

# South Carolina FitnessGram

School Year 2016-2017

Executive Summary

**FITNESSGRAM**<sup>®</sup>  
The Cooper Institute<sup>®</sup>



The BlueCross BlueShield of South Carolina Foundation is an independent licensee of the Blue Cross and Blue Shield Association.

The SC FitnessGram project is a state-wide effort to evaluate and ultimately improve health-related fitness among public school students in South Carolina. The project involved aggregation of health-related fitness data from public schools using a statewide FitnessGram software system. FitnessGram is the most widely used fitness test protocol in U.S. schools, and it is completed annually by over 10 million children nationwide.

While all South Carolina public schools serving grades K-12 are eligible to participate in the SC FitnessGram project, during the 2016 – 2017 school year over 100,000 students from over 700 schools in 60 school districts participated. FitnessGram was administered by physical education teachers to South Carolina public school students in 2<sup>nd</sup>, 5<sup>th</sup>, 8<sup>th</sup> and high school grades. FitnessGram assesses components of fitness that are known to be related to health outcomes in children and youth. Health-related criteria were applied in assigning performance on each test item to one of three categories: Healthy Fitness Zone, Needs Improvement, or Needs Improvement – Health Risk.

In the complete sample, the following percentages of South Carolina students scored in the **Healthy Fitness Zone** on the tests of the specified fitness components:

- Weight Status (BMI) 63%
- Cardiorespiratory Fitness (PACER or Mile run) 51%
- Upper Body Strength (push-ups) 59%
- Abdominal Strength and Endurance (curl-ups) 69%
- Trunk Extensor Strength and Endurance (trunk lift) 77%
- Flexibility (back-saver sit and reach right and left) 61%

The percentage of students achieving the Healthy Fitness Zone tended to decline with increasing age, and students who failed to achieve the Healthy Fitness Zone for weight status (i.e., those who were overweight or obese) also tended to perform at lower levels for the other test items. The percentage of students meeting the Healthy Fitness Zone standard for all test items was lower among students in poverty as compared to students not in poverty. Given the particularly important effects of weight status and cardiorespiratory fitness on the current and future health of students, it is a great concern that over one-third of South Carolina students were found to be overweight or obese, and nearly one-half failed to perform at the recommended level for cardiorespiratory fitness.

The SC FitnessGram project is supported by the Blue Cross Blue Shield of South Carolina Foundation, the South Carolina Department of Health and Environmental Control, and the South Carolina Department of Education. The University of South Carolina serves as the data analysis center for the project. The findings from this project will support planning and implementation of evidence-based programs and policies, across multiple sectors, to improve health-related fitness among school age youth.