## Handout 1-1 Group 5:

Fire Fighter Suffers Fatal Heart Attack at Commercial Fire — New Jersey



A summary of a NIOSH fire fighter fatality investigation

July 1, 2015

Fire Fighter Suffers Fatal Heart Attack at Commercial Fire - New Jersey

## **Executive Summary**

On June 8, 2014, a 54-year-old male volunteer firefighter (FF) responded to the scene of a commercial fire and performed interior fire suppression activities. The FF was part of an engine crew that advanced a charged 2.5-inch hoseline into the building. The FF served as the doorman to ensure the hoseline did not get caught on the door. After his second building entry, the FF exited the structure and then collapsed on the curb in the front of the building. On-scene emergency medical service (EMS) personnel immediately initiated cardiopulmonary resuscitation (CPR) and placed the FF in an on-scene ambulance for transport to the emergency department (ED). Despite resuscitation efforts on scene, during transport, and in the ED, the FF died. The death certificate and autopsy report, both completed by the Assistant Medical Examiner, listed the cause of death as "atherosclerotic cardiovascular disease," with physical exertion and smoke inhalation as contributory factors. The autopsy found severely blocked coronary arteries and evidence of an acute heart attack. Based on the FF's undiagnosed coronary heart disease (CHD), NIOSH investigators concluded that the physical exertion associated with fire suppression activities at this fire triggered the FF's heart attack and subsequent sudden cardiac death.

## **Key Recommendations**

- Provide preplacement and annual medical evaluations to all fire fighters in accordance with NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments
- Ensure fire fighters are cleared for duty by a physician knowledgeable about the physical demands of firefighting, the personal protective equipment used by fire fighters, and the various components of NFPA 1582
- Phase in a mandatory comprehensive wellness and fitness program for fire fighters.

## **INCIDENT SAFETY OFFICER**

The National Institute for Occupational Safety and Health (NIOSH), an institute within the Centers for Disease Control and Prevention (CDC), is the Federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. In 1998, Congress appropriated funds to NIOSH to conduct a fire fighter initiative that resulted in the NIOSH Fire Fighter Fatality Investigation and Prevention Program, which examines line-of-duty deaths or on-duty deaths of fire fighters to assist fire departments, fire fighters, the fire service, and others to prevent similar fire fighter deaths in the future. The agency does not enforce compliance with state or Federal occupational safety and health standards and does not determine fault or assign blame. Participation of fire departments and individuals in NIOSH investigations is voluntary. Under its program, NIOSH investigators interview persons with knowledge of the incident who agree to be interviewed and review available records to develop a description of the conditions and circumstances leading to the death(s). Interviewees are not asked to sign sworn statements and interviews are not recorded. The agency's reports do not name the victim, the fire department or those interviewed. The NIOSH report's summary of the conditions and circumstances surrounding

the fatality is intended to provide context to the agency's recommendations and is not intended to be definitive for purposes of determining any claim or benefit.

For further information, visit the <u>program website</u> or call toll free 1-800-CDC-INFO (1-800-232-4636) (This link is also accessible at the following URL: www.cdc.gov/niosh/fire)