
Objective Research Deployment of Remote Advanced ECG for Firefighter Cardiac Risk Assessment

Brett A. Dolezal, PhD,¹ Marlon Abrazado, MS,¹
Maxim A. Batalin, PhD,² Denise Smith, PhD,³
and Christopher B. Cooper, MD¹

¹Exercise Physiology Research Laboratory, Departments
of Medicine and Physiology, David Geffen School of Medicine,
University of California, Los Angeles, Los Angeles, California.

²Wireless Health Institute, Henry Samueli School of Engineering
and Applied Sciences, Los Angeles, California.

³First Responder Health and Safety Laboratory, Department
of Health and Exercise Sciences, Skidmore College, Saratoga
Springs, New York.

Abstract

Introduction: conditions. These factors can precipitate sudden cardiac events in firefighters with underlying cardiovascular disease. The purpose of this pilot study was to deploy and explore the feasibility of the resting “advanced” 12-lead electrocardiogram (A-ECG) as a remote firefighter risk assessment tool for improved assessment of cardiac risk. recording, generating A-ECG “scores” in a blinded fashion. A separate