

# National Firefighter Registry: *The Missing Piece*

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**NATIONAL  
FIREFIGHTER  
REGISTRY**  
Understanding &  
Reducing Cancer

# What do we know?

## IARC MONOGRAPHS VOL. 132: OCCUPATIONAL EXPOSURE AS A FIREFIGHTER

Occupational exposure as a firefighter is *carcinogenic to humans* (Group 1) on the basis of *sufficient evidence* for cancer in humans



The *IARC Monographs* classification indicates the level of certainty that an agent can cause cancer (*hazard identification*)



Cancer types with *sufficient evidence* for cancer in humans:



Cancer types with *limited evidence* for cancer in humans:



Strong mechanistic evidence in exposed firefighters



Exposures of firefighters include combustion products, diesel exhaust, building materials, asbestos, chemicals, shift work, ultraviolet radiation



Firefighters respond to various types of fire



Structure



Wildland



Vehicle

# What don't we know?

- What is the cancer risk for volunteer firefighters?
- What is the cancer risk for the sub-specialties of the fire service?
- How does the cancer risk vary for demographic groups?
- How does the cancer risk vary regionally across the U.S. fire service?
- How prevalent are rare forms of cancer among firefighters?
- How does the cancer risk change with increasing exposures, including major events?
- What other occupational and non-occupational risk factors contribute to cancer risk among firefighters?
- To what extent do different control interventions and workplace practices reduce the risk of cancer?
- Are there other chronic illnesses that are elevated in firefighters?



# National Firefighter Registry (NFR)

**Mission:** To generate detailed knowledge about cancer in the fire service through a voluntary registry that reflects our nation's diverse firefighters.

**Vision:** To equip the fire service and public health communities with the knowledge they need to reduce cancer in firefighters.

**Goal:** Enroll 200,000 firefighters

**Specific aims:**

1. **Collect self-reported information** on workplace & personal characteristics through web portal
2. **Obtain records from fire departments or agencies** to track trends and patterns of exposure
3. **Link with health information databases** including population-based cancer registries and the National Death Index to detect cancers and deaths



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**Occupational  
exposures**

**Cancer**

**Firefighter**

## **The Missing Piece**

- Cancer is reportable in all 50 states
- Most states do not collect detailed information about occupation
- NFR allows you to register yourself as firefighter
- Makes it possible to study the relationship between “firefighting” and “cancer”

# Welcome to the National Firefighter Registry

Confirm eligibility and then click  
“Login.gov” below to create account or  
sign in.

I am at least 18 years of age \*

I have served or am currently serving  
as a US Firefighter \*

 Login.Gov

Learn more at [www.cdc.gov/NFR](http://www.cdc.gov/NFR)

## Enrolling in the NFR

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- Visit web portal [NFR.cdc.gov](http://NFR.cdc.gov)
- Confirm eligibility and click Login.gov
- Create account
- Read and sign consent form
- Fill out user profile
- Complete the questionnaire
  - Demographics, work history, health history, lifestyle

30 - 45 minutes

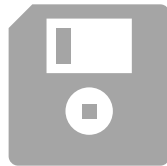
# Data security

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**Logging into web portal requires multi-factor authentication**

Email, password, and another form of authentication (e.g., text message passcode)



**Data uploaded to an encrypted database each time the firefighter clicks “save and continue” or logs out**

Logging out saves progress



**Privacy protected by an Assurance of Confidentiality**

Identifiable information will not be shared outside of NIOSH

# Who's eligible?

- ALL firefighters!
  - Active and retired
  - Career and volunteer
  - Structural, wildland, or other specialties
  - Those with or without cancer



- NIOSH will reach out to select fire departments to solicit participation and request incident records
- Most will enroll through the open enrollment route ([NFR.cdc.gov](https://www.cdc.gov/nfr/))



# What happens after enrollment?

200,000 or more!  
Over next few years

Starting line



Enroll firefighters in NFR



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Data collection (including incident records and follow-up surveys)

- Personal and demographic information
- Work history and use of controls
- Other occupational and non-occupational factors

Matching to state cancer registries and data analyses

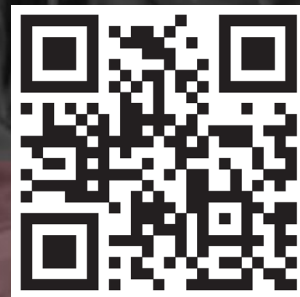
- Demographic and regional differences in cancer risk
- Exposure-response relationships and impact of controls
- Cancer risk by job category
- Quantification of cancer risk modifiers and confounders

Over next 10+ years

# Thank you

## STAND TOGETHER JOIN THE NATIONAL FIREFIGHTER REGISTRY

Answer the call. Join your brothers and sisters  
in a new effort to understand and reduce cancer.



### WHO CAN REGISTER FOR THE NFR?

All U.S. firefighters, with or without cancer, no matter their length of service. This includes:

- Active and retired firefighters
- Career, paid-on-call, and volunteer firefighters
- Structural firefighters
- Wildland firefighters
- Instructors
- Fire investigators
- Other fire service members

Having all types of firefighters join the NFR is vital to examining the relationship between firefighting and cancer. Participation is voluntary.

*The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.*



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