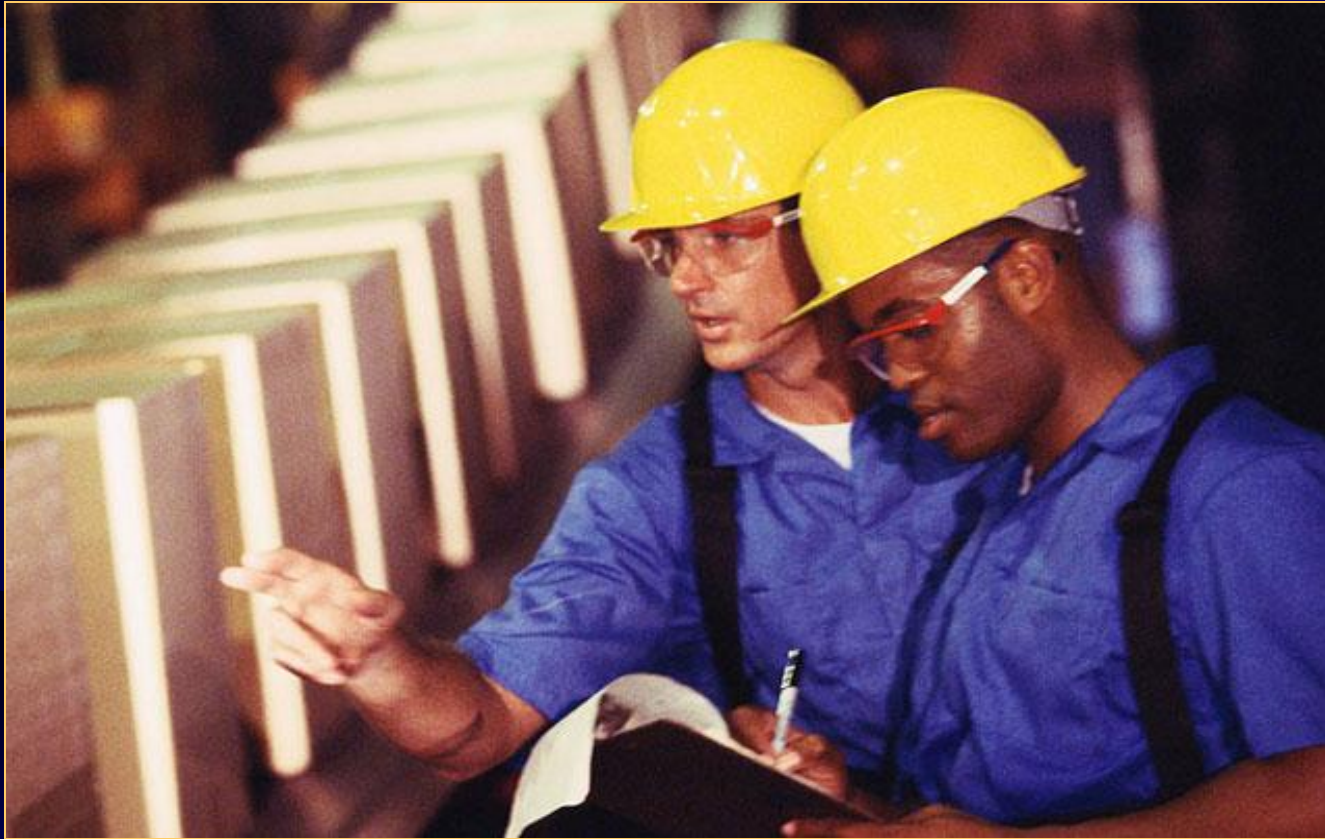


# Job Hazard Analysis (JHA) Training



# Course Overview/Description

The information provided is intended to assist Directors, Department heads, Supervisors and Managers, improve the quality of their working conditions, and reduce the occurrence of workplace injuries and illness, while increasing worker productivity and morale, and maintaining compliance with regulatory agencies. This course provides the techniques and resources required to perform a Job Hazard Analysis (JHA).

## **JHA training objectives include:**

- Define a Job Hazard Analysis
- Identify how the JHA can be a valuable planning, production, profit and safety tool
- Identify which jobs to assess and how to prioritize
- Know the 4 step process of completing a Job Hazard Analysis



# The Job Hazard Analysis Defined

- A Job Hazard Analysis is a technique that focuses on job tasks as a way to identify hazards before they result in injury, illness, property damage, or worse
- It focuses on the relationship between the worker, the task, the tools, and the work environment
- Ideally, after you identify uncontrolled hazards, you will **take steps to eliminate or reduce** them to an acceptable risk level

# Why JHA's?

- Occupational Safety and Health Administration (OSHA) requires employers to furnish a place of employment free of recognized hazards that are causing, or likely to cause death or serious physical harm to employees
- Employers must comply with occupational safety and health standards set under the General Duty Clause, section 5(a)(1) of the Occupational Safety and Health Act of 1970
- The most common and useful tool used to comply with this requirement is the JHA!



# Regulatory Requirements

- There are several other OSHA regulations that require the need for specific hazard assessments
- Failure to assess hazards in the workplace could lead to injuries or illness, and costly OSHA citations and penalties (fines) against MCCS Camp Lejeune
- OSHA can request to review your hazard assessment (JHA) program in the event of an accident/illness on the job, especially if the injury/illness results in a worker hospitalization
- Per BO P5100.3 every position description is required to have a JHA performed for it.

# Completing your JHAs is a good thing!

## Benefits of JHAs include:

- Reduced injuries
- Reduced absenteeism
- Increased productivity
- Increased morale
- And it protects employees!



# More benefits of a JHA

- Sets performance standards
- Standardizes operations based on acceptable safe practices and PPE
- Provides a form of training documentation regarding the employee's knowledge of the job requirements.
- Complies with OSHA requirements!

**As you can see, completing your JHAs is a WIN-WIN situation for you AND MCCS Camp Lejeune!**



# Job Hazard Analysis - KEY TERMS

## ■ What is a JOB?

Any activity (mental or physical, or both) that has been assigned to an employee as a responsibility and carries with it both positive and/or negative consequences based on the performance of that job.

Examples of a job include:

- ❖ Operating a forklift
- ❖ Unpacking heavy boxes and stacking books on upper shelves
- ❖ Working around children
- ❖ Using hand or power tools to fix something

# Job Hazard Analysis - KEY TERMS

## ■ What is a HAZARD?

A hazard is the potential for harm. In practical terms, a hazard often is associated with a condition or activity that, if left uncontrolled, can result in an injury or illness.

### Examples of a hazardous activity or condition include:

- ❖ Using a table saw with a missing blade guard (cut hazard)
- ❖ Using a corrosive cleaning solvent (exposure hazard)
- ❖ Working on a rooftop that has no guard rails (fall hazard)
- ❖ Manually lifting heavy boxes (lifting injury hazard)
- ❖ Performing welding activities (burn and inhalation hazards)
- ❖ Working on or around wet surfaces (Slips, Trips, Falls)
- ❖ Working outdoors in an extreme weather environment (physical hazards like heat or cold stress)

# Job Hazard Analysis - KEY TERMS

## What is a CONTROL?

- Safe procedures or other protective measures
- Any provision taken to reduce or eliminate the exposure to a hazard.

### Types of controls include:

- ❖ Engineering Controls
- ❖ Administrative Controls
- ❖ Personal Protective Equipment (PPE)

# So then, the JHA process is simply.....

- ❑ The breaking down of a job into its component steps and then evaluating each step for potential or known hazards
- ❑ Each identified hazard is then corrected or a control method of worker protection (safe practice or Personal Protective Equipment) is identified and implemented
- ❑ The final product is a written standard of safe operation for that particular job.
- ❑ The JHA will be completed through ESAMS

# So....where do you begin?

**Your basic course of action will be to....**

- **Involve your employees**
- **Review your accident history**
- **Conduct a preliminary job review**
- **List/rank/set priorities for hazardous jobs**
- **Finally...Complete a Job Hazard Analysis using the MCCS JHA form!**

# Involve your Employees...

- They possess a unique understanding of their specific jobs, and this knowledge is invaluable for assessing job details and identifying hazards
- Helps minimize oversights (by using the experts)
- Ensures a quality analysis
- Gets workers to “buy in” to the solutions because they will share ownership in their safety and health program



# Review your Accident History

- Review 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 (further evaluation).
- Supervisors can review historical incident/accident information using **ESAMS**

# Conduct a preliminary job review (start a list of jobs that are performed)

- Brainstorm with your co-workers. Start by making a list of the jobs performed, both daily and the non-routine
- Discuss with your employees the hazards they know exist in their current work and surroundings. This may identify a particular job to assess
- As you brainstorm, think of ideas to eliminate or control those hazards (this will be a major step in completing a JHA)
- Ensure your fellow employees understand you are evaluating the jobs they perform, not their performance!
- As you conduct this preliminary job review, if you identify any hazards that pose an immediate danger to an employee's life or health, **take immediate action** to protect the worker, don't wait to complete the JHA first!

# Additionally, you may have to prioritize which jobs get assessed first

- ❑ Jobs that present unacceptable risks where hazards are most likely to occur and with the most severe consequences, should be a first priority consideration
- ❑ **Example High Priority JHA:** A job with prior related injury resulting in; the need for medical attention, the loss of one or more workdays, job transfer, or loss of consciousness.
- ❑ Jobs where one simple human error could lead to a severe accident or injury should be the (highest priority)

# Who should perform the JHA?



- As you are taking this JHA course, you may have been chosen to either develop or oversee the development of JHAs for your department
- Make sure you have a knowledgeable person assist with the assessment. Remember, use your experts!
- It should be a joint effort between those actually performing the job, supervisors, safety personnel, maintenance personnel, and any other persons having specific knowledge of the particular job being evaluated

# Steps in Performing a JHA

- Step 1—Watch the job being done
- Step 2—Break the job down into steps
- Step 3—Identify the hazards in each step
- Step 4—Recommend safe procedures and protection measures (controls)

**Let's walk through each step of completing a JHA**

# Step 1- Watch the job being done

Effective methods to watch the job being done include:

- Video
  - Observation
  - Photos
  - Sketches
- Your notes will help establish job steps later



# Step 2 - Breaking Down the Job

- List each job step in order of occurrence (sequence)
- Describe each action during the step

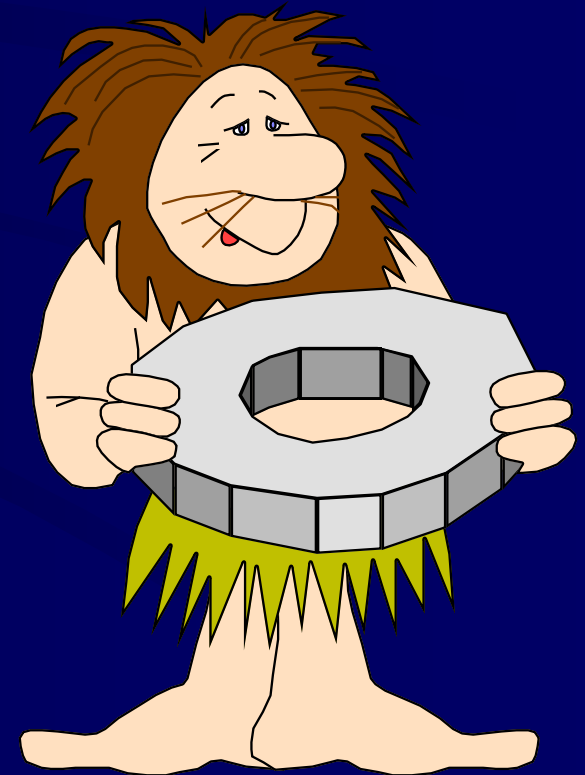
**Remember...KEEP IT SIMPLE!**

- Avoid making the breakdown so detailed that an unnecessarily large number of steps results
- Avoid making the job breakdown so general that basic steps are not recorded
- General rule of thumb is no more than 10 steps per job

# Example Job Steps for..... Changing a Flat Tire

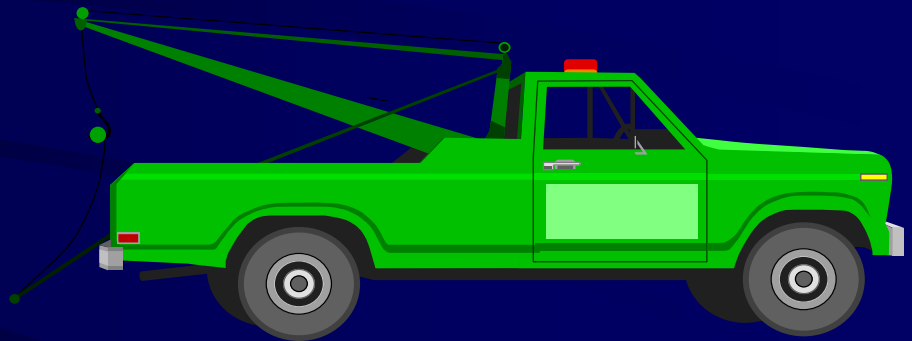
- Pull off road
- Put car in “park”
- Set brake
- Activate emergency flashers
- Open door
- Get out of car
- Walk to trunk
- Put key in lock
- Open trunk
- Remove jack
- Remove Spare tire
- **Enough steps to analyze the job???**

**Too Many Steps!**



# Example Job Steps for..... Changing a Flat Tire

- Park car
- take off flat tire
- put on spare tire
- drive away



- **Not Enough Steps for this task!**
- **Skipped steps = missed hazards!**

# Now, how about this?

- Park car, set brake
- remove jack & tire from trunk
- loosen lug nuts
- jack up car
- remove tire
- set new tire
- jack down car
- tighten lug nuts
- store tire & jack



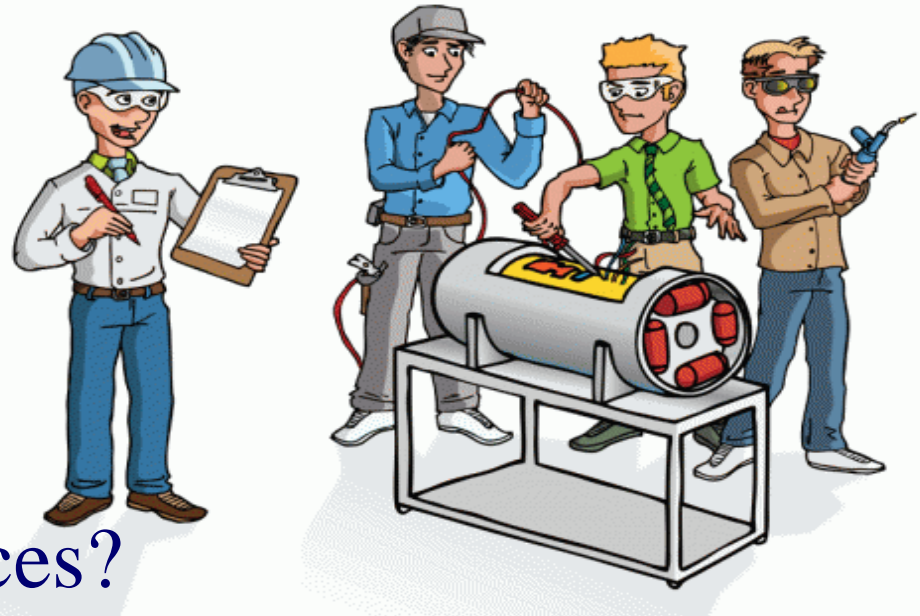
- **Just Right!**
- **Less than 10 steps**
- **Most important steps listed**
- **Key hazards can be identified**

# So far, so good!

- ❑ Now comes the fun part, playing detective
- ❑ As you watch the job being performed, you may notice situations (hazards) that could cause harm to the worker(s), the equipment being used, or the environment in which they are working
- ❑ Next we'll discuss how to identify these HAZARDS



# Step 3- Identifying hazards is indeed an exercise in detective work! During this step you must ask yourself.....



- What can go wrong?
- How could it happen?
- What are the consequences?
- What are other contributing factors?
- How likely is it that the hazard will occur?
- What could prevent it?

# Step 3- Identifying the Hazards in Each Step

- The information gathered in step 3 will be valuable in helping to eliminate and/or reduce hazards associated with the job, and improve the system weaknesses that produced them.
- Conduct a “what if” scenario for each step
- Review product/equipment labels and manuals for assistance in hazard identification (the work is often already done for you). ALWAYS consult the:
  - Owners/Manufacturer Manual
  - Material Safety Data Sheets
  - Other technical data

# Some typical questions to ask when evaluating a job step for hazards.....

- Are there any known or potential chemical exposures?
- Any excessive noise produced or encountered?
- Proper ventilation to remove contaminants?
- Is lighting adequate?
- Are emergency exits clearly marked?
- Any potential electrical shock/exposure?
- Is Personal Protective Equipment being used or should it be required?

# More questions to ask when evaluating a job step for hazards.....

- Any lifting or moving heavy objects?
- Does work involve repetitive movements?
- Any work in extreme outdoor weather?
- Any indoor heat/cold stress?
- Are cuts/lacerations possible?
- Is equipment used with blades or other cutting/grinding parts?

# Step 4- Recommend Safe Procedures and Protection Measures (Controls)

When the hazard cannot be eliminated, consider a “Control Method Hierarchy” to bring the hazard to an acceptable risk. The methods, in order of preference, are:

- Engineering Controls
- Administrative Controls
- Personal Protective Equipment (PPE)

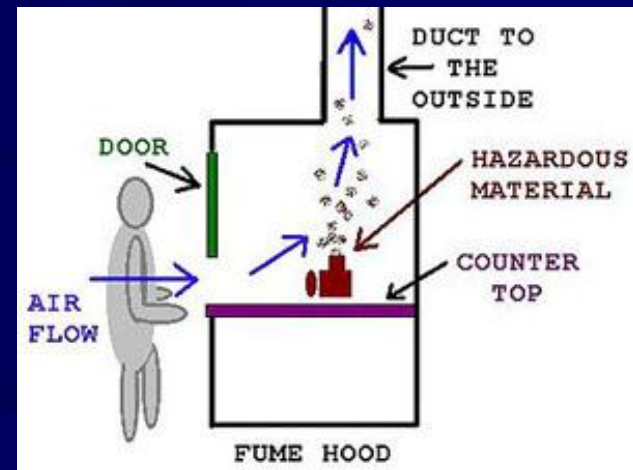


**Controls protect the worker and/or the environment!**

# Engineering Controls: when possible, use these first!

- These controls focus on the source of the hazard, unlike other types of controls that generally focus on the employee exposed to the hazard.

- The basic concept behind engineering controls is that, to the extent feasible, the work environment and the job itself should be designed to eliminate hazards or reduce exposure to hazards



- In this example, a fume hood removes hazardous contaminants away from the worker's breathing zone

# Examples of Engineering Controls

- Dilution or local exhaust ventilation systems
  - exhaust harmful agents away from the worker
- Sound dampening materials or enclosures
  - reduce potentially harmful noise exposures
- Use soap/water instead of hazardous cleaner
  - replacing harmful chemicals with safer substitutes
- Attaching dust collectors on grinding/sanding tools
  - help prevent contaminants from reaching workers
- Machine Guarding
  - Guards prevent contact with moving, dangerous parts

# Administrative Controls

- **Administrative controls**, or management controls, may result in a reduction of exposure through such methods as:
  - Changing work habits
  - Improving sanitation and hygiene practices
  - Altering work schedules

Try **Administrative Controls** when engineering controls are not feasible due to cost or other limitations

# Personal Protective Equipment (PPE)

- When exposure to hazards cannot be engineered completely out of normal operations or maintenance work; and
- when safe work practices and administrative controls cannot provide sufficient additional protection from exposure
- Use PPE as a LAST RESORT!



# A completed JHA = Safe Operating Procedures

- A completed JHA can be effectively used as a training tool and “Safe Operating Procedure”
- Any person performing the job can use the JHA as a guide to safely and effectively perform the tasks involved
- A signed JHA is also evidence of OSHA compliance regarding hazard assessment, hazard recognition, and the right to know law!

# When is a JHA Revised?



- When an accident or injury occurs
- When the job changes
- After a Near Miss (close call)
- Following an employee complaint
- If equipment suffers damage

# DOCUMENTING a JHA

- Log into ESAMS
- Go to JHA
- Scan and find JHA that closely matches your Job description.
- Cut and paste steps, potential injuries, recommended controls, and PPE if needed.
- Identify the Reviewer and Approving authority

# A Quick JHA Review

- Develop a list of jobs you perform
- Prioritize which jobs to assess first
- Perform a Job Hazard Analysis by
  - Observing the job steps
  - Note all hazards associated with each step
  - List controls (protective measures) for each hazard
  - Note any required training for the job
  - Include any relevant pictures, flowcharts, etc.
  - Document using ESAMS