

A photograph of three people in a warehouse setting. A woman in a black t-shirt and blue jeans is crouching over a man in a red and grey plaid shirt who is sitting on the floor. A man in a blue t-shirt and jeans is kneeling in the background, holding a blue clipboard. The floor is concrete, and there are cardboard boxes and a pallet in the background.

RISK MANAGEMENT SAFETY WEBINAR

ACCIDENT INVESTIGATION & CORRECTIVE ACTIONS

PRESENTED BY:
COTTINGHAM & BUTLER AND SAFETY MANAGEMENT SERVICES COMPANY (SMSC)



Cottingham & Butler

TODAY'S PRESENTER



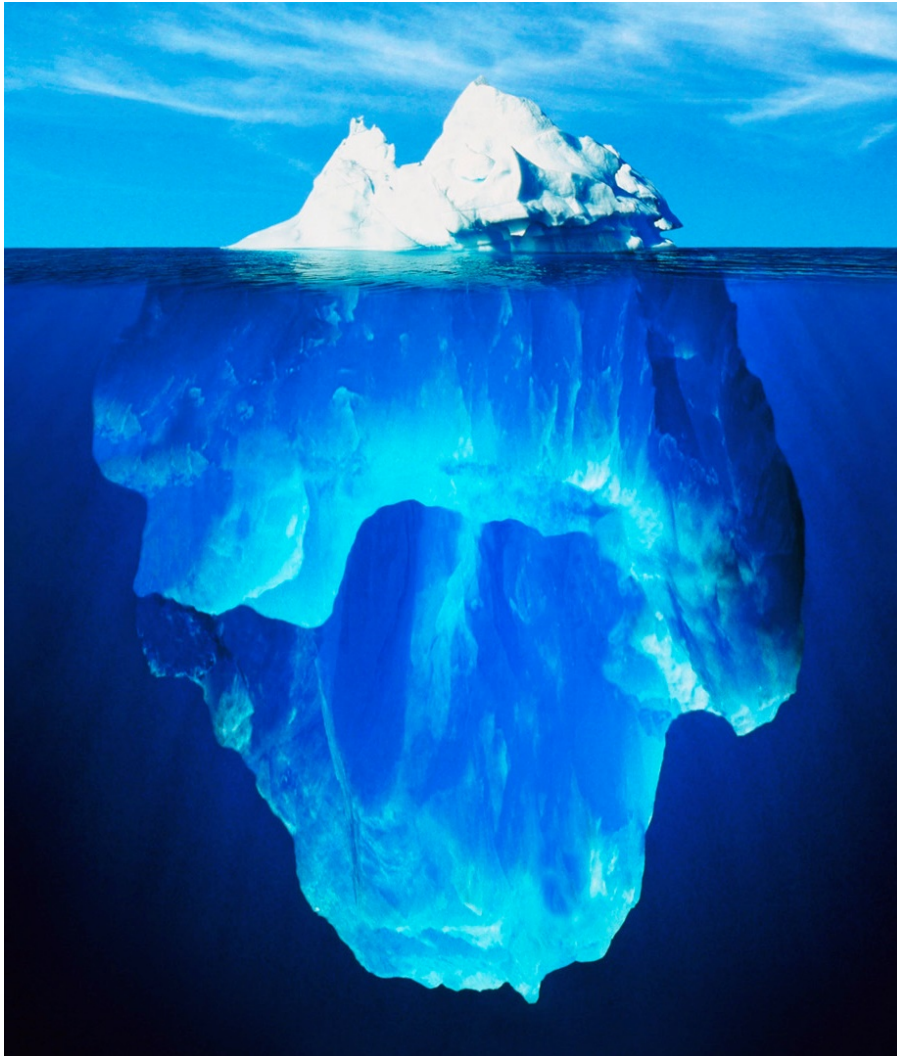
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ICEBERG OF WORKPLACE INJURY COSTS



Direct Costs

- Increased Premiums Paid
- Medical Expenses
- Time off Wages

Indirect Costs

- Damage to Equipment & Machinery
- Damage to Materials & Facility
- Production Downtime
- Lower Employee Morale
- Loss of Product or Services
- Delays in Shipment or Filling Orders
- Additional Overtime
- Additional Temporary Workers
- Cost to Hire /Train New Workers
- Management Lost Time to Deal with Situation and Post Situation Follow-up
- Employees Assisting with Accident
- Potential OSHA Penalties
- Attorney Fees

TRAINING OBJECTIVES

What is an accident or incident?

Why should you investigate both?

How do you find the true cause?

How should you investigate?

What should be the results of the investigation?

WHAT'S IN A NAME?

- Accident
 - Has an impact on the employee
- Incident
 - An accident (recordable, first-aid)
 - Property damage
 - “Near-miss”

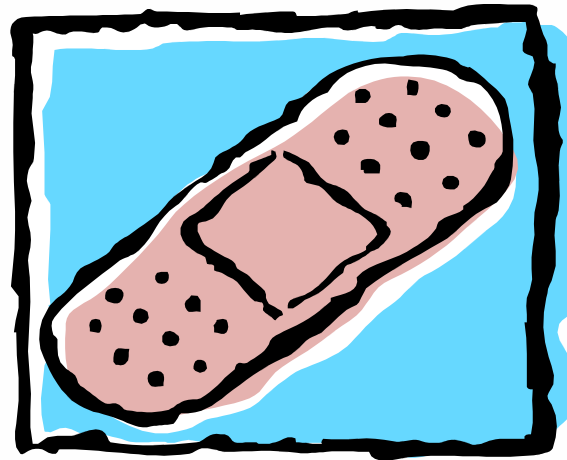
The difference between a near-miss and an accident is most often luck!

FIRST AID CASES

Remember: First-aid cases are a result of accidents that did not end in serious injury.

Are you tracking the data?

Looking for trends?



THE “NEAR-MISS”

Could be called a “near-hit”

Near-misses are:

- where no property was damaged
- no personal injury sustained
- given a slight shift in time or position, damage and/or injury easily could have occurred.



POLL QUESTION #1

What level of data does my company track?

- A) OSHA Recordables
- B) First Aids and OSHA Recordables
- C) Near Misses, First Aids and OSHA Recordables
- D) Someone else's responsibility / No idea

WHAT IS ACCIDENT/INCIDENT INVESTIGATION?

An investigation has the following elements:

- A systematic approach to incident investigation
- The identification of root causes
- Implementation of corrective actions

WHY WE INVESTIGATE



- Prevent recurrence
- Improve your safety management
- Demonstrate your commitment



INVESTIGATION REPORT

- Info about injured employee
- Info about the injury
- Description of incident
 - What was the employee doing, position, unexpected event, what happened
- List witnesses
- At-risk act or condition
- Causes of injury
- Corrective action

INVESTIGATION GOALS

Identify the cause(s) to help prevent reoccurrence.

Identify trends or problem areas.

Permit comparisons on safety performance.

Satisfy workers' compensation and other legal requirements.

Identify (without placing blame) the basic causal factors that contributed directly or indirectly.

Identify deficiencies in management systems.

Suggest corrective action for:

- Management system
- Incident

WHO SHOULD INVESTIGATE?

Team Approach

- Supervisor
- Safety manager
- Human resource manager
- Safety committee representatives
- Employee
- Team members



INTERVIEWING WITNESSES

- Witnessed events leading up to the incident.
- Was involved in the incident.
- Saw what happened.
- Came upon the scene immediately after the incident.
- Knowledgeable about procedures or equipment related to the incident.
- Discussion Format – gather information

Interviews should be conducted as soon as possible after the incident

GATHERING FACTS

- What was the exact injury or damage?
- What was the damaging energy source?
- What event(s) immediately preceded the damaging event?
- What else was going on at the time of the incident?
- Was anyone else involved?



GATHERING FACTS

Ensure observation and recording of fragile, perishable, or transient evidence:

- Save ladders, supplies, etc
- Weigh parts, buckets, etc.
- Control panel settings
- Weather and other environmental conditions
- Chemical spills
- Stains, skid marks
- Maintenance or other records
- Review photographs, video

POLL QUESTION #2

When completing an accident investigation what is usually the root cause?

- A) Retraining the injured employee
- B) Change in new hire training program
- C) Change in maintenance processes or update JSA/ JHA
- D) Discipline or fire employee
- E) Other corrective actions

INCIDENT CAUSATION

Incidents may have many contributing factors.

These include:

- Management policies and procedures
- Unsafe acts
- Unsafe conditions

INCIDENT CAUSATION

- An incident always involves a person.
- Incomplete investigations often conclude that the person committed an unsafe act.
- Unsafe acts may have underlying causes.

“Immediate causes are only the symptoms”

ROOT CAUSES

Root Cause Definition:

A root cause is the underlying reason an incident occurs. It is often related to a deficiency in management systems designed to control hazards. Root causes are the reasons management systems fail. A root cause does not apply to one incident only, but has generic implications to a broad group of credible occurrences.

Root Causes = Why a Management System Fails

ROOT CAUSE ANALYSIS (RCA) PROCESS

Various processes available

- Fishbone
- 5-Why
- Fault-Tree Analysis

Root Cause: can be reasonably identified and managed if we identify issues covering the basic elements of:

- Equipment
- Process
- Material
- Environment
- Human Performance
- Management Systems



ROOT CAUSES

Personal Factors:

- Lack of knowledge or skill
- Improper motivation
- Physical or mental conditions
- Literacy or ability

Job Factors:

- Physical environment
- Sub-standard equipment
- Abnormal usage / Wear & Tear
- Inadequate standards
- Design & maintenance
- Purchasing standards

Ergonomic Issues:

- Force
- Repetition
- Postures

Supervisory Performance:

- Inadequate instructions
- Failure of SOPs
- Rules not enforced
- Hazards not corrected
- Devices not provided

Management Policy & Decisions:

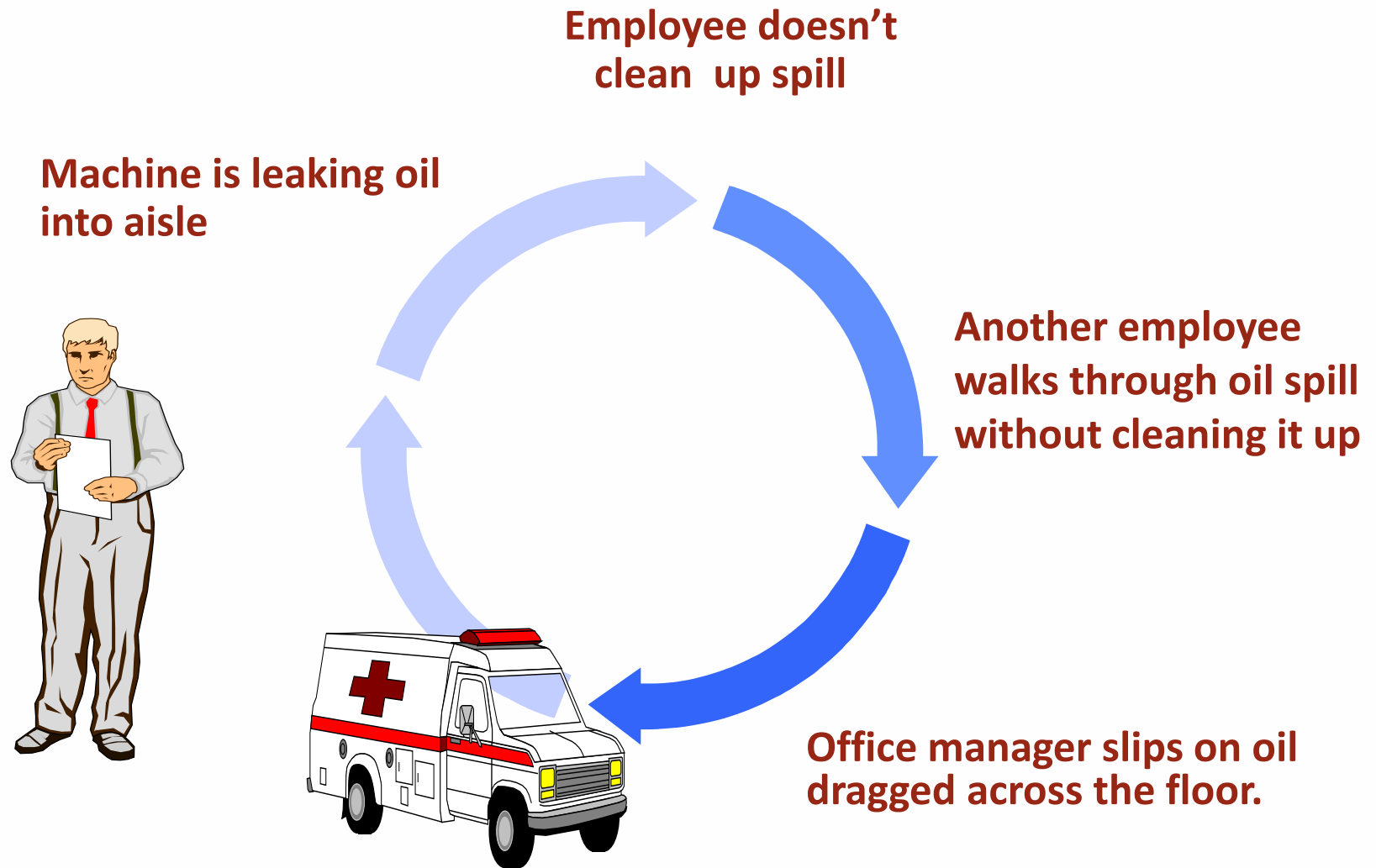
- Lack of policy
- Policy not enforced
- Standards not measurable
- Incorrect performance not corrected

MOST OF THE TIME . . .

Our root causes are too shallow
and our corrective actions too narrow!

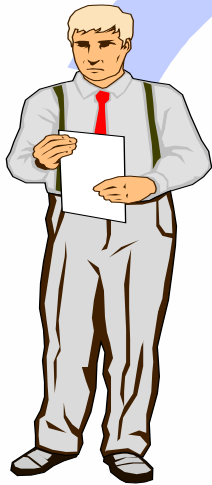
We Need to DIG DEEPER for ROOT CAUSES and
TRANSLATE corrective actions more broadly
so they become PREVENTATIVE actions.

THE KEY QUESTION - WHY?



THE KEY QUESTION - WHY?

Machine is leaking oil
into aisle



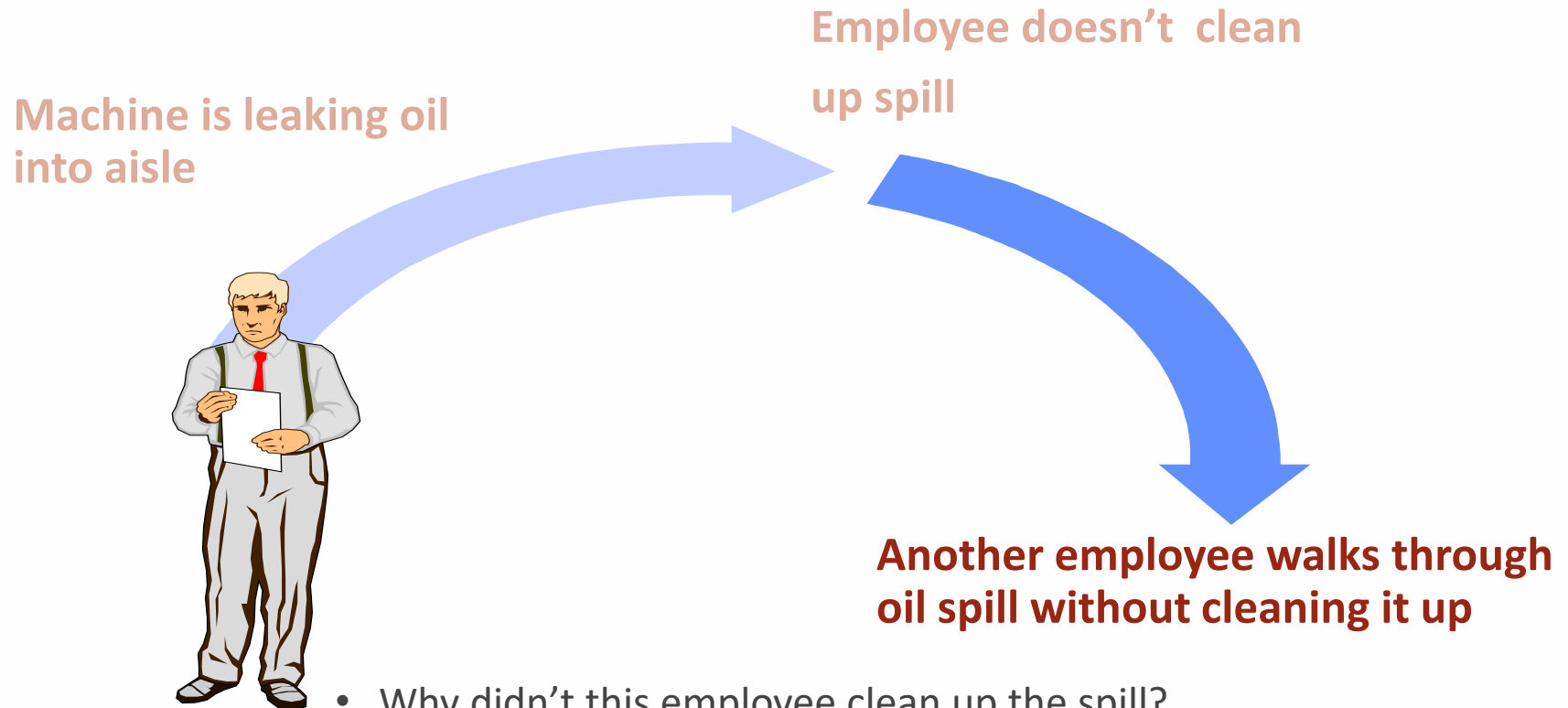
Employee doesn't clean up spill

Another employee
walks through oil
spill without
cleaning it up

Office manager slips on oil dragged
across the floor

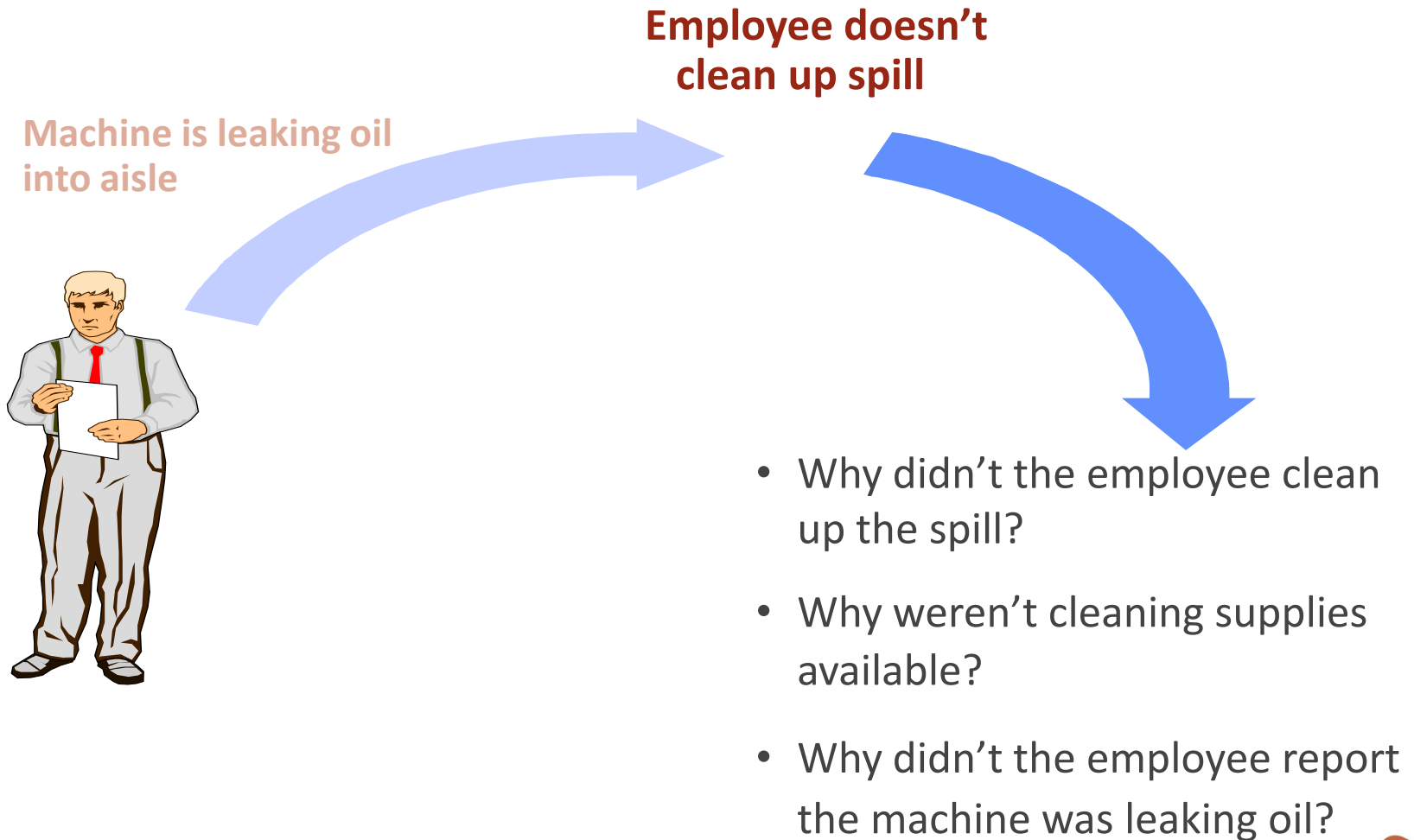
- Why was the office manager walking through this area?
- Is there another route to take?

THE KEY QUESTION - WHY?



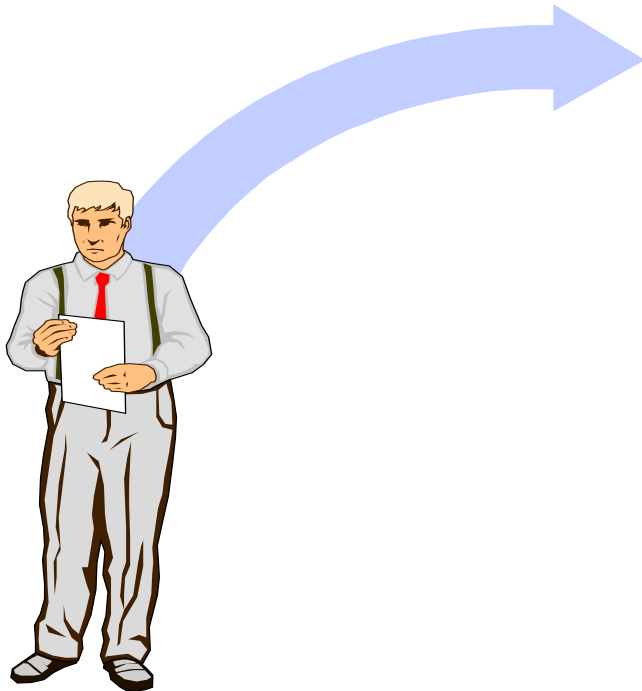
- Why didn't this employee clean up the spill?
- Why did this employee walk through the spill?
- Why didn't the employee use the cleaning supplies in the area?

THE KEY QUESTION - WHY?



THE KEY QUESTION - WHY?

Machine is leaking oil into aisle

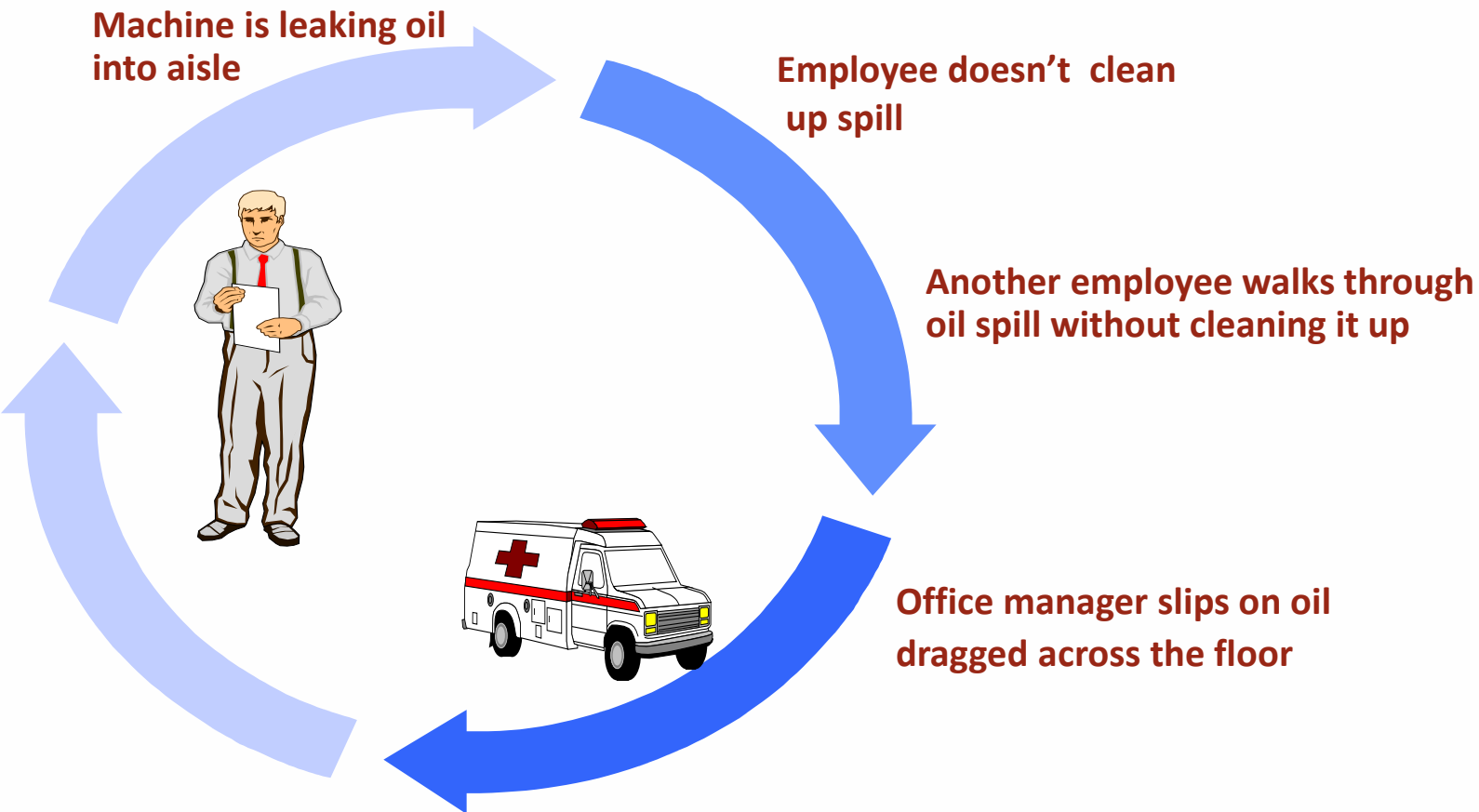


- Why is the machine leaking oil?
- Why wasn't the work order completed?
- Why wasn't a work order filled out?



TAKE CORRECTIVE ACTIONS

Step through the sequence of events, looking for corrective actions where possible.



FOLLOW UP!

Corrective measures:

- Assigned
- Implemented
- Documented
- Progress reports for longer time frames

EFFECTIVE CORRECTIVE ACTIONS

- ☐ ... address the root cause.
- ☐ ... clearly state an intended action.
- ☐ ... are practical, feasible, and achievable.
- ☐ ... eliminate or decrease risk.
- ☐ ... affect a change.
- ☐ ... have a target date for completion.
- ☐ ... designate responsible person(s).

A well-written recommendation describes the action to be taken

PREPARE A REPORT

Accident Reports should contain the following:

- Description of incident and injuries.
- Sequence of events.
- Pertinent facts discovered during investigation.
- Conclusions of the investigator(s).
- Recommendations for correcting problems.



PREPARE A REPORT

Be objective!

- State facts.
- Assign cause(s), not blame.
- If referring to an individual's actions, don't use names in the recommendation.
 - Good: All employees should...
 - Bad: George should...

A GOOD REPORT

Accurate and complete

Clear and complete description of the sequence of events (time-line)

- Leading up to incident
- Following incident

Description of any injuries

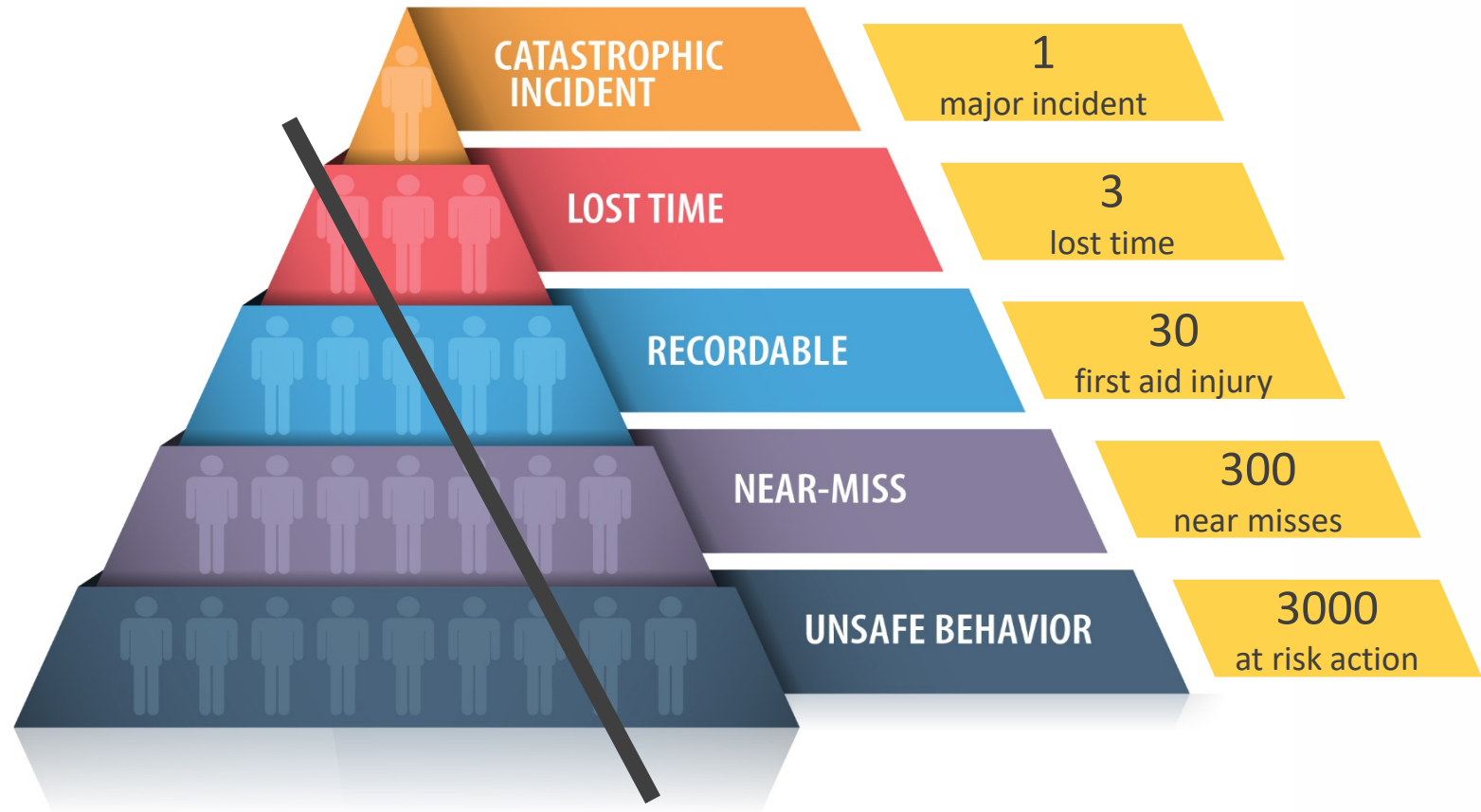
Identification of all causal factors

Recommendations for corrective actions

Proper review and sign-off

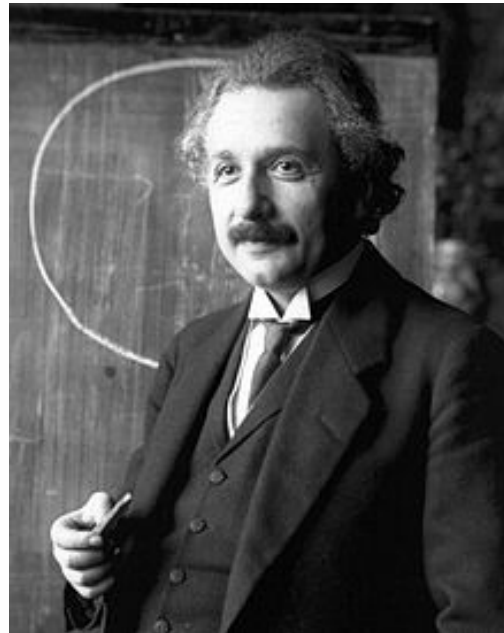


THE ACCIDENT PYRAMID

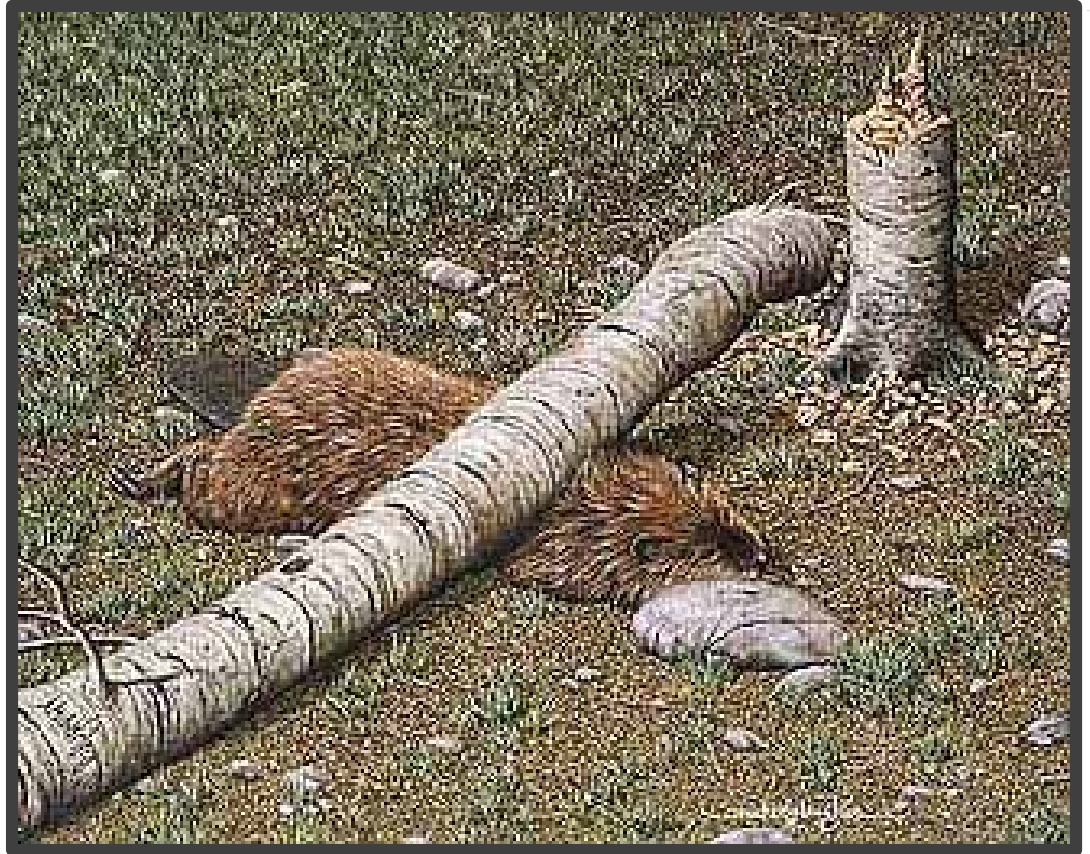


“Insanity: doing the same thing over and over again and expecting different results...”

- Albert Einstein



QUESTIONS?



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