



Maharaja Agrasen Institute Of Technology

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Batch - Cse "C"

Roll No. - "C-50"

Topic - "Defining Safety And Understanding Risks"

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A construction worker wearing a white hard hat and safety glasses, looking down at a large sheet of blueprints. He is wearing an orange and grey safety vest over a dark shirt. The background is dark, making the worker and his blueprints stand out.

Defining Safety And Understanding Risks

It is widely accepted that safety standards are important in every field of work. This is regarded as the process of recognizing potential threats, measuring the risk levels that may be inherent in those threats, and developing appropriate plans to reduce those threats to the clientele.

What is Safety?

Protecting People

Safety pertains to the protection of people's health and physical condition at the workplace.

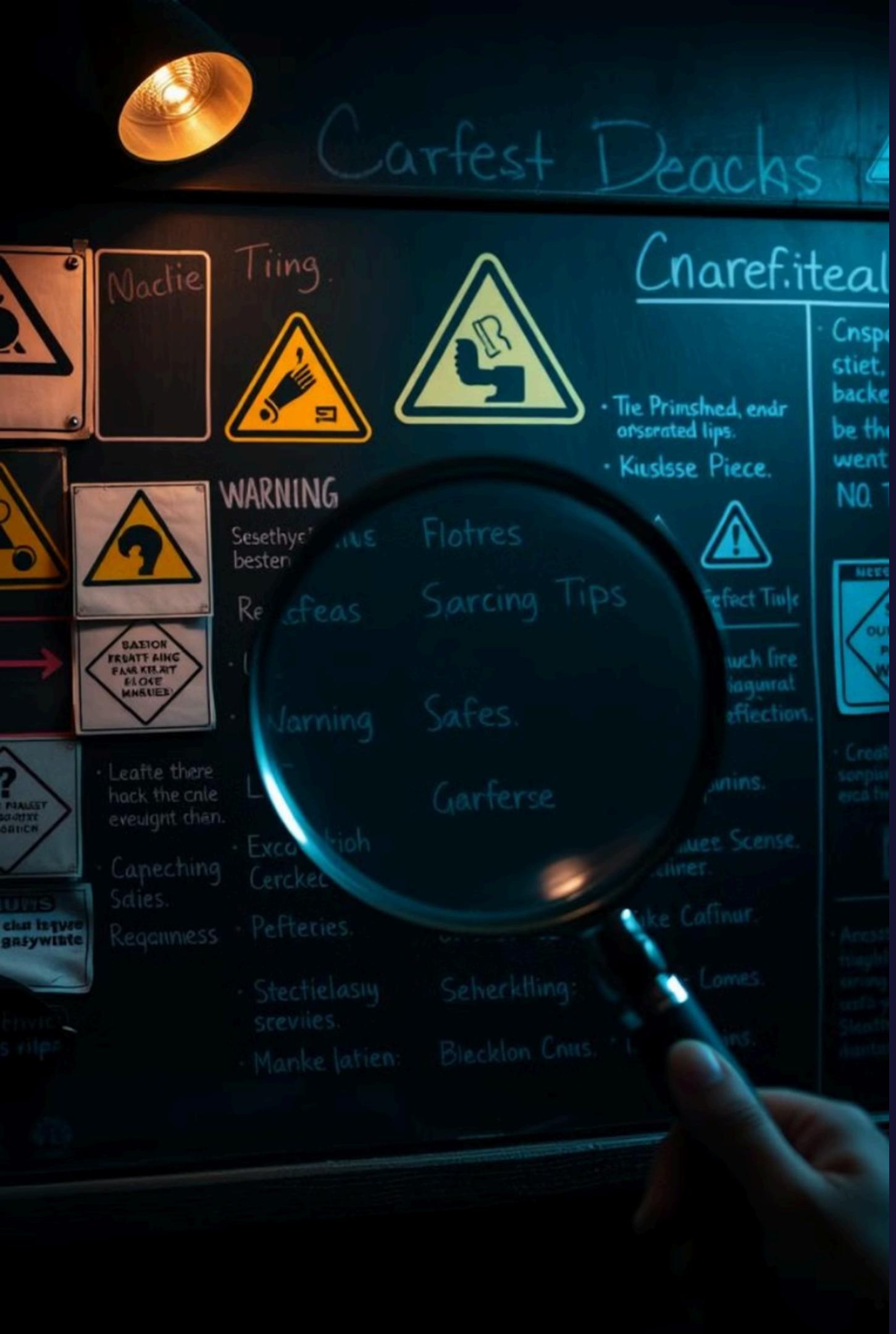
Preventing Incidents

It includes efforts aimed at detecting, evaluating, and controlling those factors that may cause accidents or injuries to people.

Promoting Well-being

Safety also implies encouraging the adoption of such practices as awareness and training to enable a safe and healthy workplace.





The Role of Risk in Safety

1

Identifying Risks

The initial step is recognizing the hazards and dangers that exist.

2

Analyzing Risks

Identifying the likelihood of potential risks and their impact to assist in prioritizing activities to be undertaken in risk management.

3

Mitigating Risks

Putting into practice the relevant control measures and safety procedures to avert risk occurrence or lessen the effects of the risk.

Identifying Potential Hazards

Physical Hazards

Possible injury sources, such as falling items, slip and trip hazards, or equipment failure.

Health Hazards

Dangerous substances, stress-developing postures, or any other working elements that can be responsible for deteriorating the worker's health.

Behavioral Hazards

Also, human factors which include fatigue, distraction, or non-adherence to safety procedures may relate to the events.

Assessing the Likelihood and Impact of Risks

1 Probability Analysis

Assessing the possibility of a risk factor occurring through the application of published works, benchmarks or experience in the industry, standards, and expert knowledge.

2 Consequence Evaluation

Estimating the potential sufficiency of injuries, damages to properties or other undesired situations that may follow if the risk event undertakes.

3 Risk Prioritization

Arranging and classifying risks based on the qualitative degree of occurrence and degree of impact of the risk event in order to ensure that attention is directed to the most reasonable issues that require attention.

May require treatment	May requires prompt treatment	May be urgent - Function could be terminated until treated
May be acceptable but not ideal	May require treatment	May requires prompt treatment
May be acceptable	May be acceptable but not ideal	May require treatment



Implementing Risk Mitigation Strategies

1

Elimination

A measure taken to eliminate a hazard and therefore, eliminate the risk of its occurrence.

2

Substitution

To use physical barriers or change risk exposure through equipment modification.

3

Engineering Controls

Implementing physical barriers or modifications to equipment to reduce risk exposure.

Conclusion: Embracing a Proactive Approach to Safety

Safety management is imperative for an organization that seeks to achieve high performance since, through safety management, organizations are able to reduce or nullify risks by defining safety, knowing what the risks are, and implementing a safety management system. Safety should not always be considered as the end goal, but rather as an integral part of a strategy that will support the organization in achieving long-term growth and sustainability.

