A shift in the right direction

RCN short guidance on the occupational health and safety of shift working nurses and health care assistants
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The reality of 24-hour health care delivery means many health care workers are required to work a variety of shift patterns. Adapting to shift patterns or changes in shift patterns can be difficult and if the associated risks are not managed properly this can lead to ill health and fatigue in a worker, which in turn can have an impact on patient care.

The RCN believes that more needs to be done by employers and others to protect the health and safety of nurses and other health care workers who work shifts.

This short guide highlights the key occupational health and safety issues for shift workers, the duties on employers to reduce the risks to health care workers, and practical strategies that shift workers can take to make shift work easier. If you are a student about to do your first night shift, or a newly-qualified nurse or a health care assistant doing shifts for the first time you may find some of these strategies useful.

Further details can be found in the accompanying full length version of this resource A shift in the right direction (RCN, 2012) publication code 004 285, which is available for download at www.rcn.org.uk/publications

Why is the occupational health and safety of shift workers important?

As humans we have a 24-hour body clock called a circadian rhythm. Controlled by the brain this regulates the times we sleep, wake and eat, our body temperature, pulse and blood pressure, and other important aspects of body function. As humans our circadian rhythms mean that we are active and perform best in the day and sleep at night. Shift work, particularly night work, can disrupt these rhythms – especially our ability to sleep – and this can lead to health problems and fatigue.

The health and safety impacts of shift work are widely recognised. Long hours, fatigue and lack of rest breaks or time to recuperate between shifts are associated
with an increased risk of errors, all of which can impact on patient safety. Long-term exposure to shift work has also been associated with health issues including chronic sleep deficit, gastrointestinal problems, cardiovascular problems, depression, cancer and an increased susceptibility to minor illnesses such as colds and gastroenteritis (Health and Safety Executive, 2006). Some groups of workers may be more vulnerable to the health risks than others – for example those with long-term conditions, pregnant workers and older workers who have worked shifts for a number of years.

Some shift systems have less impact on the health, safety and wellbeing of staff and patients and organisations need to implement optimal shift patterns – for example, a forward rotating shift pattern in which a worker moves from an early to a late to a night shift is better.

What to expect from your employer

Under health and safety laws your employer has a duty to protect your health, safety and wellbeing at work and ensure that any health and safety risks from shift work are properly managed. They also have to ensure that they comply with the Working Time Regulations (WTR) 1998 which set limits on daily and weekly working hours, and provide rest breaks during shifts and between shift changes. Employers need to assess the risks from shift work, identify staff at risk (including those who may be more vulnerable to working irregular hours or nights) and put in place measures to reduce the risk. There are a number of evidence-based good practice recommendations that help reduce and manage the risks from shift work, and examples of these are detailed on page 6.

Under the Workplace (Health, Safety and Welfare) Regulations 1992 your employer should also provide facilities for you to eat meals at work and to prepare or obtain a hot drink. If hot food cannot be obtained in or reasonably near to the workplace, an employer should provide workers with means for heating their own food (for example, a microwave oven).

Pregnant workers may be more vulnerable to night shift work and working long hours. If a specific risk has been identified to the pregnant worker and/or her GP or midwife provides a certificate stating she should not work nights, her employer must offer suitable alternative day time work on the same terms and conditions. If that is
not possible, the employer must suspend her from work on paid leave for as long as is necessary to protect her health and safety and that of her unborn child.

Workers with long-term conditions may also be covered under the Equalities Act 2010 which requires employers to make reasonable adjustments to the employment of disabled workers. For example, if a condition is exacerbated or difficult to control due to shift working patterns the employer would be required to make changes to those working arrangements as a reasonable adjustment to support the worker.

**Shift duration**

There has been much debate over the benefits and risks of eight-hour shifts versus 12-hour shifts, both within nursing and occupations outside health care. Evidence on the impacts on patient outcomes and staff safety are often conflicting. The Working Time Regulations are not specific on the length of a shift but generally require workers to have an 11-hour rest period between working days. The Health and Safety Executive (HSE) points out that for the first eight to nine hours in a shift, the accident risk is constant, but after 12 hours the risk approximately doubles and after 16 hours it trebles (HSE, 2012). While most of the research on accidents and working hours has been carried out in other industries, working long hours with inadequate rest breaks clearly has the potential to impact on patient and staff safety in health care environments.

RCN member surveys reveal that the majority of staff prefers 12-hour shifts, as they need to do fewer shifts and have more days off (RCN, 2009). The HSE also highlights that 12-hour shifts are popular as they make the working week shorter and may offer subsequent health and social benefits. However, it also points out that any benefits to health and wellbeing are likely to be lost if the worker takes on overtime or a second job during their free time (HSE, 2006).

In 2008, an RCN survey found that 45 per cent of respondents worked 12-hour shifts so this is already a reality in many nursing environments. If 12-hour shifts are to be implemented, in addition to consultation with staff and their representatives on proposed changes, the RCN recommends that employers put in place a number of safeguards that include adequate uninterrupted rest breaks during the shift, limiting the length to 12 hours, limiting the number of back-to-back shifts to two to three in a row, and ensuring protection of vulnerable workers. Ideally, workers should be given the choice of shift, with eight-hour shifts running alongside 12-hour shifts.
Rest breaks

Adequate rest breaks within shifts are essential to prevent excessive tiredness and fatigue and for rehydrating and refuelling when working in a physically demanding role. Similarly, adequate rest time to recuperate between shifts is also important. The Working Time Regulations (WTR) state that when a shift lasts six hours or more, the worker is entitled to a minimum 20-minute rest break away from their direct workstation. The HSE advises employers to consider length of shift when scheduling the duration and frequency of breaks; for example a 20-minute break for a 12-hour shift would be inadequate. Breaks are best taken before the onset of fatigue and the HSE advises workers should be given some discretion over when they take the break and that where the work is monotonous or demanding it is better to take shorter more frequent breaks.

There is increasing evidence of the benefits of a short restorative sleep during night shift breaks. In 2006, the Royal College of Physicians recommended that junior doctors working the night shift take a power or restorative nap of between 20-45 minutes.

Employers need to consider the evidence base promoting the benefits of power napping on a night shift break and put appropriate policies and resources (for example, adequate supervision and rest room facilities) in place to support power napping.

Health care workers need to be aware of their local policies and should not sleep on night duty breaks unless they have prior permission to do so by their organisational policy or in writing from their manager or supervisor.
Good practice recommendations for shift work

• Avoid scheduling demanding, dangerous, monotonous and/or safety-critical work during the night, early morning, towards the end of long shifts and during other periods of low alertness.

• Avoid placing workers on permanent night shifts.

• If possible offer workers a choice between permanent and rotating shift schedules.

• Where possible, adopt a forward rotating schedule for rotating shifts rather than a backward-rotating shift schedule.

• Either rotate shifts very quickly (every two to three days) or slowly (every three to four weeks) and avoid weekly/fortnightly rotating shift schedules.

• If not strictly necessary for business needs, try to avoid early morning starts before 7am.

• Where possible, arrange shift start/end times to be convenient for public transport or consider providing transport for workers on particular shifts.

• Limit shifts to a maximum of 12 hours (including overtime) and consider the needs of vulnerable workers.

• Limit night shifts or shifts where work is demanding, monotonous, dangerous and/or safety critical to eight hours.

• Consider if shifts of variable length or flexible start/end times could offer a suitable compromise.

• Avoid split shifts.

• Where possible allow workers some discretion over when they take a break, but discourage workers from saving up their break time in order to leave earlier.

• In general limit consecutive working days to a maximum of five to seven days and make sure there is adequate rest time between successive shifts.

• Where shifts are long (over eight hours), for night shifts and for shifts with early morning starts, it may be better to set a limit of two to three consecutive shifts.

• When switching from day to night shifts or vice versa, allow workers a minimum of two nights’ full sleep.

• Build regular free weekends into shift schedules.
If you work regular night shifts, under the WTR your employer should offer you a regular health assessment.

Employers also need to be mindful of the potential patient safety impacts of fatigue in shift workers and need to manage shift work as part of a package of measures to improve patient safety.

What’s more, your employer may not be allowed to change your shift pattern if this is written in your contract of employment. For nurses and health care assistants working in the NHS, your employer needs to give you at least four weeks notice if they wish to change your patterns of work.

**Driving and fatigue**

Where a job involves driving from site to site or house to house (for example, a community nurse), under health and safety laws your employer also has a duty to assess the risks from driving and fatigue during working hours. Health and safety regulations do not extend to commuting to and from the workplace (going home or coming to work). However, your employer has a common law duty of care to employees and others – for example to ensure that work schedules do not impact on a worker’s ability to drive home safely.
Coping with shift work

There is a lot an employer can and should be doing to reduce the risks from shift work but there are also things that individuals can do to help make shift working, in particular night shifts, easier and less of a risk to their own health and safety.

Night shift work can be a daunting experience for a newly qualified nurse or health care assistant. There are usually fewer people around to call on and you may be the most senior nurse on duty. It is inevitable that you will feel more tired and sleep less than on day time shifts, but with the support of colleagues and following some simple dos and don’ts, you can make life easier.

Getting a good sleep

It is important to get into a good sleeping habit, regardless of whether you are sleeping during the day or at night. Keeping to a regular sleep schedule – going to bed the same time and waking up at the same time – is recommended as a way to promote good sleep but can for obvious reasons be difficult for a shift worker.

People adapt differently to shift work and you need to find a sleep pattern and routine that suits you best – it may take some time and you may need to experiment to find out what works for you. Detailed on the next page are some hints and tips for sleeping and shift working.
<table>
<thead>
<tr>
<th><strong>Dos</strong></th>
<th><strong>Don'ts</strong></th>
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<tbody>
<tr>
<td>Develop a bedtime ritual that you follow before you go to sleep (relax with a book, listen to music or take a bath). This can help serve as a signal that your body is ready for sleep.</td>
<td>Avoid stressful or stimulating activity before you go to bed.</td>
</tr>
<tr>
<td>Keep your bedroom as cool as possible – people sleep better in cooler environments (around 18 degrees C).</td>
<td>Avoid alcohol or nicotine in the hour or two before sleep. Alcohol might make you feel sleepy, but it will wake you up too quickly after falling asleep. Nicotine is a stimulant and may affect the time it takes you to get to sleep. Don't drink caffeine for up to four hours before going to bed.</td>
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<tr>
<td>Eat a light meal before going to bed to avoid hunger.</td>
<td>Avoid a heavy or fatty meal before bedtime as this is harder to digest.</td>
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<tr>
<td>Regular exercise during the day helps sleep patterns but try to avoid exercise about three hours before bedtime.</td>
<td>Avoid watching TV, video games, studying, playing or working on a computer in the bedroom. If you can't avoid this as you live in a bed sit or shared accommodation – think about having distinct areas in your room, like a desk which you can close off and a cupboard to store study material.</td>
</tr>
<tr>
<td>Keep the bedroom dark – use an eye mask, blackout blinds or heavy curtains (or even a thick blanket) on your bedroom window. Even if you don't work nights it can get very light in the early mornings during British summertime.</td>
<td>Don't use another person's sleeping pills.</td>
</tr>
<tr>
<td>Keep the bedroom quiet – use ear plugs if necessary.</td>
<td>Don't try and force yourself to sleep – sleep is a passive process. If you can't sleep after 30 minutes in bed get up and do something to distract yourself.</td>
</tr>
<tr>
<td>Write a ‘to do’ list before you go into the bedroom so you don’t lie awake worrying that you will forget important things the next day (a pen and paper by the bed can also help).</td>
<td>Avoid falling to sleep on the sofa.</td>
</tr>
<tr>
<td>Use a relaxation tape to help you sleep.</td>
<td>Avoid clock watching – watching the clock can increase anxiety about length of sleep. Set your alarm if necessary and turn your clock away from your sight line.</td>
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<tr>
<td>Invest in a good mattress or at least some decent pillows – seek manufacturer’s advice on the best type of pillow for you and your usual sleeping position.</td>
<td>Avoid difficult conversations with loved ones or confrontational discussions before bedtime wherever possible.</td>
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An essential aspect of being a successful night worker is learning how to manage your daytime sleep. The strategies outlined in the table of sleep dos and don’ts can help but there may be other things you can do to promote day time sleep. These include:

- turn off mobile phones, disconnect landlines and consider putting up a ‘do not disturb’ notice on the bedroom door
- if at all possible locate your bedroom in a quieter part of the house (at the back if you are located on a major road, for example)
- black out blinds or thick curtains can help reduce daytime light and using ear plugs can reduce noise; background ‘white noise’ can also help some people
- ask family and friends at home to make sure it is a peaceful place during the day
- consider speaking to neighbours and let them know you work nights
- allow some time to unwind when returning home after a night shift (as you would after a day shift)
- try not to panic if you can’t sleep – follow the strategies detailed on page 9.

If you are new to night shift working, ask friends and family for their tips on coping but remember to stick to the principles outlined in the table.

**Preparing for the first night**

It is recommended that shift workers get extra sleep before working the first night shift to reduce sleep debt. If you don’t sleep before your first shift you could end up being awake for 24 hours or more. A longer lie-in to at least midday the morning before you start is recommended, as is a late afternoon nap of at least two hours or more to reduce the build up of fatigue on your night shift (Royal College of Physicians, 2006).

**Staying awake and alert during your night shift**

Night workers report that getting through the first night is usually easy but by the second or third night fatigue begins to set in, particularly if you are having difficulties sleeping. Our circadian rhythms mean that our body is at its lowest between 3am and 6am, and night workers often associate this time with feeling cold, shaky and nauseous as well as sleepy and drowsy.
Here are some strategies to follow to help you survive during the shift (Ross, 2011).

• Some people find it good to eat their main meal before going onto the shift, have lunch half way through their shift and another light meal when they get home while others prefer to take lots of healthy snacks to eat as eating small amounts and often helps keep your energy levels up. Find out what works best for you but avoid a heavy meal before going to sleep.

• Keep moving during your shift – if you do have any downtime then walk about and stretch.

• Keep hydrated but don’t drink too much caffeine and avoid caffeine towards the end of your shift as it can hinder sleep when you get home; the effects of a cup of coffee may last up to three or four hours depending on its strength and your individual tolerance. Too much coffee can also irritate the gastric system and has a diuretic effect. Remember it is not only coffee that contains caffeine. Cola drinks, tea and some over-the-counter pain killers or cold remedies can also contain caffeine.

• Chat to co-workers during down time to keep your mind active.

If your local policy allows a power nap or restorative sleep during your night shift break then take one and see if it helps. You should always seek prior approval, preferably in writing, from your manager or supervisor before taking a nap during your scheduled break.

Getting home safely

The end of a night shift is recognised as a high risk period for car accidents – particularly towards the end of a few back-to-back shifts. If you are dependent on a car to get you to and from work then be vigilant to the risks of fatigue. If you do feel yourself falling asleep at the wheel then pull off the road if it is safe to do so and have a short nap.

Avoid driving for a long period or a long distance after a period of night shifts or long working hours. While it may be tempting to travel directly to visit family and friends and spend your days off with them, it would be advisable to have a rest or sleep first and travel later in the day.

If you feel too tired to drive then speak to your manager and see if a contingency plan can be put in place – for example, access to somewhere to sleep for a few hours or
arranging for a ‘first aid’ driver to take you home. Remember, your employer owes you a duty of care. It may be better to use public transport or consider lift sharing with co-workers and take it in turns to drive. As well as reducing travel costs it will help keep you alert if someone else is in the car.

If you are starting or finishing work late at night make sure you can park your car in a secure and well lit area. If you have concerns about your personal safety when travelling to and from work on a night shift, or at any unsocial hour, then speak to your manager or RCN safety representative.

**Coming off nights and back onto day shifts**

Adjusting back to days can be difficult and it is important that your shift pattern allows enough time to recover from night shift work before going onto the next shift.

Have a short sleep when you get home from your last shift to get over some fatigue. Try and do normal daytime activities when you wake up and go to bed at your regular time that night to get back into a routine.

**Looking after your health**

As shift workers can be more susceptible to illness and poor health it is important to take steps to look after your general health and wellbeing, including your psychosocial health.

- Make your family and friends aware of your shift schedule so that they can include you when planning socials activities.
- Make the most of your time off – plan meal times, weekends and evenings together.
- Invite others who work similar shifts to join you in social activities when others are at work and there are fewer crowds.
- Eat a healthy diet, stop smoking and exercise regularly to reduce the risk of gastro-intestinal complaints, diabetes and cardiovascular problems. Your employer should also support you in making healthy lifestyle choices – for example access to healthy meals during shifts and allowing shift workers easy access to smoking cessation classes.
- It is especially important that female shift workers are ‘breast aware’ and if eligible for mammography screening take up these opportunities.
Try not to rely heavily on stimulants and sedatives – shift workers often use stimulants such as coffee, cigarettes, high energy drinks to keep them awake and alcohol or sleeping pills to help them sleep. Both stimulants and sedatives are only short-term solutions and can lead to the risk of dependency, addiction and physical health problems.

What to do if you have problems or concerns

Tolerance to shift work differs but figures show that between 20-25 per cent of people reject and leave shift work at an early stage due to chronic ill health. If you find it difficult to adjust or cope with shift work and your physical or mental health is being adversely affected, or you are unable to adjust your sleeping patterns and are suffering from chronic fatigue, then you should seek advice and support. If you have an occupational health service they can be approached for advice. Counselling or employer assistance programme providers may also be a source of support if you are suffering from stress and this is affecting your ability to sleep.

Your GP may also be able to offer advice or refer you on for specialist support or therapy, particularly if you have a sleep disorder. If you have a long-term condition that is affected by shift work or need to take medication at certain times of the day, you should also seek advice from your GP and occupational health service. Similarly, if you are pregnant and are having difficulties coping with shift work you should seek advice from your GP or midwife.

If you are concerned that your employer is not doing enough to manage the risks of shift work, or is imposing a new shift working schedule on you without consultation and discussion, or your working hours are a risk to your own health and safety and that of your patients, then you should speak to your RCN safety representative or steward. If you don’t have RCN representatives in your workplace then contact RCN Direct for advice.

If you are worried that shift patterns and excessive working hours without adequate rest periods are affecting the safety of patients then this would be a legitimate issue to raise concerns on under the NMC Code. Inform your manager and report your concerns in writing. If your concerns are not being addressed, then raise the issue with the RCN via RCN Direct.
Conclusions

With the right strategies in place and good risk management and support from employers, the majority of people are able to tolerate shift working. For many, shift work has a number of benefits. In addition to the financial benefits of working unsocial hours, many find that shift work helps them better manage their caring responsibilities. Travelling to and from work at off peak periods and carrying out routine domestic tasks at less busy periods are other reasons people prefer shift work. However some individuals will need extra support adjusting to shift working patterns and for some vulnerable workers the health risks will be too high to continue certain shift patterns.

The RCN is calling on employers and other key stakeholders to do more to recognise and manage the risks of shift working, and to protect and support the health and wellbeing of health care workers that work shifts. In protecting the health and wellbeing of the nursing workforce and addressing issues such as fatigue we can, in turn, better protect patients who receive care from shift workers.
Further information

You can find further information in the RCN’s full version of this publication, which is available for download at [www.rcn.org.uk/publications](http://www.rcn.org.uk/publications) (publication code 004 285).

For additional detail on flexible working options please refer to *Spinning plates – establishing a work-life balance: a guide for RCN representatives* (RCN, 2008), which is available at [www.rcn.org.uk/publications](http://www.rcn.org.uk/publications).

Full up-to-date details of the requirements of the Working Time Regulations 1998 can be found at the Government’s website: [www.direct.gov.uk/workingtime](http://www.direct.gov.uk/workingtime)

References


The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies

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