



# The Training Brief

## Quick Reference mini-training Topics Bladder Cancer

*The purpose of this training topic is to understand the signs and symptoms of bladder cancer. Firefighters, who are regularly exposed to smoke and chemical fumes, may be at a higher risk for developing bladder cancer.*

### Discussion

**Fact:** Firefighters are twice as likely than the general population to have bladder cancer. Exposure to diesel exhaust is a known risk factor for bladder cancer. Firefighters are also among the most prominent occupational groups at increased risk for bladder cancer. Surprisingly, many firefighters and their physicians are unaware of their risk for this cancer. Men get screened for prostate and colon cancers. Yet, one of the deadliest cancers, if not detected early, is not on their cancer watch list.

**Key Points:** Prolonged exposure to benzene compounds found in burning debris and diesel exhaust are associated with bladder cancer risk, so it's not surprising that studies have shown that firefighters are twice as likely to have bladder cancer than the general population. Much of this exposure comes after the fire is knocked down, when firefighters are off air performing overhaul and still exposed to smoldering material.

**Action:** Use SCBA from the start of the fire through overhaul. Perform a preliminary exposure reduction and wet wipes after every fire incident where you're exposed to products of combustion. Shower within the hour.

**Make the necessary changes**

Many firefighters and other first responders have prolonged exposure to environmental chemicals and pollutants, things that can increase a person's risk for bladder cancer. According to the American Urological Association.

Bladder cancer starts when cells that make up the urinary bladder start to grow out of control. As more cancer cells develop, they can form a tumor and, with time, spread to other parts of the body.

**Bladder cancer can easily be detected early.**

#### Signs and symptoms:

- Having to urinate more often than usual
- Pain or burning during urination
- Blood in urine (Hematuria)
- Feeling as if you need to go right away, even when your bladder isn't full
- Having trouble urinating or having a weak urine stream
- Having to get up to urinate many times during the night
- Being unable to urinate
- Lower back pain on one side
- Loss of appetite and weight loss
- Feeling tired or weak
- Swelling in the feet
- Bone pain

#### Testing

Screening tests have been used to detect a variety of cancers early in their development in an effort to improve survival. In the absence of screening, one in four bladder cancers is detected when it is already advanced, requiring expensive treatment and reduced survival. We now have the means to screen people at risk for bladder cancer using a test that detects elevated levels of the NMP22 protein marker in a single urine sample. Most healthy individuals have very small amounts of the NMP22 protein marker in their urine, but bladder cancer patients commonly have elevated levels, even at early stages of the disease.

**It cannot be understated about the importance of annual medical exams. Early detection is the key to survival.**

Download and bring the form to your Physician:

[https://firefightercancersupport.org/wp-content/uploads/2020/01/Primary-care-cancer-evaluations-for-firefighters\\_HamrockMD\\_2016\\_FCSN.pdf](https://firefightercancersupport.org/wp-content/uploads/2020/01/Primary-care-cancer-evaluations-for-firefighters_HamrockMD_2016_FCSN.pdf)

Source: American Cancer Society