Example Template - Fatigue Management Programme

Insert Date

Document Control Information

Approval signatures

Owned by - Date

Approved by - Date

Box 1 – How to use this template

This template is a resource for Company businesses and operating sites to use as they build their own fit-for-purpose Fatigue Management Programs.

It is designed to be used with

- *The Company FMP Guideline which explains the process for preparing a FMP including using this template*
- *The Glencore Copper – Fatigue Management Assessment Record (an Excel spreadsheet) a tool used undertake and record a systematic fatigue risk management review that reflects your fatigue risks*

Throughout the template there are shaded boxes with content advice for your review. To complete your FMP, extract relevant information and content to support you own work and then delete the box. Your final working FMP (built from this document) should have no shaded advice boxes

FMP INTENT AND CONTEXT

Use the information in Box 2 below as a resource for this section, add further business and operating site information. Refer to Section 3 step 1 of the guideline requirement

"Each business FMP shall include an intent section that states purpose, objectives and how it supports organisation mission e.g. by referencing health and safety policy."

Box 2 - The Company is committed to, and takes very seriously, its obligation to provide a safe, healthy and productive workplace. This commitment extends to implementing and maintaining effective processes so that fatigue impaired people cannot harm others, themselves and/or cause other business loss at work.

This Fatigue Management Program aligns with the Health and Safety Management System and assists the Company to:

- *Maintain and continuously improve our Health, Safety and Environmental Management System.*
- *Proactively identify hazards and unsafe behaviours and take steps to manage them to as low as reasonably practicable.*
- *Assess and recognise the health and safety performance of Employees.*
- *Consult and actively promote participation with Employees to ensure they have the training, skills, knowledge, and resources to maintain a healthy and safe workplace.*
- *Comply with all relevant health and safety laws.*
- *Encourage our business partners and contractors to demonstrate the same commitment to achieving excellence in health and safety performance*

This FMP is based on

- *A planned and systematic risk-based approach to identify, classify and control fatigue hazards relevant to the business and/or operating site*
- *Defining what needs to be done to implement and maintain relevant fatigue controls*
- *Setting clear accountabilities for FMP implementation and maintenance*
- *Monitoring performance*
- *Undertaking periodic reviews and where necessary to make improvementsindividuals, supervisors, and the Company are meeting their duty of care obligations.*

Use the table below as a resource to meet the guideline expectation again from Section 4, Step 1. Go to the referenced legislation and quote precisely and directly

"Based on a review of relevant legislation, the intent section shall confirm and reference both general and specific fatigue management health and safety duties that apply to and are relevant for the business and/or operation."

Reference Legal Context – Australian Example

Who	Duties
Person conducting a business or undertaking (Australia section 19 of model laws)	Has the primary duty to ensure, so far as is reasonably practicable, workers and other persons are not exposed to health and safety risks arising from the business or undertaking. This includes ensuring, so far as is reasonably practicable: • provision and maintenance of a work environment without risks to health and safety • provision and maintenance of safe systems of work, and • monitoring the health of workers and the conditions at the workplace for the purpose of preventing illness or injury of workers arising from the conduct of the business or undertaking. *Notes - the duty on the person conducting the business or undertaking is not removed by a worker's preference for certain shift patterns for social reasons, their willingness to work extra hours or to come to work when fatigued. The person conducting the business or undertaking should adopt risk management strategies to manage the risks of fatigue in these circumstances.*
Officer (Australia section 27)	Officers such as company directors, must exercise due diligence to ensure the business or undertaking complies with its work health and safety duties. *Notes: This includes taking reasonable steps to ensure the business or undertaking has and uses appropriate resources and processes to manage the risks associated with fatigue.*
Worker (Australia section 28)	Workers must take reasonable care for their own health and safety and must not adversely affect the health and safety of other persons. Workers must also comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to fatigue at the workplace, such as policies on fitness for work or second jobs. *Notes: Workers' duties in relation to fatigue do not mean they must never work extra hours. However, they should talk to their manager or supervisor to let them know when they are fatigued. They should also avoid working additional hours and undertaking safety critical tasks when they know it is likely they are fatigued.*
Consultation (Australia section 47)	**Australia** - A person conducting a business or undertaking must consult, so far as is reasonably practicable, with workers who

Who	Duties
Worker Engagement	carry out work for the business or undertaking who are (or are likely to be) directly affected by a work health and safety matter.
Worker representation (Australia Section 48)	**Australia** - If the workers are represented by a health and safety representative, the consultation must involve that representative.

RESPONSIBILITIES

Responsibility for effectively managing fatigue hazards range from company, supervisory, workgroup and individual factors.

From guideline *Step 2.5 Recommend control owners for controls* confirmed by senior management *at Step* 2.6 *Review control and control owner recommendations.*

Review the 'control owner' information in *the Fatigue Risk Management Record* (Excel spreadsheet) and build a comprehensive table of responsibilities based around fatigue hazard control measures.

The table below contains some examples

Who	Responsibilities
Individual	Employees shall ensure their activities outside working hours do not inhibit their ability to carry out their duties at work without risk to their own or other's health and safety. This includes ensuring they have adequate sleep and are not at risk of fatigue before commencing a shift or roster. If an employee recognises their ability to perform normal duties is impaired (for any reason) prior to or during a shift, it is their responsibility to report that risk to their supervisor. All employees shall complete a fatigue awareness program about the risks associated with fatigue. This program will include information about sleep requirements and the human body clock, fatigue indicators, contributing factors (e.g. lifestyle, diet, sleep, drugs and alcohol), health and fitness, and self-management of fatigue
Workgroup	If an employee believes that a workmate is fatigue impaired and unable to perform normal duties prior to or during a shift, it is their responsibility to take action to assist their workmate and report to their supervisor.
Supervisor	Manage a fatigued worker Monitor critical tasks undertaken on site
Leadership team of business or operating site	Set standards for hour of work etc.

Who	Responsibilities
HR and HSE Support	Prepare and carry out training and awareness sessions

FATIGUE MANAGEMENT CONTROL REQUIREMENTS

Based on control information recorded from following guideline steps

Step 2.1 Identify and Document Fatigue Hazards

Step 2.2 Classify level of Risk from Fatigue Hazards

Step 2.3 Document current control measures

- *Confirm maximum hours of work*

*Box 3 – Example of how **hours of work** can be defined*

Ensure the following hours of work are not exceeded:

- *A rostered shift is a maximum of 12.5 hours*
- *In a 24-hour period, the maximum working hours are 15 hours, which includes travel time to and from accommodation to site*
- *Average weekly hours over the roster cycle should not exceed 60 hours per week for routine operations.*

- *Confirm breaks, both at work and between work attendance*

*Box 4 – Example of how **rest breaks** can be defined*

Adequate and regular rest breaks within a rostered shift are necessary to manage the risks associated with hours of work and fatigue. The table below shows the minimum break requirements

Shift length (hours)	Total break time (minutes)	Number of breaks	Recommended timing of breaks
>10.5 to 12.5	60	2	4 – 5 hours after shift commencement
≤10.5	30	1	4 – 5 hours after commencement of shift

- *Flexibility of break times may be arranged after consultation between the supervisor and worker to allow management of fatigue.*
- *All personnel shall have minimum breaks between consecutive shifts of 10 hours.*
- *If a shift is extended beyond 15 hours then this recovery time should be extended by an amount of time agreed by the supervisor and employee.*
- *Personnel who are required to be on standby or on-call shall be rostered to ensure that adequate breaks are factored in.*

- *Confirm processes for managing a fatigued worker*
- *Confirm processes for journey management*
- *Confirm processes for managing contractors*
- *Confirm processes for approval to work in exceptional circumstances*

Step 2.4 Recommend additional relevant control measures

And approved by senior managers at Step 2.6

Describe and define business and/or operating site fatigue management requirements by the following categories

a) Work Scheduling & Planning – hours of work

b) Shift work

c) Night work

d) Breaks, both at work and between work attendance

e) Job Demands, both physical and mental

f) Work Environment Conditions

*Box 5 – Example of how **Work Environment Conditions control** requirements can be documented*

When temporary work environment factors (heat, humidity, noise levels and vibration) increase the fatigue risk classification to medium and/or high extra control measures will be considered such as

- *Longer rest breaks*
- *Promotion of a balanced diet and adequate rest*
- *Moderating the work environment e.g. use of shade*
- *Closer supervision*
- *Rescheduling of high demand tasks*

g) Individual and lifestyle issues

KEY PROCESSES

Based on information about key processes from

Step 2.3 Document current control measures

- *Confirm processes for managing a fatigued worker*
- *Confirm processes for journey management*
- *Confirm processes for managing contractors*
- *Confirm processes for approval to work in exceptional circumstances*

And

Step 3: Implement a fit-for-purpose FMP

- *Train supervisors*
- *Conduct employee fatigue awareness program*
- *Provide ongoing fatigue management information & support*
- *Manage the fatigue hazards from workplace change*
- *Refer at-risk employees to Employee Assistance Program*

Define FMP requirement or as appropriate link out to relevant information e.g. training packages

MONITORING AND IMPROVEMENT

Based on control information recorded from following guideline steps

Step 4: Monitor FMP performance

Step 5: Periodically reviewing and improve FMP

Provide further relevant details based on the Guideline

APPENDIX 1 SUMMARY OF THE FATIGUE RISK MANAGEMENT RECORD

Appendix 1 should include the final version of the work undertaken by the FMP Review group as approved by senior managers at Step 2.6 of the Guideline

This must include details of the members of the FMG review Group

Annex 1 Sleep and fatigue

Fatigue is caused when the body does not get adequate sleep.

Adults generally require between 7 and 9 hours sleep each night. Any reduction in this sleep time results in a sleep debt and if this occurs over consecutive nights the debt builds up. Eventually, sleep deprivation will accumulate to the level where the brain decides that it has to go to sleep and shuts down uncontrollably.

Humans have a sleep - wake cycle, the circadian rhythm, also known as the body clock, which is controlled by chemicals in the brain that are triggered by light and darkness. When it is dark melatonin shuts down many bodily functions such as digestion and muscular activity and prepares the brain for sleep. When it gets light cortisol stimulates the body to wake up. The human body is therefore hardwired to sleep at night.

Sleep is made up of different cycles as well. REM sleep (Rapid Eye Movement) and non-REM sleep. Both are essential for a good night sleep. REM sleep is dream sleep and may be linked to memory. Non-REM sleep is thought to be essential for the body to undergo cell repair and replacement. During a good night sleep the body will typically go through four of these Non-REM and REM cycles, each lasting about 90minutes, with the deepest sleep and longest period of REM sleep occurring in the last cycle.

If the body is not able to get all its required sleep needs this can result in fatigue but it can also lead to chronic health problems such as digestive or heart disorders.

Waking up prior to the last period of REM and non-REM sleep deprives the body of its deepest, most restorative sleep cycle.

Sleep deprivation is very common in modern society where work and social activities occur throughout the 24 hour period. At a time when people should be asleep many are awake for work purposes or choose to be awake for social reasons. Other causes of sleep loss include managing a new baby, studying or jet lag.

Shift work is a particular issue for sleep management as night shift workers are trying to sleep during the day when their body clock is waking them up.

Medical conditions can cause reduced sleep duration or reduced sleep quality, e.g. sleep apnoea. Snoring can be a symptom of this obstructive airway condition. However there are many other conditions that can reduce sleep duration or quality.

It is very common for travellers to suffer a disrupted sleep on the first night in unfamiliar surroundings as the brain is not adjusted to unusual stimuli that invoke a flight or fight response.

Annex 2 Recommended learning outcomes for employee fatigue management training

This annex lists examples of learning objectives of fatigue management training.

1 Introduction to fatigue management Identify the main components of a Fatigue Management Programme. Distinguish Todd management's role in managing fatigue from employees' roles. Identify and understand the aims of the fatigue management-training programme.	**5 Recognising the signs of fatigue** Identify the signs of fatigue. Rank the signs of fatigue according to severity. Recognise the signs of fatigue in specific Todd operating environments.
2 Causes and consequences of fatigue Understand what fatigue is. Identify the primary causes of fatigue. Describe the main causes of fatigue in their lives. Identify the effects of fatigue on safety. Identify the skills that are impaired by fatigue.	**6 Managing fatigue at work** Identify short-term countermeasures for managing fatigue at work. Be aware of daily caffeine consumption and how to reduce intake if necessary. Recognise which substances can affect alertness.
3 Sleep, sleep loss and the body clock Estimate their personal sleep need. Understand sleep loss and how it builds up. Identify the times of day at which alertness and sleepiness peak. Identify how the body clock influences fatigue on their roster. Recognise how being a 'morning' or an 'evening' person can affect alertness.	**7 Managing driver fatigue** Recognise the risk of drowsy driving. Identify effective preventative strategies against drowsy driving. Distinguish effective short-term countermeasures from those that are not effective. Recognise effective emergency countermeasure against drowsy driving and when to apply them.
4 How to improve your sleep Identify behaviours that interfere with their sleep. Recognise effective strategies for improving sleep habits. Recognise the most effective napping strategies. Recognise strategies to help if they are having difficulty falling asleep. Recognise when they should consult a doctor if they are having difficulty sleeping.	**8 Reporting fatigue** Identify when they need to report fatigue. Recognise why it is necessary to report fatigue. Understand the process Todd uses for recording fatigue-related incidents.

Annex 4 Fatigue impairment checklist for supervisors

This checklist is designed to assist managers identify fatigued employees.

The checklist responses reflect the opinions and perceptions of the employee who has completed it.

The checklist alone cannot determine or verify whether an employee is fatigued.

Step 1 – Observation

What do you notice about the employee's behaviour or how they are working compared to their usual pattern of behaviour over the last month?

		Yes	No
1	They have problems keeping their eyes open	☐	☐
2	They keep nodding their head.	☐	☐
3	They keep yawning.	☐	☐
4	They demonstrate poor concentration.	☐	☐
5	They demonstrate poor coordination.	☐	☐
6	They demonstrate poor communication skills.	☐	☐
7	They stare.	☐	☐
8	They demonstrate problems remembering things.	☐	☐
9	They do not finish their jobs with their usual speed.	☐	☐
10	They appear to be distracted.	☐	☐
11	They appear easily irritated.	☐	☐
12	They appear depressed.	☐	☐

If you have ticked three or more boxes, go to Step 2

Step 2 – Understand the situation

		Yes	No
1	Has this employee reported themselves, or has someone else reported them as being at risk of fatigue?	☐	☐
2	Do they perform safety or production-critical roles?	☐	☐
3	If the answer to either question 1 or 2 above is 'Yes', do you recommend that further enquiries are made into the employee's behaviour?	☐	☐

If you think further enquiries are required, go to Step 3.

Step 3 – Speak to the employee

You should speak to the employee; because this may help you understand or explain what you have noticed. For example, an employee may not be fatigued, but they may have a low blood-sugar level because they have not had anything to eat in the last eight hours.

Possible causes of fatigue include:

- Long hours of work.
- Prolonged periods without sleep.
- Working when an individual would normally be resting.

What is their explanation of what you have noticed?

1	According to the employee, how many hours is it since they last slept?	.....	hours
2	According to the employee, how long did they sleep for (at least 6 hours)?	.....	hours
3	According to the employee, how many hours continuous rest did they have before starting work?	.....	hours
4	According to the employee, is there a reason they did not get enough sleep or why they did not sleep well?		
5	What tasks have they done during this shift?		
6	Are these tasks fatigue-inducing (for example, are they repetitive, monotonous, dull, boring or conducted in a warm or poorly lit environment)?	Yes	No
	If 'Yes', for how long have they been doing these tasks?	.....	hours
7	According to the employee, how long ago did they last have a break?	.....	hours
8	According to the employee, how long was that break?	.....	hours
9	According to the employee, how long ago did they last have a drink or something to eat?	.....	hours

Notes:

Shift start time: _____ Shift end time: _____

Continue to Step 4 - Decide what action if any is required

Step 4 – Action

You should now decide whether or not it is safe to allow the employee to carry on with their tasks.

There are several suggestions about things that might help below, but if you believe these will not work, you should consider sending the employee home.

		Yes	No
1	Do you think that the employee should continue working without further action being taken?	☐	☐
2	If the answer to question 1 is no, what action will be taken?		
	• Move them to a lower-risk activity.	☐	☐
	• Have them do different tasks.	☐	☐
	• Let them have a short break.	☐	☐
	• Let them have a nap.	☐	☐
	• Have them work with a partner or supervise them more.	☐	☐
	• Send them home (perhaps in a taxi).	☐	☐
3	Have any problems with fatigue been identified for this employee in the past?	☐	☐
4	Have you done the following?		
	• Filled in an incident report.	☐	☐
	• Referred them for training in managing fatigue.	☐	☐
	• Referred them to EAP or Occupational Health.	☐	☐

Annex 5 Self-assessment questionnaires

These questionnaires can be used to assess sleepiness, the possibility of sleep apnoea and whether they prefer mornings or evenings. They are intended for personal use and are not recommended for use as management tools, for example, for assessing fitness for work, unless under the guidance of a health professional.

Questionnaire	Link	This questionnaire should be used to:
Sleep Apnoea Questionnaire	http://www.sleepapnoeanz.org.nz/saanz_test.html	Assess the possibility that you have sleep apnoea, a sleep disorder associated with loud snoring and excessive sleepiness.
Epworth Sleepiness Scale	http://www.smmc.com/index.php?id=105	Measure how likely you are to doze off of fall asleep in different situations.
Morningness–eveningness Questionnaire	http://www.bbc.co.uk/science/humanbody/sleep/crt/	Determine whether you are more or a morning person (someone who performs well in the morning) or an evening person (someone who performs well in the evening).
Stanford Sleepiness Scale	http://www.stanford.edu/~dement/sss.html	Provide a standardised way to report how alert you are feeling.

Annex 6 Guidance on the management of shift work problems

The following are examples of measures to manage shift-work. Not all measures will be appropriate in all circumstances. When deciding whether measures are to be implemented, consideration should be given to the results of a fatigue risk assessment.

Shift work	Comment	Management measures
	Scheduling	
Shift timing	We are programmed to be alert and active during the day.	Consider maximising the hours of work scheduled between 07.00 and 20.00.
Night shifts	Permanent night workers run the risk of chronic sleep debt.	Consider restricting night shifts to 4 in a row (or 2 in a row if they are 12-hour shifts). Consider allowing at least 2 days off following night shift and to avoiding keeping workers on permanent night shifts.
Early starts	Early morning starts can lead to sleep loss and fatigue.	Unless operational requirements require otherwise, consider moving early shift start times forward (e.g., 7 a.m. not 6 a.m. start) and limit the number of successive early starts to a maximum of 4 if possible. Consider whether shifts involving an early start should be shorter in length to counter the impact of fatigue later in the shift.
Shift length	Long shift duration is an important cause of fatigue.	Consider whether no scheduled shift should exceed 12 hours. Consider whether no shift should be extended beyond a total of 14 hours by overtime. Consider whether any work beyond 14 hours duty time should only be permitted in exceptional circumstances (e.g., emergencies), subject to risk assessment and management authorization.
Rotation	The speed and direction of rotation influence individual fatigue and individual adaptation.	Consider rotating shifts quickly (e.g., every 2-3 days) and avoiding rotating shifts every 1-2 weeks. Consider using forward rotation (morning / afternoon / night) whenever possible.
Rest periods between shifts	Lack of rest between shifts is a cause of shift work-related fatigue.	Consider scheduling a minimum rest period of 10 hours between the end of one shift and the beginning of the next. Consider whether rest periods between shifts permit sufficient time for commuting, meals and allow for an 8-hour sleep opportunity. Consider planning weekends off, advisably at least every 3 weeks.
Breaks within a shift	Long periods of continuous work without a break can be fatiguing.	Consider providing short breaks of 5-15 minutes every 1-2 hours.

Shift work	Comment	Management measures
Scheduling		
		After every 5 hours of work, providing 30 minutes break to enable meals to be taken.
Consecutive working days	Consecutive shifts increase accident risk due to fatigue.	Consider scheduling work hours that do not exceed 48 hours in any period of seven successive days. Consider whether total work, including overtime, should not exceed 60 hours or seven successive work days before a period of rest days.
Days off	Days off enable individuals to recover from a work schedule and to take part in social and domestic activities.	Consider scheduling at least one day off per rolling 7-day period, at least two consecutive days off per rolling 14-day period and allow at least 2 days off following night shift.

Shift work problem	Comment	Management
Scheduling		
Weekends off	Regular weekends off promote social and domestic activities.	Consider building regular free weekends into the shift schedule, e.g., at least one weekend off every rolling 21 day period.
Shift variability	Shift variability is often inevitable but can be fatiguing.	Consider confirming shift schedules are as stable as possible and do not markedly change from week to week. Consider discouraging fatigue inducing shift swapping.
Job design		
Job design		Consider arranging that safety and production critical tasks so are undertaken when employees are most likely to be alert. Consider avoiding safety and production critical tasks : • Towards the end of a shift. • Immediately after a meal. • At night. • In the early hours of the morning. Consider other job design measures that can be taken to manage the risk of fatigue when carrying out safety and production critical tasks. Such measures include: • Providing additional supervision. • Co-worker double check systems. • Varying workload. • Rotating between tasks.

Shift work problem	Comment	Management
Work environment		
Work environment	Inadequate lighting, temperature and ventilation levels promote fatigue.	Consider whether alertness can be improved by optimising lighting, temperature and ventilation levels.
Staff workload balance		
Staffing levels	Inadequate staffing levels may lead to excessive hours of work or overtime, which are fatiguing.	Consider whether adequate staffing levels and relief systems are provided to avoid regular working of excessive hours or overtime.
Workload	Individuals with an appropriate and varied workload will be more effective.	Consider whether an appropriate and varied workload is planned. Consider providing a variety of tasks, both physical and mental, and if practical allow employees to choose the order in which they are undertaken.
Control room duties		Consider dividing control room duties into watches of four or six hours each, with each employee responsible for the control room for a single four- or six- hour watch during each 12-hour shift. Consider encouraging active communication between control room operators to improve alertness. Consider recommending that in all cases, a break of 15 minutes should be taken at two-hour intervals during each watch, with one of the other team members taking over responsibility for the control room during this break.

Annex 7 Short term fatigue management techniques

1. Powernaps

A 20-40 minute nap is a short term measure for managing fatigue “in the moment”. However it should not be seen as a long term solution as it is usually only needed where sleep is not being managed.

When driving, this can be an effective short term measure for preventing a vehicle accident. Upon recognising tiredness or fatigue the person should pull over a soon as it is safe to do so and have a nap. A longer sleep however can result in sleep inertia (grogginess upon waking) which can also pose a driving risk.

2. Sleeping tablets

Sleeping tablets may be useful for a short term solution to fatigue but they do not provide both REM and non-REM sleep and are therefore not a long term solution; their use may mask underlying fatigue or medical issues.

Use of sleeping medication should always be under professional medical guidance.

3. Caffeine

Caffeine can raise alertness levels for short periods of time but should be avoided a few hours before sleep time in order not to interfere with normal sleep requirements.

Caffeine can either be consumed by drinking coffee, caffeine enhanced energy drinks or the use of caffeine tablets. Caffeine or other stimulants should not be used as a regular way of managing fatigue or raising alertness.

4. Long distance travel

Following long distance air travel, across multiple time zones, take a taxi rather than a hire car to avoid a jet lag induced vehicle accident/

Inadvisable or ineffective sleep management tactics

1. Alcohol

Alcohol, particularly in excess, far from assisting in getting sleep, results in sleep loss and is not a good tactic for sleep management.

2. Exercise

Exercise immediately prior to sleep is not a good sleep strategy as it stimulates the body rather than tiring it out and preparing it for sleep.

3. Storing up sleep

The body cannot store sleep so trying to sleep longer than 8 hours a night in anticipation of a period of sleep deprivation is not effective. Usually extending sleep time can only be achieved artificially by sleep medication which does not provide good quality sleep.

4. Driving techniques

Several methods for staying awake whilst driving are ineffective. These include winding down the window for fresh air or turning up the radio.

5. Non-sleep resting

Having a rest when tired, but not sleeping, is not effective at managing fatigue. A rest does not make up for loss of sleep.

Medical management of fatigue related conditions

Businesses can assist employees identify fatigue issues and encourage them to seek medical assistance.

People with sleep difficulties may be able to attend sleep-wake clinics for assessment and treatment.

Techniques for good sleep

Bedroom

- Make sure the bedroom has curtains which blot out light and muffle sound if trying to sleep during the day
- Ask family members to respect sleep requirements if working on night shift and not disturb sleep time.
- Do not watch TV, or use computer devices in the bedroom, the blue light these emit affects the ability to sleep.
- The body needs to cool down to get to sleep, do not heat the bedroom or bed except to take a chill off the room. Excess cold can also prevent sleep.

Pre-sleep routine

- Have a routine to allow relaxation for 30-60 minutes before going to bed. Individual needs are different and should be worked out be the individual.
- Avoid alcohol, caffeine and fatty or heavy food before bedtime. A hot milky drink can assist in relaxation.
- Avoid exercise for a couple of hours before sleep time.
- Make notes or lists before bed if there are lots of things to remember or think about to avoid losing sleep due to anxiety.
- If sleep does not come after 15-30 minutes get up and undertake a relaxing activity or menial chore.

Annex 8 Fatigue models for assessing work schedules

The fatigue models listed can be used to provide an indication of the level of fatigue associated with different work schedules.

Fatigue models are valuable tools but they should always be used in combination with other indicators of fatigue. This is because the models only consider some of the factors that determine fatigue, for example, the duration of shifts and time off. They do not consider other factors such as schedule predictability, the nature of the task being undertaken, the environment or individual factors.

The models should also only be used by appropriately trained individuals.

Fatigue model	Link	Details
Fatigue / Risk Index	http://www.hse.gov.uk/research/rrhtm/rr446.htm	The Fatigue / Risk Index was developed by the United Kingdom Health and Safety Executive and is a freely available tool.
Fatigue Audit Interdyne (FAID)	http://faid.interdynamics.com/	FAID is a commercial product developed based on research conducted at the Centre for Sleep Research in Adelaide, Australia. FAID considers four factors: the time of day of work and breaks; the duration of work and breaks; the work history in the preceding seven days; and the biological limits on recovery sleep.
Fatigue Avoidance Scheduling Tool (FAST)	http://fatiguescience.com/fast.php	FAST is a commercial product developed based on research conducted in the USA.