Since the dawn of time there have been shiftworkers. Someone needed to keep the cave fires burning and watch out for marauding tribes. Because of advances in technology, industrialization, and communication around the globe, increasing numbers work nontraditional shifts.

According to 2004 data from the Bureau of Labor Statistics, almost 15 million employees worked evenings, nights, rotations, or other irregular schedules. 2010 US National Health Interview data estimated about 19% of employees worked at least 48 hours/week and at least 7% worked 60 hours.

Carolyn Schur — sleep educator, author, and speaker specializing in shiftwork and insomnia — says working nights and nontraditional shift rotations is not without consequences. “We are day-functioning animals. Everything in our physiology serves to keep us awake during the daytime. Working through the night forces us to fight these natural circadian rhythms. Research shows on average shiftworkers get about 2 hours less sleep/sleep period than the general population, although this can certainly happen with a 9–5 worker who does not get adequate sleep for some reason.”

Studies link serious emotional, physical, and safety consequences with long-term sleep loss and disruptions in circadian rhythm. Fatigue and more frequent illness (especially flus, colds, and allergies) are usually the first outcomes. However, long-term sleep loss also can result in higher risks of:
“One of the greatest risks to shiftworkers is driving home after work. Employers have been held liable when an employee was killed in a drive-home accident. Also the employer may incur liability when an employee is called back to work knowing he/she hasn’t had a sufficient amount of sleep.”

Carolyn explains genetically predetermined circadian rhythms that you can no more control than the color of your hair or the shape of your face. “In some people, these rhythms manifest in a later sleep/wake schedule — night owl types. In other people, these rhythms manifest in earlier sleep/wake cycles — early bird types. Early birds have the most rigid circadian rhythms. They find it more difficult to stay awake at night and sleep during the day. Night owls, because of their delayed sleep cycle, can be more alert on the night shift, but it’s harder for them to advance to an earlier shift. Intermediates, the third type, possess the greatest flexibility in their circadian rhythms. Physiologically, it’s easier for them to deal with changing work schedules. All types can do shiftwork, but it requires good schedules and shiftwork management practices to ensure everyone stays healthy.”

She can look at an organization’s shiftwork schedule and predict what days they experience the greatest absenteeism. “As an example, when early bird types work 4 night shifts in a row, they can usually make it through the first 2 nights, then struggle through the third, but the fourth becomes very difficult, so they take a sick day to catch up on their sleep. The employer pays for that loss in productivity and absenteeism.”

Carolyn describes other characteristics that influence adaptability. “While age can play a role, it’s not necessarily the primary factor. A lot depends on how much sleep you require. Some people can function quite well with 6–7 hours while others need 9. If someone needs 8 or more hours of sleep regularly to feel healthy, they will easily become sleep deprived when a shift rotation requires working 4 or more of the same shift in a row.”

She acknowledges you can’t generalize about shiftwork

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management practices across all 50 states. “But for many years the trend has been toward longer schedules/rotations. This grew out of research that found people do better when they stay on a shift for longer periods because the body adapts to it. If you work 6 or 7 shifts in a row, however, your body gets used to that schedule and then you go off that shift and force it to start the change all over again. This constant changing causes the most stress and fatigue to the body. European research demonstrates that, except for employees working 14 or more consecutive shifts, short rotations are preferable. This model works better because the goal is to not adapt to alternate shifts, especially night work, at all. You want to get through it and over it so you can stay on your daytime circadian rhythm.”

Like any rule, Carolyn admits there can be exceptions. “I’m always asked ‘What is the best schedule?’ The answer depends on what industry you are in, what the work flow is, customer needs, type of work, etc. We tend to think of shiftwork generically, but every workplace is different. For example, nurses may work in the same hospital, but the kind of work they do depends on the unit they are on. Firefighters have opportunities to sleep at night so they can tolerate longer night shifts. Some jobs have loud noises and other hazards that increase the onset of fatigue. I’ve seen miners who must travel 1-2 hours before and after each shift, while those who work in remote locations do 7 in and 7 out rotations. Then you have remote locations such as offshore oil platforms where the sleeping quarters are surrounded by people coming and going and the sound of operational noise.”

BEST PRACTICES IN SHIFTWORK MANAGEMENT

Carolyn cautions employers not to manage 24-hour workplaces like a 9-5 operation with an extra shift. “Don’t make shiftworker needs an afterthought. Evaluate policies and the environment for obstacles in their path to wellness. Do vending machines provide healthy snacks? Is the cafeteria open after hours, or if not can they provide ready-to-eat products? Can microwaves and refrigerators be placed throughout the facility to store and heat food? If a 24-hour fitness center isn’t possible, can an indoor walking track be set up in office areas or hallways for exercise during breaks? Be very specific in identifying workforce needs and demographics.”

“Most important,” Carolyn affirms, “Avoid forcing shiftworkers to come in on their own time to see a manager or HR personnel or receive training. They’ll resent giving up their time for something available to other workers during the workday. And foregoing their sleep contributes to fatigue load and increases the potential for illness, time-off, accidents, and injuries.”

Other key points:

- Minimize overtime; but be prepared for resistance from employees who want the overtime pay, despite the inherent lifestyle and health risks.
- Flexible scheduling is highly valued by employees... especially millennials and parents... and doesn’t cost the employer anything.
- If possible, project the schedule at least 3 months in advance and allow for shift trading. This gives employees a valuable sense of control over their lives.

Employees should not sleep where they work. Look at napping as a preventive safety measure, not as a replacement for sleep. Naps should be limited to 20 minutes, and coworkers need to know where they are at all times.”

“Driving is very conducive to falling asleep. Set aside nap rooms for tired employees coming off-shift to refresh themselves before leaving. Some employers provide buses to take shiftworkers into an urban area so they can nap while riding to where their cars are parked. Others may offer cab fare if the employee doesn’t feel up to driving.”

Carolyn concludes, “Even within one company, shiftworking issues can be vastly different. One type of shiftwork schedule will simply not fit every department. They must be individualized. There might not be a lot you can do to modify the schedule, but the more you can do to protect employees’ sleep and reduce fatigue, the better for everyone. Because even when wellness programs or resources are readily available, if employees are too tired they won’t possess the motivation or energy to take advantage of them.”

CAROLYN SCHUR — Called the “Sleep Queen,” Carolyn Schur’s first book, Birds of a Different Feather: Early Bird’s and Night Owl’s Talk About Their Characteristics Behaviours placed her in high demand to help shiftworkers sleep better. She has written two more books, Working ‘Round the Clock: A Survival Guide for Shift and Night Workers and Alert@Work: Keys to Managing Sleepiness and Fatigue at Work and contributes to numerous professional and trade publications.

For more information, contact Carolyn Schur. 306.975.1114, schurgoode@sasktel.net, www.alertatwork.com.
The good news: Many healthy shiftwork strategies can be implemented at little or no employer cost, but understanding management’s priorities and bottom line concerns makes it easier to get them behind the program. Does management care about worker safety, productivity, absenteeism, or healthcare costs? Medications that treat shiftworker health issues often top employers’ medical expenditures. Compile data on the cost of unhealthy shiftwork practices so you can target your message to their major concerns.

Surprisingly, employees don’t consider shiftwork itself as the problem; they see sleep as the problem. Wellness messages about how to get better quality sleep and adapt to schedules will get attention.

Consider program offerings that focus on:
- Why we need sleep
- Sleep disorders and their impact
- Signs that insomnia requires professional help
- Strategies to protect sleep, such as keeping the room cool, wearing eye masks and ear plugs, hanging blackout curtains and do not disturb signs, trying white noise machines, having carpeted floors, dimming electronics, etc.
- Sleep schedules that work best to maximize sleep; how to transition between schedules
- Recognizing and managing physical, mental, or emotional fatigue
- Overcoming the guilt many have over “wasting time” sleeping by underscoring that sleep deprivation affects emotional capacity to interact positively with family and friends as well as productivity
- Pros and cons of nonprescription sleep aids and stimulants (including caffeine)
- Reducing stress.

Help employees see shiftwork as a lifestyle. Support from family and friends is critical — shiftworkers often don’t share the stresses they experience. But unless those around them appreciate the disadvantages as well as the advantages to this life and help the shiftworker get the best possible sleep, they carry a double burden, which may lead to family and social problems.

Here are tips to share:
- Ask the entire family to help with household chores.
- Create a mindset that it’s the celebration that matters… not the date. For example, a birthday party doesn’t have to be on that day. The joy and quality time of being together are what count.
- Take a work break when children are going to bed and read a story on Skype or just call and say good night.
- Use family bulletin boards to help everyone share notes, important messages, and pictures.
- Encourage shiftworkers to take pictures of themselves at work. This is especially valuable when they work from a distance and may be away for days at a time.
- Buy headphones for watching TV, listening to music, and playing video games at home while the shiftworker sleeps.
- Purchase a second phone with a private number for only family and emergency contacts, then mute the primary home phone during sleep periods.
- Share sleep and work schedules with friends so they know when to not call/visit.

Other well-being considerations:
- Promote shiftworker support groups with team-oriented challenges and campaigns to make wellness fun
- Don’t force shiftworkers to attend wellness programs during their off-time; go to them during their shifts
- Provide wellness resources online, but don’t neglect the personal touch whenever possible for encouragement
- Offer information on how the right foods at the right time can promote better sleep, health, and alertness whereas the wrong choices can disrupt sleep cycles
- Remind them that although sugar products may be tempting for an energy rush, the effects are followed by a crash and can undermine weight management results
- Suggest an easy workout before bedtime, but not a strenuous session
- Acknowledge that tobacco is often a crutch to stay awake but the urge for another nicotine fix can disrupt their sleep cycle; offer stop-smoking resources
- Caution that while alcohol is a relaxant initially, it disrupts sleep and may lead to dependency.