

## Medical Screening of Young Athletes

For over two decades, thousands of Italian athletes between the ages of 12 and 35 have undergone medical screening prior to participating in sports. The screening includes a detailed medical history, physical exam, and an electrocardiogram to detect unknown heart conditions that might put the athletes at risk of sudden cardiac death. A new study on Italy's screening program found that it reduced the incidence of cardiac death in young athletes by almost 90%.

Although sudden cardiac arrest in teens is a relatively rare event, the majority of cases occur because of an inherited abnormality of the heart or a viral infection that attacked the heart, resulting in an irregular heart rhythm. In the United States, the most common cause of cardiac arrest is a condition called hypertrophic cardiomyopathy, which is an unusual thickening of the heart muscle.

There is no guarantee that a screening will detect every heart condition, but it's clear that more extensive screening has the potential to save lives.

*Loss Control Note: Markel has received only a few reports of sudden cardiac arrest in youth. Most resulted from blows to the chest during a fight or by a baseball. All sports programs should consider proper medical screening, training in CPR, and the provision of an AED and portable oxygen.*

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If you have a safety or risk management question or a suggestion for a topic, please contact Markel's Risk Management Department at [safety1st@markelcorp.com](mailto:safety1st@markelcorp.com).