

Preventing Fire Fighter Fatalities Due to Heart Attacks and Other Sudden Cardiovascular Events

WARNING!

Fire fighters are at risk of dying on the job from preventable cardiovascular conditions.

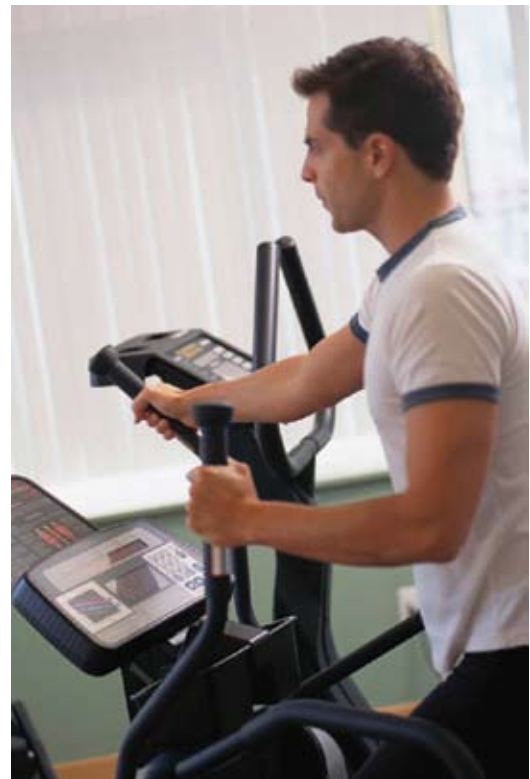
Fire fighters are dying on the job from preventable cardiovascular conditions.

Sudden cardiac death represents the most common cause of a fire fighter fatality. This document:

1. Provides background on fire fighting and heart disease,
2. Presents five case reports to highlight important findings,
3. Summarizes data from the NIOSH cardiovascular disease (CVD) fatality investigations, and
4. Provides recommendations (listed below) to minimize the risk of injury and death to fire fighters from cardiovascular events.

Fire Departments should take the following steps to reduce on-duty heart attacks and other sudden cardiovascular events:

- Provide medical evaluations to ensure that candidates and members are capable of performing job tasks with minimal risk of sudden incapacitation.



- Ensure that physicians conducting the medical evaluations are knowledgeable about the physical demands of fire fighting, the essential tasks of fire fighting, and the consensus guidelines developed by the fire service.



- Implement a comprehensive wellness/fitness program for fire fighters to reduce risk factors for CVD and improve cardiovascular capacity.
- Control exposure to carbon monoxide and other fire contaminants through proper management of the fire scene and proper use of respiratory protection.
- Ensure adequate staffing levels for operations to prevent over-exertion.
- Provide on-scene rehabilitation to monitor vital signs for indication of excessive cardiovascular strain, and to cool and hydrate the fire fighter.
- Implement a comprehensive hearing conservation program.

To help fire departments implement these steps, fire service agencies should conduct research on the following:

- Effectiveness of health promotion programs to reduce the incidence of heart disease among fire fighters.
- Barriers to implementing health promotion programs (both wellness and fitness).
- Effectiveness of on-scene rehabilitation to reduce cardiovascular strain.
- Risk posed to fire fighter's cardiovascular system due to occupational exposures.

For additional information, see ***NIOSH Alert: Preventing Fire Fighter Fatalities Due to Heart Attacks and Other Sudden Cardiovascular Events*** [DHHS (NIOSH) Publication No. 2007-133]. Single copies of the Alert are available free from the following:

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