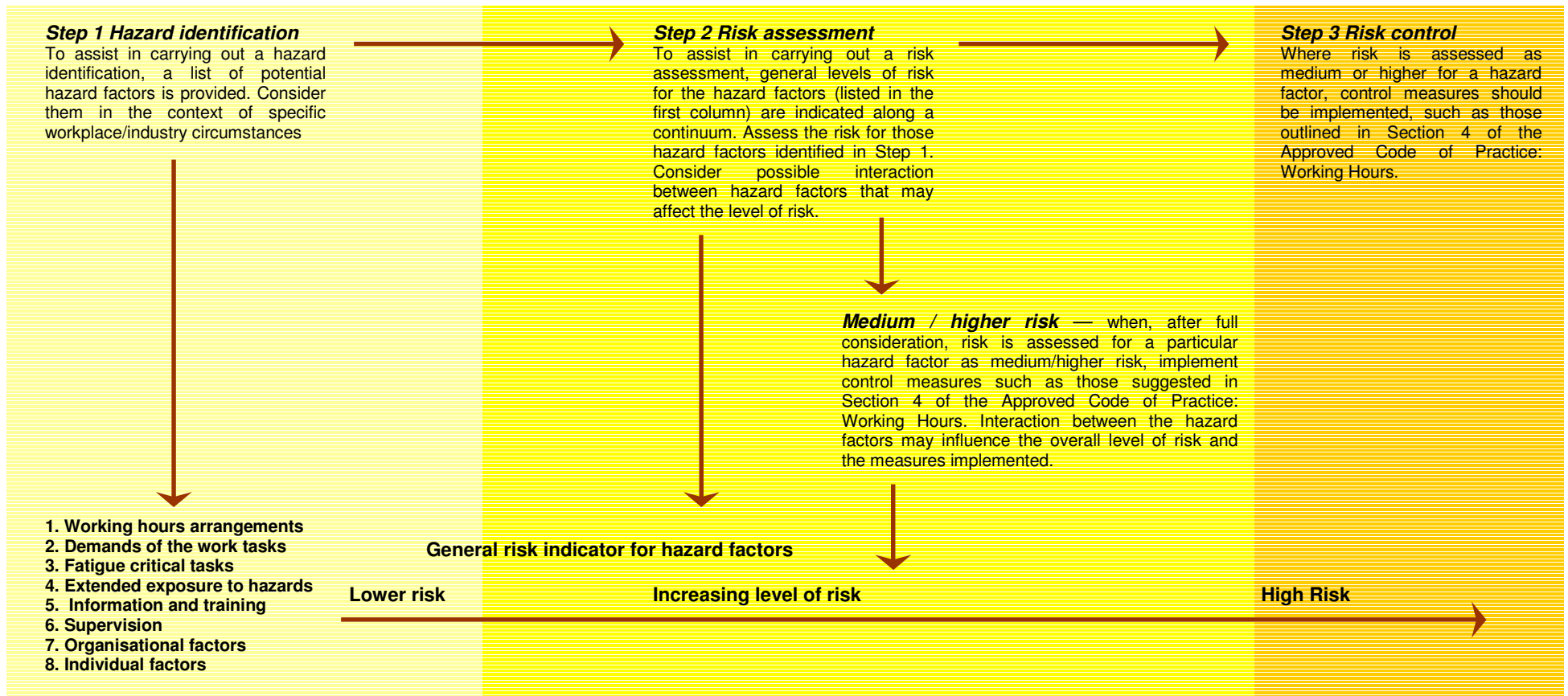


Risk Management Matrix



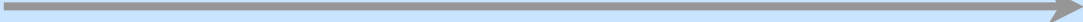

3.23 The *Risk Management Matrix* is provided on the following pages for use in considering potential hazards and risks from the **workplace**/industry working hours arrangements, and the diagram below demonstrates how to use it. The Matrix shows at which point action should be taken to introduce risk control measures. A holistic approach should be taken in assessing risks and implementing control measures.

How to use them



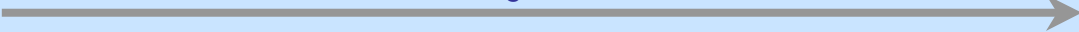
Risk Management Matrix

To start considering hazards and risk that may be associated with the working hours arrangements at your **workplace**/industry, follow the three steps set out below.

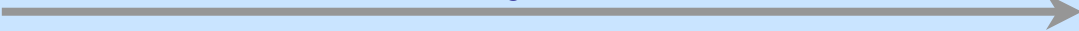
<p>Step 1: Hazard identification</p> <p>Identify potential hazard factors at the workplace/industry, such as those listed in the column below.</p> 	<p>Step 2: Risk assessment</p> <p>Assess level of risk for the hazard factors identified at the workplace (such as those listed in the column to the left), using the general risk indicator arrow guide below. In assessing risk: 1) consider interaction between hazard factors that could influence level of risk; and 2) as level of risk for each hazard factor is only indicative, take into account specific workplace/industry circumstances that may influence it.</p> <p style="text-align: center;"></p> <p style="text-align: center;">General risk indicator for hazard factors</p> <p style="text-align: center;">Action: Where risk is assessed as being above low/medium risk, undertake Step 3 in the next column.</p> <p style="text-align: center;">Increasing level of risk</p>  <p style="text-align: center;">Lower risk Higher risk</p>	<p>Step 3: Risk control</p> <p>Where a hazard factor is assessed as being above low risk/medium risk, consider implementing control measures, such as those outlined in Section 4 of the Approved Code of Practice: Working Hours.</p> 															
<p>1. Working Hours Arrangements</p> <p>1.1 Hours</p> <p>1.1.1 Average weekly hours (other than FIFO)</p> <p>1.1.2 Total hours over a three-month period (other than FIFO)</p> <p>1.1.3 Daily work hours</p> <p>1.1.4 Daily work hours and work-related travel</p> <p>1.1.5 Scheduling of work</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">35-40 hours</td> <td style="width: 33%; text-align: center;">48 hours</td> <td style="width: 33%; text-align: center;">56 hours</td> </tr> <tr> <td colspan="3" style="text-align: center;">624 hours</td> </tr> <tr> <td style="text-align: center;">9 hours</td> <td style="text-align: center;">12 hours</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">10 hours</td> <td style="text-align: center;">13 hours</td> </tr> <tr> <td style="text-align: center;">Regular and predictable hours</td> <td></td> <td style="text-align: center;">Irregular and unpredictable hours Short notice of schedule Extended overtime On call across shift cycle</td> </tr> </table>	35-40 hours	48 hours	56 hours	624 hours			9 hours	12 hours		10 hours		13 hours	Regular and predictable hours		Irregular and unpredictable hours Short notice of schedule Extended overtime On call across shift cycle	<p>Consider control measures — see those suggested for working hours in Section 4 of the Approved Code of Practice: Working Hours.</p>
35-40 hours	48 hours	56 hours															
624 hours																	
9 hours	12 hours																
10 hours		13 hours															
Regular and predictable hours		Irregular and unpredictable hours Short notice of schedule Extended overtime On call across shift cycle															

	<p style="text-align: center;">General risk indicator for hazard factors</p> <p style="text-align: center;"><i>Action: Where risk is assessed as being above low/medium risk, undertake Step 3 in the next column.</i></p> <p style="text-align: center;">Increasing level of risk </p> <p style="text-align: center;">Lower risk Higher risk</p>			
<p>1.2 Shiftwork, including Fly in/Fly out (FIFO)</p> <p>1.2.1 Length of shift (other than FIFO)</p>	<p>10 hours 12 hours </p>			<p>Consider control measures — see those suggested for shiftwork in Section 4 of the Approved Code of Practice: Working Hours.</p>
<p>1.2.2 Time of shift</p>	<p>Day shifts Afternoon shifts Night shifts </p>			
<p>1.2.3 Speed and direction</p>	<p>Forward rotation (ie morning/afternoon/night) Backward rotation (ie night/evening/ morning) or slower rotation (eg weekly rotation/3-4 weekly rotation) </p>			
<p>1.2.4 Split shifts</p>	<p> 13 hour period </p>			
<p>1.2.5 FIFO — total hours over a three-month period</p>	<p> 728 hour period </p>			
<p>1.2.6 FIFO — sequential night shifts</p>	<p> 7 x 12 hour shifts 7 x 8 hour shifts 6 x 10 hour shifts 6 x 12 hour shifts </p>			
<p>1.2.7 FIFO — period of non-work following a sequence of night shifts</p>	<p>48 hours 24 hour minimum </p>			
<p>1.2.8 FIFO — return from rest and recreation to FIFO operations</p>	<p>Adequate sleep prior to first shift Extended travel prior to shift start </p>			

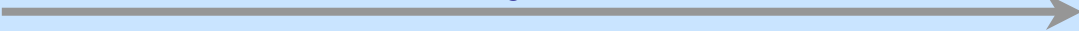
		<p style="text-align: center;">General risk indicator for hazard factors</p> <p style="text-align: center;"><i>Action: Where risk is assessed as being above low/medium risk, undertake Step 3 in the next column.</i></p> <p style="text-align: center;">Increasing level of risk </p> <p style="text-align: center;">Lower risk Higher risk</p>			
1.3 Night work					<p>Consider control measures — see those suggested for night work in Section 4 of the Approved Code of Practice: Working Hours.</p>
1.3.1	Shift end (for those working eight hours or more between 10.00 pm and 6.00 am)			After 10.00am Before 6.00 am	
1.3.2	Length of shift		8 hours 10 hours 12 hours		
1.3.3	Sequential night shifts (other than FIFO)		6 or more 8 hour shifts 5 or more 10 hour shifts 4 or more 12 hour shifts		
1.3.4	Period of non-work following a sequence of night shifts (other than FIFO)	48 hours		Less than 48 hours	
1.4 Breaks during work					
1.4.1	Frequency of breaks	Adequate and regular breaks		Infrequent or no breaks	
1.5 Breaks between work periods					<p>Consider control measures — see those suggested for breaks during work suggested in Section 4 of the Approved Code of Practice: Working Hours.</p>
1.5.1	Recovery time	Adequate time for sleep, travel and meals etc		Inadequate time for sleep, travel and meals etc	
1.6 Seasonal work arrangements					
1.6.1	Hours worked	Regular hours over 12 months		Long hours during peak season	

		General risk indicator for hazard factors		
		<i>Action: Where risk is assessed as being above low/medium risk, undertake Step 3 in the next column.</i>		
		<p style="text-align: center;">Increasing level of risk</p> 		
		Lower risk	Higher risk	
2. Demands Of The Work Tasks				
2.1 Repetitive work (physical and/or mental)	Varying task demands	Highly repetitive work and/or high concentration work, with high demands over an extended period of time.		Consider control measures — see those suggested for breaks during work period and work task demands in Section 4 of the Approved Code of Practice: Working Hours.
2.2 Physically demanding work	Minimal physically demanding work	Highly physically demanding work that results in muscle fatigue.		
2.3 High concentration and/or mentally demanding work	Minimal periods of high concentration and/or mentally demanding work	Long periods of high concentration and/or mentally demanding work.		
3. Fatigue critical tasks where there are potentially increased risks of incidents, injury or harm should employees become fatigued.	Non-fatigued employees operating plant and/or making critical decisions	Fatigued employees operating certain plant and/or making critical decisions		Consider control measures — see those suggested for fatigue critical tasks in Section 4 of the Approved Code of Practice: Working Hours.
4. Extended exposure to hazards				
4.1 Exposure to hazardous substances and atmospheric contaminants	For hazardous substances, low risk calculated using national exposure standard ¹	For hazardous substances, high risk calculated using national exposure standard.		Consider control measures — see those suggested for exposure to hazards in Section 4 of the Approved Code of Practice: Working Hours.

¹ To access exposure standards, see the internet database, Hazardous Substances Information System, available at www.safeworkaustralia.gov.au

	<p align="center">General risk indicator for hazard factors</p> <p align="center">Action: Where risk is assessed as being above low/medium risk, undertake Step 3 in the next column.</p> <p align="center">Increasing level of risk </p> <p align="center">Lower risk Higher risk</p>			
4.2 Exposure to noise	Low risk calculated according to formulae in AS/NZS 1269.1 ²		High risk calculated according to formulae in AS/NZS 1269.1	Consider control measures — see those suggested for exposure to hazards in Section 4 of the Approved Code of Practice: Working Hours.
4.3 Exposure to extreme temperatures	Minimal exposure		Long period of exposure	
4.4 Exposure to vibration	Minimal exposure		Long period of exposure	
5. Information and training				Consider control measures — see types of information suggested in Section 4 of the Approved Code of Practice: Working Hours.
5.1 Provision of information on fatigue management and health and lifestyle factors	Adequate information is provided		No information is provided	
5.2 Provision of training on fatigue management and health/ and lifestyle factors	Adequate training is provided		No training provided	
5.3 Training on job skills	Adequate training for job demands		Inadequate training for job demands	
6. Supervision				Consider control measures — see those suggested for supervision in Section 4 of the Approved Code of Practice: Working Hours.
6.1 Adequacy of supervision	Adequate supervision		In some instances, working alone (refer to Division 2.14 of the OHSW Regulations)	

² Risk should be calculated according to formulae in Australian/New Zealand Standard AS/NZS 1269.1 Occupational noise management - measure and assessment, published by Standards Australia (www.sai-global.com).

	<p style="text-align: center;">General risk indicator for hazard factors</p> <p style="text-align: center;"><i>Action: Where risk is assessed as being above low/medium risk, undertake Step 3 in the next column.</i></p> <p style="text-align: center;">Increasing level of risk</p> <p style="text-align: center;">  </p> <p style="text-align: center;">Lower risk Higher risk</p>		
<p>7. Other Organisational factors</p> <p>7.1 Work Culture</p>	<p>Work-life balance is recognised as important & a range of flexible work arrangements are offered.</p>	<p>Employees expected to work for as long as needed whenever needed.</p>	<p>Consider control measures — see those suggested for individual and lifestyle factors in Section 4 of the Approved Code of Practice: Working Hours.</p>
<p>7.2 Flexibility or lack thereof</p>	<p>Flexible work hours available to staff.</p>	<p>Flexible work hours not feasible &/or tolerated.</p>	
<p>7.3 Planning</p>	<p>Deadlines set based on work required and resources available.</p>	<p>Deadlines set without proper consideration of the work involved.</p>	
<p>7.4 Control over work demands</p>	<p>Steady flow of work – able to set own deadlines.</p>	<p>Little or no control over timing and volume of work.</p>	
<p>8. Individual factors</p> <p>8.1 Lack of sleep (amount and quality) due to e.g. illness, sleep disorder, family commitments</p>	<p style="text-align: center;">Night sleep 8 hours night sleep (in 24 hrs)</p>	<p style="text-align: center;">Day sleep 6 hours night sleep (in 24 hours)</p>	<p>Consider control measures — see those suggested for individual and lifestyle factors in Section 4 of the Approved Code of Practice: Working Hours.</p>
<p>8.2 Conflict between work and personal commitments</p>	<p>Access flexible work arrangements when needed. Has good support networks in times of peak work demands.</p>	<p>Experiencing life trauma such as serious illness of self or loved one. Sudden surge in non-work responsibilities.</p>	
<p>8.3 Travel time between work and home</p>	<p>Minimal travel time between work and home.</p>	<p>Long travel time between work and home.</p>	