Hazard Identification — study guide

You cannot control a hazard you have not seen. Hazard identification is the first, and most important, step in managing risk on board. This guide covers the hazards, the tools and the human factors behind incidents.[1]

What hazard identification is

Hazard identification, often referred to as **HAZID**, is "the process of identifying hazards and evaluating possible hazardous scenarios". Poor hazard identification is one of the leading causes of incidents in the workplace: effectively identifying potential hazards and communicating clearly about how to manage them significantly reduces the chance of incidents occurring.

Types of hazard

Occupational hazards include falls from height, slips, trips and falls, and dropped objects. **Major accident hazards** include failure of life-support systems, serious structural damage, and fire or explosion. Common hazard groups found in the maritime industry include mechanical, noise and hazardous substances. As a basic example, pressure is the "amount of force applied over a surface area".

Ranking and reducing risk

After identifying all potential hazards, the risk they pose must be **ranked** — a **risk matrix** is used to rank risk. When assessing hazard potential, the key aim is to bring the risk down to **As Low As Reasonably Practicable (ALARP)**.

Control measures

Control measures used to mitigate the risk from potential hazards include risk assessments, work procedures and toolbox talks.

Human error

Many incidents begin with human error: complacency due to repeated routine tasks, cutting corners to get a job finished quickly, not following or understanding work procedures, and not wearing the correct PPE. Good hazard identification and clear communication are the antidote.

Key facts to remember

- HAZID = identifying hazards and evaluating possible hazardous scenarios.
- Poor hazard identification is a leading cause of workplace incidents; clear communication reduces them.
- Occupational hazards: falls from height, slips/trips/falls, dropped objects.
- Major accident hazards: life-support failure, serious structural damage, fire/explosion.

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- Rank risk with a risk matrix; reduce risk to ALARP.
- Controls: risk assessments, work procedures, toolbox talks.
- Human error: complacency, cutting corners, not following procedures, missing PPE.

Sources

1. ISM Code (SOLAS Chapter IX) — hazard identification, risk assessment and safety management.

2. Code of Safe Working Practices for Merchant Seafarers (COSWP) — Maritime and Coastguard Agency (MCA) (hazard identification and control).