Introduction: The average construction site is an ever-changing, bustling place that can pose many hazards for employees. If the project is up to speed, you can find workmen from several different trades working in the same general vicinity, within close proximity of others. The hazards encountered on a jobsite can be from hand tools, power tools, or from the operation of heavy equipment. There are the risks from falls, improper excavation procedures, fire, unsafe breathing atmospheres, and the hazard of electrical shock. All of these situations are potentially dangerous, and possibly lethal, if proper safety measures are not followed. Considering the fact that 20% of all work site fatalities are related to construction, the extra time it takes to create safe work practices is well worth the effort.

To minimize the risk of accidents, on-going assessments must be maintained to determine what special tools, equipment, and personal protective equipment will be needed to safely accomplish the work. With a clear understanding as to what types of operations are going on around the jobsite and recognizing how some types of work will affect others, arrangements and adjustments can be made allowing the safe completion of all tasks. The key to a safe work environment is attention to detail.

OSHA regulations require that “employees receive training and education in the recognition and avoidance of unsafe conditions at their jobs, and knowledge of applicable regulations that control or eliminate these hazards.”

Following are recommendations to help maintain safe work practices:

- Make it a daily habit to inspect all equipment prior to use. Ensure that all power tools, compressors, generators, heavy equipment, and scaffolds/ladders are in safe working condition and being used properly.
- Ensure that all equipment operators are trained and certified on the equipment which they are operating.
- Confirm the specific type(s) of personal protective equipment that are required to be used:
  - Determine the overall requirements for hard hats
  - Appropriate eye and face protection
  - Adequate hearing protection
  - Properly selected Hand and foot protection
  - What will the breathing protection requirements be? Particulates (dust) or vapors and fumes?
  - Will personal fall arrest gear be required?
  - Falling object protection such as nets and barricades?

Scaffolds and ladders are used by most everyone, check for these safeguards:

- Personal fall protection gear (belts, harness, lanyards, or other)
- Proper guardrails – different types for different scaffolds
- Safe access using hook-on ladders or scaffolds
- with integrated ladders must be used
- Check for proper platforms, planking, and walkways
- All working decks must be fully planked with approved scaffold-grade materials
- Ensure proper erection, dismantling, moving, or altering
- Fall protection for sides, edges, and on guardrails
- Ensure proper use of aerial lifting equipment
- Are access and egress contingencies being met?
- Are the daily inspections being done?
- Is there water in the excavation or have conditions changed?

Excavations on a jobsite change daily:

- Are the proper permits obtained?
- If underground utilities are being roughed in, is shoring in place?
- Are trenches benched and sloped as required?
- Are the daily inspections being done?
- Is there water in the excavation or have conditions changed?

Temporary utilities – especially electrical – must be correctly installed

- GFCIs must be installed on properly rated circuits and temporary wiring must meet standard requirements.
- Check all extension cords and the cords on power tools.
- Potable water supply should be clearly marked and isolated to avoid possible contamination, and sanitary accommodations must be provided and maintained.

Is OSHA compliance required by all trades on site? Who is the designated safety liaison for the various trades on each project?

Conclusion: The hazards mentioned are only a few of a long list of hazards that can be found on a construction site. A properly run construction site takes the effort of every person on that site to create a safe work environment. These issues, among many others, must be addressed and resolved with your company personnel, before assigning them to work on any project. Remember that good, on-going hazard assessment, along with proper employee training, is the key to getting the job done safely. Do your part and work safely; not only to protect yourself, but those around you.

Work Site Review