

Review Article

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Sources of Information to Identify Hazards and Assess Risks

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ABSTRACT

During inspection I observed different methods that can adopt to identify health and safety hazards before an incident occurs. I suggest that organization should monitor and measure hazards, risks, and controls at the workplace.

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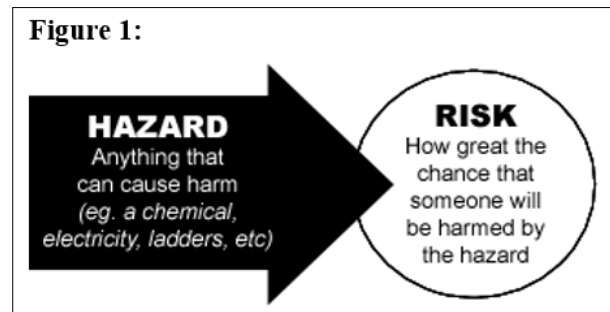
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Received: February 24, 2024; **Accepted:** March 04, 2024; **Published:** March 11, 2024**Introduction**

I explained that the purpose of risk management is to identify potential problems before they occur so that risk-handling activities may be planned and invoked as needed across the life of the product or project to mitigate adverse impacts on achieving objectives. Safe systems of work ensure that all the steps necessary for safe working have been anticipated and implemented and are designed to reduce human error. They prevent situations where workers attempt to cut corners, rush through a task or take unnecessary risks, reducing the likelihood of accidents occurring.

I suggest to remember that a workplace is any place that a worker carries out a work task for the business I evaluated techniques to identify and assess hazards by Collect and study information about the hazards present or inclined to be accessible in the workplace, Conduct beginning and irregular workplace examinations of the workplace to identify new or rehashing hazards, Investigate wounds, disorders, scenes, and near disasters/near misses to choose the concealed hazards, their causes, and security and prosperity program shortcomings.

I explained that a hazard has the potential to cause illness or injury to people, or damage to property or equipment. It is theoretically possible for a hazard to exist without any serious risk of incident. All hazards should be taken seriously and investigated for their potential to cause harm. Once a hazard is identified, it can either be eliminated, or control measures can be used to reduce risks of incidents caused by the hazard. The hierarchy of controls shows the effectiveness of control measures. An effective workplace safety program consists of identifying and mitigating safety risks. One need to be aware of workplace hazards to properly identify safety risks. To help with hazard identification and assessment, start by creating and maintaining a list of all sources of information on workplace hazards. The sources should be consulted periodically, or whenever a new process or job task is introduced.

Figure 1:

Be sure that all internal sources of information are always up-to-date, and monitor the external sources.

The following are sources of information on hazards that may already be available in a workplace and that are mentioned in OSHA's document on Recommended Practices for Safety and Health Programs:

- Equipment and machinery operating manuals.
- Safety Data Sheets (SDSs) provided by chemical manufacturers.
- Records of previous injuries and illnesses, such as OSHA 300 and 301 logs.
- Reports of incident investigations.
- Workers' compensation records and reports.
- Patterns of frequently occurring injuries and illnesses.
- Input from workers, including surveys or minutes from safety and health committee meetings.
- Results of job hazard analyses or job safety analyses.
- Documentation from other existing safety and health programs (lockout/tagout, confined spaces, process safety management, PPE, etc.).
- There are also external sources of information that one can use, such as:
 - Websites, publications and alerts
 - Best practices or other publications made available by industry groups or trade associations.
 - Labor unions, state and local occupational safety and health committees and worker advocacy groups.
 - Safety and health subject matter experts and consultants.

Techniques to Identify Hazard

Conduct beginning and irregular workplace examinations of the workplace to identify new or rehashing hazards, Investigate wounds, disorders, scenes, and near disasters/near misses to choose the concealed hazards, their causes, and security and prosperity program shortcomings. I explained Methods that can adopt to identify health and safety hazards before an incident occurs:

- Conducting pre-start discussions on the work to be carried out
- Encouraging workers to recognize and highlight hazards while performing work
- Carrying out safety inspections and audits of the workplace and work procedures
- Conducting job safety analyses (or similar task evaluation processes)
- Monitoring, measuring and testing the working environment such as noise monitoring, electrical testing and atmospheric testing
- Analyzing proposed new or modified plant, material, process or structure
- Conducting hazard (or risk) surveys
- Reviewing product information, e.g. safety data sheets, operating manuals
- Looking at past incident and near-miss reports.



Figure 2

I suggest to remember that a workplace is any place that a worker carries out a work task for the business so even when the workers are offsite or travelling for example, management need to be sure that they are not exposed to health and safety risks.

Having an incident reporting procedure and an open communication culture that supports incident reporting is a critical element in upholding health and safety in the workplace. An incident report is an official recording of the facts related to an incident on the worksite. An incident is broadly defined as any event or accident that leads to personnel injury or damage to equipment or property. Incidents also include events or accidents that have the potential to cause harm, or in other words, near misses.

Comprehensive incident reporting can help any business understand what is going wrong or could go wrong regarding workplace safety. With these insights, an organization can fix a health and safety issue before it becomes a bigger problem that can cause serious harm or damage to employees or property. As the old adage goes, a stitch in time saves nine. (Related to Evidence 3.1)

Implementation and Evaluation of Risk Assessment

I explained that carrying out suitable and sufficient risk assessments is the primary management tool in effective risk management. It is a legal requirement for any employer and must be documented

wherever five or more people are employed.

Risk assessment is a straightforward and structured method of ensuring the risks to the health, safety and wellbeing of employees (and others) are suitably eliminated, reduced or controlled. The main purpose of risk assessments is:

- To identify health and safety hazards and evaluate the risks presented within the workplace
- To evaluate the effectiveness and suitability of existing control measures
- To ensure additional controls (including procedural) are implemented wherever the remaining risk is considered to be anything other than low.

Ways to Measure, Monitor and Report Hazard

Organization should monitor and measure hazards, risks, and controls at the workplace. There are two primary jobs of monitoring and assessing. The first is to check whether the OHSMS is working as proposed. The second is to guarantee any security and clinical issues are perceived and a short time later dealt with again into the OHSMS organizing measure with the target of killing just as controlling them.

Monitoring and assessing may fuse a couple or all the going with, notwithstanding conceivably others:

- Workplace assessments
- Workplace testing
- Exposure assessments
- Injury, infection, and event following
- Safety suggestions from employees
- Occupational prosperity assessments

Maintain Records of Risks Assessment to Meet Regularly and Statutory Requirements

Assemble exact information on workplace security and prosperity. Consider gathering three kinds of information: conditions before the change, information about how the switch was set up, and what happened after the change was made.

Incredible records of how the change was made will help if have to do it again because they figure out what happened. Information on the outcome will encourage whether to take a stab at doing it again. How, how regularly, and when to assemble information? One course is to measure an outcome (like employee wounds) when the change.

Ordinarily, wounds are conflicting occasions; thusly, organization may need to assemble information for quite a while already and hence to guarantee that any movements to perceive are certified. Of course, if assessing changes in employee information and points of view after an instructional gathering, shouldn't measure for as long a time period. Organization may measure going before the readiness, soon after the arrangement, and a short time later two or three additional events 3 months to 1 year after the planning. Another model for social event information is to arrange the change so it doesn't impact everyone in the movement at one time.

How to Use Calculations in the Analysis and Improvement of Systems Reliability and Failure Tracing

There are two fragments to the framework openness condition. The first is hard and fast uptime and the second is finished excursion. Uptime is any time that asset is performing at a run of the mill yield. Individual time is any time the equipment isn't available for creation, including masterminded and off the cuff excursion. To discover framework openness for a particular time span, segment

an asset's total amount of uptime by the measure of complete uptime and outright get-away.

The asset isolated twice during the month, and it required one hour to fix each time. The asset was moreover shut down for eight hours in a month for routine evaluations. Close to the month's end, there were 100 hours of uptime on the machine and 10 total significant stretches of individual time on the machine. It figures the probability that a framework isn't isolated or for preventive upkeep when it's needed for creation.

Framework openness grants upkeep gatherings to choose the measure of an impact they are having on uptime and creation. Every organization needs its stuff to work whatever amount as could be normal. Taking everything into account, when equipment is running, money is being made. Upkeep gatherings can expect an enormous part in extending openness and ensuring the achievement of an organization. Failure codes disclose to everything concerning why an asset floundered so the organization can quickly perceive how to make it right. They influence availability by helping with diminishing excursion. Right when unconstrained get-away strikes, failure codes license experts to respond quickly, research better, and get an asset moving sooner. They in like manner help to ensure breakdowns don't transform into an issue regardless. Failure codes help to accumulate a pile of true data, which licenses to recognize the fundamental driver of a breakdown, spot designs with awkward work practices, and build a reliability-focused help system [1-13].

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