

# GUIDE TO FATIGUE MANAGEMENT FOR FLEET



**SHELL**  
LUBRICANT SOLUTIONS





# UNDERSTANDING FATIGUE

Increased pressure and demands due to the COVID-19 outbreak may lead to longer working hours for both you and your team. This may then cause fatigue, which is unhealthy and can be dangerous.



## What is fatigue?

Fatigue is drowsiness or lack of alertness caused by lack of sleep. It stops us from performing at our best, affecting everything from our reactions and decision-making, to our mood and general well-being.

It's particularly dangerous for people who drive for work as it's a big contributor to road accidents.



# CAUSES OF FATIGUE

Fatigue can be caused by all kinds of factors – from our health to our working patterns – which may then put drivers at an increased risk of a fatigue-related crash.

The COVID-19 outbreak may also cause additional stress. If we are anxious about our health or well-being, or concerned for the safety of our loved ones, this may reduce the quality of our sleep.

Understanding the factors that increase the risk of fatigue will help you assess whether your drivers are in a fit state to drive safely.



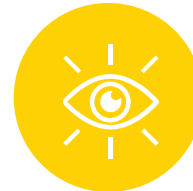
## 01

### General factors



#### Time of day

The circadian rhythm (also known as body clock) drives us to be asleep during the night, and awake during the day. Specifically, the times of day that have an increase in sleepiness levels are between 02:00 and 05:00, and post-lunch between 13:00 and 16:00. It's difficult to sleep during the day when our body clock is telling us to be awake.



#### The length of time we have been awake

The longer we have been awake, the more we need to sleep, and the more we sleep, the more able we are to be awake.



#### The amount and quality of sleep you obtain

What suits one person may not suit another. Most adults need between seven and nine hours per 24-hour period. The Prior Sleep Wake Model (PSWM) suggests, as a minimum, five hours' of sleep in a 24-hour period and 12 hours' of sleep in a 48-hour period. However, having less sleep than you need is only sustainable for short periods.

# 02



## Type of task

The effects of fatigue can be more evident on tasks that are monotonous, repetitive or demand continuous concentration. Human performance at low levels of workload is not particularly good. Work underload can impair attention and concentration, induce boredom and create a lack of motivation. This can reduce alertness, increase distraction and the potential for driver errors (e.g. missed stop signals).

As task demands or workload are increased, the standard of our performance improves until an optimum level of workload and performance is reached.

## Health factors



### Sleep and health problems can prevent good quality sleep

Medication, including prescribed drugs (including some anti-depressants) and over-the-counter cold and flu remedies, painkillers and travel sickness tablets can cause drowsiness and impair driver alertness. The packaging of any medication taken should always be checked before driving to make sure alertness is not affected. Anyone taking medication should check the side effects with their doctor or pharmacist.

# 03

## Work-related factors



### Time on task

The length of time spent on work-related activities (driving or otherwise) increases a driver's exposure to fatigue risks on the road. Many fatigue-related accidents occur after long working hours or on journeys home after long shifts, particularly night shifts.

Without sufficient opportunity for regular, good quality rest breaks during work and sufficient recovery between work periods, fatigue levels will accumulate and impair driving performance. The effects will be even more noticeable if driving during the natural dip in alertness levels. This is one reason why so many crashes occur within two hours of driving time.



Any increase in workload after this point will impair performance. This can be due to having too many tasks to complete in the available time and a driver rushing between jobs to get the work done. At extremely high levels of workload, important information may be missed (e.g. speed limits, motorway exits). This is why drivers need to adhere to the maximum number of driving hours. They are also strongly encouraged to speak up if they are unfit to work due to fatigue.

With increased time and workload pressures during COVID-19, these risks may become even more pronounced.

## Indicators of fatigue

Your drivers need to know the signs of fatigue. Here are some important things to look out for:



Decreased communication



Performance deterioration



Poor concentration / easy distraction



Poor cognitive assimilation and memory



Poor mood / inappropriate behaviour



Greater risk-taking behaviour



Inability to make necessary adjustments



Increased intake of caffeine / energy drinks



Increased sickness / sickness absence

## THE IMPACT OF FATIGUE

Fatigue is a threat to health, safety and fleet performance.



## Fatigue effects:



### Mental Health

It can make you forgetful, distracted and moody



### Physical Health

It affects everything from your blood sugar levels and weight to your immune system



### General well-being

It prevents us from enjoying a good quality of life



### Personal and Public Safety

It reduces awareness and dulls decision-making



## Drowsy driving

If a driver has not been able to get the sleep they need, they will experience 'drowsy driving'. This means feeling sleepy, but not actually being asleep. It can cause you to drift in and out of sleep without any awareness of having done so. The brief, involuntary episodes are known as microsleeps. They can last several seconds and typically have very severe consequences.

### How drowsiness affects driving

Loss of alertness is an early sign of fatigue. This can affect everything from your vigilance and reaction times to your judgement of your own fatigue levels.

### How extreme these symptoms are will depend on:

- The amount of sleep obtained
- The quality of sleep
- The extent to which the sleep obtained coincides with the normal sleep/wake expectations of the internal body clock
- The conscious effort on the part of a driver to obtain sufficient sleep

### A simple solution

Drivers need to understand that the best solution for fatigue is sleep. We recommend pulling over to a safe spot to take a power nap of 20-30 minutes maximum, until you can stop and get a full night's rest. Remember to set an alarm so that you don't fall into a deep sleep.

## Symptoms of drowsiness



Difficulty concentrating



Repeated yawning



Eyes begin to roll



Neck muscles relax (head dropping)



Heavy eyelids/ tired eyes



Restlessness



Boredom

## Driving performance

- Poor speed control
- Increased drifting within a lane, crossing the road centre line, late corrections
- Slower reaction time to braking lights and traffic signals
- Poor avoidance of hazards
- Poor steering control



# TAKE ACTION ON FATIGUE

## 3 steps to tackling fatigue in your team

### 01

#### Provide the right culture and environment

- Embed sleep and recovery into your organisation's health and well-being strategy
- Ensure working environments are comfortable and safe – e.g. well-lit, well-ventilated and regularly maintained
- Make sure vehicles are well-maintained so they are reliable and safe
- Ensure working conditions comply with HSE and employment regulations
- Make sure there are enough drivers to cover work schedules while maintaining required safety standards
- Be aware of drivers who swap shifts among themselves and the impact this can have on working hours
- Create quiet spaces where employees can switch off completely during downtime

Every fleet is different, but there are some key areas where you can focus your efforts and reduce the risk of fatigue becoming a problem.

Here's a range of fatigue-related advice to help you on your journey to a safer, happier fleet during COVID-19.





## 02 Engage your team

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- Inform your employees that you recognise the impact of sleep deprivation
- Consult them about their sleep and any problems they experience with getting the right amount and quality of sleep
- Work with them to create shifts/patterns that allow for recovery
- Lighten the load of employees who are overstretched or stressed – sometimes job re-design may be necessary
- Appoint workplace champions responsible for promoting good sleep patterns
- Empower line managers to intervene when necessary and work with individual team members to address fatigue issues



# 03

## Provide education and support

- Identify external resources you can use to support sleep and recovery among your employees (please refer to the educational material over the page as a starting point)
- Make sure your employees understand the impact of fatigue and the importance of being well-rested
- Signpost the team to information that will help with lifestyle changes and directly tackling fatigue
- Hold formal training sessions highlighting the issues surrounding fatigue and the action employees can take
- Where appropriate, refer an employee to Occupational Health or your Employee Assistance Programme if you have one
- Where fatigue-related symptoms persist, encourage the employee to seek professional help, for example through your health provider

Engaged drivers deliver:

- 10% increase in customer satisfaction\*
- 21% increase in productivity\*
- 22% increase in profitability\*

\*[www.truckinginfo.com/channel/drivers/article/story/2015/09/how-to-build-an-engaged-driver-workforce.aspx](http://www.truckinginfo.com/channel/drivers/article/story/2015/09/how-to-build-an-engaged-driver-workforce.aspx)



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To learn more about fatigue and sleep and the many other ways we can help your fleet get where it needs to go, please speak to your Shell Account Manager or visit [shell.com/](https://www.shell.com/)