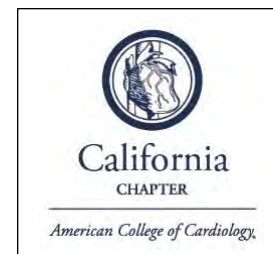


Summary of the Scientific Statement published in JACC 2025

Titled: *Clinical Considerations of Competitive Sports Participation for Athletes With Cardiovascular Abnormalities*



SECTION II: THE PREPARTICIPATION CARDIAC EVALUATION

The preparticipation evaluation (PPE) plays a critical role in the cardiac care of competitive athletes. Components of an appropriate PPE includes the 14-point history and physical (H & P) and consideration of additional screening tests, particularly a 12-lead ECG.

Preparticipation Cardiac Screening: ECG

“An ECG enhances detection of ion channelopathies, accessory pathways, and many cardiomyopathies, increasing the sensitivity of the PPE for detection of potentially fatal cardiac conditions to 94%”.

Table 4. Clinical Considerations for the Preparticipation Cardiac Evaluation of Competitive Athletes
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Specific clinical considerations

- Cardiac screening should be considered 1 component of SCA prevention that aims to identify competitive athletes with unrecognized cardiovascular disease to allow individualized and disease-specific management to prevent an adverse event.
- A cardiac screening program should ensure access to high-quality primary screening and secondary evaluation, including the financial and logistical resources to ensure a systematic process for downstream clinical evaluation.
- As a component of preparticipation screening, the cardiovascular medical history and physical examination should be performed as it can detect symptomatic competitive athletes with previously unrecognized disease and those with a family history suggestive of an inherited cardiovascular disorder.
- The inclusion of a resting 12-lead ECG is reasonable as it improves detection of underlying cardiac conditions in asymptomatic competitive athletes compared with medical history and physical examination alone.
- Effective ECG-inclusive preparticipation screening requires the involvement of clinicians with adequate training in the use of contemporary athlete-specific ECG interpretation criteria to minimize potential harm.
- Cardiac imaging, exercise stress testing, and ambulatory rhythm monitoring have insufficient data to suggest incremental value for use in the primary screening of asymptomatic competitive athletes.
- No approach to cardiac preparticipation screening provides absolute protection against SCA. Thus, an emergency action plan that includes training in high-quality CPR, prompt access to an AED, and a coordinated medical transport system should be developed, practiced, and used for all environments in which competitive athletes train and compete.

AED indicates automated external defibrillator; CPR, cardiopulmonary resuscitation; and SCA, sudden cardiac arrest.