

Accidents



An accident (industrial) is a sudden and unexpected occurrence in the industry which interrupts the orderly progress of the work.

According to the **Factories Act, 1948**, “It is an occurrence in an industrial establishment causing bodily injury to a person who makes him unfit to resume his duties in the next 48 hours”.

In other words, accident is an unexpected event in the course of employment which is neither anticipated nor designed to occur. Thus, an accident is an unplanned and uncontrolled event in which an action or reaction of an object, a substance, a person, or a radiation results in personal injury. It is important to note that self-inflicted injuries cannot be regarded as accidents.

An industrial injury is defined as “a personal injury to an employee which has been caused by an accident or an occupational disease and which arises out of or in the course of employment and which could entitle such employee to compensation under Workers’ Compensation Act, 1923”.

A **work related accident** refers to an accident that occurs at the workplace, as a result of the work that a worker is engaged in. Accidents at the workplace are a form of occupational health hazard that impacts workers within an organization. It impacts the individual physically and psychologically, and affects his or her productivity levels by making the individual insecure and uncertain, about his or her surroundings especially her/his workplace. Accidents also impact other employees within an organization, who may not have faced an accident as yet, but might face it in the future.

Causes of Accidents

Human Factors

Research evidence indicates that about 80 per cent of industrial accidents are caused by such human factors as fatigue and anxiety.

These causes arise out of the deficiencies of an individual himself, improper attitudes, carelessness, recklessness and day-dreaming on a job.

They also involve such physical inadequacies as poor eye sight and hearing, defective limbs and low stamina, dislike of the job on which a worker is engaged and dislike of the Supervisor and the environment of work; low intelligence and manual skill, violations, of safety rules and regulations, absentmindedness arising out of fatigue and anxiety and ignoring of safety devices.

All these factors affect for the worse, the alertness of any employee, distract him make him lose his concentration on the job in hand and lead to accidents.

Environmental Factors

Environmental factors indicate improper physical and atmospheric surrounding conditions of work which indirectly promote the occurrence of accidents. Environmental factors include:

1. Too low a temperature to cause shivering.
2. Too high a temperature to cause headache and sweating.
3. Too high a humidity (in textile industry) to cause uncomforted, fatigue and drowsiness (especially when the atmosphere is also hot).
4. Defective and inadequate illumination causing eyestrain, glares, shadows, etc.
5. Presence of dust, fumes and smokes (e.g., in foundry or welding shop) and lack of proper ventilation.
6. High speed of work because of huge work load.
7. More number of working hours and over and above them the tendency of the employer to insist for over-time work.
8. Inadequate rest pauses or breaks between the working hours.
9. Noise, bad odor and flash coming from the nearby machinery, equipment or processes.
10. Poor housekeeping.

Organizational Factors

Unsafe Conditions: Unsafe working conditions are the biggest cause of accidents. Work related causes like defective plants, equipment, tools, materials, buildings. Such causes are known as 'technical causes'. They occur when there are improper guarded equipment's, defective equipment's, faulty layout and location of plant, inadequate lighting arrangements and ventilation, unsafe storage, inadequate safety devices, etc.

Besides, the psychological reasons such as working over time, monotony, fatigue, tiredness, frustration and anxiety are also some other causes that cause accidents. Safety experts identify

that there are some high danger zones in an industry. These are, for example, hand lift trucks, wheel-barrows, gears and pulleys, saws and hand rails, chisels and screw drivers, electric drop lights, etc., where about one-third of industrial accidents occur.

Unsafe Acts: These acts may be the result of lack of knowledge or skill on the part of the employee, certain physical defects and wrong attitudes.

Examples of these acts are:

- a) Operating without authority.
- b) Failure to use safe attire or personal protective equipment's,
- c) Careless throwing of material at the work place.
- d) Working at unsafe speed, i.e., too fast or too low.
- e) Using unsafe equipment or using equipment's unsafely.
- f) Removing safety devices.
- g) Taking unsafe position under suspended loads.
- h) Distracting, teasing, abusing, quarrelling, day-dreaming, horseplay
- i) One's own accident prone personality and behavior.

Some of the most common industrial accidents are as follows:

- **Slips and falls.** Workers should be provided non-slip footwear and proper training in safety procedures to avoid resulting injuries such as musculoskeletal pain.
- **Falling objects.** Injuries from falling objects may occur when items are improperly positioned while stationary or not restrained while being moved. Workers should be trained in appropriate placement and proper techniques for transporting items such as the use of restraints.
- **Chemical burns/exposure.** Chemical burns and exposure accidents occur when the chemicals are not properly contained and labeled with the chemical's name and subsequent handling procedures.
- **Improper lifting/overexertion.** Back, spine and limb injuries may occur over time as improper lifting techniques resulting from lack of proper training and supervision take their toll on the worker's body. Workers need to know how to use supportive equipment and use correct techniques when lifting to avoid this type of injury.