

# Information Bulletin

## Firefighter Cancer Prevention\*

Our goal is to reduce exposure to carcinogens as a result of fireground operations. 1 out of 3 Americans will be diagnosed with cancer. Firefighters are at a 15% higher risk than the general population to contract cancer. Some cancers are at a 200% increase over the general population.

### Key Considerations

#### Personal Health

- Physical fitness- increases strength, helps to maintain a healthy weight (decreases cancer risk, decreases mental illness, decrease medical illnesses).
- A healthy diet helps promote overall health.
- Annual firefighter physicals should be incorporated into your wellness fitness routine.
- Your doctor should be familiar with the increased risk of cancer in firefighters.
- Eliminate tobacco use
- Diesel exhaust- a known carcinogen that we are exposed to on a continuous basis. Use diesel exhaust removal systems whenever possible.

#### Personal Protective Equipment

- Firefighting turnout gear should fit and be worn properly to provide the greatest protection.
- Firefighters should wear clean turnout gear whenever possible.
- Firefighters should be encouraged to wear full personal protective equipment throughout all exterior and interior fireground operations.
- Firefighters should wear self-contained breathing apparatus through all stages of fire, including overhaul.
  - Many departments rely on carbon monoxide detectors as a method to determine if SCBA is needed.
  - The Tualatin Valley Fire & Rescue study (2/25/11) shows that there is very little correlation between carbon monoxide and other very toxic gases like nitrogen dioxide, acrolein, arsenic and mercury all found when CO levels were low.
  - In addition to visible smoke there are concerns that particles not visible to the human eye will be inhaled and cause serious lung problems.

#### On-scene and Post Incident Decontamination

- Firefighters should perform on scene gross decontamination (decon) as soon as firefighting duties are complete:
  - Gross decon will remove up to 85% of the contaminants on the firefighter.
  - Gross decon will limit the amount of cross contamination ultimately reducing the firefighter's exposure.
  - Before rehab firefighters should use decontamination wipes to remove contamination from exposed skin. This process alone can remove up to 50% of the skin contamination and prevent ingesting carcinogens.
  - Firefighters should shower as soon as possible and change into clean clothes to stop the exposure.
  - Wear medical gloves and proper respiratory protection when cleaning equipment.
  - Control contamination spread by using seat covers. Consider disposable covers, garbage bags, painter drop clothes, for your apparatus and personal vehicles.
  - Wash all equipment and apparatus used on the fire scene to limit cross contamination.
  - If contaminated equipment cannot be cleaned on scene, store in an exterior compartment or an air tight container, garbage bag until it is cleaned for the next call.
  - Dirty gear, tools and equipment should never be brought into homes or living spaces at the fire house.

### ***Clean Equipment is Essential to Firefighter Health!***

\* The information contained in this safety bulletin has been obtained from the following sources: The American Cancer Society, The US Department of Labor/Occupational Safety and Health Administration, The Illinois Fire Service Institute, The NYS Department of Labor/The Public Employee Safety and Health Bureau, The National Fire Protection Association, The Firefighter Cancer Support Network, The Leukemia and Lymphoma Society, The New York State Office of Fire Prevention and Control- Cancer Prevention Program. Additional information can be obtained by contacting these organizations directly or by contacting The New York State Office of Fire Prevention and Control.