While you wait: Law Court Transcript

These are from a book called Disorder in the Court: Great Fractured Moments in Courtroom History by Charles M. Sevilla, Lee Lorenz, and are things people actually said in court, word for word, taken down and now published by court reporters that had the torment of staying calm while these exchanges were actually taking place.

Q: What is your date of birth?
A: July 15th.
Q: What year?
A: Every year.

Q: This myasthenia gravis, does it affect your memory at all?
A: Yes.
Q: And in what ways does it affect your memory?
A: I forget.
Q: You forget? Can you give us an example of something that you've forgotten?

Q: How old is your son, the one living with you?
A: Thirty-eight or thirty-five, I can't remember which.
Q: How long has he lived with you?
A: Forty-five years.

Q: Do you know if your daughter has ever been involved in voodoo or the occult?
A: We both do.
Q: Voodoo?
A: We do.
Q: You do?
A: Yes, voodoo.

Q: Now doctor, isn't it true that when a person dies in his sleep, he doesn't know about it until the next morning?
A: Did you actually pass the bar exam?

Q: She had three children, right?
A: Yes.
Q: How many were boys?
A: None.
Q: Were there any girls?

Q: Can you describe the individual?
A: He was about medium height and had a beard.
Q: Was this a male, or a female?

Q: Doctor, how many autopsies have you performed on dead people?
A: All my autopsies are performed on dead people.

Q: ALL your responses MUST be oral, OK? What school did you go to?
A: Oral.

Q: Do you recall the time that you examined the body?
A: The autopsy started around 8:30 p.m.
Q: And Mr. Dennington was dead at the time?
A: No, he was sitting on the table wondering why I was doing an autopsy.

Q: Are you qualified to give a urine sample?

Q: Doctor, before you performed the autopsy, did you check for a pulse?
A: No.
Q: Did you check for blood pressure?
A: No.
Q: Did you check for breathing?
A: No.
Q: So, then it is possible that the patient was alive when you began the autopsy?
A: No.
Q: How can you be so sure, Doctor?
A: Because his brain was sitting on my desk in a jar.
Q: But could the patient have still been alive, nevertheless?
A: Yes, it is possible that he could have been alive and practicing law somewhere.

Q: Is your appearance here this morning pursuant to a deposition notice which I sent to your attorney?
A: No, this is how I dress when I go to work.
Welcome

Welcome to the Basic Job Hazard Analysis (JHA) Workshop 103. This workshop is designed to include you as much as possible in the learning experience. It targets the workers, supervisors, and managers responsible for job safety performance, and introduces a new approach which brings the JHA to the floor as a valuable training tool that may be integrated into daily operations.

The more you contribute, the more you will get out of this training, so please don’t hold back...participate and have fun!

Introductions!

Goals

Given the information and exercises in this workshop, you will be able to:

1. Explain to others why JHAs are important
2. Recognize how the JHA may be a valuable training tool.
3. Know the five-step process and complete a JHA.

Form Teams

Elect a team leader ________________________________

Select a spokesperson ________________________________

Everyone is a recorder! ________________________________

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This material, or any other material used to inform employers of compliance requirements of OSHA standards through simplification of the regulations should not be considered a substitute for any provisions of the Occupational Safety and Health Act of 1970 or for any standards issued by OSHA. The information in this publication is intended for training purposes only.
1. **Involve your employees.** It is very important to involve your employees in the hazard analysis process. They have a unique understanding of the job, and this knowledge is invaluable for finding hazards. Involving employees will help minimize oversights, ensure a quality analysis, and get workers to “buy in” to the solutions because they will share ownership in their safety and health program.

2. **Review your accident history.** Review with your employees your worksite’s history of accidents and occupational illnesses that needed treatment, losses that required repair or replacement, and any “near misses” — events in which an accident or loss did not occur, but could have. These events are indicators that the existing hazard controls (if any) may not be adequate and deserve more scrutiny.

3. **Conduct a preliminary job review.** Discuss with your employees the hazards they know exist in their current work and surroundings. Brainstorm with them for ideas to eliminate or control those hazards.

   **If any hazards exist that pose an immediate danger to an employee’s life or health, take immediate action to protect the worker.**

   Any problems that can be corrected easily should be corrected as soon as possible. Do not wait to complete your job hazard analysis. This will demonstrate your commitment to safety and health and enable you to focus on the hazards and jobs that need more study because of their complexity. For those hazards determined to present unacceptable risks, evaluate types of hazard controls.

4. **List, rank, and set priorities for hazardous jobs.** List jobs with hazards that present unacceptable risks, based on those most likely to occur and with the most severe consequences. These jobs should be your first priority for analysis.
Why is job hazard analysis important?

Many workers are injured and killed at the workplace every day in the United States. Safety and health can add value to your business, your job, and your life. One of the best ways to determine and establish proper work procedures is to conduct a Job Hazard Analysis (JHA). A JHA is one component of the larger commitment of a safety and health management system. The JHA is an analysis and improvement process that can literally transform workplace safety. The JHA is a structured process that can discover the causes for the vast majority of workplace injuries and illnesses.

A job is a task, not a title!

It's important to understand that “job," as a term used in the JHA process does not represent the employee's job title or occupation such as forklift operator or roofer. When conducting a JHA we're actually analyzing a "task" that is composed of a series of steps. A typical job includes a number of tasks. For instance, a forklift operator not only operates the forklift, but may inspect, perform maintenance, change tires, load and unload materials, changes batteries etc. One or more of those tasks may be hazardous and in need of a Job Hazard Analysis (JHA).

EXERCISE:

What are some of the benefits of conducting the JHA?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
Involve your employees.

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If any hazards exist that pose an immediate danger to an employee’s life or health, take immediate action to protect the worker.
Four general strategies to conduct a JHA

1. This analysis takes place between the supervisor and the employee. The employee participates in developing safe work procedures for the task. The supervisor observes, asks questions about the job and records this information. The supervisor also reviews the task and offers suggestions for improvement.

2. The work group reviews a task that is everyone performs. Supervisors and employees review the task and completes a JHA in a classroom setting. A moderator ensures that time is not wasted debating issues in the JHA.

3. The supervisor develops the outline for a task and then reviews it with an employee. This method is not recommended if a high level of quality in outcomes are expected in the JHA program. The supervisor may or may not review the JHA with affected employee(s).

4. The supervisor creates the JHA on his/her own and does not involve employees.

**EXERCISE:**

Which of the four methods above is probably most effective? _______

Which one is least effective? _______
List and prioritize jobs

There's usually not enough time or resources to conduct a JHA and write a safe job procedure for every job being done in your workplace. Ask each supervisor and employee to identify the various jobs that will require an evaluation in each department. There may be quite a few job titles listed for a large manufacturing facility. The quantity of jobs listed on the master list will vary depending on the size, complexity, and type of the production process.

EXERCISE: Each member of the group describe one hazardous job at their facility or worksite. From the discussion, make a list of jobs. Remember, Jobs are not titles but tasks!

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________
4. __________________________________________________________
5. __________________________________________________________
6. __________________________________________________________
What jobs are appropriate for a job hazard analysis?

A job hazard analysis can be conducted on many jobs in your workplace. Generally, you'll want to use the "worst first" strategy. Priority should go to the following types of jobs:

1. Jobs with the highest injury or illness rates
2. Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents
3. Jobs in which one simple human error could lead to a severe accident or injury
4. Jobs that are new to your operation or have undergone changes in processes and procedures; and
5. Jobs complex enough to require written instructions.

EXERCISE: Use the information above to prioritize each of the jobs listed in the previous exercise.

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________
4. __________________________________________________________
5. __________________________________________________________
6. __________________________________________________________
JHA TOOLS
Conduct a risk analysis to help prioritize jobs

R=PS

Risk is a function of probability, and severity

• What is the **probability**? How likely will a worker be injured or become ill as a result of an accident or exposure? (unlikely, likely, very likely)

• What is the **severity**? How serious will the injury or illness be as a result of an accident or exposure? (minor, serious, death)

Factors that increase risk

• The number of employees exposed
• The frequency and duration of exposure
• The proximity of employees to the point of danger
• Potential severity of the injury or illness
• Working at elevation
• Unreasonable workload
• Working under stress (hurry, fatigue, illness, personal problems)
• Any form of distraction that takes focus away from the job
• Lack of effective supervisor and employee accountability, enforcement
• Lack of proper training of managers, supervisor, employees
• Lack of adequate supervision
• Improper or inadequate workplace design
Fix the worst first

After a safety inspection, you may find that a number of hazards exist. You need to determine which hazards are most likely to cause injury and/or property damage. The hazards presenting the most risk need to be fixed first. To determine risk objectively means using some kind of structured method to prioritize hazards. Let's take a look at one common method.

Group Exercise: Determine the risk*

1. Determine the number of employees exposed in your scenario.
2. Use each table to determine risk.

<table>
<thead>
<tr>
<th>Probability</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>The likelihood of injury or illness.</td>
<td></td>
</tr>
<tr>
<td>Is the most likely and expected result if employee enters danger zone.</td>
<td>10</td>
</tr>
<tr>
<td>Is quite possible, would not be unusual, has an even 50/50 chance.</td>
<td>6</td>
</tr>
<tr>
<td>Would be unusual sequence or coincidence</td>
<td>3</td>
</tr>
<tr>
<td>Would be remotely possible coincidence. It has been known to have happened</td>
<td>1</td>
</tr>
<tr>
<td>Extremely remote but possible. Has never happened after many years of exposure.</td>
<td>.5</td>
</tr>
<tr>
<td>Practically impossible sequence or coincidence. Has never happened when exposed</td>
<td>.1</td>
</tr>
</tbody>
</table>

Rating ________

<table>
<thead>
<tr>
<th>Severity</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>The most likely result - degree of Severity of Consequences</td>
<td></td>
</tr>
<tr>
<td>Major Catastrophe: Numerous fatalities. Extensive Damage &gt;$1M</td>
<td>100</td>
</tr>
<tr>
<td>Several fatalities; damage $500K to $1M</td>
<td>50</td>
</tr>
<tr>
<td>Fatality; damage $100K to $500K</td>
<td>30</td>
</tr>
<tr>
<td>Extremely serious injury; (amputation, permanent disability); damage $1K to $100K</td>
<td>20</td>
</tr>
<tr>
<td>Disabling injuries; damage up to $1,000</td>
<td>10</td>
</tr>
<tr>
<td>Minor cuts, bruises, bumps; minor damage</td>
<td>1</td>
</tr>
</tbody>
</table>

Rating ________

EXERCISE: Using the information from the two charts and the risk equation, determine the risk score for each of the six jobs listed in the previous exercise.

Job 1 Risk Score = P _______ x S _______ = ________
Job 2 Risk Score = P _______ x S _______ = ________
Job 3 Risk Score = P _______ x S _______ = ________
Job 4 Risk Score = P _______ x S _______ = ________
Job 5 Risk Score = P _______ x S _______ = ________
Job 6 Risk Score = P _______ x S _______ = ________

Circle the top three most hazardous tasks

The Risk Assessment Matrix

Another more visual, yet simple technique to determine risk is to use the Risk Assessment Matrix. Determine probability and severity to determine is risk is low, medium, high, or extremely high.
CONDUCTING THE JHA
Step 2 - Break the job down into a series of steps

Nearly every job can be broken down into job tasks or steps. Each step in a task actually describe an event. Once the step/event is clearly understood, we can then analyze that step for hazardous conditions and/or unsafe behaviors. Developing the steps for a job is critical in the analysis process to fix job and the system.

Each step describes on action. The action describes what the worker does in each step. Actions may or may not be observable. An action may describe something that is done or not done.

When beginning a job hazard analysis, watch the employee perform the job and list each step as the worker completes it.

• Be sure to record enough information to describe each job action without getting overly detailed.
• Avoid making the breakdown of steps so detailed that it becomes unnecessarily long or so broad that it does not include basic steps.
• You may find it valuable to get input from other workers who have performed the same job.
• Later, review the job steps with the employee to make sure you have not omitted something.
• Point out that you are evaluating the job itself, not the employee’s job performance.
• Include the employee in all phases of the analysis—from reviewing the job steps and procedures to discussing uncontrolled hazards and recommended solutions.
• It may be helpful to photograph or videotape the worker performing the job.

EXERCISE: Using the JHA form provided by the instructor, choose one of the six tasks listed in the previous exercise and develop the steps for the task. If some members of your group are not familiar with the task, you may choose a more familiar job from work or home.
What is a hazard?

Simply stated, a hazard is an unsafe condition or practice that could cause injury or illness to an employee.

What is exposure?

Exposure usually refers to an employee's placement relative to the hazard’s “danger zone.” If the employee is within the danger zone, the employee is exposed. There are two general types of exposure:

- Physical exposure. When the person is generally within arm’s length.
- Environmental exposure. Due to noise, hazardous atmospheres, temperature extremes. Could be everyone in facility.

How do I identify workplace hazards?

A job hazard analysis is an exercise in detective work. To make your job hazard analysis useful, document the answers to these questions in a consistent manner to help target the most important contributors to the hazard. Your goal is to discover the following:

- Where it is happening (environment)?
- Who or what it is happening to (exposure)?
- What can go wrong?
- What are the consequences?
- How could it arise?
- What are other contributing factors?
- How likely is it that the hazard will occur?
Don't forget to look for potential hazards

To ensure that all hazards associated with a step are identified, analyze each step to identify potential as well as actual hazards produced by both work environment and the activity being performed. Be sure to consider the following:

- Is there danger of striking against, being struck by, or otherwise making harmful contact with an object?
- Can the worker be caught in, by, or between objects?
- Is there potential for a slip or trip?
- Can the employee fall from one level to another or even on the same level?
- Can pushing, pulling, lifting, lowering, bending, or twisting cause strain?
- Is the work environment hazardous to safety or health?
- Are there concentrations of toxic gas, vapor, fumes, or dust?
- Are there potential exposures to heat, cold, noise, or ionizing radiation?
- Are there flammable, explosive, or electrical hazards?
More Common Hazards and Descriptions

**Chemical (Toxic).** A chemical that exposes a person by absorption through the skin, inhalation, or through the blood stream that causes illness, disease, or death. The amount of chemical exposure is critical in determining hazardous effects. Check Material Safety Data Sheets (MSDS), and/or OSHA 1910.1000 for chemical hazard information.

**Chemical (Flammable).** A chemical that, when exposed to a heat ignition source, results in combustion. Typically, the lower a chemical’s flash point and boiling point, the more flammable the chemical. Check MSDS for flammability information.

**Chemical (Corrosive).** A chemical that, when it comes into contact with skin, metal, or other materials, damages the materials. Acids and bases are examples of corrosives.

**Explosion (Chemical Reaction).** Self explanatory. *(Over gas/energy due to a significant pressure difference Pressurization).* Sudden and violent release of a large amount of such as rupture in a boiler or compressed gas cylinder.

**Electrical (Shock/ is incorrectly or inadvertently grounded, such as Short Circuit).** Contact with exposed conductors or a device that when a metal ladder comes into contact with power lines. 60Hz alternating current (common house current) is very dangerous because it can stop the heart.

**Electrical (Fire).** Use of electrical power that results in electrical overheating or arcing to the point of combustion or ignition of flammables, or electrical component damage. *(Static/ESD).* The moving or rubbing of wool, nylon, other synthetic fibers, and even flowing liquids can generate static electricity. This creates an excess or deficiency of electrons on the surface of material that discharges (spark) to the ground resulting in the ignition of flammables or damage to electronics or the body’s nervous system. *(Loss of Power).* Safety-critical equipment failure as a result of loss of power.

**Ergonomics (Strain).** Damage of tissue due to overexertion (strains and sprains) or repetitive motion. *(Human Error).* A system design, procedure, or equipment that is error-provocative. (A switch goes up to turn something off).

**Excavation (Collapse).** Soil collapse in a trench or excavation as a result of improper or inadequate shoring. Soil type is critical in determining the hazard likelihood.
Fall (impacts). Conditions that result in falls from (Slip, Trip) height or traditional walking surfaces (such as slippery floors, poor housekeeping, uneven walking surfaces, exposed ledges, etc.)

Fire/Heat. Temperatures that can cause burns to the skin or damage to other organs. Fires require a heat source, fuel, and oxygen.

Mechanical/ Vibration (Chaffing/ Fatigue). that can cause damage to nerve endings, Vibration or material fatigue that results in a safety-critical failure. (Examples are abraded slings and ropes, weakened hoses and belts.)

Mechanical Failure. Self explanatory; typically occurs when devices exceed designed capacity or are inadequately maintained. Mechanical. Skin, muscle, or body part exposed to crushing, caught-between, cutting, tearing, shearing items or equipment.

Noise. Noise levels (>85 dBA 8 hr TWA) that result in hearing damage or inability to communicate safety-critical information.

Radiation (Ionizing). Alpha, Beta, Gamma, neutral particles, and X-rays that cause injury (tissue damage) by ionization of cellular components. (Non-Ionizing). Ultraviolet, visible light, infrared, and microwaves that cause injury to tissue by thermal or photochemical means.

Struck By (Mass Acceleration). Accelerated mass that strikes the body causing injury or death (Examples are falling objects and projectiles).

Struck Against. Injury to a body part as a result of coming into contact of a surface in which action was initiated by the person. (An example is when a screwdriver slips.)

Temperature (Heat/Cold). Temperatures that result in heat stress, Extreme exhaustion, or metabolic slow down such as hypothermia.

Visibility. Lack of lighting or obstructed vision that results in an error or other hazard.

Weather Phenomena (Snow/Rain/Wind/Ice). Self explanatory.

Source: Appendix A, OSHA 3071 Excerpt, Table of Hazards
What are the direct causes of injury or illness

The direct cause of injury describes the harmful transfer of energy. Injury or illness may be caused by one or more of the following types of harmful energy:

- **Acoustic** - exposure to excessive noise and vibration
- **Chemical** - contact with, contact by corrosive, toxic, flammable, reactive –
- **Electrical** - contact with low/high voltage, current
- **Kinetic** - struck by, struck against energy transferred from impact
- **Mechanical** - crushed, cut by components that move
- **Potential** - struck by, struck against stored energy in objects
- **Radiant** - exposure to ionizing and non-ionizing radiation
- **Thermal** - contact with - exposure to excessive heat, extreme cold

**EXERCISE:** Using the JHA form provided by the instructor, identify and list the hazards associated with each step developed for the task used in the previous exercise.
How do I correct or prevent hazards?

After reviewing your list of hazards with the employee, consider what control methods will eliminate or reduce them. The most effective controls are engineering controls that physically change a machine or work environment to prevent employee exposure to the hazard. The more reliable or less likely a hazard control can be circumvented, the better. If this is not feasible, administrative controls may be appropriate. This may involve changing how employees do their jobs.

Control strategies

There are four approaches used to eliminate or reduce hazards and exposures. They are as follows:

• **First control strategy - Engineering controls.** Suggest eliminating or reducing the hazards that existed, primarily through equipment replacement, substitution, re-design or other engineering controls.

• **Second control strategy - Management controls.** (Also called administrative or work practice controls) Make recommendations that eliminate or reduce exposure to the hazards that exist. You do this primarily by changing practices, procedures, and scheduling.

• **Third control strategy – Personal Protective Equipment.** Use personal protective equipment to establish a barrier between the hazard and the worker. Used in conjunction with management and engineering controls.

• **Fourth control strategy – Temporary measures.** Cones, guards, tape, etc., can all serve to temporarily protect employees from hazards until permanent control strategies can be used.

**EXERCISE:** Using the JHA form provided by the instructor, discuss the control strategies you might use to eliminate or reduce the hazards associated with each step of your group's task.
CONDUCTING THE JHA
Step Five - Write the Safe Job Procedure

Points to remember when writing the safe job procedure

• Write in a step-by-step format
• Paint a word picture - concrete vs. abstract
• Write the narrative in the first person - I, you not the worker.
• Write in the present tense - take not should be taken
• Write as clearly as possible - use not utilize
• Remind the worker why it’s important to do the step safely
• Include notes, cautions, warnings

Example SJP: Pounding a nail into a piece of wood.

Before you begin, get a hammer, nails and 2x4 lumber. Note: Be sure to check tools to make sure they are not defective. Check to ensure enough light. Select and put on leather gloves, goggles and face shield. It’s important to make sure they are clean, in good repair, and comfortable so they won’t interfere with work.

1. Place a 2x4 on the work bench directly in front of you. Note: Make sure 2x4 is stable.

2. Take a nail and place it on the mark on the 2x4. Use your thumb and fore-finger to hold the nail up over the mark. Caution: Make sure you hold the nail so that the hammer will not hit your thumb or fingers.

3. Take the hammer and carefully tap the nail into the wood until it stands by itself. Note: Brace the 2x4 with your free hand to make sure the board does not move as you finish nailing.

4. Finish hammering the nail into the wood until the head of the nail is flush with the surface of the wood.
EXERCISE: Using the space below, develop a safe job procedure for your group's task. Be prepared to read your safe job procedure to the class, and to respond to questions. Other groups will analyze and evaluate your SJP using criteria on the previous page.
Reviewing the JHA

Periodically reviewing your job hazard analysis ensures that it remains current and continues to help reduce workplace accidents and injuries. Even if the job has not changed, it is possible that during the review process you will identify hazards that were not identified in the initial analysis.

It is particularly important to review your job hazard analysis if an illness or injury occurs on a specific job. Based on the circumstances, you may determine that you need to change the job procedure to prevent similar incidents in the future. If an employee’s failure to follow proper job procedures results in a “close call,” discuss the situation with all employees who perform the job and remind them of proper procedures. Any time you revise a job hazard analysis, it is important to train all employees affected by the changes in the new job methods, procedures, or protective measures adopted.

Use the JHA as a lesson plan

To get more value out of the JHA program, consider using the completed JHA as a lesson plan when training new employees. Doing so helps guarantee safe job procedures are taught from the start.

Get employees involved

It's so important to involve employees in developing JHAs to increase ownership. Employees use their own procedures when not being directly supervised. Doesn't it make sense to involve employees in developing safe job procedures so that when they are not being supervised, they'll use them!
Don't just let the JHA collect dust!

Use the JHA to dig up the roots

The hazardous conditions and unsafe or inappropriate behaviors you discover during a JHA are the effects that may indicate the presence of deeper safety management system weaknesses. Safety management systems fail in two basic ways:

**System Performance Weaknesses** - Failure to accomplish action plans. (Failure to work the plan)
- General failure to effectively implement and accomplish safety policies, plans, processes, procedures or practices
- Failure to provide resources, enforcement, supervision, training, leadership
- These failures cause common hazardous conditions and/or unsafe behaviors
- They may also cause repeated unique hazardous conditions and/or unsafe behaviors

**System Design Weaknesses** - Missing or inadequate program planning and development (Failure to plan the work)
- One or more inadequate policies, plans, programs, processes, procedures,
- Inadequate resources - money, time, people, materials, etc.
- Guarantees inadequate performance of the safety management system
- Have the greatest positive or negative impact on the safety management system
Cause-Effect Analysis and Evaluation

Every hazard we identify in the JHA represents the effect of a cause. To get the most value out of the JHA as an analysis tool to improve the safety management system, it's important that we not only use it to improve the task, we also need to conduct root cause analysis for identified hazards to make sure they do not surface in the future. The cause-effect flow chart below can be helpful in understanding the root cause analysis process. The blocks represent possible causes and effects.

• To conduct root cause analysis, analyze each block above to evaluate the block below.
• Each block represents is the effect of the block below and the cause of the block above.

Effect – The Observed Hazard or Unsafe Practice
Hazardous condition and unsafe/Inappropriate behavior identified in the analysis

Why? Analyze Evaluate Effect Cause Because!

Contributing Surface Causes
Hazardous conditions and unsafe/Inappropriate behaviors contributing to the problem

Why? Analyze Evaluate Effect Cause Because!

System Performance Root Causes
General failure to carry out management and supervisory responsibilities

Why? Analyze Evaluate Effect Cause Because!

System Design Root Causes
Inadequate/missing programs, policies, plans, processes, procedures, practices
1. Commitment 2. Accountability 3. Involvement
Before you run…let’s review

1. It is important to involve the employee because it builds:
   a. doubt.
   b. interest.
   c. ownership.
   d. complacency.

3. To prepare for the JHA, it's a good idea to do all of the following, except:
   a. Prioritize jobs to be analyzed
   b. Review accident history
   c. Arrange for no-notice observations
   d. Conduct preliminary job review

3. According to the workshop text, which of the following jobs is least appropriate for Job Hazard Analysis?
   a. Job that are so complex they require written instructions
   b. Jobs that have been performed for years
   c. Jobs with high injury rates
   d. Jobs in which one error leads to serious injury

5. Which of the following was not listed in the workshop as a factor that increases the probability of an accident?:
   a. frequency
   b. posture
   c. attitude
   d. point of operation

5. When writing a safe job procedure make sure you:
   a. Write in the first person
   b. Write as abstract as possible
   c. Write in good technical jargon
   d. Do not include the obvious
Reference Materials
Sample Job Hazard Analysis Plan

1.0 Purpose
To explain how to conduct a Job Hazard Analysis (JHA) and how to use it as an effective tool for employee safety training and in the injury and illness prevention process.

2.0 Objectives
To provide a method to identify existing and potential hazards associated with each job step and to establish safe work practices for controlling and/or avoiding these hazards.

To provide a method for supervisors to involve employees in conducting a safety analysis of departmental job tasks.

To provide supervisors with a document for training employees.

3.0 Scope
A JHA should be performed for all routine Maintenance, Custodial and Transportation Department job tasks. Job tasks which may expose employees to physical or chemical hazards should be analyzed first.

Non-routine tasks should be evaluated as to their frequency and as to the severity of potential hazards to determine if a JHA should be conducted.

4.0 Responsibilities
The supervisor is responsible for:

• Selecting jobs for analysis,
• Maintaining a department JHA file,
• Conducting employee JHA training, and
• Revising a JHA whenever necessary.

Risk Management is responsible for:

• Reviewing JHAs to ensure that the proper hazard control measures have been established.

5.0 Basic Procedure
Once the job has been selected, the supervisor discusses the JHA procedure and its purpose with the employees who perform the job. Using the JHA form, the supervisor and employees list each job step in order of occurrence. Be sure to provide enough information but do not make the breakdown too detailed. The wording for each job step should begin with an action word such as "remove," "open" or "pour."
Once the job steps have been recorded, identify and list the potential hazards or accidents which might occur for each step. To do this, ask yourself and your employees the following questions:

- Is there a danger of striking against, being struck by, or otherwise making injurious contact with an object?
- Can the employee be caught in, by, or between objects?
- Can the employee be strained by pushing, pulling, lifting, bending or twisting?
- Does the work environment contain a potential safety and health hazard such as a toxic gas, vapor, mist, fumes, dust, noise, heat or electrical hazard?
- Is there a potential for a slip or trip? Can the employee fall from one level to another?

The next step in the JHA process is to develop a safe job procedure or control action to address the hazard(s) in each job step. The safe job procedure should clearly identify exactly what the employee needs to do and/or what the employee needs to know in order to perform the task safely. Avoid general statements such as "be careful" or "use caution."

The JHA form includes a section to list all the required personal protective equipment the employee must wear when performing the job. The safe job procedure for each job step must specify when the employee needs to wear the protection based on the hazards of that job step.

The JHA form includes a section to list all the required tools and equipment needed to perform the job. Remember, injuries frequently occur because the employee selected the improper tool or equipment to perform a job.

When the JHA has been completed, the supervisor should sign and date it and send a copy to Risk Management for review and for filing in a central JHA file.

6.0 JHA Utilization

The JHA is used for the orientation and training of new or transferred employees who will perform the job and whenever the need for retraining is determined. Document all training.

The supervisor will establish a department JHA file and shall make it accessible to employees for review when needed.

Whenever possible, a copy of the JHA should be laminated and secured to the machine/equipment or at the permanent location where the job is being performed.

When a job involves the use of highly toxic or extremely dangerous hazardous substances, it's a good idea to attach the MSDS pages for these substances to the JHA.

JHAs will also be used as the lesson plan in conjunction with our safety training plan.
<table>
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<th>SEQUENCE OF BASIC JOB STEPS</th>
<th>POTENTIAL HAZARDS</th>
<th>RECOMMENDED ACTION OR PROCEDURE</th>
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WE VALUE YOUR COMMENTS

1. I found the course materials easy to understand and usable

2. The information I learned today can help me reduce hazards and prevent work-related injuries and illnesses at my workplace

3. Please rate the overall usefulness of this workshop in helping you to understand your safety and health issues and possible solutions:

   …Not Effective...   … Effective...

   1 2 3 4 5 6 7

4. Please rate the overall effectiveness of the instructor in providing quality training

   …Not Effective...   … Effective...

   1 2 3 4 5 6 7

We value your comments. Please tell us how we can improve. Thanks!!

Course Content: ____________________________________________________________

Materials: ________________________________________________________________

Instructor: ________________________________________________________________

Facility: _________________________________________________________________

Other Subjects I’d like to see offered: ________________________________________