

# ***Mechanical Power Press Accidents***

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***Knowing What to Do?***

***or***

***Knowing What to do!***

# An Occupational Injury Occurs Now What?

- **Taking care of the injured worker.  
Contacting 911.**
- **Rendering any care from employers first response team.**
- **After injured worker has been transported off site to medical facility, now accident scene must be preserved.**

# OSHA 1904.39 Reporting Requirements

- **Work related Fatality (8 hours)**
- **Work related amputation, loss of eye or hospitalization of at least one employee. (24 hours)**
- **1-800-321-OSHA (1-800-321-6742).**
- **Online [www.osha.gov](http://www.osha.gov)**

# The Focus Should Be On

■ Finding \_\_\_\_\_

**Not**

■ Not Finding \_\_\_\_\_

# OSHA 1910.217 (g) (1)

The employer **shall report**, within **30 days** of the occurrence, all point-of-operation injuries to **operators or other employees** to either the Director of the Directorate of Standards and Guidance at OSHA, U.S. Department of Labor, Washington, DC 20210 or electronically at <http://www.osha.gov/pls/oshaweb/mechanical.htm>; or to the State Agency administering a plan approved by the Assistant Secretary of Labor for Occupational Safety and Health.

# 1910.217 (b) (8)

- **Selecting the mode of operation. The key must be removed from the selector switch and kept in the possession of the employer or his authorized representative such as superintendent, supervisor, foreman or lead man.**
- **A key-operated selector switch is the only means acceptable to meet all of the requirements of this paragraph.**

# 1910.217 (b) (8)

- **Requires a key-operated selector switch**
- **Capable of selecting the mode of operation desired on mechanical power presses using part revolution clutches, if they are capable of**

# Information Gathering

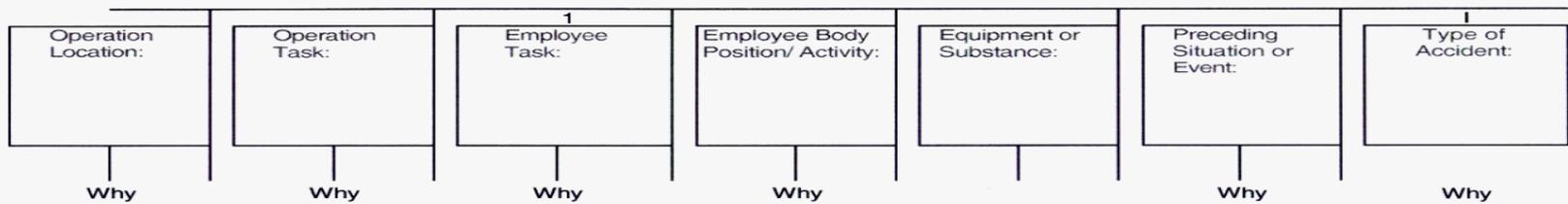
- Taking pictures of complete area from various angles, locations .
- **Press information- manufacturer, model #, serial #, control type, selector switch.**
- Has machine/equipment been modified?
- **Was it guarded properly?**
- Was there any mechanical failure?

# Decision Tree Analysis

## ACCIDENT TREE

Nature of Injury or Illness:

Part of Body Affected:



# Interviewing

- **Most difficult aspects to incident investigations**
- **Obtain witnesses description of event in their own words.**
- **Basic question elements: who, where, when, why, what and how.**
- **Combined with the incident causes to create relevant and useful questions.**

# Interviewing Do's

- ✘ Try to sense any underlying feeling of the interviewee
- ✘ Make short notes only during interview
- ✘ Ask open ended questions
- ✘ Ask questions that will develop facts in the order of occurrence.
- ✘ Ask only one question at a time

# Interviewing Do's:

- ✗ **Begin by asking questions that are not likely to cause the interviewee to be defensive or hostile**
- ✗ **Put the interviewee at ease**
- ✗ **Emphasize the real reason for the investigation  
→to determine what happened and why←**
- ✗ **Let the interviewee talk, uninterrupted**
- ✗ **Confirm that you have their statement correct**

# Four Steps in Conducting Accident Analysis

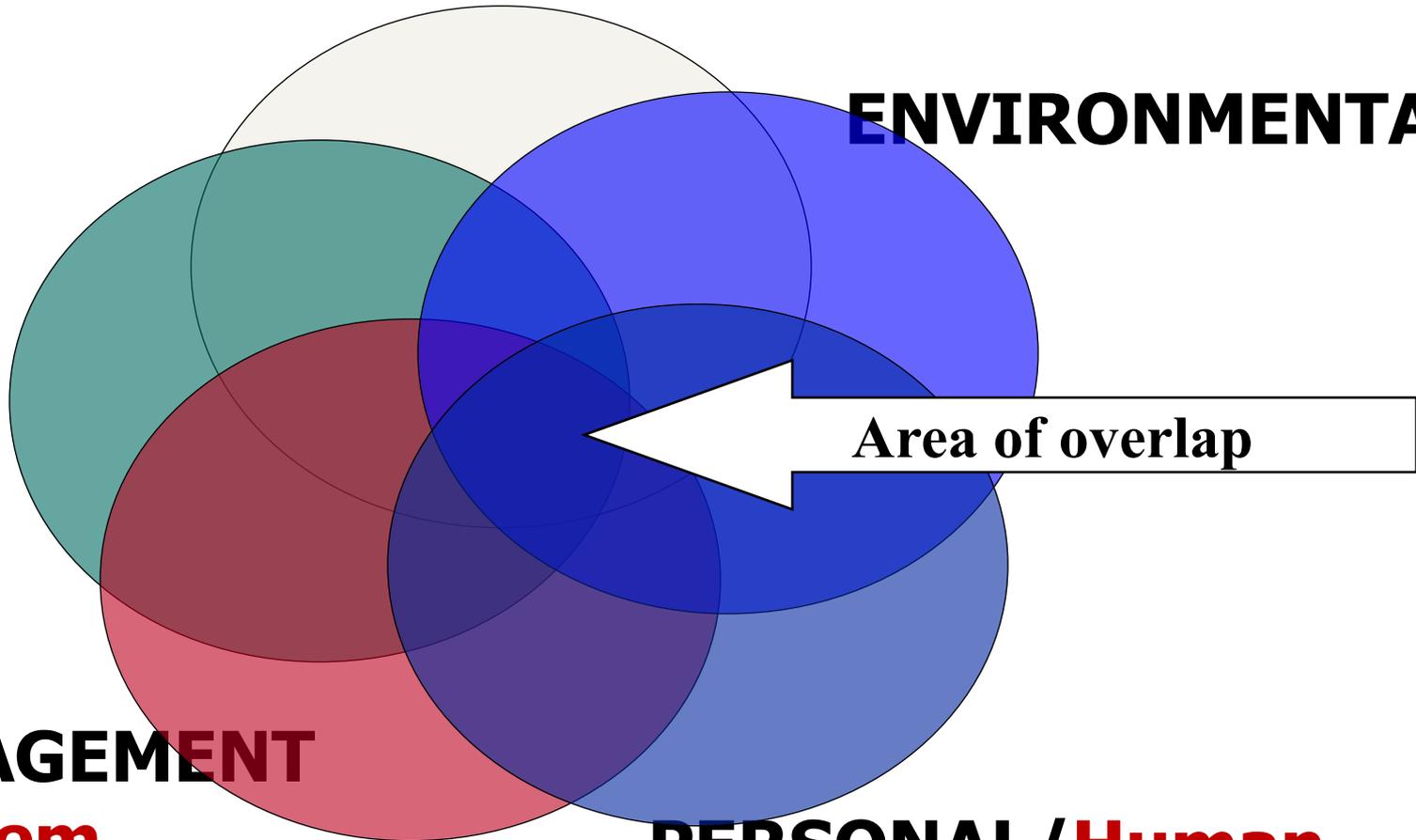
- Information Gathering
- Analysis & Conclusion
- Recommendations
- Written Report

# Causal factors

**MATERIAL/Design**

**ENVIRONMENTAL**

**TASK**



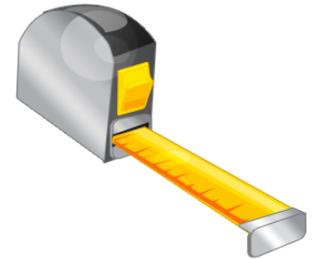
**Area of overlap**

**MANAGEMENT**  
**/System**

**PERSONAL/Human**  
**Behavior**

# Accident Analysis Kit

- Camera, voice recorder, video camera
- Clip board, paper, pencils, graph paper
- Compass, small tool kit
- Copy of forms (accident report, witness)
- Ruler, tape measure, magnifying glass



# Accident Analysis Kit

- Identification tags, collection containers
- **Personal Protective Equipment (BBP)**
- Barrier tape, cord, ???
- Accident forms, checklists, contact numbers

# ***MINIMUM REQUIREMENTS FOR POWER PRESS OPERATORS TRAINING (OSHA)***

*The operators of mechanical power presses must be trained in all phases of the operation of the equipment and its capabilities and limitations, and;*

# *Operator Training*

- *All press controls and how to use them;*
- *The safety guards and devices incorporated on the machines and the correct use of each;*
- *The use of tools for removing stuck work and the use of swabs, brushes, or oil cans for lubricating dies and stock;*

# ***Operator Training***

***Understanding why, when, and how to use personal protective equipment, such as safety glasses, gloves, safety shoes, and hearing protections;***

# ***Operator Training***

- ***The storage of parts, tools, or other objects on dies, die sets, bolster plates, or press components not designed to retain them; present hazards of falling on operators; and possible pinch points with moving components.***
- ***Operators must be aware of these hazards, as well as the basic housekeeping around the press areas;***

# ***Operator Training***

***Not to operate the press until the press has been checked and tested several times prior to production operations. He/she should report any problems which he/she observes to the proper person; and***

# ***Operator Training***

***Employees who are going to operate presses should receive a minimum of 8 hours on-the-job training under supervision prior to being assigned to operate the press. This could be up to 2 weeks or more, depending on the complexities of the operation.***

***MINIMUM TRAINING  
REQUIREMENTS FOR  
PRESSROOM SUPERVISORS***

# *Supervisor Training*

- *The foreperson must be informed of his/her accountability to the employer and the employees who work with him/her.*
- *He/she must know the hazards of power press operations and their set-up and maintenance.*

# *Supervisor Training*

- *The pressroom foreperson must be knowledgeable about the intended function of the safety guards and devices, and the correct adjustments and uses of each.*
- *He/she must check each set-up and be sure that all operators are instructed in safe power press operations before they start work.*

# ***Supervisor Training***

***It is his/her responsibility to ensure that correct operating procedures are being followed.***

# ***Supervisor Training***

- ***The foreperson must see that all maintenance is performed and that presses are in safe repair prior to their operation.***
- ***As the employer's representative, the pressroom supervisor is responsible for the training and operations of the employees under his/her control.***

# ***ANSI Training Requirements***

## ***Training Requirements per the ANSI B.11.1 (2009) Standard***

# ANSI Training Requirements

AMERICAN NATIONAL STANDARD

B11.1-2009

STANDARD REQUIREMENTS

EXPLANATORY INFORMATION

- 1) Training shall ensure that user personnel associated with press production systems are properly trained in safe working procedures and are qualified to perform the functions to which they are assigned.
  
- 2) The user shall instruct all operators in the operation of the press production system. Instructions shall include the following requirements:
  - a) The user shall instruct the operator in the proper method of operation for each production set-up before the press production system is placed into production.
  
  - b) The user shall require that all operators demonstrate their knowledge of the press production system.

- 1) Examples of training program elements include:
  - a) A description of the assigned task;
  - b) The function of operator controls necessary for performing the assigned task;
  - c) The hazards associated with the assigned task;
  - d) The hazards associated with the improper use of or the failure to use the means of safeguarding provided;
  - e) The designated method of feeding;
  - f) Any requirements for the use of hand tools in the production process (see also 9.3.4);
  - g) The designated method of safeguarding;
  - h) The methods of function-testing or otherwise assuring the proper function of safeguarding means.
  
- 2)
  - a) The user should place particular emphasis on the training, instruction, and supervision of workers who are inexperienced in the operation of press production systems, or lacking in the ability to effectively communicate.  
 Instructions should include but not be limited to the following applicable guidelines to ensure that:
    - a) all personnel are in a safe location before operating the press production system;
    - b) operators know and understand the start-up and stopping procedures;
    - c) operators know and understand safe operating procedures;
    - d) operators understand that the INCH mode is not to be used during production for press actuation;
    - e) operators know the safeguarding required for the operation and understand its function;
    - f) operators know they should report to their supervisor any apparent defect, damage, malfunction or inconsistent or unpredictable performance of the press production system (see also, 4.3).

# MPP Accidents

Employee #1 was standing near the V & O part revolution power press waiting for her next assignment. She watched as a coworker operated the power press. Employee #1 reached into the machine for the tray of parts. The coworker was unaware that Employee #1 reached into the machine and operated the press. Employee #1 suffered fractures to her hand. She was hospitalized for the treatment of her injuries.

# ***MPP Accidents***

- ***On November 5, 2007, a recently hired untrained mechanical power press operator suffered an amputation of his left middle finger in the point of operation. The press operator was hospitalized and treated for finger amputation.***
- ***9 citations from 1910.217 (\$6100)***

# ***MPP Accidents***

*On January 11, 2006, Employee #1 was working as a press operator for a manufacturer of non-wood office furniture. He lost his balance and stepped on the press's foot pedal while one of his fingers was in the die. The press activated, puncturing the index finger on his right hand. He was not hospitalized. A causal factor was that the mechanical power press he was using was inadequately guarded.*

# 1910.217(b)(4)(i) & (ii)

- **The pedal mechanism shall be protected to prevent unintended operation from falling or moving objects or by accidental stepping onto the pedal.**
- **A pad with a nonslip contact area shall be firmly attached to the pedal.**
- **OAC requires this for all foot pedals.**

# MPP Accidents

*At 4:30 p.m. on August 12, 2015, Employee #1 was adjusting a die in Press 145. The employee loosened the top die and attempted to twist it. Employee #1's hand slipped and the top die fell, amputating the left middle finger. The employee was hospitalized for his injury.*

# 1910.217 (d) (9) (iv)

The employer shall provide and enforce the use of safety blocks for use whenever dies are being adjusted or repaired in the press.