

## Adjusting to the Night Shift

*Trying to figure out the best way to conform to the night shift? Sleep on it.*

By Dana Hinesly



Sleep is like air: it is taken for granted until there is not enough of it. This is not news to many of the estimated 22 million Americans working evening, swing, rotating, or on-call shifts, where lack of

traditional sleep patterns can create very real problems.

Known as shift work sleep disorder (SWSD), the common set of symptoms brought on by working “off” hours is characterized by excessive sleepiness during the evening’s work shift, coupled with insomnia during the hours reserved for rest.

According to the American Academy of Sleep Medicine’s International Classification of Sleep Disorders-2, SWSD is suspected when these symptoms associated with the shift-work schedule persist for at least 1 month.

### How much is enough?

So just how much sleep is required to avoid SWSD? The short answer is “it depends.” Most sleep experts agree the average adult requires between 7 and 9 hours<sup>1</sup> of sleep in order to maintain an adequate level of alertness.

During this time, the body rests, rebuilds, and restores—and the brain gets busy, using the physical dormancy as an opportunity to recharge. Typically, individuals will cycle between REM stage sleep and four stages of non-REM sleep every 90 minutes. Stages 3 and 4 of non-REM sleep are typically referred to as slow-wave, or delta, sleep. It is during these phases of deep sleep that the biggest benefits are realized.

Without it, the body suffers and the ramifications extend far beyond simply dozing off in front of a monitor. Sleep deprivation is linked to a myriad of health concerns, including obesity, high blood pressure, and gastrointestinal diseases.<sup>2</sup>

“Studies also show an increased risk for stomach ulcers and



sleepiness-related accidents,” says Muhammad A. Sayed, MD, medical director, Cascade Valley Sleep Disorders Center, Arlington, Wash. “Shift workers can suffer from short-term memory disturbances, decreased overall mental ability, and headaches, as well as poor overall sleep quality.”

It also takes a toll emotionally. According to the National Sleep Foundation, ongoing fatigue can decrease productivity and bring on negative moods and behavior—feelings that can be compounded by a sense of segregation.

“You start to feel so isolated from the rest of humankind, because the world is going on without you,” says Theresa Shumard, North American manager of sleep strategic planning for DeVilbiss Sleep Therapy, Longmont, Colo, and a veteran of the night shift. Shumard recommends making time for social events for the sake of sanity. “It’s a day-shift world so it’s important for night techs to network; it helps them to feel part of that community.”



### **Friends Don't Let Friends Drive Tired**

The National Highway Traffic Safety Administration<sup>1</sup> estimates that fatigue is a factor in at least 100,000 auto crashes and 1,500 deaths each year; it suggests the real figures are higher primarily because daytime accidents and those involving two or more vehicles are not included. In fact, in 2002, a survey found that 37% of the participants admitted to having fallen asleep at the wheel at some point in their lives.

### **An Elusive Limit**

Just how much sleep is enough varies by person, but a safe assumption is 7 to 9 hours for the average adult to feel rested and maintain proper brain function.

### **Making Due**

Addressing the physical consequences is not as easy. In most cases, SWSD can be completely eliminated only by reverting back to a “work days, sleep nights” schedule. For those whose jobs rule out the option of working days, hope is not lost.

“Improving the overall environment at your workplace is instrumental,” says Sayed, who recommends installing bright lights and maintaining a cool atmosphere throughout the night. Such minor changes are often achievable by coordinating with an employer and coworkers. “We don’t want to freeze anyone, but cooler is better because when you feel warm, you want to go to sleep.”

### **Maintaining Continuity**

“If you work a night shift 5

For many shift workers, these numbers are unattainable and that translates to dangerous daily commutes. Many shift workers, accustomed to feeling tired, do not realize the hazard they present, even if they do not fall asleep while driving.

“If you do not have enough sleep, you are not paying attention and you are not reacting with the speed and accuracy you should,” says Muhammad A. Sayed, MD, medical director, Cascade Valley Sleep Disorders Center, Arlington, Wash. “There is a lack of an appropriate or timely response.”

Such responses can catch workers off guard. When driving home after completing her overnight shift as a polysomnographic technician, Theresa Shumard, who is now the North American manager of sleep strategic planning for DeVilbiss Sleep Therapy, Longmont, Colo, found that squinting into the morning sun seemed to encourage her eyes to close completely.

“I was trying so hard to keep them wide open, but because I had to squint to see, it almost made it easier to fall asleep, which I did,” Shumard says. “It was just a doze, a microsleep, but I still wasn’t fully awake.”

Though seemingly innocuous, such “microsleeps”—bouts of sleep lasting only a few seconds—can have deadly results. It only takes 3 seconds for a vehicle traveling 55 miles per hour to cover almost 250 feet, which is ample room for an accident.

nights a week, you don’t want to change your sleep schedule during the weekend,” Sayed advises. “Otherwise, you basically end up having to readjust to the night shift every week.”

Shumard agrees. “After I had completely turned into a night shift person and was getting the proper amount of rest, I kept that schedule all the time, staying up as late as possible while still having a family life.”

She admits the conversion to being a “night shift person” did not come easy, and sleeping during the day presented a unique set of challenges.

“It was like an obsession to get darkness into my life,” Shumard recalls. “I had darkening shades and those didn’t work. I’d put up foil on the windows ... I’d see one little crack of light coming through and it would bother me.” To help combat constant distractions, Shumard recommends employing eyeshades, which can also aid in blocking out noise. “When I started using those, I managed to be asleep before [any noise] started, and then it wouldn’t wake me up.”

### **Repetition Helps**

Just as personal hygiene is important in the care and maintenance of our bodies, sleep hygiene holds many of

### Putting the brakes on drowsy driving

Another similarity between drowsy and drunk driving: it is preventable. But that is often easier said than done for those shift workers eager to get home. To avoid driving drowsy, Sayed recommends planning for success.

“If you have this problem, until it gets under control, just don’t take your car to work,” he says, emphasizing the need to coordinate carpooling or public transportation ahead of time. “If you have your car with you, you’re not going to leave it, even if you’re too tired to drive.”

—DH These techniques should help diminish the adverse side effects felt when initially

adjusting to a new schedule; however, if SWSD symptoms are severe or do not recede, consulting with a sleep specialist could help rule out a more serious, underlying health condition.

“First, you need to get a diagnosis, then decide if you need to do something more than the basics,” Sayed says. “We highly discourage any over-the-counter approaches, because it is never a good idea to just diagnose and treat yourself.”

By working with a medical professional, it is possible to address the situation methodically. Beyond the standard sleep hygiene techniques, other measures such as bright light therapy—an attempt to “reset” the biological clock with artificial light—or pharmacological stimulants can be initiated to regulate the sleep/wake cycle.

### Not Just for Toddlers

When dealing with SWSD or any sleep disorder, one irrefutable fact must be acknowledged: there is no substitute for sleep. But that does not mean it has to come in a single stretch.

“The power nap can make a real difference,” Sayed says. “Sleeping for 20 minutes to a half hour helps a lot.”

Think napping is the sole domain of tantrum-prone 2 year olds? Guess again. British statesman, prime minister, author, and

the same benefits. A consistent bedtime routine—whether it be light reading or a warm bath—signals to the brain that it is time to gear down and prepare itself for rest.

“General sleep hygiene will maximize sleep quality,” Sayed says. “Go to bed only when you feel sleepy, do not sleep outside the bedroom, and use your bedroom for sleep only.” Sayed also advises against the consumption of caffeine, nicotine, or alcohol within 6 hours of bedtime.

nap-enthusiast Sir Winston Churchill once said, “Don’t think you will be doing less work because you sleep during the day. That’s a foolish notion held by people who have no imaginations.”

It has been said that during World War II, Churchill would rarely sleep an entire night, instead taking several naps throughout the day. Other famous nappers include Leonardo Da Vinci, Albert Einstein, and Thomas Edison. Yet, modern society disdains the concept, often judging those who partake as lazy and ineffective, despite evidence to the contrary.

Sara Mednick, PhD, a research scientist at the Salk Institute for Biological Studies, La Jolla, Calif, concurs that a 20-minute nap can increase alertness, improve physical dexterity, boost stamina, and lower stress.<sup>4</sup> Studies show naps can reduce crankiness and enhance brain performance. Additional benefits include improved heart function, increased alertness, and strengthened memory retention.

Reap the most nap rewards by resting at the same time each day and limiting the session to 30 minutes (or less). Longer periods allow the body to lapse into deep sleep, from which waking is difficult.

“Napping is very critical, and we’re so against it in this country that we deny ourselves,” Shumard says. “We let ourselves use the restroom, have lunch and other necessities, but we don’t allow for our most basic need: sleep.”

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