

Ready To Respond: Scene Safety Considerations Prior to the Fire Investigation

Audience: Fire Marshals, Fire Investigators and Company Officers

Program Objectives:

At the completion of this drill the participants will be able to:

1. Identify safety hazards that may be present during a fire investigation.
2. Conduct a scene safety assessment prior to initiating the fire investigation.
3. Identify the appropriate PPE for the fire investigator based on the findings of the scene assessment.

Time: Online – 45 minutes; Classroom – 1 hour

Instructor Reference:

NFPA 921: Guide for Fire and Explosion Investigations, 2004 Edition. National Fire Protection Association; Chapter 12, Safety

Other Helpful Resources:

Fire Investigator, First Edition, IFSTA, 2000 Chapter 1, Safety pp 8-10; Chapter 3, The Basics of Building Construction as it Relates to the Fire Investigator; Chapter 6, The investigators Role in Recognizing Hazardous Materials

Fire Protection Handbook, 19th Edition, NFPA,

Section 12.2 Building Construction

Section 12.4 Structural Integrity during Fire

Section 12.11 Evaluating Structural Damage

Brannigan, Francis L, *Building Construction for the Fire Service*, 3rd Edition

Building Construction Related to the Fire Service, 2nd Edition, IFSTA

Hazardous Materials for Fire and Explosion Investigators, Hildebrand, Michael S. and Gregory G. Noll, Red Hat Publishing Company, Inc.

Prior to the Class: Have students log on to CFITrainer.net and complete the *Fire Investigator Scene Safety* module including the end of program test.

NOTE: The instructor may elect to use the module as part of the classroom portion of the drill if the department has the facilities and equipment to display the on-line materials.

Suggested Program Outline

1. Review the program Objectives
2. Discuss the factors that influence scene safety identified in NFPA 921 Section 12.2 and the response that the investigator should take to prevent injury for each of the hazards based on the information provided in the *Fire Investigator Scene Safety* module.
 - a. Status of Suppression
 - b. Structural stability – Are there areas of the structure that should be avoided due to instability of collapse?
 - c. Utilities and electrical hazards
 - d. Standing water
 - e. Bystanders – Are they at risk or do they pose a risk to the investigator?
 - f. Atmosphere within the structure – Is it safe or is respiratory protection required? Does your department use a portable gas meter to determine the safety of the atmosphere prior to the fire investigator entering?
 - g. Are there hazardous chemicals or materials in the structure?
 - h. Is there a potential for explosives or secondary devices in the structure?
3. Discuss the process of conducting the scene safety assessment to identify specific hazards present at the scene
 - a. Discuss hazards that may be present with the Incident Commander
 - b. Do an outside walk around
 - c. Monitor the atmosphere in the structure using a portable gas meter
 - d. If safe to do so - Do an interior walk around to identify hazards that may not be visible from the exterior.
4. Discuss the PPE that should be used during the Fire Investigation – NFPA 921 Section 12.1.2. The type and level of protection should be based on the safety assessment, potential hazards to the investigator and the policies of the jurisdiction.
 - a. Safety equipment
 - b. Protective clothing
 - c. Respiratory protection
5. Discuss the policies and procedures of the Department related to fire scene safety during the investigation.
6. Ask participants *Are you ready to respond?*
7. Develop a list of action items and training needs that should be addressed to improve investigator safety for your department.