Introduction

• Audio is broadcast through On24 audio broadcast system
• This presentation is being recorded for on-demand viewing
• An email will be sent with recording link and PDF of the presentation
• Q & A will be answered at the end of the presentation, please submit questions through Q & A box on right of screen
• Please use the Q & A Box if you are experiencing any technical issues, our team will work to address them
Presenter

Wesley L. Wheeler, SMS
NECA Director of Safety

Investigation Questions/Controversy

- Accident vs Incident
- What warrants investigation?
- How to protect against lawsuits?
- Is legal counsel needed?
Definitions

- **Accident** - unplanned, unwanted, but controllable event, disrupts work process and causes injury
- **Incident** – unplanned and unwanted event disrupts work and has potential of injury, harm, or damage to persons or property.

Investigation Goal - prevent future incidents

- Identify and eliminate hazards,
- Expose deficiencies so corrective action can take place
- Fulfill legal and comp requirements

WHAT GETS INVESTIGATED

Factors to consider:

- staff skills and knowledge
- equipment needed
- time needed
- budget
- severity of the injury
- potential severity of injury
- accident history
WHO SHOULD INVESTIGATE

<table>
<thead>
<tr>
<th>INCIDENT TYPE</th>
<th>INVESTIGATIVE TEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatalities</td>
<td>Company Safety Representative, consultants expertise related to incident, legal counsel</td>
</tr>
<tr>
<td>OSHA Reportable (amputations, etc.), serious injuries (ex. lost time) and significant property loss (ex. crane collapse)</td>
<td>Company Safety Representative, health and safety committee, union rep (if applicable), consultants with expertise related to incident, legal counsel</td>
</tr>
<tr>
<td>No actual injury, but high potential for injury/significant property loss</td>
<td>Employees with knowledge of work, supervisor, Company Safety Representative, health and safety committee, union rep (if applicable)</td>
</tr>
<tr>
<td>OSHA Recordable</td>
<td>Employees with knowledge of work, supervisor, Company Safety Representative, health and safety committee, union rep (if applicable)</td>
</tr>
<tr>
<td>No actual injury and potential for only minor injury/low property loss</td>
<td>Employees with knowledge of work, supervisor, Company Safety Representative (optional)</td>
</tr>
</tbody>
</table>

WHAT SHOULD THE RESULTS BE

**Causes**
- *Direct Cause*
- *Indirect Cause*
- *Root Cause*

**Precursors**
- Reasonably detectable event, condition, or action that serves as warning sign of event
- An unmitigated High Risk situation that will eventually result in a serious injury or fatality if allowed to continue
**Simplified Root Cause Approach**
(The “five whys”)

Material on the scaffold deck fell and hit me on the head.

1) *Why?* – Someone kicked the materials and it fell from the scaffold.

2) *Why?* - Material was allowed to accumulate and there was no toeboard.

3) *Why?* – No one inspected the scaffold to ensure it was erected and used properly.

4) *Why?* - A competent person for scaffolding was not assigned to the jobsite.

5) *Why?* - There is no safety and health program addressing the safe use of scaffolds.

**Preliminary Response to an Incident**

1) Remove potential threats

2) Care for the injured and contact emergency medical personnel

3) Contact the Company Safety Representative or other appropriate contact

4) Preserve all potential evidence

5) Record as much information as possible

6) Quickly identify witnesses and keep them at the scene, but separate
STEPS OF INVESTIGATION

1 Prepare
2 Collect Evidence
3 Analysis
4 Report
5 Corrective Action

STEPS OF INVESTIGATION — 1) Prepare

• Develop an Incident Investigation Program
• Prepare an Investigation Kit
• Assess the preliminary response and be prepared
• Establish a plan for returning the scene to normal use.
• Report the incident to management
• Notify OSHA
STEPS OF INVESTIGATION — 1) Prepare

OSHA Notification:

- All work-related fatalities within 8 hours
- All work-related inpatient hospitalizations within 24 hours
- All amputations within 24 hours
- All losses of an eye within 24 hours

STEPS OF INVESTIGATION — 2) Collect Evidence

Incident Categories
- Task
- Material
- Work Environment
- Personnel
- Management

Types of Evidence
- Physical Evidence
- Witness Statements
Collect Evidence: Task

• Was a safe work procedure used?
• Had conditions changed to make the normal procedure unsafe?
• Were the appropriate tools and materials available?
• Were they used?
• Were safety devices working properly?
• Was lockout used when necessary?

Collect Evidence: Material

• Was there an equipment failure?
• What caused it to fail?
• Was the machinery poorly designed?
• Were hazardous products involved?
• Were they clearly identified?
• Was a less hazardous alternative product possible and available?
• Was the raw material substandard in some way?
• Should personal protective equipment (PPE) have been used?
• Was the PPE used?
• Were users of PPE properly educated and trained?
**Collect Evidence: Work Environment**

- What were the weather conditions?
- Was poor housekeeping a problem?
- Was it too hot or too cold?
- Was noise a problem?
- Was there adequate light?
- Were toxic or hazardous gases, dusts, or fumes present?

**Collect Evidence: Personnel**

- Did the worker follow the safe operating procedures?
- Were workers experienced in the work being done?
- Had they been adequately educated and trained?
- Can they physically do the work?
- What was the status of their health?
- Were they tired?
- Was fatigue or shiftwork an issue?
- Were they under stress (work or personal)?
- Was there pressure to meet a deadline/by-pass safety procedures?
- Was the pressure self-imposed or applied by supervision/management? How?
Collect Evidence: Management

• Were safety rules communicated to and understood by all employees?
• Were written procedures and orientation available?
• Were the safe work procedures being enforced?
• Was there adequate supervision?
• Were workers educated and trained to do the work?
• Had hazards and risks been previously identified and assessed?
• Had procedures been developed to eliminate hazards or control risks?
• Were unsafe conditions corrected?
• Was regular maintenance of equipment carried out?
• Were regular safety inspections carried out?
• Had conditions/concerns been reported beforehand and action taken?

Collect Evidence: Physical Evidence

• tools/equipment or parts/pieces
• photos
• samples
• design specifications
• operating logs
• purchasing records
• previous reports procedures
• equipment manuals
• job safety analysis reports
• training records
• drug testing in accordance with regulations and labor agreements
Collect Evidence: Sketches

- Make sketches large; 8" x 10" and clear
- Include “Incident Details”
- Include measurements, use permanent points
- Indicate directions
- Make notes on the sketch

Collect Evidence: Witness Statements

- Understand victim/witnesses may have experienced significant trauma
- Interviewees have certain rights
- Labor agreements must be honored.
- Focusing on the accuracy
- Develop a rapport with the interviewee
- Investigators should receive training
Collect Evidence: Witness Statements

Interviewing - “DOs”...
• Conduct interviews as soon as possible
• Put the witness, who is probably upset, at ease
• Emphasize reason for investigation
• Make short notes
• Ask if it is okay to record
• Let the witness talk, listen
• Confirm that you have the statement correct
• Try to sense any underlying feelings of the witness
• Close on a positive note

Collect Evidence: Witness Statements

Interviewing - “DON’Ts”...
• Intimidate the witness
• Interrupt
• Prompt
• Ask leading questions
• Show your own emotions
• Jump to conclusions
**Collect Evidence: Witness Statements**

**Interviewing - Ask open-ended questions**

- Where were you at the time of the incident?
- What were you doing at the time?
- What did you see, hear?
- What were work environment conditions (weather, light, noise, etc.)?
- What was (were) the injured worker(s) doing at the time?
- In your opinion, what caused the incident?
- How might similar incidents be prevented in the future?

---

**STEPS OF INVESTIGATION — 3) Analysis**

- Assemble all information to be able to review at one time
- Look for all pertinent facts
- Separate facts from opinion
- Review, correlate and pose hypothetical causes
- Keep an open mind to all possibilities
- If gaps in understanding, re-interview/look for other data
- Outline potential direct, indirect, contributing and root causes
- Have an independent review
- Test potential causes
- Check conclusions
STEPS OF INVESTIGATION — 4) Report

A. Administrative

1) Incident Identification
2) Investigation Team
3) Investigation Completion Date
4) Report Audience

B. Basic Incident Information

1) Who was injured and details of the injury
2) Incident logistics
3) Affected property and extent of any damage
4) Medical response
STEPS OF INVESTIGATION — 4) Report

C. Description of the Incident
1) Description of what happened in detail

D. Evidence
1) Physical Evidence
   a) Sketch of the incident scene
   b) Photographs and diagrams
   c) Other (maintenance records, tests, etc.)
2) Witness Statements

E. Causes
1) Direct causes
2) Indirect or root causes
3) Contributing factors

F. Corrective
1) Immediate actions taken
2) Short term action with target completion dates
3) Long-term actions with target completion dates
**STEPS OF INVESTIGATION — 4) Report**

- **Incident Result Complications**
  - Investigation reveals human error, negligence or intentional acts
  - Person responsible may be management/supervisor

- **Regardless**
  - Errors must be pointed
  - Include related conclusions
  - Do not recommend discipline
  - Actions should be taken by management
    - Company disciplinary policies
    - Normal personnel procedures should be followed.
    - Must be well documented and action taken must reference work rules
    - Note no action was taken in retaliation for an injury or the reporting of it

- **STEPS OF INVESTIGATION — 5) Corrective Actions**
  - Respond to recommendations
  - Monitor scheduled actions completed
  - Check condition of injured worker(s)
  - Educate and train other workers at risk
  - Re-orient worker(s) on their return to work
  - Review to assure correction is effective needed.
SUMMARY

- Determine what gets investigated
- Identify who will investigate
- Incorporate the “five whys” (Root Cause Analysis in your investigation)
- Complete the 5 steps of an investigation
  1. Prepare
  2. Collect Evidence
  3. Perform an Analysis
  4. Report
  5. Recommend and complete Corrective Actions

necanet.org/store

- NECA Spiral Bound Booklet
  Index # 5026-18

- Digital Resource Kit:
  Index # 5026-18RK
  Includes: PDF, PPT, Forms
NFPA 70E® Training

• NECA Education is now offering one- and two-day courses on NFPA 70E Standard for Electrical Safety in the Workplace at your location.
• Chapter hosting or Onsite training

For more information, contact education@necanet.org
NECA Safety Meeting App

- Access to over 1000 safety talks from smart devices, phones, iPads, tablets and computers.
- Documentation securely stored in the cloud
- Ability to store photos with meetings and incident documentation
- Added Checklists for daily inspections
- Soon to have ability to email reports directly from app

www.NECASafetyApp.com

Next Webinar

“OSHA 2020”, What’s In Store for Next Year

December 3, 2019 – 11:00am EST
Thank You!

Contact Information:

Wesley L. Wheeler, SMS
NECA Director of Safety
wlw@necanet.org
safety@necanet.org
(301) 215-4546
Guide to Incident Investigations

Review Questions

1. Which of the following is NOT the goal of an investigation?
   a. Determine the root cause
   b. Prevent future incidents
   c. Determine appropriate disciplinary measures for those who caused the incident
2. What is the purpose of the “five whys”?
   a. To push the interviewee into answering questions honestly
   b. To get the interviewee to repeat information so that you can accurately record their answer
   c. To get to the Root Cause

3. Which of the following is a correct interview strategy:
   a. Let the witness talk, listen
   b. Intimidate the witness
   c. Let the interviewee know how you feel about their responses
Guide to Incident Investigations

Review Questions

4. Which of the following is the first step in your preliminary response to an incident?
   a. Care for the injured and contact emergency medical personnel
   b. Quickly identify witnesses and keep them at the scene, but separate
   c. Remove potential threats

Guide to Incident Investigations

Review Questions

5. What are the incident categories of evidence?
   a. Task, Material, Work Environment, Personnel, Management
   b. Physical Evidence, Witness Statements
   c. None of the above