



## Firefighter Physical and Mental Health Webinar Series

Impacts: Conceptual, Capacity Building, Connectivity, Socio-environmental

Wildland firefighters experience a wide range of physical and mental health stressors while on the job that can lead to short and long-term health issues. Physical and mental health impacts are intermingled and may include prolonged smoke exposure, decreased reproductive health, sleep deprivation, and chronic injuries. Experiences of firefighters in dangerous situations can also lead to trauma, depression, and substance abuse. The schedule demands of being away from family for long periods and working long shifts under difficult conditions with others also creates challenges. The impacts of these health concerns on individuals, and the greater wildland firefighter profession, are receiving increased attention from government agencies, researchers, health professionals, and the wildland firefighter community.

In 2022, NRFSN partnered with the Northwest Fire Science Consortium, the Great Basin Fire Science Exchange, the Southern Rockies Fire Science Network, and the California Fire Science Consortium to host a 3-day webinar series titled: [“Wildland Firefighter Health Series: Current Knowledge for Body, Mind, and Well-being.”](#) During this 3-day series of presentations and panel discussions, professionals and agency leaders shared some of the current science, knowledge, and tools available to support wildland firefighter physical and mental health. The series aimed to bring the latest science to those working in fire management and/or wildland firefighting. This event was likely the NRFSN’s most time-consuming, but rewarding, event of the past year. Additionally, the event provides a strong foundation for the NRFSN and other fire science exchanges to help JFSP’s efforts to focus on this emerging area of interest.

This event was organized with agenda input provided by the [USDA Forest Service’s Innovation & Organizational Learning RD&A](#) and [Work Environment & Performance Office](#), and inspiration derived from the International Association of Wildland Fire’s [Workforce Resilience Ignite Talks](#).

**Products:** The recordings of the speakers from each day are available on our past-event [webpage](#) as is a list of resources recommended by the speakers. In addition, we created a [Wildland Firefighter Health Hot Topic](#) that includes a curated list of resources on the topic.

### Women Fire Fighters Study: Stress, Cancer Risk and Reproductive Toxicity



**Purpose:** To evaluate causes of stress, cancer, and adverse reproductive health effects in women firefighters, and plan effective interventions to mitigate these conditions.

**Specific aims:**

- Compare stress and biomarkers of cancer risk and reproductive health in incumbent and new recruit women firefighters;
- Evaluate changes in these conditions over time in an inception cohort of women new recruits; and
- Develop, beta test, and assess the feasibility of a peer support intervention for women firefighters.



Funding: FEMA EMW-2019-FP-00526

**Attendance:**

Day 1: 166; Day 2: 127; Day 3: 89

Most attendees were from the USFS, BLM, States, and University Faculty and Researchers, with additional attendance from the NPS, private associations, tribal nations, NGOs, FWS, and consultants.

**Feedback:** 92% said they will use the information from this webinar in their work. 82% said the material presented and discussed was very useful. Some of the survey comments included:

*“Really great lineup! Very impressive. Looking forward to the next two days.”*

*“Great 3 days of training/information. Enlightening and empowering. Thank you all.”*

*“Speakers and participants were great and very respectful of each other in this space.”*

*“Thank you for all of your commitment and hard work.”*

*“Great sessions! Keep up the awesome work!”*

**Impacts cited in NRFSN Evaluation Survey:** These statements were provided in response to a question about how NRFSN activities or products have been used by our members. These particular responses addressed the topics addressed in the webinar series.

*“Information from publications used to frame discussion at incident management team meeting as it relates to the value of good sleep on assignments.”*

*“The webinar I participated in (was a speaker) resulted in collaboration with several managers contacting me [about] additional training and information for their staff and crews thereby increasing their knowledge of fire science.”*

**Research Need:** NRFSN also submitted a research need to JFSP based on the responses to our post-event survey. The research need focused on questions around smoke exposure of firefighters although we also recognize the need for further research on wildland firefighter mental health.

**Logic Model Outcomes addressed:** Fire managers and firefighters increase awareness of health and safety-related research (short-term); Fire managers access relevant science more easily, increase their knowledge of science, and share scientific products with colleagues (medium-term); Fire managers and firefighters regularly use health and safety-related science to inform decisions and actions (medium-term); Fire managers and firefighters work in a culture that rapidly assimilates the latest science on health and safety (long-term).