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On-duty fire fighter fatalities due to cardiovascular disease (CVD): A case-series

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Each year 45 to 50 fire fighters are killed in the line-of-duty due to CVD. Since 1998, NIOSH has completed 85 detailed investigations of these deaths. The vast majority were due to coronary artery disease (CAD) (95%), followed by idiopathic cardiomyopathy (4%), and strokes (2%). The victims were predominately men (98%) with a mean age of 50 years old with a seniority of 20 years (mean). Compared to the Western States (RR=1.0), the Northeast had the highest CVD fatality rate ratio (RR=5.8), followed by the North Central (RR=2.3), the South (RR=2.1). Over 75% of these deaths occurred while performing physically demanding tasks associated with emergency response or training for emergency response. All of the victims had at least one CAD risk factor, yet only 22% of the Fire Departments performed periodic medical clearance evaluations, and only 17% had mandatory fitness programs. As recommended by the fire service labor and management organizations, prevention efforts should be directed toward the mandatory implementation of Fire Department fitness/wellness and medical screening programs to identify and reduce CAD risk factors. In addition to generating prevention strategies, this data can be used to generate hypotheses (e.g. reasons for the geographic differences in fire fighter CVD fatality rates) which can be tested in analytic epidemiological studies.

Learning Objectives: "At the conclusion of the session, the participant (learner) in this session will be able to: 1. Recognize the two surveillance efforts to track line-of-duty fire fighter fatalities. 2. List the number and characteristics of fire fighter fatalities due to cardiovascular disease. 3. Be aware of workplace risk factors associated with sudden cardiac death among fire fighters. 4. Be familiar with a variety of interventions, including mandatory medical screening and fitness programs, to prevent these line-of-duty-deaths.

Keywords: Occupational Health Programs, Health Promotion

Related Web page:

www.cdc.gov/niosh/firehome.html

Presenting author's disclosure statement:

Organization/institution whose products or services will be discussed: International Association of Fire Fighters (Labor) International Association of Fire Chiefs (Management)

I do not have any significant financial interest/arrangement or affiliation with any organization/institution whose products or services are being discussed in this session.

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