

Energy UK Guide to: Fatigue

A guide to getting enough sleep and avoiding the risks of working whilst tired.



Introduction

What do we mean by fatigue?

How much sleep do we need?

What happens when we sleep?

What about shift work and overtime?

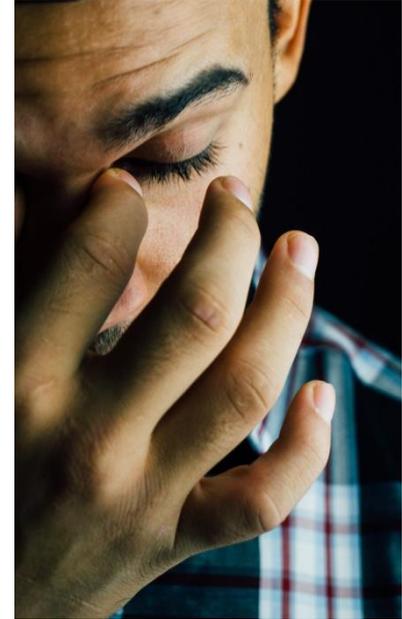
If you're having trouble sleeping.

Introduction

Since the advent of electric lights we have changed our sleep patterns, often to the detriment of our health.

- Do you think you got enough sleep in the past week?
- Can you recall the last time you woke up without an alarm clock, feeling refreshed, not needing caffeine?

If the answer to either of these questions is 'no', you are not alone – two-thirds of adults in all developed countries fail to obtain the recommended eight hours of nightly sleep!



What do we mean by fatigue?

Fatigue is generally understood to be a feeling of tiredness and being unable to perform work effectively.

A fatigued person will be less alert, less able to process information, will have slower reaction times and appear less interested than a person who is fully rested.

- Acute Fatigue
- Chronic Fatigue
- Observable signs of fatigue

Individual factors including excessive exercise, medication and stress can all affect us differently and have varying effects of fatigue levels.



How much sleep do we need?

The World Health Organisation and the NHS both state an average eight hours of sleep per night for adults.

Did you know that sleep deprivation can also have profound consequences on your physical health?

- After several sleepless nights, the mental effects become more serious.
 - Your brain will fog, making it difficult to concentrate and make decisions.
 - You'll start to feel down, and may fall asleep during the day.
 - Your risk of injury and accidents at home, work and on the road increases.
- If it continues, lack of sleep can affect your overall health and make you prone to serious medical conditions, such as: obesity, heart disease, high blood pressure and diabetes.

As a general rule, if you wake up tired and spend the day longing for a chance to have a nap, it's likely that you're not getting enough sleep.

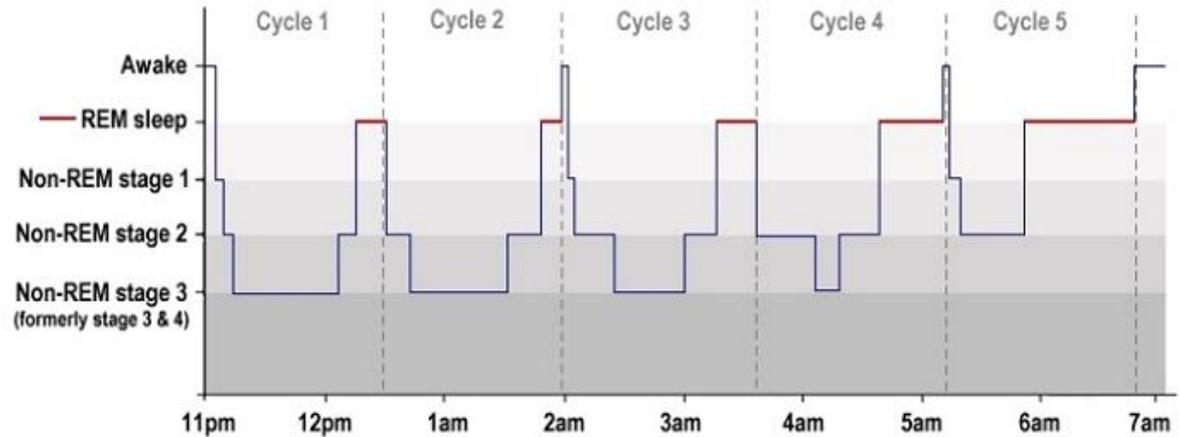


**World Health Organisation (WHO)*

What happens when we sleep?

Sleep is essential for our bodies to repair themselves and for our brains to run their 'maintenance routines' laying down long-term memories and consolidating learning.

- Non-REM stage 1 – Lasts around 5-10 minutes.
- Non-REM stage 2 – Lasts around 20 minutes.
- Non-REM stage 3 - The duration of stage 3 sleep reduces with each successive sleep cycle during the night.
- REM sleep – The duration of REM sleep increases with each successive sleep cycle.



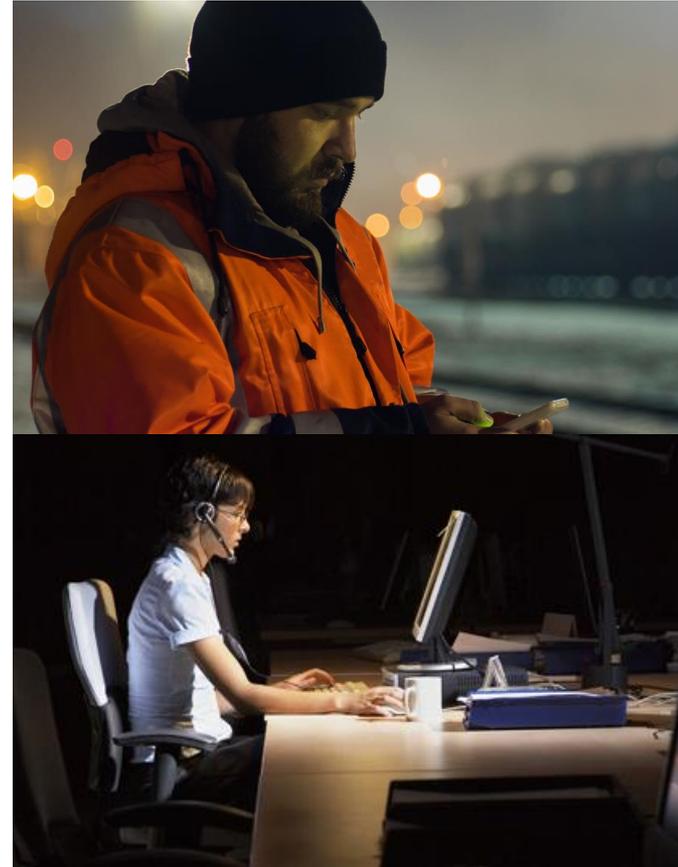
Each sleep cycle lasts around 90-110 minutes.

Ideally we should normally have five sleep cycles per night.

What about shift work and overtime?

Our bodies have adapted to sleeping at night and being awake during the day. Forcing ourselves to be awake at night and to sleep during the day results in greater levels of fatigue.

- Many of our physical and mental processes are governed by **Circadian Rhythms**.
- Any disruption to these is likely to increase fatigue. Daytime sleep is of shorter duration and less restorative than night time sleep.
- There is a significant amount of guidance on the HSE website (<http://www.hse.gov.uk/humanfactors/topics/fatigue.htm>) relating to good practice for shift work.
- Key features focus on giving workers sufficient time to rest and recover rather than simply focussing on time worked.



If you're having trouble sleeping.

Poor sleep habits are most likely to be the cause.

Top tips for better, more refreshing sleep:

- Reduce the temperature.
- Make sure it's really dark.
- Transition towards sleep by relaxing before bedtime.
- Disconnect
- Eat earlier
- Reduce caffeine
- Maintain a regular routine
- Exercise

If you can't sleep, don't lie there worrying about it! Get up and do something you find relaxing until you feel sleepy again.



External references and other useful links

Topic	Website	Website address
Sleep and Tiredness	NHS	https://www.nhs.uk/live-well/sleep-and-tiredness/
Tips to beat insomnia	NHS	https://www.nhs.uk/live-well/sleep-and-tiredness/10-tips-to-beat-insomnia/
30 day plan to better sleep	The Sleep Council	https://sleepcouncil.org.uk/30-day-better-sleep-plan/
Human Factors: Fatigue	HSE	http://www.hse.gov.uk/humanfactors/topics/fatigue.htm
Managing Shift Work: H&S guidance (HSG256)	HSE	http://www.hse.gov.uk/pubns/books/hsg256.htm

Further reading	Author	ISBN
Why We Sleep – The New Science of Sleep and Dreams	Matthew Walker	978-0-141-98376-9
Sleep – A very short introduction	Steven W. Lockley and Russell G. Foster	978-0-199-58785-8
Circadian Rhythms – A very short introduction	Russell G. Foster and Leon Kreitzman	978-0-198-71768-3