

Female Fire Fighters and Cancer

Fire fighters face a greater risk of being diagnosed with occupational cancer than the general public, and this includes female fire fighters. Scientific studies on cancer and fire fighters have centered around male fire fighters due to the small percentage of female fire fighters in the workforce. However, female fire fighters are being diagnosed with different cancers than their male colleagues, and more research is needed to fully evaluate these differences.

Studies that have evaluated cancer risk among female fire fighters suggest that, like their male coworkers, they may be at an elevated risk for overall cancer incidence.¹ These studies also suggest that female fire fighters may be at an elevated risk for breast,¹ cervical, thyroid,² and bladder cancers.¹ Genetic and environmental factors are believed to play a role in breast cancer risk, but inheritance accounts for only 10% of breast cancers.³

Reproductive cancers are also of interest because elevated incidence and mortality may be associated with exposures to endocrine-disrupting chemicals in the fire fighter population. Endocrine-disrupting chemicals could result in elevated incidence and mortality for reproductive cancers among female fire fighters as well. With the potential that these chemicals could affect female fire fighters, further research needs to be done to gain a better understanding of these health concerns.



Female fire fighters have an increased risk of developing certain cancers, and some are being diagnosed at higher rates compared to female non-fire fighters:

- Cervical Cancer: 4 times higher risk¹
- Breast Cancer: Half of all cases^{1,7}
- Thyroid Cancer: 3 times higher risk^{2,4,7}
- Brain Cancer: 2.54 times higher risk⁴
- Bladder Cancer⁴
- Ovarian Cancer^{5,6,7}
- Melanoma: 1.68 times higher risk⁴

Some of these numbers are alarming; however, these studies have very small sample sizes due to the low number of female fire fighters in the workforce. More studies need to be done, and some are currently underway.

Sources:

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