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## July 2023 IN TOUCH **EHS Newsletter**



Radiation describes any process in which energy emitted by one body, travels through a medium or through space, and is ultimately absorbed by another body. Radiation can be classified according to the effects it produces on matter: ionising and non-ionising radiations.

Even without technological devices, we are constantly being exposed to radiation from EMFs (electro magnetic fields), even if it as at a low rate. EMF waves are capable of travelling across a wide distance. However, the exact distance travelled by a particular EMF wave is dependent on the source of emission. The most familiar form of electromagnetic (EM) radiation is sunshine, which provides light and heat.

TYPES OF RADIATION

## CONTACT US TO PROVIDE THE FOLLOWING SERVICES

EHS Risk Assessments

FOR YOUR BUSINESS:

- Occupational Hygiene Surveys
- Ergonomics Surveys
- EHS Management System Development and Implementation
- Environmental Monitoring
- Identification of EHS Legal Requirements and Compliance Audits
- Construction EHS Services
- Construction H&S Files
- Internal Auditor Training
- General EHS Training







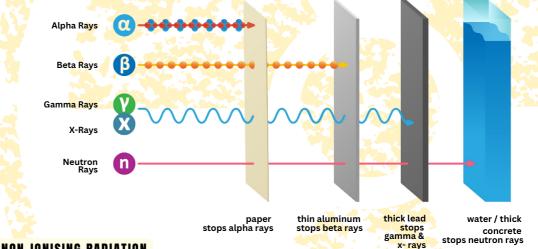
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## Non-lonising (lower frequency EM radiation)

- Ultraviolet (UV)
- Infrared (IR)
- Microwave (MW)
- Radio frequency (RF)
- Extremely low frequency (ELF)

## Ionising (higher frequency EM radiation)

- particulate (alpha, beta, neutrons)
- electromagnetic (x-rays, gamma rays) radiation.



#### NON-IONISING RADIATION



As the wavelength is relatively long, the energy present is too low to ionise atoms which make up matter. The action of non-ionising radiation is to heat cells rather than change their chemical composition.

#### **IONISING RADIATION**



Ionisi<mark>ng ra</mark>diation attacks the body's cells by producing chemical changes in the cell DNA by ionising it (producing free radicals) which leads to abnormal cell growth.

#### THE EFFECTS OF THESE IONISING ATTACKS DEPEND ON THE FOLLOWING FACTORS:

- The size of the dose
- The area or extent of exposure
- The duration of the exposure

Radiation sources are found in a wide range of occupational settings. If radiation is not properly controlled it can be potentially hazardous to the health of workers. There is no way to accurately determine if an area or device is safe from EMF radiation except to test it using an EMF meter.





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## STACKING DO'S & DON'TS What the OHS Act (General Safety Regulation 8) says

No employer shall require or permit the building of stacks which consist of successive tiers, one

on top of another, unless:



the stacking operation is executed by or under the personal supervision of a person with specific knowledge and experience of this type of work; the base is level and capable of sustaining the weight exerted

on it by the stack;

the articles in the lower tiers are capable of sustaining the weight exerted on them by the articles stacked above them;

all the articles which make up any single tier are consistently of the same size, shape and mass;

pallets and containers are in good condition;

any support structure used for the stacking of articles is structurally sound and can support the articles to be stacked on it.

## An employer shall not permit:

- articles to be removed from a stack except from the topmost tier or part of that tier;
- anybody to climb onto or from a stack, except if the stack is stable and the climbing is done with the aid of a ladder or other safe facility or means.

#### An employer shall take steps to ensure that:

- persons engaged in stacking operations do not come within reach of machinery which may endanger their safety;
- stacks that are in danger of collapsing are dismantled immediately in a safe manner;
- the stability of stacks is not endangered by vehicles or other machinery or persons moving past

#### Unless a stack is otherwise supported, an employer shall take steps to ensure that tiers of stacked material consisting of sacks, cases, cartons, tins or similar containers

are secured by laying up articles in a header and stretcher fashion and that corners are securely

are stepped back half the depth of a single container at least every fifth tier or that, alternatively, successive tiers are stepped back by a lesser amount;

Provided that at least the same average angle of inclination to the vertical is achieved and

- provided further that where the containers are of a regular shape and their nature and size are such that the stack will be stable, they may be stacked with the sides of the stack vertical if the total height of the stack does not exceed three times the smaller dimension of the underlying base of the stack;
- Free-standing stacks that are built with the aid of machinery may, with the approval of an Inspector, be built to a height and in a manner permitted by the nature of the containers being stacked, provided that:
  - 1. the stacks are stable and do not overhang;
- 2. the operator of the stacking machinery is rendered safe as regards falling articles.



Slips and falls are one of the most common causes of workplace injuries and can lead to serious injuries such as concussions, broken bones, herniated discs etc.

### THE IMPACT OF THESE INJURIES INCLUDE:

lost productivity

costs to injured workers and their families

replacement employee costs

overtime for existing employees <

increased workers' compensation costs 🞺

#### **SPOT CHECK FOR HAZARDS:**

- Identify cracks and uneven surfaces that may cause slips and falls. Arrange for repairs promptly.
- Check that drain pipes, grate covers and catch basins are not clogged with debris.
- Make sure lighting systems covering parking lots and sidewalks are checked regularly to verify they are working properly. Poor lighting makes it more difficult for employees to see uneven or broken surfaces.
- Check entrance steps and handrails for damage.
- Water tracked indoors or spilled (interior walking surfaces in entrances, reception areas, hallways and stairwells) can be dangerous. Place "wet floor" signs to slow people down as they enter an area. Use water-trapping floor mats to catch excess water.



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