

# The push for clean PPE and Healthy Fire Fighters

In the past decades, firefighters have been glorified for their tough and dirty exteriors that demonstrate their heroic efforts to fight fires and save lives. Soot covered turnout gear often served as a badge of honor, illustrating how courageous these men and women are in their day to day job.

Recent research, however, has suggested that the fire flames are not the only battles our fire fighters are fighting. One other unforeseen battle is cancer.

Combustion by-products are pollutants that firefighters are exposed to when encountering fires. These contaminants include benzene, formaldehyde and even asbestos, which are known or suspected to cause cancer. In 2013, the U.S. Fire Administration (USFA) and National Institute for Occupational Safety and Health (NIOSH) announced that their multi-year study of a group of 29,993 U.S. firefighters concluded that they are at higher risk of cancers of the digestive, oral, respiratory, and urinary systems when compared to the general population. Although many of these exposures are inevitable in this field, there are unnecessary exposures that can and should be eliminated to reduce the overall risk. One way to do this is through the proper washing and drying of personal protective equipment (PPE).

Turnout gear becomes heavily saturated with carcinogens after an encounter with fire. The contaminants are not only on the outside of the gear, they become embedded in the fibers of the material. Firefighters take extra precautions not to inhale harmful toxins during the line of duty, however, they overlook that these hazardous particles are left with them on their PPE to be absorbed through the skin or ingested.

Podab Inc., a commercial laundry manufacturer based in Sweden, has exclusively partnered with the organization 'Healthy Firefighters' to aid in the prevention of carcinogenic

exposures through proper washing, drying, and handling of contaminated gear. Stefan Magnusson, the founder of 'Healthy Firefighters' and a firefighter himself, has developed a method of disposing dirty PPE through properly extracting and containing it immediately after an exposure so that it can be washed and dried promptly upon arrival to the station. He emphasizes that for this procedure to be effective, washing and drying must be done with equipment that can clean and dry it quickly enough so that it can be re-used again as soon as possible.

Stefan said, "The heavy duty turnout gear is absolutely essential to keep firefighters safe, however, it is important to realize that after attending an incident the PPE can also act as a potential danger. Soot and other particles can contaminate the garments, making them a health hazard for our firefighters. In order to prevent this contamination, PPE should be removed immediately after every operation and washed and dried in a timely manner."

Podab presents a complete range of washing and drying equipment that has been developed in cooperation with Healthy Firefighters. It has developed the FC20 Protective Gear Drying Cabinet specifically to dry turnout gear.

This cabinet was the first drying cabinet on the market with the unique ability to dry PPE from the inside and outside by directing hot air through its hangers, significantly cutting drying time.

The FC20 bears a crucial component to the decontamination of PPE. Fire stations across the globe will be more likely to wash their gear if they can have it dry and ready to re-use as soon as possible. Damp turnout gear can be just as dangerous as dirty gear. If gear isn't fully dried, the moisture left can turn into steam during a fire and subject the firefighter to burns. Any moisture left in the gear can also mold or mildew. The FC20 cabinet is equipped with humidity tracking system (HTS) that measures the level of humidity every second to determine exactly when textiles are dry, eliminating any risk of dampness.

These cabinets are a predominant feature in fire stations across Sweden. By spreading awareness about the importance of clean PPE, Podab and 'Healthy Firefighters' hope to aid in the prevention of cancer in our firefighters worldwide. Our mission is to help protect the men and women who protect us.

**For more information, go to [www.podab.com](http://www.podab.com)**

