

Hazards in the Workplace

What is a hazard?

A hazard is something that can threaten your safety or cause harm to your health. A hazard can cause a harmful health effect if you are exposed to it. Health and safety hazards can cause injury and illness in the workplace when workers are exposed to them.

Safety Hazards are those hazards that cause a physical injury, such as a bruise, cut, amputation, burn, or even death. Safety hazards often receive the most attention because it is easier to link an injury to the hazard that caused the injury.

Examples of safety hazards include slippery floors, working at heights, falling materials, moving parts of machinery, working in trenches/excavations, fires, explosions, etc.

Health hazards can cause illness or disease. There is often a long period between the exposure to some health hazard at work and the disease. For example, a worker may have asbestosis from inhaling asbestos dust 20 years after the years of work where the exposure took place. Other occupational illnesses take place sooner and can be more easily related to the hazards that caused them.

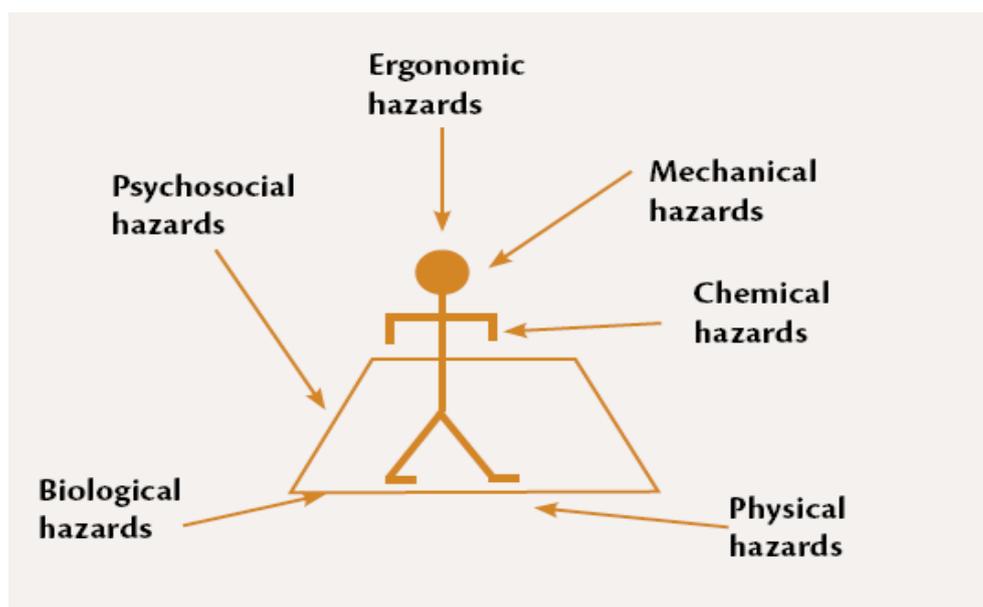


(illustration by Lesley Lewis, Inkspots, Durban)

Why should workers be aware of hazards?

1. In some working industries, one in every three workers is seriously injured every year.
2. Most employers do not inform their workers of the dangers at work.
3. In South Africa, the OHS statistics are not only very limited, but the little we do know is not very good. Thousands of workers have died in mines, smelters, petro-chemical companies and factories, to name a few industries.
4. Aside from the 'big' accidents that create all the media attention, there are many silent killers such as asbestosis, TB, silicosis, lung cancer, manganese poisoning, etc.
5. Employers are often reluctant to spend money to make machines and processes safe, or on buying protective equipment if there is no pressure on them to do so. Some employers are keen health and safety enthusiasts. Others, unfortunately, are not so concerned.
6. No one should have to give up his or her health, welfare or dignity in order to earn a decent living.
7. Any worker could be the next victim of an injury or disease and be unable to work and earn an income.

Different industries and workplaces have different hazards. Below is a list of common hazards experienced by many workers:



Source: African Newsletter on Occupational Health and Safety: Volume 19, Number2, August 2009

Hazard	Route of Entry	Exposure	Health Effects	Protection
Physical		Noise, working in extreme temperatures, radiation, vibration	Hearing loss, burns, frostbite, hypothermia	PPE, elimination or substitution of machinery
Chemical	Through breathing, the mouth and the skin	Liquid substances, oils, detergents, Gaseous and Vapour, Solids [silica and asbestos dust], fumes and smoke, cleaning agents, factories, garages, tie & dye fabric work	Skin irritation, respiratory [breathing] problems, problems associated with the liver, eyes, kidneys and intestinal tract. Personality changes and possible cancers	Elimination or substitution of toxic substances, use of personal protective equipment [PPE], prevention of leakage, good housekeeping [protection of workers' interests],
Metals	Normally in vapour form from melting down a metal, during welding, smelting, panning, etc	In construction, garages, paints, electronics, and automotives.	Kidney damage by heavy metals, damage to the nervous system, respiratory diseases such as asthma, lung cancer, and lung fibrosis	Use of PPE, good housekeeping
Pesticides	The skin and open wounds	Manufacturing, formulation, transportation, mixing, spraying of crops on farms, dealers, retail shops, use in homes to control pests	Skin irritations, allergies, pesticide poisoning	Substitution, engineering controls, making use of safety signs, PPE, following manufacturers instructions
Mechanical		Poorly designed machines, machinery and working tools, hysters, scaffolding, etc	Injury whilst working, falls, accidents	Preventative measures, good working machinery, etc

Hazard	Route of Entry	Exposure	Health Effects	Protection
Biological	Inhalation through outdoor work, mould and mildew on water damaged building materials, bites from insects, snakes or other animals. TB, HIV in blood, Hepatitis, bacteria in unclean drinking water	Caused by living organisms – plants, animals and microorganisms such as fungi, bacteria and viruses.	Bilharzia from snails in swampy area, food handlers [fungal infection from wet conditions], snake bites, HIV/AIDS, anthroposis [wool sorter's diseases] for workers handling cow products.	PPE, good housekeeping, etc.
Ergonomic	Muscular-skeletal part of the body	Long standing/sitting while working, lifting heavy loads, poorly designed tools, repetitive work, staying in one position for too long, direct pressure to part of the body, stress, environmental factors: extreme temperatures, noise, inappropriate lighting, high humidity, etc.	Injury to the muscles and other skeletal body parts	Use of sound and good working tools such as chairs, tables, computers, etc.
Pyschosocial & Work Organisation		Poor pay, poor job insecurity, demanding jobs, discrimination, lack of promotion, job description and incentive schemes, work in isolation, risk of violence at work, risk of sexual and other forms of harassment	Headaches, disturbed sleep, inability to concentrate, high blood pressure, etc	Good housekeeping, good communication strategies at work,

