What is a Heart Screening?

There are many groups around the country that provide youth heart screenings. They don't all follow the same screening formats and protocols, but their goal is identical – to prevent sudden cardiac arrest and death in children through early detection of heart disorders.

We don't know the best way to screen for these conditions. We don't know the best age or how frequently children should be screened, but most experts who advocate for screenings believe that age 12 is a good starting point and one time is not enough. Collectively, we're trying to answer these questions, and screenings are providing us with new and important information.

WE BELIEVE the following:

- Thousands of children die every year from sudden cardiac arrest.
- Most of the conditions that lead to sudden cardiac arrest and death in children are detectable and treatable.
- The current standard of care for screening – a questionnaire, physical exam and listening with a stethoscope – is not a best practice for detecting conditions.
- Many students who experience sudden cardiac arrest have had wellness exams and/or sports physicals.
- Non-invasive heart tests like the electrocardiogram (ECG/EKG) and the echocardiogram (Echo) are a more effective way to screen for heart conditions.
- No screening method available today will identify every heart condition or provide 100% reassurance.
- More research is needed to learn about the hearts of seemingly healthy children, and screening provides information that we just can't get with the status quo.

WE BELIEVE that the BEST screening method will ultimately be a blend of

- the most effective – finds the most conditions.
- the most accurate – limits the number of false-positive screens
- the most affordable
- the most accessible
- the least invasive

What are the different services offered at screenings?

- Blood pressure
- Medical and family history
- Physical exam
- Auscultation (listening with a stethoscope)
- Electrocardiogram (ECG/EKG) - looking at the electrical patterns of the heart
- Echocardiogram (Echo) – looking at the size and structure of the heart

Blood pressure

- Pro – non-invasive simple test that reveals how hard the heart is working to circulate blood throughout the body.
- Con – if students are nervous or stressed about the heart screening, this may be falsely elevated.

Medical and Family History

- Pro – some children have experienced symptoms or have a significant family history of sudden cardiac arrest/death and/or a genetic heart condition that is revealed through questions.
- Con – many children who suffer sudden cardiac arrest/death do not have symptoms prior to their event.

Physical Exam and Auscultation

- Pro – reveals the sound of the heart, and an abnormal sound can suggest a problem.
- Con – most heart conditions do not have abnormal physical exam features.

Electrocardiogram

- Pro – reveals specific electrical conditions like WPW, Long QT, and Brugada Syndrome, and can suggest other structural disorders like cardiomyopathy.
- Con – does not reveal some structural conditions like anomalous coronaries or aortic dilation. It needs to be interpreted by a physician who is experienced in youth heart screenings to reduce the chance of a false-positive.

Echocardiogram

- Pro – reveals structural conditions like cardiomyopathy, valve function and disorders, heart muscle thickness and function, and coronary artery anatomy.
- Con – does not evaluate for electrical disorders.

We want you to get your child's heart screened. We want you to be familiar with the different services offered at the heart screening. We want you to understand what these services can tell you about your child's heart. Finally, we want you to appreciate that you are part of something special – improving the quality of care of our children.

Cody Stephens Foundation | mCore | Nick of Time Foundation | Simon's Heart