KEY POINTS

- A fatigued worker may seem sleepy, irritable, sad or giddy
- Fatigue can reduce mental and physical abilities and may increase risk-taking
- Fatigue can cause workers to fall asleep unintentionally
- Extended work hours can contribute to worker fatigue
- Occupational exposure limits may need adjustment for extended work hours

THE HAZARDS: What are the hazards of fatigue and extended work hours to workers?

Fatigue is influenced by extended work hours, tough physical or mental activities, and loss of sleep. Fatigue affects people differently but it can increase a worker’s hazard exposure by:

- reducing mental and physical functioning;
- impairing judgement and concentration;
- lowering motivation;
- slowing reaction time; and
- increasing risk-taking behaviour.

Besides the influence on fatigue, extended work hours can also increase the time a worker is exposed to hazards. Some chemical and noise hazards have limits (occupational exposure limits), and these require adjustment for shifts longer than 8 hours. Information about these limits, and how to calculate adjustments, is available in the Occupational Health and Safety Code Section 18, and the Code Explanation Guide.

Extended work hours can also impact the effectiveness of personal protective equipment (PPE). Choosing the right PPE for long work hours may require selecting something with more protection than usual (eg. a full face respirator instead of a half mask). Also, parts like respirator cartridges may need to be replaced more often, and workers may need more breaks from wearing PPE during long work hours.

THE EFFECTS: What effects could workers experience from fatigue?

If small amounts of sleep loss add up over a long period of time, or if a worker misses a lot of sleep in a short period of time, a worker may experience sleep deprivation. Sleep deprivation can cause a worker to briefly fall asleep without meaning to do so, which distracts the worker’s attention from the job they are doing.
THE CONTROLS: How can workers be protected from fatigue?

- **Be aware of how time of day affects fatigue**
  Most major workplace incidents happen between 12 a.m. and 6 a.m. and between 1 p.m. and 3 p.m. Human bodies tend to be naturally tired during these times of day. When possible, schedule safety sensitive tasks to occur outside these times.

- **Focus on short tasks when fatigued**
  Fatigue may be temporarily overcome by performing brief tasks that last between two and five minutes.

- **Maintain consistency in work schedule**
  Keeping a work schedule consistent can make it easier to maintain a sleep schedule and avoid sleep loss.

- **Be aware that shift schedules affect sleep loss**
  Research has reported that night shift workers and workers whose shifts start before 6 a.m. sleep less than day shift workers. It is important for workers to be aware of this so they can catch-up on sleep loss, and avoid the cumulative effects of fatigue.

- **Encourage maintainence of healthy sleep patterns**
  People generally require 7 to 9 hours of sleep per night.

- **Encourage sleep quality**
  Eliminate exposure to noise, light and uncomfortable temperature or sleep surfaces. Caffeine, alcohol, some prescription drugs, and sleeping illnesses, like sleep apnea, can also reduce sleep quality.
Fatigue, Extended Work Hours & Workplace Safety

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Throughout Alberta
• 1-866-415-8690

Deaf or hearing impaired:
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