

members
get more®

Injuries Caused When Struck by a Person or Object

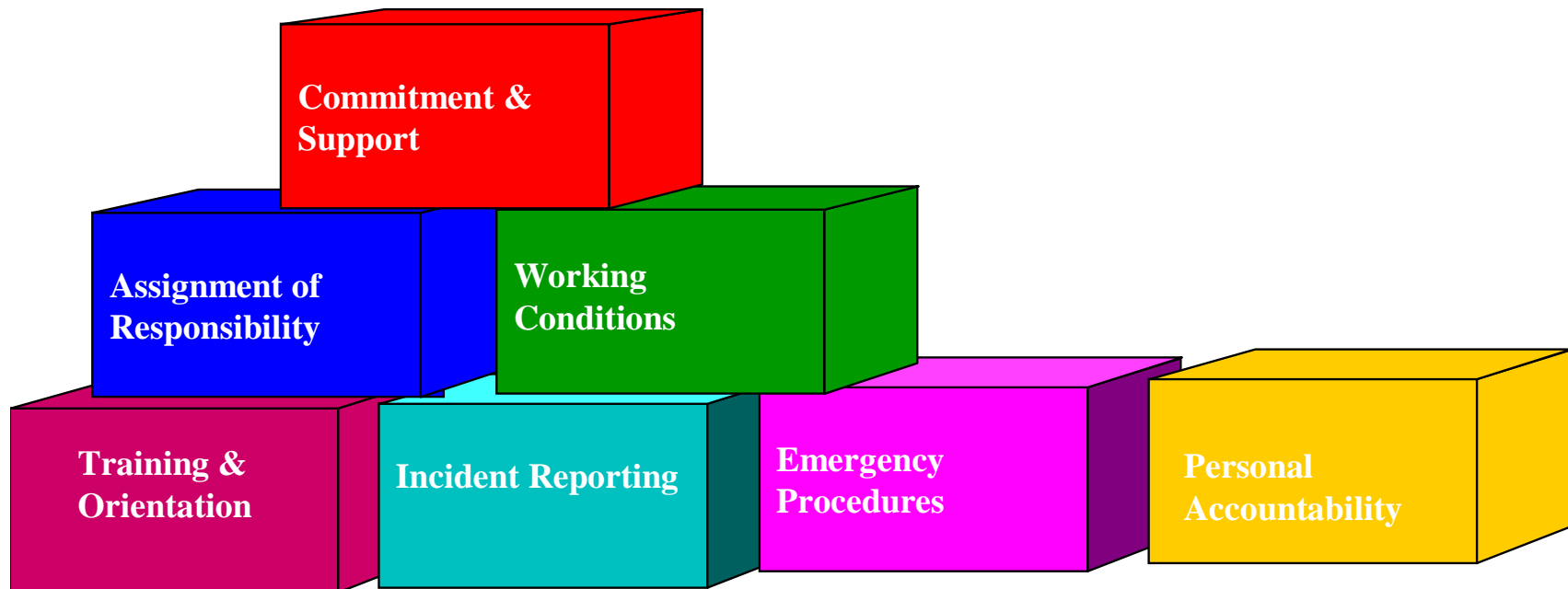


NATIONAL
SAFETY
MONTH 2010



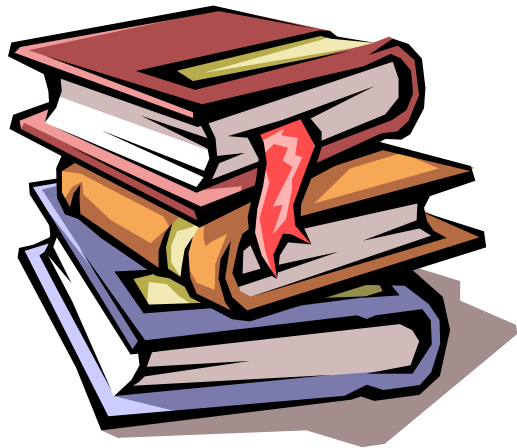
Injuries - Struck By or Against

**Salvatore Caccavale, CPEA
Global Senior Manager EHS
A.M. Castle & Co.**



EHS Philosophies

“Sal - osophies”



Struck By or Against injuries are the most under rated work place and off the job injury category.

Many are fatal

Many are life threatening

Many incidents deliver serious injuries

Many occur with serious property damage



The Numbers are Staggering

According to the National Safety Council (NSC) Injury Facts (2010 Edition) Struck By/Against Injuries:

- **2nd leading cause of non-fatal unintentional injuries**
- **Leading cause in the 15-24 year old age group**
- **4th leading cause of days away from work cases**
- **4th leading cause of work related deaths**
- **Odds of dying on the job by Struck B/A 1 in 1400**



Potential Injury Opportunities?

**Struck By: car, truck, bus, train, boat, golf cart,
Golf club, forklift, crane, mobile platform,
Bicycle, tire, flying piece of X, garage door,
Door opening, rock, another person, mail carrier,
Farm equipment, falling objects, motorcycle,
Stock items, batted ball, lawn mower, scaffolding,
Pressurized hose, hammer head, etc.....**

**Struck Against: car door, piece of protruding X,
wall, door, flower pot, office equipment, ladders,
Piping, hoses, machinery, fencing, etc.....**

Some of the Causes?

Distractions (on & off the road)

cell phone, texting, laptops, TV, I-pod, I-pad

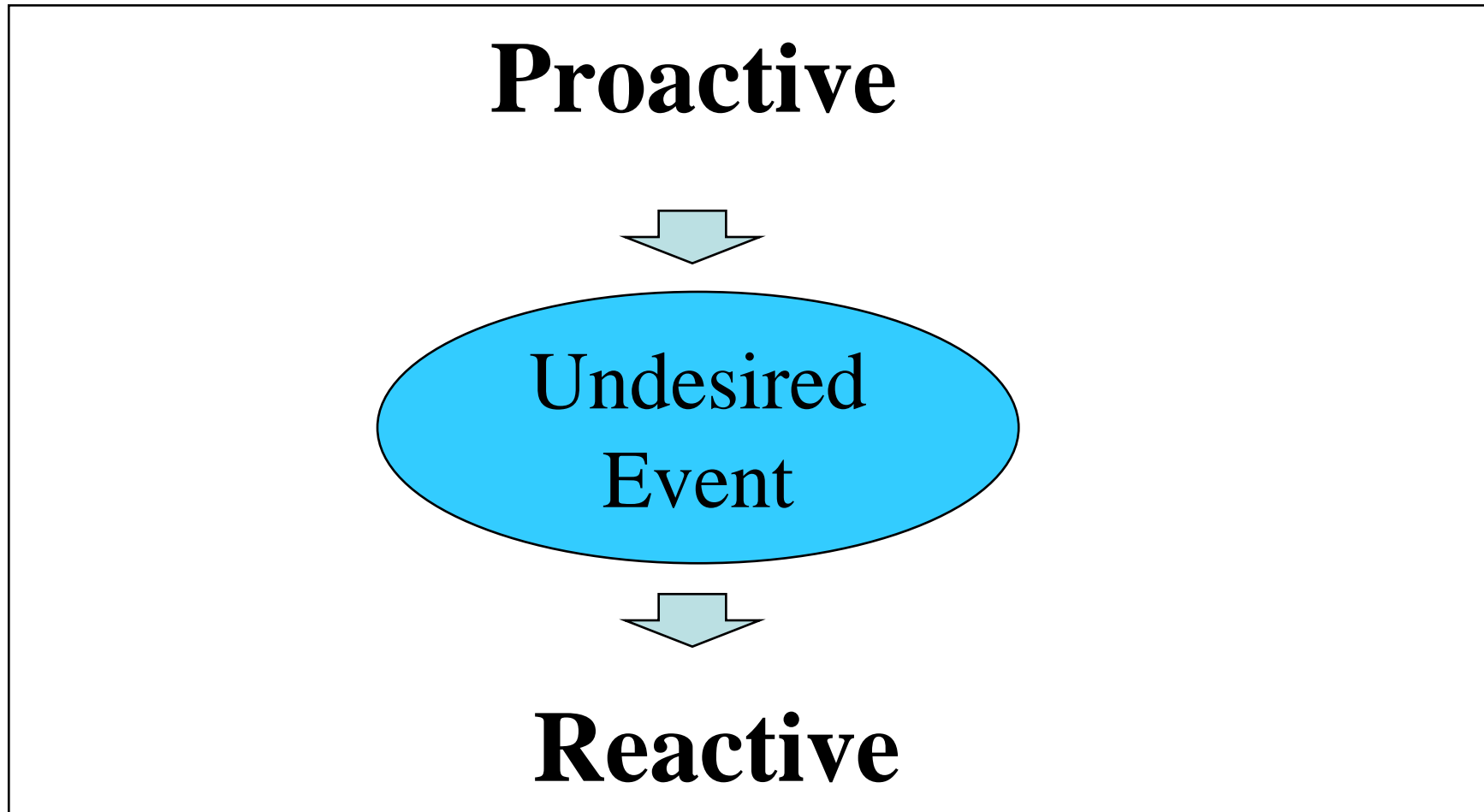
Inattention to job surroundings

Opening the door

Open office equipment (desk/cabinet drawers)

Standing up at desk or work station

Do WE want Struck By/Against Incidents?



Controls

- **Workplace assessments**
- **Job Safety Analysis**
- **Hazard recognition**
- **Incident Investigation (near miss reporting)**
- **Behavioral safety process**
- **Warning devices (audio, visual)**
- **Preventive Maintenance programs**

Controls

- **Housekeeping standards**
- **Maintain regulatory compliance**
- **Policies & procedures (workplace violence)**
- **Job skills training (certifications)**
- **Workplace design (engineering)**

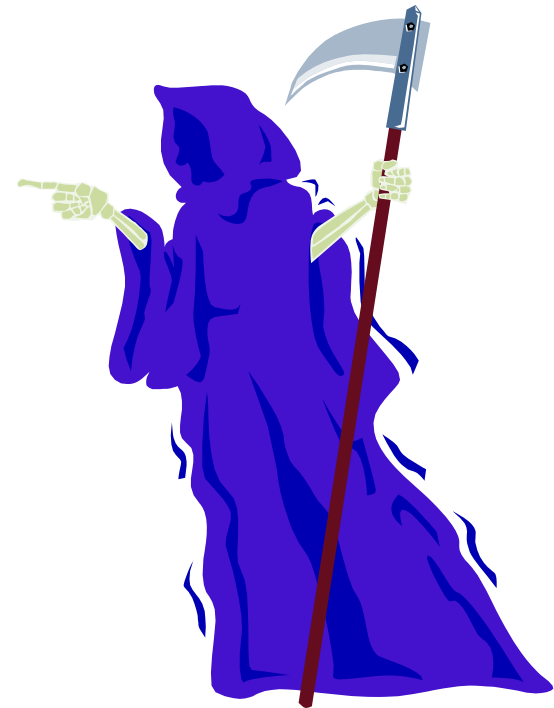
Outline of EHS Process

- **Management Commitment & Support**
- **Assignment of Responsibility, Authority & Accountability**
- **Maintenance of Safe & Environmentally Sound Working Conditions**
- **Training & Orientation**
- **Incident Reporting, Analysis & Record**
- **Emergency Programs & Procedures**
- **Acceptance of Personal Accountability**



Assessments, Audits & Evaluations

- Meeting the Needs of the Organization
- Self-Assessments
- Third Party Assessments
- Reports and Follow-up
- Regulatory Assessments



Job Safety Analysis

A system for the development and use of safe job methods to:

- identify and control unsafe job practices before they result in injury/damage**
- detect hazardous conditions that can be controlled/eliminated through job modification or engineering controls**

Job Safety Analysis

Everyone involved in the process

Department Supervisor - develop

Employees - develop

Department Head - approve

One master copy set of JSA's

Reviewed and/or updated at least every 18 months

Job Safety/Hazard Analysis

Job:		Date
Title of Employee Who Does Job:	Responsible Supervisor:	Author #1 Signature:
Department:	Section:	Author #2 Signature:
Required And/Or Recommended Personal Protective Equipment:		Approved By: Signature:

Sequence of Basic Job Steps	Potential Injuries or Hazards	Recommended Safe Job Procedure

Job Safety Analysis

New employee orientation

Educate current employees in job hazards

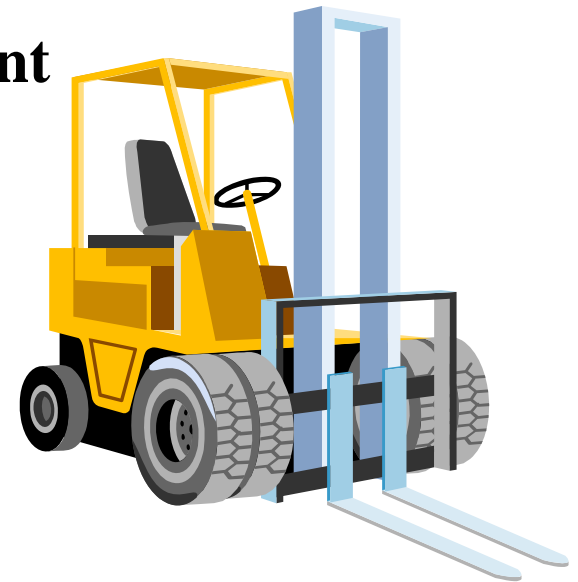
Incident Investigation tool

Foster employee participation!!



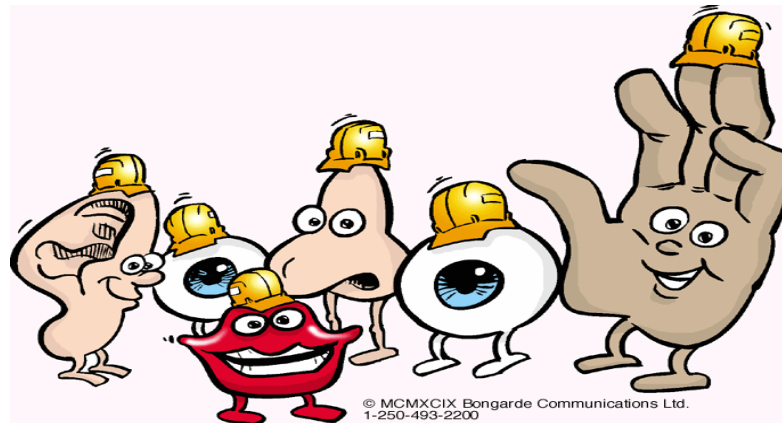
Hazard Recognition, Evaluation & Control

- **Hazard Recognition**
 - Job Safety Analysis**
 - Safety & Health Inspections**
 - Incident Investigations/Reviews**
- **Evaluations**
 - Material Safety Data Sheets (MSDS)**
 - Industrial Hygiene Exposure Assessment**
 - Systems Safety Reviews**
- **Hazard Control**
 - Engineering Controls & Redesign**
 - Permits**
 - Preventive Maintenance**
 - Personal Protective Equipment (PPE)**



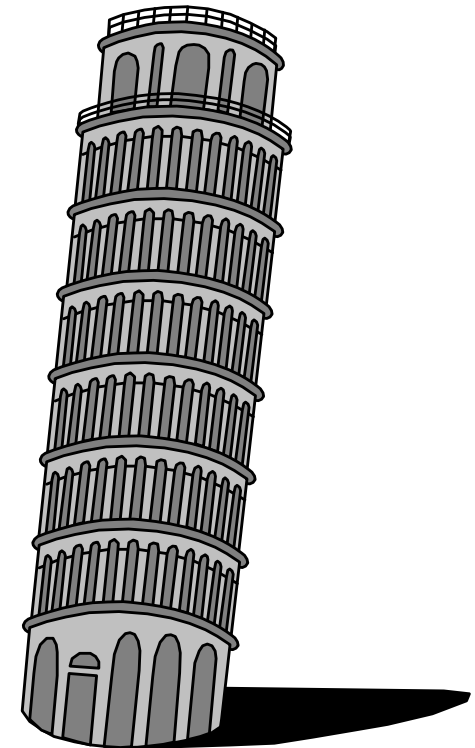
Proactive tools for maintaining safe working conditions

- Pre-Startup Safety Reviews
- IH exposure assessment
- Housekeeping inspections
- Corrective Action Systems
- Management of Change
- Project reviews
- Design concepts
- Operating procedures
- Safe work practices
- Safety & Health procedures
- Procurement guidelines
- Mechanical integrity



Workplace Design & Engineering

- **Design and Start-up Review**
- **Ergonomic Factors/ Material Handling**
- **Machine Safeguards**
- **Life Safety Code and Fire Prevention**
- **Flow Diagrams/P&ID's**
- **Instrumentation and Control**
- **Overpressure Protection**
- **Loss Prevention Aspects**



“You never know where you’re going ‘til you get there.”
Sylvester the Cat

Acceptance of Personal Accountability

- **Accountability (PPE, Procedures, Safety Rules)**
- **Ability to Participate**
- **Observation Programs**
- **Safety and Health Committees**
- **Safety Suggestions**
- **Housekeeping**



**“We are what we repeatedly do.
Excellence then is not an act, but a habit.”**

Aristotle

Acceptance of Personal Accountability

Managers or Supervisors Role:

- Maintain** - acceptance of personal accountability in those who inherently bring safe behavior to the job
- Enhance** - acceptance of personal accountability in those who allow other priorities to compromise safe behavior
- Develop** - acceptance of personal accountability in those who demonstrate unsafe behavior and continually demonstrate a lack of safety awareness

Acceptance of Personal Accountability

Supervisor's Functions

Establish work methods

Give job instructions

Assign people to jobs

Supervise people (direct and correct)

Maintain equipment and work place

All while emphasizing SAFETY!



Acceptance of Personal Accountability

Leadership Skills

Ability to organize and direct activities of others

Human behavior (self and others)

Leadership (changing face-to-face situations)

Emotional control (stress)

Practical decision-making (goals based on intelligence)

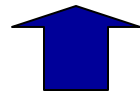
Acceptance of Personal Accountability

A - Attitude

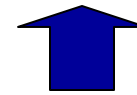
B - Behavior

C - Commitment

Barriers to Safe Work



Direct Causes



Severe Fatigue
Illness
Intense or Prolonged Stress
Alcohol/Drug Use



Indirect Causes



Workplace Stressors

- **Shift Schedule**
- **Interpersonal Conflicts**
- **Role Conflicts**
- **Production Schedules**
- **Cultural Change**
- **Unclear Policies**

Individual Stressors

- **Family Conflict**
- **Financial Problems**
- **Reaction To Change**
- **Personality Factors**

Analysis & Correction

- **Incident Type**

Struck by, against

Slip or trip w/o fall

Fall from elevation

Fall from same level

Caught in, under, between

Overexertion, strain

Transportation

Drowning, buried

Explosion, implosion

- **Contact by**

Chemicals

Electricity

Temperature extremes

Noise

Radiation

Animal, insect, plants

Analysis & Correction

- **Personal Factors**

Lack of knowledge/skill

Stress

Inadequate capabilities

Improper motivation

- **Job Factors**

Inadequate Leadership

“ **Engineering**

“ **Maintenance**

“ **Equipment**

“ **Standards**

Abuse or misuse

Wear & tear

Analysis & Correction

- **Unsafe Behaviors**

Failure to

Operating without

Improper

Using defective

Making inoperable

- **Unsafe Conditions**

Inadequate

Defective

Hazards

Exposure

Extremes

**You never get a
2nd chance
to make a good
1st impression**

New Employee Orientation

Set aside appropriate amount of time

**Know what EHS training the person has and needs
forklift, mobile platform, etc.**

**Stress how important the EHS process is to you and
the organization**



New Employee Orientation

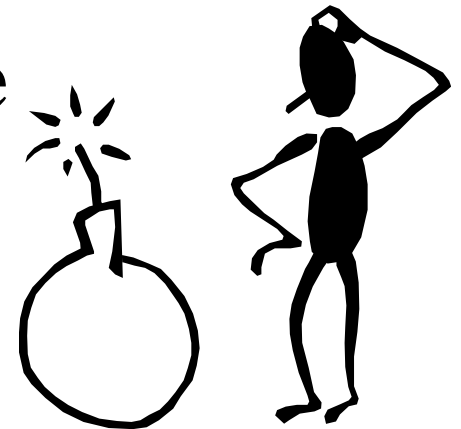
- **General Safety Rules**
- **EHS Policy**
- **EHS Process**
- **Safety Manual**
- **Hearing Conservation**
- **Housekeeping**
- **Incident Reporting**
- **Safety meetings**
- **Reporting hazards**
- **Emergency procedures**
- **Shift work**
- **Heat/cold stress**
- **Safety committee**
- **PPE - glasses Rx**
- **Hazard Communications**
- **Equipment specific**

Attitudes that increase injuries

Apathy	“Who cares?” approach to their safety
Carelessness	follow safety haphazardly or not at all
Complacency	I’ve never been hurt before on the Job
Defiance	purposely ignore rules & refuse work safely
Emotion	excessive anger/overly upset
Ignorance	what you don’t know can hurt you
Negligence	housekeeping, equipment in good repair
Tiredness	slows reactions/lowers power of concentration

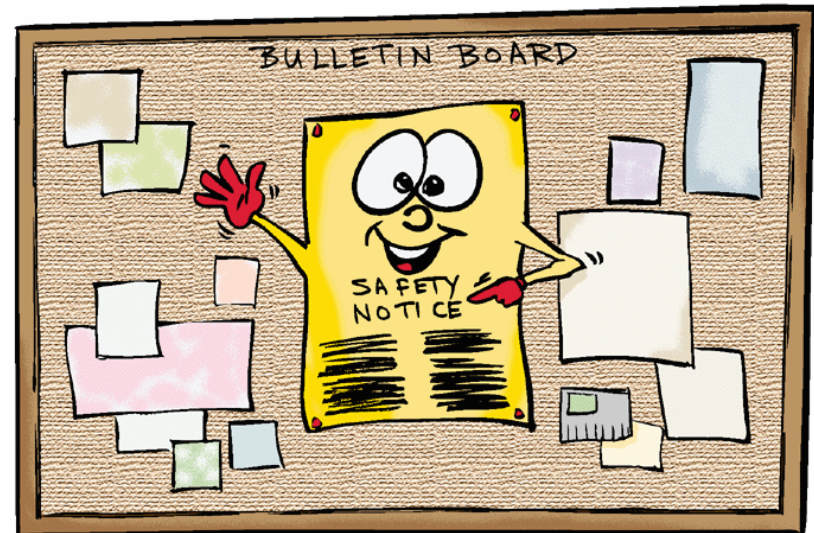
Why employees do not report incidents

- **Fear of discipline**
- **Concern about record/reputation**
- **Fear/dislike of medical treatment**
- **Avoidance of red tape**
- **Poor understanding of importance**



Employee Participation

- Site safety committees
- Program development
- Off the job safety
- Training



© MCMXCIX Bongarde Communications Ltd.
1-250-493-2200

Safety Committees

Basic Objectives:

- **Reduce incidence of injuries in workplace**
- **Improve safety in the work environment**
- **provide a means for communication about safety**

AWARENESS

Employees accept personal accountability for safety when they react safely and effectively in the presence of a hazard.

Key to the success of any safety process

