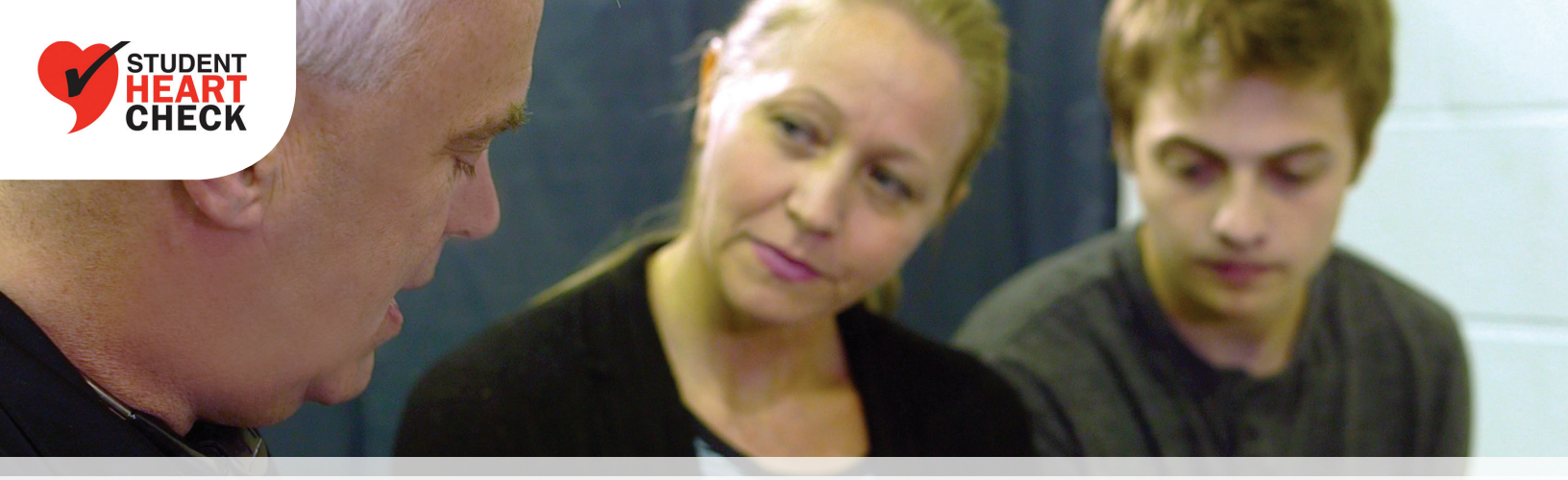
STUDENT HEART CHECK



Cardiologist Checklist

This list is what Beaumont Student Heart Check recommends. It is only a suggestion.

1. Evaluate the student's history form

- ☐ ask students if they reviewed their form. Have them elaborate on any abnormal responses to determine an increased risk or concern
- ☐ categorize a student as "Play But Follow Up" if there is anything that suggests cardiac risk
- ☐ refer students with potential cardiac risk to their primary care physician for further evaluation (their PCP can make the cardiologist referral)

2. Do a physical exam

- ☐ review all students' blood pressure (BP) readings before the exam
  ****If the first and second readings are above a normal range, do a third BP reading after your exam. Nervousness can elevate blood pressure. Make sure students return to you after this third reading to determine if a follow-up is needed with his/her PCP.*
- ☐ if the BP is greater than 150 over 90, the student should "Stop" playing until a further evaluation by the PCP
  ****For a BP of 130 over 80, students can "Play But Follow Up" with their PCP.*
- ☐ listen for heart murmurs, clicks or abnormal heart sounds
- ☐ check the pulse on the right arm and lower extremities

3. Interpret the ECG

The following is based on the Seattle criteria for ECG interpretations

- ☐ pay close attention to the QTC (re-measure if necessary)
- ☐ use Bazzett's equation (the R-R interval should be measured in seconds): $QT_c = \frac{QT}{\sqrt{R\text{-}R}}$
- ☐ get further evaluations for PVCs
- ☐ please note a right atrial rhythm can be normal in adolescents
- ☐ students should "Stop" playing sports and get a further evaluation for all suspected WPWs
- ☐ do not write on the ECG
- ☐ any notes should be clearly printed and written in easy-to-understand, layman terms (it's okay to write out an explanation)
- ☐ avoid using technical terms or abbreviations (e.g., "Incomplete right bundle branch block, LVH")

Beaumont CHILDREN'S

4. Do a "quick look" echo

We suggest looking at five views

#1: Parasternal long axis view | Pay attention to:

- [ ] the left atrial size
- [ ] LV size and function
- [ ] a quick evaluation of the right side of the heart can be made at this time
- [ ] LV outflow
- [ ] mitral valve function
- [ ] if apex is not well seen, move the transducer down as an additional view
- [ ] prolapse or SAM
- [ ] a midline closure in the aortic valve

#2: Parasternal long axis view with color | Focus on:

- [ ] LV outflow
- [ ] mitral valve regurgitation
- [ ] any aortic insufficiency

#3: Four-Chambered view | Pay particular attention to:

- [ ] chamber sizes
- [ ] valve flow
- [ ] function

#4: Five-Chambered view | Look at the:

- [ ] LV outflow
- [ ] mitral valve flow.

#5: Five-Chambered view with color | Look for:

- [ ] outflow turbulence

During these views:

- [ ] make measurements when necessary
- [ ] you're looking for hypertrophic cardiomyopathy, not diagnosing other conditions
- [ ] a bicuspid aortic valve or suspicion for an ASD may be apparent

****These conditions might be abnormal and warrant further diagnosis – but are not life-threatening. Students with these symptoms will need a follow-up exam but more than likely won't need a "Stop" designation.*

5. Summarize your findings

- [ ] sign off on the student results and make sure your notes are legible with understandable, non-medical terms

6. Discuss abnormal concerns

- [ ] students recommended to "Stop" playing should have the reasons explained to them and their parents
- [ ] when discussing your concerns, remind them this is a screening exam, not a diagnosis

****The purpose of this screening is to find those who might be at risk for sudden cardiac arrests.*

- [ ] explain that student heart checks are not equipped to perform more detailed studies

****Findings are non-conclusive and by no means justify a diagnosis. Any abnormalities, however, are enough reason to warrant a more in-depth evaluation.*

- [ ] make students and parents aware your findings do not mean there is an increased risk for a cardiac event but you recommend the student "Stop" playing until a further evaluation can be done

Beaumont CHILDREN'S