



Cardiac Risk Screening Program

Intense training, as done by elite athletes, puts an extreme amount of stress on the cardiovascular system. While this high level of exercise is generally thought to protect elite athletes from cardiac events, individuals with underlying cardiac abnormalities who train at elite levels can be at considerable risk of severe cardiac events.

The National Federation of State High School Associations estimates 10 to 25 cases of sudden cardiac death (SCD) per year in individuals younger than 30 years in the United States¹. A 2006 study of the cardiovascular screening practices of the major North American professional sports teams found that "as many as one of 3500 professional sports team athletes may experience a sudden-death event each year."²

While these numbers are not staggering, the death of a young elite athlete is not only tragic, but is often considered avoidable. There are relatively easy tests to identify cardiac risk factors and by that means to considerably lower the instance of sudden cardiac death. In 1982 the Italian government implemented a program to screen all athletes under the age of 35 who planned to participate in a competitive sport. Over the past 25 years that that program has been in place the annual cardiac deaths among athletes has decreased 89 percent³. Additionally, just last year the National Basketball Association implemented a mandatory and standardized cardiac screening protocol for all of its athletes.



In order to identify athletes with potential risks within the Stanford Athletics Community, Stanford Sports Medicine and the Stanford Human Performance Lab will begin offering free electrocardiogram (ECG) screening to all Stanford Student-Athletes. The screening will enhance the current practice of collecting medical and family histories and will offer Student-Athletes a more comprehensive screening program.

Stanford Student Athletes interested in free cardiac screening will have the opportunity to receive an ECG during their Pre-Participation Examination or at any other time via appointment through the Stanford Sports Medicine Clinic. All ECG records will remain confidential and will be read by a licensed cardiologist. Any abnormal findings from the ECG will result in the appropriate follow up care.

¹ Van Camp SP. Sudden death. *Clin Sports Med*. 1992;11:273-289.

² Harris KM, Sponsel A, Hutter AM, Maron BJ. Brief communication: Cardiovascular screening practices of major North American professional sports teams. *Ann Intern Med* 2006; 145:507-511.

³ Corrado D, Basso C, Pavei A, et al. Trends in Sudden Cardiovascular Death in Young Competitive Athletes After Implementation of a Preparticipation Screening Program. *JAMA*. 2006;296:1593-1600.