Module 3:

Causes, effects and warning signs of fatigue
Learning objectives

At the end of 'Module 3 – Causes, effects and warning signs of fatigue' you will be able to:

1. Describe the key causes of fatigue
2. Identify the effects and warning signs of fatigue
Key causes of fatigue

Knowing the **causes** of fatigue is important in helping to **manage** your own fatigue. Fatigue is not only caused by a lack of sleep, there are **many factors** that contribute to a build up of fatigue.
Time of day factors

Circadian rhythms

‘The Body Clock’

24 hour cycle

Internally regulated

• Eating habits
• Sleep patterns
• Moods
• Energy levels
• Other biological functions

• Temperature
• Sunlight

Shiftwork/working nights → Can disrupt natural rhythms → Causes fatigue
Sleep factors

Between 7 and 9 hours of sleep in every 24 hour period

Deep sleep
- Maintain good health
- Recharge energy
- Prevent illness

Lack of Sleep
- Working long hours
- Shift work
- Insomnia

Poor quality sleep
- Disruption to natural rhythms
- Daytime light and noise
- Health complaints
- Environmental conditions

Regular
- Good quality sleep
- Prevent a build up of fatigue

Remember, sleep does not have to be taken all at once. Short naps can help you catch up on sleep and improve performance.
Sleep debt

Loss of good quality sleep over time builds up your levels of fatigue. As you continue to operate on an insufficient amount and quality of sleep, the more fatigued you become.

Your ability to recognise your own signs of fatigue is also impaired.

Scale of fatigue

<table>
<thead>
<tr>
<th>Number of days of inadequate sleep</th>
<th>4 hours</th>
<th>6 hours</th>
<th>3 hours</th>
<th>5 hours</th>
<th>6 hours</th>
</tr>
</thead>
</table>

Dangerously fatigued
Health factors

Another cause of fatigue is a poor state of health. Maintaining good health - both mental and physical – will ensure you sleep well, and assists the body to cope with the demands of modern life.

Maintaining balanced health includes:

- Getting sufficient:
  - Peaceful sleep
  - Nutritious food
  - Drinking water
  - Regular exercise
  - Time for leisure activities

Limiting:
- Alcohol
- Cigarettes
- Drugs
- Excessive use of caffeine

Alcohol, cigarettes and stimulants are not recommended for managing fatigue, as they:
- reduce the quality of your sleep
- produce negative side effects
- cause other health problems

Coffee, chocolate and caffeinated drinks:
- can provide a short term boost

Excessive amounts can make you more tired by:
- preventing you from sleeping
- disturbing your sleep when you’re on a break

Caffeine also contributes to dehydration.
Other personal factors

Fatigue is not only related to your physical health, and can be caused by tension associated with **personal circumstances**. Preoccupation with emotional issues can lead to a sense of being 'tied up in knots' which can cause you to become fatigued more quickly.

Personal issues

- Family responsibilities
- Close relationships
- Illness or injury
- Grief or emotional stress
- Stressful work situations
- Working long hours/multiple jobs
- Financial pressures
- Insufficient time for leisure activities

💡 There are times when you may need to seek **professional help** or guidance, to assist with some of these issues.
Work factors

There are a number of **work-related factors** that can contribute to fatigue. These can be broadly broken down into **four** categories.

**Workload and scheduling**
- Duration of shifts
- Shift patterns
- Frequency and duration of breaks
- Stress caused by tight timeframes
- Time of day

**Type of work**
- Dull or repetitive work
- Work that is physically demanding
- Trips that are predictable
- Tasks that lack challenge or stimulation

**Work environment**
- Feeling confident in your ability to perform your job
- Support from colleagues and the organisation
- Working alone for long periods
- Weather conditions
- Ergonomics, temperature, lighting, and ventilation
- Excessive noise/persistent rhythmic vibration

**Preparation**
- Efficient cargo loading
- Pre-departure checks to avoid mechanical delays
- Time to review the route, local weather, road closures

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Effects and warning signs

The effects and warning signs of fatigue can vary from one person to the next. Click each category to learn more.

Physical
Temperament/Disposition
Cognitive/Thought processes
Effects and warning signs

The effects and warning signs of fatigue can vary from one person to the next. Click each category to learn more.

**Physical**
- Poor reflexes
- Blurred vision
- Headaches
- Nausea or vomiting
- Feeling dizzy or fainting
- Excessive yawnning/ blinking
- Lack of energy or lethargy
- Feeling tired upon waking up
- Drowsiness

**Temperament/Disposition**
- Micro-sleeps
- Unexplained muscle pain
- Weakness of the limbs
- Slurred speech
- Difficulty breathing
- Chest pain
- Elevated heart rate
- Frequent colds and infections

It is important that you are aware of and on the lookout for the physical warning signs of fatigue in yourself and others. As a person becomes more fatigued, their ability to recognise these signs becomes impaired.
Effects and warning signs

The effects and warning signs of fatigue can vary from one person to the next.

Click each category to learn more.

- Irritability or moodiness
- Quick temper
- Impatience
- Being 'on edge'
- Anxiety or panic
- Stress
- Feeling overwhelmed/helpless
- Loss of motivation
- Depression
- Being 'spaced-out'
- Lack of sense of humour
- Making reckless decisions

If you experience fatigue frequently, it can be difficult to distinguish between your usual temperament, and the behaviour that arises from fatigue.
Effects and warning signs

The effects and warning signs of fatigue can vary from one person to the next.

Click each category to learn more.

- Physical
- Temperament/Disposition

Cognitive/Thought processes
- Difficulty in solving problems
- Difficulty processing information
- Inability to concentrate
- Being easily distracted
- Difficulty following instructions
- Poor memory and recall
- Daydreaming
- Absence of mind or 'mind blanks'
- Being vague or distant
- Impaired judgement
- Inability to make decisions
- Inability to make connections or register information

The effects of fatigue accumulate over time, so it is important to recognise the warning signs that let you know that fatigue is creeping up on you, and take appropriate action.
Common warning signs - Checklist

It is important that you are aware of and on the look out for the warning signs of fatigue in yourself and others.

As a person becomes more fatigued, their ability to recognise these signs becomes impaired and it may be up to you to recognise that they are fatigued.

This list is not exhaustive.

There may be other signs unique to different people.
# Your personal warning signs - Checklist

Select each of the warning signs that **you experience**, then click 'Print' to use the page as a **Personal Warning Signs Checklist**.

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<th>Cognitive / Thought Processes</th>
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Print your checklist
Summary

Congratulations! You have now completed 'Module 3 – Causes, effects and warning signs of fatigue'.

You should now be able to:

- Describe the key causes of fatigue
- Identify the effects and warning signs of fatigue

You can now return to the home page and move on to the next module which will look at workplace procedures and practices to manage fatigue.