

FATIGUE FACTORS WITHIN MARINE OPERATIONS

Human error resulting from fatigue is now widely perceived as the cause of numerous marine casualties including one of the worst environmental disasters the EXXON VALDEZ.

Poor quality sleep is a major issue contributing to fatigue.

The quality of sleep is influenced by the following factors, some in our control some not;

Environmental factors

The vessels violent movement, heavy vibration or noise, cyclones or rough waters, extreme conditions, or poor accommodation

Operational factors

During limited fishing seasons vessels work continuously, causing long working hours or broken rest also disruption caused by machinery, or loading and unloading vessels.

Food and consumption of chemicals

Medication, coffee or alcohol intake causes the human body to 'burn off' alcohol during sleep causing the body to work during sleep hence tiredness (hangover) from poor sleep.

Sleep disorders

Insomnia or sleep apnoea interrupts sleep or causes a person to wake up.

Each individual has a **biological clock** which regulates the **body's circadian rhythm**. Problems occur when they are out of sync. In essence, the internal clock wakes a person up when they need to sleep and puts them to sleep when they need to be awake.

Psychological factors

Stress occurs when a person is confronted with an environment which poses a threat or demand and the individual becomes aware of his/her inability or difficulty to cope with the environment a feeling of being overwhelmed. This can result in reduced work performance and health problems. Stress can be caused by a number of things already mentioned including personal problems or on-board interpersonal relationships.

To read the full IMO Guidance document refer to www.nautinst.org/fatigue

Further reference:

Safe Work Australia

'Preventing and managing Fatigue in the Workplace' Draft Code of Practice

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The negative effects of fatigue present considerable risk. Fatigue is a problem 24 hours a day.

Because shipping is a very technical and specialised industry, these negative effects are exponentially increased requiring constant alertness and intense concentration. This again increases fatigue and therefore, risk.

Fatigue is known to affect a person's performance detrimentally and may reduce individual and crew effectiveness and efficiency, decrease productivity, lower standards of work, and lead to errors which pose a hazard to vessel safety.

It is a **myth** fatigue can be prevented by various characteristics such as personality, intelligence, education, training, skills, motivation, physical attributes or practise.

A seafarer is a captive of the work environment, spending three to six months living away from home.

Whilst on board there is no clear separation between work and recreation.

Crews can be comprised of various nationalities, backgrounds and personalities, required to work and live together for long periods of time frequently in close quarters, this can lead to additional stress.