



# Minnesota Electrical Association

# Electrical

# Toolbox Talks

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## Fatigue

On the job, as an electrical professional, fatigue and sleepiness are serious problems that can threaten your life. You must be attentive while working around moving equipment, with power tools, or with live power. These can be dangerous. Electricians need to be aware of their surroundings and be thinking clearly to avoid accidents or costly mistakes.

What is the difference between FATIGUE and SLEEPINESS?

- Fatigue is usually a more chronic (long-term) condition than sleepiness. Sleepiness is generally caused by not enough restful sleep, or a lack of stimulation. For sleepiness, the answer is to get more restful sleep.
- Sleepiness can be a symptom or an indicator of a medical condition. Fatigue, especially chronic fatigue, is usually linked to a greater medical problem.

People who suffer from fatigue feel they lack motivation and energy. Even though fatigue and drowsiness are not the same, drowsiness, or the desire to sleep, is a common symptom that accompanies fatigue. Apathy may also accompany fatigue.

### Physical Fatigue

Physical fatigue, or muscle fatigue, is the temporary physical inability of a muscle to perform optimally. The onset of muscle fatigue during physical activity is gradual, and depends upon an individual's level of physical fitness, and also upon other factors, such as sleep deprivation and overall health. With physical fatigue - the person's muscles cannot do things as easily as they used to. Climbing stairs or carrying equipment or supplies may be much harder than before. Physical fatigue is also known as muscle weakness, weakness, or lack of strength. Doctors usually carry out a strength test as they go about diagnosing and trying to find out the causes of individual cases of physical fatigue. It can be reversed by rest

### Mental (Psychological) Fatigue

- Mental fatigue may be life threatening, especially when the sufferer has to perform some tasks, such as driving a vehicle, operating heavy machinery, or working with live power. When symptoms are severe the sufferer might not want to get out of bed in the morning, or perform his/her daily activities. Mental fatigue often appears together with physical fatigue, but not always. People may feel sleepy or have a decreased level of consciousness, and in some cases show signs similar to that of an intoxicated state. The term sometimes heard is "punch drunk."
- Mental fatigue is a temporary inability to maintain optimal cognitive performance. The onset of mental fatigue during any cognitive activity is gradual, and depends upon an individual's original cognitive ability, and also upon other factors, such as sleep deprivation and overall health. Mental fatigue has also been shown to decrease physical performance.

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- Fatigue is a normal result of working, mental stress, overstimulation and under-stimulation, or lack of sleep. It may also have chemical causes, such as poisoning or mineral or vitamin deficiencies. Chronic blood loss frequently results in fatigue, as do other conditions that cause anemia. Fatigue is a normal response to physical exertion or stress, but can also be a sign of a physical disorder.

### **Stages of Fatigue**

- *Prolonged fatigue* is a self-reported, persistent (constant) fatigue lasting at least one month.
- *Chronic fatigue* is a self-reported fatigue lasting at least six consecutive months. Chronic fatigue may be either persistent or relapsing. Chronic fatigue is a symptom of many diseases and conditions.

### **Some Causes of Fatigue**

- Overweight/obesity is a rapidly growing problem in much of the world today. Obese people are much more likely to experience fatigue, for various reasons - having to carry a lot of weight is tiring, obese people have a higher risk of developing diseases and conditions where fatigue is a common symptom, such as diabetes and sleep apnea. Being underweight may mean there is less muscle strength; the very thin person may tire more easily.
- A certain amount of stress can invigorate us; in fact, most of us need some kind of mental pressure to get going. However, when stress levels become excessive, they can easily cause fatigue. Stress and worry are two emotions that commonly cause tiredness. Stress can reach a point in which the sufferer and is “unable to see the light at the end of the tunnel,” which leads them towards despair.
- Some jobs are more closely linked to a risk of fatigue than others. Examples include the police, doctors, nurses, firefighters, and shift-workers in general whose sleep patterns are “unnatural” for humans. The problem of fatigue is exacerbated if the shift-routines are regularly changed.
- Because disrupted sleep is a significant contributor to fatigue, a diagnostic evaluation considers the quality of sleep, the emotional state of the person, sleep pattern, and stress level. The amount of sleep, the hours that are set aside for sleep and the number of times that a person awakens during the night are important. A sleep study may be ordered to rule out a sleep disorder.

### **What you can do yourself to overcome persistent fatigue?**

- Try to go to bed and wake up at the same time each day.
- Set your bedroom’s temperature at a comfortable level. It must neither be too cold nor too hot.
- Do not have your last meal less than two hours before you go to bed.
- As bedtime approaches, physically and mentally slow down. Have a warm bath and listen to some soothing music. Clear your mind of stressful and worrying thoughts.
- If you eat three regular meals each day, eat at the same time each day, and follow a well-balanced diet, your overall health will improve and so will your sleep patterns.
- If you are underweight, add more calories to your diet, but make sure you make a healthy choice.
- If you are overweight/ obese, follow a well-balanced diet and aim for a healthy body weight.
- Do not crash-diet. Your sleep may be affected.
- Drink in moderation, or not at all, alcoholic and caffeinated beverages
- Scientists from Hull York Medical School, England, found that patients with Chronic Fatigue Syndrome who ate dark chocolate, i.e., high cocoa content and no milk chocolate - had considerably reduced symptoms of fatigue. Not too much chocolate.
- Remember that fatigue-physical inactivity-fatigue is a vicious cycle. If you are unfit you are more likely to feel tired. Break that cycle. It is important that any physical activity is done properly and gradually. Regular exercisers sleep better and suffer much less from fatigue than other people.

**Seek medical help if fatigue has not subsided.**