

Factors to Consider Whilst Determining the Risk

Risk depends on the *severity of the harm* and the *likelihood of harm*.

In deciding on the *severity of harm* you have to consider the nature of the harm.

Is it **slightly** harmful? e.g.

- Superficial injuries; minor cuts and bruises; eye irritation from dust
- Nuisance and irritation (e.g. Headaches); ill-health leading to temporary discomfort

Is it **harmful**: e.g.

- Lacerations; burns; concussion; serious sprains; minor fractures;
- Deafness; dermatitis; asthma; work related upper limb disorders; ill-health leading to permanent minor disability

Is it **extremely** harmful? e.g.

- Amputations; major fractures; poisonings; multiple injuries; fatal injuries
- Occupational cancer; other severely like shortening diseases; acute fatal diseases

In deciding on the *likelihood of harm* the adequacy of control measures already implemented and complied with needs to be considered e.g. Permit-to-work systems, exposure limits, specialised equipment. You would then typically consider the following issues in addition to the work activity information, which you uncovered earlier:-

- Number of personnel exposed
- Frequency and duration of exposure to the hazard
- Failure of services e.g. Electricity and water
- Failure of plant and machinery components and safety devices
- Exposure to the elements
- Protection afforded by personal protective equipment and usage rate of personal protective equipment
- Unsafe acts (unintended errors or intentional violations of procedures) by persons, for example, who
 - May not know what the hazards are
 - May not have the knowledge, physical capacity, or skills to do the work
 - Underestimate risks to which they are exposed
 - Underestimate the practicality and utility of safe working methods