

## Physical Activity

Physical fitness is a Colorado trademark, but it doesn't apply to nearly a third of our children. Colorado barely makes the top half of states for the percentage of young people who are physically active on a regular basis, despite the well-documented benefits of being active. The rate of physical activity is improving and obesity is declining, but more can be done to help our children stay healthy today and into their adult lives.

### Why It Matters

For the first time in history, children in the U.S. are expected to have a lower life expectancy than their parents, mostly due to increases in childhood obesity and associated conditions.<sup>1</sup>

Regular physical activity helps to keep children healthy and promotes behavior that can reduce the risk of obesity, diabetes and other chronic diseases in adulthood. Inactivity has costs – in dollars and in health. Children who are not physically active are more likely to become obese, a

### Defining the Indicator

Children (ages 6-17 years) who participate in vigorous physical activity – the kind that makes them sweat and breathe hard – at least four days a week.

condition that increases the risk for many other health issues. Obesity is also an economic threat, not only for individuals but for our state as a whole. Colorado spent \$1.6 billion treating diseases and conditions related to obesity in 2009.<sup>2</sup>

Along with physical health benefits, regular exercise promotes cognitive development at a crucial age in childhood. Active children often experience improved physiological and social well-being, as well as higher academic achievement.<sup>3,4,5</sup>

### In Colorado

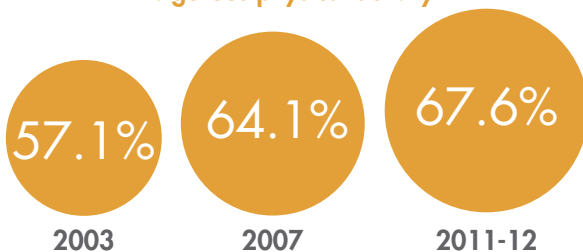
Colorado children are not getting enough exercise. Colorado ranks only 24th in the nation for the percentage of children (ages 6-17) who frequently participate in vigorous physical activity, according to the 2011-12 National Survey of Children's Health (NSCH) – a survey conducted by the Centers for Disease Control and Prevention.

But extensive statewide efforts to encourage children and families to be active may be showing results. The percentage of Colorado

children participating in vigorous physical activity has steadily improved over the past 10 years, climbing more than 10 percentage points, from 57.1 percent in 2003 to 67.6 percent in 2012. Meanwhile, childhood obesity rates among children ages 10-17 have fallen from 14.2 percent in 2007 to 10.9 percent in 2012. (It is important to note that the decline is not "statistically significant," which means there is the possibility it is due to chance.)

Still, there is room to improve. One third of Colorado children do not participate in regular physical activity. Children from low-income families are not as physically active as those in middle- or high-income families. In 2012, about 58 percent of Colorado children from families below the poverty line participated in vigorous physical activity compared with 74 percent of children from families earning four times the poverty level.

Percentage of children participating in vigorous physical activity



### Children's Physical Activity

Percentage of children in Colorado who participate in 20+ minutes of physical activity 4+ days a week:

# 67.6%

Colorado's Rank  
**24/50**

Best State  
**North Dakota**

North Dakota:  
Children's Physical Activity

# 75.6%

Data from 2012

### What if We Were No. 1?

If Colorado were ranked first instead of 24th



# 66,600

More Colorado children would participate in 20+ minutes of vigorous physical activity at least four days per week.

## Promising Practices

The U.S. Department of Health and Human Services recommends that children engage in 60 minutes of physical activity daily. Quality physical education (PE) is one way to get students active.

Some promising initiatives are underway in Colorado. Physical Education Quality Improvement grants, funded by the Colorado Health Foundation, are awarded to Colorado school districts to implement evidence-based PE curricula to improve the quality of PE. The grants had reached approximately 100,000 students in 42 school districts as of March 2014.

House Bill 11-1069, passed in 2011, requires elementary schools to provide students with an average of 30 minutes of physical activity per day. Local school districts can implement these requirements through PE classes, recess or classroom-based physical activity.

Still, many students do not have access to quality PE during the school day. Moving forward, it is important that Colorado children are provided adequate PE time - 150 minutes per week for elementary students and 225 for middle and high school students.<sup>6</sup> Heightened accountability - both on a state and local level - will be an important step in getting children active.

# Making a Difference

## St. Vrain Valley School District

For students in the St. Vrain Valley School District near Longmont, physical education is much more than an assigned class period to play tag or a game of soccer.

A three-year Physical Education Quality Improvement grant from the Colorado Health Foundation has allowed the district to launch an ambitious program to increase physical activity among elementary students through quality PE.

Among other things, the grant supported a grade-specific PE curriculum with standards, assessment tools and instruction.<sup>7</sup> The district also implemented WELNET, a fitness data evaluation system used by students and teachers. WELNET keeps fitness-testing data, records cognitive assessments and allows teachers to assign behavior logs that students fill out about their eating habits, exercise regimen and more.

Nearly all St. Vrain elementary students (96 percent) engaged in PE in 2012, averaging 71 minutes a week. Another promising trend is the time spent by students in moderate to vigorous physical activity during PE time, which increased from 44 percent to 53 percent between the first and second years of the grant.

The district is reviewing the curriculum with an eye toward making the program's structure, curriculum, professional development and funding sustainable.<sup>8</sup>

[www.svvsd.org](http://www.svvsd.org)



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A kindergartener enjoys a game with her classmates during a Physical Education class at Red Hawk Elementary in Erie.

<sup>1</sup>S.J. Olshansky et al., "A Potential Decline in Life Expectancy in the United States in the 21st Century," *New England Journal of Medicine* 352 (March 2005): 1138-45.

<sup>2</sup>Trogdon, J.G., Finkelstein, E.A. Feagan, C.W., Cohen, J.W. (2012). State- and Payer Specific Estimates of Annual Medical Expenditures Attributable to Obesity, 10, 214-220.

<sup>3</sup>Centers for Disease Control and Prevention, "The association between school-based physical activity including physical education and academic performance. U.S. Department of Health and Human Services," (2010): 1-84.

<sup>4</sup>Trost S. G, et al., "Physical activity and determinants of physical activity in obese and non-obese children," *International Journal of Obesity*. (2001) 25: 822-829. <http://www.nature.com/ijo/journal/v25/n6/pdf/0801621a.pdf>.

<sup>5</sup>Singh A. S, et al. Tracking of childhood overweight into adulthood: a systematic review of the literature. *Obesity Reviews* (2008) 9(5):474-488.

<sup>6</sup>National Association for Sport and Physical Education.

<sup>7</sup>St. Vrain Valley Schools. "Curricular Resources by Content & Grade Level," accessed December 5, 2013, <http://www.svvsd.org/about/departments/curriculum/curricular-resources>.

<sup>8</sup>Personal communication with Paige Jennings, Physical Education Grant Coordinator of St. Vrain Valley School District, December 4, 2013.

