

<b>🌀 FIRE GROUND SAFETY INITIATIVE 🌀</b>	
<b>-Standard Operating Guideline-</b>	<b>-Number-</b>
Cancer Risk Reduction	SOG # 007
	<b>Date Approved by the Fire Chiefs Association:</b> 2-13-18
	<b>Date Last Revised:</b> 11-28-17
	<b>Next Revision Date:</b> January 2019
	<b>Review Date:</b> SOG Shall be reviewed annually by the AHJ

**Purpose**

This Standard Operating Guideline has been developed to reduce the risk and incidence of members contracting cancer. Respiratory protection during an emergency incident is a critical first step to preventing cancer. However, smoke’s carcinogens are also absorbed into the human body through the skin. A firefighter’s PPE (turnouts, hood, helmet, gloves, SCBA, etc.) continue to off-gas carcinogens and other toxins from smoke exposure until they have been adequately decontaminated.

**Scope**

At any incident that involves direct or indirect smoke exposure, personnel will utilize SCBA for respiratory protection. Circumstances include (but are not limited to): interior/exterior fire suppression, vehicle fires, dumpster fires, cooking fires, and live fire training where smoke exposure is present.

Personnel will utilize SCBA protection during ongoing fire suppression efforts and during overhaul operations, if they are in the immediate IDLH atmosphere. Fire investigators should also wear SCBA or other accepted respiratory protection while completing investigations. Based off the information received from air quality monitoring, the incident commander shall decide when SCBA protection will be discontinued.

**Procedures**

*Decontamination at the Scene*

After smoke exposure, personnel will undergo gross field decontamination of PPE’s exterior (i.e. Turnouts, boots, helmet, SCBA harness/straps/mask) to remove as much soot and particulates as possible. This can be accomplished by rinsing PPE with water in a downward angle from top to bottom, and using a rigid scrub brush to aid in the process. Doing so will rinse off smoke particulates and minimize the amount of carcinogens that are off-gassed from contaminated PPE.

While wearing medical gloves, personnel will use body wipes to remove carcinogens from the most vascular areas of their skin (i.e. - face, head, neck, jaw, throat, underarms, groin (if possible), and hands). If possible, wash hands and face with water and a degreasing soap (i.e. Dawn dish soap) prior to leaving the scene. Before returning to the station, members will doff all contaminated PPE.

While returning to the station, members should consider transporting their contaminated PPE and equipment (i.e. Hose) outside of the passenger compartment area.

### *Decontamination at the Fire Station*

Upon returning to the station, personnel should shower as soon as possible. It is preferable to first shower with cold water (as to not open the skin's pores). After a cold shower, warm/hot water can be used.

Personnel will launder all contaminated personal clothing (i.e. Station wear) immediately after showering. Contaminated clothing should not be worn home.

Personnel will launder all contaminated PPE in an extraction washer using a NFPA 1851-approved detergent. This includes turnout coat and pants, gloves, and hood. PPE shall be laundered according to the manufacturers' instructions. Personnel shall utilize their spare set of firefighting PPE until their frontline PPE is decontaminated and dry. If a spare set is not available, gear should be washed at the completion of the shift.

No bunker gear shall be allowed in the living areas of the fire houses, or inside administration/training buildings.

Personnel should use a damp, soapy cloth to clean all other items from their PPE that may not withstand full water immersion (i.e. Helmet liner, inside of helmet, thermal imaging camera, portable radio and strap, flashlight, SCBA mask, etc.). When directly handling contaminated equipment/PPE, personnel should wear medical gloves.

On a weekly basis, personnel should use damp, soapy cloths to decontaminate affected areas of the fire apparatus' passenger compartment (i.e. Seats, doghouse, headsets, etc.). As a rule of thumb: if any equipment smells of smoke, it should be decontaminated as soon as possible.

To reduce contamination from diesel exhaust, all apparatus should be outfitted with an exhaust extraction/containment system, and its use should be required. When this system is not present or is out of service, apparatus and tools shall be started and/or idled outside the bay during routine checks and cleaning. Bay doors shall be open before starting the apparatus and remain open until the apparatus is shut off.

## **References**

Clayton Fire Department - Cancer Prevention SOG

San Antonio Fire Department - Cancer Prevention SOP

Metro West Fire Protection District - Cancer Prevention Guideline POM

Taking Action Against Cancer in The Fire Service, <http://firefightercancersupport.org/wp-content/uploads/2013/08/Taking-Action-against-Cancer-in-the-Fire-Service.pdf>