



The silent threat

Five easy steps for every firefighter to lower the risk of work-related cancer.

Firefighting is highly demanding and requires both mental and physical strength, stamina and a healthy lifestyle. Still, firefighters risk of developing cancer is 9% higher than average and their risk of dying from cancer is 14% higher*.



1. Remember that every fire is a fire

First and foremost, always wear your protective gear – including your mask – while on the fire scene. Working with the final extinction of the fire will still expose you to carcinogens and should be treated no different than a fully developed fire.



2. Create a sustainable washing routine

To effectively prevent work-related cancer it is very important to decontaminate gear after every use. Therefore, every station should have an easy-to-follow cleaning routine to minimize exposure to carcinogens. Soot can be extremely hard to completely remove without a brush or sponge, even with strong cleaning agents. To maximize effect without damaging the breathing apparatus it is important to pay close attention to the following steps.

- Take your time. A brief cleaning cycle will likely leave dangerous residue on the SCBA.
- Adjust the water temperature to best suit the cleaning agent and the type of equipment being washed.
- Apply the right water jet pressure.

Keep in mind that many cleaning agents are not designed for decontaminating firefighting equipment in regard to carcinogens. Make sure to use a cleaning agent specifically developed for soot and dirt.



3. Shower sooner rather than later

There are three major ways for carcinogens to enter our bodies; during inhalation, through the skin, and orally. A firefighter's turnout gear is made to protect against flames and heat, and their SCBA will give complete respiratory protection while it is worn. Nothing, however, protects against the small particles from the smoke that can penetrate clothing all the way into the skin to the blood and cells. Always shower as soon as you can to remove any carcinogens from your body.



4. Take care of your mask

Your mask takes good care of you, so please take good care of your mask. It should be cleaned thoroughly after every mission. The mask should be washed separately in a machine or by hand. Since the mask has a clean and a dirty side it is important to rinse it properly, otherwise soot from the dirty side may contaminate the clean side of the mask. When using the right washing agent and the right procedure the mask will be as good as new!

Our studies show sharply-increased levels of hazardous and carcinogenic substances after new (unused) breathing masks are exposed to smoke. However, after machine washing, the levels of carcinogens on the used masks were once again as low as those found on previously unused masks.



5. Keep the fire truck clean

Soot on your turnout gear, SCBA, helmet, and gloves can always be hazardous so it is important to not expose yourself at any time. This can be done in a number of ways ... for instance, keeping your face mask on while removing turnout gear. Another step could consist of putting contaminated gear and SCBAs in sealed bags and storing them in the back of the truck to keep the cabin free from carcinogens.

Always shower as soon as you can to remove any carcinogens from your body.

The statistics on the matter are as clear as they are dark:

- Approximately 60% of career firefighters will die because of cancer**.
- Other known problems related to firefighting are infertility, asthma, allergy and cardiovascular diseases.
- Children of firefighters are more likely to have congenital heart defects.

Sources:

*Source: The National Institute for Occupational Safety and Health (NIOSH) <https://www.nfpa.org/News-and-Research/Resources/Emergency-Responders/Health-and-Wellness/Firefighters-and-cancer>

**Source: <https://www.nfpa.org/-/media/Files/News-and-Research/Resources/Fire-service/Cancer-Toolkitv6.ashx?la=en>