



## 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:** Your structure firefighting gloves are often the most contaminated piece of personal protection equipment that we use.

**Action:** Inspect your gloves at a minimum of every 12 months or after each fire incident. Clean your gloves per the NFPA 1851 Standard.

**A little history:**  
The first reported occupational cancer is attributed to exposure to soot in 1775. Prolonged exposure to soot on the skin is a hazard to firefighters. Soot particles absorb hazardous vapors, holding them in place on surfaces including firefighter's skin and clothing. If not removed, contaminated exterior surfaces and inner layers of protective clothing and equipment results in exposure well after the incident.

**Make the necessary changes**

# The Training Brief

## Quick Reference mini-training Topics Cleaning Structure Firefighting Gloves

*The purpose of this training topic is to understand how to reduce exposure risk to harmful chemicals and properly cleaning your structure firefighting gloves*

NFPA 1851 Standard for Selection Care & Maintenance of Personal Protective Equipment does not recommend washing structure fire gloves in a washer/ extractor. Your structure fire gloves should be inspected, washed, and dried in the station. Do not take your structure fire gloves home to wash in your personal washing machine.

### HOW TO PROPERLY CLEAN STRUCTURE GLOVES

1. Wear appropriate PPE, EMS nitrile or latex gloves for dermal protection and eye protection.
2. One glove at a time, don one of your Structural Firefighting gloves. Using a soft brush, gently brush off all visual dirt and debris. Be gentle, you are just trying to remove the loose dirt and debris.
3. After brushing off dirt and debris, visually inspect each glove. Visually inspect the entire glove looking for damage from wear & tear, contact with hazardous materials, tears and rips and loose or broken stitching. Any damaged glove must be taken out of service.
4. One glove at a time, don one of your Structural Firefighting gloves. Using a spray bottle of clean water, spray glove to be cleaned. Get glove nice and wet. Using opposite hand, work water into outer shell of glove to help remove dirt and debris. Rinse with spray bottle of water.
5. Using another spray bottle with a mixture of clean water and dish soap at a dilution of 1oz of dish soap and 15 oz. of water:
6. Spray glove with cleaning solution soaking outer layer of glove.
7. Using opposite hand work cleaning solution into glove until cleaning solution becomes a lather.
8. Rinse glove clean using spray bottle with only clean water.
9. Rinse until all cleaning solution has been rinsed away.
10. Repeat using remaining glove to be cleaned (This step may be repeated as needed).
11. Set cleaned gloves aside to dry. Make sure it's a cool dry area. Keep away from heating devices and sun.

**"A major cause of cancer in firefighters is Polycyclic Aromatic Hydrocarbons absorbed through the skin as a result of contact with soot, persistently and under hot conditions.**

**Dr. Stuart Baxter Ph.D.**

Source: <https://www.lionfireacademy.com/training/nfpa-1851>