



ACCIDENTS

Work accidents are common all over the world

The International Labor Organization (ILO) says that over **337 million accidents** happen at work globally each year.

Occupational accidents **kill** more than **2.3 million** people annually (ILO, 2022).

Occupational accidents may include attacks by humans or animals, acute **poisoning, insect bites, slips, falls, and traffic collisions.**

Authorities across the world disagree on whether we could include a commuting accident as an occupational accident.

Commuting accidents are those that occur while traveling to or from work.

Definition of an **ACCIDENT**

It is defined as a random, mostly uncontrolled event.

It can also be defined as an event "having **low level** of **expectedness**, **avoidability** and **intention**" which **involves injury**.

Definition of occupational accident or "work injury": An injury which arises out of and in the course of the work.

Near Miss اصطدام تم تفاديه

An unexpected or unplanned incident which occurs but does **NOT** cause any **injuries** or **damage** to properties

A Near Miss Could Be The Next Accident



Report **ALL** Near Misses
Before It's Too Late

Causal and predisposing factors (risk factors) of occupational accidents:

Risk factors in the **working environment**:

- Excessive heat or cold and noise.
- Poor ventilation which leads to discomfort, fatigue and incoordination.
- Improper lighting.
- Defective construction and maintenance of buildings.



Risk factors in the working conditions:

- **Defective housekeeping and disorganization** of the work place.
- **Lack of safety measures** for machines, fire and electric hazards.
- **Lack of ergonomic measures.**
- **Insufficient training and work information**



Risk factors related to **worker himself**:

- Extremes of age
- Lack of physical fitness for the job.
- Presence of acute or chronic disease.
- Presence of **accident proneness**.
- Negligence or over self-confidence.
- Wearing unsuitable cloths and shoes.
- Failure to follow employers rules and instructions.

الميل الى Accident proneness

Definition: personal idiosyncrasy **خصوصية** (peculiarity) predisposing such a person to a relatively high accident rate.

This idiosyncrasy may be in the form of **psychoneurosis** (anxiety and depression) or **immaturity** (lack of self control, insight, initiative and independency).

Accident Rates

Incidence rates = $\frac{\text{Total No. of accidents (period)}}{\text{Average No. of workers (period)}} \times 1000$

Frequency rate = $\frac{\text{Total No. of accidents (period)}}{\text{Average man hours worked (period)}} \times 1000$

Frequency rate is a better indicator of safety level than incidence rate because number of accidents is more likely related to hours of work rather than No. of workers.

$$\text{Severity rate} = \frac{\text{Total No. of days lost}}{\text{Average man hours worked}} \times 1000$$

Accident rates should be calculated in a defined period

DEATH AND INJURIES CAUSED BY WORKPLACE ACCIDENTS

1) Overexertion: The result of employees working beyond their physical limits.

2) Impact Accidents: Workers being struck by, or strike against, an object.

Example, a worker being struck by a machine.



3) Poisoning: Poisoning is caused by chemical substances whether gases, liquids or solids. They enter the human body through *inhalation*, *injection* or *skin absorption*.



4) Falls: For example, a worker who falls from the roof of a building, falls into a drain, stumbles and falls due to a defect in the walking surface.

5) Fire: Injuries and deaths caused by fire, toxic fumes, impact from a falling object due to fire at the place of work.



6) Motor vehicle accidents: Motor vehicle accident is the main cause of injuries and deaths at the workplace. It may be work risk if the person works as a driver or it can occur to workers on their way to or from their place of work.

7) Suffocation: Suffocation can be work-related or non-work related. Suffocation can occur in the water (drowning) and also on land due to lack of oxygen.

8) Firearms: Injuries and deaths caused by firearms such as armed robbery, negligence while using firearms and violence.

Most Dangerous Industries

In **2020**, each of these four industries could be ranked as most dangerous:

- **Construction**– experienced the most **workplace** deaths
- **Education and health services**– experienced the most nonfatal injuries and illnesses involving **days away from work**

- **Agriculture, forestry, fishing and hunting**—experienced the highest **death rate** per 100,000 workers

Hence, companies and organizations must take preventive measures to reduce accident risks in their workplaces.

COST OF ACCIDENTS

There are two types of costs related to workplace accidents, namely direct costs (insured costs) and indirect costs (uninsured costs)

Direct costs are costs such as claims and medical expenses paid to workers directly affected by an accident. The rate and method of payment are predetermined.

Indirect costs include all the other unexpected costs related to an accident, such as wages paid to unaffected workers despite stopping work caused by the accident, cost of property damage and raw material, additional cost for overtime, and so on.

IMPACT of ACCIDENTS on organizations

(a) Operational Costs:

Include **medical costs** of workers injured in the accident, costs of **insurance premiums** which must be borne by the organizations, costs of **accident investigation**, costs due to **absence of workers** affected by the accidents, costs of **productivity loss**, and the costs of **training workers who are replacing the workers displaced** by the accident.

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- All these costs can be avoided if only accidents can be prevented, and this can be achieved by inculcating غرس a **safe work culture**.
- Management is responsible for creating a safe and healthy work environment.

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(b) Legal Costs:

When an accident occurs at the workplace, enforcement agencies such as the Occupational Safety and Health Department will conduct an investigation into why the accident happened and what could be done to prevent a recurrence.

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(c) Motivating Workers:

Implementing occupational safety and health aspects at the workplace can be a motivating factor to workers.

Workers who work in a safe and conducive environment will feel happy and will be motivated to perform their tasks more effectively and efficiently.

IMPACT of ACCIDENTS on organizations

(d) Boosting Organizational Image:

When the rate of workplace accidents is low, workers will feel safe. This in turn will boost the image of the organization among the public and will attract **more job seekers**.

In addition, the surrounding community will also respect and support the efforts of the organization to improve its work safety and health standards.

In the long run, **goods produced** or **services** rendered by the organization will be of **high standards**, whether in the local or international market.