

## FIREFIGHTER CANCER AWARENESS AND PREVENTION PROGRAM

Dear Primary Care Provider:

Thank you for providing medical care to firefighters. You play a vital role to help prevent the disturbingly high incidences of cancer and heart disease in America’s firefighters. Boston firefighters have two-and-a-half times the risk of developing cancer and acute coronary syndromes than other Boston residents. Firefighters face chronic exposure to heat, smoke, diesel exhaust, and toxic flame retardants. These carcinogenic chemicals are absorbed, inhaled, and ingested into the firefighters’ skin, airways, and gastrointestinal system at building fires, car fires, dumpster fires, even kitchen fires. Carcinogens also accumulate on and inside the firefighters’ protective bunker gear and in their firehouses.

These carcinogen exposures help account for the very alarming discovery that every three weeks a Boston firefighter is diagnosed with cancer. Boston firefighters have elevated rates of cancers of the brain, lung, colon, prostate, bladder, kidney, and skin. Every firefighter should obtain a thorough and confidential firefighter physical exam and undergo the screening tests listed below for prevention and early detection of these specific cancers annually.

### Recommended Firefighter Physical Exam and Screening Tests

Annual Exam	Annual Labs and Screening Tests
○ Blood pressure, pulse	○ Comprehensive metabolic and chemistry panel
○ Respiratory rate, temperature	○ Liver function tests
○ Oxygen saturation	○ Hepatitis profile
○ Weight and body-fat index	○ Complete blood count
○ Thorough skin exam	○ Thyroid panel
○ Eye exam and hearing testing	○ Hemoglobin A1c (for diabetes monitoring)
○ Oral exam	○ Fasting lipid profile and blood glucose
○ Heart and lung exam	○ Urinalysis and urine biomarkers
○ Abdominal and testicular exam	○ EKG
○ Prostate and rectal exam	○ PSA ( <b>begin at age 40</b> for prostate cancer screening)
○ Fecal occult blood testing	○ Pulmonary function test every three years
○ Pelvic and Pap for females	○ Low-dose helical chest CT scanning ( <b>begin at age 50</b> )
○ Vascular and neurological exams	○ Colonoscopy ( <b>begin age 40</b> and every five years)
○ Mental status exam	○ Exercise stress echocardiogram test ( <b>begin age 40</b> and every three years)
○ Musculoskeletal exam	○ Mammograms for females ( <b>begin age 35</b> )

I have gained a unique perspective and understanding of the tremendous dangers and health risks associated with firefighting from my 20 years of combined experience as a Boston firefighter and the department physician for the BFD. Now, as a practicing PCP who treats many firefighters, I am convinced that these screening protocols work. They are very effective tools for early detection and prevention of these serious occupational related illnesses.

These high rates of cancer and heart disease in firefighters are no longer acceptable. Thank you for taking the time from your busy schedule to review these medical surveillance evaluations for firefighters. I do hope you seriously consider using these screening protocols for all of your firefighter patients.

Sincerely,

Michael G. Hamrock, MD

Dr. Hamrock is working closely with the Last Call Foundation and the Firefighter Cancer Support Network to implement a comprehensive Firefighter Cancer Awareness and Prevention Program for Boston. He practices primary care and addiction medicine at St. Elizabeth's Medical Center.

#### References:

The federal National Institute for Occupational Safety and Health (NIOSH) published the results of the largest firefighter cancer study to date in 2013. Researchers examined cancer risks for career firefighters by examining data from nearly 30,000 firefighters from three large U.S. cities (San Francisco, Chicago, and Philadelphia). NIOSH researchers looked at both cancer incidence and mortality between 1950-2009.

Daniels et al., 2013 – Daniels, R. D., Kubale, T. L., Yiin, J. H., Dahm, M. M., Hales, T. R., Baris, D., & Pinkerton, L. E. Mortality and cancer incidence in a pooled cohort of US firefighters from San Francisco, Chicago and Philadelphia (1950–2009). *Occupational and environmental medicine*, 71(6), 388-397. Retrieved from: [http://www.cdc.gov/niosh/firefighters/pdfs/OEM\\_FF\\_Ca\\_Study\\_10-2013.pdf](http://www.cdc.gov/niosh/firefighters/pdfs/OEM_FF_Ca_Study_10-2013.pdf)

See also Cancer risk among firefighters: a review and meta-analysis of 32 studies by LeMasters et al, 2006. Abstract at [www.ncbi.nlm.nih.gov/pubmed/17099456](http://www.ncbi.nlm.nih.gov/pubmed/17099456). Retrieved from: <http://osfm.fire.ca.gov/codedevelopment/pdf/wgfsbim/LeMasters2006.pdf>.