

THE FIREFIGHTER PRE-PHYSICAL (PREP) GUIDE FOR PREVENTION AND EARLY DETECTION OF OCCUPATIONAL CANCERS

Dear Firefighter:

In addition to your elevated risk for cardiovascular disease, well researched government and university studies demonstrate that your occupation also puts you at significant risk for developing respiratory, gastrointestinal, genitourinary, skin and blood cancers. The Firefighter Pre-Physical (PREP) Guide is designed to better prepare you to obtain the necessary comprehensive screening tests from your primary care clinician to help early detect and prevent these high risk occupational illnesses.

Your primary care clinician may not be fully aware of your unique occupational health risks and your health insurance plan may not automatically cover additional screening tests especially for younger firefighters. As a "high-risk" consumer of health care, you can overcome these challenges by utilizing the PREP Guide along with the Firefighter Comprehensive Physical Exam (CPE) template for your primary care provider. This will help to foster a stronger partnership with your PCP and more effectively advocate for the comprehensive screenings you deserve.

This PREP Guide will help you recall and document any concerning signs and symptoms of these particular high risk occupational cancers. This list, along with a thorough review of your job related exposures, should be discussed and charted with your primary care clinician during the Review of Systems (ROS) questioning portion of the annual exam. This inquiry should help justify and facilitate more aggressive workups.

FIREFIGHTER PRE-PHYSICAL (PREP) GUIDE

CANCER TYPE	SIGNS AND SYMPTOMS			WORKUP
SKIN	"ABCDE" Skin Lesion Criteria: ○ Asymmetry ○ Border irregularities ○ Color variation (within the same region)		○ Diameter 6mm or > ○ Enlargement or change in shape, color or symptoms	May require Dermatology Referral
RESPIRATORY SYSTEM: Throat, airways and lung	○ Chronic cough and sputum ○ Dyspnea(shortness of breath) ○ Chest pain		○ Weight loss ○ Hemoptysis(coughing up blood) ○ Hoarseness or chronic pharyngitis	May require Chest CT scan and ENT or Pulmonary consult
BLOOD: Leukemia, lymphoma and multiple myeloma	○ Bleeding ○ Fatigue ○ Easy bruising ○ Pale color ○ Dyspnea	○ Fever or Night Sweats ○ Weight loss ○ Itching ○ Large nodes ○ Bone pain	○ Chronic infections ○ Poor wound healing ○ Brittle nails	Complete Labs sets and hematology referral may be required

CANCER TYPE	SIGNS and SYMPTOMS	SIGNS and SYMPTOMS	WORKUP
GASTRO INTESTINAL SYSTEM: Mouth, liver, esophagus, colon and pancreas	<ul style="list-style-type: none"> ○ Bloody or dark stools ○ Abdominal pain ○ Change in bowel habits (pencil thin or loose stools or constipation) 	<ul style="list-style-type: none"> ○ Vomiting ○ Fatigue ○ Pain or difficulty with swallowing ○ Jaundice ○ Early satiety ○ Weight loss 	GI referral, Colonoscopy, and Imaging studies may be required
GENITO- URINARY: Kidneys, bladder, prostate, testicles and uterine and ovarian for females	<ul style="list-style-type: none"> ○ Hematuria (blood in urine) ○ Urinary frequency, urgency or slow stream ○ Abdominal mass/pain ○ Painless testicle mass 	Females: <ul style="list-style-type: none"> ○ Pelvic pain or bloating ○ Abnormal gyn bleeding 	May need Urinalysis, biomarkers, PSA testing, Cystoscopy, Imaging, Urology referral, Gyn referral

INCIDENTS	CARCINOGENIC EXPOSURES	WORKUP
HOME and AUTO FIRES	<ul style="list-style-type: none"> ○ Polycyclic aromatic hydrocarbons (PAHs) and formaldehyde from smoldering plastics and synthetics ○ Brominated dioxins and furans from flame retardants 	See: Firefighter Comprehensive Physical Exam (CPE) Template
FIREHOUSE	<ul style="list-style-type: none"> ○ PAHs, Nitrogen dioxide and sulfur dioxide from diesel exhaust 	

Fortunately, you can significantly help minimize your high risk for developing occupational cancer by being more proactive and practicing better self-care. This includes adhering to all cancer safety measures on the fire ground and in the firehouse, eating healthy, exercising regularly, avoiding smoking, limiting alcohol consumption, and using sun block. Additionally, completing this PREP Guide before arriving for your annual exam along with your CPE template is of utmost importance.

Sincerely,

Michael G. Hamrock, MD

(Dr. Hamrock is a former firefighter and department physician for the Boston Fire Department and provides primary care to many Massachusetts firefighters at Steward St. Elizabeth's Medical Center in Boston, MA.)