



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore - 641 107

An Autonomous Institution

Accredited by NBA - AICTE and Accredited by NAAC - UGC

with 'A' Grade

Approved by AICTE, New Delhi & Affiliated to Anna

University, Chennai



DEPARTMENT OF MANAGEMENT STUDIES

COURSE NAME : 19BA316 INDUSTRIAL RELATIONS & LABOUR WELFARE

II YEAR /III SEMESTER

Unit IV - INDUSTRIAL SAFETY

Topic 2: Causes of accident



INDUSTRIAL SAFETY

“Measures or techniques implemented to reduce the risk of injury, loss and danger to persons, property or the environment, in any facility or place involving the manufacturing, producing and processing of goods or merchandise.”





SIGNIFICANCE

- Safety is a value not a cost
- Indian businesses are now realising that only 4% of accidents are caused due to unsafe conditions, while 96% are due to human failure.
- India accounts for 32% of global workplace fatalities averaging 120 deaths at work per day.
- The overall rate of workplace injuries is about 50,000 per day, around one-third of global occupational injuries.





THEORETICAL PERSPECTIVE INDUSTRIAL SAFETY

- Psychological theories – covers all aspects of behaviour i.e thoughts, feelings & motivations.
- Structural theories – due weightage to the socio-economic, political and technological aspects of work organisation rather the individual attitude and behaviour.
- Psycho-sociological theories- make an effort to link both theoretical approach





INDUSTRIAL ACCIDENT

- An unplanned and uncontrolled event in which the action or reaction of an object, substance, person, or radiation results in personal injury or the probability thereof.
- Industrial accidents refer to any accident that occurs at an industrial site.



CAUSES AND CONSEQUENCES OF IA

- Total cost of accident=Direct cost +Indirect and hidden cost of accident
- Direct cost of accidents : medical bills, hospital and rehabilitation expenses, workers' compensation, higher insurance premiums or loss of insurability.
- Indirect & hidden costs: usually uninsured, disruption to normal work procedures etc.



INDUSTRIAL ACCIDENTS - CAUSES

Unsafe conditions:

- The causes of industrial accident that pertain to unsafe conditions may include insufficient workplace lighting, excessive noise, slippery or unsafe flooring, extreme temperature exposure, inadequate protection when working with machinery or hazardous materials, unstable structures, electrical problems, machine malfunction or failure and so on.



UNSAFE ACTS

- The causes of industrial accidents that pertain to unsafe acts may include actions or failures to act which results in injury.



EXTERNAL & INTERNAL CAUSES

- External: include fires, chemical spills, toxic gases, emissions or radiations. Due to org errors, human factors, abnormal operational conditions, natural forces, software failure etc.
- Internal: Technical, personal, psychological, non-observance of safety rules, inability of the workers, haste on the part of workers, liberal attitude



PREVENTION

- Safety of the Industrial site.
- Focus on the equipment frequently used in industrial area.
- Focus on employers
- Unsafe conditions
- Unsafe acts
- Focus on supervisors/foremen





SUGGESTIONS BY ILO

- Provide positive protection
- Prevent all access to the danger zone
- Cause the operator no discomfort or inconvenience
- Not interfere unnecessarily with production
- Operate automatically or with minimum effort
- Constitute preferably a built-in feature
- Be suitable for the job and the machine.
- Provide for machine oiling, inspection, adjustment and repair.
- Withstand long use with minimum maintenance





RECAP

QUESTIONS???

THANK YOU