What are criterion-referenced health standards and how were they determined?

There are several types of standards commonly used with fitness tests. The CPFA uses criterion-referenced health standards or standards associated with good health. Scientific information is used to determine the amount of fitness needed to meet minimum health levels. The CPFA uses a *"Health-Related Fitness Zone"* to designate the range of fitness scores associated with good health. Scores falling below the Health-Related Fitness Zone are categorized as being in the "*Needs Improvement Zone*" to indicate that efforts are needed to bring the score into the Health-Related Fitness Zone. Fitness test performances that exceed the top score of the Health Fitness Zone are in the *"High Fitness Performance Zone."* The goals in Health-Related Fitness Zone are criterion-referenced health standards because they are based on how much fitness a child needs for good health.

Should feedback be provided?

Providing feedback is an important element of all assessment and should be provided to each student taking the assessment, as well as their parents. Feedback should focus on the status of students' fitness, based on health criteria, and should include information to help interpret results. Teachers may include student reports as part of student physical education portfolios, along with other information related to important physical education objectives. Feedback shared with parents should incorporate ways parents can help students plan personal physical activity programs that are suited to their child's personal needs.

Why do some standards for boys and girls differ?

Two factors must be taken into account when determining criterion-referenced health standards: inherent physiologic differences between genders, and differences in health risks between genders. Due to physiologic and anatomic differences between the genders, there may be inherent performance differences between boys and girls for a specific fitness component. For example, differences in cardiac function and body composition between adolescent boys and adolescent girls result in adolescent boys, as a general rule, having a higher aerobic capacity than adolescent girls. Specifically, if the minimum VO_2 max for healthy girls is 28 ml. kg^{-1}. min^{-1} and for healthy boys, 32 ml. kg^{-1}. min^{-1}, setting the same standard for both on the One-Mile Run Test would not be appropriate. In the case of aerobic capacity, gender differences are taken into account, along with existing data on health risks, in order to determine the standards.

In addition to physiologic differences, the two genders do not face the same health risks during their growth. To reflect these differentiated health risks, the standards are adjusted.

Why are some standards for boys and girls the same?

When there is no valid reason for expecting a difference in the performance between boys and girls, the standards are the same. For example, young children, particularly in Grades 1-6, do not always possess the physical and physiological differences that appear as children approach puberty (Falls & Pate, 1993). When this is true, the same standards may be used for both genders. (*Source:* Welk, G. J. & Meredith, M.D. (Eds.). (2008). Fitnessgram/Activitygram Reference Guide. Dallas, TX: The Cooper Institute).

Why are standards for aerobic endurance lower for girls than for boys?

Inherent gender-related differences in body composition and in hemoglobin concentration cause aerobic capacity, referred to as VO_2 max, for boys and girls who have the same level of physical activity, to be different. The differences prior to puberty are very small or nonexistent (for hemoglobin concentration), but they increase during puberty and adolescence. These differences are linked in part to differences in the reproductive hormones. The lower VO_2 max in girls compared to boys with the same physical activity level are not thought to be associated with increased health risk. The standards for boys and girls reflect the different levels of VO_2 max that are associated with increased health risk in adults (*Source:* Welk, G. J. & Meredith, M.D. (Eds.). (2008). Fitnessgram/Activitygram Reference Guide. Dallas, TX: The Cooper Institute).

Should students who are physically challenged be included in fitness testing?

Under Section 504 of the Rehabilitation Act of 1973, students with disabilities are required to be included to the best of their abilities: "No otherwise qualified handicapped individual in the United States… shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity which receives benefits from Federal financial assistance."

In administering the CPFA, students with disabilities or any kind of special need should be included to the greatest extent possible. Fitness activities, exercises, and testing should be part of the physical education curriculum and offered to all students. Historically, fitness tests were designed for individuals without disabilities. The assessment included in this manual, though designed for students without disabilities, can be personalized to include all children. Due to the fact that emphasis is placed on a personalized approach, and the reality that physical fitness profiles, components, and test items for students with a disability can require modification from those typically used, the many possibilities are not included in this document. Resources are available to assist physical educators with both the testing and standards that are appropriate for assessing the physical fitness of students with disabilities.

A child who is tested using an alternate method or with adjusted standards should not be included in the aggregate totals on the Summary Data Report. If a child with a disability meets standards that are appropriate for them, they should be recognized along with other children who meet the health-related fitness standards.

There are many resources available regarding levels of performance and the use of fitness assessments for students with disabilities.

Should a student with a doctor's note excusing them from the CPFA or specific test items be counted as exempt?

Students with notes from medical professionals are not automatically exempted from being tested and do not count as exempt if they do not take the assessment. The note from a medical professional can be used by a 504 planning team to make a determination that accommodations or alternate test items are necessary, which would qualify the student to be counted as exempt.

How should students taking adaptive physical education be assessed?

Students taking adaptive physical education should be assessed to the best of their abilities using appropriate accommodations and/or the use of alternate assessments. In state reporting, these students would be reported under the Exempt category.

Is a student with an IEP or 504 Plan automatically considered exempt from testing?

Students with disabilities are expected to be assessed to the best of their ability. An IEP or 504 Plan may outline specific test accommodations or indicate the use of alternate assessments. If a student is given an alternate assessment or the normal test item, but with the use of an accommodation, they should be reported in the "Exempt or taking Alternate Assessment" category when results are reported to the state.

Can a parent choose to not have their student assessed?

Like other state assessments, there is no "refuser" option for the CPFA. All students in the tested grades are expected to be assessed, except those who are medically exempt (i.e., has a long-term, documented medical condition that renders them medically/emotionally unable to attend school).

How to record a student who refuses to take some or all of the CPFA?

If a student takes any action associated with an assessment (for example, lines up for the one-mile run/walk) and then chooses not to continue, they should be recorded as a participant and given the lowest score. If a student refuses to take any steps toward completing a test item, they should not be counted as a participant.