2019 NYSUT Health & Safety Conference

Getting to the Root Cause

Presenter: Komilla Bhatta, CSP
Session Objectives

• Why Safety Matters
• Your role as a leader
• Understanding why incidents happen
• Root Cause Analysis
• Gathering Information
• Goal Setting Planner
Safety First

Evacuation Alarms, Exits and Muster Points

• FIRE ALARMS
• EXITS
• MUSTER POINTS
• AED LOCATION(S)
• RUN, HIDE, FIGHT
Safety is a Core Value

SAFETY MOMENT
Introductions

• Name
• Job/Responsibility
• Number of years
• Safety Role? Yes/No
Why Safety Matters

• Why is safety important to you?
• How does safety impact your role?
• How does safety impact your coworkers? Your managers?
• How do injuries impact your workplace?
Safety Leadership: Saying or Doing?

Remember Everybody

Let's All Be Careful Out There!
Leaders Look For Clues on How to Set Priorities
What’s interesting to my boss, fascinates me!
Safety Leaders

But telling people to work safer doesn’t yield the right results.

Pyromaniacs don’t start refinery fires.
Preventing Injuries – Your role as a leader

• Understanding Root Causes
• Reviewing incidents - 5 Whys
• Communicating best practices - Engaging members
• Inspect what you expect
• Lead by example
### What Causes Incidents? Understanding Causal Factors

<table>
<thead>
<tr>
<th>5 Whys</th>
<th>Root Cause Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td><strong>Immediate cause:</strong></td>
</tr>
<tr>
<td>Machine</td>
<td>• Substandard condition</td>
</tr>
<tr>
<td>Man</td>
<td>• Substandard act</td>
</tr>
<tr>
<td>Materials</td>
<td><strong>Root causes</strong></td>
</tr>
<tr>
<td>Method</td>
<td>• Job factors</td>
</tr>
<tr>
<td></td>
<td>• Personal factors</td>
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</table>
Examples of Root Causes

• Poor or faulty design of equipment
• Poor layout of indicators and controls
• Lack of preventive maintenance
• Lack of Standard Operating Procedures (SOPs)
• Inadequate or irrelevant training
• Inoperative warning devices or alarms
Risk Factors in a Workplace

- Environment
- The job!
- Procedures/tasks
- Skill level/Training
- Shifts/Times/Deadlines
- People
Gathering Information

- Get the “Big Picture”
- Interview Witnesses
- Reenactment (can be risky)
- Use Sketches, Maps and Photography
- Equipment Examination
- Material Failure Analysis
- Records Check
Tools You can Use

• Good Camera and/or video – quick note on this!
• Note book(s) and tape recorder
• Quarter (for sizing)
• Flashlight
• Job Hazard Analysis or Job description
• Nitrile (or latex) gloves
• Hazard tape
• Extra Pens, pencils
Interviews

• Quiet area, as few distractions as possible
• Ask permission to tape record
• **NO** Leading questions
• Time the event was witnessed
• Ask where the person was in relation to incident. Ask them to show you if possible
• Any notice of unusual sounds, actions, or scents
• Does the witness normally work in that area?
• Ask for the sequence of events and write down exactly as presented
• Read back and ask for corrections
• Do not speculate to the witness
Review Information

• Review all witness interviews
• Determine the sequence of events (make a timeline)
  – Before the incident
  – During the incident
  – After the incident
  – Review for inconsistencies
Investigation Report

- Use a Standard Form
- Provide all identifying Information
- Describe incident in detail
- Results of Root Cause Analysis
- Evaluation - potential for loss
- Action Plan - what was done immediately and additional recommendations
- Correct the hazards using Hierarchy of Controls
<table>
<thead>
<tr>
<th>Why?</th>
<th>Because...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Why is Tom injured?</td>
<td>...he had a fall</td>
</tr>
<tr>
<td>2. Why did he fall?</td>
<td>...the floor was wet</td>
</tr>
<tr>
<td>3. Why was the floor wet?</td>
<td>...there was a leaking valve</td>
</tr>
<tr>
<td>4. Why was the valve leaking?</td>
<td>...there was a seal failure</td>
</tr>
<tr>
<td>5. Why did the seal fail?</td>
<td>...it was not maintained</td>
</tr>
</tbody>
</table>

A continuum of causes
Fishbone approach to Problem Solving
Hierarchy of Controls

- **Elimination**: Physically remove the hazard
- **Substitution**: Replace the hazard
- **Engineering Controls**: Isolate people from the hazard
- **Administrative Controls**: Change the way people work
- **PPE**: Protect the worker with Personal Protective Equipment
Next Steps

• Where does your report go?
• Who can you review it with?
• What can your OSH rep do?
• What can your safety committee do?
• What are your employer’s obligations under OSHA?
• What are your rights under OSHA?
How can you lead your people better using both the ‘head’ and the ‘heart’?
Training is only part of the Learning Process.

- 10% Formal Training
- 20% Manager Coaching & Mentoring
- 70% On-the-Job Application

Reinforcement leads to Effectiveness
Workshop Goal Setting Planner

<table>
<thead>
<tr>
<th>Action</th>
<th>Reflection/Commitment</th>
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</thead>
<tbody>
<tr>
<td>1. What more do I need to know to practice lessons learned?</td>
<td></td>
</tr>
<tr>
<td>2. What will I do differently when I go back from this workshop?</td>
<td></td>
</tr>
<tr>
<td>3. When will I get this done?</td>
<td></td>
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Reminder / Summary

• Why Safety Matters
• Your role as a leader
• Understanding why incidents happen
• 5 Whys Approach & Fishbone diagrams
• Gathering Information
• Goal Setting Planner

What are you going to do differently?
Questions?