

*Clinical Study*

# The Prevalence of Cardiovascular Disease Risk Factors and Obesity in Firefighters

**Denise L. Smith,<sup>1</sup> Patricia C. Fehling,<sup>1</sup> Adam Frisch,<sup>2,3</sup> Jeannie M. Haller,<sup>1</sup> Molly Winke,<sup>1,4</sup> and Michael W. Dailey<sup>4</sup>**

<sup>1</sup>First Responder Health and Safety Laboratory, Health and Exercise Sciences Department, Skidmore College, Saratoga Springs, NY 12866, USA

<sup>2</sup>Department of Emergency Medicine, University of Pittsburgh, Pittsburgh, PA 15260, USA

<sup>3</sup>Department of Emergency Medicine, Albany Medical College, Albany, NY 12208, USA

<sup>4</sup>Department of Exercise Science, East Stroudsburg University, East Stroudsburg, PA 18301, USA

Correspondence should be addressed to Denise L. Smith, dsmith@skidmore.edu

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Obesity is associated with increased risk of cardiovascular disease (CVD) mortality. CVD is the leading cause of duty-related death among firefighters, and the prevalence of obesity is a growing concern in the Fire Service. *Methods.* Traditional CVD risk factors, novel measures of cardiovascular health and a measurement of CVD were described and compared between nonobese and obese career firefighters who volunteered to participate in this cross-sectional study. *Results.* In the group of 116 men (mean age  $43 \pm 8$  yrs), the prevalence of obesity was 51.7%. There were no differences among traditional CVD risk factors or the coronary artery calcium (CAC) score (criterion measure) between obese and nonobese men. However, significant differences in novel markers, including CRP, subendocardial viability ratio, and the ejection duration index, were detected. *Conclusions.* No differences in the prevalence of traditional CVD risk factors between obese and nonobese men were found. Additionally, CAC was similar between groups. However, there were differences in several novel risk factors, which warrant further investigation. Improved CVD risk identification among firefighters has important implications for both individual health and public safety.