Incident Investigations: Turning Near Misses into Prevention

Our Presentation Will Begin Soon

Incident Investigations: Turning Near Misses into Prevention

Our Presentation Will Begin Soon

Today's Presenter:

Liza Castillo

Risk Management Manager, Risk Management Services

Today's Topics

What is an Incident Investigation

Root Cause Analysis

Tips for a Successful Investigation

Case Study

Poll Question?

How would you describe your incident investigation procedures?

a. Formal with corrective actions taken consistently
b. Informal with some corrective actions taken
c. Formal with corrective actions taken based on feedback from multiple levels of employees
d. Has a lot of opportunities for improvement

What Is an Incident?

Definition

An incident is any unplanned event or near miss in the workplace that could have or did result in injury, illness, or property damage.

Incident vs. Accident

- Incident: any event that disrupts normal work, including near misses
- Accident: an incident that results in actual injury or damage

Why It Matters

- Every incident is a warning sign
- Reporting all incidents prevents future accidents
- Near misses are your best opportunity to act before someone gets hurt

System for Incident Investigation

Have procedures in place for:

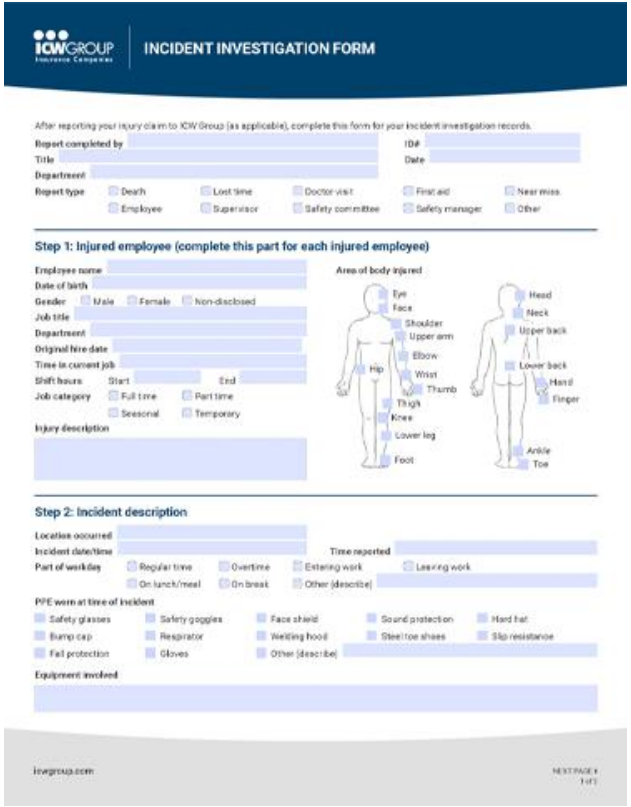
Who fills out the form?

- Do they understand how to fill out the form?
- Is it in a language they can read?
- Is it someone who understands the operation?

Access to the form

How quickly do they need to fill out the form?

What happens after the form is filled out?



ICW GROUP Insurance Companies | INCIDENT INVESTIGATION FORM

After reporting your injury claim to ICW Group (as applicable), complete this form for your incident investigation records.

Report completed by | ID#
Title | Date
Department
Report type: Death | Lost time | Doctor visit | First aid | Near miss
Employee | Supervisor | Safety committee | Safety manager | Other

Step 1: Injured employee (complete this part for each injured employee)

Employee name
Date of birth
Gender: Male | Female | Non-disclosed
Job title
Department
Original hire date
Time in current job
Shift hours: Start | End
Job category: Full time | Part time | Seasonal | Temporary
Injury description

Area of body injured

Step 2: Incident description

Location occurred
Incident date/time | Time reported
Part of workday: Regular time | Overtime | Entering work | Leaving work | On lunch/meal | On break | Other (describe)

PPE worn at time of incident
Safety glasses | Safety goggles | Face shield | Sound protection | Hard hat
Bump cap | Respirator | Welding hood | Steel toe shoes | Slip resistance
Fall protection | Gloves | Other (describe)

Equipment involved

icwgroup.com

ICW GROUP Insurance Companies

Root Cause Analysis

“An incident is just the tip of the iceberg, a sign of much larger problems below the surface.”

- Don Brown

Things That are NOT Root Causes

"Didn't use any common sense."

"Shoulda known better!"

"Didn't follow the safety rules!"

"You can't fix stupid!"

"She took it upon herself."

"Wasn't paying attention!"

"Just a dumb mistake."

"I trained him never to do that."

Root Causes

What are Root Causes?

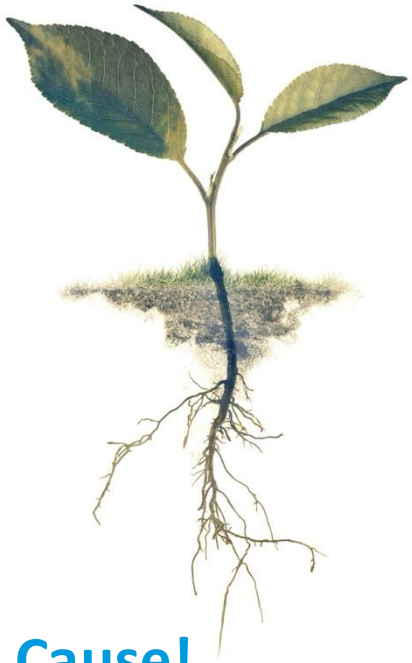
The underlying or systemic causes of an incident which go beyond generalized or immediate causes.

Why is Root Cause Identification Important?

- Identifies what specific measures would prevent accident reoccurrence
- This is an essential step in accident prevention
- Considers multiple causes which leads to more effective incident prevention

Root Cause Categories

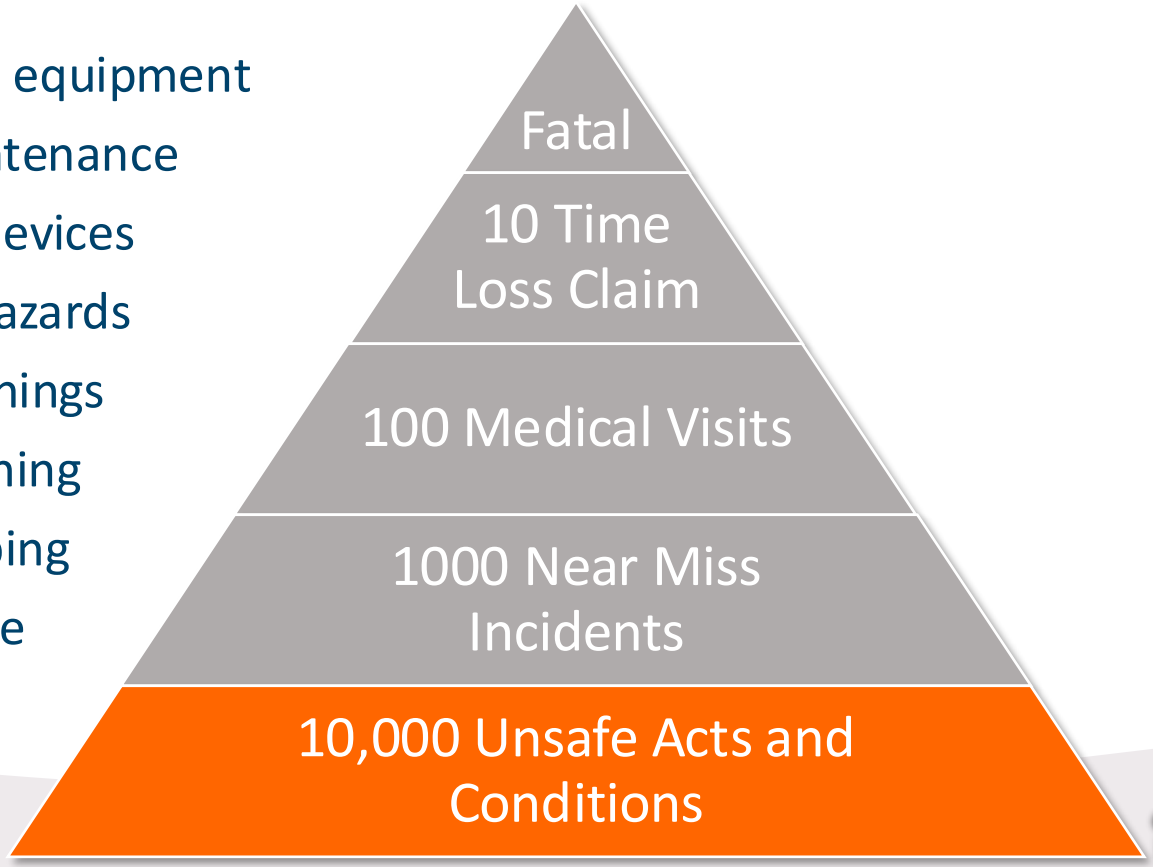
- Unsafe act
- Unsafe condition
- Combination of Both



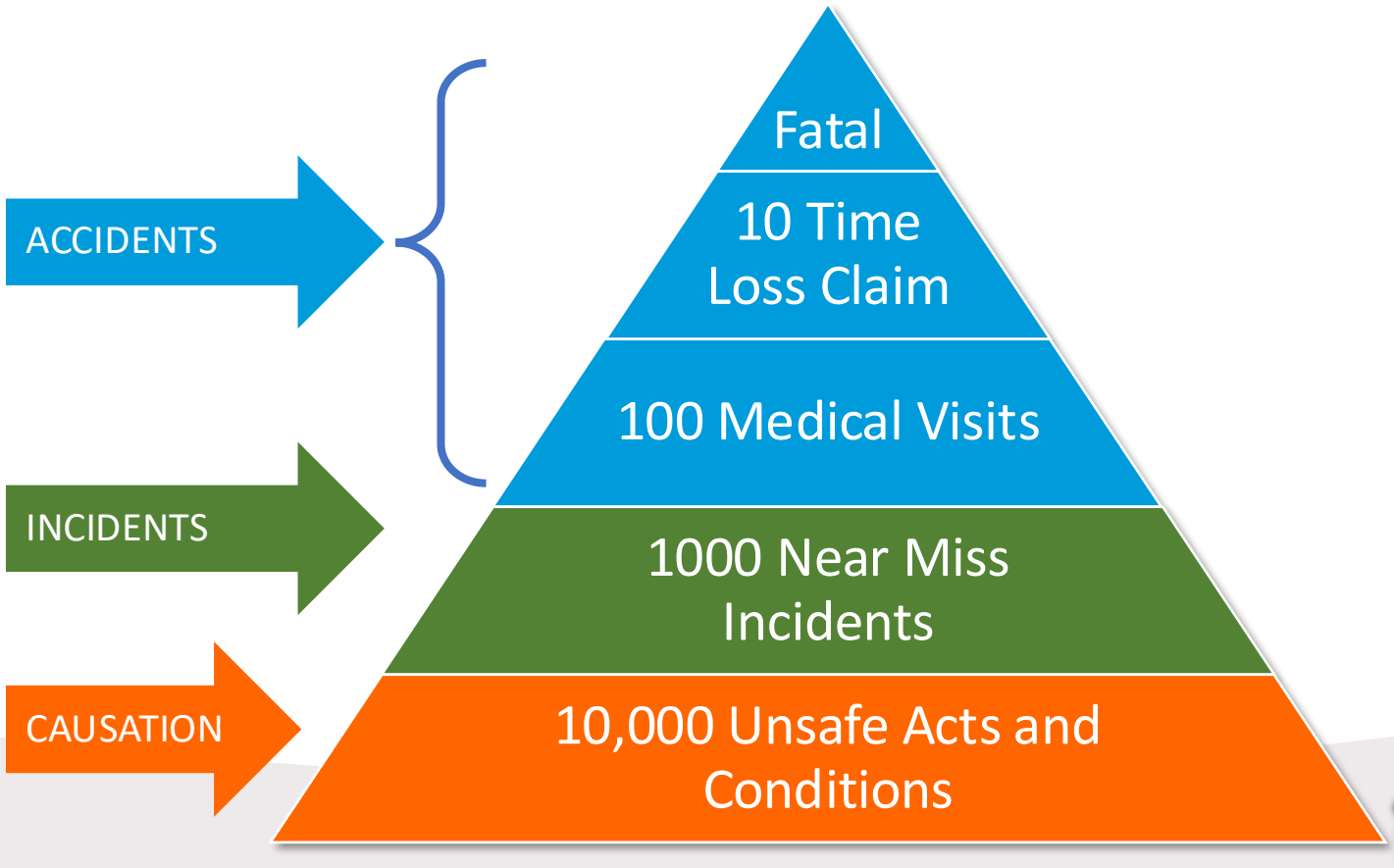
There may be more than one Root Cause!

Unsafe Act & Conditions

- Defective safety equipment
- Ineffective maintenance
- Missing safety devices
- Unrecognized hazards
- Insufficient warnings
- Inadequate training
- Poor housekeeping
- Deficient signage
- Lack of caring

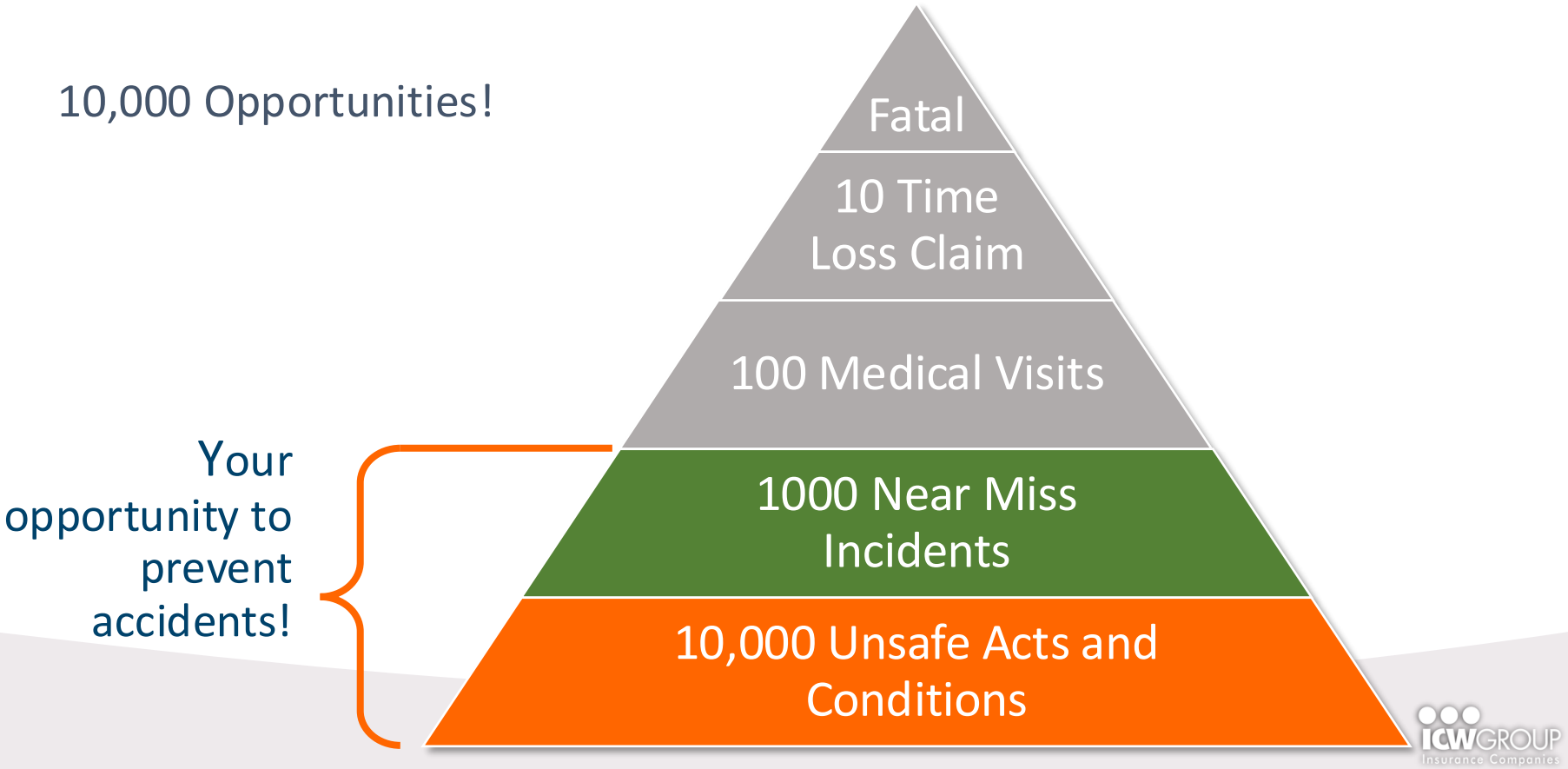


Incident to Accident Pyramid



Knowing Every Incident Is Important!

10,000 Opportunities!



Root Cause Analysis

Example of Root Causes

- Defects in tool or equipment
- Unrecognized hazard
- Incorrect use of tool or equipment
- Design of the task
- Issues with PPE
- Environmental factors

ROOT CAUSE INVESTIGATION FORM

DIG DEEP TO GET THE CAUSE ID#_____

Complete to uncover the root cause of incidents and accidents. Review the possible corrective actions and add your own plan.

PART 1 - Equipment

	Cause	Possible Corrective Actions	Your Plan
☐ 1.1	Defect in equipment, tools or material contributed to hazardous conditions.	Review procedures to inspect, report, maintain, repair, replace, and recall defective equipment.	
☐ 1.2	Hazardous condition was recognized but not reported.	• Train employees and stress individual accountability. • Review job procedures for hazard recognition and avoidance.	
☐ 1.3	The incorrect equipment, tool or material was used.	Specify correct equipment, tool or material in job procedures and make sure the right tools are readily available.	
☐ 1.4	Equipment/tool design created operator stress or encouraged error.	Alter equipment/tools to conform with human capabilities and limitations.	
☐ 1.5	Appropriate PPE for task was NOT specified.	Review methods to specify PPE requirements.	
☐ 1.6	PPE inadequate for job performed.	Review PPE requirements, standards, specs and certifications.	
☐ 1.7	PPE used improperly when injury occurred.	• Implement procedures to monitor and enforce use of PPE. • Make sure PPE is the proper fit.	
☐ 1.8	Employees didn't know where to obtain equipment, tools or material required for the job.	• Review procedures for storage, access, delivery or distribution. • Review training procedures.	

PART 2 - Environmental and Task System

	Cause	Possible Corrective Actions	Your Plan
☐ 2.1	Location of equipment, material or employees was a contributing factor.	• Perform job safety analysis and review, improve procedures. • Change equipment layout and employee position. • Provide guardrails, barricades, signals, etc. • Train employees in observation and risk assessment.	
☐ 2.2	Employee was NOT supposed to be in the vicinity of the equipment or material.	• Investigate why the employee was in the vicinity of the equipment. • Review job procedure. • Redesign the equipment to prevent access to hazards.	

icwgroup.com

NEXT PAGE ▸ 1 of 3

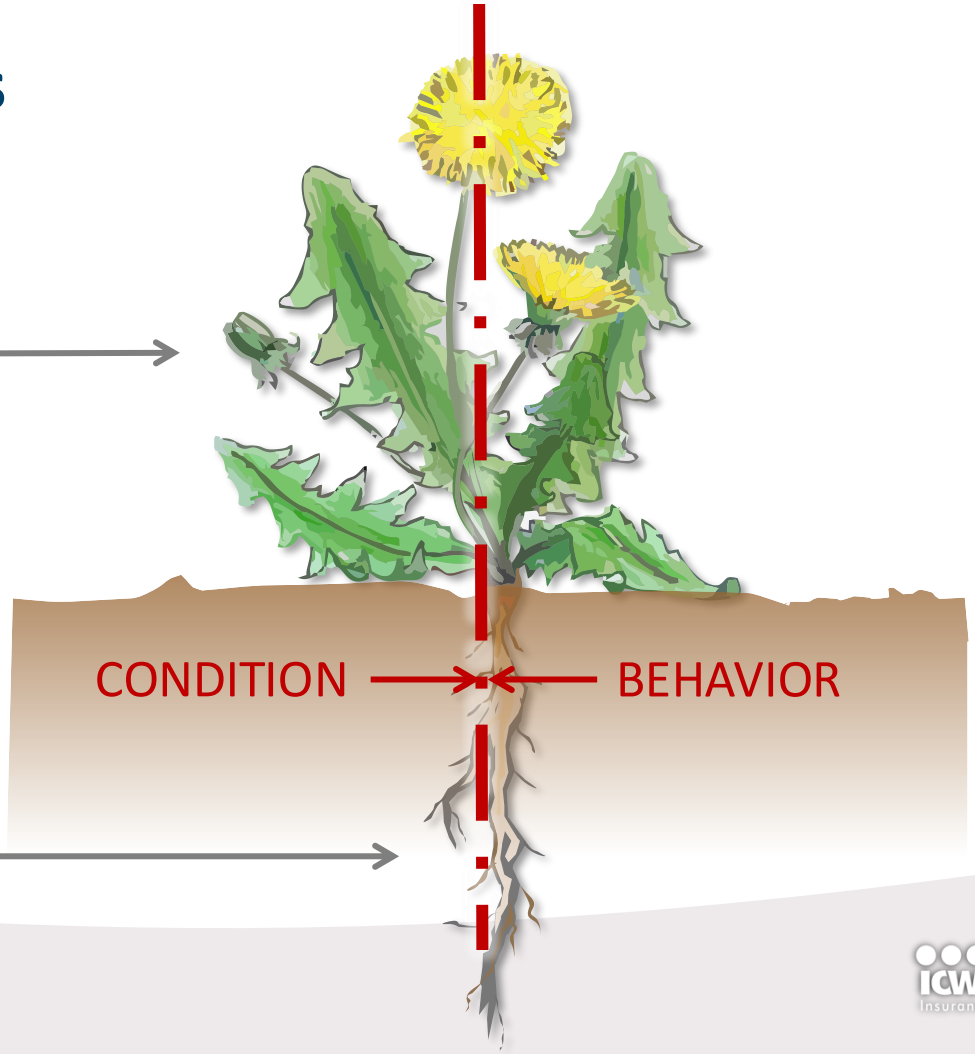
2 of 3

3 of 3

ICW GROUP Insurance Companies

2 Focuses of Analysis

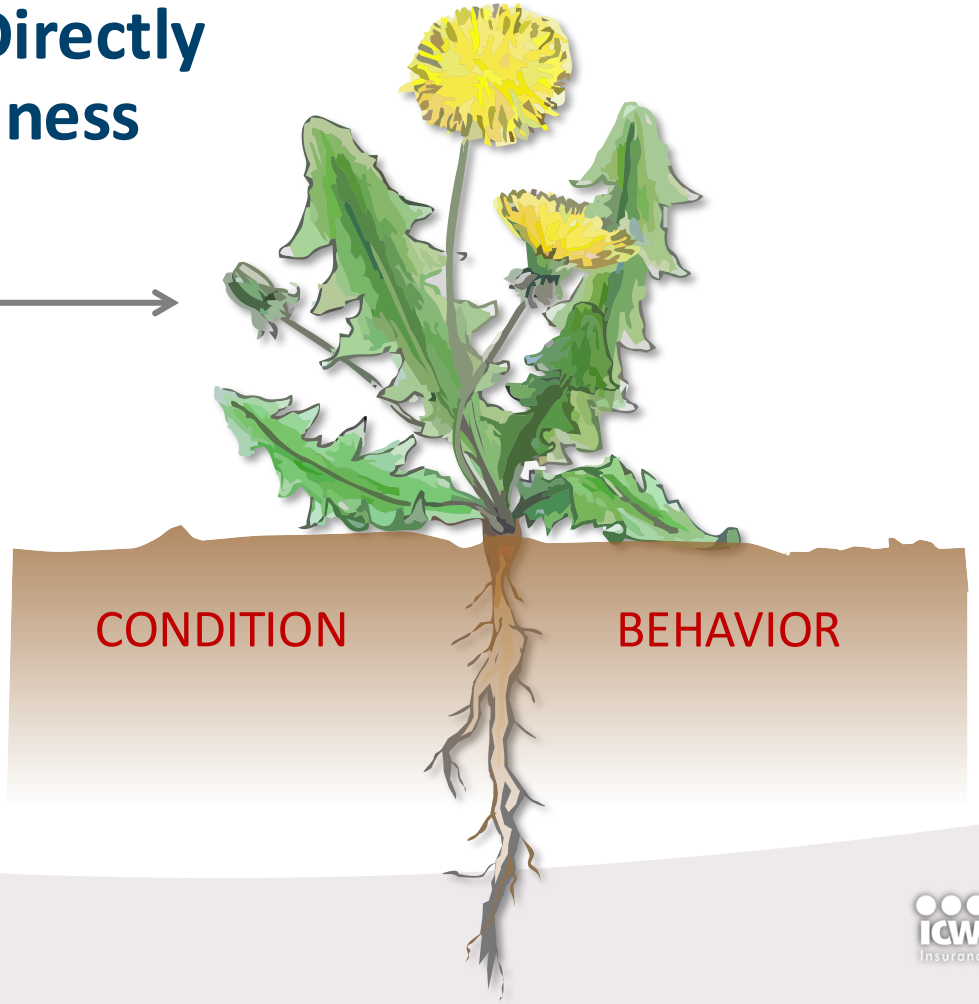
Direct cause



Root cause

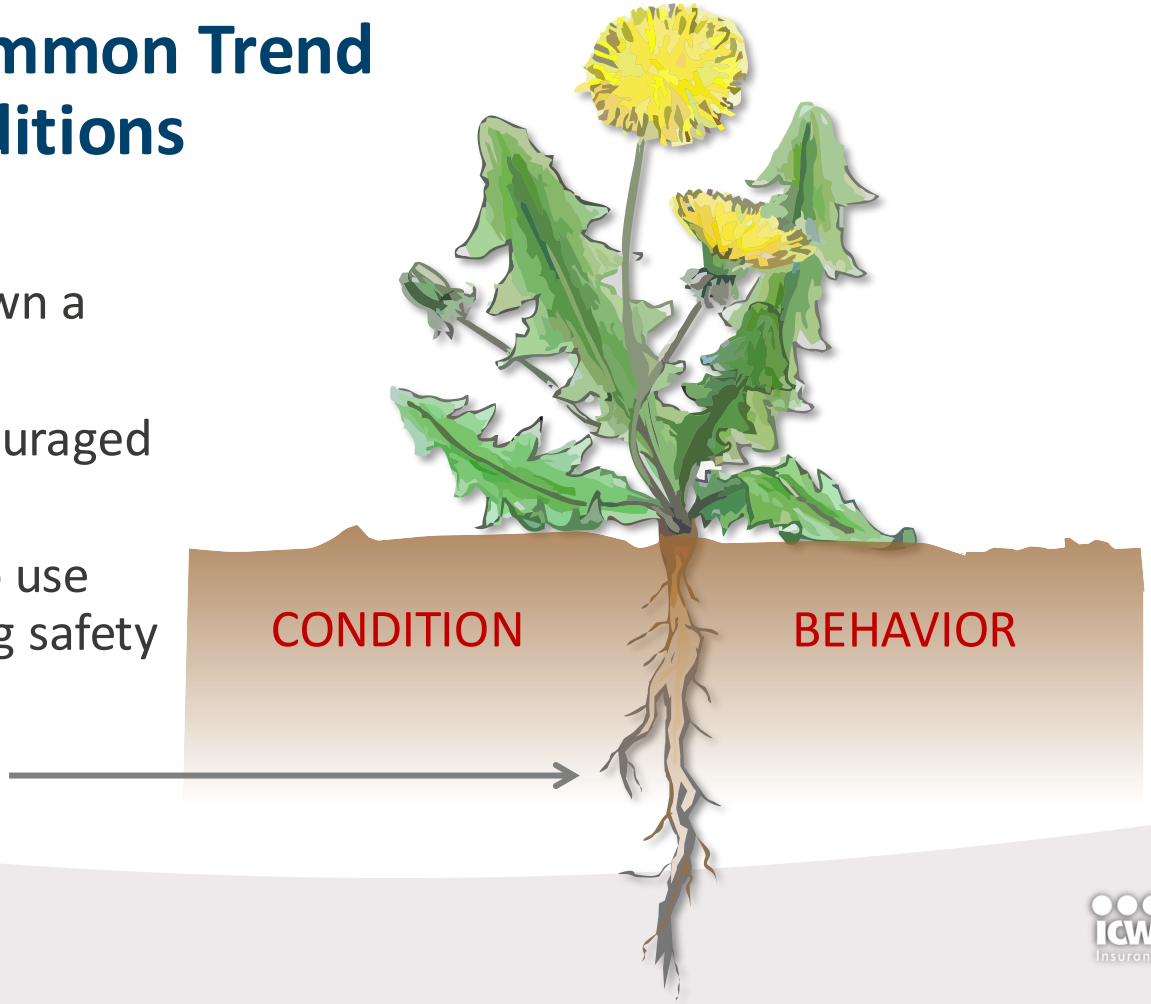
Direct Cause: What Directly Produced Injury or Illness

- Worker cut off finger
- Not using a push block for table saw



Root Cause: Common Trend Leading to Conditions

- Company doesn't own a push block
- Employees not encouraged to observe & report
- General culture is to use regardless of missing safety guards, etc.



Tips for Conducting an Effective Incident Investigation

Fact Finding – **Not** Fault Finding

- Keep open mind
- Don’t presume cause
- Interview witnesses separately and as soon as possible
- Get the facts!
- Get to the Root Cause
- Keep asking “WHY?”

ICW GROUP
Insurance Companies

Ask Open Ended Questions

- Who?
  - Who was involved in the incident?
- What?
  - What were the people doing at the time of the incident?
- Where?
  - Where did the accident occur?
- When?
  - When did the accident happen
- Why?

5 Whys Method

Why did the employe trip and fall?

-Because there was an extension cord on the floor.

Why was there an extension cord on the floor?

-Because staff saw the extension cord but didn't report it.

Why didn't staff report that there was an extension cord on the floor?

-Because it was a real hot day and maintenance was using the extension cord for an evaporative cooler.

Why didn't we keep the extension cord off the floor?

-Because we didn't wrap and hang the left over cord wire.

Why didn't we wrap and hang the left over cord wire?

-Because we don't have any hooks to hang the cord wire on.

Work Towards Outcomes

Scenario: Employee was walking and tripped on an extension cord.

Upstream Investigation / 5 Whys:

- Found that staff noticed an extension cord on walkway but didn't report it
- Found maintenance was using extension cord for temp evaporative cooler
- Found that extension cord storage was inconvenient

Address Causes: Install permanent cooling system, stall hooks for convenient storage, create a system that makes hazard reporting easy

ICW GROUP Insurance Companies

Reactive vs. Proactive

Reactive

- After an incident
- Investigate damage
- Unsafe Acts/Behavior
- Costly and urgent

Proactive

- Before an incident
- Identify potential risks
- Improve systems
- Preventive and planned

Poll Question?

How does your organization address hazards?

a. We address hazards as they are reported by employees

b. Regular inspection are completed and documented

c. We typically correct hazards after accidents happen

d. In addition to regular inspections, we complete a Job Hazard Analysis on all new, infrequent and high hazard tasks

e. Other

“You can’t fix problems with the same thinking that created them.”

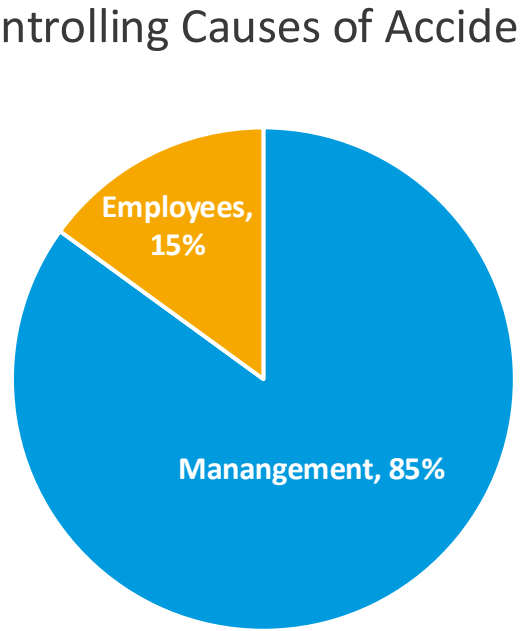
-Albert Einstein

“Accidents are a symptom of management failure.”

-Dan Petersen, *Safety by Objectives*

ICW GROUP
Insurance Companies

Who Controls Causes of Accidents?



15% of an organization's accidents can be controlled by employees

85% can be controlled only by management

-Dr. W. Edward Deming

ICW GROUP Insurance Companies

Tips for Conducting Incident Investigations

Who Should Be Involved

If systemic factors are going to be identified and addressed, the people involved in the process need:

- Knowledge of the operation and the incident
- Authority to make changes

It Takes a Team!

ICW GROUP
Insurance Companies

Engagement Is Key

- Formalize reporting of near misses
- Normalize discussions about 'what could go wrong’
- Ask for thoughts and opinions
- Reward proactive safety behavior
- Create a no-blame environment
- Implement systems and retrain
- Leadership buy in and engagement is key

Metrics to Consider

- Percentage of incident reviews completed the same day
- Number of near misses reported
- Number of incidents investigated
- Number of people trained in incident investigation
- Days of lag between identification of corrective action and implementation

Investigate the Scene

Record details – take photos!

ICW GROUP
Insurance Companies

Avoid Investigation Pitfalls

- Reluctance to accept responsibility
- Limited interpretation of environmental cause
- Erroneous emphasis on single cause
- Allow solution to determine cause
- Not involving the right people in the discussion

Case Studies

ICW GROUP
Insurance Companies

Scenario

Warehouse Fatality

A warehouse worker in California died after being struck by cases of bottled water that fell from an unstable pallet. Acting as a spotter for a forklift operator, the victim moved behind the pallet, out of the operator's line of sight. The forklift's forks caused the pallet to tilt, and the shrink wrap gave way, dumping the load on the victim.

Protocols in Place

- Injury and Illness Prevention Program (IIPP)
- Standard Operating Procedures (SOPs) for forklift use, material handling, and personal protective equipment.
- Proper training for lift equipment operators and spotters.
- Spotters were tasked with maintaining eye contact, ensuring safety zones, and assisting operators as needed.

Scenario

Other factors

- Victim had been working for 3 months and was acutely intoxicated based on coroner report.
- Records showed the victim and forklift operator had completed required training but were not within the line of sight or communicating with each other.
- Pallets of merchandise were double stacked (9.5 feet high)because they were delivered that way and the forklift operator was unstacking the 2 pallets when the forks contacted an interior portion of the pallet pushing it backward causing it to tilt and fall on the victim. The forklift operator did not know the victim was standing behind the pallet.
- No employees trained in CPR.

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cdc.gov/niosh/face/state/22CA002.pdf

Poll Question?

Which of these measures has a higher probability of preventing this fatality?

a. Enforcement for the exclusion zone rule
b. Using a vendor that does not double stack pallets
c. Having the forklift operator call out prior to lifting an unbalanced load
d. Making sure there is an employee trained in CPR on each shift

icwGROUP
Insurance Companies

Safety Resources Available to You

Policyholder Website

- Injured Workers Resources
- Safety Webinars on demand
- Safety *OnDemand®*
- And More!!

icwgroup.com/safety

ICW GROUP Insurance Companies

2026 Safety Training Webinar Series – What's Next!

Upcoming Webinars:

- **May 14** – Accident Investigations (this title will change)
- **May 28** – Sprains & Strains: Why Your Prevention Efforts Aren't Working!
- **6 Part Certificate Series** - Risk Management for Leaders
- **Kickoff** on August 27

- **Register at** www.icwgroup.com/webinar

ICW GROUP
Insurance Companies

QUESTIONS

riskmanagement@icwgroup.com

THANK YOU

riskmanagement@icwgroup.com

THANK YOU