APRIL 26-28, 2026

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Learning, Growing, Advancing Together Through A

Risk Assessment Safety Tour

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2026 AAOHN NATIONAL CONFERENCE

Disclosures

- **Accreditation statement:** The American Association of Occupational Health Nurses (AAOHN) is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation
- **Contact hours:** 4.0
- **Successful completion:** Complete Safety Tour Risk Assessment form and evaluation
- **Disclosures:** None of the planners or presenter for this activity have any relevant financial relationship to disclose with ineligible companies
- **Note:** The opinions expressed in this presentation are my own and not necessarily those ot AAOHN or any other organization

Objectives

- Describe steps involved in one job/job task observed
- Identify at least 2 potential hazards and assign a risk score to hazards related to one job/job task observed
- Recognize at least 1 control measure used/required and/or recommend additional control measures related to one job/job task observed

Job Hazard Analysis

JHA Key Terms

- **Job/Job Task -** Any activity (mental or physical or both) assigned to an employee as a responsibility that carries with it both positive and/or negative consequences based on performance

- **Hazard -** unsafe condition or practice that could cause injury, illness, or property damage
- **Analysis –**

  1) breaking down a job task into component steps & evaluating each

  2) looking for hazards, then

  3) correcting or identifying methods of control & making them standard operation/procedure

JHA is a…..

- Detailed ***study*** of a job/job task to
  - **Learn** what potential safety & health hazards exist during various stages of the job/job task
  - **Implement** controls to eliminate or minimize hazard/potential hazard
  - **Integrate** acceptable safety & health principles & practices into a particular operation
    - ~ ***Safety and health practices are integral parts of every job/job task -- not separate entities***

JHA is a ….

- ***Method*** that can be used to identify, analyze, and record:

1. Steps involved in performing a specific job/job task
2. Existing or potential safety & health hazards associated with each step
3. Recommended action(s)/procedure(s) that will eliminate or reduce these hazards & the risk of a workplace injury or illness

JHA is a …….

- ***Technique*** that focuses on job tasks as a way to identify hazards ***before they occur (OSHA)***
  - ~ Focuses on relationship between worker, task, tools, and work environment
  - ~ After identifying uncontrolled hazards, take steps to eliminate or reduce hazards to an acceptable risk level

JHA Purpose

- Effective JHA's help employer/s recognize and control workplace hazards and exposures

How might a worker's perception of a "hazard" differ an employer or supervisor?

Value of JHA's

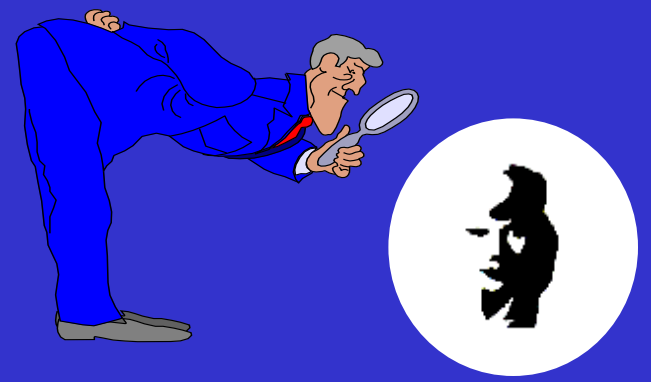
- **Identifies** hazards at point of "contact" with worker, and determines effective abatement tactics
- **Maximizes** efficiency & safety = REDUCED COSTS
- **Key** in mishap prevention work
  - Incident & near-miss investigations
- **Used for**
  - New worker orientation
  - Refresher training
    - ~ for experienced worker and seldom done job tasks
  - Information for better safety meetings
  - Empowering workers into safety process

JHA Approaches

- Observation method
  - JHA team observes staff performing job task
  - Not an inspection/audit
- Discussion method
  - Several staff who perform job task provide input on job steps and hazards
- Recall and check method
  - Staff does their own JHA using recollection
- Combination of above

Observation & Discussion:

Identify Hazards



- Search for hazards produced by
  - Management
  - Individual/s
  - Job task steps
  - Environment
- Repeat job task observation as many times as necessary to identify all hazards

Identify Hazards

- Anything that can cause harm
  - Chemicals/Biologicals
    - ~ Materials/products
  - Change in elevation – ladders, stools,etc.
  - Ergonomic/Position
    - ~ Lifting and /or moving
    - ~ Static sitting or standing
    - ~ Awkward postures
  - Equipment
  - Environmental
    - ~ Hot, Cold, Light, Vibration, etc.
  - Physical
    - ~ Asbestos, Confined Space, Electricity, Noise, Threats of Violence, etc.

Identify Hazards (cont'd)

- Use common sense
- Continually ask "What If…"
- Don't be overly complicated
- Get and use employee input
- Utilize
  - Professional/trade association/manufacturer information and research
  - SDS
  - Regulations, guidelines, standards of practice, and recommendations
  - Consultants/specialists/experts

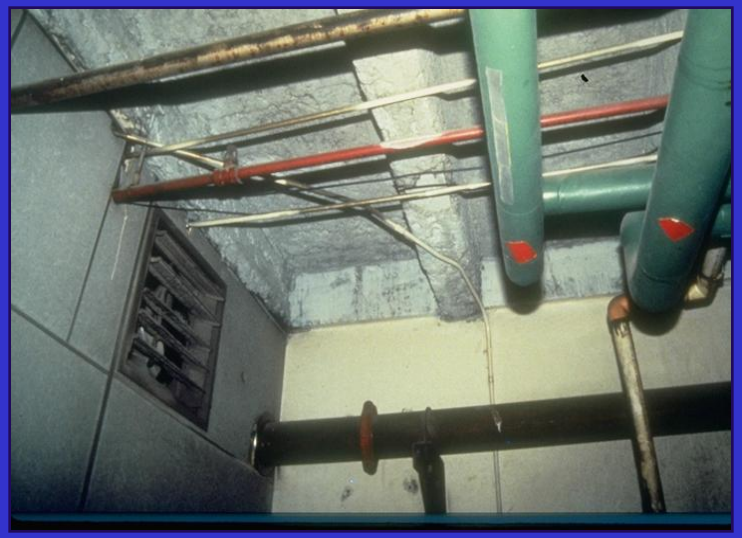
Hazards

- Chemical & Biological
  - Asphyxiant
  - Biologically active
  - Corrosive
  - Environmentally harmful
  - Explosive
  - Flammable
  - Highly reactive
  - Irritant/sensitizer
  - Pyrophoric
  - Toxic: acute/chronic
  - Unstable
- Physical
  - Energy
    - ~ Electrical
    - ~ Kinetic energy
    - ~ Potential energy
  - High/low temperature
    - ~ Heat/cold stress
  - Light
  - Mental stress
    - ~ Threats of violence
  - Noise/vibration
  - Physical stress
  - Radiation: ionizing/non-ionizing
  - Vacuum

Hazards (cont'd)

- Change in elevation
  - Ladders, stools, etc.
- Ergonomic
  - Awkward postures
    - Lifting
    - Static sitting/standing
  - Repetitive motions
  - Force exertion
  - Pressure Points
  - Vibration
- Equipment
  - Assembly lines
  - Power tools
  - Hand tools
  - Electrical
  - Etc.
- Environmental
  - Hot/Cold
  - Dry/Dusty
  - Humid/Wet

What is the Hazard?



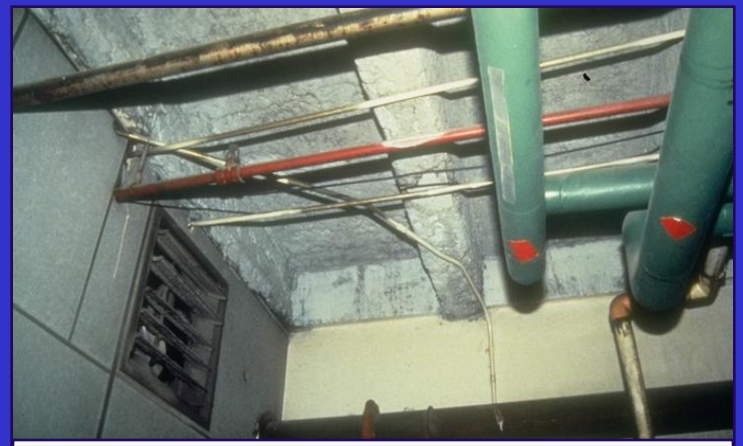
Hazards Identified

Over reaching

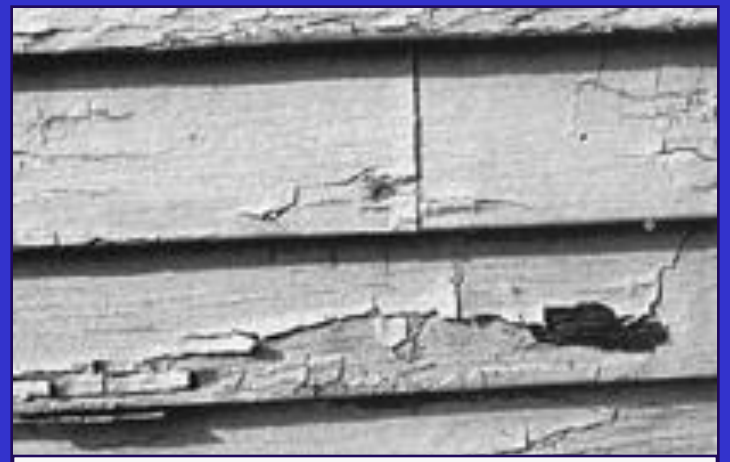
Boxes Blocking view

Awkward posture/contact stress

Eating & drinking in lab



Asbestos



Chipping lead based paint

Break Task into Steps

- Logical ***and usual*** sequence of key steps
  - *Each set of movements **that forms a coherent sum** consistent with the intended level of analysis*

- E.g., key step “Remove Flat Tire” in task “Change Flat Tire” has three movements:
  a. Grab wheel
  b. Pull wheel straight towards you, & off car
  c. Set flat to the side

Key Job Task Steps - guidelines

- Number key steps ***consecutively****
- ***Record*** every step from start to finish
- Each step should tell ***what is done, not how it is done***
  - Use action verbs like “insert”, “open”, “pick up”, “turn on”

Key Job Steps - guidelines

- Don’t make breakdown…
  - Too detailed with large number of steps, or
  - Too general that important steps and associated hazards are missed
  - 10 or less key steps
  - If more than 15, divide task into smaller units

Example: Steps in Loading a Trailer

- 1. Secure and verify load ticket
- 2. Engage “*Dock Lock*” and deck plate
- 3. Load product
- 4. Verify shipment with driver
- 5. Release *“Dock Lock*” and deck plate

Conducting Analysis

- Identify all actual or potential safety and health hazards ***associated with each step***
- Determine & record recommended action(s), control measures, and/or procedure(s) for each step to abate hazard
  - ~ i.e. engineering changes, job rotation, PPE, etc.

Job Hazard Analysis Form

JOB TITLE: DATE OF ANALYSIS:

JOB LOCATION:

STEP	HAZARD	NEW PROCEDURE OR PROTECTION

¶ ¶	JOB·TASK:··¶ ¶ Page·····d·····	JSA·No.¶ ··¤	DATE:··¤	NEW·····¶ ¶ REVISED·····¤
· JOB·HAZARD·ANALYSIS¤	JOB·TITLES·OF·WHO·DOES·JOB·TASK:¶	SUPERVISOR:¶	ANALYSIS·PERFOMED·BY:¶	
ORGANIZATION:¶	LOCATION:¶	DEPARTMENT:¶	REVIEWED·BY:¶	

SEQUENCE·OF·BASIC·JOB·STEPS¤	POTENTIAL·HAZARDS¤	RECOMMENDED·ACTION·OR·PROCEDURE¤
1 1 ¤	¤	¤
1 1 ¤	¤	¤
1 1 ¤	¤	¤
1 1 1 ¤	¤	¤
1 1 1 ¤	¤	¤

SAMPLE JOB HAZARD ANALYSIS WORKSHEET

Job Description: _____

Step 1 Description: _____

Hazards	Preventive Measure(s) Required
1. _____	_____
2. _____	_____
3. _____	_____

Step 2 Description: _____

Hazards	Preventive Measure(s) Required
1. _____	_____
2. _____	_____
3. _____	_____

Step 3 Description: _____

Hazards	Preventive Measure(s) Required
1. _____	_____
2. _____	_____
3. _____	_____

Safe Job Procedure

_____

_____

Job Hazard Analysis Form

JOB TITLE: DATE OF ANALYSIS:

JOB LOCATION:

STEP	HAZARD	NEW PROCEDURE OR PROTECTION

JHA Exercise

De-burring Iron Castings
Using a Grinding Wheel

Job Steps

Step 1: Reach into metal box to right of machine, grasp 15 Lb casting, & maneuver to grinding wheel

Step 2: Push casting against wheel to grind off burrs

Step 3: Place de-burred casting in metal box to left of machine

Hazards

- Strike hand on edge of metal box or casting
- Cut hand on burr
- Drop casting on toes

- Strike hand against wheel
- Flying sparks, dust, or chips
- Wheel breakage
- Not enough of wheel guarded
- No dust removal system
- Sleeves could get caught in machinery

- Strike hand against metal box or castings

Controls

- Provide gloves with better protective grip
- Steel toe shoes with arch protection
- Use device to pick up casting
- Remove castings from box
- Place on table

- Provide larger guard over wheel
- Install local exhaust system
- Provide safety goggles
- Wear short or tight-fitting sleeves

- Provide for removal of completed stock

JHA Exercise

Job Task: Change Flat Tire

List Job Steps

http://www.howdini.com/howdini-video-6671961.html

Job Steps…1st Try

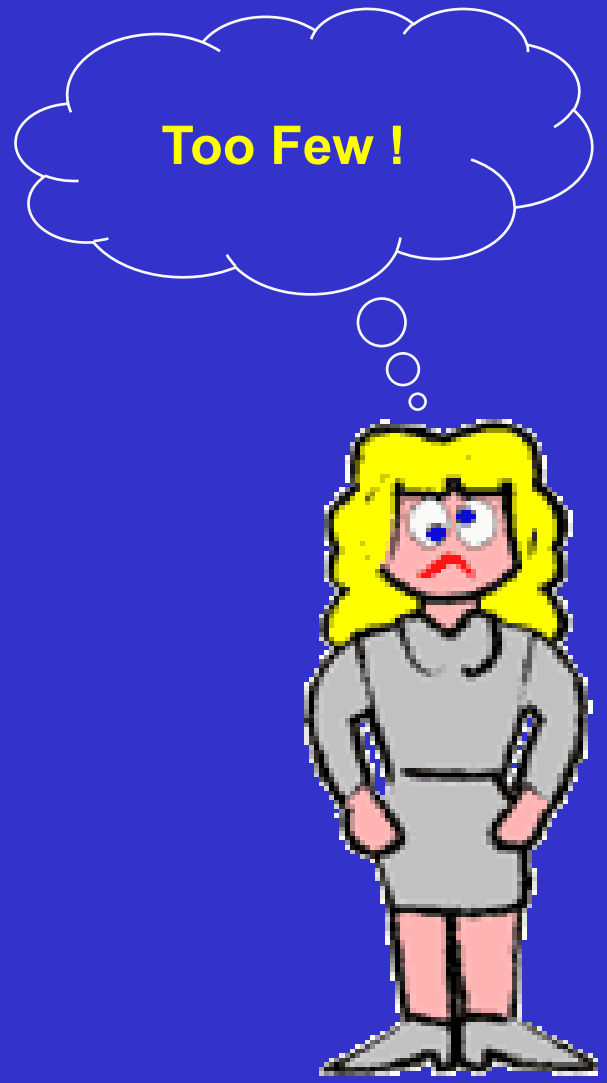
1. Open trunk
2. Remove spare
3. Remove tool kit
4. Get lug wrench
5. Loosen lug nuts
6. Attach jack
7. Jack up car
8. Remove lug nuts
9. Remove flat
10. …

…

XX. Close trunk

Job Steps…2nd Try

1. Get Spare
2. Remove flat
3. Put on spare
4. Store flat



Job Steps…3rd Try

1. Remove spare & tool kit
2. Loosen lug nuts
3. Jack up car
4. Remove lug nuts
5. Remove flat
6. Put on spare
7. Hand tighten lug nuts
8. Jack down car
9. Tighten lug nuts
10. Store flat & tool kit

Job Steps….

1. Remove spare & tool kit
2. Loosen lug nuts
3. Jack up car
4. Remove lug nuts
5. Remove flat
6. Put on spare
7. Hand tighten lug nuts
8. Jack down car
9. Tighten lug nuts
10. Store flat & tool kit

JHA Exercise

Job Task: Change Flat Tire

Potential Hazards….

Potential Hazards…

1. Remove spare & tool kit
   a. Back strain
   b. Bang head on trunk
2. Loosen lug nuts
   a. Back/arm strain
   b. Slip & fall
3. Jack up car
   a. Back/arm strain
   b. Car slips off jack
4. Remove lug nuts
   a. Awkward posture
5. Remove flat
   a. Back stain
   b. Slip & fall
6. Put on spare
   a. Back stain
   b. Slip & fall
7. Hand tighten lug nuts
   a. Awkward posture
8. Jack down car
   a. Back/arm strain
9. Tighten lug nuts
   a. Back/arm strain
   b. Slip & fall
10. Store flat & tool kit
    a. Back strain
    b. Bang head on trunk

Potential Hazards

- Get expert help:
  - Technical: Electrical, Programming, Engineering
  - Ergonomic – grip & force measurements
  - Production Processes
  - Packaging and Distribution

Step 4 Determine & Implement Controls

- Best done in discussion with operator, team leader and entire team
- Use Hierarchy of Controls
- Get expert help when needed

Hierarchy:

- Best:
  - Find a new way to do job task
  - Alter conditions that create hazards
  - Engineer out hazard
- Better:
  - Administratively control
  - Change work procedure
  - Reduce frequency
- Good:
  - Provide PPE

Best: Eliminate the hazard

- Determine work goal of job task
  - Analyze various ways of reaching work goal for safest way
- Consider work saving tools & equipment

Change Physical Conditions

- Substitute
- Tools, materials, equipment layout or location

***Study change carefully for other benefits / “watchouts”

~ costs, time savings, etc.

Better: Change Work Procedures

- How should it be done
  - What engineering controls are needed
  - What can worker do to eliminate/ minimize hazard
  - Is PPE needed
- Document changes in detail
- Train employees

Better: Reduce Frequency

- What can be done to reduce job task frequency
  - Revise schedule
  - Identify parts that cause frequent repairs
    - Maintain
    - Change
  - Reduce vibration…saves machine parts

JHA Exercise

Job Task: Change Flat Tire

Control measures….

Potential Hazards…

1. Remove spare & tool kit
   a. Back strain
   b. Bang head on trunk
2. Loosen lug nuts
   a. Back/arm strain
   b. Slip & fall
3. Jack up car
   a. Back/arm strain
   b. Car slips off jack
4. Remove lug nuts
   a. Awkward posture
5. Remove flat
   a. Back strain
   b. Slip & fall
6. Put on spare
   a. Back stain
   b. Slip & fall
7. Hand tighten lug nuts
   a. Awkward posture
8. Jack down car
   a. Back/arm strain
9. Tighten lug nuts
   a. Back/arm strain
   b. Slip & fall
10. Store flat & tool kit
    a. Back strain
    b. Bang head on trunk

Recommended Action…

1. Remove spare & tool kit
   a. Watch truck lid position
   b. Turn spare upright in the wheel well; using legs & standing close, lift spare out of truck & roll to flat
2. Loosen lug nuts
   a. Neutral kneeling position
   b. Using lug wrench; apply steady pressure slowly
3. Jack up car
   a. Ensure proper jack position on flat surface
   b. Block car
4. Remove lug nuts
   a. Be aware of hand/finger placement
5. Remove flat
   a. Neutral kneeling position
   b. Limit reach
6. → 10.

   Much the same as 1 thru 5, but in reverse

Step 4: Monitor & Review

- Follow-up review always essential
  - Changes
    - ~Processes, tasks or hazards
    - ~Staffing levels
  - Controls effective
    - ~Technology
    - ~Work Practices
    - ~PPE

Recommended Action Effects

- Redesigned job may affect other jobs or work processes
- Evaluate, check, & re-observe new process for new hazards
- ***Are we ever done??***

The Safety Formula

Safe Acts + Safe Conditions =

A Safe Workplace!

Conclusion

- Risk assessment, control, & review completed is not to be forgotten
  - Ongoing
  - Document hazard identification properly even in simplest of situations or tasks

Summary and Feedback

- Information Resources
- Summary
- Safety Tour
- Evaluation
- Questions & Answers

Information Resources

- Mary Gene Ryan, MPH, RN, COHN-S (ret), CSP (ret), FAAOHN
  805.377.4866 ryanfive@sbcglobal.net
- Georgi Popov, Bruce K. Lyon, & Bruce Hollcroft. Risk Assessment: A Practical Guide to Assessing Risks. ASSP, ISBN: 978-1118911044.
- Main, Bruce. Risk Assessment - Challenges and Opportunities. ASSP ISBN: 978-0-9741248-2-7.

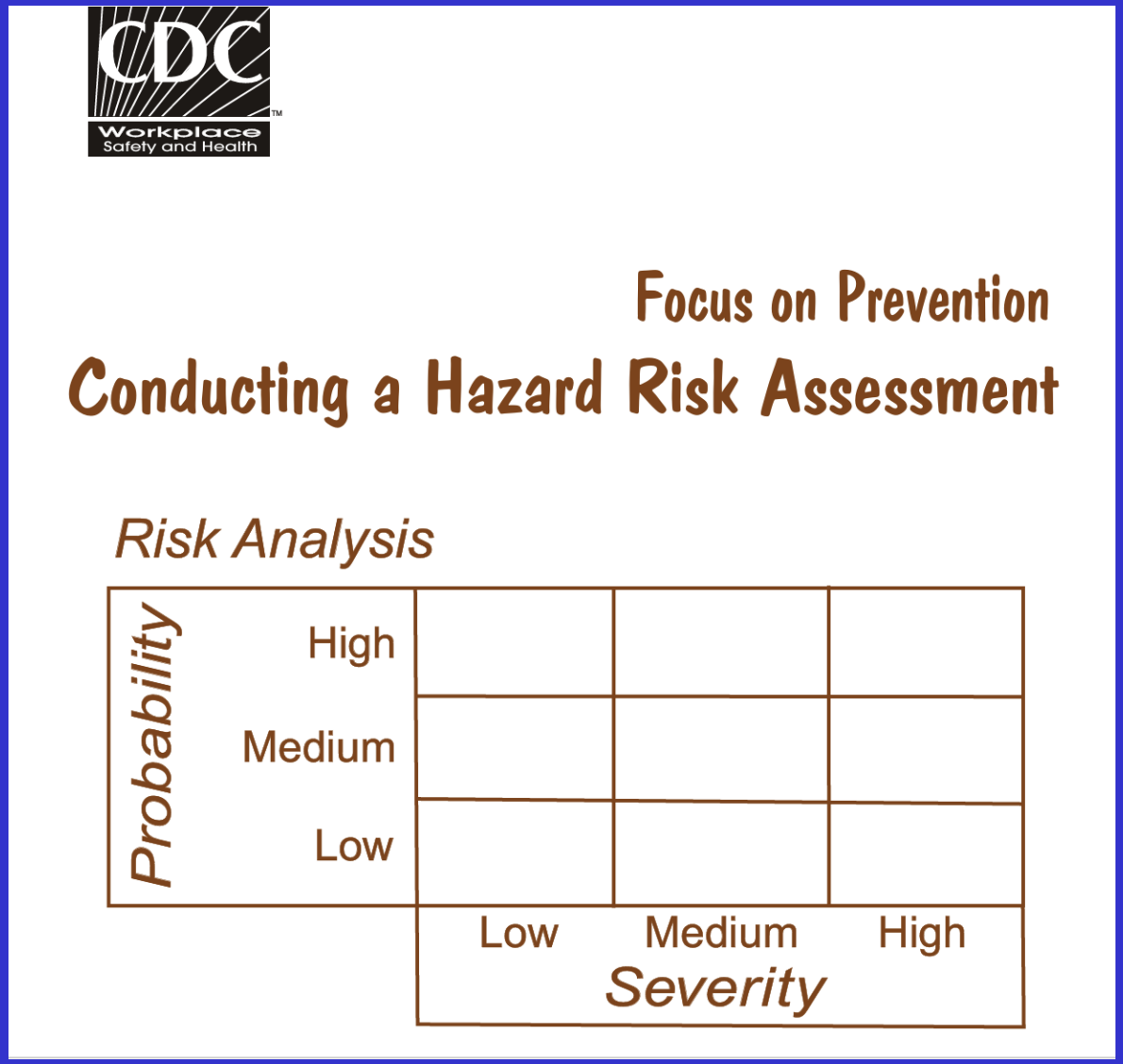
Information Resources

- Morris, J. (‘03). Implementing a Job Hazard Analysis Program. AAOHN Journal, 51(4)
- NIOSH www.cdc.niosh.gov
- OSHA www.osha.gov

Job Hazard Analysis
OSHA 3071, 2002 (Revised)

Contents

Risk Assessment



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Public Health Service Centers for Disease Control and Prevention National Institute for Occupational Safety and Health Pittsburgh Research Laboratory Pittsburgh, PA
July 2003

DHHS (NIOSH) Publication No. 2003-139

Summary

- Job Hazard Analysis (JHA) with Risk Assessment
  - Hazard appraisal & documentation process
  - First step in any job
  - Your responsibility
- Safe Acts + Safe Conditions =

A Safe Workplace!

Safety Tour

- Shingle Creek Golf Course
- Walking tour
  - Long pants & closed toed shoes
  - Tour groups & briefing
  - Complete Safety Tour Form and Evaluation

AAOHN SITE TOUR SAFETY ASSESSMENT

Use this assessment checklist to annotate job/job tasks viewed, list potential or known hazard/s, state engineering and work practice/administrative controls along with any personal protective equipment (PPE) being used or assigned for use. Assign a Risk score by asking "if an incident were to occur involving the listed Hazard Area, the worst-credible consequence might be…"

(leave no blanks; use "?" for "can't decide"):

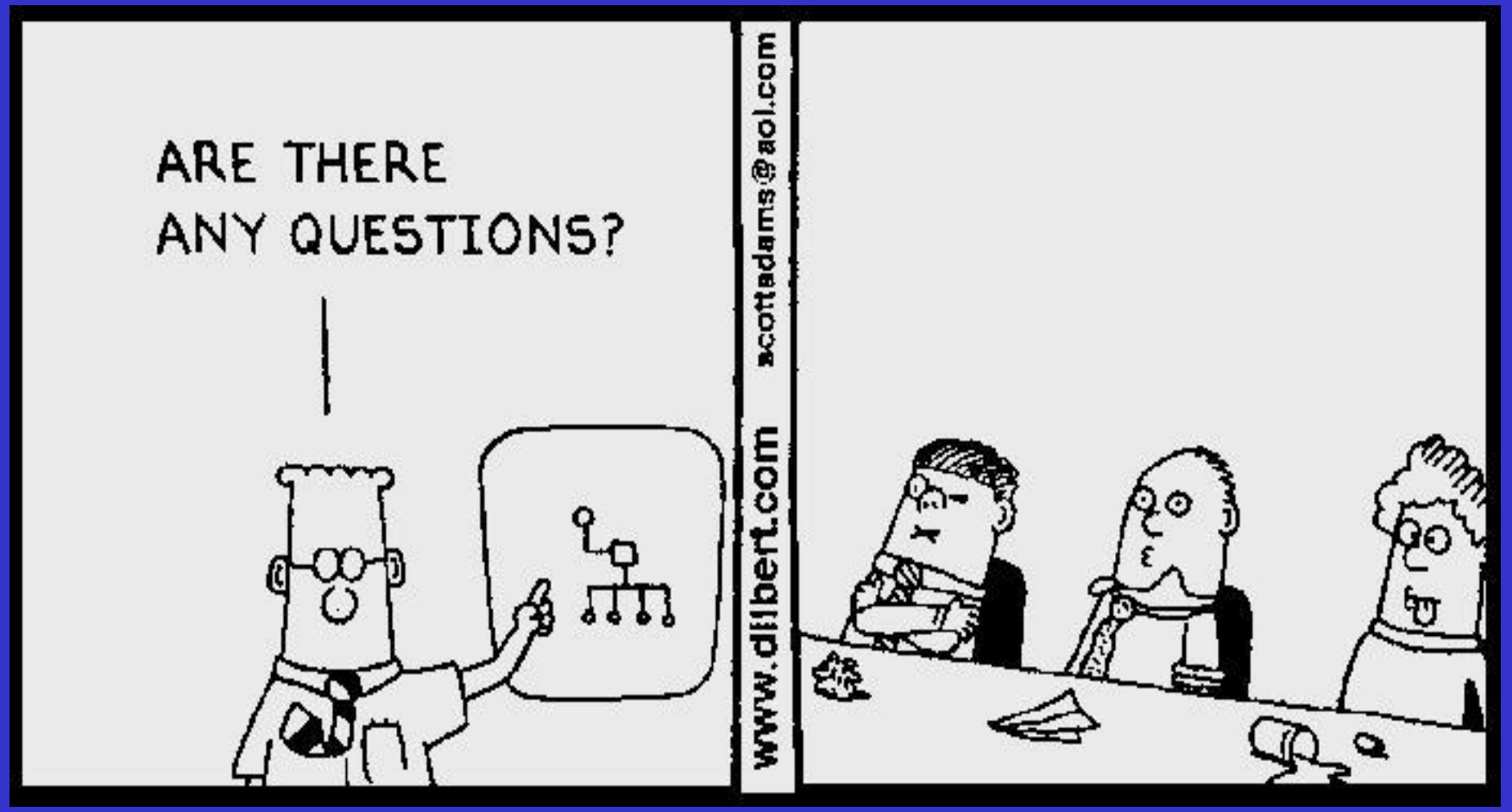
H = High (life-safety issues) ····· L = Low (minor injury/illness issues)

M = Moderate (major injury/illness issues) ····· N = Not an issue

RULE: ···· The highest Risk Score recorded is the final risk score for the full Job or Job Task

Provide any recommendations for improvement or changes in engineering and work practice/administrative controls and/or PPE.

Plant/Organization							
Analyzed By							
Job		Job Task					
Date Analyzed		Department/Section					
Sequence of Job Task Steps		List Potential/Inherent Hazards for each step	Hazard Risk Score			Controls	Recommendations
#	Description		H	M	L		


ARE THERE
ANY QUESTIONS?
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