

The Role of Occupational Culture and Leadership in Firefighter Cancer Prevention

BACKGROUND

- Firefighters experience elevated cancer risk due to repeated occupational exposures, yet awareness of these risks does not always translate into cancer-preventive behaviors.
- Occupational culture and leadership may play an important role in shaping how firefighters perceive and respond to health and safety risks.
- This qualitative study explored how occupational culture and leadership influence cancer prevention among Houston Fire Department (HFD) firefighters.

METHODS

- Interviews were conducted with departmental leadership and firefighters between May and September 2026.
- Interviews explored health and safety, cancer risk and prevention, organizational norms, leadership, and health behaviors.
- Rapid qualitative analysis used structured interview summaries and comparison matrices.

RESULTS

Theme 1: Health and Safety Culture is Evolving.

Participant describing past fire service health and safety culture:

“Health and safety like was like a made-up thing. Like when I started, it was just nowhere to be found. I remember being on a particular district...they would wear their freaking bunker pants like watching TV in a lounge”

Participant describing the shift toward a stronger safety culture:

“I’m really thankful that the culture has changed because everybody’s a bit more safety minded...it just takes time to build that safety culture”

Theme 2: Occupational Norms Shape Behavior.

Participant describing how peer norms influence newer firefighters:

“...monkey see, monkey do, especially when you’re new... you don’t want to be left out, you don’t want to do things different than everybody else. And it was just a culture of danger.”

Participant describing pressure to conform to established practices:

“...when you have like a brand-new firefighter come out, [you] could teach them all day long at the academy. But when they get to the station... if the other guys at the station aren’t taking those measures, well, they’re not going to do that. They don’t want to be the odd man out. They want to, they want to fit in.”

Participant describing how established practices persist despite available resources:

“We have some machines that you can clean your gear there. But again, almost nobody cleans their gear after a fire.”

Theme 3: Leadership Can Reinforce or Change Norms.

Participant describing how officers set expectations for preventive practices:

“As an officer, you do have that ability to tell those guys, hey, we are going to use the PPE today. And this is why we have the PPE and we got to use it. That’s our responsibility.”

Participant describing leadership enforcing preventive practices:

“They’ll come back from a fire and you literally have to sit there and place the apparatus out of service and make them take a shower. And they’re like, no, I’m fine. I’m fine. It’s like, no, no, no, no, it’s for your benefit. If not for you, it’s for your family. So go clean yourself up, put new stuff on.”

CONCLUSIONS

- Cancer prevention among firefighters may require more than increasing knowledge and awareness of occupational cancer risks.
- Interventions should consider the organizational and social context in which firefighters make health decisions and leverage trusted leaders and peer norms to translate cancer risk awareness into preventive action.