

## **Hazard Alert**

# **Firefighter PPE Contamination**

The Virginia Department of Labor and Industry's VOSH program has identified evidence that fire fighters are at increased risk of certain types of cancer as a result of occupational exposure. Raised awareness and exposure prevention efforts are cost-effective means to reduce occupational cancer risk. Thus, the fire service should increase efforts to educate members about safe work practices.

### How are firefighers exposed?

Fires generate toxic combustion products, some of which are known or suspected to cause cancer. Fire fighters may be exposed to these toxins as a consequence of their job duties. Fire fighter personal protective equipment (PPE) is exposed to a wide range of toxic chemicals, biological pathogens, and other hazardous substances. It's well recognized that these contaminant exposures can pose significant dangers to fire fighters' immediate and long-term health, with increased risk to cancer topping the list. Exposure to contaminated PPE subjects firefighters to toxic contaminants and carcinogens.

#### Following these measures can save workers' lives

Adequate cleaning procedures can help to remove toxic contaminants from PPE. General cleaning procedures have been established in NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting. Hazard controls to prevent exposure to contaminated PPE include the following:

- Garbage bags for transporting contaminated PPE
- Hand wash stations on every fire engine
- Disposable wipes for cleaning face and neck on scene
- Multiple sets of turnouts available to wear while contaminated sets are being cleaned
- Designated turnout compartments on apparatus separate from the cab
- No contaminated turnouts should be allowed in any apparatus cab
- All turnouts, helmets, masks, gloves, and boots decontaminated on scene
- Prohibit carrying, storing, and wearing of PPE in facility living areas

#### How can VOSH help employers?

VOSH encourages all fire departments to follow NFPA 1851 to select, care for, and maintain contaminated PPE. If you need further assistance or would like additional information please contact our Consultation Division at 804-786-8707.

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