

Fire smoke increases the risk of cancer- there are better protections, and it must become standard.

The connection between fire smoke and cancer has been established by IARC (WHO) after many years of study. And since July 1, 2022, the job of firefighter has been classified as a high-risk occupation when it comes to cancer. IARC places firefighters in category 1 (out of four categories) regarding cancer, meaning there is a confirmed link between cancer and fire smoke, which in turn means that a cancer diagnosis is classified as a work-related injury.

Fortunately, we have been aware of the risks for a long time and have therefore worked on preventive measures to reduce exposure to dangerous fire gases, such as by introducing the concept of "Healthy Firefighters." But there is still more to be done to further reduce the risks. Our largest organ is the skin, and it is also where the greatest uptake of toxic substances occurs. Our turnout gear provides some protection, but studies show that it takes only about 2 minutes for toxins to be absorbed through the turnout gear to our skin. And when the temperature rises by 5 degrees, skin absorption also increases by 400%! Therefore, we need better safety equipment that provides greater protection. Today, there is an undergarment with very good study results that reduces skin exposure. It has taken 8 years to develop this undergarment and is fundamentally military equipment. My hope is that this undergarment will be included in our equipment as soon as possible when we respond to fire alarms.

There are many studies that support the increased cancer risk for firefighters. Unfortunately, there are still no major studies on us female firefighters, although American studies showed a 600% greater risk for female firefighters to develop breast cancer compared to the rest of the female population. The reason for the lack of studies is that there are too few of us. So until we reach a number that justifies and warrants a larger qualitative study on female firefighters and their risks in the workplace, we must follow the guidelines and findings available for male firefighters. I think that goes a long way, but an area that has not been studied is fertility and how fire gases affect the chance of becoming pregnant. I know that, for example, female hairdressers are at greater risk of infertility due to the chemical fluids they use in their profession.

Many other professions, such as painters and the rubber and aluminium industries, have eliminated risks associated with chemical substances. So, the recognition from WHO showing the risks in the firefighter profession is important, the next step is to look at how we can eliminate these risks. One way may be to monitor our PAH (Polycyclic Aromatic Hydrocarbons found in fire gases) levels through the annual health check. Some cancer diagnoses also have a long incubation period, so perhaps these levels should also be checked after leaving employment in the fire service? I have a vision that within a few years, we will have eliminated the increased cancer risk within the firefighting community, but we all need to work together to demand the safest possible work environment. No one should get sick or injured on the job!