



The Training Brief

Quick Reference mini-training Topics

The importance of cleaning and inspecting flash hoods

The purpose of this training topic is to understand the importance of a flash hood and keeping it clean as it relates to occupational cancer.

Discussion

Fact: Firefighters have a **9 percent higher risk** of being diagnosed with cancer and a **14 percent higher risk** of dying from cancer than the general U.S. population, according to research by the CDC/National Institute for Occupational Health and Safety (NIOSH).

Key Points: Firefighter flash hoods are in direct contact with exposed skin areas identified as areas that where significant dermal exposure occurs.

The greatest number of carcinogens enter a firefighter's body through the lungs; with the skin being the second most concerning access route. Furthermore, if the hoods are not properly cleaned, the toxins will linger in the hoods and rub against the firefighter's skin.

Firefighters protective hoods that are not cleaned are potential carriers of PAH's and products known to cause cancer. Keep your hood clean.

Action: Clean your hood after every incident where it is exposed to products of combustion. Follow NFPA 1851 recommendations.

Make the necessary changes

It is well-documented that firefighter Personal Protective Equipment (PPE) is exposed to a wide range of toxins, pathogens and other hazardous substances. According to a study by the Centers for Disease Control (CDC) and the National Institute of Occupational Safety and Health (NIOSH), firefighters have a greater number of cancer diagnoses and cancer related deaths. .

Firefighters are occupationally exposed to products of combustion containing polycyclic aromatic hydrocarbons (PAHs) and flame retardants (FRs), potentially contributing to their increased risk for certain cancers.

Personal protective equipment (PPE), including firefighter hoods, helps to reduce firefighters' exposure to toxic substances during fire responses by providing a layer of material on which contaminants deposit prior to reaching the firefighters skin. However, over time hoods that retain some contamination may actually contribute to firefighters' systemic dose.

Protective hoods come in direct contact with neck and face skin, areas identified for significant dermal exposure to products of combustion.

As the fire service learns more about fireground exposure, the importance of maintaining clean gear is being emphasized even more. It is now recommending that you wash your hood after every call to minimize exposure to fireground particulates, and this frequent washing can affect a hood's life.

As part of an overall occupational health and safety program, organizations should educate personnel about the proper use and care of protective clothing, and establish the following practices in accordance with NFPA 1851:

- Wash protective hoods after every fire or emergency service use.
- Inspect for damage and continued serviceability after every fire or emergency service use.
- Do not allow protective hoods to be taken home, to a laundromat or to a dry cleaner for washing.