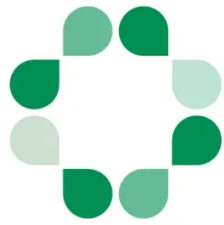




# The health, safety and wellbeing of shift workers in healthcare environments

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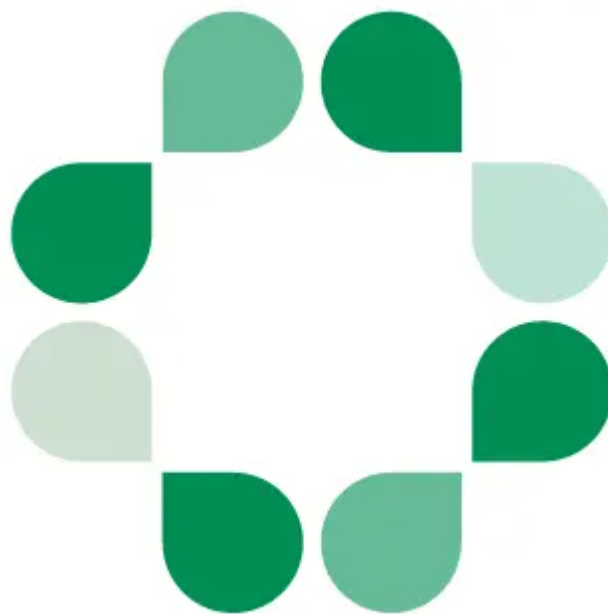
**Health, Safety  
& Wellbeing Group**

# About the Health, Safety and Wellbeing Group

The Health, Safety and Wellbeing Group (HSWG) is a sub-group of the NHS Staff Council. It is a tripartite group involving staff side representatives from healthcare unions, management side representatives from NHS organisations and specialist members, such as the Health and Safety Executive, and the Institute of Occupational Safety and Health with a remit to do the following:

to raise standards of workplace health, safety, and wellbeing in healthcare organisations

to promote a safer working environment for all healthcare staff  
to promote best practice across both the NHS and the Independent sector.



This guidance was produced through partnership working between unions, management and specialist advisors. The group wishes to ensure this guidance is implemented with the same partnership approach. HSWG recognises that partnership working ensures best

outcomes for patients and staff in protecting their health, safety and wellbeing.

Other HSWG resources to support you in your organisation can be found on our web pages.

# Introduction

A significant number of staff involved in delivering round-the-clock care in healthcare environments are shift workers.

## Definition of a shift worker under working time regulations

Shift worker means any worker whose work schedule is part of shift work.

Shift work means any method of organising work in shifts whereby workers succeed each other at the same workstations according to a certain pattern, including a rotating pattern, which may be continuous or discontinuous, entailing the need for workers to work at different times over a given period of days or weeks.

While patients are outside of the scope of this document, they are reliant on a workforce dedicated to providing out-of-hours care.

Shift work has many benefits for the employee. For instance, it allows employees to condense their working time to improve work-life balance and manage carer responsibilities.

However, poorly designed shift patterns, aligned with poor sleep patterns and environmental factors can have a detrimental impact on employee health and patient outcomes. Poorly managed shift patterns can, for

example, increase sickness absence rates, presenteeism, increased at-work errors and patient safety incidents, and associated costs. Therefore, it is important to ensure that safeguards are put in place to support safe working practices around shift working.

This guidance has been developed in partnership with trade unions and management for the benefit of healthcare organisations. It incorporates good practice on shift working from the Health and Safety Executive (HSE).

It advises on key health, safety and wellbeing considerations associated with shift work in healthcare organisations and encourages partnership working between managers and union representatives to mitigate the impacts on staff and the organisation.

Unless otherwise stated, all references in this document are from Health and Safety Executive sources. This guidance applies to staff covered by the NHS Terms and Conditions of Service Handbook.

# How shift work can impact on health, safety and wellbeing

## Impact on the individual

The body's natural circadian rhythm is our body clock, which is tuned to where we live on the planet, the time of the sun rising and setting, and the chemical changes that occur between waking and sleeping. Shift work can negatively affect this rhythm, the clearest way to describe this is the well-known phenomenon of jetlag.

In addition to being a health risk, fatigue associated with sleep deprivation can impact patient safety (e.g. increased risk of medication errors) and the ability of the shift worker to drive safely, particularly at the end of a night shift.

## Reported health effects

Shift work can impact our health in many ways, it can cause or contribute to the following:



- fatigue and sleep disorders
- obesity
- type 2 diabetes
- cardiovascular disease
- digestive disorders
- mental ill health (anxiety, depression)
- some evidence suggests an impact on reproductive health
- some evidence suggests an increased incidence of cancer.

Tolerance to shift work can also alter with age, long-term health conditions and during pregnancy.

## What can employers do?

This section looks at how employers can take proactive steps to implement safe shift patterns, manage workloads at night and make adjustments for employees that may require them.

Many organisations have e-roster systems set up which are designed to safeguard staff against poor roster design and to ensure compliance with the Working Time Regulations 1998/Working Time Regulations (Northern Ireland) 1998. These are common in many clinical work areas. If organisations do not have these systems or override some of the built-in rules of roster systems, care must be taken to ensure these working patterns do not create risk.

## Managing organisational risks

### **Compliance with the Working Time Regulations**

The Working Time Regulations, which originated from the European Working Time Directive, are intended to support the health and safety of workers by setting minimum requirements for working hours, rest periods and annual leave.

In general terms, the key elements include:

- A limit of an average of 48 hours a week (usually averaged over a 17-week reference period) unless the worker chooses to opt out.

- Paid annual leave of 5.6 weeks per year (pro rata).
- 11 hours of consecutive rest in any 24-hour period.
- Workers must have a 20-minute break away from the immediate workstation if working longer than six hours.
- A weekly rest period of not less than 24 hours.
- A limit on the normal working hours of night workers to an average eight hours in any 24-hour period.
- Night workers should not work more than an average of eight hours in a 24-hour period (this is also averaged over a 17-week reference period).
- Night shift workers are entitled to a free regular health assessment.

#### Definition of a night worker under working time regulations

A night worker is someone who normally works at least three hours during the night period, which is the period between 11 pm to 6 am unless the worker and employer agree on a different night period.

Night workers should not work more than an average of eight hours in a 24-hour period. This average is usually calculated over a 17-week reference period, but it can be over a longer period if the workers and employer agree. Regular overtime is included in the average and workers can not opt out of this limit.

Source: ACAS

#### **Night work and special hazards, heavy physical or mental strain**

As outlined in sections 27.22 and 27.23 of the NHS Terms and Conditions of Service Handbook, employers will need to undertake a risk assessment in line with local policies to identify special hazards and work involving mental or physical strain.

Where it is identified that a night worker's job involves special hazards or heavy physical or mental strain, no averaging of hours is permitted and is based on hours actually worked. Employers must ensure that the night worker does not work more than eight hours in each 24-hour period.

Government guidance outlines ways of mitigating the risks from night work or any type of shift work, including the importance of in-work rest

breaks in suitable facilities with access to hot food, suitable time off between shifts and not scheduling safety-critical tasks at the end of the night shift.

### **Compensatory rest**

Where shifts cannot be designed in any other way, there is an exemption for daily and weekly rest for shift workers (e.g. where a shift worker changes shifts and cannot take a daily or weekly rest period between the end of one shift and the start of the next).

In these cases, compensatory rest would apply. Organisations should have compensatory rest agreements in place to ensure that compensatory rest is taken and that the risk of shift worker fatigue is reduced.

#### **Night shift workers health assessment**

Regulation 7 of the Working Time Regulations requires an employer to give a night worker the opportunity for a free health assessment before assigning him or her to work, and at regular intervals thereafter.

A common approach to these assessments might be for managers to give employees a health questionnaire to complete. The University of Cambridge has produced a great template for this.

Should the questionnaire highlight any issues that may affect their ability to perform night work, the employee should be referred for a specialist occupational health assessment to determine whether they are fit to undertake or continue night work.

Special consideration needs to be given to the learning and development needs of night shift workers.

### **Risk assessments**

Under the Health and Safety at Work etc. Act 1974/The Health and Safety at Work (Northern Ireland) Order 1978 and the Management of Health and Safety at Work Regulations 1999/Management of Health and Safety at

Work Regulations (Northern Ireland) 2000, employers should treat shift work like any other workplace hazard.

Using the five steps to risk assessment can help organisations identify risks and implement best practice measures to control the risks:

1. **Assessing the risks of shift work** e.g. by looking at accident rates, near misses and drug errors. If available, analyse data and trends by the time an incident occurred to help identify issues with shift patterns.
2. **Decide who may be harmed and how** – while all workers are at risk from shift work, some groups may be more vulnerable than others, e.g. pregnant workers, older workers, young workers adapting to shifts for the first time and those with pre-existing health conditions including those who take time-dependent medication.
3. **Evaluate the risk and decide on precautions** – shift work cannot be eliminated within the healthcare sector, so steps need to be taken to minimise or control the risks from shift work.
4. **Record the findings** – for instance, what measures will you implement to ensure rest breaks are taken?
5. **Review risk assessment and update accordingly** – review your risk reduction measures to check effectiveness, including qualitative data such as absenteeism, staff turnover and accident rates and qualitative data. Ask shift working staff for their views on fatigue, health and safety.

### Equality Act 2010/Disability Discrimination Act 1995 (Northern Ireland)

Workers with long-term conditions who are classified as disabled under the Equality Act require reasonable adjustments to their role. For example, if a condition is exacerbated or difficult to control due to shift working patterns, the employer should obtain occupational health advice on what changes can be made as a reasonable adjustment to support the worker. Examples include extra breaks to take medication on time, limiting the number of night shifts or, in some cases, excluding from nights. Any adjustments should be regularly reviewed to ensure they are still required.

### Pregnant workers

Night shifts and long working hours are recognised as a risk to pregnant workers. Under the Management of Health and Safety at Work Regulations, risk assessments must be carried out to identify any health and safety risks to new and expectant mothers and measures put in place to protect the pregnant employee and the unborn child. Alternatives such as suitable alternative daytime work on the same terms and conditions should be considered as adjustments.

## **Workload management**

High, monotonous workloads during a shift are a major contributor to stress and fatigue. The HSE Management Standards can be used to assess stress caused by work demands. Wherever possible, safety-critical work should be avoided during the night, early hours of the morning and towards the end of long shifts. Wherever possible, variation in work activity helps reduce the risk of mistakes caused by involuntary automation (otherwise known as autopilot).

## **Devising safe shifts**

Having effective, well-managed and well-designed shifts can considerably reduce the risk of potential harm to staff and patients.

### **Rotating shifts**

Forward rotating shifts (i.e. clockwise from early to late as opposed to late to early) are less disruptive to the internal body clock.

### **Timing of shifts**

The HSE advises avoiding shifts that start before 7am; therefore, this should be considered when devising shift patterns. If the shift only allows for shorter breaks, facilities close to the workplace should be identified to allow maximum opportunity for an adequate break.

### **Duration of shifts**

There is a general agreement from safety experts that 12-hour shifts should be no longer than 13 hours in total duration, including adequate unpaid rest breaks. Some studies have identified increased risk to both patients and staff from shifts of 12 hours or more. However, these shifts are often popular with staff, due to the work-life balance benefits and savings on childcare and travel costs. The HSE advises split shifts should be avoided as they do not allow enough recovery time between shifts.

### **Tolerance of longer shifts**

Tolerance can vary with age. Wherever practical, a choice of shift length should be offered to support older employees working rotation shifts for longer.

#### **Did you know...?**

NHS England advises publishing rosters a minimum of six to twelve weeks in advance.

### **Rest breaks within shifts**

The working time regulations require a minimum of 20 minutes break if the shift is six hours or longer. However, more breaks are encouraged to reduce fatigue during longer shifts. Best practice research from the HSE

and others supports the benefits of a short period of sleep or 'power nap' of around 20 minutes during an authorised break as a way of coping with fatigue during a night shift or a long shift. Research from NASA highlighted that their astronauts increased their effectiveness by over 30 per cent following a nap of between 14-19 minutes.

### **Rest break between shifts**

Under the Working Time Regulations, a minimum of 11 hours of continuous daily rest is required, but regulations recognise that this may not be possible due to shift work patterns. In this case, compensatory rest must be put in place and organisations should have an agreement to accommodate this (see NHS Terms and Conditions of Service Handbook section 27). The HSE also recommend limiting consecutive working days to between five and seven, or between two and three when shifts are long (i.e. 12-hour shifts) with regular free weekends to be built into shift schedules.

### **Overtime and shift swapping**

Overtime and shift swapping will be a reality in a pressurised healthcare environment. However, management should check staff's work schedules before agreeing to overtime to ensure excessive hours are not being worked. Trusts should have a system in place to monitor ongoing compliance with the working time regulations and the opt-out. Shift swapping should be monitored and recorded to ensure staff are getting the necessary rest periods and not working excessive hours. Managers should have agreed protocols for covering unplanned absences of shift workers. Unless permitted to do so by the member of staff, managers should avoid calling in staff on their days off.

## **Other considerations**

### **Driving and fatigue welfare**

The Royal Society for the Prevention of Accidents recognises that drivers who work shifts are a high-risk group for fatigue-related car accidents, especially at the end of a night shift or a long shift. There have been a



number of healthcare workers involved in serious and sometimes fatal car accidents when driving home.

While the duty of care to other road users lies with the individual driver, it is good practice for employers to have provisions in place, such as quiet rest areas where the driver can have a 'power nap' before driving home or the provision of taxis or someone to take the person home. This is a particular risk where the shift has gone on longer than expected due to an emergency or unforeseen circumstance.

Workers who drive at work during their shift may also be at risk of fatigue-related car accidents, particularly between 2 am and 6 am and when working long hours. Employers have a duty to assess the risk of driving-related fatigue and put measures in place to reduce the risks including adequate rest breaks.

### **Healthy eating**

The provision of healthy food options in vending machines and access to facilities to cold store and reheat food brought in from home is an important way employers can support the health and wellbeing of shift workers. The Approved Code of Practice to The Workplace (Health, Safety and Welfare) Regulations 1992 and the Workplace (Health, Safety and Welfare) Regulations (Northern Ireland) 1993 state that where hot food is not readily available out of hours or during shifts, organisations should ensure there are adequate facilities to allow staff to store and heat up food, e.g. fridges and microwaves. There should be adequate amounts of equipment for the staff who may be using them at any one time. There should be cleaning schedules in place for rest/eating areas and equipment.

### **Information and training**

Shift workers must be provided with information and training on managing the risks of shift work, including guidance on coping strategies for night shift work and how and when to report fatigue related incidents. Access to learning and development programmes must also be considered, as night shift workers should not be excluded from learning and development programmes, including mandatory training.

### **Physical environment**

Shift workers must have easily accessible facilities to rest and replenish away from the immediate workplace. Lighting and temperature should

also be considered for those working a night shift; adequate lighting so work can be carried out safely and at a comfortable temperature to compensate for an overnight drop in body temperature.

#### Good practice example

The HALT (hungry, angry, late, tired) campaign makes staff aware that taking enough breaks can also help them to provide the highest standard of patient care, by putting them in a position to make the best decisions for patients. Staff throughout the trust are asked to plan their own breaks during the workday, and managers and team leaders are advised to lead by example in order to create a 'take a break' culture. The launch of the HALT campaign coincided with World Sleep Day on Friday 17 March 2017.

During that day, staff across the trust received information, attended workshops, and listened to presentations about the importance of taking regular breaks. Guy's and St Thomas' NHS Foundation Trust positively support staff across the trust who work night shifts and have an Occupational Health Staff Physiotherapy team to support those who are desk-based and experience repetitive work that can affect their health.

In line with the NHS People Plan, Guy's and St Thomas' Charity generously funded permanent wellbeing zones in 2021, to ensure colleagues feel they have safe spaces to rest and recuperate in.

## What can employees do?

People vary in the way they adjust to and cope with shift work. Some people will adjust to night shift or early shift work better than others. For others, such as those with health conditions, lower levels of fitness, insomnia and domestic responsibilities, it can be harder to adapt. Listed below are some examples of measures, which can be found within HSE resources, to reduce the individual health impacts and safety issues related to shift work:

- Eating small amounts often throughout the night will help keep energy levels up. Foods that are easy to digest such as pasta, rice, bread, salad, fruit, vegetables and milk products are best. Fatty or heavy meals are more difficult to digest, which can make individuals feel drowsy rather than alert. They may also disturb sleep. Sugary foods such as chocolate may provide a short-term energy boost, but this will be followed by a dip in energy levels.
- Employees should obtain medical advice from their doctor and/or occupational health department if they require regular medication such as insulin for diabetes or suffer from a chronic condition such as epilepsy. Employees should discuss reasonable adjustments under the Equality Act 2010/Disability Discrimination Act 1995 (Northern Ireland) e.g. ensuring adequate breaks, adjusting shift cycles etc.
- Have a short sleep before the first night shift.
- If coming off night shifts, have a short sleep and go to bed earlier that night.
- Keep to a suitable sleep schedule once identified.
- Take regular short breaks during the shift if possible.

- Get up and walk around during breaks.
- Plan to do more stimulating work at the times when feeling most drowsy.
- Keep in contact with co-workers, as this may help all individuals to stay alert.
- Consider using public transport or taxis rather than driving.
- Exercise briefly before making a journey.
- Share driving if possible.

### **Support from GP or occupational health**

Employees working regular night shifts are entitled to a free night worker health assessment. Employees should contact their line manager and occupational health service to find out more.

Employees experiencing health problems related to shift work e.g. difficulties sleeping, should seek prompt advice from their GP and/or occupational health service.

### **Reporting concerns**

Employees should feel supported and able to raise any concerns about risks such as the impact of fatigue and poorly designed shift patterns on patient safety to their manager and/or trade union safety representative. Any near misses or incidents related to fatigue must be reported as per local policies and a just culture applied to learn from incidents rather than apportion blame.

### **Professional responsibilities**

While employers have a legal responsibility to protect the health and safety of employees and patients, healthcare professionals have a responsibility to practice safely and raise concerns under their respective professional codes.

Issues such as an inability to take scheduled rest breaks, insufficient rest periods between shifts and pressure to carry out excessive overtime are all legitimate issues to act on and raise professional concerns about if they are leading to fatigue and subsequent risk of errors and risks to patient safety.

Employees should also consider the impact of multiple jobs on working hours on their ability to practice safely.

## The importance of partnership working

Trade union safety representatives working in partnership with managers to support improvement in staff health, safety and wellbeing can assist in ensuring optimum shift patterns are in place that comply with the relevant standards and working time regulations outlined in this guidance.

The Health and Safety Executive recognises that change is a key stressor and changing shift patterns without sufficient consultation with staff and their representative may lead to poor wellbeing and stress-related illness. For those with caring responsibilities, it can be even more stressful as many plan caring arrangements around their shift work.

Furthermore, changes to shift patterns may impact on personal safety e.g. moving to a twilight shift which may finish at 2 am and the implications for shift workers leaving work and getting home safely in the early hours. For these reasons, it is important that employers work with both trade union stewards and safety representatives when looking at shift working patterns.

Equally, it is important to consider the requirements of the service to deliver safe patient care around the clock when discussing shift patterns and options for flexible working.

Under the Safety Representatives and Safety Committee Regulations 1977 and the Safety Representatives and Safety Committee Regulations (Northern Ireland) 1979, safety representatives have a right to be consulted on matters that have the potential to affect the health and safety of the members they represent. Consultation should be in 'good time', i.e. before the changes take place, and representatives should be given adequate

time to discuss the matter with the members they represent and feedback their concerns. Trade union health and safety representatives should be consulted on any plans to change shift patterns as this could have a significant impact on the health, safety and wellbeing of the members they represent.

The HSE stresses the importance of employers consulting and involving trade unions' health and safety representatives in the risk assessment process and in getting views on the advantages and disadvantages of current shift systems.

Working with health and safety representatives, the HSE suggest that employers seek the views and stimulate discussion by:

- encouraging workers to share their experiences of shift work
- discuss which shifts are hardest and why
- provide examples of different shift work schedules and invite contributions of ideas.

### **Further information**

For further information on partnership working, please see the group's [partnership working on health and safety guidance](#), [welfare facilities at work](#) and [stress management guidance](#).

Our full range of guidance and resources published by the NHS Staff Council Health, Safety and Wellbeing Group (HSWG) can be found on our dedicated [HSWG web page](#).

