



*Safety Brief Series*

# Staying Fit for Snow Fighting

With winter weather comes snow fighting and with snow fighting comes fatigue. Unpredictable weather can lead to long difficult hours on the road with few breaks and little sleep. However, there are several things agencies and drivers can do to make sure crews are in good shape to combat Old Man Winter, maintain our roads, and get home safely.

## Guide for Discussion:

### **Why does fatigue happen?**

Unpredictable weather leads to varying work schedules which can throw your circadian rhythm out of balance. Your circadian rhythm (also known as your sleep/wake cycle or body clock) is a natural, internal system that is designed to regulate feelings of sleepiness and wakefulness over a 24-hour period.

When we make changes to our sleep patterns, it throws our rhythm out of balance and causes fatigue; confusing our body on when it should be sleeping and when it should be awake.

**What happens to our bodies when we are fatigued?** When our bodies are fatigued, the following symptoms result:

- Increased reaction time – takes longer to take action when a threat is noticed
- Decreased alertness – takes longer to notice a threat
- Reduced situational awareness – lesser ability to notice what is happening around you
- Poor assessment of risk – decision-making is more difficult
- Impaired memory – can be difficult to remember details
- Reduced field of vision – peripheral vision is reduced and tunnel vision can result
- Difficulty in staying awake – eye lids get “heavy” and eyes can shut for longer periods of time

## What can snow fighters do to fight fatigue?

Get some rest – try to optimize your sleeping conditions:

- Room temperature should be between 60 and 72 degrees.
- Complete silence is best but using earplugs or using steady background noise or white noise to help mask surrounding sounds can help too.
- Reduce lighting as much as possible. If there are windows in your rest area, use shades to block any sunlight coming in.
- Try to limit your use of technology right before you sleep.
- Think ahead – if you know a storm is coming, be sure to get a good night's sleep so your body is prepared for the longer hours ahead.

Eat Well – feed your body properly and stay awake longer:

- Stay away from drinks that contain caffeine
- Avoid junk foods that are high in fat and sugar
- Try to include high protein foods to help you stay awake longer.
- Lean meats, nuts, eggs and dairy are all good choices to fuel your body for the long haul.
- Stay hydrated

Exercise:

- After a brief rest break and before a long shift, take a few minutes to warm up your body. Try doing some quick exercises to help increase your heart rate. Even a short walk can increase endorphins to help with physical wakefulness.
- If you find yourself getting tired during a run, take a quick stretch break to wake up your muscles and improve your ability to focus.
- At home, in between storms, exercise regularly to improve your overall sleep quality and to help you fall asleep faster.

## Additional Discussion Notes:

Department leaders can help their crews stay fit by incorporating the best practices noted above into their winter operations plan and reviewing the tips above with crews during pre-storm meetings.

For more information on fatigue and snow fighting preparations:

[http://clearroads.org/wp-content/uploads/dlm\\_uploads/11-05-Factors-Causing-Fatigue-Final-Report\\_MnDot.pdf](http://clearroads.org/wp-content/uploads/dlm_uploads/11-05-Factors-Causing-Fatigue-Final-Report_MnDot.pdf)

<http://www.themunicipal.com/2014/12/monitoring-and-detecting-snowplow-driver-fatigue/>

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