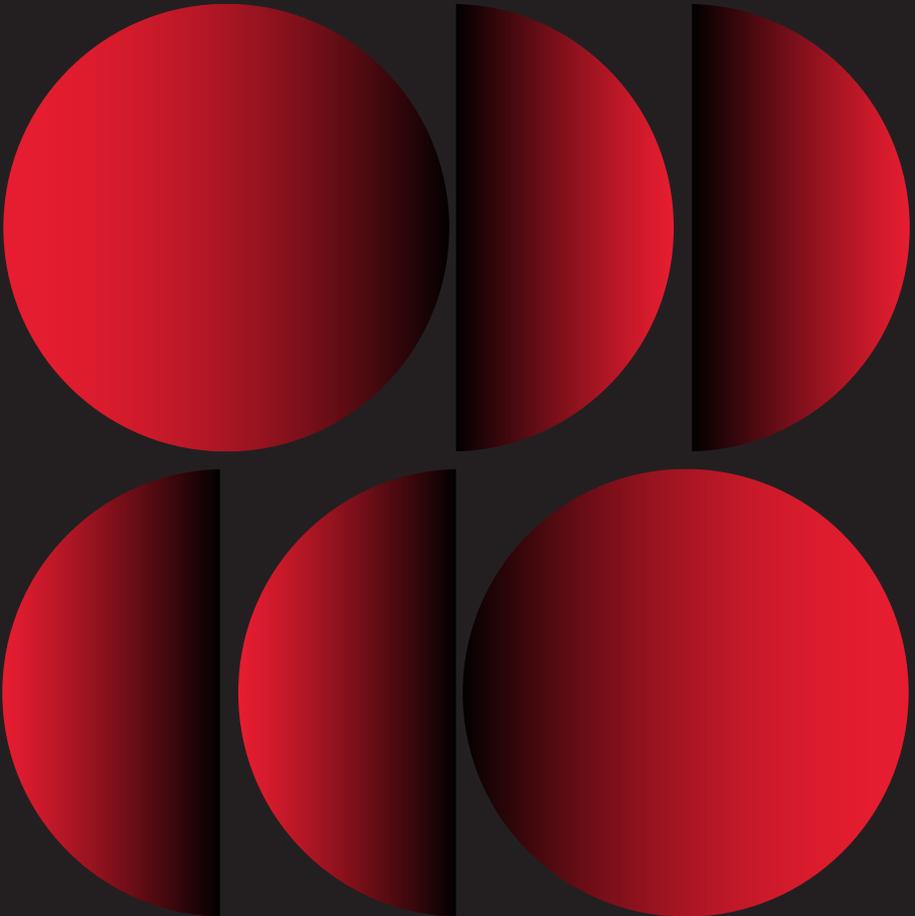


RESOURCE



NIGHT SHIFT

Your Handbook for Working Night Shifts



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WELCOME TO THE NIGHT

Working night shifts is hard.

It takes a toll on your body, strains your mind, and affects your life outside of work. Many of us who work the graveyard shift know the frustrating combination of feeling exhausted just as our shift begins, and then lying wide awake when we finally get home after dawn.

Fatigue is the major challenge night shift workers face. This unique hazard increases the risk of physical and mental health issues, and raises the chance of errors or injuries on the job.

Understanding these risks, and knowing what practical steps you can take to reduce them, is essential. This handbook offers a brief overview of what we know about the impacts of night shift work, along with strategies to improve sleep, manage fatigue, and stay safe before, during, and after your shifts.

Research continues to highlight the burden of night work. A 2019 study of hospital staff found night shift workers reported lower job satisfaction, more disruption to family and social life, and significantly poorer sleep quality than their daytime colleagues (71% compared with 50%).





Newer science reinforces how deeply nights affect our bodies. A 2022 study of French hospital night shift workers using portable activity and temperature monitors found major disruptions to circadian rhythms — changes that persisted even years after stopping night shifts.

While individual strategies matter to stay safe when working night shifts, collective action matters too. As a union, we work to ensure our contracts and rosters protect your health and safety on nights. This will only grow in importance as demand for 24/7 services continues to rise.

Together, we can ensure health professionals receive adequate protections, rest, and compensation for working the night shift.

When everyone else is asleep, night shift workers are on their feet, attending to the 24/7 needs of the public.



THE WORKPLACE IN THE 24-HOUR SOCIETY

Access to healthcare for an increasingly unwell and ageing population has made 24-hour rosters essential, but they come with a cost. The more we expand 24/7 operations, the more we risk the health and wellbeing of the people delivering those services. As Philippa Gander writes in *Sleep in the 24-Hour Society*:

“ *The usual motivation for moving to 24-hour operations (except in the emergency services) is economic – to increase productivity and profitability. The safety and health consequences of shiftwork are effectively hidden costs that are transferred to the individual, his or her family, and eventually to society... putting a dollar value on them is exceedingly difficult. Nor does it capture their effect on quality of life...*

I am still unresolved in my position with regard to the 24-hour society. The pragmatist in me says that it is here to stay... But there is another voice that urges caution. I also strongly believe that we need to broaden the debate on the costs and benefits... and to stop ignoring the moral and political implications. ”

Why Worker Protections Matter

Workplace safety has often been led by workers. Union-won campaigns for the 8-hour day, equal pay, and a minimum wage have improved and extended workers' rights. These victories were secured through collective strike action and by Parliament passing legislation such as the Equal Pay Act and Health and Safety at Work Act.

As research increasingly shows the critical importance of sleep, and the serious risks associated with sleep disruption, we need to continue this tradition by building new protections for night shift workers into our collective agreements. For hospital workers and emergency services in particular, 24-hour operations are not going away. Our protections must evolve to meet this reality.



What Safer Night Work Could Look Like

An effective action plan for night shift workers begins with recognising the unique physiological strain nights impose. The following minimum standards should be mandatory to help reduce fatigue, improve safety, and support wellbeing:

- Clean **drinking water** and **nutritious meals** provided.
- No more than **8 hours** worked overnight.
- No more than **4 consecutive** night shifts.
- Reimbursed annual **medical check-ups**.
- Annual **fatigue monitoring**, and wrist-worn sleep trackers to regularly assess roster impacts.
- **11 hours of rest** in every 24-hour period.
- On-site **sleep facilities** for napping or post-shift rest, especially for long-distance commuters.
- Roster changes made only **with agreement** from those working them.
- **Time-and-a-half pay** for all hours worked between 10pm and 7am.



The Night Work Convention

The International Labour Organisation (ILO) - a United Nations agency representing states, employers and union organisations - sets international employment law and monitors workers' rights worldwide.

Through conferences, these parties agree the rules and standards for international employment law through adopting Conventions, which can then be ratified through for example implementation in domestic or national law.

In 1990, the ILO adopted Convention 171: the Night Work Convention. It was the eighth convention the ILO has adopted on the rights of night shift workers. Earlier ILO conventions had regulated night work for women and children; C171 broadened focus to all workers affected by night shifts.

C171 defines night work as *more than seven hours including the interval between midnight and 0500*, and outlines key protections for night workers, including:

- The right to a free, confidential health assessment and advice on how to avoid health problems associated with their work (before employment, at regular intervals during, and if they experience a health problem).
- On-site first aid facilities.

- The right to transfer to similar daytime work if medically unfit for nights.
- An alternative to night work for pregnant women eight weeks before and after childbirth.
- Compensation in time and pay that recognises the nature of night work.
- Access to appropriate social services.
- Regular consultation between employers and unions over the work schedules of night workers.

In 2018, Uruguay became the 17th country to ratify C171. At ratification, the Vice Minister of Labour and Social Security, Dr. Nelson Loustaunau, stated:

“ *There is scientific evidence that night work has undesirable effects on the physical and psychological health of those who perform it. For that reason, it is not recommendable to undertake night work. Nevertheless, the current conditions of production, in certain cases, make it necessary and even indispensable. It is for these reasons that our country is ratifying Convention No. 171 with a view to extending the list of instruments to protect those workers who have to work at such times.* ”

Lets Get Truckin’ — Lessons from Transport Workers

New Zealand heavily regulates the maximum working hours of transport and truck drivers, who may work a maximum of 13 hours in any 24-hour period, must have a 10 hour break, as well as their half breaks for each five-and-a-half-hour period. After 70 hours worked, drivers must take a break of at least 24 hours. These rules are enforced by the police, who can inspect the logbooks drivers are required to keep and show on demand.

Yet no equivalent legal protection exists for most other workers, despite identical human physiology and identical fatigue risks. An OECD report found 13% of New Zealanders work more than 50 hours a week, far above the average of 9% for other OECD countries.

Until we get serious as a country about ensuring adequate protections for shift workers, the negative effects of the 24-hour society will continue to be borne by those working the midnight shift.

We must keep working together to put stronger protections into our collective agreements to ensure we’re as safe as possible on the night shift.

European Working Time Directive

Europe incorporates many ILO C171 protections directly into law. The European Working Time Directive recognises that:

“ *Research has shown that the human body is more sensitive at night to environmental disturbances and also to certain burdensome forms of work organisation and that long periods of night work can be detrimental to the health of workers.* ”

THE DIRECTIVE MANDATES:

- **11 consecutive hours' rest** every 24-hours.
- A **24-hour rest** every 7 days.
- A maximum average of **48 working hours** per week (including overtime).
- Night shifts no longer than **8 hours**.
- Free health assessments and guaranteed transfer to day shifts for workers who become ill.

Some European countries go even further. Sweden's *Working Hours Act 1982* ensures 11 consecutive hours' rest in any 20-hour period, and limits night shifts to 8 hours.

NASA Nap

In the 1990s, NASA began studying fatigue in astronauts, recognising that a single mistake in space could be catastrophic. One study examined the effect of short naps on commercial airline pilots during 9-hour flights.

The findings were striking:

- A **25-minute nap** maintained pilot performance across long flights.
- Napping pilots had **16% faster reaction times** and **34% fewer lapses**.
- They were **half as likely** to report drowsiness.

Today, “NASA naps” are widely used by pilots and astronauts to improve alertness and reduce fatigue. The research underscores a simple truth: strategic rest saves lives.



THE HEALTH & SAFETY AT WORK ACT 2015

The Health and Safety at Work Act 2015 (HSWA) places a clear duty on employers to ensure, **so far as is reasonably practicable**, the health and safety of workers. In practice, this means employers must **eliminate risks** where possible, and **minimise risks** when elimination is not realistic.

For night shift workers, fatigue is a known and significant risk. Worksafe New Zealand provides specific guidance to help employers manage this risk effectively.

What Employers Should Do

Worksafe recommends that employers:

- Ensure workers take **regular rest breaks**.
- Monitor hours carefully to ensure shifts are not too long and that workers can cope.
- Take a **conservative approach** to safety during low-attention periods (03:00–05:00 and 15:00–17:00), avoiding critical tasks.
- **Negotiate overtime**, set limits, and avoid incentives that encourage excessive hours.
- Monitor and limit **shift swapping and on-call duties**.
- Design rosters that allow **adequate sleep, meaningful recovery time**, and avoid starts **before 6am** wherever possible.

- Limit the number of **consecutive night shifts**.
- Provide adequate facilities for breaks, rest, and drinking water.
- Ensure workloads are manageable.
- Understand employees' personal circumstances and provide support where needed.
- Provide good **supervision**.
- Develop a **fatigue management policy**, covering maximum shift lengths, weekly hours, travel, and how to report fatigue.
- **Train all workers**, especially new staff, in fatigue management.

What Workers Must Do

Under the HSWA, workers also have responsibilities to protect their own health and safety, including:

- Arriving at work **fit for duty**, having made every effort to get adequate sleep.
- Informing a manager when a task is **beyond their capability**.
- Recognising the **signs and symptoms** of fatigue.
- Report **fatigue-related incidents** or near misses.



KEEP YOURSELF SAFE

We're not always the best at looking after ourselves. This section outlines simple (though not always easy) strategies to protect your sleep, reduce fatigue, and stay safe.

Caffeine

Caffeine is a common tool for night workers, and when used well, it can help maintain alertness. But it stays in your system far longer than most people realise.

- Caffeine peaks in your bloodstream **15–45 minutes** after consumption.
- It has a **half-life of 5–6 hours**, meaning half the dose is still active many hours later.

In a US study, people consumed caffeine 0, 3, and 6 hours before bedtime. All three groups lost more than an hour of total sleep time, even when they didn't feel disrupted.

Interestingly, those who took caffeine six hours before bed did not report sleep disturbance — despite clear sleep fragmentation in their brain activity.

Best practice: Stop drinking caffeine at least 8 hours before your intended sleep time.

Alcohol

Alcohol can feel like a shortcut to sleep, especially after a night shift. But while it may help you fall asleep faster, it significantly degrades sleep quality.

- Alcohol suppresses melatonin, the hormone that regulates your sleep-wake cycle.
- Even moderate drinking can reduce melatonin production by 15–19%.
- It disrupts REM sleep, which is essential for memory, mood, and recovery.

A 2013 review found that although alcohol may deepen the first part of sleep, it leads to fragmentation, snoring, and poorer breathing later in the night.

“ Sleep may be deeper to start with, but then becomes disrupted... one shouldn't expect better sleep with alcohol. ”

–Chris Idzikowski, Director of Edinburgh Sleep Centre.

Best practice: Aim to have a zero blood alcohol level before going to sleep.

Blue Light

Our bodies are designed to be exposed to light in the day and darkness at night. Blue light — part of the short-wave spectrum of visible light — is strongest at midday and is naturally present in sunlight. It boosts attention, reaction time, and mood, but it also suppresses melatonin more than other types of light.

Exposure to sunlight or bright screens after a night shift can make it much harder to fall asleep.

Specialised cells in the eye help track time and regulate biological functions like the circadian clock, making our bodies especially sensitive to blue light.

Best practice:

- **Use warm-white LED or CFL bulbs (2700–3000 K) at home, avoiding cool-white or blue-white lighting.**
- **Enable night-time or “warm” screen settings on phones and computers.**
- **If commuting home in daylight, wear sunglasses or orange-tinted glasses to block blue light exposure.**

Sleep Masks & Earplugs

Noise and light can disrupt daytime sleep, whether from construction, traffic, or household activity.

- Studies show that eye masks and earplugs improve sleep quality, increase REM sleep, and raise nocturnal melatonin levels.
- Benefits include shorter time to fall asleep, fewer awakenings, and reduced anxiety.

Best practice: Use earplugs and a sleep mask whenever sleeping during the day to create a dark, quiet environment.

Annual Medical Checks

Night shift workers are at higher risk of type 2 diabetes, cardiovascular disease, hypertension, and certain cancers.

Best practice:

- **Have a yearly medical check with your GP.**
- **Request appropriate tests (blood pressure, blood sugar, cholesterol) to monitor risks.**
- **Where possible, employers should reimburse these check-ups.**

Meditation & Relaxation

Stress and racing thoughts make sleep difficult. Mindfulness and relaxation techniques help focus on breathing and body awareness, promoting calm and preparing the body for sleep.

- Research shows mindfulness meditation improves sleep quality more than sleep hygiene education alone.

Best practice: Use guided meditation or relaxation apps/videos before attempting to sleep.

Restructuring Rosters

Roster design is one of the most effective ways to reduce the health impacts of night work. A large 2022 cohort study found metabolic disturbances (higher BMI, waist circumference, and immune cell counts) were more pronounced in workers doing more than 3 consecutive night shifts.

Best practice:

- Limit rosters to no more than 3–4 consecutive night shifts
- Provide adequate rest days before and after night blocks.
- Minimize the total number of night shifts per month.
- Avoid rapid back-and-forth rotation between days and nights.
- Prioritise forward-rotating shifts (day to evening to night), which are easier on circadian rhythms.

Exercise

A 1988 Finnish study of shift-working nurses found moderate exercise (running, swimming, walking, gymnastics) increased sleep length and reduced fatigue.

Best practice:

- Aim for 150 minutes of moderate activity per week, broken into manageable sessions.
- Avoid heavy exercise in the 1–2 hours before bedtime.
- Light stretching or yoga after a night shift can help unwind.

Chamomile Tea

Chamomile tea is one of the world's most widely used herbal remedies, known for mild sleep-inducing and calming effects. Its natural compound, apigenin, may promote relaxation.

Best practice: Drink a cup of chamomile tea in your wind-down routine after a night shift.

Pregnancy

Evidence shows that night-shift work can disrupt menstrual cycles and, for pregnant workers, is linked to higher risks of miscarriage and preterm birth. Risk increases are especially notable for women in fixed night shift patterns.

Because night work disrupts circadian rhythms, sleep, and hormonal cycles, many health agencies advise minimising or avoiding night shifts during pregnancy.

- Pregnant staff should **avoid night shift work after 28 weeks.**
- Consider earlier modifications if experiencing fatigue, insomnia, or complications.
- Employers should provide alternative duties or day-shift options.
- Discuss shift work with a midwife or GP to ensure personalised guidance.

Sleep Debt

Recovery from sleep debt occurs over several nights and involves reorganising sleep architecture.

Typical recovery pattern:

- Night 1: Increased slow-wave (deep) sleep
- Night 2: Increased REM sleep
- Night 3: Sleep patterns usually return to normal

Best practice:

- **After a run of night shifts, plan for 2–3 recovery sleeps.**
- **Avoid over-sleeping beyond what feels restorative.**
- **Re-establish your normal sleep schedule with consistent sleep/wake times.**

Get Home Safe

Fatigue greatly increases risk of microsleeps and vehicle accidents, including head-on collisions.

Studies show post-night-shift drivers have impaired reaction times and frequently drift out of lanes. Fatigue-related crashes often occur within the first 45 minutes of driving.

Best practice:

- **Nap at work before driving home if your commute exceeds 20 minutes.**
- **Use public transport, carpooling, or ride-share if fatigued.**

Healthy Eating

Night shift disrupts metabolism and increases cravings for high-fat, high-carbohydrate foods. This is associated with higher risks of obesity, diabetes, and cardiovascular disease.

Meal Timing

- After shift, before sleeping: Small breakfast to prevent waking from hunger.
- After waking: Balanced lunch for daytime energy.
- Early in the shift: Light dinner or healthy snack.
- Late in the shift: Small snacks every few hours to maintain alertness.

Food Choices

Choose:

- Vegetables, soups, salads, fruit
- Yoghurt, whole-grain sandwiches
- Eggs, nuts, cheese or cottage cheese
- Green tea for antioxidants

Avoid:

- Sugary drinks, pastries, confectionery
- High-glycemic foods (white bread, refined carbohydrates)
- Heavy, greasy meals during the night

Bonus Tips

- **Keep a consistent sleep schedule** whenever possible, your body adjusts better to regular patterns.
- **Create a pre-sleep routine.** A warm bath can help by lowering your core body temperature, making it easier to fall asleep.
- **Avoid heavy meals or large drinks** right before bed.
- **If you can't fall asleep within 20 minutes**, get up and do something calming before trying again.
- **If sleep problems persist**, speak with your doctor for further support.



RISKS

We can't avoid the facts: research shows that night shift work is associated with increased risks for a range of health conditions. This does not mean that night shifts doom you to poor health, but it does mean you deserve accurate information so you can make informed decisions and take proactive steps to protect yourself.

Heart Attack & Stroke

Heart Attack Risk Up 31%

A 2012 meta-analysis of 34 studies involving 2,011,935 people found that shift work was associated with:

- 23% increased risk of heart attack
- 5% increased risk of stroke
- For night shift workers specifically: 41% higher risk of a "coronary event" (heart attack, coronary death, or hospitalisation due to coronary artery disease).

Long-Term Unhealthy Ageing

21% Less Likely to Age Healthily

A 24-year study of 46,318 U.S. nurses found that the more years worked on rotating night shifts, the less likely participants were to reach older age without chronic disease, or physical decline, or cognitive decline.

- Those with 10+ years of rotating night shifts had a 21% lower chance of healthy ageing.

Type 2 Diabetes

A 2018 study of 272,214 British adults found that people working more than eight night shifts per month were:

- 36% more likely to have type 2 diabetes than those who never worked nights.
- Researchers noted that circadian misalignment itself can worsen glucose tolerance, even in long-term shift workers.

Cancer

A 2018 meta-analysis of 61 studies including 3,909,152 women found increased cancer risks for long-term night shift workers:

- Breast cancer: up 32%
- Skin cancer: up 41%
- Digestive cancers: up 18%

Melatonin disruption and circadian rhythm disturbance are believed to contribute, as melatonin has antioxidant, immune-regulating, and anti-cancer properties.

Depression

Risk Up 42%

A meta-analysis of 11 studies found that night shift workers had a 42% higher risk of experiencing depressive illness.

Possible explanations include:

- Reduced sleep time
- Reduced sensitivity of peripheral cortisol receptors and functional hypercortisolism
- Reduced melatonin production

Infection & Immunity

A 2016 Cambridge University study found that mice infected with influenza or herpes viruses had 10x greater viral replication during their biological “rest phase” than their active phase.

This suggests that people with disrupted body clocks, such as night shift workers, may be more susceptible to viral infections.

Researchers suggested shift workers may particularly benefit from **annual flu vaccination**.

Shift Work Sleep Disorder (SWSD)

SWSD occurs when circadian disruption from shift work causes chronic sleep difficulties. It may affect up to one-third of shift workers.

Symptoms include:

- Difficulty falling or staying asleep
- Excessive sleepiness
- Poor concentration
- Headaches
- Low energy

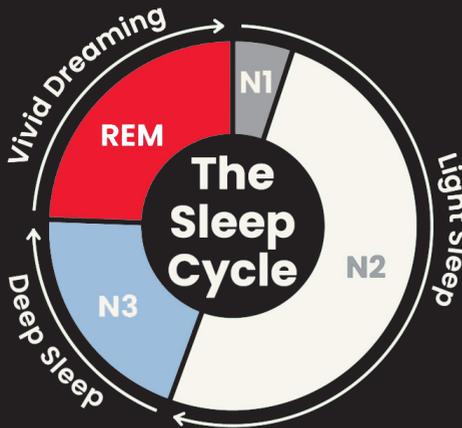
Clinicians assess SWSD by comparing sleep on work days vs days off, and by reviewing the worker’s strategies to promote sleep.

Sleep & Alzheimer's Disease

Poor sleep is a well-established link with increased risk of dementia.

- A 2017 U.S. study showed that lack of REM sleep is associated with higher dementia risk.
- Animal studies show that sleep is crucial for clearing toxic proteins (such as beta-amyloid) from the brain.

Neuroscientist Jeffrey Iliff has shown that during sleep, cerebrospinal fluid washes through the brain to remove waste, work the brain “puts off” during waking hours.



Sleep & Learning

Matthew Walker's research demonstrates that sleep restores the brain's ability to learn by clearing short-term memory “storage” in the hippocampus.

In studies comparing nappers vs non-nappers:

- People who did not sleep between learning sessions saw their ability to form new memories decline.
- Those who napped for 90 minutes had a 20% improvement in memory performance later the same day.
- This shows how essential sleep is for cognitive performance, decision-making, and safe clinical practice.



KEY POINTS

Know the health risks associated with shift work and take steps to manage them.

Get the annual flu vaccine as disrupted body clocks can weaken immunity.

Avoid alcohol before sleep.

Stop caffeine intake at least 8 hours before you plan to sleep.

Chamomile tea may help promote relaxation and sleep.

Reduce blue light exposure (sunlight, screens) before sleeping.

Use a sleep mask to block light.

Use earplugs to reduce noise.

Try meditation or relaxation techniques before bed.

Get regular exercise.

If possible, avoid night shifts during pregnancy.

Be mindful of what and when you eat; avoid high-sugar and convenience foods on night shifts.

Keep your sleep routine as regular as possible.

Don't drive if you're fatigued: consider a nap before heading home.

If you can't fall asleep within 20 minutes, get up and do something relaxing and try again.

Get regular medical check-ups.

And most importantly:

Keep working with APEX to protect your rights and conditions of employment!

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