

Emergency Services face cancer risk

Following a review of new scientific findings in Lyon, France in 2022, the International Agency for Research on Cancer (IARC) updated the classification of the profession to be "definitely carcinogenic."

Until last year, the World Health Organization's International Agency for Research on Cancer (IARC) had classified firefighters' profession as possibly carcinogenic. Following a review of new scientific findings in Lyon, France in 2022, the IARC updated the profession to be classified as "definitely carcinogenic." Brandsäkert compares how Australia and Sweden deal with the issue.

"The new classification has been an eye-opener for many. For example, AFA now compensates mesothelioma and bladder cancer as occupational injuries. These were the two strongest diagnoses in the IARC's decision. But the problem is that no diagnosis sets a precedent. Each individual case must be reassessed, and in most cases, requests for occupational injury compensation are denied," says Anders Cederberg, chairman of the Fire Union and Firefighters Cancer Foundation.

On the IARC website, it states that around 40 percent of all cancer cases can be prevented by working to develop the best preventive measures.

To start on the governmental side, the Swedish Work Environment Authority's vision is that no one should become ill, injured, or die from their work. In its mission from the government and parliament, the authority is tasked with ensuring that laws regarding work environment and working hours are followed by companies and organizations.

"It is the employer's responsibility to conduct a risk assessment and find the best possible personal protective equipment available on the market to protect against the existing risks," says Paula Lundberg, an expert in PPE at the Swedish Work Environment Authority.

According to Anders Cederberg, there is now an undergarment that provides firefighters with the protection they deserve.

"Everyone realizes that CPP's undergarments are the solution, " but the problem is that no employer wants to be the first to purchase these because they cost around 10,000 kronor each," says Anders Cederberg.

The protective undergarment has been developed by CPP Garments on behalf of the Firefighters Cancer Foundation. The undergarment protects the skin against carcinogenic smoke and particles.

"We have tested the undergarment in 26 different operations, 25 minutes each. We found that the undergarment provides 1,000 times better protection compared to a regular undergarment," says Anders Cederberg.

The fabric, patented in Germany, is equipped with three layers of textile. The first is cotton and elastane. Then follows a particle filter that minimizes the skin's exposure to toxic PAH particles. Closest to the skin are small spheres of activated carbon on a cotton fabric. The carbon adsorbs the harmful smoke gases. The undergarment is based on the same technology used to protect the military from chemical warfare agents.

The importance of the undergarment for firefighters' health is because the protective clothing does not protect against smoke.

"Tests show that after about 25 seconds, the smoke has penetrated our turnout gears and into the skin. If the smoke were not flammable, we would extinguish the fires wearing chemical suits, that's the level of smoke," says Anders Cederberg.

It has been found that even laundered turnout gears emit carcinogenic substances through the skin.

"Additionally, add PFAS that are present in our clothes. The only solution is the undergarment sold by CPP Garments," says Anders Cederberg.

Currently, four firefighters have had their cancer diagnoses approved as occupational injuries. The diagnoses are: prostate, colon, leukemia, and esophageal cancer.

First up was Tommy Sand. The year was 2016. By then, Tommy had worked as a firefighter for over 30 years.

Recently retired, he has left the profession behind. However, prostate cancer accompanies him for the rest of his life.

"Prostate cancer can take 25 to 35 years from the time you are infected until it manifests, so many of us get it as we get older, although firefighters get it earlier compared to other professions," says Tommy Sand.

He further explains that everyone is more aware of risks now compared to when he started working as a firefighter. The profession operates under the concept of Healthy Firefighters, which in short means being aware of how to avoid overexposure to toxins, but sometimes it can be nearly impossible.

"You can get carcinogenic substances through the skin and throat. So even if you protect yourself with a face mask, you get dirty on your legs, and then you get the carcinogenic substances there," says Tommy Sand.

Every time Tommy Sand is mentioned in the media, he receives calls from colleagues asking for advice. So far, about 50-60 firefighters who have had cancer have contacted him.

"I tell them all to report it. That's the most important thing, so someone else can assess it in the end. I hope more cases will be approved in the future," says Tommy Sand.

On the other side of the globe, Australia's United Firefighters Union (UFU) also works to improve working conditions for its firefighters.

Their president, Greg McConville, says UFU places great emphasis on firefighters having access to the best personal protective equipment on the market.

"When industrial agreements have been updated, we have included that professional firefighters should have direct input into the purchase of protective equipment and other safety equipment," says Greg McConville.

Greg McConville has heard about the protective undergarment from CPP Garments.

"We probably need to conduct studies here to see how the garment affects firefighters' ability to regulate their body temperature when extinguishing fires or working in other emergency situations," says Greg McConville.

"But with that said, the development of new technology that potentially protects firefighters from thermal absorption of carcinogenic toxins is a welcome and exciting development," he concludes.

At the top of the Australian agenda is ensuring that all states and territories increase the number of precedent-setting cancer types from 12, as approved in 2011, to 20 — a decision several states and the federal government adopted at the end of 2022.

"We hope that our colleagues in other countries can convince their governments to provide this important and necessary protection and support for their professional firefighters who daily sacrifice both their quality of life and lifespan to protect their communities," says Greg McConville.

To achieve their goals, UFU conducts campaigns and lobbies politicians. The cornerstone of their efforts has been to base all their demands on scientific evidence.

"We also sincerely hope that our progress can help firefighters in Sweden," says Greg McConville.

Text by: Ulrika Eriksson

Facts from Australia:

Australia has over 13,000 full-time firefighters. The federal government is the employer of firefighters at 27 airports in the country through Airservices Australia, which is equivalent to the Civil Aviation Authority, and at military bases through the Australian Defence Force. Most firefighters are employed by a state or territory. About six percent of Australia's firefighters are women. The average age is 44.