



# Fire Fighter Cancer Awareness and Prevention



## Cancer Screenings

Given the known occupational risk of exposure to carcinogens and the excess number of certain cancers in the fire service, the IAFF Wellness-Fitness Initiative's (WFI) Medical Committee, for some cancers, made recommendations beyond those made for the general population.

Examples here include lowering the age at which screening begins or repeating screening more frequently than would be done for the general, non-occupationally exposed population.

Appropriate screening examinations of the **lungs, skin, breast, cervix, testes, prostate, thyroid, oral mucosa, bladder and colon** must be conducted with the annual examination or as indicated below.

### LUNG CANCER

- Annual screening for lung cancer in adults ages 55 to 80 years who have a 30-pack per year smoking history and currently smoke or have quit within the past 15 years.
- Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.

### SKIN CANCER

- Skin cancer must be diagnosed in a timely manner to ensure successful treatment and maximize cure rates.
- Comprehensive inspection of the skin, especially in sun-exposed areas, is recommended.
- Any suspicious lesions shall be referred for dermatological assessment.

### BREAST CANCER

- Breast cancer incidence and mortality rates increase with age.
- An annual clinical breast examination is required. Self-examination should be encouraged, and educational information should be made available to interested patients.
- Mammography screening shall be performed on all women uniformed personnel beginning at age 40 and continue every other year until age 50, at which point annual mammography is indicated.
- Annual mammography should be obtained before age 50 if clinically indicated.

## **CERVICAL CANCER**

- The United States Preventative Services Taskforce (USPSTF) recommends screening for cervical cancer in women ages 21 to 65 years, with a pap smear every three years.
- For women ages 30 to 65 years who want to be screened less frequently (every five years), screening should be a combination of a pap smear and human papillomavirus (HPV) testing.

## **TESTICULAR CANCER**

- A baseline examination by a healthcare provider followed by routine self-examination is recommended, and educational materials should be made available to interested patients.

## **PROSTATE CANCER**

- The prostate-specific antigen (PSA) test is a blood test that has been used for prostate cancer screening.
- Uniformed male personnel shall be offered a discussion regarding PSA testing at age 50 and annually thereafter.
- Uniformed male personnel who are considered to be at an increased risk for prostate cancer, such as those who have a family history of prostate cancer or are of African-American heritage, shall be offered a discussion regarding PSA testing starting at age 40 and annually thereafter.
- Current consensus also highlights the importance of measuring and comparing PSA results over time, known as PSA velocity. Where an increase over time would indicate higher risk for prostate cancer, the magnitude of this increased risk should be in accordance with current national urological association guidelines.
- Digital Rectal Examination (DRE) – The DRE is no longer the preferred method of screening for prostate or colorectal cancer; however, if PSA is obtained, DRE can be performed as well.

## **COLORECTAL CANCER**

- WFI recommends that healthcare providers discuss the possible increased risk of colorectal cancer resulting from occupational exposures along with the risks and benefits of initiating screening at age 40 in fire fighters.
- If the fire fighter decides to start screening at age 40, fecal occult blood testing (FOBT) is the method recommended for use as it has the lowest risk for adverse patient events and is the most cost effective.
- Recommended screening methods for colorectal cancer include FOBT, sigmoidoscopy or colonoscopy beginning at age 50 and continuing until age 75. They will all be effective in reducing mortality using any of the following three regimens, assuming 100% adherence to the same regimen for that period:
  - o Annual screening with high-sensitivity fecal occult blood testing
  - o Sigmoidoscopy every five years, with high-sensitivity fecal occult blood testing every three years
  - o Screening colonoscopy every 10 years
- Colonoscopy should start at an earlier age (40 years) and/or be conducted more frequently if clinically indicated. A colonoscopy shall also be performed, regardless of age or schedule, when FOBT results are positive or when there is a consistent change in bowel habits.



## **BLADDER CANCER**

- As the body absorbs cancer-causing chemicals, they are transferred to the blood, filtered out by the kidneys and expelled from the body in urine. High concentrations of chemicals in urine can damage the endothelial lining of the bladder and increase the risk of cancer.
- Urine shall be evaluated for blood (hematuria) during scheduled wellness examinations. Positive dipstick for hematuria requires follow-up and referral may involve upper-tract imaging, cystoscopy and/or urine cytology.

## **ORAL CANCER**

- Regular dental checkups that include an exam of the entire mouth are important in finding oral and oropharyngeal cancers and pre-cancers early.
- The American Cancer Society recommends that doctors examine the mouth and throat as part of a routine cancer-related checkup.

## **THYROID CANCER**

- A physical exam for palpable nodules should be part of the routine exam.

**There are currently no approved screening modalities for these cancers:**

- Ovarian
- Uterine
- Brain