



# **2009 California Physical Fitness Test**

**Report to the Governor  
and the Legislature**

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**Prepared by  
California Department of Education**

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## Introduction

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By law (California *Education Code* Section 60800), all public school districts in California are required to administer the physical fitness test (PFT) annually to all students in grades five, seven, and nine. The test used for the PFT is the *FITNESSGRAM*<sup>®</sup>, designated for this purpose by the State Board of Education. This report summarizes results of the spring 2009 test administration and provides a summary comparison with the results from 2007 and 2008.

The data provided in this report incorporates the revised results submitted by local educational agencies during the data correction window. Therefore, these final data may be slightly different from the preliminary results released to the public on November 30, 2009.

## Description of the Test

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The *FITNESSGRAM*<sup>®</sup> was developed by The Cooper Institute in Dallas, Texas with the primary goal of assisting students in establishing physical activity as part of their daily lives. In order to help students attain this goal, the *FITNESSGRAM*<sup>®</sup> provides a number of performance options so that all students, including those with special needs, have the maximum opportunity to participate in the test.

The *FITNESSGRAM*<sup>®</sup> assesses three broad components of fitness: 1) aerobic capacity, 2) body composition, and 3) muscular 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. To ensure the comprehensive assessment of fitness, the *FITNESSGRAM*<sup>®</sup> covers the following six fitness areas with multiple performance options in four of the six areas:

- **Aerobic Capacity** – Progressive Aerobic Cardiovascular Endurance Run (PACER), One-Mile Run, or Walk Test
- **Body Composition** – Skinfold Measurements, Bioelectric Impedance Analyzer, or Body Mass Index
- **Abdominal Strength and Endurance** – Curl-Up
- **Trunk Extensor Strength and Flexibility** – Trunk Lift
- **Upper Body Strength and Endurance** – Push-Up, Modified Pull-Up, or Flexed-Arm Hang
- **Flexibility** – Back-Saver Sit and Reach or Shoulder Stretch

More detailed information regarding the *FITNESSGRAM*<sup>®</sup>, the six fitness areas, and the performance standards can be found on the California Department of Education (CDE) [PFT Web page](#).



## Performance Standards

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The *FITNESSGRAM*® uses criterion standards to evaluate fitness performance. These standards represent a level of fitness that offers a degree of protection against the diseases associated with physical inactivity. Performance on each of the fitness-area tests is classified into two general levels:

- Healthy Fitness Zone
- Needs Improvement (i.e., not in the Healthy Fitness Zone)

The desired performance goal for each fitness-area test is the Healthy Fitness Zone (HFZ). (The HFZ standards for the different fitness-area tests are available from the CDE PFT *FITNESSGRAM*: [Healthy Fitness Zone Charts Web page](#).) Test results within the HFZ reflect reasonable levels of physical fitness that can be attained by most students. The goal for all students is to achieve a score within the HFZ for each fitness-area test.

(Note: It is possible that some students' scores exceed the HFZ. For PFT scoring purposes, the CDE considers these scores to be in the HFZ.)

## Results of 2009 Testing

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A total of 1,380,958 students were administered the California PFT in 2009, representing approximately 93 percent of California public school students enrolled in grades five, seven, and nine. This is the highest percentage of students in grades five, seven, and nine that has participated in the PFT since its inception ten years ago.

Tables 1 and 2 provide an overall summary of the results of the 2009 PFT by grade. The percentage of students in the HFZ for each fitness area is presented in Table 1, and the percentage of students meeting the HFZ standards by the number of physical fitness areas is presented in Table 2. Both tables include comparison data from 2007 and 2008.

As shown in Table 1, for most fitness areas and for all grades, greater percentages of students met the HFZ in 2009 than in the previous two years.

**Table 1: Percentages of Students in the Healthy Fitness Zone by Fitness Area (2007-09)**

Physical Fitness Area	Grade 5			Grade 7			Grade 9		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
Aerobic Capacity	62.7	64.2	65.7	62.2	63.8	66.1	55.5	60.5	63.0
Body Composition	67.9	68.4	68.4	67.7	68.4	68.7	68.7	69.7	69.8
Abdominal Strength	80.2	80.6	80.1	83.5	84.6	84.8	84.0	86.2	86.0
Trunk Extensor Strength	87.9	88.2	88.2	89.6	89.9	90.1	87.9	90.1	90.7
Upper Body Strength	68.5	69.6	69.8	70.1	71.2	71.8	72.2	75.3	76.8
Flexibility	68.1	69.6	70.8	73.9	76.3	77.4	73.6	79.2	81.0

As summarized in the bullet points below\*, the data in Table 1 indicate that a majority of students across all grades tested met minimum fitness levels for each area in 2009. However, there are still a number of California's students who need to continue to work toward becoming physically fit.

- Aerobic Capacity: 63-66 percent of students were in the HFZ
- Body Composition: 68-70 percent of students were in the HFZ
- Abdominal Strength: 80-86 percent of students were in the HFZ
- Trunk Extensor Strength: 88-91 percent of students were in the HFZ
- Upper Body Strength: 70-77 percent of students were in the HFZ
- Flexibility: 71-81 percent of students were in the HFZ

Of the six fitness areas tested, overall scores for Trunk Extensor Strength in 2009 were the highest (average percent in the HFZ = 89.7 percent). Aerobic Capacity, which is perhaps the most important indicator of physical fitness, had the lowest overall scores (average percent in the HFZ = 64.9 percent).

\*The figures shown in the bullet points have been rounded to the nearest percent.

**Table 2: Percentages of Students by Number(s) of Areas in the Healthy Fitness Zone (2007-09)**

Number of Areas in the Healthy Fitness Zone	Grade 5			Grade 7			Grade 9		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
6 of 6	27.1	28.5	29.2	30.9	32.9	34.2	30.1	35.6	37.9
5 of 6	26.3	26.6	26.7	26.2	26.4	26.5	26.5	27.1	26.9
4 of 6	20.2	19.6	19.3	19.1	18.1	17.8	19.2	16.9	15.9
3 of 6	13.7	13.2	12.8	12.5	12.1	11.5	12.2	10.3	9.7
2 of 6	8.0	7.7	7.5	7.0	6.6	6.4	6.3	5.4	5.0
1 of 6	3.6	3.4	3.5	3.0	2.8	2.7	2.9	2.5	2.3

NOTE: Percentages of students achieving 0 of 6 criteria not included; therefore, columns may not add up to 100 percent.

The PFT performance goal is to achieve the HFZ for all six fitness areas tested. As shown in Table 2, between 29 and 38 percent of students met this goal in 2009. Compared to 2008, these results represent a 0.7 percentage point increase in grade five students' scores, a 1.3 percentage point increase in grade seven students' scores, and a 2.3 percentage point increase in grade nine students' scores.

- Grade Five: 29.2 percent of students achieved the HFZ in six areas
- Grade Seven: 34.2 percent of students achieved the HFZ in six areas
- Grade Nine: 37.9 percent of students achieved the HFZ in six areas

Approximately 66 percent of public school students have **not met** the HFZ for all six fitness areas.

## Summary and Implications

This is the tenth year that data has been reported about the fitness of California's students in grades five, seven, and nine. Full and complete public access to the summary data is available on the [CDE PFT Web page](#). This Web page provides access to summary reports for the state and every county, school district, and school.

Current data show that approximately one-third of the students at the three grades tested are meeting the performance goal established for the PFT. California's students could benefit from a greater emphasis on all areas of physical fitness, especially aerobic capacity, body composition, upper body strength, and flexibility.



School, school district, and charter school administrators, teachers, parents, and guardians can examine the data to get a more complete picture of the yearly fitness levels of their students and children. School districts and schools are encouraged to use the data they receive from this test to examine and make improvements, as needed, to their physical education programs. Schools and parents and guardians have the opportunity to work together to use this information to inform plans and strategies to improve the physical activity opportunities offered to students during and outside of the regular school day. Collaboration among educators and families is key to effectively increasing the health-related physical fitness of all California's students.