

**ESTIMATION OF OCCUPATIONAL RISK**

**=**

**SEVERITY OF DAMAGE**

**+**

**PROBABILITY OF DAMAGE OCCURRING**

## **SEVERITY OF DAMAGE**

**To determine the potential severity of the damage, it should be considered:**

**(a) parts of the body to be affected**

**(b) the nature of the damage**

### **- Slightly harmful**

Superficial damage: small cuts and bruises, irritation of the eyes from dust.

Discomfort and irritation, for example: headache, discomfort

### **- Harmful**

Lacerations, burns, concussions, major sprains, minor fractures.

Deafness, dermatitis, asthma, musculoskeletal disorders, disease leading to minor disability

### **- Extremely harmful**

Amputations, major fractures, poisonings, multiple injuries, fatal injuries.

Cancer and other chronic diseases that severely shorten life

## PROBABILITY OF DAMAGE OCCURRING

**HIGH Probability:** Damage will always or almost always occur

**MEDIUM Probability:** Damage will occur on some occasions

**LOW Probability:** Damage will occur rarely

**RISK LEVEL**  
Extremely

Slightly harmful

Harmful

harmful

**PROBABILITY**

|                             |                              |                               |
|-----------------------------|------------------------------|-------------------------------|
| Trivial risk<br><b>T</b>    | Tolerable risk<br><b>TO</b>  | Moderate risk<br><b>MO</b>    |
| Tolerable risk<br><b>TO</b> | Moderate risk<br><b>MO</b>   | Significant risk<br><b>S</b>  |
| Moderate risk<br><b>MO</b>  | Significant risk<br><b>S</b> | Intolerable risk<br><b>IN</b> |

| Risk             | Action and timing   |
|------------------|---|
| Trivial (T)      | No specific action required   |
| Tolerable (TO)   | <p>There is no need to improve preventive action. However, more cost-effective solutions or improvements that do not entail a significant economic burden should be considered.</p> <p>Regular checks are required to ensure that the effectiveness of control measures is maintained.</p>  |
| Moderate (M)     | <p>Efforts should be made to reduce risk by determining the precise investments. Measures to reduce risk should be implemented within a given period.</p> <p>When moderate risk is associated with extremely harmful consequences, further action will be required to establish, more precisely, the probability of harm as a basis for determining the need for improvement of control measures.</p> |
| Significant (S)  | <p>Work should not be started until the risk has been reduced.</p> <p>Considerable resources may be required to control the risk. When the risk corresponds to a work that is being done, the problem should be remedied in a shorter time than the moderate risks.</p>   |
| Intolerable (IN) | <p>You should not start or continue the work until the risk is reduced. If it is not possible to reduce the risk, even with unlimited resources, work should be prohibited.</p>   |