Effective Loss Control Through Accident/Incident Investigation, Reporting and Follow-up

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“The Fundamentals”

- Inspections
- Training
- Communications
- Disciplines
- Procedures & Instructions
- Reward & Recognition
- Process Reviews
- Incident/Accident Investigations
- Continuous Improvement Framework

Core Safety Processes

What Is An “Incident”?
An incident is an unplanned and unwanted event which disrupts normal activities and has the potential of resulting in injury, harm, or damage to persons or property (e.g. fall on steps with no injury).

An incident disrupts the work process, does not result in injury or damage, but should be looked as a “wake up call”. It can be thought of as the first of a series of events which could lead to a situation in which may become a loss.
**What Is An “Accident”?**

By dictionary definition: “an unforeseen event”, “chance...”, “unexpected happening...”, formerly “Act of God”

An accident is an unplanned and unwanted event definite as to time and place which disrupts normal activities and results in an injury, harm, or damage to persons or property (e.g. fall on steps resulting in a broken ankle).

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**What Is An “Accident”?**

- An accident is NOT “just one of those things” or “just bad luck.”
- From experience and analysis accidents are “caused occurrences.”
- Accidents are predictable events - they are the logical outcome of hazards.
- Accidents are preventable and avoidable - hazards do not have to exist. They are often caused by things people do -- or fail to do.
- Accidents don’t have to happen!

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**A Simplified Way to Look At “Incident” vs. “Accident”?**

An incident is an accident without loss (injury or damage)

An accident is an incident with loss (injury or damage)
A Simplified Way to Look At “Incident” vs. “Accident”?

What Is An “Occurrence”? 
An occurrence is an accident with the limitation of time removed - an “accident” that is extended over a period of time rather than a single observable happening (e.g. bus mechanic experiencing hearing loss, mold problem from a prolonged roof leak).

Loss Control Hierarchy

| 10,000 | Unsafe Behaviors / Hazards |
| 1,000 | Non-Injury Incidents / Near Misses |
| 100 | Minor Injuries / Medical Only |
| 10 | Lost Time |
| 1 | Serious Injury or Fatality |
Look at it as the “Tip of the Iceberg”

Accidents
Accidents or injuries represent only a fraction of the errors that exist.

Incidents
Investigate incidents since they are potential “accidents in progress”

Accident cost iceberg

Injury & illness costs
- Medical
  - Compensation costs (insured costs)
- Building damage
- Test and replacement damage
- Protection and special damage
- Legal expenses
- Replacements of emergency supplies
- Benefits, employee costs

$1 to $50
Ledger costs of property damage (insured costs)

$1 to $3
Uninsured miscellaneous costs

Benefits of Incident/Accident Investigation
- Prevent future accidents/ incidents by identifying and eliminating hazards
- Expose deficiencies in process and/or equipment
- Maintain worker morale
- Greater safety awareness - provides the cornerstone for an effective workplace safety / injury prevention program
- Facts gathered in the even of litigation
- Reduce injury and worker compensation costs
The goals of accident investigation are:

- Determine/find the root cause(s)
- Take the appropriate corrective action(s)
- Prevent a similar accident/incident from happening again

- No accident investigation has ever changed what has already happened
- Accident investigation should NOT assign blame - it should identify breakdowns in the safety process

Accident Investigation

Steps in the Accident Investigation Process

Notification → Analysis → Corrective Action
Response → Fact-finding → Follow-up

Notification

Your plan, policy, procedure or process should, at a minimum, address:

- What types of incidents/accidents required to be reported and investigated
  - All injuries or accidents with the potential for injury
  - All incidents/accidents resulting in property damage
  - All “near misses” where there was potential for serious injury
- Who, internally and externally, should be notified when an incident/accident occurs
- How the incident/accident should be reported
Is there an established safety-oriented culture within the school district?

Is there a positive relationship between the school district and its employees?

Are effective processes in place to encourage and facilitate timely reporting of incidents/accidents to the appropriate district staff?

Have barriers to report incidents/accidents been identified and removed?
  - Employee/supervisor accident reporting training
  - Electronic or on-line accident reporting functionality

Notification

Obtain/ensure medical treatment

Eliminate dangerous/obvious hazard
  - Don’t wait for investigation process

Secure the accident scene
  - Control unsafe conditions
  - Preserve material (critical) evidence
  - Prepare for possible third party involvement

Provide appropriate notifications regarding the accident/injury

Identify who should be involved in the accident investigation process

Response

Collect / gather accident-related information

Examine / document the accident scene
  - Note location of person(s) at the time of the accident
  - Note location of objects
  - Note conditions (including weather if applicable)
  - Take photographs or video (as warranted)

Develop a sequence of events
  - Detailed step by step description of the accident
  - Do not just describe the accident itself, include a description of the events that led up to the accident

Fact-finding
### Fact-finding

- Interview the injured employee(s) as soon as possible
- Identify and interview accident witnesses
- Utilize practical, simple approaches
  - Who, What, Where, When, How, WHY
- Keep probing for more information
- Don’t jump to conclusions and recommendations too quickly
- Remember that accidents rarely result from a single cause - they usually result from network of multiple causes

### Interviewing

**When is it best to interview? Why?**

**Who should we interview? Why?**

**Where should we conduct the interview?**

### Analysis

Determining and understanding the cause(s) of the accident

- Start by analyzing the events to discover the **surface cause(s)** for the accident
  
  - Surface causes are usually obvious/evident and not overly difficult to determine
- Then, by working to understand the “WHY” behind the system factors, the related **root cause(s)** are uncovered
- Focus on the underlying causes (the **root causes**), not symptoms (the **surface causes**).
The **WHAT** and **WHY** factors of accident/incident investigation:

**WHAT** happened?
- Identifying/determining the surface cause(s)
  - What were the conditions?
  - What was the employee doing?

**WHY** did it happen?
- Identifying/determining the root cause(s)

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The **surface causes** of accidents are those hazardous conditions and individual unsafe employee/manager acts or behaviors that have directly caused or contributed in some way to the accident.

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Hazardous conditions may exist in any of the following categories:
- Materials
- Machinery
- Equipment
- Tools
- Chemicals
- Environment
- Workstations
- Facilities
- People
- Workload
Most hazardous conditions are the result of an unsafe behavior(s) that produced them. Examples of unsafe employee/manager behaviors include:

- Failing to comply with rules
- Using unsafe methods
- Taking shortcuts
- Horseplay
- Failing to report injuries
- Failing to report hazards
- Allowing unsafe behaviors
- Failing to train or inadequate training
- Failing to supervise
- Failing to correct
- Excessive workload

The root causes for accidents are the underlying system weaknesses that have somehow contributed to the existence of hazardous conditions and unsafe behaviors that represent surface causes of accidents.

A root cause is the cause that, if corrected, should prevent recurrence of this and similar occurrences.

Root cause analysis is a systematic technique that focuses on finding the real cause of a problem and dealing with that, rather than just dealing with its symptoms (surface causes).

Scale the scope of the analysis to suit the seriousness or complexity of the accident/incident.
Multiple Root Cause Analysis: "WHY" Analysis

Why
Why
Why
Why
Why

There are two categories of root causes:

- **System design weaknesses**
  - Missing or inadequately designed policies, programs, plans, processes or procedures will affect conditions and practices generally throughout the workplace. Defects in system design represent **hazardous system conditions**.
- **System implementation weaknesses**
  - Failure to initiate, carry-out or accomplish safety policies, programs, plans, processes or procedures. Defects in implementation represent **ineffective management behavior**.

<table>
<thead>
<tr>
<th>System Design Weaknesses</th>
<th>System Implementation Weaknesses</th>
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</thead>
<tbody>
<tr>
<td>Missing or inadequate safety policies/procedures</td>
<td>Safety policies/rules are not being enforced</td>
</tr>
<tr>
<td>Missing or inadequate training program</td>
<td>Safety training is not being conducted</td>
</tr>
<tr>
<td>Poorly written plans</td>
<td>Lack of adequate or appropriate supervision</td>
</tr>
<tr>
<td>Inadequate process</td>
<td>Incident/accident analysis is inconsistent</td>
</tr>
<tr>
<td>Lack of procedures</td>
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Developing corrective or preventative actions is the most important step in the accident/incident investigation process. All the efforts leading up to this step culminate with recommendations to prevent similar accidents from happening in the future.

If root causes are not corrected, it is only a matter of time before a similar accident occurs.

**Corrective Action**

- Identify and address multiple root causes
  - Not just the apparent, immediate causes
- Develop system controls to address or solve the causes
  - If this is corrected, will the likelihood of recurrence be eliminated?
  - Are the controls systematic and sustainable?
- Multiple root causes need multiple controls
  - Avoid focus on a single solution
- Identify those persons who are responsible for corrective/preventative actions
Follow-up

- Establish a timeline and process to follow-up on corrective actions
  - Who is responsible for implementing?
  - Who is responsible for following-up on that person?
- Evaluate to find out or determine if the corrective actions are effective in preventing similar accidents from occurring
- Modify or revise corrective actions as needed
- Share / communicate the results

Tips on Investigating Accidents and Injuries

When investigating we want to **GAIN** knowledge!

1) **G**o to and secure the accident scene
   - Accident / investigation report/ form (FILL OUT COMPLETELY!)
2) **A**sk ….
   - Open ended questions; **T**ell me how…
   - For a demonstration; **S**how me how…
   - For employee input; **W**hat do you think can be done?
3) **I**nterview accident victims / witnesses separately
4) **N**ever place blame; look for FACTS ONLY!

Accident Investigation Example

A food service employee for Yourtown School District was injured during the 2010-11 school year while cleaning filters in the exhaust hood system. The injury was serious and resulted in a torn rotator cuff, surgery, and extended time away from the job. The eventual cost of the claim was $149,678.

What was this employee doing to get so severely injured?

If no investigation of this incident occurs, could a similar accident happen in the future?

Let's investigate!
Accident Investigation Example

- Interview the injured employee
- Interview witnesses
- Interview the supervisor
- Inspect the accident site/scene/equipment
- Determine:
  - **Surface causes** - Unsafe acts and/or unsafe conditions / hazards
  - **Root causes** - Policies/procedures, decisions, personal factors, environmental factors

- **Surface Cause(s):**
  - Cart moved resulting in loss of balance and fall
  - Use of an inappropriate climbing device
  - Why? Because that's the way we have always done this in the past

- **Root Cause(s):**
  - Appropriate climbing device not provided
  - No procedure in place
  - No training on proper procedure

Remember the cost?
- $149,678 in medical costs and wage replacement
- Substitute costs
- $21,990 in additional WC Premium

If future occurrence of this activity is eliminated through accident investigation is it worth it?
Thank You

Thank you for your on-going efforts and leadership in helping to provide a safe environment for the students, staff and parents/visitors to your schools!!!!!