

## **Hazard Recognition**

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### **Introduction**

This paper will provide a wider perception of what constitutes a workplace hazard, and how you can increase your recognition of a hazardous condition. A hazard unrecognized is a condition that opens the way to an injury or illness. In this paper, you will understand:

- What safety hazards are
- Where safety hazards are
- What types of injuries can result from working around and/or with safety hazards
- How to anticipate, recognize, evaluate and control safety hazards
- How human behavior that results in people getting hurt
- Why you should fully utilize job hazard analyses (JHAs) in your work planning

### **What Is a Safety Hazard?**

A safety hazard is a source of danger to a person's safety, health or well-being. Examples may include the following at a jobsite:

- Gravity: Always present unless you are in outer space
- Mounting/Dismounting Equipment: Often routine and overlooked
- Unusual and non-routine tasks: Planning is critical
- Highwalls: Sometimes obvious and sometimes taken for granted
- Chemical agents: Know your chemical hazards and exposures
- Slippery work areas: Wet areas, mud, snow, ice; frequently present
- Congested work environments: Contact with objects and people
- Heavy Equipment/Pinch Points: Fingers and toes; keep all of them
- Contaminated Soils: Don't assume; test and confirm
- Lifting heavy objects: Back injuries are waiting to happen
- Repetitively performing the same work in a awkward manner: Ergonomics
- Not following proper traffic patterns: Vehicle accidents are costly

How are our employees working while injured? Here is an example of a scenario to consider:

- Compare safety hazards to crocodiles:
  - Crocodiles have been very successful for millions of years.
  - And why is that? Because they wait in areas where animals, including humans, congregate, e.g., rivers, watering holes.
  - They just sit there, watching and waiting unobserved.
  - They are waiting for an animal that is normally very cautious to approach the water and get comfortable.
  - They wait until the animal gets too comfortable.
  - To become complacent and think that things are okay.
  - When they accept the situation as normal and safe.
  - The hidden hazard strikes from beneath the surface.

So on your jobsites and project locations, think about those crocodiles waiting to strike. Maybe it is an unguarded pinch point on a machine or a broken tool or a perfectly good aluminum ladder in the tool shed just waiting for a worker to decide it is safe to use on a task that they have not taken the time to survey for hidden hazards, a/k/a, crocodiles.

#### Working at All the Jobsites

You can be certain that “safety” crocodiles are just biding their time, waiting for you to also get too complacent doing what you normally do. That might involve doing what you have done safely for quite awhile, normally and without thinking too much about what you are doing. When you get too complacent or you don’t pay quite enough attention to what you are doing, or you take your eyes or mind off the job for just a second, the crocodile will still be there waiting for that moment.

Sometimes the crocodiles are very obvious and easy to see; they just *jump* out at you when you look at them! Other times they are only somewhat obvious, only visible when you really look closely at them, and pick them out from their surroundings because you know what the surroundings should look like. Other times they are *not* very obvious at all or maybe you have never even seen a crocodile or even seen a picture of a crocodile. In a normal workplace, there can be many crocodiles lurking around at the same time, waiting for the unsuspecting or untrained worker.

#### Always Be Observant and Assess All of the Hazards Prior to Doing the Job

Videos can be powerful training tools. One commonly viewed video consists of a bungee jumper who jumps from a crane over a pond of water. As he is swinging high above the water, he is “gobbled” up by an unforeseen crocodile. Although this video is graphic, it remains a memorable image serving as a comparison of what *could* happen when hazards are not assessed before the task.

#### Identification of Hazards Takes Skill and Teamwork

Would everyone identify the same safety hazards if we were to take a walk through all the facilities at a work site? Not likely. Each individual brings personal knowledge and experience to observation skills. Your personal ability to identify safety hazards is primarily based on your education or training; personal knowledge or experience, especially as it relates to your current or previous work experience; practice at

observation skills; concentration, or the lack thereof, as you are walking through the area; perception of what you are seeing; and whether you have worked with the hazard safely before, as well as the ability to identify more than one hazard at the same time. Sometimes we say, they “can’t see the forest for the trees.”

Most employees follow the rules on the job, often dismissing the *same* rules when working at home. So what do you do when you see a work situation with a known hazard?

Many people think: “Keep on going;” obviously, someone has thought about it and determined that it’s probably okay. (In many cases, nobody has thought about it, and it is probably not okay to “keep going.”) While working, use a “questioning attitude” as well as your stop work authority. Stop work authority is your individual right to stop work if a safety hazard is suspected or present. Talk to a safety representative or your supervisor to determine if your suspicions are correct or incorrect. If your suspicions are correct, the task may need to be re-assessed and re-planned.

### Safety Hazards

Okay, so we all agree that safety hazards pose a risk to workers. But what are the potential results of working in and/or around a safety hazard?

- Nothing: The work gets done safely *if we’re lucky!*
- A Near Miss: This occurred *but no one got hurt this time!*
- A First-aid Injury: *Now we have to go to the clinic and report it.*
- A Medical Treatment Injury: *This might hurt or cost some money.*
- An Injury that Results in Restricted Work: *So what, slack job now?*
- Days Away Case: *So who is going to replace me while I’m out?*
- The Worker Dies: *Now a lot of other people are affected.*

Most of the time, the severity of the incident is considered luck or, in the case of an incident resulting in severe injury or death, really bad luck for a lot of people. But luck is one of those things that, when it is going right you give it credit, but when things are going bad, you blame it. The outcome of a situation is really how you react and address the situation, not how the situation treats you. What could a worker’s responses to a safety hazard be?

- Recognize that the situation is hazardous and take appropriate precautions to work safely around the hazard and warn others of the hazard as well. *They “walk the talk” for safety.*
- Work as usual because they do not recognize the safety hazard is there. *Ignorance is bliss but may be fatal.*
- Recognize that the situation is hazardous, but not take all of the appropriate precautions to work with the hazard safely. *Familiarity breeds contempt.*

- Recognize the hazard, but don't think that they will be injured, *"Joe got hurt because he didn't know what he was doing. I did this before, and I won't get hurt."*
- Accept the hazard as "a cost of doing business" or *"we gotta get the job done now,"* or maybe they just accept injuries as being part of the job, or could be that macho attitude drives them not to be the "scaredy cat" on the job.

We always have the opportunity to do the job right the first time. We need to plan our work and then work the plan. If changes occur that are not part of the plan, we need to back up two yards and revise our work-plan to include the changes.



**Figure 1. How many of us have heard the excuses that are on these head stones in the cemetery? SOMETIMES WE JUST CAN'T DO IT OVER.**

These are eleven common sources of injuries to consider in job planning:

- Caught in between
- Caught in
- Caught on
- Fall to below
- Fall same level
- Overexertion
- Struck by
- Struck against
- Contact with
- Contacted by
- Exposure

## **Conclusion**

As supervisors, managers and safety professionals, it is our responsibility to assure that we ask questions regarding the eleven common sources of injuries during the job planning phase. We need to ask questions in order to assure that all the existing and potential hazards of the job have been addressed. As workers, make sure that your safety education includes proper training. Proper training should be completed in the task you are performing. In addition, you should ensure that you understand the hazard types and their nature. As human beings, we all have a responsibility to watch out for our fellow worker; if you see them doing something dangerous, stop them, discuss the condition and the possible outcome. Collectively, work together to find a safer way to do the job. You never know where crocodiles might be lurking and waiting. The best way to reduce the crocodile population is not to feed them.