

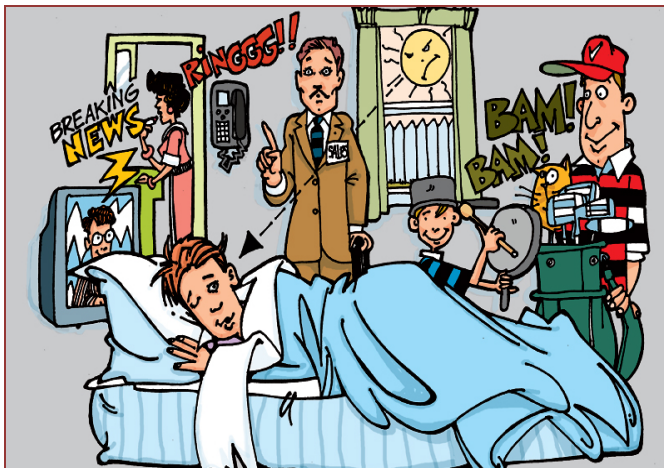


FATIGUE

What is the main thing sleepy Americans do to make it through the day? According to the 2009 National Sleep Foundation (NSF) "Sleep in America" poll, they **accept it and keep going**. What do pipeline controllers and others who work shift work do when they are fatigued? The ones I have observed **accept it and keep going, with an occasional nap and some irritability**. That was my usual strategy in years of shift work and working irregular hours. Of course, regular doses of caffeine and eating junk food were also tactics to stay awake. These strategies were not good ones!

One man I knew was an entrepreneur, as well as a pipeline operator. He had a business to run when he was not working at the tank farm. He "napped" at traffic lights by putting the car in park and waiting on another driver to blow the horn and wake him from his quick nap. People can become creative when we get sleepy, even as we attempt to keep going. However, there are personal, organizational, and societal costs when 20% of a population report getting less than 6 hours of sleep most nights. (2009 Sleep in America Poll Summary of Findings, NSF, page 8)

Each of us needs about 8 hours of sleep per night. Sometimes we work all night, and have to try to sleep in the daytime. People who need to sleep during the daytime may have even more difficulties getting enough sleep. Humans are not designed to sleep during the daylight hours. When I worked rotating shifts, I seldom got more than five hours of continuous sleep when I tried to sleep in the daytime. A shift supervisor recently told me that workers installing new utility poles kept him awake all day, and he reported to work with very little sleep. He kept going, like other Americans who are sleepy. Since I was working on night shift with him, it was apparent that he became more and more fatigued during the shift.



What happens when "life gets in the way," as one controller told me about a day when he needed to sleep in order to rest for a night shift AND he wanted to see his son play a baseball game. He had sufficient time off-duty, but did he get eight hours of continuous sleep? NO.

On the night we worked together, he correctly carried out the roles and responsibilities. What was the probability he was fatigued during the twelve hour night shift, when he did not sleep eight hours between the two twelve hour night shifts? What if an abnormal or emergency situation had occurred at 5:00 AM? Could the controller have responded inadequately and caused a threat to public safety? The probability may not be high, but the consequences from an incorrect or inadequate response can be serious.

If "life gets in the way" of getting adequate sleep and if we "accept it and keep going," what effect could that have in the workplace? Answer these questions about your control room or other workplace:

1. Have verbal comments about feeling tired and being fatigued increased?
2. Are there more complaints about physical ailments, such as indigestion, heartburn, headaches?
3. Are shiftworkers often irritable with co-workers or customers?
4. Are there more disagreements and petty arguments among employees?
5. Are shiftworkers having difficulty concentrating?
6. Are shiftworkers complaining about lack of adequate sleep and rest?
7. Do they appear more tired than usual? Do they have low energy levels? Do they have dark circles under their eyes?
8. Are shiftworkers unable to complete their assignments in a timely, efficient manner?
9. Has there been an increase in errors or near misses, caused by slips, lapses, and mistakes?

Here's a good self-assessment about the amount of necessary sleep in order to have a low fatigue risk on the job? Sleep 7 hours or more in the last 24 hours, sleep 14 hours or more in the last 48 hours, and do not be awake longer than 15 hours when your shift or work day ends.

High fatigue risk occurs with less than 5 hours of sleep in 24 hours, less than 12 hours of sleep in 48 hours, and being awake 18 hours or longer at the end of the shift. **Get adequate sleep!**