ACBSP™ Position Stand on Preparticipation Examinations

Effective June 13, 2015

Overview
The ACBSP has developed this position statement using the best available scientific evidence and published best practices. The guidelines herein may assist health care providers in identification of athletes with conditions that may threaten their health and safety while participating in organized sport.

Introduction
As sport participation increases, so does the incidence of sport-related mortality and morbidity. One proposed method for reducing the incidence of sport-related health problems is use of the preparticipation examination (PPE). Over 7 million young athletes participate in high school level sport annually.1 There are concerns that the burden of performing PPEs for this growing population may overextend the health care system and that health care providers do not uniformly follow current best practices when performing them.2 This statement describes the roles and standards for qualified health care providers, including doctors of chiropractic, when performing the PPE.

Preparticipation examinations are conducted to protect the health and welfare of individuals who participate in sport. The critical end point of the PPE is the clearance decision, but providers must also determine necessity of follow-up examination.

The ACBSP recognizes that no health care provider has specialization in all aspects of medical practice and advocates co-management with physicians who specialize in the involved organ system for any case in which there is clinical concern that sport participation may be contraindicated.

Chiropractic PPE Qualifications
The ACBSP’s position is:

1. Doctors of chiropractic with post graduate education and current ACBSP (DACBSP or CCSP) certification3,4 are qualified to perform PPEs and make clearance decisions in any patient population.

2. Doctors of chiropractic without sports medicine certification may evaluate, diagnose, and manage a broad range of conditions, which may qualify them to perform PPEs based upon their individual clinical expertise, education, clinical acumen, and additional training related to the PPE.5 The Council on Chiropractic Education’s standards for accreditation require extensive physical examination, history taking, cardiology, and pharmacology education.

3. The skills needed to appropriately perform a PPE can be supported by additional education.

4. All health care providers who perform PPEs have an obligation to maintain current knowledge regarding PPE best practices.
PPE Performance Standards
The ACBSP’s position is:

Methodology
1. PPEs may be performed by a single health care provider or by multiple health care providers as a station-based examination.
2. If a station-based PPE format is used, the most experienced clinician with licensure to render a diagnosis should be responsible for reviewing the history, performing the cardiopulmonary examination, and rendering the final clearance decision.

History
1. Standardized history forms, such as described in the current edition of the PPE Preparticipation Physical Evaluation monograph or International Olympic Committee Periodic Health Evaluation form, should be used. Utilization of standardized protocols reduces risk of medical error.
2. A comprehensive personal and family history is the cornerstone of the PPE. The history is a more sensitive tool than the physical examination for detecting conditions that could prohibit or alter sport participation. For youth athlete populations, an adult who is well informed regarding the examinee’s health history must assist in collecting the historical data. The lead clinician should review the history before the examination is administered.
3. Specific attention should be given to cardiovascular-related findings, neurological injuries, and other causes for restriction or disqualification that might predispose an athlete to injury or illness. A reference list of medical conditions that affect sport participation serves as a useful reference for the health care provider performing the PPE.
4. The personal history must be screened to identify congenital or acquired heart disease, history of hypertension or hypotension, murmurs, or family history of cardiovascular disease. Symptoms of chest discomfort, shortness of breath, palpitations, and syncope or near-syncope are critically important to identify. A family history of hypertrophic cardiomyopathy, Marfan syndrome, or sudden cardiac death in relatives younger than 50 years are all significant findings.
5. The ACBSP endorses the American Heart Association’s Preparticipation Cardiovascular Screening of Young Competitive Athletes. These recommendations should be implemented on all PPEs. A positive response to any screening question should be confirmed, and further evaluation performed as indicated. Additional evaluation should be performed by an appropriate specialist, such as pediatric cardiologist in the child or
adolescent.

6. Identification of current or previous concussion and other head traumas is required. The number of injuries and their temporal relationship, as well as time to recovery, are key elements regarding head injury history and clearance for sport participation.14

7. Baseline concussion testing is a recommended component of the PPE. The Sports Concussion Assessment Tool - 3rd edition (SCAT3) is a recommended tool. Additional testing may also be used.15,16

8. Risk factors for relative energy deficiency in sport and its clinical sequela may be identified in the medical history.17

General Physical Examination
1. A targeted physical examination is required, as outlined in the PPE Preparticipation Physical Evaluation monograph.6
2. The screening should include:
   a. Vital signs
      i. Pulse
      ii. Blood pressure
      iii. Respiration rate
      iv. Temperature
      v. Height
      vi. Weight
   b. Targeted cardiovascular and pulmonary screening
      i. The cardiovascular examination is discussed in detail in a subsection of this document.
   c. Visual acuity
      i. Visual acuity should be tested with a Snellen chart. Athletes with best corrected visual acuity of less than 20/40 in one eye should be considered functionally one eyed.18
   d. Abdominal examination
   e. Neurologic examination
   f. Musculoskeletal examination
      i. Musculoskeletal pathology is a common cause of denied clearance for participation. Special attention to areas of prior injury or surgery should be given during the musculoskeletal examination.19
      ii. The musculoskeletal examination should include screening for connective tissue disease, such as Marfan syndrome.6
   g. General medical examination
      i. A focused examination should be performed for any area of complaint, dependent upon athlete presentation.20
Cardiovascular Examination
1. The cardiovascular examination should follow the American Heart Association guidelines.\(^{13}\)
2. Cardiac auscultation is a core component of the cardiovascular examination and is required to identify abnormal heart sounds. All abnormalities detected via auscultation should be evaluated by a cardiologist since cardiologists are the only medical specialists found to accurately identify the majority of abnormal heart sounds.\(^{21}\)

Clearance for Sport Participation
The decision to clear an athlete for sport participation is multifactorial:

1. Co-management with a specialist in the organ system in question is recommended for cases in which there is clinical concern that sport participation may be contraindicated.
2. Classification of sport type based on contact and cardiac demand should be considered when making clearance decisions.\(^{11}\)
3. Athletes presenting with underlying disabilities may be cleared for sport; however, additional evaluation may be required for clearance to participate.

Conclusion
The preparticipation examination is an important component of health care for the athletic population. Doctors of chiropractic with post graduate education and current ACBSP (DACBSP or CCSP) certification\(^3,4\) are qualified to perform PPEs. All health care providers should use evidence based practices such as described in this document when performing preparticipation examinations.

References


