National Firefighter Registry for Cancer: *Progress Report for NFR Subcommittee*

National Firefighter Registry Subcommittee June 13, 2023

Kenny Fent, PhD, CIHNational Firefighter Registry (NFR) for CancerNational Institute for Occupational Safety and Health (NIOSH)





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.

Outline

- Introduction of NFR team
- Current events
- Goals and objectives
- Progress over the last year
- Nationwide launch
- Current registration numbers
- Future work



The NFR Science Team

Lead epidemiologist: Miriam Siegel, DrPH

Health scientist: Alex Mayer, MPH

Health scientist: Andrea Wilkinson, MS

Health communications: Jennifer Tyrawski, PhD (split with DFSE)

Health communications: Greg Hartle (split with FRB)

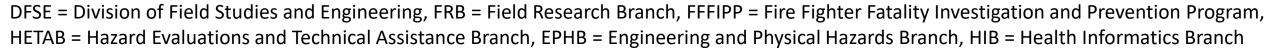
Public health advisor: Jasmine Nelson (split with FRB)

Fire service SME: Rob Saunders (split with FFFIPP)

Ind. hygienist/Epidemiologist (support): Catherine Beaucham, PhD (split with HETAB)

Engineer (support): Barb Alexander, PhD (split with EPHB)

Data scientist (support): Karl Sieber, PhD (split with HIB)







Other Support

NIOSH OD Information Technology – helped build the enrollment web portal

NIOSH OD Communications – helped with press release, news interviews, and social media posts

RTI International (Contractor) – developed **c**ommunication materials (e.g., videos, fact sheets, tip

sheets, palm cards, exhibit booths)

Fire Service SME Contractors – helped disseminate information to fire service partners

Current events in the fire service

- Heightened concerns among firefighters responding to major events
 - East Palestine, Ohio train derailment and fire
 - Richmond, Indiana plastics recycling fire
 - Wildland-urban interface fires
- Per- and polyfluoroalkyl substances (PFAS)
 - Aqueous film-forming foams (AFFF)
 - PFAS in turnout gear
- Lithium ion battery fires
 - Numerous fires in New York city over last few years

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)

Higher level of certainty

Lower level of certainty

Cancer types with sufficient evidence for cancer in humans:



Mesothelioma Bladder cancer

Cancer types with limited evidence for cancer in humans:



Strong mechanistic evidence in exposed firefighters









Genotoxicity Epigenetic

alterations

Oxidative stress

Chronic inflammation

Modulation of receptor-mediated effects



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



Firefighters respond to various types of fire



https://www.iarc.who.int/infographics/iarc-monographs-evaluate-the-carcinogenicity-of-occupational-exposure-as-a-firefighter/

Knowledge gaps

- 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 firefighters' cancer risk vary regionally?
- How prevalent are rare forms of cancer among firefighters?
- How does the cancer risk change with increasing exposures, including from major events?
- What other occupational and non-occupational risk factors contribute to cancer risk among firefighters?
- Are there other chronic illnesses that are elevated in firefighters?



National Firefighter Registry (NFR) for Cancer

One Hundred Fifteenth Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Wednesday, the third day of January, two thousand and eighteen

An Act

To require the Secretary of Health and Human Services to develop a voluntary registry to collect data on cancer incidence among firefighters.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the Firefighter Cancer Registry Act of 2018.

SEC. 2. VOLUNTARY REGISTRY FOR FIREFIGHTER CANCER INCIDENCE.

(-) Ist Output The Counter of Health and Hermiter

Firefighter Cancer Registry Act of 2018:

CDC/NIOSH "to develop and maintain... a voluntary registry of firefighters to collect relevant health and occupational information... for purposes of determining cancer incidence."



NATIONAL FIREFIGHTER REGISTRY

Understanding & Reducing Cancer

National Firefighter Registry (NFR) for Cancer

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.

NATIONAL FIREFIGHTER REGISTRY Understanding & Reducing Cancer

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

Progress over the last year

- Made finishing touches to the enrollment questionnaire (see updated protocol on the <u>NFRS</u> <u>webpage</u>)
- Finalized the Assurance of Confidentiality
- Updated our website: <u>www.cdc.gov/NFR</u>
- Obtained written support from several fire service organizations
- Performed user acceptance testing for the NFR web portal: https://NFR.cdc.gov
- Conducted soft rollout of the web portal at 7 fire departments
- Created and staffed NFR Help Desk
- Launched the NFR nationally
- Rolled out our comprehensive communications plan

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- **Created and staffed NFR Help Desk**
- Launched the NFR nationally
- Rolled out our comprehensive communications plan
 Discussed later



The National Institute for Occupational Safety and Health (NIOSH)

Print

Firefighter Resources

Firefighter Resources

Cancer and Other Illnesses

Exposure and Other Hazards

National Firefighter Registry

About the NFR

How the NFR Works

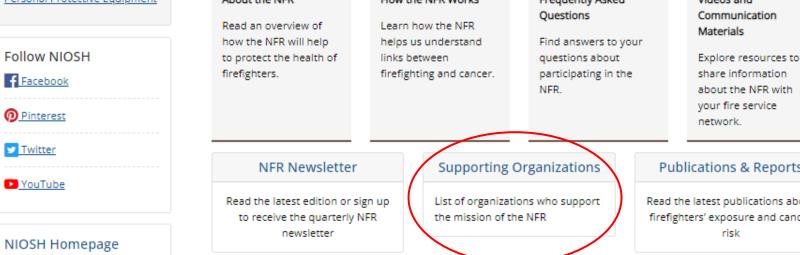
Frequently Asked Questions About Participating in the NFR

Communication Materials

Related Topics

Fighting Wildfires

Personal Protective Equipment



National Firefighter Registry (NFR) for Cancer

Understanding and Reducing Cancer





About the NFR



Cancer

Ioin Now

How the NFR Works

Join the National Firefighter Registry for

Answer the call. Join your brothers and sisters in a new

effort to understand and reduce cancer in the fire service.

Frequently Asked Videos and

Publications & Reports

Read the latest publications about firefighters' exposure and cancer risk

www.cdc.gov/NFR

- Join now link to web portal •
- Topic pages: About the NFR, . How the NFR works, and FAQs
- Videos and communication • materials
- NFR Newsletter •
- Publications •
- Supporting organizations .



The National Institute for Occupational Safety and Health (NIOSH)

Firefighter Resources

Firefighter Resources

Cancer and Other Illnesses

Exposure and Other Hazards

National Firefighter Registry

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Topics

As of May 2023

Supporting Organizations

<u>Print</u>

This mission of the National Firefighter Registry (NFR) for Cancer is to generate detailed knowledge about cancer in the fire service through a voluntary registry that reflects our nation's diverse firefighters. The following organizations have provided official support for the mission of the NFR.

Promoting productive workplaces through safety and health research

Written support:

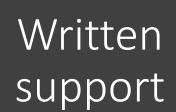
- International Association of Fire Fighters (IAFF): IAFF Letter of Support
- National Volunteer Fire Council (NVFC): NVFC Position Statement Supporting the National Firefighter Registry 💈 🖸
- Urban Fire Forum of the Metropolitan Fire Chiefs: 2022 Urban Fire Forum Position Statement Support for the National <u>Firefighter Registry</u>
- National Fallen Firefighters Foundation (NFFF): <u>NFFF Letter of Support</u>
- North American Fire Training Directors (NAFTD) NAFTD Letter of Support 🖪 🗹
- Fire Department Safety Officers Association (FDSOA): FDSOA Support for the National Firefighter Registry (NFR) 🖪 🔀
- Firefighter Cancer Support Network (FCSN): FCSN Letter of Support 18
- Underwriters Laboratories (UL), Fire Safety Research Institute (FSRI): <u>FSRI Letter of Support</u>
- National Association of Hispanic Firefighters (NAHFF): <u>NAHFF December 2022 President's Report</u>
- International Association of Wildland Fire (IAWF): <u>IAWF Letter of Support</u>
- International Association of Arson Investigators (IAAI): <u>IAAI Position Statement</u>

Financial support:



U.S. Fire Administration Working for a fire-safe America

Naming these organizations does not constitute an endorsement by NIOSH, the Centers for Disease Control and Prevention, or the U.S. Government



User testing and soft rollout

- End of 2022 conducted internal user testing, data validation, and fine-tuning of the web portal
- Start of 2023 pushed web portal to production and conducted soft rollout with firefighters at 7 fire departments:
 - 1. Loveland-Symmes FD, Ohio
 - 2. Independence Fire District, Kentucky
 - 3. Tucson FD, Arizona
 - 4. Pike Township FD, Indiana
 - 5. Fairfax County Fire & Rescue, Virginia
 - 6. Howard County Fire & Rescue, Maryland
 - 7. Hanover Park FD, Illinois



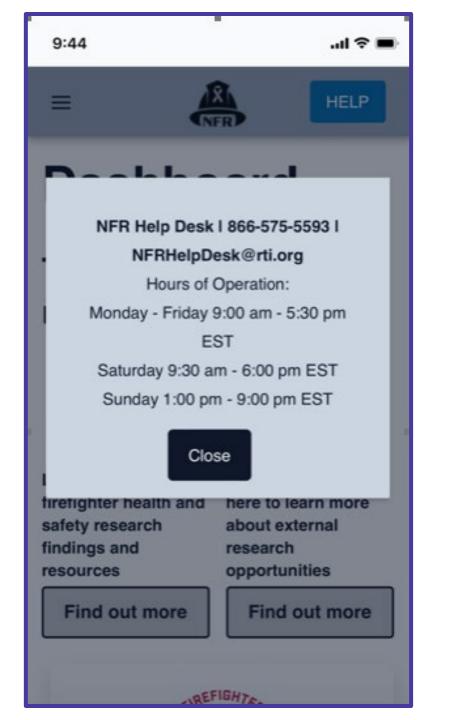
Kenny Fent hands a thank you plaque to Executive Officer Bruck Hawk at Loveland-Symmes Fire Department

Final updates to the web portal

- Obtained feedback from firefighters during soft rollout and from select firefighters who enrolled at the Fire Department Safety Officers Association (FDSOA) Conference in Florida in January
- Implemented final changes and pushed that version to production in April 2023
- Notified fire service partners through our Newsletter on April 13
- Press release and social media campaign on April 17
- Big announcement at the Fire Department Instructors Conference (FDIC) on April 27

NFR help desk

- Staffed through contract
- Ticketing process for resolving technical issues
- Response within 24 hours
- NFR web portal contains enrollment tip sheet (discussed later)



NFR announcement at FDIC 2023

- Opening ceremony on Thursday April 27
- Attended by thousands in-person and thousands virtually
- Kenny Fent joined on stage by representatives at IAFF, FCSN, NFFF, and FDIC
- Exhibit booth open on Thursday Saturday
 - Collected >350 emails
 - Distributed >1500 printed materials and >3500 branded items
 - > 2000 people accessed the web portal during the week of FDIC

IAFF = International Association of Fire Fighters, FCSN = Firefighter Cancer Support Network, NFFF = National Fallen Firefighters Foundation, FDIC = Fire Department Instructors Conference



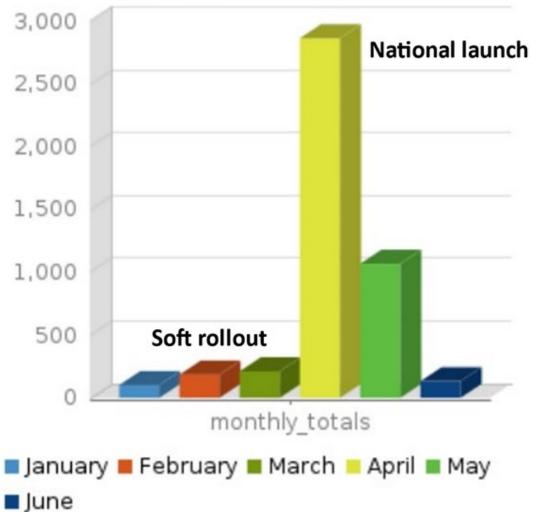


Current registration numbers (as of June 7, 2023)

>5,200 consented

>3,650 completed enrollment questionnaire

Goal: Enroll <a>200,000 firefighters



NFR Participants Enrolled by Month

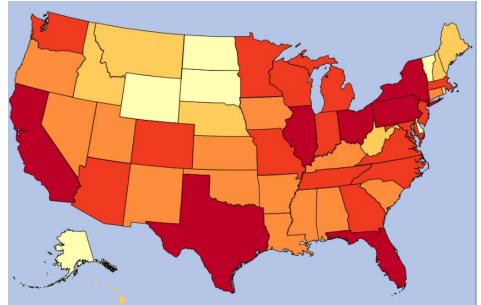
Future work

- Targeted enrollment (discussed later)
- Messaging and marketing (discussed later)
- Follow-up questionnaires (discussed later)
- Dashboards with data visualizations
 - Personal and public
- Data ingestion
 - Incident records
 - Exposure tracking data
- Data linkages
 - Population-based cancer registries
 - National Death Index
- Collaborations with other researchers
- Data sharing
 - Research data centers



Future work: Dashboard – data viz

- Acquire data science/engineering support
- Provide near real-time figures and plots
 - Only aggregated data to maintain privacy
- Show distribution of participation by:
 - Status (e.g., career, volunteer, active, retired/former)
 - Geographic region
 - Number of years working
 - Demographics (e.g., age, sex, race/ethnicity)



Example of what a heat map showing participation rates might look like

Future work: Incident and exposure records

- Begin with fire departments (from targeted enrollment?)
 - Records management system (RMS) vendors
- U.S. Fire Administration (National Fire Incident Reporting System NFIRS)
 - Being replaced: National Emergency Reporting Incident System (NERIS)
- Exposure tracking applications (self-reported exposure data)
 - Develop process to ingest data and match to NFR participants

Future work: Health outcome linkages

- North American Association of Central Cancer Registries (NAACCR)
 - Virtual Pooled Registry
 - Facilitated access to the majority of the state cancer registries
 - Begin process of submitting applications, piloting linkages
 - Data quality analyses

VIRTUAL POOLED REGISTRY CANCER LINKAGE SYSTEM (VPR-CLS)

The Virtual Pooled Registry Cancer Linkage System (VPR-CLS) is a onestop-shop designed to efficiently connect researchers with multiple cancer registries, thereby increasing access to, linkage with, and use of this valuable source of cancer surveillance information. The project is coordinated by the North American Association of Central Cancer Registries (NAACCR) and funded by the National Cancer Institute (NCI). The VPR-CLS is currently in the development and testing phase and is progressing with input from national partners, researchers, and central registry staff.

Future work: Data sharing

- National Center for Health Statistics: Research Data Centers (RDC)
 - Begin legwork to establish RDC
 - Formalize protocol for sharing data
 - Consistent with Assurance of Confidentiality
 - Information security review and approval



Future work: Collaborations

- Increase impact via collaborations with external researchers
- Leverage existing relationships
- Expand recruiting
- Build upon existing data (e.g., biomarkers of exposure/effect)
- Provide long-term cancer tracking



Thank you!



Strength Through Diversity

For All Firefighters. All Backgrounds. All Experiences.



Learn More About the National Firefighter Registry at **WWW.cdc.gov/NFR**



October, 202



Targeted Enrollment Plans

MIRIAM SIEGEL AND ALEX MAYER

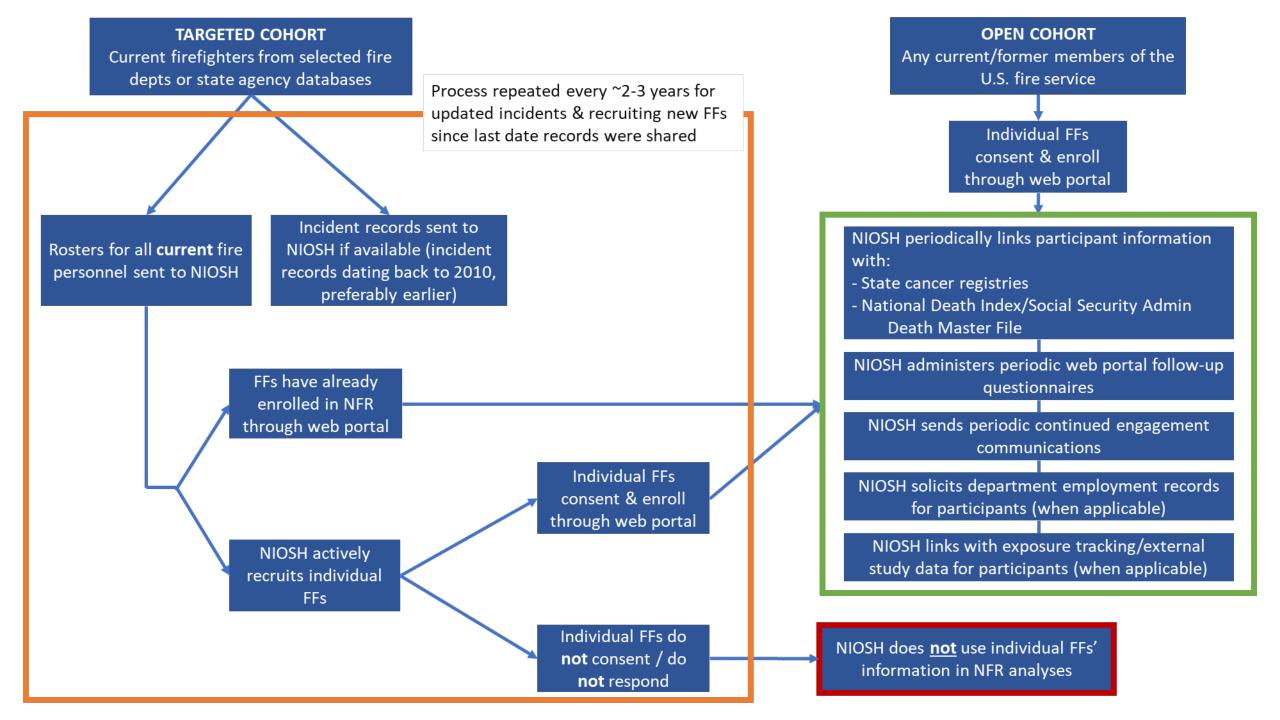
NFR Enrollment Strategies (Recap)

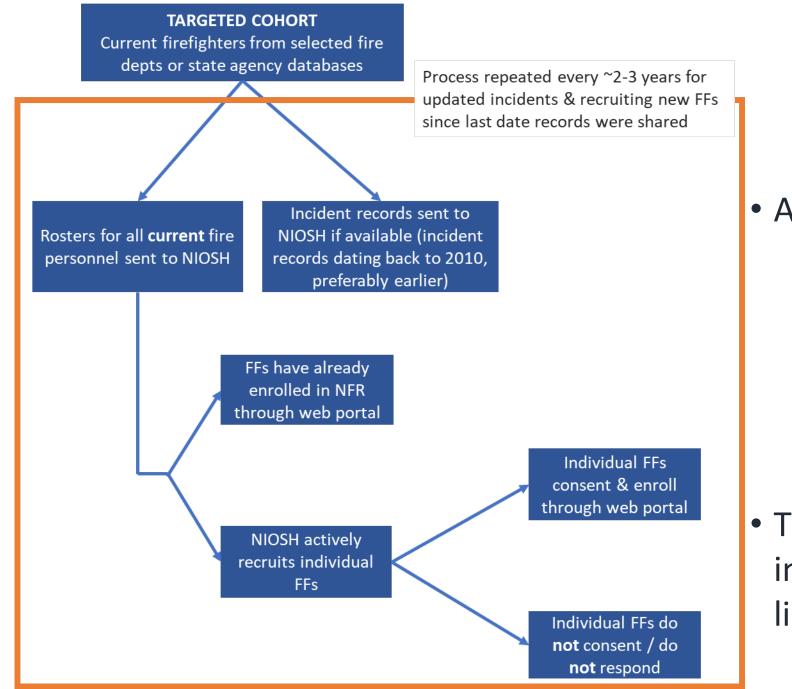
Open enrollment (non-probability sample)

- Any current/former/retired firefighter
- Beneficial for diverse sample; but may not be generalizable

Targeted enrollment (prospective cohort)

- Sampling design to recruit active FFs from selected fire depts/states
 - Focused enrollment of women, minorities, volunteers
- Access fire department records





Original Design

• Active roster info:

- Name, fire dept, email address, phone number, residential address
 - Note: revised by NIOSH legal; affects ability to calculate stratified participation rates without demographic variables
- Track participation rates on an individual-level; roster-NFR linkages



Hesitancy or inability to share roster records (some or all variables)

- ➢ Privacy and legal concerns for many depts
- Depend on culture and geographic location of dept
- Require heavy proactive messaging & education to/from dept leadership
- Likewise for incident/employment records

Preference for having leadership disseminate invitations
 Belief that participation would be higher if messaging from dept
 Emails from NIOSH might be distrusted or disregarded

Alternative Design

Develop recruitment procedure for dept leadership

• With initial & follow-up emails to send to their own rosters

Obtain workforce count (i.e., denominator) from dept

• Request demographic denominators for stratified participation rates

NIOSH *estimate* participation rates using reported affiliations in NFR
Feedback loop to dept to facilitate reminders to enroll

Request incident/employment records via original design (if feasible?)

Original Design: Pros

Consistent method of recruitment

Most accurate way to monitor participation rates, including over time

Depts more likely to provide incident/employment records (maybe?)

Original Design: Cons

More time & resource intensive

Limits/biases depts that will participate

Skepticism from dept/union leadership and/or workforce

Potential issues with roster-NFR linkages

Alternative Design: Pros

Less time & resource intensive

More depts can participate

Depts play a more active role; dept leadership has more trust – possibly better participation

Alternative Design: Cons

Less control over recruitment methods (assertiveness, info quality)

Less rigorous participation rate tracking, especially over time

Difficulty obtaining incident/employment records

Complicated state recruitment/tracking

Original Design

Pros

- Consistent method of recruitment
- Most accurate way to monitor participation rates, including over time
- Depts more likely to provide incident/employment records (maybe?)

Cons

- More time & resource intensive
- Limits/biases depts that will participate
- Skepticism from dept leadership and/or workforce
- Potential issues with roster-NFR linkages

Alternative Design

Pros

- Less time & resource intensive
- More depts can participate
- Depts play a more active role; dept leadership has more trust – possibly better participation

Cons

- Less control over recruitment methods (assertiveness, info quality)
- Less rigorous participation rate tracking, especially over time
- Difficulty obtaining incident/employment records
- Complicated state recruitment/tracking

Committee's thoughts?

Other alternative methods?

Marketing and Messaging

Kenneth Fent, PhD, CIH

Key personnel

Health communications specialists at NIOSH

- Jennifer Tyrawski
- Greg Hartle
- Jasmine Nelson (public health advisor)

Communications contract: RTI International

- Video and graphic designers
- Communication specialists
- Social media specialists
- Exhibit booth managers

Newsletter (April 13)

National Firefighter Registry (NFR) for Cancer Quarterly Newsletter (Spring 2023)

Print

Download this page

Spring 2023

A Message from the National Firefighter Registry Team Lead



Greetings from NIOSH,

I am excited to announce the <u>National Firefighter</u> <u>Registry (NFR) enrollment portal</u> is now live! Over the past several months, we have been enrolling firefighters at select departments across the country in a soft launch. The soft launch allowed us to test the enrollment portal and make refinements. Thank you to all the departments and firefighters that participated in the soft launch.

We are now ready to invite all U.S. firefighters to enroll in the NFR. We will begin promoting the nationwide launch of the NFR enrollment portal next week, starting April 17. Please join us in spreading the word at that time. We have new communication materials you can share, and the NFR Promotion Kit Southines five steps you can take to help share the NFR with firefighters across the nation. On Wednesday, May 10 at 1:00 PM (ET), we will host a call with interested partners to discuss how to promote the NFR. If you'd like to attend, please register here \Box .

We will make our first in-person announcement about launching NFR enrollment nationwide at FDIC International's Opening Ceremony on April 27. If you are attending the conference, please join us at the Opening Ceremony or our exhibit booth (#543). At the exhibit booth, our team members will be available to discuss enrollment, share materials, and answer questions.

Please read below to learn more about our recent activities and next steps as we launch the NFR enrollment portal nationwide. We're excited firefighters can now





Subscribe to NFR Quarterly Newsletter

Please enter your email address to receive the National Firefighter Registry Quarterly Newsletter.

Email Address
<u>What's this?</u>
Submit

In This Issue:

- Welcome
- <u>NFR Soft Launch Enrollments</u>
- <u>Conferences and</u>
 <u>Presentations</u>
- <u>New Communication Materials</u>
- What's Next for the NFR?

Press release (April 17)

NIOSH Launches the National Firefighter Registry for Cancer to Understand and Reduce Cancer in the Fire Service

All U.S. Firefighters are encouraged to join

Print

Press Release

For Immediate Release: Monday, April 17, 2023 Contact: <u>Media Relations</u> (404) 639-3286

The Centers for Disease Control and Prevention (CDC), through its National Institute for Occupational Safety and Health (NIOSH), are pleased to launch the <u>National Firefighter Registry for Cancer</u> online enrollment system for firefighters across the nation. The NFR for cancer is the largest effort undertaken by the nation to support and advance understanding of cancer in the fire service. President Biden has shown strong and enduring support for firefighters for decades and this step will help deliver on his commitment to end cancer as we know it as part of the <u>Cancer Moonshot</u>

Numerous studies show that firefighters' exposure on the fireground, where smoke and hazardous chemicals are released from burning materials, may increase the risk of certain types of cancer. President Biden has signed two laws that seek specifically to advance firefighter health, safety, and protection from toxic exposures on the job. The National Firefighter Registry (NFR) for Cancer will contribute to these broader efforts by helping scientists better understand the link between cancer and firefighting to ultimately improve firefighter health. The NFR will capture details about firefighters' work and match it with cancer information from state cancer registries.

While participation is voluntary, all U.S. firefighters, with or without cancer, are encouraged to join the NFR for Cancer; these include:

- active and retired firefighters
- · career, paid-on-call, and volunteer firefighters
- structural firefighters
- wildland firefighters
- instructors
- fire investigators
- other members of the fire service

Visit <u>NFR.CDC.GOV</u> to complete the NFR survey through the secure website. Enrollment takes about 30 minutes to complete. You will:

NIOSH e-News (May 1)

The Monthly Newsletter of the National Institute for Occupational Safety and Health (NIOSH)

Volume 21 Number 01, May 2023

🚯 💟 🖸 🚳 😂

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From the Director's Desk John Howard, M.D., Director, NIOSH

Join the National Firefighter Registry for Cancer Today!

NIOSH is pleased to announce the launch of the longawaited <u>National Firefighter Registry (NFR) for Cancer</u>. The NFR is a voluntary registry of U.S. firefighters. It was developed by NIOSH to understand and reduce cancer among firefighters. All firefighters—career or volunteer, active or retired, with or without cancer—can join.

With the support of fire service organizations and leaders, NIOSH hopes to enroll at least 200,000 firefighters from the numerous and diverse backgrounds of the U.S. fire service. Achieving this goal will help NIOSH better understand cancer risk among firefighters across the country, including those who have been underrepresented in previous studies.



Kenny Fent (NIOSH) shakes hands with David Rhodes (Fire & Rescue) on stage at FDIC after signing up for the NFR. Andrew Pantelis (IAFF), Victor Stagnaro (NFFF), and Joe Schumacher (FCSN) also shared their support for the NFR. Photo by NIOSH.

The National Institute for Occupational Safety and Health (NIOSH)

Firefighter Resources

♠ Firefighter Resources



Join the National Firefighter Registry for

Answer the call. Join your brothers and sisters in a new

effort to understand and reduce cancer in the fire service.

Cancer and Other Illnesses

Exposure and Other Hazards

National Firefighter Registry

About the NFR

How the NFR Works

Frequently Asked Questions About Participating in the NFR

Communication Materials

Related Topics

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National Firefighter Registry (NFR) for Cancer

Print

Understanding and Reducing Cancer





About the NFR

Read an overview of how the NFR will help to protect the health of firefighters.

NFR Newsletter

Read the latest edition or sign up

to receive the quarterly NFR

newsletter

How the NFR Works

Learn how the NFR helps us understand links between firefighting and cancer.



Cancer

Join Now

Frequently Asked Questions Find answers to your questions about participating in the NFR.

Supporting Organizations

List of organizations who support

the mission of the NFR



Videos and Communication Materials

Explore resources to share information about the NFR with your fire service

network.

Publications & Reports

Read the latest publications about firefighters' exposure and cancer risk



The National Institute for Occupational Safety and Health (NIOSH)

Firefighter Resources > National Firefighter Registry

♠ Firefighter Resources

Cancer and Other Illnesses

Exposure and Other Hazards

National Firefighter Registry

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How the NFR Works

Frequently Asked Questions About Participating in the NFR

Communication Materials

Related Topics

Fighting Wildfires

Personal Protective Equipment

Communication Materials – National Firefighter Registry (NFR) for Cancer

<u>Print</u>

With your participation in the NFR, we can leave the fire service better than we found it. You can help make sure everyone in the fire service is represented by sharing the materials below with your network.



On This Page

NFR Promotion Kit Videos Fact Sheets

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Promoting productive workplaces through safety and health research

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NFR Promotion Kit

This kit is designed to help fire service leaders and organizations share the NFR with firefighters across the nation. Learn how you can share the NFR in five steps.



Videos

Informational Videos



What is the National Firefighter Registry?

Get an overview of how the NFR will protect the health of firefighters.

<u>Watch video</u>



How Does the National Firefighter Registry Work?

Learn how the NFR will help researchers investigate the link between firefighting and cancer.

<u>Watch video</u>

How Will the Na...

How Will the National Firefighter Registry Protect My Data?

Learn how the NFR will protect your data.

<u>Watch video</u>

Testimonial Videos



Join the National Firefighter Registry

Hear fire service members share why joining the NFR is important.

<u>Watch video</u>

NATIONAL FIREFIGHTER REGISTRY (NFR) **PROMOTION KIT**

This kit is designed to help fire service leaders and organizations share the NFR with firefighters across the nation.

Why get involved with the NFR?

The NFR is the only national database that monitors cancer in U.S. firefighters and will make it possible to investigate the link between firefighting and cancer. By sharing information about the NFR with your network, you play an integral role in helping enroll as many firefighters as possible.

How can I help spread the word?

Use the resources in this Promotion Kit to share the NFR in person or digitally with your colleagues and encourage U.S. firefighters to sign up. This kit includes talking points, social media posts, email language, and links to posters and other NFR materials.

SHARE THE NFR IN 5 STEPS:

1. USE TALKING POINTS AND DOWNLOADABLE MATERIALS FROM THE NFR WEBSITE

Talking Points

- The National Firefighter Registry is the largest existing effort to understand and reduce cancer risk among firefighters.
- All firefighters paid or volunteer, active or retired, with or without cancer, and no matter their length of service - can join the National Firefighter Registry. Participation is voluntary.
- By joining the National Firefighter Registry, you can help protect your brothers and sisters in the fire service from developing cancer and pave the way for new health and safety measures to keep the next generation of firefighters safe.

SHARE LINK TO JOIN THE NFR NFR.CDC.GOV

FOLLOW NIOSH ON SOCIAL MEDIA FOR THE LATEST NFR UPDATES



Posters DOWNLOAD -

Videos DOWNLOAD +

offices, or conferences.

· Print NFR posters for your fire stations,

Roll Call Announcement DOWNLOAD +

· Share videos and testimonials to

help firefighters learn more.

Introduce the NFR to your fire

firefighters join the registry.

Palm Cards DOWNLOAD .

department or fire service team.

Enrollment Tip Sheet DOWNLOAD .

· Follow this step-by-step guide to help

Hand out this 4 x 9" card at conferences and events.

NATIONAL FIREFIGHTER REGISTRY

2. POST ON SOCIAL MEDIA

Share the draft social media posts and images below on Facebook, Instagram, LinkedIn, and Twitter. Use #NationalFirefighterRegistry on Twitter and tag NIOSH social media accounts on the previous page at your discretion.

Post 1

TITLE

[Insert your organization's name here] is

excited to share the National Firefighter Registry, a new effort to understand and reduce cancer in firefighters. Together, we can have a lasting impact on the fire service. Join today at NFR.cdc.gov

Post 2

The National Firefighter Registry is now open! We need all U.S. firefighters - paid or volunteer, active or retired, with or without cancer - to join.

NIOSH will use the registry to understand and reduce cancer risk in the fire service. Join today at NFR.cdc.gov

3. SEND AN EMAIL OR E-NEWSLETTER Share the NFR with your listservs.

Subject: Stand Together, Join the National Firefighter Registry

Body text:

[Insert your organization's name here] is excited to share the National Firefighter Registry (NFR), the largest existing effort to understand and reduce cancer risk among firefighters. The NFR is open to all U.S. firefighters - paid or volunteer, active or retired, with or without cancer.

Studies have shown that firefighters' exposure on the fireground may increase their risk of cancer. When you sign up for the NFR, researchers will match information you provide to cancer diagnosis information from state cancer registries. This will allow them to study the relationship between firefighting and cancer outcomes.

Post 3

Firefighters, answer the call.

Facebook/Instagram

DOWNLOAD »

Answer the call. Join the NFR today at NFR.cdc.gov

4. FEATURE THE NFR ON YOUR WEBSITE

Add this badge to your website to help visitors learn more about the NFR. ADD THIS BADGE »



5. SHARE THE NFR OR CODE.

Share this QR code on your website or by email to help firefighters register for the NFR. SHARE THIS QR CODE »





PROUD Supporter



The National Firefighter Registry is now open!

The more firefighters that join the NFR, the more

questions we can answer about the link between firefighting and cancer. Join today at NFR.cdc.gov



Twitter/LinkedIn

TWITTER DOWNLOAD *







Centers for Disease Control and Prevention tional Institute for Occupational



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Publications and Products

Programs

Contact NIOSH

NFR Promotion Kit

This kit is designed to help fire service leaders and organizations share the NFR with firefighters across the nation. Learn how you can share the NFR in five steps.

Download NFR Promotion Kit 🔼

Videos

Informational Videos

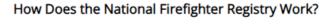


How the Nation...

What is the National Firefighter Registry?

Get an overview of how the NFR will protect the health of firefighters.

<u>Watch video</u>



Learn how the NFR will help researchers investigate the link between firefighting and cancer.

<u>Watch video</u>



How Will the National Firefighter Registry Protect My Data?

Learn how the NFR will protect your data.

<u>Watch video</u>

Testimonial Videos



Join the National Firefighter Registry

Hear fire service members share why joining the NFR is important.

<u>Watch video</u>

Partners have commonly shown both videos

Join the National Firefighter Registry – YouTube

How the National Firefighter Registry Works - YouTube









Join the National Firefighter Registry: Judy Smith Thill Hear Judy Smith Thill share why joining the NFR is important. Watch video

Hear Jeff Pauley share why joining the NFR is important.

Join the National Firefighter Registry: Billy Goldfeder

Join the National Firefighter Registry: Bryan Frieders

Join the National Firefighter Registry: Jeff Pauley

Watch video

<u>Watch video</u>

Watch video

Hear Billy Goldfeder share why joining the NFR is important.

Hear Bryan Frieders share why joining the NFR is important.



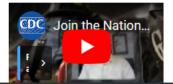




Join the National Firefighter Registry: Regina Wilson Hear Regina Wilson share why joining the NFR is important. Watch video

Hear Rick Swan share why joining the NFR is important.

Join the National Firefighter Registry: Rick Swan



Perspectives

Fire chief

- **Cancer support** ٠
- Fire investigators

Female firefighters ۲

- Latino firefighters ٠
- Female and non-white firefighters ٠
- Wildland firefighters

Watch video

Fact Sheets



Stand Together - Join the National Firefighter Registry

This fact sheet provides information about the NFR, the largest existing effort undertaken to understand and reduce cancer among U.S. firefighters.

Download Stand Together - Join the National Firefighter Registry



How Do I Sign Up for the National Firefighter Registry?

This fact sheet provides an overview of the four steps for enrolling in the NFR and provides helpful enrollment tips.

Download How Do I Sign Up for the National Firefighter Registry?

For fire leadership



National Firefighter Registry: Roll Call Announcement

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This fact sheet provides information for fire chiefs to share about the NFR. It describes the NFR, benefits of joining, and what to expect after joining.

Download National Firefighter Registry: Roll Call Announcement

Posters

NFR promotional posters

- <u>NFR Stand Together: A New Effort 1</u>
- <u>NFR Stand Together: A New Effort 2</u>
- <u>NFR Stand Together: Groundbreaking 1</u>
- <u>NFR Stand Together: Groundbreaking 2</u>

Posters featuring artwork by Paul Combs

- NFR: Be the First
- NFR: Launch
- <u>NFR: Strength Through Diversity</u>

Posters for wildland firefighters

- <u>NFR Stand Together: Wildland Firefighters 1</u>
- <u>NFR Stand Together: Wildland Firefighters 2</u>

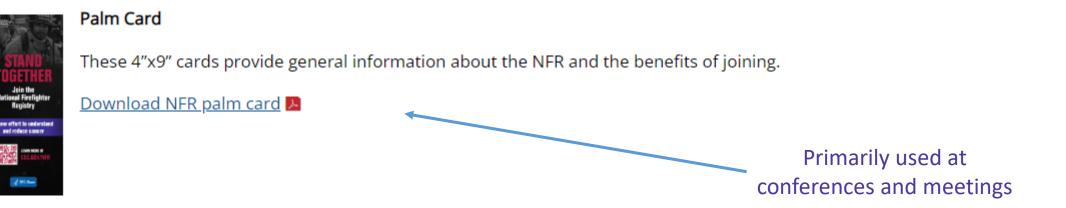




Has performed well in social media



Other Print Materials



Social Media Graphics

Download graphics to share the NFR on Facebook, Instagram, Twitter, and LinkedIn. Draft messages are available in the NFR Promotion Kit 🖪 .



Download graphic for Facebook/Instagram 🖪

Download graphic for Twitter 🖪

Download graphic for LinkedIn 🖪

Website Graphics

Share the NFR on your website. Download a NFR Proud Supporter Badge and QR code.



Download NFR Proud Supporter Badge (PNG 🖪 , JPG 🖪)

Download QR Code (<u>PNG</u> 🖪 , <u>JPG</u> 🖪)



Working with partners

- GOAL: Collaborate with partners to deliver messaging
- Held partner promotion call on May 10 attended by >30 recognized fire service leaders
 - Shared existing resources
 - Brainstormed with partners
 - Developed ideas for reaching different groups



Examples of existing partnerships

- Underwriters Laboratories, Fire Safety Academy
 - > 90,000 registered students
 - Pop-up box about the NFR presented to all students
 - Free cancer prevention course with NFR module: <u>UL</u> <u>FSRI Fire Safety Academy</u>
- Loveland-Symmes Fire Department, Ohio
 - Added NFR branding to Air Management trailer
 - Demonstrating this resource to 20+ fire departments in SW Ohio
 - Sharing information about the NFR (palm cards and posters)



Examples of existing partnerships

- North American Fire Training Directors (NAFTD) state training academies
 - Collectively train hundreds of thousands of firefighters per year
 - Several have expressed interest in sharing information about the NFR with their students
- Social media posts and amplification
 - Coordination with key partners
 - Posts planned over the next 12+ months



Fire Safety Research Institute @FSRI_org · Apr 26 Calling ALL firefighters to sign up for the **#NationalFirefighterRegistry** asap! nfr.cdc.gov @FDICevent #FDIC2023 75% of #firefighter occupational deaths are from cancer...help make a change!



NVFC

...

£

NatlVolFireCouncil @NVFC · Apr 19 The **#NationalFirefighterRegistry** is now open! ALL firefighters are invited to sign up to help @NIOSH understand the link between firefighting and cancer. Join at nfr.cdc.gov!



...



Firefighter Cancer Support Network · Follow April 27 at 1:52 PM · ③

We are so excited for @NIOSH to launch the #NationalFirefighterRegistry! The more firefighters that join the NFR, the more questions we can answer about the link between firefighting and cancer. Join today at NFR.CDC.gov

Chief Operations Officer Joe Schumacher was proud to help kick off the #NationalFirefighterRegistry at #FDIC2023 this morning with Kenny Fent, Victor Stagnaro, Andy Panteli and David Rhodes.

To assist firefighters battling cancer, scan the QR code in the picture to donate today.



...

I encourage all firefighters to register in the National Firefighter Registry for Cancer research. This is a major initiative in understanding the relationship between firefighting and cancer.

We officially launched this in a very public way on Thursday's #FDIC2023 opening ceremonies. I was joined in stage by NIOSH, the National Fallen Firefighter Foundation, the Firefighter Cancer Support Network and the IAFF as I completed my registration. https://www.cdc.gov/niosh/firefighters/registry.html





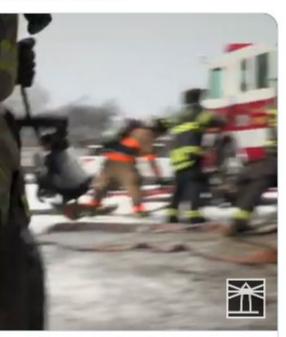
International Association of Fire Fighters @IAFFofficial

.@iaffpresident urges fire fighters to join @CDCgov National Fire Fighter Registry for Cancer. #Firefighters are at an elevated risk for occupational cancer, including from chemicals in their bunker gear.



9% more likely to **develop cancer**

14% more likely to die from cancer



youtube.com

New firefighter registry for cancer aims to help reduce deaths Firefighters are 9 percent more likely to develop cancer and 14 percent more likely to die from it compared to the general population.

3:09 PM · Apr 28, 2023 · 3,007 Views

12 Retweets 2 Quotes 25 Likes 1 Bookmark

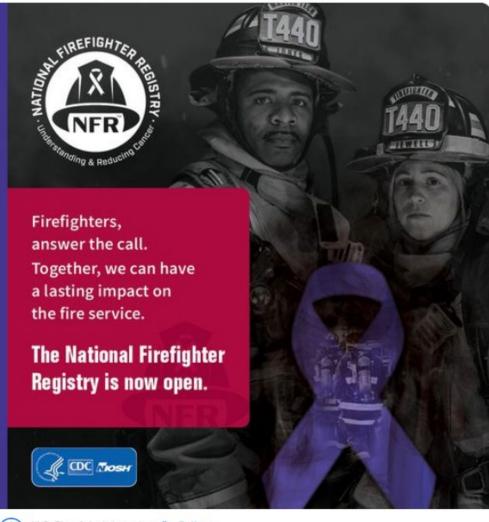


...

National Fallen Firefighters Foundation · Follow April 17 at 11:18 AM · 🕲

The National Firefighter Registry is now open! #FireHero

https://www.facebook.com/100064866813748/posts/610297444475811/





USFA is excited to share the National Firefighter Registry, a new effort to understand and reduce cancer in firefighters. Together, we can have a lasting impact... See more



How We're Supporting the National Firefighter Registry

Filed in Safety and Health, Worker Safety and Health • By: Christopher J. Godfrey • April 21, 2023

On Thursday, April 13, the National Institute for Occupational Safety and Health (NIOSH) announced the opening of the National Firefighter Registry for Cancer — the largest effort ever undertaken to understand and reduce risk of cancer among U.S. firefighters.

Each year, the U.S. Department of Labor's Office of Workers' Compensation Programs (OWCP) receives about 2,600 claims from federal firefighters injured or sickened on the job. Of those, about 175 are complex occupational disease claims that include conditions such as cancer, heart disease and lung disease.

Starting today, OWCP will now provide information to all federal firefighters who file a claim for their workplace injury or illness on how and why to participate in the National Firefighter Registry.



U.S. Department of Labor



🔂 Home / Blog

As an active, former or retired member of the fire service — paid or volunteer — you now have an opportunity to do something that can help your fellow firefighters.

By adding your information to the National Firefighter Registry (NFR), you can help researchers better understand how your work affects the risk of getting cancer and how to lower this risk. According to National Institute for Occupational Safety and Health (NIOSH) research, cancer is a leading cause of death among firefighters, and research suggests firefighters are at higher risk for certain types of cancers when compared to the general population.

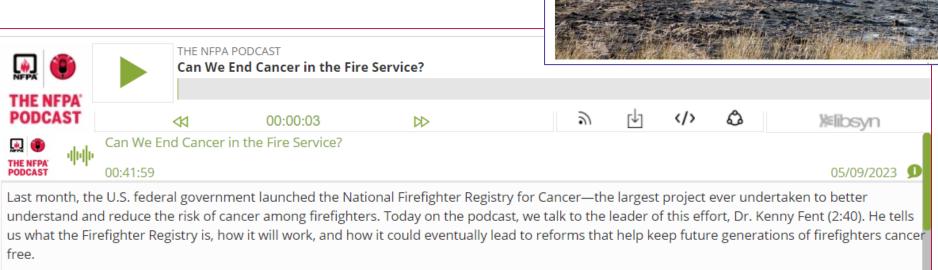
Some of the data requested for an NFR profile includes name, date of birth, and information about work, exposures, health and lifestyle. When cancer diagnoses are found in state cancer registries, NIOSH researchers match NFR profiles and work histories to the state registries. They then seek to obtain work history records from fire departments to better understand the firefighters' exposures and how they may be related to cancer over time.

Any cancer diagnosis information that is linked to an NFR participant is protected by the same safeguards as the other NFR data, including by an Assurance of Confidentiality.

The more firefighters who sign up for the registry through its secure web portal, the more information researchers have to learn about cancer in the fire service and how to protect firefighters from developing cancer in the line of duty. The registry also helps pave the way for new health and safety measures to keep firefighters safe and improve understanding of cancer risk among minority, female, volunteer and wildland firefighters.

Podcasts and news interviews

- NFPA Podcast
- USFA Podcast
- Fire Engineering Podcast
- National Fire Radio interview
- Local news interviews



Then, on a new Code Corner, NFPA electrical expert Corey Hannahs kicks off Electrical Safety Month by discussing changes to the rules on kitchen island receptacles in the 2023 *National Electrical Code* (34:14).

Wildland firefighters strongly encouraged to enroll in new national registry for cancer

Boise State Public Radio News | By Murphy Woodhouse Published May 12, 2023 at 8:37 AM MDT

LISTEN • 1:07



Conference booths

- NFR exhibit booths at large conferences
- NFR tables at smaller conferences
- Firefighter subject matter experts (contractors)
 - Attend conferences and meetings on behalf of the NFR program
 - Focus on women, minorities, and volunteer firefighters
 - Focus on wildland firefighters and local firefighter unions



Discussion topics

- Who are we missing in our marketing?
- How do you feel our initial launch is going?
 - What could be improved?
- Do you think our current messaging is effective?
 - How could our messaging be refined?

FOLLOW-UP QUESTIONNAIRES

Miriam Siegel

PURPOSE OF FOLLOW-UP QUESTIONNAIRES

- Add to current knowledge base "specialty topics"
 - e.g., major events or deployments, special health topics, topics for specific groups, emerging topics
- Collect <u>self-reported</u> longitudinal info, e.g., changes in exposures over time
 - Also, reminders to update user profile
- Limitation unsure/low expectation on follow-up participation (voluntary)
- Note: comprehensive, prospective cancer follow-up via state cancer registry linkages

EXAMPLE TOPICS

Longitudinal work information

- Dept/position/work status changes?
 - Protective practices?
 - Incident response estimates?

Lifestyle

- Smoking detail/changes?
- Alcohol use detail/changes?
 - Diet?

Health/Co-Morbidities

- Reproductive?
- Behavioral/mental?
- Attitudes, beliefs, perceptions?

Subspecialties

- Wildland,WUI?
 - Women?
 - Volunteers?
- Major events?

QUESTIONNAIRE ADMINISTRATION

- The format of notifications could involve...
 - Notifications with links to single follow-up questionnaire opportunities
 - [Multiple] modules in the web portal for completion at convenience
 - Newsletter announcements
 - Reminders to update user profile
- Only eligible participants for some specialty topics, so questionnaire frequency will vary
- Timing of administration based on calendar time, time since last questionnaire submission, or another approach?
- Contact via enrolled & alternative email addresses; possibly cell phone number for texts

QUESTIONS FOR SUBCOMMITTEE

- I. What is the ideal time length and frequency for follow-up questionnaires?
- 2. What topics should be prioritized?

Considering likely loss to follow-up and survey brevity, how to prioritize questions on <u>self-reported</u> longitudinal information/changes in exposure over time versus "specialty" information?

3. What is the best format and timeline for questionnaire administration?

NFRS MEMBER FEEDBACK

Conversation facilitated by NFRS Co-Chairs, Grace LeMasters and Pat Morrison