

Safe Job Planning

Many tasks at Northwestern are hazardous (e.g., working on energized electrical systems, high-pressure steam systems, and at heights), and the potential for injuries is often high. With any hazardous task, regardless of whether it is routine or non-routine, it is important to factor safety into your planning. Complacency is common with routine jobs, and with non-routine jobs, especially those that are complex, high-hazard, and/or involve multiple people, it is easy to not recognize potential or actual hazards without safe job planning.

Without knowing the potential or actual hazards of a task and implementing control measures, it is impossible for you and your team members to stay safe. To accomplish this, there are several common methods; one method is a Job Hazard Analysis (JHA), which is a deep analysis of each step of a process, associated potential hazards, and controls to mitigate the potential hazards.

Some complex hazardous tasks, such as those involving multiple entities (e.g., contractors, shop employees), unique hazards, or unfamiliar tools or work locations, require Safe Operating Procedures (SOPs), which factor in who performs each step of the task. Review Northwestern's [SOP guide](#) and [template](#) to learn more about how and when to use an SOP.

While you can develop a written Safe Operating Procedure for high-risk jobs, safe job planning can be done anytime by:

- Considering each job step in the correct sequence they are performed, noting who will be performing each step
- Brainstorming potential and actual hazards for each step, including any uncontrolled conditions/activities that can result in injury/illness
- Considering the specific hazard controls that can reduce the risk

Hazard controls to mitigate risk include:



Eliminate the Hazard – choose a different process, modify an existing process, substitute a less hazardous substance, improve the environment (e.g., ventilation), or modify or change equipment/tools.

Contain the Hazard – use enclosures, machine guards, worker booths, or other similar devices.

Revise Work Procedures – modify steps that are hazardous, change the sequence of steps, or add additional steps (e.g., locking/tagging out energy sources).

Reduce the Exposure – reduce the number of times the hazard is encountered, use appropriate personal protective equipment, and provide emergency facilities (e.g., eyewash station).

Consider the potential hazards in the painting example to the right; what hazard controls could you put into place to mitigate the risk of each of the potential hazards?

Job Tasks	Potential Hazards
Relocate furniture	Back sprains/strains
Prep the walls (e.g., spackle, sand)	Hand/arms muscle strain Breathing in respirable dust Working at heights
Paint the walls	Hand/arms muscle strain Breathing in paint fumes Working at heights

If you have any safety concerns that need to be addressed, Environmental Health & Safety (EHS) can help develop a Safe Operating Procedure, conduct a formal hazard assessment, and more.

Tips for Success When Talking to Your Team

Preparation is Key: Keep the topic relevant. Work with your team to review hazardous tasks in your workplace that may require an SOP or hazard assessment and discuss how the hazards can be avoided.

Stay Positive: Keep the focus on what can be done to create a safe workplace instead of focusing on what has gone wrong in the past.

Share a Story, Ask for a Story: Storytelling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

Report all injuries on Risk Management's [website](#) or call 847.491.5582.

Learn more: Complete [Job Hazard Analysis](#) training and review [OSHA's Job Hazard Analysis resource](#).

Safety at Home

Whether you are doing a home renovation project or partaking in a personal hobby, including safety considerations in your plan can help keep you and your loved ones safe at home. Keep the following in mind:

- Working with or on utilities (e.g., electrical circuits, plumbing) can be dangerous and cause extensive damage; do not touch these if you are not competent or qualified.
- Whether knives in a kitchen or tools in the garage, keep sharp or dangerous objects and tools out of reach of children.
- PPE is not just for tasks performed at work and may be necessary at home as well (e.g., hearing protection while mowing, pot holders while handling hot pans).

For Additional Information

Contact Environmental Health and Safety at ehs@northwestern.edu.

Do you or your team have a safety story you'd like to share? Contact Environmental Health and Safety for details.