

Conducting a Job Hazard Analysis (JHA)

ACKNOWLEDGE: Thank you for being here and participating in this safety talk. I know your time is valuable, so I will ensure every moment of this talk is worth your while (*Make eye contact with the entire group*).

Training Tips:

Ask a lot of questions while delivering your Safety Talk. Questions 'hook the mind' and engage your participants. The simple act of asking questions is a High Impact Training technique!

Raise a hand when asking questions directed to your audience. You'll often find that people are more willing to answer your questions and become active participants. . . try it out! Also, pause for a moment after asking a question; waiting for and encouraging responses from the group.

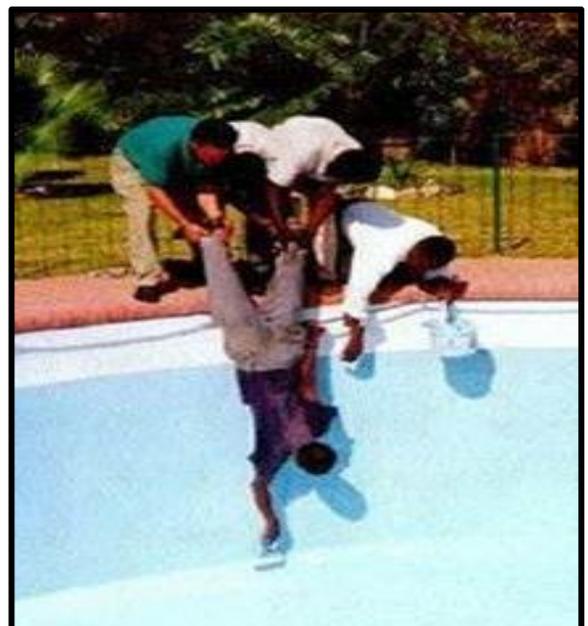
Provide an example of a personal experience (or a recent news event). For instance: "A close friend of mine once _____", or "Just last week _____". This is a very effective method to help participants relate to your topic. It often helps them to realize: '*Yeah, this could affect me. I should listen to this.*'

ASK: What is Safety? What does safety mean to you? Answer: *Control of loss to People, Property, Process and Environment*

What's In It for Me (WIIFM)? Many workers can be injured or killed at work, business operations can be affected, and the environment can be damaged. How would you be affected if you witnessed a co-worker be injured, or you were unable to work due to lay-offs, or if the surrounding water supply was contaminated? Conducting a JHA can help prevent incidental losses for commonly unrecognized hazards.

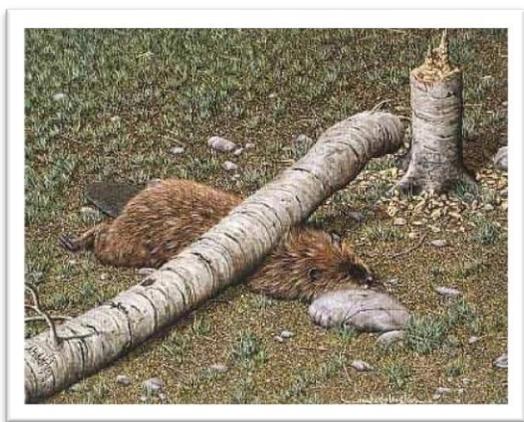
ASK: How many of you have taken risks? How many of you have been hurt by a risk you have taken? We all weigh the consequences of doing an activity and a job is no different. *A risk describes the odds a hazard will result in loss.* Risk considers the probability of something undesirable happening and the consequence when it does happen. Basically, if something was to go wrong, what is the worst thing that can happen? If the fire exit was blocked, the likelihood of a fire may be low BUT the consequences would be very high if one did occur.

ASK: What is a hazard? Answer: *Any activity or situation with the potential for loss.*



ASK: What are some examples of hazards? (Highlight hazards that are more prevalent in your workplace) There are 2 types of hazards: Safety Hazards and Health Hazards

Mechanical	Energy Sources	Biological	Hazardous Materials	Human Factors
equipment failure	electrical	viruses	chemicals	Training
flying debris / projectile	pneumatic	bacteria	toxins , poisons	Experience
tension loads / rigging	hydraulic	spores	flammable or explosive	Phobias
crushing / entangling	radiation	parasites	corrosive, burns	Fatigue
friction / abrasion	thermal (heat, steam)		pesticides	Physical Condition
severing / shearing / pinch	kinetic (motion)		asbestos	Culture
Ergonomics	Hygiene	Work Environment	Environmental Conditions	OTHER
slips or trips	noise	distractions	weather factors	language
lifting/twisting strains	air quality	cramped space	heat / cold	communication
fatigue, stress	dusts, mists	enclosed space	lighting conditions	adjacent hazards
manual handling / heavy lifting	fumes, vapors	working alone	housekeeping	
repetitive work	vibration	over water/at heights	landscape	



Incidents often result from hazards people have come to consider routine or unimportant!

ASK: Who knows what a Job Hazard Analysis (JHA) is? Answer: Breaking a job down into its steps to identify the hazards at each step.

ASK: Why would we want to spend the time to perform a JHA? Answer: It allows controls to be developed and implemented for the hazards identified at each step of a job.

A Job Hazard Analysis is the backbone of any Safe Work Procedure. The information collected and the controls identified for each hazard will be the “meat and potatoes” of our safe work procedures. A safe work procedure will describe the safest way for our workers to perform a job. It will describe the way to **always** perform a job safely. If we didn’t develop a safe work procedure, the job will continually be performed differently by different workers. This variation leads to inefficiency and increased risk of loss. How does McDonald’s succeed with teenagers managing and supervising? They follow a strict set of procedures for every task. Safe work procedures are no different.

ASK: Can you think of what types of job would require a JHA? Answer: Examples include those with a high injury rate, with the potential for loss, a process that has changed, etc. Refer to your critical task list for those jobs with the greatest hazard risks.

ASK: What are reasons why we would include workers in the JHA? *Answer: Workers know the inherent hazards of the machines and the steps required to operate it. Workers are the experts. You have the knowledge and experience to make our jobs safer.*

An effective Job Hazard Analysis involves a team of workers who regularly perform the job

A Job Hazard Analysis is broken into 3 steps:

1. List the steps of the job; break it down into its parts
 - a. A job should be less than 15 steps: avoid too much detail
If a job has too many steps, the job should be broken down into smaller tasks, or into separate jobs.
2. Identify the hazards at each step
 - a. Both actual and potential hazards need to be identified
All hazards need to be identified and assessed in order to be able to select and implement effective controls to avoid loss.
3. Develop safe actions and procedures required to control the hazards
 - a. These control methods should eliminate or reduce the hazards to workers

Below is an example of a Job Hazard Analysis from SafeManitoba – Bulletin #249

Company Name: ABC Carpentry

Date: September 16, 2007

Job Name: Woodworking Band Saw	Facility: Shop 1	Conducted By: J. Carpenter
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Job Steps	Hazards	Corrective Actions
1. Place material in front of blade on work platform	1.a) Debris on platform b) Accidentally start saw while preparing c) Awkward posture - lifting and twisting (material handling) d) Forceful exertion lifting heavier pieces of wood	1.a) Inspect to ensure clean work platform b) Electrically isolate before starting anything else c) Implement lift/materials handling training d) Cover in lift/materials handling training
2. Turn on saw	2.a) Electrical shock b) Exposed blade c) Noise d) Blade break	2.a) Inspect electrical cord and switch b) Adjust guard to 1/8" above wood to be cut c) Hearing protection d) Inspect blade and wear eye protection
3. Push piece of material through blade	3.a) Knots/nails in wood – kickback b) Amputation or cuts – hands contact with blade c) Saw dust in eyes d) Saw dust inhaled (toxic – hardwoods) e) Awkward postures due to leaning and reaching	3.a) Inspect wood and push through slowly. b) Ensure safe zone is identified and jigs or push sticks are used if hand would leave the safe zone c) Eye protection d) Engage dust collection system and ensure it is included in monitoring program e) Position body to avoid exposure to awkward and sustained postures (Cover in body posture training)
4. Remove material from platform	4.a) Exposed blade – cuts b) Material fall and strike feet	4.a) Keep hands away from blade, shut off saw, use a push stick to remove pieces close to blade b) Wear safety footwear
5. Shut off saw	(Added to #4 corrective actions – remove step)	
6. Clean off saw	6.a) Saw dust in eyes b) Saw dust inhaled	6.a) Eye protection b) Disposable respirator (N95)

ASK: What type of controls do you think are available to make your work safer?Control at the Source:

- Elimination – getting rid of the job, tool, process, substance or machine
- Substitution – replace the hazard with something less hazardous
- Redesign – a change in the workspace, work process, tools and processes
- Isolation –
- Automation – removing worker involvement in the process

Control along the Path:

- Barriers – using guarding or barricades to prevent workers from contacting an energy source
- Absorption – using materials to absorb energy such as sound baffles
- Dilution – minimizing the concentration of a hazard

The greater the distance the hazard is from the worker, the more effective the control measure will be

Control at the Level of the Worker:

- Administrative – policies/procedures, supervision, training & education, etc.
- Personal Protective Equipment (PPE) – to be used in conjunction with other control measures

ASK: Can you tell me what type of control each of these is?

- A respirator (at the worker - PPE)
- A using a forklift to move a pallet versus a manual hand jack (at the source - Substitution)
- Locking out a defective tool (along the path - Barrier)
- Using an adjustable work table (at the source – Redesign)
- Machine Guarding (along the path – Barrier)
- Using fiberglass insulation instead of asbestos (at the source – Substitution)
- Using labels to identify hazardous materials (at the worker – Administrative)
- Using an exhaust in a spray booth (along the path – Dilution)

ASK: Why is Personal Protective Equipment the least reliable and least effective control of hazards? *Answer: It does not remove the hazard, there is still an exposure risk if the PPE fails, plus it has to be worn and be worn properly by the worker.*

ASK: What do we need to do to ensure our controls are effective?

- Develop and comply with our safe work procedures
- Be responsible and accountable in following our safe work procedures
- Educate our workers on the controls
- Require our contractors to follow safe work procedures
- Monitor the controls to ensure they continue to eliminate or reduce the hazards, and that they do not introduce a new hazard

Selecting controls to mitigate hazards is an important step in a Job Hazard Analysis, but they are only effective if they are implemented and monitored for their effectiveness.

TAKE AWAY: Conducting a Job Hazard Analysis is one step in our safety management system. It helps us identify hazards and develop the safe work procedures in order to ensure our workers are protected and go home safely at the end of the day.

STATE: If you have any questions regarding the topics discussed today, please let me know. If I don't have an answer for you now, I will direct your question to another individual, if you are comfortable with that. We want you to be safe and feel safe while at work!

Facilitator, remember to:

1. Ask for the commitment of your employees,
2. Answer all questions,
3. Thank them for their time and
4. Document that this safety talk occurred.

RECORD OF SAFETY TALK	
Date:	Time:
Talk Given By:	
Company Name:	Work Location Dept.:
Results of inspection, demonstration or other activity or suggestions during talk:	

List of All Employees Who Attended the Safety Talk:	
Name (PRINT)	Signature
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Signed: _____

Position Held: _____