



**HABIB SUGAR MILLS**

**PRESENTATION TOPIC:  
INDUSTRIAL OCCUPATIONAL  
HEALTH, SAFETY & ENVIRONMENT  
PROGRAM**

**(REF-ISO 45001:2018 & 14001:2015)**



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# Why it is important to implement HSE at Workplace ?

On average, how many people are died at work each year?

Worker fatalities:

5,333 workers died on the job in 2019

[<https://www.bls.gov/news.release/cfoi.nr0.htm>]

on average, more than 100 fatalities a week or about 15 every day.



On average, how many workers are suffered from recordable injuries & illnesses at workplace each year ?

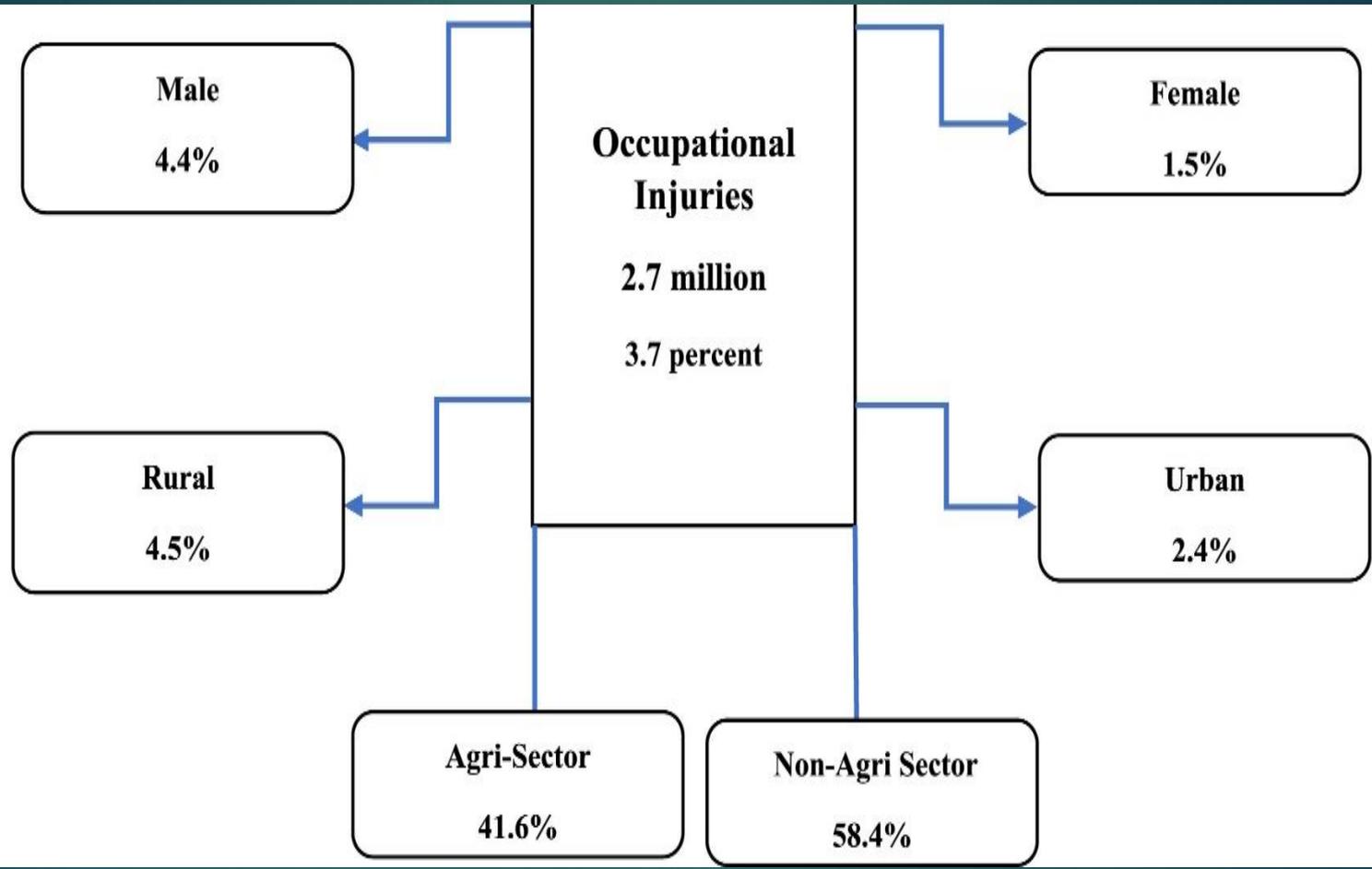
Worker Injuries & Illnesses:

Industry employers reported 2.7 million nonfatal workplace injuries and illnesses in 2020.

<https://www.bls.gov/news.release/pdf/osh.pdf>



# Labor Market Profile of Pakistan:



The recent estimates revealed that 2.7 million of the employed population (61.7 million) experienced an injury at work in 2017-2018.



## There are three key reasons to implement HSE at workplace.

1. Moral
2. Legal
3. Financial

Health, Safety and Environment management system should be a straightforward part of managing the workplace as a whole. It involves practical steps that protect workers and environment from harm and at the same time protect the future success and the growth of business. Good practice in health and safety makes sound business sense.



# HSE Management System

→ Plan → Do → Check → Act →

- |              |   |
|--------------|---|
| <b>Plan</b>  | <ul style="list-style-type: none"><li>■ identify key problem areas or issues for human factors in your workplace (talk to staff and their representatives, look at accident and near miss reports, look at risk assessments);</li><li>■ prioritise these issues;</li><li>■ allocate resources;</li><li>■ identify expertise;</li><li>■ develop possible solutions or action plans (consider people, their tasks, the work environment and organisational attributes); and</li><li>■ encourage staff and other people with a stake in the changes to participate in planning and solution development.</li></ul> |
| <b>Do</b>    | <ul style="list-style-type: none"><li>■ raise awareness of the issues and gain acceptance for the changes;</li><li>■ implement solutions;</li><li>■ involve staff and their representatives; and</li><li>■ communicate about the actions and successes.</li></ul>   |
| <b>Check</b> | <ul style="list-style-type: none"><li>■ evaluate the effectiveness of actions by asking for the opinions of staff and their representatives;</li><li>■ check relevant data sources; and</li><li>■ observe relevant activities.</li></ul>  |
| <b>Act</b>   | <ul style="list-style-type: none"><li>■ if the situation is not satisfactory then identify possible reasons;</li><li>■ identify alternative steps; and</li><li>■ encourage participation to solve the situation.</li></ul>  |



## HSE POLICY:

- ▶ Written Statement endorsed by top management, communicated through the organization.
- ▶ Commitment to continual improvement & prevention from harm to employees & environment.
- ▶ Commitment to compliance with legislation & regulations.
- ▶ A framework for HSE objectives & targets
- ▶ Training & awareness of employees.



## HSE Planning

- ▶ Normal and Abnormal operations and potential emergency conditions.
- ▶ A procedure to identify and have access to legal and other requirements relevant to the HSE aspects of the organization.
- ▶ Overall goals of the organization aligned with HSE policy statement.
- ▶ Specific goals of **ZERO ACCIDENT** the organization should measurable wherever practicable.



## Hazard & Risk:

### Hazard:

Anything that has the potential to cause harm.

### Risk:

Is a combination of likelihood and consequences of the hazardous event.



## OPERATION PHASE HAZARDS:

- ▶ Bagasse dust exposure
- ▶ Fly ash
- ▶ High pressure steam
- ▶ Hot surface
- ▶ Hot water
- ▶ High Noise
- ▶ High temperature atmosphere
- ▶ Pollution
- ▶ Entanglement
- ▶ High voltages
- ▶ Slippery surface
- ▶ Fire and Explosion
- ▶ Hazardous chemicals handling



## MAINTENANCE PHASE HAZARDS:

- ▶ Lifting & transporting heavy materials
- ▶ Manual handling
- ▶ Electrical shock
- ▶ Hand & Power tools
- ▶ Falls from height/ Falling objects
- ▶ Slip/ Trip
- ▶ Handling hazardous materials
- ▶ Open flame activities (Welding & cutting)
- ▶ Poor house keeping
- ▶ Fire & Explosion



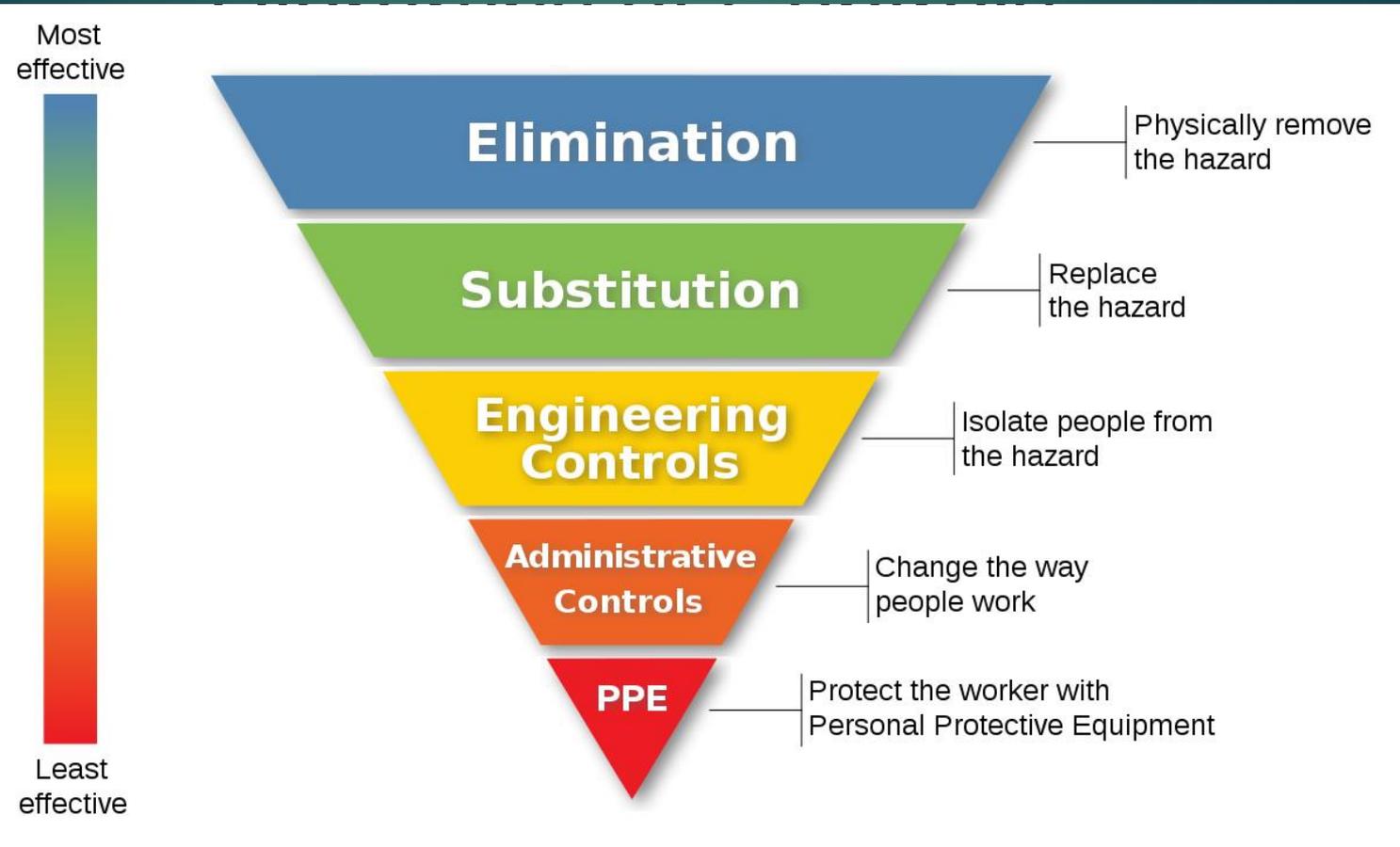
# HSE Tool box talk/ Awareness Training:

- A toolbox talk is an informal safety meeting that is part of an organization's overall safety awareness program at job site.
- A toolbox talk covers special topics on safety aspects related to the specific job. Meetings are normally short in duration and cover topics such as workplace hazards and safe work practices.
- Listen to your Supervisors tool box talk Instructions before starting work.





# HIERARCHY OF RISK CONTROL (H&S):





# PERSONAL PROTECTIVE EQUIPMENT:

## WORK SAFETY



Wear Vest



Wear Hand Protection



Wear Safety Boots



Wear Head Protection



Wear Eye Protection



Wear Face Mask



# EMERGENCY EVACUATION & FIRE:



▶ To create awareness and reduce impact of incident:

Know your

- Plant Emergency contact ph#
- Alarm Point
- Exit Routes
- Assembly points



▶ Fire Prevention

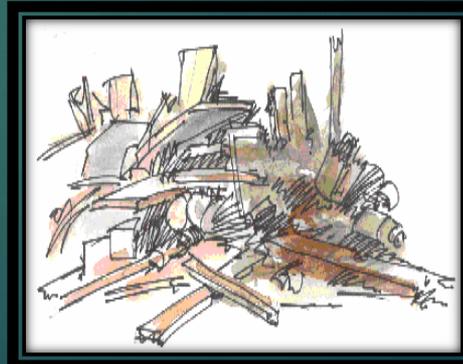
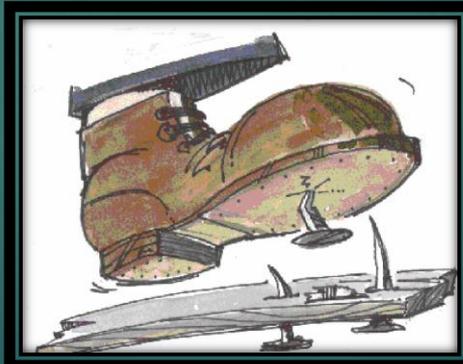
- Keep all ignition sources away from flammable substances.
- Keep the site clean and clear.
- Smoking is prohibited at no smoking points.





# HOUSE KEEPING:

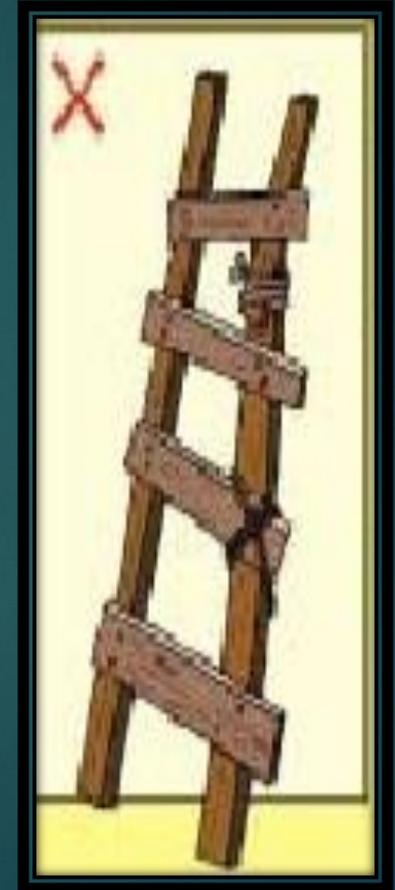
- ▶ Right place for every thing and everything in its right place
- ▶ Always clear up your own rubbish and dispose properly
- ▶ **“Poor housekeeping delays the work”**
- ▶ **“A Clean site is a safe site”**





## LADDER SAFETY:

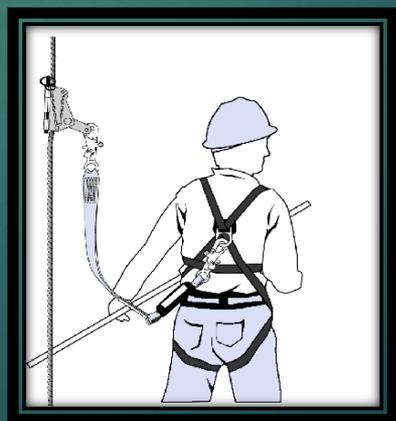
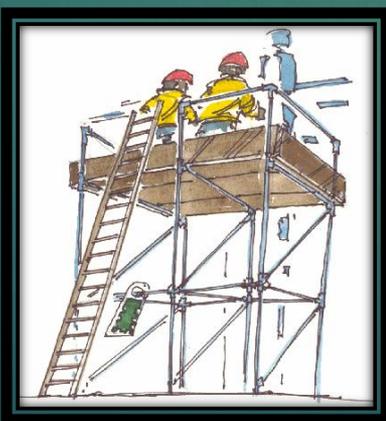
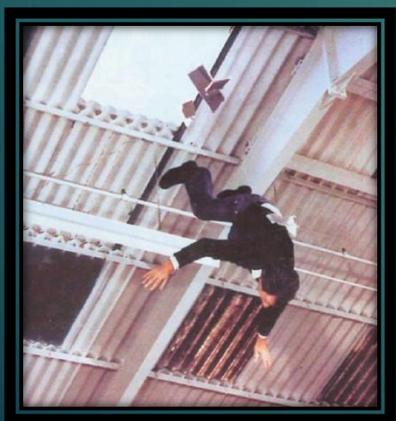
- USE PROPER LADDER AS PER THE JOB
- Ladder shall be set 1' out of each 4' of height
- Check for condition of rungs and legs
- Maintain 3 point contact
- Do not carry any material on hand while climbing ladder
- Anchor ladder 3 feet above from the resting place
- Check rails for cracks, checks or bends.
- Check if the base of the ladder placed on a solid surface
- Look for anchor points at the top and bottom of the ladder.





# WORKING AT HEIGHT:

- ▶ Use secured platforms with proper edge protection
- ▶ Protect holes, leading edges and fragile materials
- ▶ Use Proper scaffold , certified by competent person
- ▶ Lifelines and full body safety harness must be worn working at height of more than 2.0 meters.



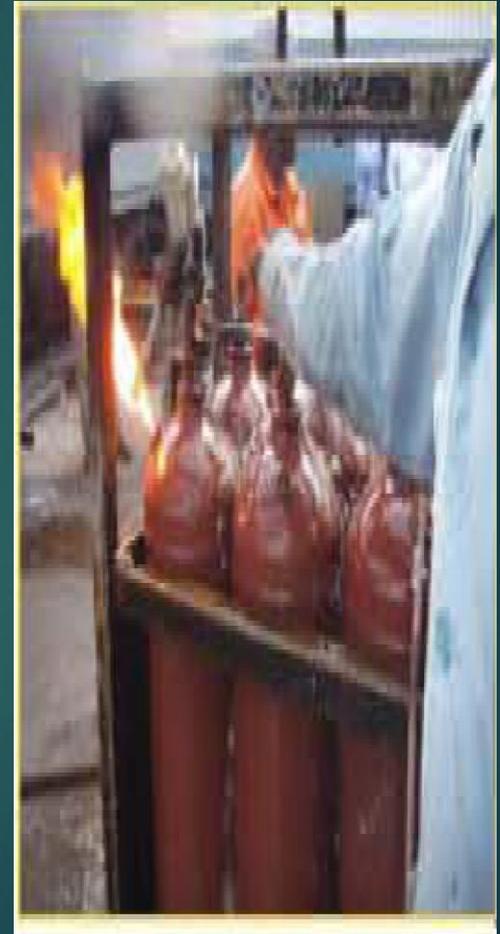


## WELDING:

- ▶ Make sure the isolation switch is closer to the work place
- ▶ Check the welding components / tools (Damages & Cuts)
- ▶ Welding machine/ plant to be effectively earthed by double earthing
- ▶ Wear appropriate PPE like helmet, face shield, Leather gloves and shoes
- ▶ Area to be neat and clean free from flammable substances
- ▶ Provide shielding against UV rays with canopy/ frame

## COMPRESSED GAS CYLINDERS:

- ▶ Suitable trolley with fastening arrangement should be used for transporting gas cutting set.
- ▶ Gas cylinders should not be rolled or dragged and dropped.
- ▶ Color identification of cylinders should be maintained.
- ▶ Gas cylinders should be kept shielded from direct sunlight and excessive heat to avoid build up of excess internal pressure.
- ▶ Cylinders should always be transported and used in vertical position.
- ▶ Hoses should be inspected daily to see that they are free from cuts, scratches, cracks, burnt or worn patches.





## WELFARE AT PLANT:

- ▶ Welfare facilities are necessary for Employees which **protect to health and safety of employees at workplace.** Welfare facilities on-site cover a wide range of basic health, safety and welfare issues.





**“Prevent the worst and  
Put safety first, because  
being Safe today will  
keep you Alive  
tomorrow”**





Thank You!

Any questions?

