### Mental and physical demands of work

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Control measures to consider</th>
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<tbody>
<tr>
<td>These include, for example:</td>
<td>• Re-design jobs to eliminate boring, repetitive tasks</td>
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<td>• repetitive or monotonous work;</td>
<td>• Improve communication</td>
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<tr>
<td>• sustained physical or mental effort;</td>
<td>• Provide training to allow multi-skilling and effective job rotation</td>
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<td>• sustained and/or complex physical or mental tasks</td>
<td>• Use alarms and monitors, particularly for solo work (eg driving vehicles)</td>
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<td>• Use plant, machinery and equipment to eliminate or reduce the excessive physical demands of the job</td>
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<td>• Reduce the amount of time employees/workers need to spend performing sustained physically and mentally demanding work</td>
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<td>• Ensure there are adequate employees/workers and other resources to do the job without placing excessive demands on staff</td>
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<td></td>
<td>• Roster enough employees/workers during peak times and demands</td>
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<td>• Ensure adequate breaks during shifts to allow recovery</td>
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<td>• Allow supervisors and employees/workers to reschedule tasks if fatigue becomes a problem</td>
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<td>• Ensure work demands gradually increase towards the middle of the shift and decrease towards the end</td>
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<td>• Eliminate sources of risks that might exacerbate fatigue (eg lack of job control, manual handling, extremes of temperature)</td>
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<td></td>
<td>• Improve communication processes</td>
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<td></td>
<td>• Improve the duration and timing of work</td>
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<td>• Ensure safe and efficient shift hand-over</td>
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### Work scheduling and planning

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Control measures to consider</th>
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<tbody>
<tr>
<td>Night shifts, including the number of consecutive night shifts</td>
<td>• Eliminate or limit night work where possible</td>
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<td>• Eliminate the use of night shifts for particular jobs or activities</td>
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<td></td>
<td>• Schedule complex tasks for daytime</td>
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<td>• Schedule work for hours when the risks may be lower – for example, complex and safety-critical tasks are best undertaken during normal day shifts when employees/workers are less likely to be fatigued, rather than during low body clock periods (ie don’t schedule tasks between 2am and 6am and, to a lesser degree, between 2pm and 4pm)</td>
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<td></td>
<td>• Avoid scheduling higher risk tasks on the first night of a night-shift cycle. If unavoidable, when planning the task consider additional controls such as job rotation or additional rest breaks</td>
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<td>• Minimize or redesign routine administrative tasks to ensure employees/workers can focus on core duties during their night work</td>
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<td>• Limit the number of consecutive night shifts worked – no more than four night shifts in a row</td>
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<td>• Allow regular night-shift employees/workers periods of normal night’s sleep to catch up on their sleep deficit</td>
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<td>• Ensure that rosters allow for at least two full nights’ sleep after the last night shift</td>
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<td>• Arrange shifts so that day sleep is adequate</td>
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<td>• Use a forward-rotation shift system (ie morning to afternoon, afternoon to night)</td>
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<td>• Improve the order, speed, direction and length of rotation of the shift cycle</td>
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<td>• Except for emergencies, give at least 24 hours notice before night work. Consider providing a longer period of notice so that employees/workers have time to adjust their activities</td>
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<td>• Allow for naps during night shifts</td>
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For more information on this or other safety topics, contact Matt Weis at mattw@dawsonins.com or 701-306-3791

<table>
<thead>
<tr>
<th>Work environment Conditions</th>
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<tbody>
<tr>
<td><strong>Risk factor</strong></td>
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</table>
| **Stress** | • Improve job control and the other risk factors associated with stress  
• Ensure opportunities to clarify stress-related issues |
### Adverse physical Conditions
- Avoid working during periods of extreme temperature
- Control exposure to hazardous substances and environments
- Provide effective protective clothing and equipment, allowing for different shifts
- Use heating and cooling to control ambient temperatures to support alertness
- Provide adequate facilities for rest, sleep, meal breaks, onsite accommodation (if appropriate) and other essential requirements, such as bathroom facilities
- Install adjustable, vibration-free seats in appropriate machinery and vehicles
- Ensure the workplace and surroundings are well lit, safe and secure

### Excessive commuting times necessary
- Start work at long distance commute sites on the day after arrival and start travel home on the day after the shift cycle is finished
- Assist with travel arrangements, eg provide transport
- Reduce active working time to account for long commuting time or distance

### Individual and non-work factors
- Provide suitable professional advice, eg an employee assistance program, sleep disorder clinic
- Maintain vigilance in identifying non-work related factors
- Subsidize modifications to private homes to improve sleeping conditions (eg air conditioning)
- Provide information and education about how non-work related factors can increase the risks of fatigue
- Provide a mechanism to encourage employees/workers to report non-work factors that might affect fatigue management

### Effect of exposure during extended shifts
- Employees/workers who perform repetitive manual tasks should have regular rest breaks
- Ensure exposures are carefully monitored and exposure levels adjusted. For example, exposure during a 10-hour shift may not equate to 1.25 times the exposure experienced during an eight-hour shift

### Tips for individuals on avoiding fatigue

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Control measures to consider</th>
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<tr>
<td><strong>Sleep</strong></td>
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<td>The best sleep is night sleep</td>
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<td>If sleeping during the day, darken the room and allow more time than normal to fall asleep</td>
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<td>Choose a quiet, peaceful place to sleep and adhere to a routine</td>
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<td>Seven to eight hours uninterrupted sleep is adequate</td>
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<td>Seek medical advice for excessive snoring, irregular breathing and insomnia</td>
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<td><strong>Drugs and alcohol</strong></td>
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<td></td>
<td>Avoid excessive consumption of alcohol – it affects quality of sleep</td>
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<td>Avoid stimulants – they delay the need for sleep</td>
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<td>Do not consume coffee or tea before going to bed</td>
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<tr>
<td><strong>Medical conditions</strong></td>
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<td></td>
<td>If you have a medical condition, you should seek advice from your doctor if you are in a job that involves shift work or long working hours</td>
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<td>Tell your employer about any medical conditions that may limit your ability to work or make you susceptible to fatigue</td>
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<td>Ask your doctor for an alternative medication if it causes you drowsiness when you need to be awake</td>
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<td><strong>Fitness</strong></td>
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<td>Maintain a basic level of fitness</td>
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<td>Exercise regularly</td>
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<td>Keep your weight in check – obesity contributes to sleeping disorders</td>
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