



Council for  
Public Interest  
in Anesthesia

## What is it about the Holidays?

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### Dealing with the Increased Stress, Fatigue, and their Consequences

**D**o you find yourself feeling that there is too little time and too much to do? Does the phrase “stressed to the max” apply to you, particularly at this time of year?

We live in a world where responsibilities to others, pressure at work, a polluted environment, traffic jams, and unexpected weather challenges are constantly with us. Add the hectic pace of the holiday season, and we experience additional stress, overwhelming fatigue, and exhaustion. Emotions run high during the holidays. For most it is a joyful time with great anticipation and excitement. For others, it may trigger overwhelming conflict and worry associated with financial concerns. According to experts, more people become depressed or anxious during the holidays than any other time of year.

We generate much of our own stress by trying to create the perfect holiday and dealing with the demands of unrealistic expectations, over-commercialization, financial constraints, and the inability to be with one’s family and friends. Fatigue magnifies our stress. Further, people are more likely to turn to food and drink as a means to reduce stress during the holidays. Comfort eating combined with increased inactivity may also lead to poor sleep patterns and greater fatigue.

### Fatigue and its Consequences

Nearly 40 percent of U.S. workers experience fatigue, and individuals with decision-making responsibility and workers with “high-level of control” job requirements report higher rates of exhaustion. Certainly, workplace stress does not disappear in the hustle and bustle of holiday shopping. Workloads may increase and with the addition of children out of school, stress levels also climb. Fatigue reduces work performance by interfering with concentration and increasing the time needed to accomplish tasks. Studies show a



person suffering from fatigue has slowed reflexes and reduced functional ability. Excessive tiredness is also a known risk factor in motor vehicle and workplace accidents.

According to researchers, fatigue is physical or mental weariness that results in the inability or unwillingness to continue effective performance of tasks. The causes of fatigue are many and include sleep deprivation, boredom, work overload, physical exhaustion, excessive hours, and changes to circadian rhythms. Environmental distractions such as noise, room temperature, and stress further contribute to fatigue.

A study that equates the performance impairment caused by fatigue with that due to alcohol intoxication (Dawson and Reid) shows that moderate levels of fatigue produce higher levels of impairment than the legal levels of alcohol intoxication.

Studies reveal that while most people need at least eight hours of sleep for optimal performance, more than one-third of the population sleeps less than six hours per night.

Sleep loss is cumulative. When you “shop ‘til you drop,” work long hours, wait at an airport for a delayed flight, entertain a house full of guests, or party into the night, you add to your “sleep debt.” Sleepiness and alcohol are an extremely dangerous mix and alcohol is believed to be involved in one-third of the accidents in which the driver fell asleep.

### Fatigue + Driving = Danger

Holiday driving often means long tiring journeys, starting at the end of the workday, and fatigue can be fatal behind the wheel. Fatigue is believed to be the primary contributing factor in about 7 percent to 30 percent of fatal driving accidents. Driving after working the night shift is considered most problematic, and the longer the distance, the greater the potential increase in risk. The problem is similar for those working four to five 12-hour day shifts. In two studies investigating possible mechanisms for performance impairment, the loss of attention resources and active regulation of task demands were symptoms associated with fatigue effects.



## Fatigue and Work Performance

Multiple studies have documented the impact of fatigue on medical personnel performance. Using standardized testing, investigators have found that after a night of call, sleep-deprived physicians may have worse language and numeric skills, retention of information, short-term memory, and concentration. Other studies on the impact of sleep deprivation on surgical residents found that after a night without sleep, surgeons were slower and more prone to errors on a simulator than those who had a normal night of sleep. A study of anesthesia residents found that those who had been on call and were sleep deprived also scored poorly on simulated critical events. Although psychomotor performance seems to be affected by sleep deprivation, data remains inconsistent and further studies are ongoing.

Nurse anesthetists are aware that vigilance requires a state of maximal physiologic and psychological readiness to react. It requires a cognitive skill level that can rapidly and reliably assess a large volume of information. Alertness, complex memory, decision making, attention, selection of information, and conscious effort are vulnerable to sleep deprivation.

Complex monitoring tasks form a substantial component of a nurse anesthetist's workload. Monitoring vigilance, stress, and fatigue are all affected by environmental conditions. Noise may cause distraction during critical periods. It negatively affects information processing and short-term memory, interferes with effective verbal communication, and masks task related cues. Ambient temperature also may affect performance: Overheated, dry rooms cause performance deterioration, and extremely cold temperatures cause distraction and reduce manual dexterity. Physical condition and personal habits can have a significant influence on vigilance and monitoring performance. Research has shown that preventable human errors are a major contributor to poor outcomes.

Fatigue is not new. Nor is knowledge about its potential for harm. Convincing evidence about the risk and actual consequences has been

slower to accumulate. While the evidence base needs to be strengthened, we know enough to issue some cautions. Driving and working after extended call, after sleep has been restricted, or at vulnerable times such as the holidays, contributes to fatigue. Lack of sleep is cumulative and needs to stop being regarded as a badge of responsibility and duty, but as a serious hazard to yourself and others.

## Taking Care of Yourself During the Holidays

The holidays should be a meaningful, enriching time for you. The holiday season can be especially challenging for those of us who are working to stay fit, maintain the diet, and balance work and home life. We're prone to overextending ourselves leading to exhaustion and a lack of adherence to healthy habits because there's so much more to do.

Take steps every day to ensure that you are taking care of your mental and physical health. Recognize that stress isn't all bad. We need some stress to motivate us and to give us the push we need to accomplish our goals. However, too many of us have more stress than we can manage successfully, and much of that serves no purpose, particularly when it results in lack of sleep and fatigue. The overall busyness of the season, holiday work schedules, travel, parties, and late nights only make things worse.

Simply put, take care of yourself first.



## Resources

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*Even the strongest have  
their moments of fatigue.*

*Friedrich Nietzsche*