# **Understanding** Increased Risks to Firefighter Health

Firefighters are exposed to many hazardous substances during the course of their careers.

Careful screening can lead to early detection and improved health outcomes for firefighters.

## At-Risk Conditions:

- Cancers: Brain, bladder, breast, cervical, colorectal, cervical, esophageal, leukemia, lung (including mesothelioma), multiple myeloma, non-Hodgkin's lymphoma, ovarian, pancreatic, penile, prostate, testicular, thyroid, skin and ureter.
- Health: Mental health, cardiovascular disease, lung disease (COPD/interstitial lung disease) and thyroid disease.

### **Recommendations:**

- Medical Evaluation: Update history and consider increased risks.
- Physical Exam: Cardiovascular exam, digital rectal exam, neurological exam, pelvic exam, respiratory exam, skin surveillance, testicular examination and thyroid examination.
- Bloodwork: CBC, electrolytes, renal function, cholesterol, blood glucose, ferritin, TSH and urinalysis.



# **Screening Check:**

#### **Mental Health:**

Questionnaire or equivalent screening.

#### **Breast:**

- Annual mammography for ages 40-49.
- Biennial mammography for ages 50-74.

#### Cardiovascular:

- Baseline EKG with frequency based on symptoms and shared decision making.
- Exercise Stress Test with frequency based on established risk factors.
- Framingham risk score to determine cardiovascular disease risk.

#### Cervical and Ovarian:

- Baseline pap test for sexually active women age 21 or older. Repeat every three years. More frequent testing if results are abnormal.
- Bimanual examination as indicted.

#### Colon:

- FIT test for ages 50-74 at a minimum every two years. Initial screening prior to 50 based on symptoms and shared decision making.
- Colonoscopy, if patient has one first degree relative with colon cancer under 60 years old or two family members with colon cancer.

# **Kidney:**

Routine urinalysis as indicated.

• Baseline chest x-ray is recommended. Repeat if patient develops chronic cough or shortness of breath (SOB).

### **Prostate:**

- Baseline PSA age 50-70.
- If less than 1, repeat every 4 years.
- If 1 to 3, repeat every 2 years.
- If greater than 3, repeat more frequently as discussed with Medical Practitioner.

#### Skin:

Annual skin surveillance as indicated.

#### Thyroid:

Annual thyroid examination and TSH as indicated.

Government of Newfoundland and Labrador, Department of Health and Community Services International Agency for Research on Cancer (2022) via Health Canada International Association of Fire Fighters, Wellness-Fitness Initiative, fourth edition