Preventing A Tragedy That Could Be A Heartbeat Away

Thousands of kids die annually from undetected heart conditions that can cause Sudden Cardiac Arrest (SCA) – the number two cause of death among youth under 25, and the number one killer of student athletes.

A heart screening that includes an EKG can help identify these cardiac abnormalities that puts kids at risk, but EKGs are not a regular part of well-child or preparticipation sports physicals.

SCA is not a heart attack. It's an abnormality in the heart's electrical system or structure that abruptly stops the heartbeat. It's fatal in 92 percent of cases if not properly treated within minutes. Abnormalities can be genetic, or inherited conditions, or they could be congenital, meaning you're born with it. The defect could become more pronounced as young hearts grow. In general, SCA affects males four times more than females and occurs during exercise 60% of the time, putting athletes at a higher risk.

SCA often has no warning signs. In fact, the first symptom could be death. But According to a study published by the Journal of the American Board of Family Medicine (2012), 72% of students that suffered from SCA were reported by their parents to have at least one cardiovascular symptom before SCA. They just didn't recognize it as life threatening.

That's why it's important to understand potential warnings of SCA.

Educating youth and parents about the symptoms and risk factors of Sudden Cardiac Arrest is one way to help prevent it. Young people often don't tell adults if they experience symptoms, and parents often urge their kids to play hard. Kids may be frightened, embarrassed or simply unaware that what they are feeling indicates a potentially fatal condition.

Athletes (and often their parents) don't want to jeopardize their playing time, so they may also avoid telling parents or coaches in hopes that the symptoms will "just go away" on their own. Or, they may think they're just out of shape and need to train harder. We need to let student athletes know that if they experience any of the symptoms below, it is crucial to get follow-up care right away with a primary care physician. If the athlete has any of the risk factors, these should also be discussed with your doctor to determine if a heart screening is needed.

These symptoms are potential indicators that SCA is about to happen:

- racing heart, palpitations or irregular heartbeat
- dizziness or lightheadedness
- fainting or seizure, especially during or right after exercise
- fainting repeatedly or with excitement or startle
- chest pain or discomfort with exercise
- excessive, unexpected fatigue during or after exercise
- excessive shortness of breath during exercise

The following factors increase risk of SCA:

- family history of known heart abnormalities or sudden death before age 50
- specific family history of Long QT Syndrome, Brugada Syndrome, Hypertrophic Cardiomyopathy, or Arrhythmogenic Right Ventricular Dysplasia (ARVD)
- family members with unexplained fainting, seizures, drowning or near drowning or car accidents
- known structural heart abnormality, repaired or unrepaired
- use of drugs, such as cocaine, inhalants, "recreational" drugs or excessive energy drinks