FATIGUE IN SEAFARERS

YOUR HEALTH AT SEA 4

Merchant Vessels
Fishing vessels
Yachts
What is fatigue?

One dictionary defines “Fatigue” as follows;
1. Physical or mental weariness resulting from exertion
2. Something such as tiring effort or activity, that causes weariness

It is difficult to explain fatigue in one definitive statement. What is clear, however, is that anyone can be subject to fatigue given exposure to certain factors. It is probably easier to understand how fatigue manifests itself and the consequential effects on our ability to perform both physically and mentally.

This leaflet aims to explain what factors can lead to fatigue, how to identify the signs of fatigue and, more importantly, how to go about resolving the problem of fatigue and thus assure the safety of the seafarer and the continued safe operation of the ship.

What causes fatigue?

Following a recent study commissioned by the MCA and supported by both the Health and Safety Executive (HSE) and Nautilus UK, the following factors were identified as contributing to fatigue:

- **Shortage of sleep / poor quality sleep**
  restlessness, disturbed sleep, inability to relax fully, rough weather restricting sleep.

- **Negative environmental factors**
  such as noise and vibration.

- **High job demands / high stress**
  taking on other jobs outside normal duties such as paperwork.

- **Frequent port turnarounds**
  which interrupt standard working patterns.

- **Adverse weather conditions**
  fighting against the elements both the cold and wet or intense heat.

- **Consistently working more than 12 hrs a day**
  There is a demonstrable link between both the number of hours we work and sleep deprivation.
What are the physical effects of fatigue?

Fatigue can show itself in a number of different ways in terms of both our physical and mental ability.

Common indicators are:

- **Increasingly frequent lapses in performance** – making obvious mistakes or omissions
- **Slower reaction times and a reduced state of alertness** – being unable to anticipate potential problems and to take appropriate preventative action.
- **Memory problems** – inability to retain or take on any new information, concentration span is also notably reduced. A fatigued seafarer may find themselves completing tasks out of order, or in some cases overlooking tasks completely.
- **Cutting corners to get the job done**
- **Lack of concentration** – reduced awareness and alertness to detail or a potential situation arising which may compromise safety. With the inability to think logically, you may find yourself taking unusual risks, with decisions being based on poor judgement of distance, time, speed or even incorrect calculations.
- **Subjective desire to rest and an aversion to further work with an objective decrease in performance** – responding slowly to situations. Experiencing a constant desire to rest and spend as little time on the task as possible, in favour of seeking rest and relaxation.
Why should it matter if I’m fatigued?

“Reduced safety due to fatigue will increase the risk of accidents that may lead to loss of life, environmental damage and huge economic cost.”

Seafarer Fatigue: The Cardiff Research Programme

Fatigue is a result of a cumulative set of factors. For example; if an individual is deprived of sleep and this is left unresolved without suitable rest, then it can combine with other fatigue-inducing factors such as long working hours, and perhaps also adverse weather conditions, to cause a state of fatigue.

In transport many jobs are safety-critical and there is likely to be a strong association between risk factors for fatigue and reduced safety. Not only may this expose an individual to an increased risk of injury, but it may also put others at risk and affect your general state of health and overall well-being. In terms of the overall effect on the ship’s operation, fatigue may result in an accident or in a greater risk of collision or environmental damage due to poorer performance.
How can I tell if I’m suffering with fatigue?

Here are a few questions to ask yourself:

**MOOD**
- Do I feel stressed?
- Am I more irritable than usual?
- Am I easily frustrated by tasks?
- Do I feel like I just can’t be bothered and don’t want to co-operate with others?

**ALERTNESS / SLEEPINESS**
- Do I feel tired and yawn all the time?
- Do I fall asleep for small amounts of time?
- Do I behave automatically to save thinking?
- Am I having difficulty concentrating?
- Am I forgetting to do things more and more?
- Am I finding it increasingly difficult to perform more than one task at once?
What can I do if I’m suffering from fatigue?

**Practical steps to resolve a temporary problem would be to:**

- Alert your head of department or responsible officer
- Take a break
- Have a nap (40 mins if work will resume shortly after waking). A longer nap (about 2 hours) is better. This should also allow for a 30 minute “wake up” phase.
- Have a drink – water is best, avoid caffeine (if within 4 hours of a sleep period)
- Have something to eat (not too heavy)

**For a longer term problem:**

- Discuss your work schedule with your Manager.
- Try to ensure you are well rested before starting work.
- Try to identify with your Manager any other reasons for your fatigue such as environmental factors.
- Agree with your Manager what actions you can both take to alleviate your fatigue

Sleep well... zzzzzzzz
Further reading

- Merchant Shipping (Hours of Work) Regulations 2002
- Merchant Shipping Notice MSN 1767 Hours of Work, Safe Manning & Watchkeeping revised provisions from the 1 September 2002
- Imo Resolution A890(21) as amended by A955(23)
- Merchant Shipping & Fishing Vessels (Health and Safety at Work Regulations) 1997
- STCW 95

See also the leaflet Safety Management at Sea 6 “Managing Fatigue in Seafarers” (MCA/182)
The leaflet contains notes on good practice which are not compulsory, but which you may find helpful in considering what you need to do.

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