

International Association of Arson Investigators, Inc.
Health and Safety Committee



FIRE INVESTIGATOR COMPREHENSIVE PHYSICAL EXAM LETTER

Dear Primary Care Provider:

Thank you for providing medical care to fire investigators. You play a vital role to help prevent the disturbingly high incidences of cancer and heart disease in this profession. Performing fire investigations in toxic environments places tremendous demands on the cardiovascular system that can lead to premature structural heart and coronary artery disease. In addition, fire ground exposures place fire investigators at significant risk for developing respiratory, gastrointestinal, genitourinary, skin and blood cancers.

Fire investigators are exposed to numerous cancer-causing chemicals from the byproducts of combustion of common household items made of plastics and synthetics as well from furniture covered with flame retardants. These carcinogenic chemicals are absorbed, inhaled, and ingested into their skin, airways, and gastrointestinal system at every structure and vehicle fire investigation. Chronic exposure to the carcinogens from diesel exhaust fumes in the firehouse also promotes occupational cancer in fire investigators.

Fire investigators should be considered “high-risk” patients because of their unique occupational exposures and deserve comprehensive physicals and screening tests for prevention and early detection of heart disease and cancer annually.

Recommended Fire Investigator Physical Exam and Screening Tests

Annual Exam	Annual Labs and Screening Tests
<input type="radio"/> Blood pressure, pulse	<input type="radio"/> Comprehensive metabolic and chemistry panel
<input type="radio"/> Respiratory rate, temperature	<input type="radio"/> Liver function tests
<input type="radio"/> Oxygen saturation	<input type="radio"/> Hepatitis profile
<input type="radio"/> Weight and body-fat index	<input type="radio"/> Complete blood count
<input type="radio"/> Thorough skin exam	<input type="radio"/> Thyroid panel
<input type="radio"/> Eye exam and hearing testing	<input type="radio"/> Hemoglobin A1c (for diabetes monitoring)
<input type="radio"/> Oral, throat and thyroid exam	<input type="radio"/> Fasting lipids and blood glucose
<input type="radio"/> Heart and lung exam	<input type="radio"/> Urinalysis

○ Abdominal and testicular exam	○ EKG
○ Prostate and rectal exam	○ PSA (begin at age 40 for prostate cancer screening)
○ Fecal occult blood testing	○ Pulmonary function test every 3 years
○ Pelvic and Pap for females	○ Low-dose helical chest CT scanning (begin at age 50)
○ Vascular and neurological exams	○ Colonoscopy (begin age 40 and every five years)
○ Behavioral health, smoking and substance abuse evaluations	○ Exercise stress echocardiogram test (begin age 40 and every three years)
○ Musculoskeletal exam	○ Mammograms for females (begin age 35)

I have gained a unique perspective and understanding of the tremendous dangers and health risks associated with fire investigations 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 fire investigators, I am convinced that these screening protocols work. These comprehensive exams, along with full compliance with respiratory and personal protection equipment guidelines* at all fire investigation scenes and practicing better self-care, are all very effective tools for early detection and prevention of these serious occupational related illnesses.

These high rates of cancer and heart disease in fire investigators are no longer acceptable. Thank you for taking the time from your busy schedules to review these recommended medical surveillance evaluations. I do hope you seriously consider using these screening protocols for all your fire investigator patients. Please contact me with any questions or concerns with these recommendations.

Sincerely,

Michael G. Hamrock, MD

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(Dr. Hamrock is working closely with the Last Call Foundation to prevent occupational injuries and illnesses in firefighters. He practices primary care and addiction medicine at Steward St. Elizabeth's Medical Center in Boston, MA.)

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* See the Fire Investigator Health and Safety Best Practices white paper, published by the International Association of Arson Investigators, Inc., June 15, 2018.