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# FIREFIGHTER HEALTH AND FITNESS ASSESSMENT: A CALL TO ACTION

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## ABSTRACT

Storer, TW, Dolezal, BA, Abrazado, ML, Smith, DL, Batalin, MA, Tseng, C-H, and Cooper, CB; The PHASER Study Group. Firefighter health and fitness assessment: A call to action. *J Strength Cond Res* 28(3): 661–671, 2014—Sudden cardiac deaths experienced by firefighters in the line of duty account for the largest proportion of deaths annually. Several fire service standards for fitness and wellness have been recommended but currently only 30% of U.S. fire departments are implementing programs for this purpose. The Department of Homeland Security Science and Technology Directorate has initiated the Physiological Health Assessment System for Emergency Responders (PHASER) program aiming to reduce these line-of-duty deaths through an integration of medical science and sensor technologies. Confirming previous reports, PHASER comprehensive risk assessment has identified lack of physical fitness with propensity for overexertion as a major modifiable risk factor. We sought to determine if current levels of fitness and cardiovascular disease (CVD) risk factors in a contemporary cohort of firefighters were better than those reported over the past 30 years. Fifty-one firefighters from a Southern California department were characterized for physical fitness and CVD risk factors using standard measures. Overall, physical fitness and risk factors were not different from previous reports of firefighter fitness and most subjects did not achieve recommended fitness standards. Considering the lack of widespread implementation of wellness/fitness programs in the U.S. fire service together with our findings that low physical fitness and the presence of CVD risk factors persist, we issue a call to action among health and fitness professionals to assist the fire service in implementing programs for firefighters that

improve fitness and reduce CVD risk factors. Fitness professionals should be empowered to work with fire departments lending their expertise to guide programs that achieve these objectives, which may then lead to reduced incidence of sudden cardiac death or stroke.

**KEY WORDS** cardiovascular disease risk factors, line-of-duty deaths, risk mitigation

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