

SUMMARY

Recent epidemiological research on firefighters indicates an increased incidence of specific types of cancer. Intervention is needed in the fire service yet little is known about how firefighters perceive their cancer risk. Participant observation and focus group data were collected from 15 fire stations in South Florida. Firefighters had at least 3 years of experience, ranks included drivers, captains, lieutenants, and specialty captains, with a median age of 51 years.

FINDINGS

- Findings from this study indicated that firefighters perceive risk factors for cancer under two major categories: (1) direct factors related to work (eg, on-scene exposures, issues related to gear, exhaust from the trucks or engines) and (2) indirect factors related to their occupation, but not considered essential features of firefighting (eg, diet).
- It is important to note that due to the uniqueness of the profession, direct and indirect are not necessarily mutually exclusive categories.
 The firefighters in our study spend 24 h together when on shift, leading many of their personal behaviors to become work related.
- Firefighters in this study identified what they perceived to be individual causes of cancer (eg, eating too much bacon, diesel exhaust), but many also believe cancer etiology is a combination of many of these individual factors, including occupation, genetics, and family history of cancer.

Anderson, D. A., Harrison, T. R., Yang, F., Wendorf Muhamad, J., & Morgan, S. E. (2017).

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TAKEAWAYS

- Firefighters in the study reported concern for their cancer risk from on-scene exposures, contaminated gear, and exhaust from engines and rescue trucks.
- Firefighters discussed their concerns over how their diet may influence their cancer risk and the difficulties associated with making changes considering the social nature of eating in the firehouse.
- While firefighting is an occupation known for being dangerous or risky, many firefighters in our study believe that cancer is what will ultimately end their lives.
- Firefighters made comments about being resigned to getting cancer or referring to the cancer already being in them, yet were hopeful that something could be done for themselves or future generations of firefighters.

FIRE STATION TALKS

- Normalize individual healthy eat habits while on duty.
- Better yet, engage in cooking healthy meals as a crew.
- Wear proper PPE and SCBA on all fires, including brush and car fires.
- Properly wash PPE after fire exposure.
- Do not store gear in personal vehicles or living quarters.

CHIEF PERSPECTIVE

- Invest in proper diesel exhaust ventilation systems.
- Ensure bunker gear is kept in a separate room from the apparatus in a well ventilated room.
- Change policies and procedures regarding running engines while in the apparatus bay.
- Design future stations to keep bunker gear and bunk rooms separate from the apparatus bay.
- Support a culture of healthy eating while on duty.
- Work with local restaurants or organizations to teach firefighters how to cook healthy meals.
- Provide extractors and dryers at stations to ensure PPE is being properly cleaned.
- Ensure firefighters have a second set of gear to encourage gear cleaning in a timely manner.

