



# ESTES PARK HEALTH

## 10 Things to Hate About Sleep Loss

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You know lack of sleep can make you grumpy and foggy. You may not know what it can do to your sex life, memory, health, looks, and even ability to lose weight. Here are 10 surprising -- and serious -- effects of sleep loss.

### 1. Sleepiness Causes Accidents

Sleep deprivation was a factor in some of the biggest disasters in recent history: the 1979 nuclear accident at Three Mile Island, the massive Exxon Valdez oil spill, the 1986 nuclear meltdown at Chernobyl, and others.

But sleep loss is also a big public safety hazard every day on the road. Drowsiness can slow reaction time as much as driving drunk. The National Highway Traffic Safety Administration estimates that fatigue is a cause in 100,000 auto crashes and 1,550 crash-related deaths a year in the U.S. The problem is greatest among people under 25 years old.

Studies show that sleep loss and poor-quality sleep also lead to accidents and injuries on the job. In one study, workers who complained about excessive daytime sleepiness had significantly more work accidents, particularly repeated work accidents. They also had more sick days per accident.

### 2. Sleep Loss Dumbs You Down

Sleep plays a critical role in thinking and learning. Lack of sleep hurts these cognitive processes in many ways. First, it impairs attention, alertness, concentration, reasoning, and problem solving. This makes it more difficult to learn efficiently.

Second, during the night, various sleep cycles play a role in “consolidating” memories in the mind. If you don’t get enough sleep, you won’t be able to remember what you learned and experienced during the day.

### 3. Sleep Deprivation Can Lead to Serious Health Problems

Sleep disorders and chronic sleep loss can put you at risk for:

- Heart disease
- Heart attack
- Heart failure
- Irregular heartbeat
- High blood pressure
- Stroke
- Diabetes

According to some estimates, 90% of people with insomnia -- a sleep disorder characterized by trouble falling and staying asleep -- also have another health condition.

### 4. Lack of Sleep Kills Sex Drive

Sleep specialists say that sleep-deprived men and women report lower libidos and less interest in sex. Depleted energy, sleepiness, and increased tension may be largely to blame.

For men with sleep apnea, a respiratory problem that interrupts sleep, there may be another factor in the sexual slump. A study published in the *Journal of Clinical Endocrinology & Metabolism* in 2002 suggests that many men with sleep apnea also have low testosterone levels. In the study, nearly half of the men who suffered from severe sleep apnea also secreted abnormally low levels of testosterone during the night.

### 5. Sleepiness Is Depressing

Over time, lack of sleep and sleep disorders can contribute to the symptoms of depression. In a 2005 Sleep in America poll, people who were diagnosed with depression or anxiety were more likely to sleep less than six hours at night.

The most common sleep disorder, insomnia, has the strongest link to depression. In a 2007 study of 10,000 people, those with insomnia were five times as likely to develop depression as those without. In fact, insomnia is often one of the first symptoms of depression.

Insomnia and depression feed on each other. Sleep loss often aggravates the symptoms of depression, and depression can make it more difficult to fall asleep. On the positive side, treating sleep problems can help depression and its symptoms, and vice versa.

## **6. Lack of Sleep Ages Your Skin**

Most people have experienced sallow skin and puffy eyes after a few nights of missed sleep. But it turns out that chronic sleep loss can lead to lackluster skin, fine lines, and dark circles under the eyes.

When you don't get enough sleep, your body releases more of the stress hormone cortisol. In excess amounts, cortisol can break down skin collagen, the protein that keeps skin smooth and elastic.

Sleep loss also causes the body to release too little human growth hormone. When we're young, human growth hormone promotes growth. As we age, it helps increase muscle mass, thicken skin, and strengthen bones.

"It's during deep sleep -- what we call slow-wave sleep -- that growth hormone is released," says sleep expert Phil Gehrman, PhD. "It seems to be part of normal tissue repair -- patching the wear and tear of the day."

## **7. Sleepiness Makes You Forgetful**

Trying to keep your memory sharp? Try getting plenty of sleep.

In 2009, American and French researchers determined that brain events called "sharp wave ripples" are responsible for consolidating memory. The ripples also transfer learned information from the hippocampus to the neocortex of the brain, where long-term memories are stored. Sharp wave ripples occur mostly during the deepest levels of sleep.

## **8. Losing Sleep Can Make You Gain Weight**

When it comes to body weight, it may be that if you snooze, you lose. Lack of sleep seems to be related to an increase in hunger and appetite, and possibly to obesity. According to a 2004 study, people who sleep less than six hours a day were almost 30 percent more likely to become obese than those who slept seven to nine hours.

Recent research has focused on the link between sleep and the peptides that regulate appetite. "Ghrelin stimulates hunger and leptin signals satiety to the brain and suppresses appetite," says Siebern. "Shortened sleep time is associated with decreases in leptin and elevations in ghrelin."

## **9. Lack of Sleep May Increase Risk of Death**

In the "Whitehall II Study," British researchers looked at how sleep patterns affected the mortality of more than 10,000 British civil servants over two decades. The results, published in 2007, showed that those who had cut their sleep from seven to five hours or fewer a night

nearly doubled their risk of death from all causes. In particular, lack of sleep doubled the risk of death from cardiovascular disease.

## **10. Sleep Loss Impairs Judgment, Especially About Sleep**

Lack of sleep can affect our interpretation of events. This hurts our ability to make sound judgments because we may not assess situations accurately and act on them wisely.

Sleep-deprived people seem to be especially prone to poor judgment when it comes to assessing what lack of sleep is doing to them. In our increasingly fast-paced world, functioning on less sleep has become a kind of badge of honor. But sleep specialists say if you think you're doing fine on less sleep, you're probably wrong. And if you work in a profession where it's important to be able to judge your level of functioning, this can be a big problem.

"Studies show that over time, people who are getting six hours of sleep, instead of seven or eight, begin to feel that they've adapted to that sleep deprivation -- they've gotten used to it," Gehrman says. "But if you look at how they actually do on tests of mental alertness and performance, they continue to go downhill. So there's a point in sleep deprivation when we lose touch with how impaired we are."

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