

## DISCUSSION

One question continues to plague fire rescue departments: how does a fire department reduce or prevent line of duty deaths? Fire departments have not been successful at implementing wellness and fitness programs evident by the fact that since the 1970s fire fighters continue to die in the line of duty from heart attack at an average of 50% annually. The results from the external questionnaires reflect that designing a wellness and fitness program must receive top management support. Fire fighters observe and form attitudes about management performance and respond in kind. The Fire Service Joint Labor Management Wellness Fitness Initiative (IAFC, 1997) reports that wellness is a personal commitment that all certified personnel must make to sustain a fire service career. The challenge in the fire service is to encourage personnel to make a personal commitment to wellness. Without a personal commitment and top management support, a wellness and fitness program will not be successful.

Research shows that the value of a wellness and fitness program benefits the employer as well as the employee. From the external questionnaire, 98% stated there was value to the HWF program. Seventy-six percent reported a decrease in sick leave usage and 85% reported a decrease in on-the-job injuries. Additionally, many departments reported that the HWF program assisted in early prevention of serious illness, disease, and that fire fighting activities were more effective, there was an increase in morale, and a decrease in workers compensation claims. The return investment from a proactive wellness and fitness program has been estimated to be from \$3–\$14 for every dollar spent (Rosenfeld, 2007). Not only is the value in a HWF program monetary, but morale increases and performance soars (ACSM, 2007).

As stated in NFPA 1583 (2000), fire fighters need to be medically and physically fit in order to perform vital job functions. A controversial topic within fire department wellness and fitness program is the issue of mandatory versus voluntary participation. NFPA, USFA, NIOSH, and IAFC recommend mandatory participation. IAFC and USFA recommend non-punitive while NFPA recommends establishing a standard with consequences if the standard is not met. The external survey found that out of 58 departments that responded 79% had HWF programs, 63% were mandatory and 66% had standards. Several of the external HWF programs had standards for personnel that were hired after a specific date, which is a way to grandfather in veteran members without penalty. Encouraging participation in a wellness and fitness program is challenging for any fire department.

The research findings, consistent with Greenberg et al. (2004), IAFC (1997), NFPA (2007), NIOSH (2007), Pearson et al. (1995), and USFA (2007) indicate a successful wellness and fitness program addresses all aspects of employee health, such as: medical physicals, fitness assessments, physical agility testing, behavioral health, and emotional health. Additional components of establishing a HWF program include incorporating a wellness and fitness committee, training and education of company officers, researching on the job injuries and deaths specific to your organization, and documenting improvements. Overall, the results of the research conducted to complete this applied research project indicate that creating a comprehensive wellness and fitness program involves every level of an organization, including fire fighters, department heads, management, union representatives, families, and the community at large.