



Sleep Deprivation: Causes and Consequences¹

Nebraska Rural Health & Safety Coalition²

HOW MUCH SLEEP IS ENOUGH?

Most adults need 7 to 8 hours of sleep per night. People who are well rested feel alert and do not have the urge to nap.

WHAT CAUSES SLEEP DEPRIVATION?

- Not allowing enough time for sleep
- Anything that causes insomnia or poor quality sleep
- Sleep disorders
- Excessive worry, depression
- Repeated awakenings from noise
- Working at night, travel across time zones
- Medical illness causing pain, difficulty breathing, etc.

WHAT SLEEP DISORDERS CAUSE EXCESSIVE DAYTIME SLEEPINESS?

Obstructive sleep apnea: A very common disorder where there is obstruction of the nose and/or throat by enlarged tonsils, a deviated nasal septum etc. which results in pauses in breathing during sleep. Symptoms include snoring, morning headache and daytime fatigue. Obstructive sleep apnea can lead to heart failure and is a risk factor for heart attacks and strokes.

Nocturnal myoclonus: Jerking of legs during sleep which causes brief awakenings. This causes insomnia and daytime sleepiness.

Narcolepsy: A relatively rare sleep disorder of dream sleep. The main symptom is uncontrollable sleepiness during the day.

WHAT ARE THE CONSEQUENCES OF SLEEP DEPRIVATION?

- Motor vehicle accidents and work accidents
- Decreased productivity

If this becomes a chronic problem, sleep deprivation can cause difficulties with social relationships because of irritability; as well as some significant medical problems.

WHEN ARE ACCIDENTS RELATED TO SLEEP DEPRIVATION MOST LIKELY TO HAPPEN?

In the early to mid afternoon and in the very early morning hours. These are the times when everyone is least alert.

WHAT OTHER PROBLEMS CAUSE EXCESSIVE DAYTIME SLEEPINESS?

- Medical illnesses: heart disease, breathing disorders and a variety of other problems can cause fatigue and sleepiness.
- Mental illness: depression is an important cause of insomnia troubles during the day.

HOW CAN THESE ACCIDENTS BE AVOIDED?

Getting enough sleep at night or adding naps in the afternoon when needed can help prevent serious accidents due to sleepiness. If a person has signs of a sleep disorder or has their sleep disrupted by symptoms of a medical illness or depression, they should see their physician.

1. This document was produced by the Nebraska Rural Health & Safety Coalition. Funded in part by a grant from the W.K. Kellogg Foundation.
2. Nebraska Rural Health and Safety Coalition, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, Nebraska 68198-5300. Phone: (402) 559-7397. FAX: (402) 559-8210.

EPWORTH SLEEPINESS SCALE

In contrast to just feeling tired, how likely are you to doze off or fall asleep in the following situations? (Even if you have not done some of these things recently, try to work out how they would have affected you.) Use the following scale to choose the most appropriate number for each situation.

- 0 = Would never doze
- 1 = Slight chance of dozing
- 2 = Moderate chance of dozing
- 3 = High chance of dozing

Situation	Chance of Dozing
Sitting & Reading	_____
Watching TV	_____
Sitting inactive in a public place (i.e. theatre)	_____
As a car passenger for an hour without a break	_____
Lying down to rest in the afternoon	_____
Sitting & talking to someone	_____
Sitting quietly after lunch without alcohol	_____
In a car, while stopping for a few minutes in traffic	_____

A score of greater than 10 is a definite cause for concern as it indicates significant excessive daytime sleepiness.