

# Cardiac Risk Assessment in Youth



## Making Sudden Cardiac Arrest Prevention Part of Your Practice

A Free Online CME Presented by John Rogers, M.D. and the Eric Paredes Save A Life Foundation

Register Online at [iph.sdsu.edu](http://iph.sdsu.edu)

Training provided by University of California, Irvine—Office of Continuing Education and San Diego State University Institute of Public Health

**CME Accreditation:** The University of California, Irvine School of Medicine designates this enduring material for a maximum of 2 *AMA PRA Category 1 Credit*.™ Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Nursing Credits Granted By The Institute For Public Health:** Provider approved by the California Board of Registered Nursing, Provider Number CEP17194, for 2 contact hours.

Studies show cardiac consideration is an often overlooked area of assessment for youth and student athletes alike, with practitioners and parents largely unfamiliar with warning signs and risk factors that require follow up. As new guidelines recommend youth who've had COVID-19 exposure, symptoms or a diagnosis to get a comprehensive cardiac evaluation, now more than ever it's critical to incorporate evidence-based diagnostic protocol into your practice. Join this in-depth discussion to make sure you're prepared.

### Course Outline:

- Incidence, Mortality, Disparities, Etiology
- Prevention
  - Recognition of warning signs and symptoms
  - Tools and processes to assess risk
  - Family history solicitation
  - Physical exam
  - Diagnostic follow up
- Screening and follow up with family members after SCD
- Championing prevention

*For bibliography and references see course resources.*



**About The Presenter** Dr. Rogers, a cardiovascular disease and electrophysiology specialist at Scripps Health in San Diego for nearly three decades, is passionate about SCA prevention in youth. He has been the volunteer Medical Director of the Eric Paredes Save A Life Foundation for ten years, facilitating free heart screenings for nearly 33,000 adolescents and counting, finding 500+ with previously undiagnosed cardiac abnormalities.

**UP TO 49%**  
of SCA victims had significant family history

**UP TO 60%**  
of SCA preceded by symptoms did not consider a cardiac diagnosis

**UP TO 72%**  
of SCA is preceded by unrecognized symptoms

**1 IN 300**  
YOUTH HAS AN undetected heart condition that puts them at risk



**Parent Heart Watch.**  
THE NATIONAL VOICE  
PROTECTING YOUTH FROM SUDDEN CARDIAC ARREST



# Here's Some of What You'll Learn in this Training Module

I will prevent disease whenever I can, because prevention is preferable to cure.  
—HIPPOCRATIC OATH

Early evaluations show participants are highly satisfied with the course, that they learned something new that will be useful to their practice, and that planned to make changes as a result. Nearly all said they would recommend the course to their colleagues.

At the onset, only 7% of course attendees were very or completely confident that they would recognize the warning signs of a potential heart condition, and only 6% were very or completely familiar with current cardiac assessment guidelines.

Post-testing showed a significant increase in knowledge, the most dramatic being a new awareness of the true incidence of SCA in youth and that ECG is a critical diagnostic tool that can detect two-thirds of conditions that can cause it.

These data further illustrate the need for continuing education about effective cardiac risk assessment in youth.

## Needs Assessment

**This course was inspired by over 350 published findings, including:**

- **The early recognition of heart abnormalities that can lead to SCA is critical for prevention**
  - **The AAP acknowledges that warning signs and risk factors are often missed by medical professionals and parents/youth**
  - **Recommended cardiac risk assessment tools are largely unused**
  - **Physical and history alone miss more youth at risk than when an ECG is part of the screening**
- How many youth experience sudden cardiac arrest annually?
  - What percentage of SCA occurs during sports or exercise?
  - What percentage of SCA in youth is preceded by warning signs or symptoms prior to SCA?
  - The mortality rate for cardiac syncope is in what range?
  - What indicators suggest cardiac syncope?
  - When are echocardiograms required for chest pain?
  - When are heart palpitations concerning?
  - Is a chest x-ray sufficient for diagnosis of myocarditis?
  - Which relatives should be included when inquiring about family cardiac history?
  - What cardiac conditions are heritable?
  - What percent of youth who die from sudden cardiac death had a significant family history of cardiac issues?
  - What is indicated by delayed femoral compared to radial pulses?
  - What characteristics of a heart murmur indicate the need for a cardiac referral?
  - What is the estimated prevalence of heart conditions that may lead to sudden cardiac arrest?
  - What percentage of conditions that can cause SCA can be detected by ECG?
  - What is the false positive rate when using current ECG interpretation criteria?
  - In cases of SCA or SCD, cascade screening should include which relatives?
  - In what percent of cases where molecular autopsy was performed on youth with SCD is a genetic mutation relevant to relatives found?

Find more course information:



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