

# USC Center for Work & Family Life

## How Shift Work Affects Our Sleep

Nearly 15 million Americans work a permanent night shift or regularly rotate in and out of night shifts, according to the Bureau of Labor Statistics. That means a significant sector of the nation's work force is exposed to the hazards of working nights, which include restlessness, sleepiness on the job, fatigue, decreased attention and disruption of the body's metabolic process.

### Natural rhythms

Poor scheduling, combined with unhealthy attitudes about the need for sleep, can cause major problems for night workers. That's because working at night runs counter to the body's natural circadian rhythm. The circadian clock is essentially a timer that lets various glands know when to release hormones and also controls mood, alertness, body temperature and other aspects of the body's daily cycle.

Our bodies and brains evolved to relax and cool down after dark and to spring back into action come morning. People who work the night shift must combat their bodies' natural rest period while trying to remain alert and high functioning. It doesn't matter whether they get enough sleep during the daytime. All the sleep in the world won't make up for circadian misalignment.

That's especially dangerous for people whose jobs require them to be on high alert and make split-second, life-or-death decisions during the night, such as medical personnel or police officers. It's common for police departments, for example, to require rookies and lower-ranking officers to bear the brunt of night shifts. They'll often work a few days during normal daytime hours, then either work an extra-long shift that carries on until the morning, or take a day off, rest, then work a full night shift.

Working against a person's natural sleep cycle causes such sleep disorders, as well as fatigue. Fatigue, in turn, worsens moods, decreases cognitive abilities and reflexes, and makes people more vulnerable to disease. That resulting crankiness and warped perspective can interfere with one's ability to make sound decisions and manage people effectively, and can increase the frequency of negative encounters.

### **How can shift work sleep disorder affect your health?**

Shift work can increase stress, and that may make you more likely to get sick. Lack of sleep from shift work can increase the chance of car accidents and on-the-job accidents. It also can lead to trouble concentrating at work and poor job performance.

Experts also have found that shift workers have a higher chance of getting some health problems, such as colds and the flu, than people who work days. Experts don't know exactly why this sleep disorder raises the risk of health problems. But they suspect that shift work may cause problems because, if you work at night, your body makes less melatonin than it needs. Melatonin is a hormone that helps control sleeping and waking cycles. It also plays a role in keeping you healthy by making your immune system strong and preventing the growth of tumors. Light and dark affect how the body makes melatonin. Most melatonin is made at night. During the day, light tells your body to make less melatonin. If you work at night in artificial light, your body may be making less melatonin than it needs.

### **What can you do to sleep better when you work nights?**

Sometimes sleep problems can be fixed only by switching to a regular work schedule-working in the day and sleeping at night. But many people are able to work the night shift by making a few changes. You can help yourself get good sleep by keeping your sleeping environment dark and quiet and by taking good care of yourself overall.