

Health & Safety Guidance



Fatigue at Work

The Working Time Regulations are the main serious attempt to regulate working hours in the UK and address the issues arising from fatigue at work and other issues stemming from long hours. They give:

- the right to at least 4 weeks (28 days) in paid holidays each year;
- rest breaks at work;
- rest of at least 11 hours in any 24 hours;
- restrictions on excessive night work;
- a day off after a week's work; and
- the right to work no more than 48 hours per week.

What is fatigue?

Fatigue is usually defined as the decline in mental and/or physical performance that results from prolonged exertion, sleep loss or disruption of the internal clock. The word "fatigue" is usually used to refer to a more chronic (long-term) condition than just sleepiness or acute fatigue which is generally caused by not enough proper, restful sleep, or a lack of stimulation. Much of the discussion about fatigue at work is related to shiftwork and shift systems. But, fatigue is not just associated with shift working, and can be a product of long working hours in general.

"A systematic approach to assessing and managing the risks associated with shift work"
from: HSG256 Managing shiftwork - Health and safety guidance HSE 2006

Consider the risks of shiftwork and the benefits of effective management.	<ul style="list-style-type: none">■ What are the undesirable effects of shiftwork?■ Consider the costs and benefits of effective management of shiftworking arrangements
Establish systems to manage the risks of shiftwork.	<ul style="list-style-type: none">■ Seek management commitment to control the risks of shiftwork■ Identify individuals responsible for shiftworking arrangements■ Involve safety representatives and workers
Assess the risks associated with shiftwork in your workplace.	<ul style="list-style-type: none">■ Consider the risks that workers may be exposed to■ Establish who might be harmed by shiftwork■ Consult workers and their safety representatives
Take action to reduce these risks	<ul style="list-style-type: none">■ Assess how severe the risks are and identify where improvements need to be made■ Improve the shift-work schedule■ Improve the workplace environment■ Apply good practice guidelines
Check and review your shiftwork arrangements regularly	<ul style="list-style-type: none">■ Implement a system for early reporting of problems associated with shift work■ Monitor alterations to shift-work schedules and/or work conditions■ Periodically review the effectiveness of your shiftworking arrangements

Long hours and accidents

In the transport sector it is estimated that 20% of road accidents are a result of fatigue, and there are similar concerns in sectors like construction, rail, aviation and shipping. A Unite survey of 13,500 Unite members operating in passenger transport, lorry driving and the construction sectors about excessive hours found that three quarters of the workers surveyed were suffering physical health problems due to long hours, while over half of respondents said that excessive hours were damaging their mental health. 73-80% of respondents said that their family life and relationships had been damaged due to their working practices. A survey of 4,000 Unite HGV drivers also found that almost 30% had fallen asleep at the wheel. There are several sets of rules around [Drivers Hours](#).

ETF Study

A survey of drivers in 28 European countries by the [European Transport Workers Federation](#) (ETF), found that two thirds of professional drivers regularly feel fatigued (60 per cent of lorry drivers and 66 per cent of bus and coach drivers). Furthermore 30 per cent of lorry drivers and 24 per cent of bus and coach drivers have fallen asleep whilst driving at least once in the last year. Policy recommendations from the ETF to tackle driver fatigue include:

- Respect for working a 40 hour week,
- Ensuring that all working time is fully recorded,
- Breaks are respected and not interrupted,
- Levels of pay are fair
- Shifts and rotas are regular and predictable.

Sleep Apnoea

Obstructive Sleep Apnoea (OSA) is a serious, potentially life-threatening condition characterised by brief interruptions of breathing during sleep. Unite has published detailed guidance for professional drivers about OSA. See: <https://resources.unite.theunion.org/media/1119/1119.pdf>

Any organisation can have an issue with fatigue and it can be a problem with any sector where there are long hours, high demands, monotonous work, shift work or where low pay forces workers to take on additional part-time work. Fatigue can lead to errors, accidents, ill-health, injury and reduced productivity. It has often been found to be the root cause of major accidents. A US study into mining found that that the proportion of injuries occurring 9 or more hours into a shift increased almost threefold between 1983 and 2015. The authors suggested that the adoption of comprehensive fatigue risk management plans might help to address the problem. They also concluded that the findings are disturbing given the widespread use of contract workers and the adoption of extended working hours. Long working hours are killing hundreds of thousands of people a year, according to a World Health Organization (WHO) and International Labour Organisation (ILO) 2021 report. It found that working 55 hours or more a week was associated with a 35% higher risk of stroke and a 17% higher risk of dying from heart disease, compared with a working week of 35 to 40 hours. (<https://www.sciencedirect.com/science/article/pii/S0160412021002208>)

Railways

The UK Office of Rail Regulation has identified fatigue (extreme tiredness) as one of the main causes of incidents on the railways. Employers must make arrangements to ensure that workers do not carry out safety-critical tasks if they are affected by fatigue (or would be affected if they carried out the task) in a way that also affects health and safety. ORR has published guidance on "Managing Rail Staff Fatigue". According to ORR, an effective process for managing fatigue in safety-critical workers should include the following stages. (This could apply to any industry).

1. Identify the workers affected

Find out who carries out safety-critical tasks, and particularly consider those workers who are most at risk of being affected by fatigue when carrying out these tasks.

2. Set standards and design working patterns

Identify, set and keep to appropriate standards and good practice for working hours and working patterns. The working-time restrictions set out by law are not enough on their own.

3. Limit the times when workers go beyond the standards

Make sure workers only go beyond the standards in exceptional circumstances. A good way of doing this is to record the times this happens to help build a profile.

4. Consult safety-critical workers

Involve employees and their safety representatives when developing the arrangements for managing fatigue, and consult them on the changes you plan to make. You could also consider how workers can be encouraged to report fatigue at the start of or during a shift without being penalised in any way.

5. Record the arrangements

Make and update a record. Make sure the affected workers are aware of and understand the arrangements.

6. Provide information

As well as the above, make sure that employees who carry out safety-critical work know how fatigue should be controlled and have access to all relevant information about health and safety risks caused by fatigue.

7. Monitor

Check that the arrangements are effective (for example, by monitoring actual hours worked, levels of overtime, and how often workers go beyond the standards).

8. Taking action when safety-critical workers are affected by fatigue

Make sure that workers who come to work while clearly affected by fatigue do not carry out safety-critical tasks. Similarly, workers who become affected by fatigue during a shift should not continue carrying out a safety-critical task. Providing enough rest is one way of controlling this risk.

9. Review the arrangements

Update your arrangements if you have reason to doubt their effectiveness (for example, if you are concerned they are not working properly or if you make changes to working patterns).

Causes

The main cause of fatigue is a loss of sleep, either "acute" from the night before, or "cumulative" as a result of lack of sufficient regular sleep over a longer period. It can also be caused by poor quality sleep or changes in sleep patterns.

Among the causes of fatigue that are related to work or the work environment are:

- Duration of shifts, split shifts, time off between shifts and changes to shift patterns.
- Ability to sleep on rest days, the quality of sleep, and sleeping disorders.
- Scheduling and quality of rest breaks during a shift.
- Cold starts and inadequate recovery times.
- Commuting time to and from the workplace.
- Workload and responsibilities, physical and mental (repetitive, monotonous, demanding, strenuous)
- The impact of second or multiple jobs
- Stress at work.
- A working environment which can encourage sleepiness through being too warm, dark or quiet.
- Pressures from "digital life", including the pressure to respond to emails when not at work.

Effects

Compared with their normal state, a person who is either acutely or chronically fatigued is likely to:

- Find it hard to concentrate, make clear decisions or take in and act on information
- Have more frequent lapses of attention or memory
- React more slowly (for example, to hazards arising in the workplace)
- Make more errors
- Occasionally fall asleep at work - momentarily or for several minutes
- Have little motivation or interest in their work
- Be irritable

This means that people with fatigue are not only likely to be performing badly, they can also pose a danger to themselves and others. Over time, they also risk damaging their health. The long term effects of fatigue can be similar to stress and often people who are suffering from fatigue think they are stressed. Of course work can cause both stress and fatigue and they often go together.

Among the symptoms are:

- Insomnia (often people with fatigue are simply unable to return to usual sleep patterns)
- Depression and anxiety
- Headaches
- Confusion
- Dizziness
- Blurred vision
- Unexplained weight loss or gain
- Digestive problems

Why is fatigue a problem?

Fatigue can adversely affect safety at the workplace. Fatigue reduces alertness, which may lead to errors and an increase in incidents and injuries, particularly when:

- operating fixed or mobile plant, including driving vehicles
- undertaking critical tasks that require a high level of concentration
- undertaking night or shift work when a person would ordinarily be sleeping.

The law

In the UK employers are required to manage fatigue risks from work through risk assessment and risk management. Complying with the Working Time Regs alone is insufficient to manage the risks of fatigue. Nor can an employer claim that a person willingly worked additional hours or shifts. Employer must be aware of the hours a person works and take action to prevent any risk to the worker or to others. In addition there is a legal requirement to consult within the workplace, either directly or through H&S reps. The HSE has produced detailed guidance for employers on complying with the law and also a 'fatigue risk index'- FRI (see Resources). The HSE stress that whilst the FRI is useful, and can help assess the risks of fatigue and injury, it should not be seen as the sole or primary means of assessing these risks. Shift work planners should always start by considering the HSE guidelines in Managing shift work: Health and Safety Guidance (HSG 256), which includes background information on the H&S risks associated with shift work and fatigue, UK legal duties and practical guidance on how to reduce the risks. FRI outputs should also be considered in conjunction with feedback from staff on how tiring they find their work patterns.

HSE advice

In a briefing note on fatigue, the HSE gave the following advice on how to manage fatigue:

- Working hours are not too long
- Employees get enough rest between shifts
- Employees don't work too many night shifts in a row
- Managers negotiate with staff about overtime or double shift working
- Managers fit in with individuals' preferences - some people prefer nights
- Employees avoid critical jobs at the ends of shifts or at 'low points' in the day or night e.g. 3a.m.
- Shifts rotate 'forwards' that is, mornings, then afternoons, then nights
- Employees take quality rest breaks in their work
- Anyone can report fatigue problems to management who will then make improvements
- The environment doesn't cause drowsiness
- There are contingency plans to avoid overloading one person with overtime or double shifts
- Incidents or accidents where fatigue may be responsible are thoroughly investigated

Unite insists that employers involve the workforce and their representatives in any discussions concerning fatigue.

Role of Unite Reps

If reps think that fatigue is an issue in their workplace they can survey members to find out what the causes are and raise it with the employer. Raising awareness of the dangers of fatigue and work with employers should help to develop an environment where workers can report when they are fatigued without fear of repercussions.

In addition Unite reps can ensure that they are supporting their members who feel they are fatigued by ensuring that they get their employer to refer them to an occupational health provider for help if they are ill as a result.

However in most cases the best support is to ensure that the causes of the fatigue are removed. Unite reps can have a positive role in preventing workplace fatigue. Fatigue affects all sectors.

Unite seeks to work with all employers to ensure that the demands of work and shift patterns do not risk the health of workers or the public. The HSE guidance and their fatigue index calculator are a good starting point. Finally Unite reps should support members who are threatened with disciplinary action because the employer claims they have made a mistake or underperformed as a result of fatigue. Employers have a responsibility to prevent workers from getting fatigued through work and, where there is a safety critical job, they also need procedures to be in place to monitor the risk of a fatigued worker placing themselves and others at risk, even if the fatigue is a result of factors outside their work. If a mistake happens because a worker is fatigued, it is because these procedures have failed and they should not scapegoat the worker.

Action points

- Raise awareness of fatigue issues amongst employers and members
- Member surveys
 - Tiredness surveys
 - Sleep surveys
 - Working Hours surveys
- Emphasise the employer's legal duty to address and manage fatigue risks
- Incident and accident investigations should consider fatigue as a factor
- Encourage members to report fatigue problems

Resources

TUC fatigue <https://www.tuc.org.uk/research-analysis/reports/fatigue-guide-health-and-safety-representatives>

HSE Human Factors - Fatigue <http://www.hse.gov.uk/humanfactors/topics/fatigue.htm>

HSE Fatigue Index Calculator <http://www.hse.gov.uk/research/rhhtm/r446.htm>

HSE Managing Shiftwork HSG256 (2006) <http://www.hse.gov.uk/pubs/priced/hsg256.pdf>

ORR - Managing Rail Fatigue <https://orr.gov.uk/rail/health-and-safety/health-and-safety-strategy/working-patterns-fatigue>

Unite – Lorry drivers at risk <https://unitetheunion.org/news-events/news/2018/april/lorry-drivers-lives-being-placed-in-danger-due-to-long-hours-and-lack-of-facilities-unite-warns/>

Unite – Burning the candle at both ends <https://unitetheunion.org/campaigns/burning-the-candle-at-both-ends/>

Government Website – Drivers Hours <https://www.gov.uk/drivers-hours>

Friedman L, Almberg K, Cohen R "Injuries associated with long hours among employees in the US mining industry: risk factors and adverse outcomes", Occ & Env Medicine, vol76, no.6 <https://www.ncbi.nlm.nih.gov/pubmed/30979785>

WHO/ILO Global, regional, and national burdens of ischemic heart disease and stroke attributable to exposure to long working hours <https://www.sciencedirect.com/science/article/pii/S0160412021002208>