Background

California *Education Code* Section 60800 requires each local educational agency (LEA) in California to administer a physical fitness test annually to all students in grades five, seven, and nine. The State Board of Education designated the *FITNESSGRAM®* as the required Physical Fitness Test (PFT) for California public schools. The *FITNESSGRAM®* is a comprehensive health-related fitness test developed by The Cooper Institute. The primary goal of the *FITNESSGRAM®* is to assist students in establishing lifelong habits of regular physical activity.

The PFT is administered between February 1 and May 31. It is required that students' individual results be provided to them upon completion of the test. Some LEAs may require that each student's PFT results be sent to parents and guardians.

There are several ways to use the PFT results. Schools can use them to determine the fitness levels of their students and provide direction for physical education programs. Students can use the results to assess their individual levels of fitness and develop personal fitness programs of maintenance or improvement. Parents and guardians can use the results to help their child plan fitness activities to meet their individual needs. LEAs also can use the PFT results to monitor the fitness status of their students in grades five, seven, and nine.

FITNESSGRAM®

The *FITNESSGRAM®* is designed to test six key fitness areas that represent three broad components of fitness: (1) Aerobic Capacity, (2) Body Composition, and (3) Muscle Strength, Endurance, and Flexibility. This third component is further divided into four areas: Abdominal Strength and Endurance, Trunk Extensor Strength and Flexibility, Upper Body Strength and Endurance, and Flexibility.

Performance Standards

The PFT uses the *FITNESSGRAM®* objective criteria to evaluate fitness performance. Student's performance is classified into the Healthy Fitness Zone® (HFZ®) or into other zones, depending on the fitness area. For Aerobic Capacity, results are classified as in the HFZ®, Needs Improvement – Some Risk, or Needs Improvement – High Risk. For Body Composition, results are classified as Very Lean, in the HFZ®, Needs Improvement – Some Risk, or Needs Improvement – High Risk. For all other areas, results are classified as in the HFZ® or Needs Improvement. The desired performance goal for each test option is the HFZ®, which represents a level of fitness that offers some protection against the diseases resulting from physical inactivity. The Needs Improvement designation indicates an area of fitness where students would benefit from activities designed to improve performance. The *FITNESSGRAM®* HFZ® and performance standards have been established according to gender and age and are updated on a regular basis. The latest version of the standards is available on the California Department of Education (CDE) PFT Web page at http://www.cde.ca.gov/ta/tg/pf/.

Test Areas

The *FITNESSGRAM®* provides test options for most of the fitness areas so that all students, including those with special needs, have the maximum opportunity to participate in the tests. For those fitness areas that have options, only one option is reported for each student.

Aerobic Capacity

Aerobic capacity refers to the maximum rate that oxygen is taken in and used by the body during exercise. Good aerobic capacity has been associated with a reduction in health problems. The three performance task options for aerobic capacity assess the capacity of the cardiorespiratory system by estimating VO_2 max or the maximum amount of oxygen, in milliliters, one uses in one minute per kilogram of body weight.

PACER (Progressive Aerobic Cardiovascular Endurance Run). This test is an alternative to the distance run. The objective is to run as long as possible, going back and forth across a 20-meter distance, and at a specified pace that is set to music and gets faster each minute. (The PACER is shown in the photo on the lower section of the cover.)

One-Mile Run. The goal of this test is to walk and/or run a distance of one mile at the fastest pace possible.

Walk Test. This test is only for students who are 13 years or older. The objective of this test is to walk a distance of one mile as quickly as possible while maintaining a constant walking pace for the entire distance.

Body Composition

The three body composition options estimate the level of fat in the body. This is a key component of fitness because excessive fat content has been associated with health problems, such as coronary heart disease, stroke, and diabetes.

Skinfold Measurements. This test involves taking measurements of the thickness of the skinfolds on the triceps and calf with a device called a skinfold caliper. These measurements are used to calculate the percentage of body fat.

Bioelectric Impedance Analyzer (BIA). The BIA is a device that measures body fat by sending a safe, low energy electrical signal through the body and generating an index of resistance. The resistance value (along with other values such as height, weight, age, and gender) is used to estimate the percentage of body fat.

Body Mass Index (BMI). To calculate the BMI, a student's weight and height measurements are inserted into a formula to produce an index of the relationship between weight and height. Although not as accurate an indicator of body composition as skinfold measurements, particularly for students with high muscle mass, it is an acceptable option in LEAs where policies limit the use of skinfold measurements.

Muscle Strength, Endurance, and Flexibility

Abdominal Strength and Endurance

Abdominal strength and endurance are important in promoting good posture, correct pelvic alignment, and lower back health.