

NWCG Risk Management Committee

Safety Bulletin: 24-001

September 16, 2024



To: Wildland Fire Community

From: Risk Management Committee and Fire Shelter/PPE Subcommittee

Subject: Use of Respirators on Wildland Fires

Issue: As *Wildland Fire Respirators* are available through several established vendors, wildland fire personnel need to understand regulations and limitations of respirator use in the workplace.

- **Requirements for Respirator Use:** In all occupational settings, including the wildland fire environment, respirator use must meet the requirements of the Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard ([29 CFR 1910.134](#)). Employers will determine if respiratory protection is required based on evaluation of hazards in the work environment or necessary to protect the health of the employee. All employers who require the use of respirators at work must implement an OSHA compliant Respiratory Protection Program (RPP) with medical screening, annual training, initial and annual respirator fit tests, a process to ensure employees can maintain a good seal and select a National Institute for Occupational Safety and Health (NIOSH) Approved[®] respirator.
- **Voluntary Respirator Use:** Employees may voluntarily choose to wear a respirator if the following requirements are met: the employer (1) has determined that voluntary use of a respirator is acceptable, (2) has determined no other inhalation hazards exist in the environment for which the respirator is not designed to protect against and (3) complies with the requirements of [29 CFR 1910.134 Appendix D](#). Inhalation hazards can include gases, vapors, or very small solid particles. This likely means respirators may be worn voluntarily in fire camps but use on the fireline may require monitoring to prevent exposures above thresholds values.
- **Current Respirator Options:** To date, no *wildland fire respirators* are NIOSH Approved[®] to protect against all inhalation hazards identified and meet requirements outlined in [National Fire Protection Association \(NFPA\) 1984 – Standard on Respirators for Wildland Fire-Fighting Operations and Wildland Urban Interface Operations](#). NIOSH has approved respirators that address most hazards identified in NFPA 1984, except for acrolein, and carbon monoxide, which can pose significant risks to the health and safety of wildland firefighters. Some NIOSH Approved[®] respirators can protect against the particulates in smoke which are generally the primary contaminant in fire camps where non-arduous work is performed.
- **Unknown Risks of Respirator Use:** Arduous work while wearing respirators may increase the risk of heat-related illness and dehydration and reduce performance. Further study is needed to understand these risks in the wildfire environment. Products such as masks, gaiters, or hoods which are not respirators, may be worn to provide comfort however their effectiveness for particulate matter is unknown and will not protect against combustion by-products.

Background: The Bipartisan Infrastructure Law (2023) has increased awareness of hazards in the wildfire environment by directing federal fire agencies to “develop and adhere to recommendations for mitigation strategies to minimize exposure due to line-of-duty environmental hazards” which includes smoke.

Mitigation Recommendations: NWCG strongly recommends the use of administrative and engineering controls to help reduce smoke exposure of personnel whether on the fireline or in a camp setting due to current respirator limitations. NWCG encourages everyone to review the [NWCG Smoke Management Guide for Prescribed Fire, PMS 420-3](#) and the “[Smoke, Knowing the Risks](#)” and “[Protecting Wildfire Personnel from Smoke – How Incident Management Teams Address Smoke Risks](#)” videos for information.

Determining the need for respirators and providing them to employees is an employer responsibility. NWCG recommends that employers continue to explore how new and existing respirators may be utilized in the wildland fire environment and develop guidance and policy for their use. For more information, contact your agencies’ Safety Manager.

NWCG standards are interagency by design; however, the decision to adopt and utilize them is made independently by the individual member agencies and communicated through their respective directives systems.