

Title of Intervention and Website: Program for increasing health and physical fitness of fire fighters

Intervention Strategies: Individual Education, Group Education, Environments and Policies, Supportive Relationships

Purpose of the Intervention: To increase muscular strength and endurance, reduce the magnitude of modifiable coronary heart disease risk factors and reduce insurance claims for orthopedic and cardiovascular injuries and illness

Population: Fire fighters working at fire stations in Los Angeles County; adults and older adults

Setting: Los Angeles County Fire Department; worksite-based intervention

Partners: None mentioned

Intervention Description:

- Individual Education: The fire fighters received individualized exercise prescriptions.
- Group Education: Group nutritional counseling was presented at each fire station.
- Supportive Relationships: Twenty-minute individualized counseling sessions were provided by an exercise physiology technician immediately after each exercise test. The importance of cardiovascular fitness and strength training for the safe performance of fire fighting and the importance of control of smoking, nutrition, and blood pressure for cardiopulmonary health were reinforced during these counseling sessions. Spouses were invited to attend nutritional counseling sessions.
- Environments and Policies: The LA county fire department physical fitness manual and stationary bikes were placed in all 163 fire stations.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: exercise physiology technician, nutritionist.
- Training: not mentioned
- Technology: not mentioned
- Space: classroom and counseling space
- Budget: not mentioned
- Intervention: nutritional materials and physical fitness materials
- Evaluation: chest roentgenograms, spirometry, ECG and physical examinations

Evaluation:

- Design: Pre- and post-evaluation
- Methods and Measures: Chest roentgenograms, spirometry, ECG and physical examinations were performed before and after the intervention. Fire fighters were ranked on a physical fitness scale based on their flexibility, strength, blood pressure, percent body fat, physical work capacity and heart rate responses to exercises.

Outcomes:

- Short Term Impact: not mentioned
- Long Term Impact: Increase in physical work capacity was noted. Significant increase in spinal flexibility, decrease in the prevalence of smoking and a decrease in disabling injuries were also seen.

Maintenance: Not mentioned

Lessons Learned: It is difficult to determine the influence of any one factor on the collective well-being of fire fighters, it is logical to assume that this program has had an important beneficial effect on the maintenance of a healthy work force.

Citation(s):

Cady, L. D., Jr., P. C. Thomas, et al. (1985). "Program for increasing health and physical fitness of fire fighters." *J Occup Med* 27(2): 110-4.