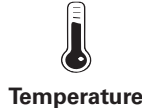


Hazard ID and Mitigation

Before each job task, consider safety. Learn more and submit your ideas for improving Facilities Division safety at go.ncsu.edu/safety

STEP 1

Identify Hazards



STEP 2

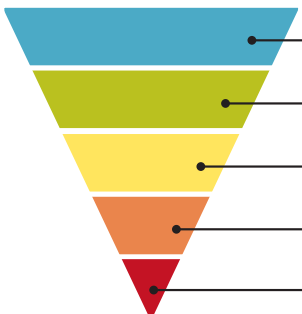
Assess Hazards

How could the hazards affect safe completion of the job?

STEP 3

Establish Controls

Use the hierarchy of controls.



STEP 4

Monitor Effectiveness

Verify controls are effective for the entire duration of the job.

- Elimination**
Physically remove the hazard
- Substitution**
Replace the hazard
- Engineering**
Isolate people from the hazard
- Procedure**
Change the way people work
- Personal Protective Equipment**
Protect the worker with PPE

If you are unsure how to control a hazard, STOP and talk to your supervisor.

NO ONE GETS HURT GO FOR ZERO

| Category | Hazard Examples | Control Examples |
|---|--|---|
|  Slip, Trip, Fall | Fall from height Slippery surfaces Objects in a walkway Changes in elevation | Guardrail Fall protection Barricading slippery area Good housekeeping |
|  Electrical | Exposed energized parts Damaged cords Power lines (over/under) Arc Flash | De-energize, test, Lock Out Tag Out Inspect cords (remove/repair) Maintain safe distances Ground Fault Circuit Interrupter |
|  Pressure | Steam and Condensate Lines Hydraulic Equipment Residual Energy Compressed Gases and Lines | Preventative Maintenance Inspection Lock Out Tag Out Cable Check (whip check) |
|  Mechanical | Rotating Equipment Pinch Points Missing Guards Component Failure | Installing Barriers Installing Guards Lock Out Tag Out Preventative Maintenance |
|  Vehicle | Backing (obstructed view) Speed Restricted view Distractions | Cameras Back up alarms/spotters High Visibility lights / PPE No portable electronic device use |
|  Temperature | Outdoor temperatures Ambient temperatures Hot Work (welding/torch/etc.) Hot Cold surfaces | Heat illness prevention program Hot work permits Signs PPE |
|  Chemical | Toxicity Flammability Reactivity Other hazards | Ventilation Proper use and storage Training PPE |
|  Health | Silica, Asbestos, Lead Noise Biological Radiation Welding | Abatement (removal) Ventilation / vacuum Work Practice Barriers Personal Protective Equipment |
|  Ergonomics | Excessive force Repetitive motion Awkward posture | Right tool for job Work / Rest cycles Mechanical vs manual Proper lifting |
|  Struck By or Against | Falling objects Flying objects Limited space for work Excavation cave-in | Secure objects Barricades Install bump protection Cave-in protection |