

Table 15-2
RECOMMENDED PORTIONS OF A STANDARDIZED EXAMINATION

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| <ul style="list-style-type: none"> • Medical history questionnaire • General appearance • Vision • Respiratory • Abdominal/genitourinary • Integumentary • Weight and height | <ul style="list-style-type: none"> • Blood pressure • Cardiovascular • Neurological • Musculoskeletal • History of heat illness/intolerance • Sickle cell trait |
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Table 15-2 identifies components recommended as portions of a standardized examination.^{2,14}

It is suggested that an examination be performed within 4 to 6 weeks of the beginning of participation.² This would allow for both recent medical conditions to be identified and present with ample time to perform any further medical and/or laboratory tests with definitive results and findings prior to the start of an athlete's participation in the sport.²

In today's world, some form of PPE appears to be the standard acceptance of clearance prior to formal organized participation. However, some in the medical profession question whether certain aspects of the examination are worth performing because they yield such low prevalence rates of findings.^{18,19} Controversy exists as to whether electrocardiograms (ECGs) should be included as part of the PPE.¹⁹ Furthermore, it is unclear whether a medical history screening and physical examination alone are enough to identify potentially life-threatening pre-existing conditions.²⁰ Some sudden death conditions resulting from athletic participation appear to be undetectable during a PPE. An analysis of sudden deaths in young athletes from 1980 to 2006 found sudden deaths were mostly due to cardiovascular disease (n = 1049 of 1866 total [56%]).²¹ Of these, the authors estimate that about 30% of these deaths would not have been identified by a PPE screening or even an ECG in some cases.²¹ In a previous study by Maron et al,²² 115 of the 158 cardiovascular deaths had a PPE, but only 4 were suspected of having cardiovascular disease, and in only 1 was the lesion identified correctly.

Best¹⁸ feels as though the PPE has minimal effect on overall mortality and morbidity associated with sport participation and that no standard PPE exists whereby a true consensus is found. Furthermore, Best¹⁸ states that there is no clear consensus on who should perform the PPE, and that, in fact, a proper medical history may be more effective than the clinical exam itself. On the other hand, Drezner and Corrado²³ found that approximately 1 in 500 athletes may have an occult cardiovascular condition. Due to the risk of sudden cardiac death, a cardiovascular screening and the integration of an electrocardiogram screening may be warranted.^{15,20,23}

In terms of the musculoskeletal exam in the PPE, numerous musculoskeletal findings that could be classified as deficits or perhaps non-normative during a PPE have not been demonstrated to be the causative factor of any eventual catastrophic or even mild injury. Magnes et al²⁴ reported on 10,540 preseason evaluations in children between ages 10 to 19 over a 5-year period and found that, overall, 47 (0.4%) failed the exam, 18 (0.2%) had hypertension, 6 (0.06%) presented with blindness, 5 (0.06%) were absent a testicle, and 4 (0.05%) had postconcussion symptoms. With such small numbers of conditions being identified, the resources of time and money are questioned as to their worth in performing such lengthy exams.