



The Training Brief

Quick Reference mini-training Topics

Best Practices for Fire Investigators

The purpose of this training topic is a best practice for Fire Investigators a best practice guide to reduce members exposures to cancer causing toxicants in the course of their duties.

Discussion

Fact: Fire investigators can be exposed to cancer causing toxicants while performing their fire cause investigation. Following these best practices can reduce your exposure to toxicants

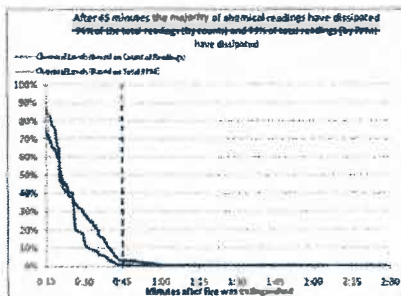
Measures need to be taken to minimize harmful exposures while conducting fire cause investigations.

Key Points:

Fire investigators should undergo the personal hazard reduction cleaning process after conducting the investigation.

The clean cab concept needs to occur with fire investigator's vehicles. No Contaminated PPE or equipment should be transported in the passenger compartment of the vehicle.

All contaminated PPE and equipment should be bagged up and sealed. The contaminated PPE and equipment should be cleaned per NFPA 1851 guidelines and your Department policy.



Make the necessary changes

Off-gassing of hazardous compounds and known carcinogens continues to occur even after the production of visible smoke has stopped.

Each investigator should employ the following measures to minimize harmful respiratory and absorption exposures while conducting fire scene investigations:

Fire incidents should be classified for fire cause investigators as Hot, Warm, or Cold Scenes.

Hot scene: A fire scene where the fire has been extinguished but overhaul has not yet commenced or is in progress. It is strongly recommended that fire investigators not enter fire scenes during this period

Warm scene: A fire scene that has been fully extinguished (LOSS STOPPED) and at least one hour of exterior air exchanging fans have been placed and running. This is the typical time period when fire investigation is conducted. But it is also the time when a significant particulate and gas/vapor exposure hazard exists.

Cold scene: A cold fire scene that has been fully extinguished for at least 2 hours. When moving fire debris or digging of the scene occurs, particulates are re-introduced into the localized air and gas pockets can be released, thus creating a health hazard for the Fire Cause Investigator.

Use powered ventilation fans to physically move ambient air and propel contaminants downwind from the investigation scene. For gases and vapors, ventilation is your friend.

Significant reading of chemicals was found for up to 45 minutes after a fire was extinguished. To increase the amount of dissipation time, as a best practice the timeframe has expanded to 90 minutes to enter and begin the fire cause investigation. Some agencies use two 92) hours as a time frame for entry as a best practice. Refer to your agencies specific SOP/SOG.

Respiratory Protection: The gold standard for respiratory protection is using a SCBA during fire cause investigation. This provides the highest level of protection.

The IAAI (International Association of Arson Investigators) recommended minimum respirator assembly for all fire investigators while in the hot and warm zone of every warm and cold fire scene is a half-mask facepiece with goggles, or a full facepiece, that has a P100 particulate filter with an OV/AG/FM gas/vapor cartridge. Again, The SCBA is the gold standard for respiratory protection.