

Countering Sleep Deprivation

Crane operation is a demanding job that requires constant awareness under varying site conditions. Operators must remain alert and prepared at the job site at all times. Unfortunately, many operators are often affected by sleep deprivation.

Sleep deprivation can occur if you are not getting the amount of sleep or the quality of sleep you need. Even a slight reduction in one or both factors can greatly impact your job performance. Chronic sleep deprivation is dangerous and should be addressed as soon as possible. If left unchecked, it could lead to an increased risk of accidents and death.

Effects of sleep deprivation

Constant fatigue and drowsiness can significantly affect your health and safety, as well as the safety of other workers at the job site. It is important to be aware of the effects of sleep deprivation and how they affect your ability to operate a crane. Common effects of sleep deprivation include:

- **Impaired motor skills:** Good motor skills and hand-eye coordination are essential when operating a crane, especially while maintaining control of a load.
- **Mood changes:** It is important to communicate effectively with other personnel at the job site, both in person and by radio. Irritability or impatience can lead to communication breakdowns and result in accidents.
- **Lower immunity:** Sleep deprivation not only affects your body's ability to prevent colds and infections, but it also affects your body's ability to fight colds and infections once you get them.
- **Poor memory:** When you are tired, it is easy to forget or overlook certain tasks such as recording information in the crane logbook or thoroughly conducting pre-operational inspections.
- **Slower reaction time:** When something unexpected suddenly occurs and immediate action is required, a slower reaction time could affect the safety of you and other workers.
- **Reduced awareness of your environment:** During crane operation, you must be aware of your surroundings at all times, which includes being

aware of hazards, powerlines, personnel, and other vehicles/cranes.

- **Cognitive impairment:** Your ability to concentrate and process information may be affected, which often leads to difficulty in analyzing data and making decisions. This may impact certain tasks such as interpreting load charts and lift plans, calculating load weights, and understanding various worksite documentation.

- **Health problems:** Long-term sleep deprivation may lead to dangerous health problems such as heart disease, high blood pressure, depression, or stroke.

Prevention

When you start to feel sleepy and unable to focus, leave the crane for a short walk if possible. Since this may not be a practical solution at a busy job site, it is best to prevent sleep deprivation before it happens. In the crane industry, shifts and schedules are varied, but if possible try the following tips to improve your sleeping habits and eliminate unnecessary distractions.

- **Maintain a regular sleep schedule:** Try to go to bed at the same time every night and wake up at the same time every morning.

- **Avoid eating large meals right before bed:** Finish meals at least two to three hours before bedtime.

- **Avoid caffeine, alcohol, and nicotine right before bed:** Caffeine and nicotine are stimulants that can disrupt your sleep. Alcohol may help you fall asleep, but it can disturb your sleep later in the night.

- **Exercise regularly:** Exercise can lower stress and improve the quality of sleep, but try to avoid strenuous exercise right before going to bed.

- **Maintain a healthy diet:** A healthy diet can help you avoid any health-related symptoms or discomfort that could disturb your sleep and result in a restless night.

- **Manage your stress:** Stress can prevent you from falling asleep or disrupt your sleeping pattern throughout the night. Try breathing exercises or other relaxation techniques as part of your bedtime routine.

- **Establish a routine:** Find a nighttime routine that helps you relax, such as reading or listening to music, and repeat it every night so your body gets used to preparing for bed.

- **Avoid excessive computer use right before bed:** Electronic devices such as computers are stimulants, and excessive use right before bed can prevent you from falling asleep.

- **Dim your lights a few hours before bed:** Include this step as part of your routine to mentally prepare yourself for bed.

By following the steps listed above, the duration and quality of sleep can be greatly improved. In some cases, however, the underlying cause of sleep deprivation may actually be a sleep disorder. Common sleep disorders include but are not limited to chronic insomnia, sleep apnea, and narcolepsy. If you suspect you have a sleep disorder, it is best to consult a health care professional. He or she can analyze your symptoms, determine the cause, and recommend treatment.

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