader.

#### Powder-Actuated Tools

Any use of powder-actuated tools should be both coordinated with and have the authorization of your supervisor and the supervisor of the area in which the tool will be operated, in addition to the safety and health leader.

### Trenching and Excavations

Excavation work must follow state legal requirements, including Building Code Requirements and N.C. Occupational Safety and Health Standards ([NC OSHA Standard 29 CFR 1926, Subpart P](#)). Excavations include, but are not limited to, operations such as drilling, digging, and trenching.



### Hazard Hint

Safety for pedestrians is often overlooked in lift truck safety programs. When operating trucks or heavy machinery use warning devices, slow down, make eye contact with pedestrians and never talk or text on your cell phone.



### Hazard Hint

Tools are such a common part of our lives that it is difficult to remember that they may pose hazards. Before use of tools, learn to recognize the potential hazards associated with each tool.

The following brief overview of safety controls must be followed in addition to all specific requirements which are required for the job and by N.C. Occupational Safety and Health Standards.

## **Waste Disposal**

### *Hazardous Waste Generators– 40 CFR 261 – 266*

Facilities will attempt to minimize the generation of hazardous waste through source reduction and recycling prior to sending waste for disposal. Hazardous waste is to be kept in closed containers that are labeled in a manner to describe its contents. Employees that manage hazardous waste should at a minimum be thoroughly familiar with proper waste handling and emergency procedures.

### *Universal Waste – 40 CFR 273*

Universal waste includes used batteries, pesticides, and mercury-containing equipment and lamps. Fluorescent lights and thermostats that contain mercury, as well as lead-acid batteries, are banned from landfills in North Carolina. Universal waste regulations were developed to ease the regulatory burden on facilities that wish to collect these wastes, reduce the amount of these wastes going to solid waste landfills, and ensure that the waste will go to the appropriate treatment or recycling facilities pursuant to the full hazardous waste regulatory controls. Used lamps must be maintained in a closed container that is labeled as “Universal Waste-Lamps”, “Waste Lamps”, or “Used Lamps”. Used batteries must be maintained in a container that is labeled as “Universal Waste-Batteries”, “Waste Batteries”, or “Used Batteries”. Universal waste can be stored onsite for no longer than one year.

### *Electronics*

Discarded televisions and computer equipment are banned from landfills in North Carolina. Old electronic equipment should be sent for recycling.

### *Used Oil – 40 CFR 279*

Used oil is banned from landfills in North Carolina. Used oil must be stored in tanks or containers that are in good condition and not leaking. Tanks and containers must be labeled as “Used Oil” and all spills must be stopped, contained, cleaned, and managed properly. Fill pipes used to transfer used oil into underground storage tanks must be labeled as “Used Oil”.





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# NC State Government Safety and Health Handbook

I understand that it is my responsibility to become familiar with and abide by these instructions, insofar as they apply to the duties which I will perform for the State of North Carolina. (A copy of this certification will be filed with the employee's personnel records.)

Additionally, I hereby acknowledge receipt of a copy of the **North Carolina State Government Safety and Health Handbook**.

**Employee's Signature:** \_\_\_\_\_

**Agency or University:** \_\_\_\_\_

**Date:** \_\_\_\_\_