



BetterWork

Accident Investigation & Emergency Preparedness



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Question 1



**According to estimations by the ILO,
how many non-fatal occupational accidents
occur at work every year?**

**non-fatal occupational accidents per year
(2014 ref)**



313 million occupational accidents

(860,000 injured persons per day)

resulting in over 4 days away from work

Source: World Day for Safety and Health at Work 2015

ILO Director-General: Building a culture of prevention on occupational safety and health

Question 2



**How many work-related fatalities
occur per year?**

**work-related fatalities per year
(2014 ref)**



2.3 million fatalities/year

Source: World Day for Safety and Health at Work 2015

ILO Director-General: Building a culture of prevention on occupational safety and health

Workplace Accidents in Bangladesh (FY 2016-2017)



Month	No. of Accidents	Injured	Deceased
Jul-16	10	8	7
Aug-16	10	12	20
Sep-16	16	55	52
Oct-16	41	36	6
Nov-16	28	23	7
Dec-16	30	22	11
Jan-17	36	40	11
Feb-17	43	39	14
Mar-17	67	64	7
Apr-17	50	54	21
May-17	40	41	6
Jun-17	39	41	8
Total	410	435	170

Data Source: DIFE Annual Report 2016-2017

Brainstorming in groups:



What is the estimated average cost of occupational accidents for minor injuries, major injuries and fatalities?

Average cost of accidents in the UK (2006)



	Human Cost	Lost Output
Fatality	\$ 1,284,000	\$ 675,000
Major Injury	\$ 23,800	\$ 21,000
Minor Injury	\$ 260	\$ 130

The economic burden of poor OSH practices is estimated at 4 % of global GDP each year.

Source: World Day for Safety and Health at Work 2015

ILO Director-General: Building a culture of prevention on occupational safety and health

Most common injuries in garment production



78% suggested that the accident could have been avoided by modifiable human factors

BEHAVIOUR IS KEY!











To Investigate or not to Investigate ??



Short circuit causing a minor fire



Finger cut off



Nail puncture



Mass fainting



Warehouse rack collapse



Massive workplace fire





What is an investigation?

An investigation into an occupational accident, disease or dangerous occurrence (near miss)

- identifies how and why an undesired event (accident, contraction of a disease, dangerous occurrence, near miss) occurred; and
- establishes actions required to prevent a similar event, thereby leading to an improvement in occupational safety and health management.

Any investigation must answer six basic questions, the 5Ws and 1H:



Who was injured, suffered ill health or was otherwise involved in the event under investigation?

Where did the accident occur?

When did the accident occur?

What happened at the time of the accident?

How did the accident occur?

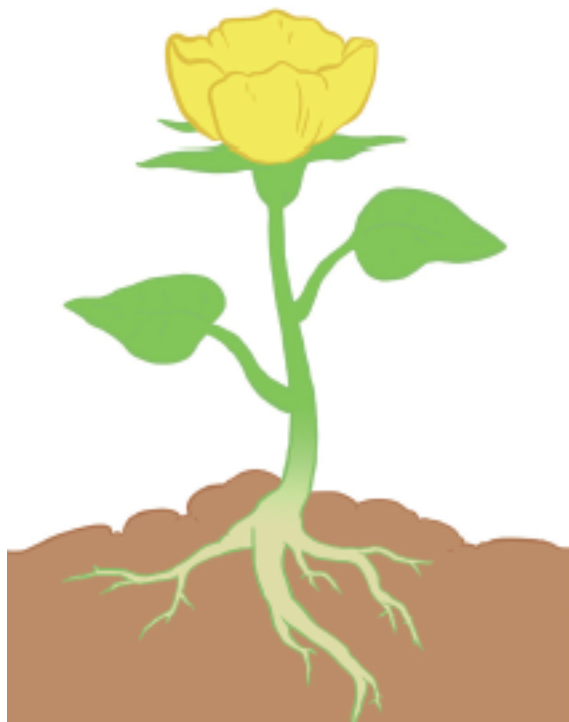
Why did the accident occur?



5 aspects of Accident Investigation

1. Limit further injuries or damage
2. Record and Report the accident/incident
3. Investigate the accident/incident
 - Gather information/Analyse information
 - Identify root causes
 - Identify risk control measures
4. Develop and implement action plan
5. Evaluate the effectiveness of the corrective action



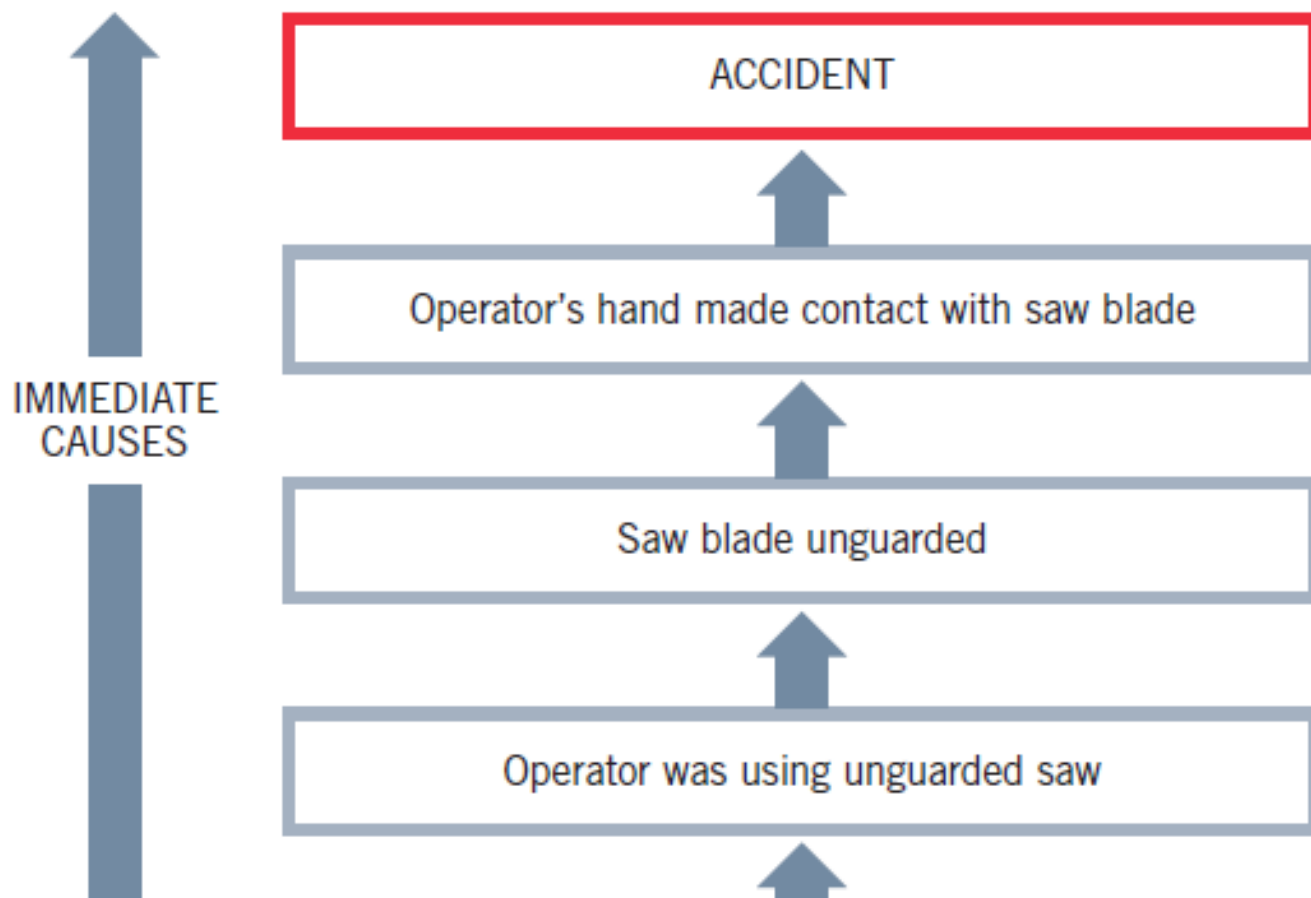


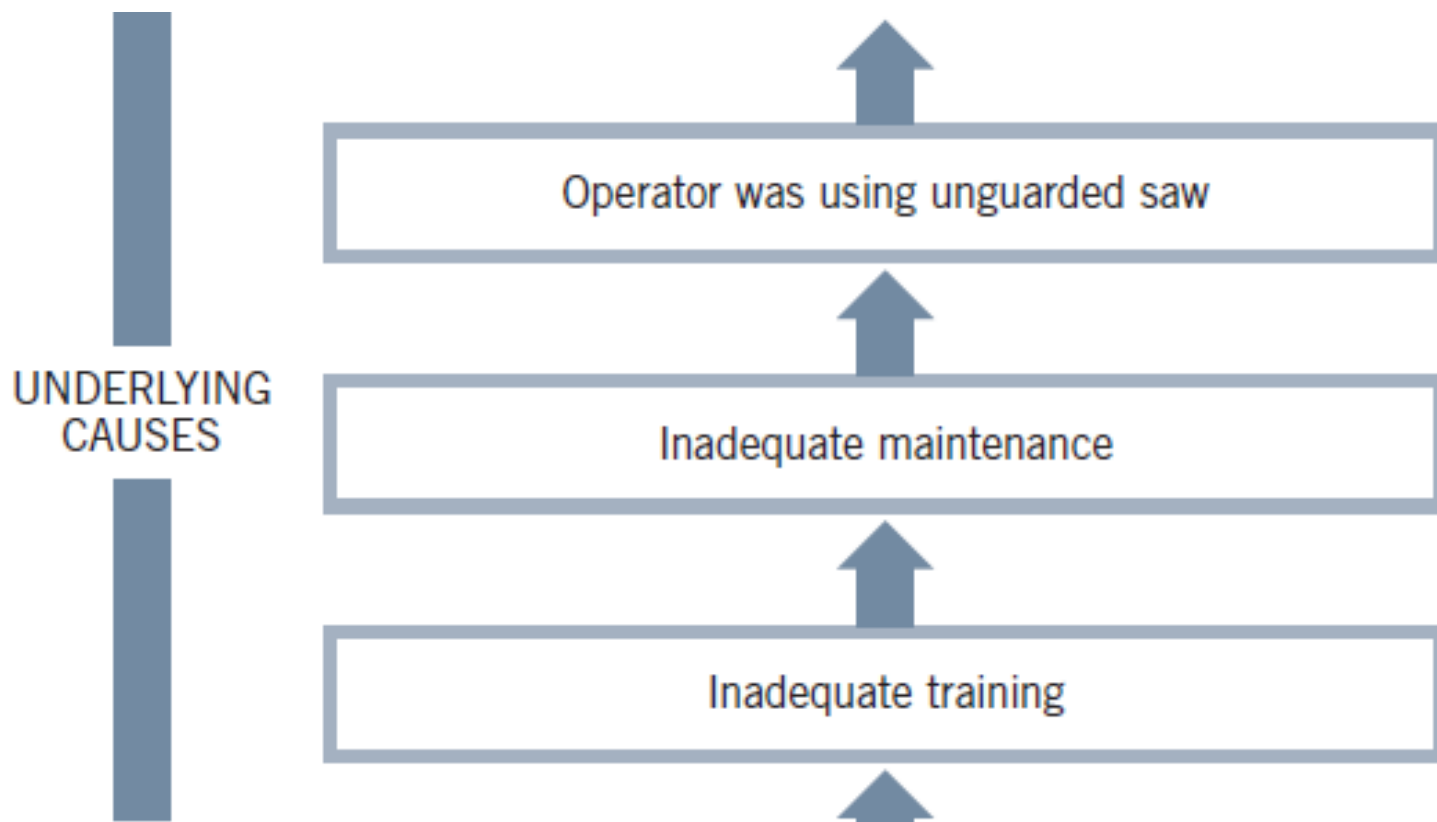
Flower represents an accident

Stem represents immediate
and underlying cause

Root represents root causes











Why Investigate?

- ◆ Prevent future incidents and loss
- ◆ Identify and eliminate hazards
- ◆ Expose deficiencies in process and/or equipment
- ◆ Reduce injury and work compensation cost
- ◆ Improve worker morale
- ◆ Meet the legal requirements



Steps of an investigation:

- ◆ Preparation
 - ◆ Standard Operating Procedure (SOP)
 - ◆ Notification protocol- Local Authority, Buyers, BWB
 - ◆ Tools and kits
 - ◆ Reporting mechanism



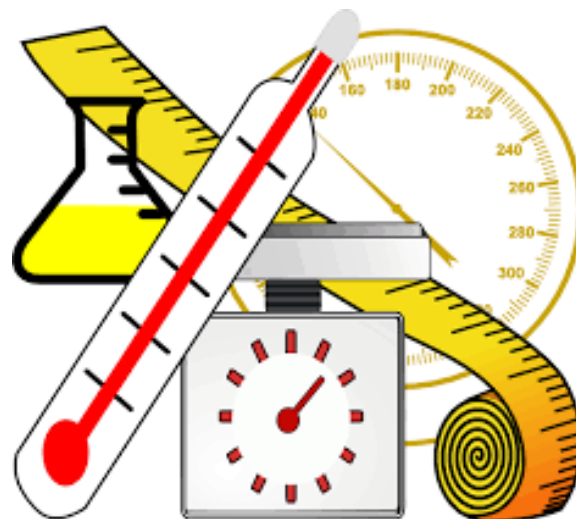
When investigating an incident/accident-

- ◆ Conducting and documenting:
 - ◆ What activities were occurring?
 - ◆ What happened?
 - ◆ Where and what date/time?
 - ◆ Who was present/victim?
 - ◆ Why did it happen?



Steps of an investigation (cont.):

- ◆ On-site investigation:
 - ◆ Collecting evidence
 - ◆ Photographs/readings/measurements





Steps of an investigation (cont.):

- ◆ On-site investigation:
 - ◆ Interviews
 - ◆ Victim/witness/co-worker/safety officer /committees/management





Steps of an investigation (cont.):

- ◆ Fact gathering:
 - ◆ When?
 - ◆ Time
 - ◆ Day of the week
 - ◆ Working hour/duration of the victim on that day before
 - ◆ Was there overtime
 - ◆ Duration of job



Steps of an investigation (cont.):

- ◆ Fact gathering:

- ◆ Who

- ◆ was injured?
 - ◆ witnessed incident?
 - ◆ first responded after incident occurred?
 - ◆ supervised the victim?
 - ◆ installed, maintenance, inspected equipment
 - ◆ told the victim to do the work he or she was involved in at time of incident?



NO BLAME



Steps of an investigation (cont.):

- ◆ Fact gathering:
 - ◆ What?
 - ◆ What happened?
 - ◆ What was the victim doing at the time of the incident?
 - ◆ What was the victim doing immediately prior to the incident?
 - ◆ If this was not the victim's regular job, what was his or her regular job?



Steps of an investigation (cont.):

- ◆ Fact gathering:
 - ◆ Where?
 - ◆ Where did incident occur?
 - ◆ Where was the victim at the time of the incident?
 - ◆ Where were the witnesses?
 - ◆ Where was the supervisor?



Steps of an investigation (cont.):

- ◆ Fact gathering:
 - ◆ Conditions?
 - ◆ Was the victim working in crowded conditions?
 - ◆ Was there anything different or abnormal on the day of the incident?
 - ◆ Was the job understaffed?
 - ◆ If line speed was a factor, was the line moving at normal speed?
 - ◆ Were workers asked to work unusual overtime on the day of the incident?



Steps of an investigation (cont.):

- ◆ Fact gathering:
 - ◆ Related:
 - ◆ Had anyone else ever been injured on the same job, same piece of machinery, etc.
 - ◆ Had concerns about the safety of the job, piece of machinery, or environmental conditions, been raised with management before?
 - ◆ What language does (did) the victim speak? In what language was the safety training and any other training concerning the job conducted?
 - ◆ Was the worker skilled/certified to perform the job?



Interviewing skills:

- Past experience
- Training and education
- Age
- Physical condition
- Stress
- Peer pressure
- Personal interests/home life
- Job satisfaction/security
- Ambition.



PEACE Interview

- ♦ **P – Planning and preparation**
- ♦ **E – Engage and explain**
- ♦ **A – Account, clarify and challenge**
- ♦ **C – Closure**
- ♦ **E – Evaluation**



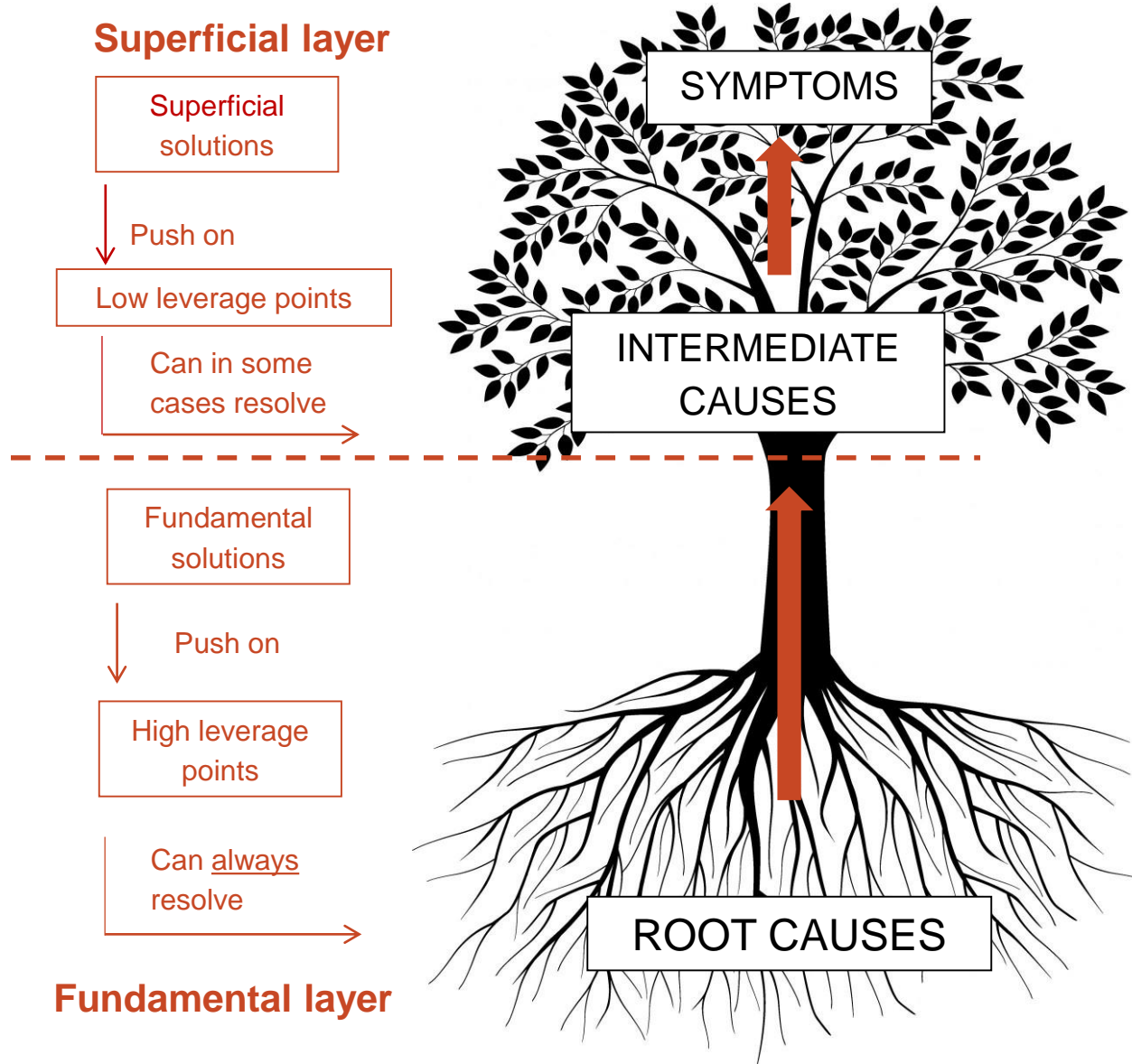
Tell, Explain, Describe (TED)

- Can you **Tell** me ... what you were doing at the time of the accident? what you saw? where you were?
- Please **Explain** ... what was going on at the time of the accident? ... how the work was being carried out?
- Please **Describe** ... what you saw at the time of the accident?

Examples of closed questions:

- When you operate the saw, is the guard usually in place?
- What time did the accident happen?
- Who taught you to operate the saw?
- Do you know where the operating instructions for the saw are?

Root Cause Analysis – 5 Whys





Behavior is the KEY!

1. Information/communication
2. Continuous learning: awareness and training
3. Incentivizing to sustain

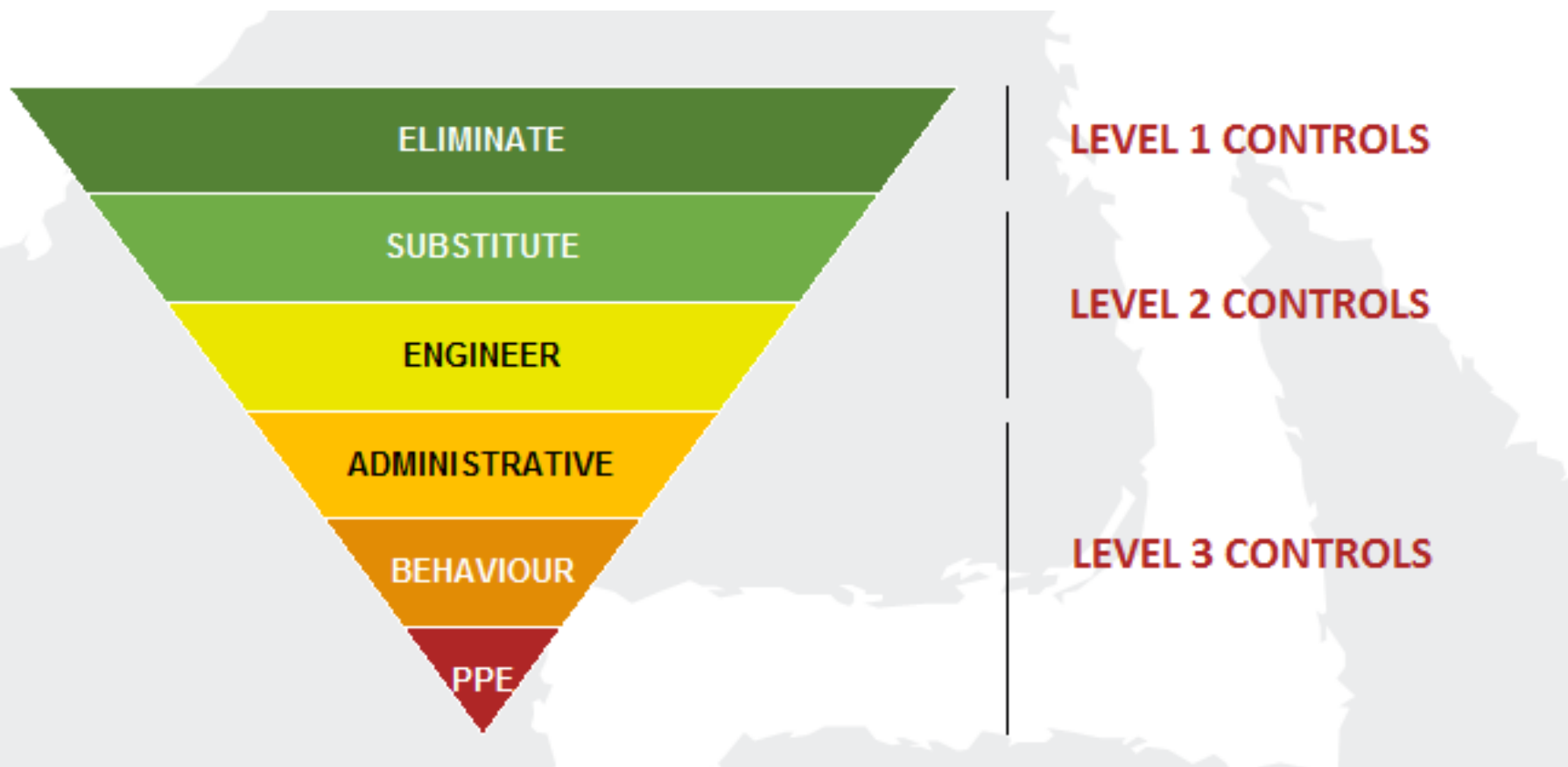


Behavioral change (Cont.):

- ◆ Understanding:
 - ◆ **Consequences**
 - ◆ **Causes**
 - ◆ **Control mechanism**



Risk Control Measures





69. Serving notice of accident:

(1) Where in any establishment, any person faces any accident which ultimately causes his death or if, due to such accident, there is no reasonable possibility for that person to join his work in that establishment for the following 20 days, the accident shall be considered as fatal or serious, as the case may be, and the authority of such establishment shall instantly serve a notice, through telephone, fax, e-mail or special messenger, to the following persons, namely:-

- (a) Inspector General;
- (b) Concerned Deputy Commissioner;
- (c) Concerned Inspector;
- (d) Nearest Fire Service Station;
- (e) Nearest hospital or health centre;
- (f) In case of death or fatal accident, the Officer-in-Charge of Industrial Police of the concerned area.



69. Serving notice of accident:

(2) The notice sent by telephone, fax, e-mail should be supported in written format in **Form- 27** within two days and in case of necessity, the notice shall sent by the special messenger according to the Form- 27.

(3) Within two months from the date of such incident or after joining of the worker, the owner of the establishment or any officer authorized thereby shall send a final report and where applicable with description of the latest condition of such accident in Form- 27 (A) to the Deputy Inspector General of the district concerned.



70 . Notice of minor accident

If any worker, injured by any accident in the establishment, is not being able to join his work within 48 hours and in accordance with Form-27 in the case of any absent for less than 20 days due to such accident, such accident shall be considered as minor accident and the authority of such establishment, within 07 (seven) days of such accident, should send news to the authorities mentioned in Rule 69 (1) (a), (b), (c).



71. Notice of dangerous occurrence

If there occurs any severe accident in any establishment like explosion, outbreak of fire, building collapse or serious accident in machine takes place and whether anyone personally gets injured or not, the establishment authority, within 03 (three) working days, shall communicate the news of such accident to the authorities mentioned in Rule 69 (1) (a), (b), (c).



72. The place/spot of fatal accident

(1) Where the accident causes any disablement or amputation or death, the place of such accident shall be preserved in the same condition until the inspector, after being informed, visits the place or till at least 03 (three) days after such accident.

(2) The inspector shall collect information of such investigation and inform the employer regarding the steps to be taken.

(3) Notwithstanding anything in Sub-Rule (1) and (2), for the purpose of rescue operation and for the sake of protecting lives and property there may be deviation in obeying this Rule.

73. Register of accident or dangerous occurrence and monthly accident report



(1) The management of every establishment shall record the accidents and dangerous occurrences in his establishment in Form- 28 and whatever measures have been taken by the employer that shall be also recorded specifically in the register.

(2) The information as a form of report of six-month accidents recorded in the register in accordance with Sub-Rule (1) shall be submitted to the Inspector within 10 (ten) workdays after completion of six months.



Thank you