

	ARLINGTON COUNTY FIRE DEPARTMENT STANDARD OPERATING PROCEDURE	
	OFFICE OF THE FIRE CHIEF	
	SUBJECT: Cancer Protection Program	SOP# OFC **
	APPROVED: John J. White Assistant Fire Chief, TSD	Initiated
	APPROVED: Edward P. Plaucher Fire Chief	Revised

A. PURPOSE

To provide procedures and guidelines for the Cancer Protection Program in response to the Commonwealth of Virginia's Workers' Compensation cancer presumption provision found in §§65.2-402 Code of Virginia, 1950 as amended.

B. DEFINITIONS

Cancer: A group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death.

Carcinogenic: A substance or agent producing or inciting cancer.

Epidemiology: The study of disease in the population, defining its incidence and prevalence and examining the role of external influences.

Occupational disease: a disease presumed to be contracted because of, or suffered in, the line of duty unless such presumption is overcome by a preponderance of competent evidence to the contrary.

Toxic substance: A known or suspected carcinogen, as defined by the International Agency for Research on Cancer, and which causes, or is suspected to cause, leukemia or pancreatic, prostate, rectal, throat, ovarian or breast cancer.

Tumor: An abnormal mass of tissue that is not inflammatory, arises without obvious cause from cells of preexisting tissue, and possesses no physiologic function.

C. BACKGROUND

§§65.2-402 Code of Virginia, 1950 as amended, recognizes certain cancers as occupational diseases for firefighters who have been exposed to a toxic substance during their employment and after the firefighter has had a minimum of twelve years service. The cancers referenced are pancreatic, prostate, rectal, throat, ovarian or breast cancer or leukemia. This provision is enacted in response to growing evidence that fire fighting as an occupation has been linked to development of the listed cancers. Exposures to toxic substances have thus been judged to be part of the occupation and firefighters who contract these cancers, and who meet the other provisions cited in the Code, are presumed to have contracted them in the line of duty. Line of duty injuries and occupational diseases are compensable under the Commonwealth's Workers' Compensation Act.

The Arlington County Fire Department remains committed to the health, welfare and safety of its members and as such, is instituting the following procedures and guidelines to reduce exposure of these toxic substances. The reduced exposure should translate to lower potential for the development of these cancers in members. All members need to be personally aware of the nature of these toxic substances and do their part in controlling their personal exposure levels.

D. PROCEDURE

1. General

Like any environmental factor linked to cancer, there has been no direct cause to effect relationship between any single agent (fume, chemical, behavior, activity, etc.) and the formation of cancer. However, there is a large body of evidence correlating fire fighting and cancers, sufficient to warrant the occupational disease presumption listed previously. As such, it is prudent to take every possible precaution to prevent and/or limit exposure to known carcinogens present in the environment firefighters find themselves. Many studies also note that single event exposures translating to the formation of cancer is, while possible, less likely than the cumulative effect of repeated exposures over time.

These practices are only as effective as the choice individuals make to follow them or disregard them. The more frequently these practices are followed the sum of cumulative exposures is reduced which in turn lowers the risk for cancer formation. Additionally, each time an exposure is prevented another potential single exposure event is eliminated.

2. Fire Fighting Operations

a. Self-contained Breathing Apparatus (SCBA)

- i.** Members shall don SCBA on any incident where the potential exists for exposure to the products of combustion.

- ii. Members shall go 'on-air' any time there is smoke and/or vapors of any kind present in the atmosphere. This includes outside fires and vehicle fires. If a member questions themselves whether they should be 'on-air' or not, the answer is YES.
 - iii. Every effort should be made to use detectors or meters to investigate an odor rather than the member's sense of smell.
 - iv. Once members are 'on-air' during an incident, they shall not go 'off-air' until either they are clear of the immediate area of contamination or the atmosphere has been declared safe and the Incident Commander has approved an 'all-clear' message.
 - v. An 'all clear' message shall not be transmitted until the atmosphere has been tested and the following potentially carcinogenic products of combustion are found not to be present: benzene, asbestos, polycyclic aromatic hydrocarbons (PAHs) or formaldehyde. These are in addition to the parameters currently tested to declare an 'all clear'.
- b. Personal protective equipment (PPE) including SCBA shall be field decontaminated after each and every occurrence where they are exposed to products of combustion.
 - c. Members should make every effort to assure that PPE is donned completely, including all straps, buckles, hook and loop closures, etc. so that no skin is exposed to hazardous atmospheres.
 - d. Turnout gear shall be routinely cleaned according to guidelines found in SOP TSD 2 - PPE Cleaning, to remove any accumulated contaminants, which may have gathered on garments.

3. Emergency Medical Operations

- a. SOP OPS H&S 2 - Guidelines for Infection Control at Scene provides direction and guidance for exposure control during emergency medical incidents.
- b. SOP OPS H&S 3 - Medical Waste Management provides direction and guidance to protect members and the public from contaminants found on medical waste.
- c. SOP OPS H&S 4 - Post-response Cleanup (medical) provides direction and guidance to protect members from exposure to contaminants while performing decontamination after an emergency medical incident.

Fire Stations - Work Sites

- a. Personal Protective Equipment (PPE)
 - i. After returning to quarters from an incident requiring field decontamination, complete decontamination of all affected PPE shall be performed.
 - ii. PPE shall not be allowed into any living area of a fire station. Doors and passageways shall be marked accordingly.
- b. Engine Exhaust
 - i. No vehicle shall be brought into a fire station unless it can be connected to the *Plymovent* Engine Exhaust Removal System installed in each station.
 - ii. Vehicles entering fire stations shall be connected to the *Plymovent* system prior to entering the station and shall remain connected to it until it exits the station.
 - iii. All vehicles, regardless of fuel type (diesel or gasoline) shall use the *Plymovent* system while inside a fire station.
- c. Uniforms
 - i. Contaminated boots will be brush scrubbed with a solution of hot, soapy water, rinsed with clean water, and allowed to air dry.
 - ii. Contaminated work clothing will be removed and replaced with clean clothes. Personnel will shower if body fluids were in contact with skin under work clothing. Each individual shall keep a minimum of one clean, complete work uniform available at the station.
 - iii. Contaminated work clothing will be laundered at the station using hot water and soap. Contaminated work clothing is NOT to be laundered at home.

E. PROGRAM MANAGEMENT

The Technical Services Division in general, and the Health, Wellness and Safety Officer in particular, is responsible for this program.

END