

Turnout Gear Issues and Female Fire Fighters

Personal protective equipment (PPE) is required for firefighting activities but it does not eliminate the risk of exposure to carcinogens. Exposures can occur in all stages of firefighting, including knockdown and overhaul, and back at the station through contaminated PPE or equipment that may be off gassing. Additionally, ill-fitting turnout gear can increase the risk of prolonged exposure to carcinogens.

Based on research conducted by Dr. Sara Jahnke, Director and Senior Scientist with the Center for Fire, Rescue and EMS Health Research at National Development and Research Institutes, ill-fitting gear affects female fire fighters unfavorably.

Many female fire fighters indicated that their turnout gear:

- Is too large, with gaps at the neck and wrists.
- Gloves are too large and too wide at the fingers, making work and carrying equipment cumbersome.
- Self-contained breathing apparatus (SCBA) masks are too large and cannot get a good seal.

These issues can increase the risk of prolonged exposure to carcinogens.

Even though gear and glove companies are starting to make smaller sizes for women, the purchasing pool is still too small, and they are reluctant to focus on women and smaller sizes.

Many departments cannot afford to buy new gear, instead passing down gear that is ill-fitting. It is also cheaper for departments to buy in bulk, so they purchase larger sizes. The percentage of career women fire fighters is estimated to be only 3.7% nationwide, so departments often do not focus on ordering smaller sizes.¹



Sources:

1. Haynes, H. J., & Stein, G. P. (2017). US fire department profile 2015. Quincy, MA: National Fire Protection Association.
2. Jahnke, S. A., Poston, C. W., Haddock, C. K., Jitnarin, N., Hyder, M. L., & Horvath, C. (2012). The health of women in the US fire service. *BioMed Central Women's Health*, 12:39. doi:10.1186/1472-6874-12-39
3. U.S. Fire Administration (USFA). March 2019. Emerging Health and Safety Issues Among Women in the Fire Service. https://www.usfa.fema.gov/downloads/pdf/publications/emerging_health_safety_issues_women_fire_service.pdf

