

# Firefighters Have Twice the Risk to Develop Mesothelioma, Says Study

By: **Andrew Devine**

The U.S. Fire Administration (USFA) and the National Institute for Occupational Safety and Health (NIOSH) have teamed up to study the causal relationship between firefighting and diseases such as [mesothelioma](#). The study found that [firefighters](#) have a substantially higher risk of developing mesothelioma than the general population.

Firefighters are a group of people that have one of the more notable risks for developing mesothelioma. These risks aren't hard to imagine when considering the amount of debris and toxins released into the air when an older building burns down.

The smoke and dust generated from these fires are likely to contain unsafe levels of asbestos. When structures are on fire and when they collapse, asbestos fibers present in the structure become airborne.

There are also unforeseen risks that firefighters serving prior to the 1970s may have incurred. Such a risk is the use of asbestos in the protective materials worn by firefighters prior to this period. Since the risks of asbestos were not widely known, it seemed logical at the time to manufacture helmets, coats and pants with fire-resistant asbestos.

While firefighters today have protective equipment, such as masks and respirators, it is not always a requirement for them to use the equipment. This obviously puts firefighters at risk of exposure if asbestos is present.

## **Background of the Study**

The idea behind the study was to create a more conclusive understanding of the occupational risks of firefighting and developing cancer. By increasing the amount of participants in the study, researchers hope to back up previous studies with a more scientifically significant analysis.

The study consisted of nearly 30,000 career firefighters who served between 1950 and 2009 in San Francisco, Chicago and Philadelphia.

While the research does not consider factors such as smoking, personal health and consumption of alcohol, they did determine that firefighters are twice as likely to develop mesothelioma compared to the general population.

This was the first study ever to identify higher rates of mesothelioma among firefighters in the United States. It also found that firefighters have a higher rates of developing several other types of cancer.

The study is projected to have a second phase in which researchers will look at the occupational history of the firefighters in this study to gain more specific information about the relationship of firefighting and the development of cancers like mesothelioma.

## **9/11: A Recent Example of Asbestos Risks for Firefighters**

One of the most infamous asbestos exposure risks for firefighters were those who served at Ground Zero on 9/11. The lower floors of the Twin Towers were coated in tons (estimated between 400 and 1,000 tons) of asbestos that was released into the air when the buildings collapsed.

The dust cloud resulting from the collapse swamped lower Manhattan, engulfing skyscrapers and people. Those without respirators were sure to inhale the toxic dust.

A study released a year after 9/11 by the American Thoracic Society highlighted the risks associated with asbestos exposure for firefighters at Ground Zero.

Although the study wasn't speculative about firefighters developing mesothelioma in the future, it determined there was a significant amount of asbestos released in the air after the collapse.

The study did, however, determine that firefighters at Ground Zero had immediate respiratory side effects, including pleural effusions and pleural thickening. These are serious symptoms, which illuminate the risks firefighters must face.

There isn't any event comparable in magnitude that posed risks to firefighters quite like 9/11. However, it does go to show that firefighters responding to calls involving buildings containing asbestos face an inevitable risk of being exposed to dangerous levels of asbestos.

### **Why Is This Study Important?**

The study released by the USFA and NIOSH is important for many reasons, but one reason stands out in relation to mesothelioma: awareness. Knowing that firefighters have two times the risk of developing mesothelioma than the average American is powerful information.

This is information that can be used to help protect firefighters from unseen, airborne risks such as asbestos. It may also encourage firefighters who are tempted to remove their respirators to protect themselves.

Many people are still unaware of the potential threat of [asbestos exposure](#). The toxic fibers are regulated in the U.S., but they still aren't banned. Firefighters, especially, need to be aware of these risks.

### **About the Writer, Andrew Devine**

Andrew Devine is a contributing writer for Mesothelioma Guide. He has developed an interest in educating patients and their families on everything from new treatments to what to expect after diagnosis.