



Our school's Athletic Department cares about your child's heart health, so we are partnering with the Cypress ECG Project to screen athletes with an ECG (electrocardiogram). The ECG screening will be held on September 21, 2016 at Frisco High School in the Field House from 7:30 am-10:30 am.

Here are some Frequently Asked Questions (FAQ) on the program:

Why should my child get a cardiac screening?

The human body changes during puberty both externally and internally in a variety of ways. One of these internal changes is the structure of the heart. In middle school, student athletes learn how to push their bodies to new levels as they mature and get bigger and stronger. Because of these physical changes and the increased stresses on a student athlete's heart, cardiac screening should be part of a physical at least once while in middle school and once in high school.

A simple cardiac screening can help detect problems before they become major medical issues. While we recommend all student athletes get an ECG, you should definitely be screened if you:

- ✓ compete in high impact sports that increases your heart rate for long periods of time
- ✓ have a family history indicating that there is a heart disease risk
- ✓ get dizziness during athletics
- ✓ experience fainting spells or weakness while participating
- ✓ get shortness of breath that does not clear quickly
- ✓ get chest pain while participating

How is the cardiac screening done?

Cardiac screening can be done to detect a variety of potentially catastrophic genetic diseases. The simplest level of testing is an Electrocardiogram (ECG). This test looks at the electrical signals that the heart uses to contract and circulate blood through the body and lungs. An ECG takes four minutes start to finish and requires electrodes to be placed around the heart to record the signals that it produces. A Cardiologist familiar with the student athlete heart can detect a large number of heart diseases based on the timing of muscles contracting, valves opening and closing, and muscles releasing. Diseases like Hypertrophic Cardiomyopathy (HCM) or thickening of the heart, Long QT Syndrome, Wolff-Parkinson-White Disease, Arrhythmia, and Abnormal Right Ventricular Disease, which are all electrical conduction issues, can be detected with an ECG.

How often do you find a problem?

On average 95% of all student athletes have no problems or issues.

In about 4.5% of all athletes, results are inconclusive or suggest something that an ECG cannot verify, and an Echocardiogram (Echo) is recommended. The Echo is used to get a picture of the heart using sound waves. This is similar to an ultrasound to look at a baby during pregnancy. The Echo looks for valve and vein structure, muscle thickness, and proper operation of the heart. This, in conjunction with an ECG, can detect diseases like Brugada Syndrome or Occlusions of the aorta and veins.

Most rarely, but most importantly, we find that 1 in 2000 student athletes are at risk for sudden cardiac death (0.5% overall).



Will I see the results of my child's ECG?

Yes. We will return an interpretation to the school within 2-3 business days with a diagnosis of low risk, follow-up or high risk. A copy of the ECG will be returned as well as information about a potential diagnosis in cases of follow up or high risk designation.

Who reads the ECG?

The Cypress ECG Project has trained Cardiologists on staff, who have read more than 25,000 student athlete ECGs since we began in 2000. They are uniquely qualified to read this particular population – the student athlete.

What if my child needs a follow-up?

The diagnosis will include some documentation on what the potential problem might be. We will provide the names and phone numbers of some recommended doctors to visit in your area. Even if your child is flagged for a follow-up, he or she can continue participating in the school's sports program. You'll just need to have your child visit a Cardiologist within 3 months to determine why the ECG came back abnormal.

What if my child is considered high risk?

If your child is flagged as *high risk*, he or she should not participate in sports in any way (practice, games, scrimmages, etc) until he or she has seen a specialist and received clearance or treatment. If you don't have one already, we will offer the contact information of Cardiologists in your area.

How much will this cost?

The ECG is just \$15 per student. A typical doctor's appointment with ECG costs \$100 and up.

Isn't this covered with the annual physical?

The annual physical exam asks family history questions, and requires a doctor to listen to the student's heart with a stethoscope. Studies have shown that this is just 1% effective in catching heart disease. Adding ECG screening improves the effectiveness in catching heart issues up to 85%. Pediatricians, Orthopedists and Chiropractors perform most physicals, and generally do not have the equipment on-hand to perform the necessary test or follow-up exam regarding heart health. Our Cardiologists have special training on this particular population, the student athlete, which results in more accurate exams.

Do we need to do this every year?

Cardiac screening should be part of a physical at least once while in middle school and once in high school due to the physical changes and the increased stresses on a student athlete's heart which occur during that timeframe. If your child is considered low-risk then those are the only two times recommended getting an ECG before adulthood.

Are boys and girls screened together?

No, arrangements are made for privacy.

Where can I find out more information?

You can visit www.cypressecgproject.org or call 713-487-6704 to find out more.

