Safety Management Systems

Failure of, or inadequate attention to, any of the identified Safety Management Systems with the most impact on worker safety leads to unsafe conditions and employees at increased risk.
What causes incidents?

• Failures in the management safety system structure (carrying out health & safety responsibility of the employer) produce an inadequate health & safety environment...it’s known as **Root Cause** (different from direct cause)

• These failures lead to inadequate health & safety behavior by managers

• In turn, this causes inadequate health & safety performance by supervisors.
What causes incidents?

- This creates unsafe activities and conditions at the level of the worker, failure to use PPE, shortcuts, not trained for task, etc. (known as direct causes or work area errors)

- Work area errors lead to injuries or near miss incidents

- These result is human and economic loss
Why do Incidents/Injuries Occur?

90% Unsafe Acts
10% Conditions

This is why Safety Job Observations by Supervisors (if done properly) can have such a positive impact on performance.
Examples - Unsafe Acts & Conditions

Managers & Supervisors need to understand that both can result in an injury or loss but statistically one has a bigger impact

- **Unsafe Acts**
  - Failure to use PPE
  - Not using equipment properly
  - Removing safety devices
  - Operate equipment w/o authority
  - Improper lifting
  - OUI Drugs/Alcohol
  - Horseplay

- **Unsafe Conditions**
  - Inadequate guards & devices
  - Defective tools & equipment
  - Inadequate warning system
  - Poor housekeeping
  - Exposure:
    - Noise & Temp.
    - Hazardous Materials

90%  10%
Where things go wrong..

- Complacency - I’ve done this dozens of time
- Tunnel Vision - Not focused on overall picture
- Short Cuts - Not following proper procedures
- Lack of training - No experience with this task
The Aim of the Investigation

• Some think the Aim of the investigation is to:
  • Exonerate individuals or Management
  • Satisfy Insurance Requirements
  • Defend a position for a legal argument
  • Or, to assign blame
The Aim of the Investigation

Simply put:

The key result should be and **must** be to prevent a recurrence of the same incident.
The Accident

• What is an Accident?
  • 1
    • \(a\): an unforeseen and unplanned event or circumstance
    • \(b\): lack of intention or necessity (met by *accident* rather than by design)
  • 2
    • \(a\): an unfortunate event resulting especially from carelessness or ignorance
    • \(b\): an unexpected and medically important bodily event especially when injurious (a cerebrovascular *accident*)
    • \(c\): an unexpected happening causing loss or injury which is not due to any fault or misconduct on the part of the person injured but for which legal relief may be sought
Types of Accidents

• Acute-definitive date
  • Minor-Paper cuts, minor scrapes, minor strains, First Aid
  • Major- Serious injury, Medical treatment, Lost Time, Serious Property Damage

• Cumulative-no definitive start date
  • Examples would be hearing loss, carpal tunnel, chemical over exposure
What do they all have in common?

- Negative - They all had unwanted and unexpected outcomes
  - Injury/Death/Disease
  - Pain/suffering/lost productivity/lost off the job activities
  - Equipment/property damage
- They all had contributing factors
- Positive (potentially) - Proper Incident Investigation should lead to positive changes
  - Procedures/Equipment/Safety Rules
Contributing factors

- Every Accident has them:
  - Systems & Procedures
    - Lack of procedures and systems
    - Inadequate procedures and systems
  - Design
    - Workplace layout/job safety planning
    - Design of tools/ equipment/PPE
Contributing factors

• Cont.: 
  • Environmental 
    • Temperature (Heat/Cold/Humidity) 
    • Weather/Walking conditions 
    • Light/Dark 
    • Insects/critters 
  
• Human Behavior 
  • Common to all accidents 
  • Not limited to the person injured
Who Should Investigate

- All accidents must be investigated
- Begins with Supervisor’s initial review
- Minor injuries/accidents may not need further investigation
- Serious injuries/accidents require more detail investigation
- Any Near Miss with Medium/High potential for harm requires detail investigation
Who is on the formal Review Team?

- Transparency is critical in this type of investigation
- Safety Manager assigns members of the Review Team by an independent process
  - Will not include local Manager/Supervisor
  - Will include subject matter experts from other DOCs
    - These participants vary depending on the event but may include Union employees that perform the same work, Supervisors, Managers, Engineers, or others deemed to be of use in the process
Investigation Process

- Gather information and establish the “facts” surrounding the event
- Determine applicable contributing factors
- Make recommendations for improvement opportunities and corrective actions
- Once approved assist (if required) in the implementation of the improvements and corrective actions
Gathering the Facts

• Go into the process with no preconceived ideas
• Be impartial and objective, gather facts not opinions
• Outline actions taken step by step by those involved
• Compile essential documentation
  • Photos/Diagrams
  • Plans/Procedures/Standards/Safety Rules
• Isolate the incident scene (if possible)
• Don’t change, discard, or destroy anything
  • This depends on the seriousness and nature of the event.
More Gathering the Facts

- Confidentiality and trust if the key
- Interview discussions, evidence, statements, etc. stay within the Review Team
- Interviews may be individual or group
  - Determined by the Review Team and based on the event
  - Obtain facts not opinions
  - Make it clear this process is about preventing a recurrence
  - The Review Team and process does not assign blame
Determine Contributing Factors

- Which of these Safety Management Systems broke down and played a role in the incident?

- It is not unusual to find 3, 4 or 5 categories that may apply to a particular event.
Determine Corrective Actions

• Using the identified Safety Management systems that failed, discuss improvement opportunities and what needs to be done to make those changes

• Each category should have a specific recommendation(s) to help correct the failure and help prevent a recurrence.
  • This can vary - training, procedures, safety rules, equipment, etc.
Determine Corrective Actions

• Ask the critical question for each category....
  • Would the accident have happened if this particular factor was not present?

• Develop the written report outlining a summary of the event (no names, locations, or identifying objects) and recommended corrective action or improvement opportunity for each categories
Key Points

• We are not hear to assign blame
• We are charged with finding a way to prevent a recurrence so co-workers and friends do not suffer the same injury
• Facts, Facts, Facts, no opinions, no suspicions
• This process can make a difference
  • Quick response and corrective actions increase belief in the process
  • Slow response or no response casts a shadow on the entire program
• Safety writes the report for review and approval by the full Review Team

• Final version is submitted to applicable Leadership

• The Safety Leadership Group sees each report and acts on recommendations.
Finishing The Process

• At the conclusion of the process information is shared at Safety Meetings
  • What happened
  • What was identified as contributing factors
  • What recommendations were improved for implementation
  • Timeline for implementation
3 CAUSES OF ACCIDENTS

- I didn't think
- I didn't see
- I didn't know
Think About it…

There is little difference in people, but that little difference makes a big difference. The little difference is attitude. The big difference is whether it is positive or negative.