

Safety & Health Advisory



Safety and Health Considerations for Junior Firefighters

As firefighting remains one of the most dangerous occupations, junior firefighters are exposed to hazards that increase the risk of injuries, illnesses, and fatalities.

The fire service helps to address recruitment and retention needs by bringing in younger members through a junior firefighter program. Also known as explorers or cadets, these junior firefighters serve volunteer, career, and combination (career/volunteer) fire departments. Based on the state of the fire department's location, junior firefighters range from 14 to 17 years of age. State child labor laws specify what types of firefighting, emergency medical response, training, and non-operational activities junior firefighters may perform. In most states, junior firefighters may only participate in training and perform support work at fireground, emergency medical services, or rescue operations. Support work may include establishing a water supply, rolling up hoselines, or assisting with patient care as directed by medical personnel.

Some states have laws allowing junior firefighters to engage in training activities more consistent with their adult counterparts. These activities include "live fire" training to prepare junior firefighters to work in environments immediately dangerous to life or health. Performing activities such as live fire training places junior firefighters in an environment with a higher potential for injury and requires appropriate personal protective equipment (PPE).

WHAT FIRE DEPARTMENTS CAN DO:

- ❑ Follow state child labor laws for permissible activities specific to junior firefighters
- ❑ Update standard operating procedures or guidelines to reflect the requirements and restrictions identified in state child labor laws
- ❑ Recognize that junior firefighters require safety and health considerations beyond those for an adult firefighter
- ❑ Provide junior firefighters with appropriate PPE that both fits and affords the necessary protections for their assigned tasks
- ❑ Ensure proper training for junior firefighters on the use and care of their assigned PPE, including its limitations
- ❑ Comply with NFPA 1403 and any state or local regulations for safe training practices in states that permit live fire training for junior firefighters
- ❑ Consider developing mentor- and peer-support mechanisms designed for younger responders
- ❑ Inform parents or guardians about the expectations and the physical and mental risks of their junior firefighter's participation



Junior firefighters training on ground ladders. Photo courtesy of the South Strabane Fire Department.

QUESTIONS & ANSWERS on page 2

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QUESTIONS & ANSWERS

What activities are junior firefighters permitted to perform?

Each state has laws and regulations specifying which activities junior firefighters can perform. Many of these use a tier system where the higher the age, the more activities are allowed. For example, 16- and 17-year-olds can perform certain tasks that 14- and 15-year-olds cannot. NIOSH encourages fire departments and academies to check with their local authority having jurisdiction and state Department of Labor for any requirements and restrictions specified under their state [child labor laws](#).

Why are safety and health considerations different for junior firefighters?

As adolescents, junior firefighters experience rapid changes in the brain and body at varying rates. As their physical strength develops, junior firefighters may not understand their physical limitations while working in their assigned PPE. They also may not fully understand or interpret risks around them. They tend to have far less judgment and experience than adult firefighters. These factors may influence their behavior and overall safety. Therefore, fire departments should ensure junior firefighters perform permitted activities under the direct supervision of an adult firefighter. They should be within speaking and touching distance. They should also require junior firefighters to undergo a general wellness medical exam or check-up by a physician before joining the fire service.

Why should fire departments provide junior firefighters with the appropriate PPE?

PPE is firefighters' last line of defense against many exposures. Improperly fitting PPE can increase injuries. It provides greater potential for slips, trips, and falls. Poorly fitting gear may also increase the chance of heat and chemical exposure if gaps exist at crucial interface areas (coat/pant, sleeve/glove, etc.).

NFPA 1971 sets size ranges for turnout gear and requires specific design patterns for men and women. However, it does not account for the different body types or sizes needed for adolescents. Junior firefighters often receive used PPE due to financial, logistical, and supply chain issues, especially in the volunteer fire service. They may receive PPE that does not fit properly, is past its 10-year service life, or has damage. As such, it may not provide the appropriate protection in hazardous settings and should not be used. Funding sources, such as the [Assistance to Firefighters Grants](#), can help secure appropriate PPE. Fire departments should follow the manufacturer's safety and use guidance for all PPE provided to junior firefighters.

What other considerations and resources support the safety and health of junior firefighters?

Using PPE color and markings (e.g., helmet color, shield panel) can help fire departments identify junior firefighters and ensure appropriate assignments, tasks, and supervision. Fire departments should also consider developing mentor- and peer-support mechanisms designed for junior firefighters. Firefighters' high risk of occupational exposure to traumatic events and stress may affect junior firefighters differently than their adult counterparts. Additional resources for support include the National Volunteer Fire Council's [National Junior Firefighter Program](#), NIOSH's [Young Worker Safety and Health](#) webpage, the U.S. Department of Labor's [child labor provisions](#), and the U.S. Fire Administration's [Manual on Recruitment and Retention](#).

Get more topic resources:

<https://www.cdc.gov/niosh/research-programs/portfolio/public-safety.html>

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