

Hazard Identification & Assessment

Hazard identification and assessment is an essential part of an effective safety and health program. A primary cause of occupational injuries and illnesses in the construction industry is the failure to identify hazards.

Hazard identification and assessment should be a proactive, ongoing process that typically includes activities like workplace inspections, observations, and incident investigations. Information collected from inspections, observations, and investigations when carefully reviewed and analyzed reveals uncontrolled exposures as well as incident trends. High energy is a primary source of hazards in the workplace.

High energy hazards can include suspended loads, falls from elevation, mobile equipment, vehicles, excavations, temperature, steam, explosions, arc flash and electrical contact.

Health hazards are often more complex and harder to identify. Health hazards can be classified as chemical, physical, and biological. Construction workers can be exposed to chemical hazards that are present on the host employer's site or introduced as part of the construction process. Finally, ergonomic risk factors must be identified. These can result from activities that require heavy lifting, working above shoulder height, repetitive motions, or tasks with significant vibration.

The hazard identification and assessment process should include foreseeable emergency scenarios and non-routine tasks. For example, the failure and collapse of structures should be considered when they are under new construction or undergoing structural repairs. Hazards can also be introduced from emergency events like fires, weather, and chemical spills.

The hazard assessment process includes prioritizing the hazards for control so that those presenting the greatest risk are addressed first. These decisions are based on the severity of potential outcomes, the likelihood that an event or exposure will occur, and the number of workers who might be exposed. At times, interim control measures are used until more permanent solutions are implemented.

