



NORTH AMERICAN FIRE TRAINING DIRECTORS

SERVING STATE, PROVINCIAL, AND TERRITORIAL FIRE TRAINING AND EDUCATION SYSTEMS

North American Fire Training Directors

North American Fire Training Directors (NAFTD) Position Statement:

Support for the National Firefighter Registry (NFR)

Adopted at the Annual Meeting, September 27, 2022

Firefighting is a hazardous occupation. In addition to the potential for injuries, heat stress, shift-work, sleep disruption, and psychological stress, firefighters are exposed to toxic combustion byproducts.⁽¹⁾ Several studies show that firefighters' have an increased risk of cancer.⁽²⁻⁴⁾ Just recently in the summer of 2022, the International Agency for Research on Cancer (IARC) completed their evaluation of the carcinogenicity of occupational exposure as a firefighter, which they have now classified as a group 1 *known human carcinogen*, based on sufficient evidence for cancer in firefighters for mesothelioma and bladder cancer. There was also limited evidence for several other cancers: colon, prostate, testicular, melanoma of the skin, and non-Hodgkin lymphoma.⁽⁵⁾

Still, more in-depth and comprehensive research is needed to better understand specific cancer risks and occupational risk factors among all types of firefighters, including volunteer firefighters, female and minority firefighters, and subspecialty groups of the fire service, like arson investigators, airport rescue firefighters, wildland firefighters, and fire instructors. Instructors, in particular, may be at an increased risk of cancer because they often participate in multiple live-fire trainings over extended periods. Studies have found that during live-fire training, instructors can be exposed to certain types of carcinogens at levels similar to firefighters during structure fire responses.^(6,7) A study in Australia found a dose-response relationship between estimated training exposures and overall cancer incidence.⁽⁸⁾




To better understand the link between on-the-job exposure to toxicants and cancer, U.S. Congress directed the Centers for Disease Control and Prevention (CDC) to create the National Firefighter Registry (NFR).

The NFR will be a voluntary registry of all U.S. firefighters, not just those with cancer. The project is being led by the CDC's National Institute for Occupational Safety and Health (NIOSH), which has the knowledge, expertise, experience, and resources to lead this type of project. The NFR will be used to monitor and better understand cancer among firefighters in the U.S.

With broad participation, the NFR will be able to:

- Track cancer incidence (including rare types of cancer) among a diverse group of firefighters throughout the U.S.
- Explore cancer risk between different groups of firefighters, including women, minorities, and subspecialties of the fire service
- Investigate whether the cancer risk is improving or worsening among more recent firefighters
- Evaluate how exposures, including large or unusual incidents, relate to firefighters' cancer risk
- Evaluate how control interventions relate to firefighters' cancer risk

Participation in the NFR is voluntary. However, it is the position of the North American Fire Training Directors (NAFTD) that all firefighters—structural and wildland, career, and volunteer, active and retired,

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Angela White	Jim Keiken	Dennis Ray	Caroline Reed	John Cunningham	Kenneth Willette
Wisconsin	Illinois	South Carolina	Oklahoma	Nova Scotia	(774) 200-7774
www.naftd.org					PO Box 1389 Ware, MA 01082



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and those with and without cancer—should take part. Having broad and diverse participation is absolutely critical to the success of the NFR.




By supporting the NFR, NAFTD hopes to learn more about the health risks firefighters' face. Information gleaned from this project will be useful to fire departments, fire service organizations, standard-setting organizations, and policy makers throughout the country.

NAFTD encourages training directors to take the following steps in anticipation of the NFR opening registration at the end of 2022:

- **Advise your organization that the NFR is open to ALL firefighters, not just those with cancer.**
- **Encourage instructors and students to register and reassure them that the information they provide is confidential. It is anticipated that the entire registration process will take around 30 minutes for many participants. The registration process is likely to be even shorter for new recruits because of their limited work history. More information on the registration process is available at the NFR website (www.cdc.gov/NFR).**
- **Provide information about the NFR to instructors and students, including the QR code that will direct firefighters to the secure web portal when it launches. Communication materials will be available at the NFR website (www.cdc.gov/NFR) or upon request (email: NFRRegistry@cdc.gov)**
- **Recommend that participating firefighters take part in follow-up questionnaires. These follow-up questionnaires may not be necessary for firefighters to register, but will likely be important for understanding risk factors and answering other important research questions.**
- **Tell others, including retired and volunteer firefighters, about the NFR. Word-of-mouth will be vital for increasing participation in the NFR.**

Sources

1. **Fent, K.W., C. Toennis, D. Sammons, S. Robertson, S. Bertke, A.M. Calafat, J.D. Pleil et al.:** Firefighters' absorption of PAHs and VOCs during controlled residential fires by job assignment and fire attack tactic. *J. Exp. Sci. Environ. Epi.* (Online June 2019) <https://doi.org/10.1038/s41370-019-0145-2>
2. **LeMasters, G.K., A. Genaidy, P. Succop, J. Deddens, T. Sobeih, H. Barriera-Viruet et al.:** Cancer risk among firefighters: a review and meta-analysis of 32 studies. *J. Occup. Environ. Med.* 48(11): 1189-202 (2006).
3. **Daniels, R.D., T.L. Kubale, J.H. Yiin. et al.:** Mortality and cancer incidence in a pooled cohort of US firefighters from San Francisco, Chicago and Philadelphia (1950-2009). *Occup Environ Med.* 71(6): 388-97 (2014).
4. **International Agency for Research on Cancer (IARC):** Painting, Firefightings, and Shiftwork, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol.98. *Worth Health Organization.* Lyon, France (2010).
5. **Demers, P.A., D.M. Demarini, K.W. Fent, et al.:** Carcinogenicity of occupational exposure as a firefighter. *Lancet Oncol.* 23(10) 985-986 (2022).
6. **Fent, K.W., A. Mayer, S. Bertke, et al.:** Understanding airborne contaminants produced by different fuel packages during training fires. *J. Occup. Environ. Hyg.* 16(8) 532-543 (2019).
7. **Kirk, K.M. and M.B. Logan.:** Firefighting instructors' exposures to polycyclic aromatic hydrocarbons during live fire training scenarios. *J. Occup. Environ. Hyg.* 12(4) 227-234 (2015).
8. **Glass, D.C., A. Del Monaco, S. Pircher, et al.:** Mortality and cancer incidence at a fire training college. *Occup. Med.* 66(7) 536-542 (2016).

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