



## Firefighter fatigue...Doc, why am so tired?

Fatigue is one of the most common complaints for which people seek medical attention, and many of our consultations with firefighters have to do with being tired and low on energy. This article will discuss some of the more common causes of fatigue as they relate to firefighters.

One of the hardest things for people, and especially firefighters, to understand is that 80% of fatigue is related to anxiety or depression. These are not easy topic to bring up, and many firefighters, especially males, want to blame a physical cause like low testosterone. It is important to realize that physical causes represent only 20% of the cases of fatigue. Anxiety and depression are common in the general population but depression has been recognized as a particular problem in the fire service. In 2011 the National Fallen Firefighters Association held a conference about depression and suicidality in firefighters. If one of your firefighters complains about fatigue it is important to remember that the cause may be psychological and not physical.

Fatigue is notoriously non-specific, and can be a symptom of many medical problems. In this article we will cover some of the more common causes that we have found through the years of screening firefighters.

**Low Testosterone-** Low T, while sometimes a culprit for fatigue, probably gets more blame than it deserves. There is a great deal of variation in "normal" testosterone levels. We often see firefighters who are taking way too much testosterone attempting to treat their fatigue and low sex drive. What they don't realize is that higher than normal levels of testosterone can have significant adverse health consequences. These include stroke, elevated blood pressure, increased risk for prostate cancer and mood issues including anxiety and anger outbursts. Some firefighters who have true low testosterone will benefit from appropriate testosterone supplementation. Testosterone levels are not routinely screened as part of an NFPA physical but can be easily added to the blood panel that is collected prior to the exam process.

**Low Thyroid-** Hypothyroidism is a remarkably common medical condition where the thyroid gland does not produce enough thyroid hormone. Thyroid hormone is responsible for appropriate metabolic activity. While one of the main symptoms of low thyroid levels is fatigue, others can include constipation, dry skin, difficulty thinking clearly and dry brittle hair. It is easily treated with thyroid replacement. Screening for thyroid disease is a routine part of NFPA 1582 bloodwork.

**Liver Disease-** The liver is responsible for many functions in the body, including storing energy for the in the form of glycogen. If the liver is damaged and can't store energy the individual may experience fatigue. Liver enzymes are routinely checked as part of NFPA 1582 bloodwork.



**Kidney Disease-**The kidneys play a very important role in salt and water balance as well as producing the hormone erythropoietin, which stimulates red blood cell production. Kidney failure can also cause fatigue. Kidney function is screened as part of the NFPA bloodwork panel.

**Anemia-** The red blood cells are the oxygen carriers for the body. If a firefighter is low on red blood cells fatigue will generally be one of the significant symptoms. There are multiple causes for anemia but screening for anemia with a complete blood count is a part of the NFPA bloodwork.

**Infection or Cancer-** Fatigue can be a symptom of a hidden cancer or infection. Routine screenings should be performed yearly, but targeted screenings should be done if the firefighter is having significant symptoms of fatigue.

**Cardiac Disease-** Heart disease does not always present with chest pain. Fatigue is a very common symptom and should not be overlooked as a possibility, especially in firefighters as they are at higher risk for heart disease than the general population.

**Medications-** Many medications can cause fatigue. Some of the more common offenders that we see among firefighters include certain blood pressure, cholesterol, reflux and antihistamine medications. This doesn't mean that these medications shouldn't be taken but it does mean that sometimes medications may need adjustment in order to avoid side effects. As part of our comprehensive examination, we always review medications looking for potential causes for fatigue.

**Drugs or Alcohol-** There is a tendency to abuse alcohol in the fire service. Unfortunately, some firefighters also tend to abuse other drugs as well. We always screen for alcohol or drug abuse as part of our comprehensive exam and counseling session with individual firefighters. This is especially true when they have complaints of fatigue.

The causes of fatigue are numerous and this list is by no means complete. The important thing to remember is that fatigue should not be ignored when brought up as it can indicate significant medical and/or psychological issues which should be addressed and treated.

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