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Policies and Standards for Promoting Physical Activity in After-School Programs

Introduction

Today, nearly one in three young people in the United States are overweight or obese and lack of physical activity contributes to the epidemic.¹ Regular physical activity promotes health, reduces risk for obesity and has been shown to improve students' academic performance.^{2,3} Leading public health officials recognize after-school programs as an important setting for promoting physical activity and preventing obesity.⁴⁻⁷ Nationwide, more than 8 million children and adolescents spend an average of eight hours per week in after-school programs.⁸

In recent years, 14 states have adopted policies and national standards have been developed to help increase the amount of physical activity children accumulate while attending after-school programs.⁹ In April 2011, the National Afterschool Association released physical activity standards for after-school programs and summer camps, but many of the existing standards and policies lack clearly defined benchmarks.¹⁰ Since many of the policy goals are difficult to

measure, leaders and staff at after-school programs, as well as state and national organizations, are not able to monitor compliance with the policies or evaluate their effectiveness. There also are substantial differences in staffing and resources, such as indoor and outdoor play space, among after-school programs,^{6,7} which should be considered as policies and standards are developed.

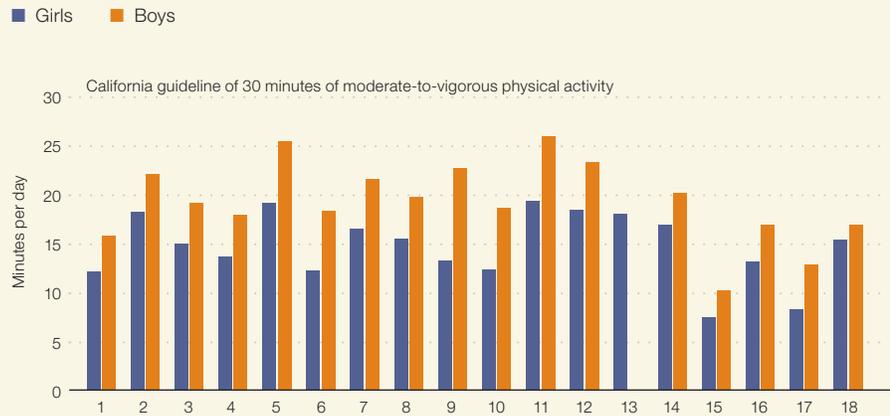
This brief summarizes research on physical activity in after-school programs and examines how policies can help after-school programs more effectively promote physical activity and prevent obesity among children.

Key Research Results

Children who attend after-school programs get some physical activity, but not enough.

- A study of 25 after-school programs in Omaha, NE, and Columbia, SC, found that the programs dedicated an average of 64 minutes of their daily schedule to opportunities for physical activity.¹¹ Among the programs, the time dedicated to physical activity ranged from 40 minutes to 120 minutes.
- Children accumulate 13 minutes to 24 minutes of moderate-to-vigorous physical activity each day at after-school programs.^{12,13} This is less than half of the minimum national recommendation for physical activity.
- Two large-scale studies of 253 children attending three after-school programs¹² and 934 children attending 25 after-school programs¹¹ found, on average, children accumulated 2,800 to 2,900 steps per day during the after-school program. This is less than one-third of the daily recommendation for children, which is 10,000 to 13,000 steps per day.¹⁴
- A systematic observation of 745 children in 12 after-school programs indicated that only half of the children were physically active during the observation periods.¹⁵
- Based on current practice, the total length of an after-school program and the amount of time allocated in the program's schedule for physical activity do not appear to be related to the amount of time children spend in physical activity during the program.¹¹ However, when after-school programs reduce the amount of time dedicated to physical activity, children accumulate less physical activity.¹⁶ Conversely, incorporating physical activity into an after-school program's daily routine can lead to increased physical activity among children.¹⁷

FIGURE 1. **Time Spent in Moderate-to-Vigorous Physical Activity During After-School Programs in Nebraska and South Carolina**¹⁸



Note: Data represent 771 children attending 18 after-school programs in Nebraska and South Carolina. Children had to attend the after-school program a minimum of 60 minutes to be included in the estimates. Children wore ActiGraph accelerometers up to four consecutive days; estimates use the Evenson et al., 2008 cutpoints.¹⁹

Physical activity policies in after-school programs vary.

- A comprehensive review identified national organizations and 14 states that have developed or adopted policies targeting physical activity within the after-school program setting.⁹ Some of these policies included general language, such as “provide scheduled daily play time,” while other policies were highly specific: “20 percent of daily program time for moderate-to-vigorous physical activity” or “accumulate 30 minutes to 60 minutes of moderate-to-vigorous physical activity daily within the after-school program.”
- The majority of existing policies regarding physical activity for after-school programs claim to be evidence-based, yet none of the evidence cited was based on data collected within the after-school program environment.⁹
- None of the policies regarding physical activity for after-school programs specified how compliance via state, national oversight organizations, national licensing agencies, or self-evaluation by after-school program leaders and staff will be conducted.
- A study¹² of 253 children ages 5 to 13 found that, depending on the policy, the percentage of children who met policy goals each day they attended an after-school program ranged from 0.1 percent for a specific goal (e.g., accumulate 60 minutes of physical activity daily) to 93 percent for a weak goal (e.g., provide opportunity for 30 minutes of physical activity every three hours).
- The largest study¹¹ of physical activity within after-school programs found that only 17 percent of children accumulated at least 4,600 steps per day while attending an after-school program. The study included daily observations of 934 children ages 4 to 14 at 25 after-school programs in South Carolina and Nebraska. The guideline for daily steps was developed to reflect California’s policy which states that children should accumulate at least 30 minutes of moderate-to-vigorous physical activity each day while attending an after-school program.²⁰

Strategies to increase physical activity among children in after-school programs vary and evaluations of the programs are needed.

- There are more than 52 physical activity programs that after-school programs can purchase.²¹ It is unclear how many of the physical activity programs have been evaluated for effectiveness.
- Evaluations of commercial programs, such as the Sports, Play, and Active Recreation for Kids (SPARK) Afterschool Program and the Child and Adolescent Trial for Cardiovascular Health (CATCH) Kids Club, suggest they have limited effectiveness at increasing physical activity among children compared with after-school programs that do not have a commercial program.^{15, 22, 23}
- A comprehensive review⁵ of 13 physical activity interventions conducted across numerous after-school programs found that the amount of time children spent in physical activity during the after-school program increased by as much as 17 percent after the interventions were implemented.
- The effectiveness of programs designed to increase children's physical activity within after-school programs is mixed; some programs have decreased the amount of time children spend in moderate-to-vigorous physical activity and others have shown modest increases.^{13, 14, 22, 23}
- One study¹⁷ found modest increases (of up to 10 minutes per day) in the total daily amount of time children spent in moderate-to-vigorous physical activity. This was achieved by allocating time for physical activity, involving staff in activities or making other changes to better support physical activity in after-school programs.
- A review of some strategies suggests that after-school programs should enhance professional development training for their staff and offer such trainings at multiple times throughout the year to help children be more active during after-school programs.⁶
- No studies have evaluated whether interventions that aim to increase children's physical activity in after-school programs effectively help meet goals for physical activity that are specified within existing policies.

Conclusions

After-school programs have the potential to help children accumulate up to 30 minutes of moderate-to-vigorous physical activity each day, which would satisfy half of the national recommendation for daily physical activity. Such a goal is a reasonable expectation based on the amount of time after-school programs typically allocate for physical activity. Yet more efforts are needed to better support physical activity in the after-school setting.

Although 14 states have adopted physical activity policies for after-school programs and recent national standards for physical activity have been developed,¹⁰ there is little evidence showing that after-school programs facilitate sufficient amounts of physical activity to meet policy goals. In addition, the majority of policies, including those recently developed, fail to clearly define how to measure progress toward meeting the goals. Finally, no studies have specifically evaluated strategies for increasing physical activity in after-school programs to determine if they are helping to meet one or more of the established state-level policies.

Policy Implications

The evidence suggests that after-school programs can meaningfully contribute to children's overall daily physical activity, but their potential impact is far from being realized. Public health officials and after-school program leaders should strive to increase the amount of physical activity children accumulate while attending after-school programs.

- Policies for promoting physical activity in after-school programs need to be *S.M.A.R.T.* The policies should *specifically* target an important outcome (e.g., children accumulate 30 minutes of moderate-to-vigorous physical activity). The outcome needs to be *measurable* by oversight and licensing agencies, as well as after-school program leaders and staff. There should be a clearly defined *accountability* system in place to reward those that attain policy goals (e.g., a star rating system to indicate high levels of compliance) and support those in need of additional assistance (e.g., technical support, professional development training of after-school program staff). The outcome should be *realistic* and able to be achieved within a well-defined *timeframe*.
- Policies should state the amount of time scheduled for physical activity opportunities and the amount of physical activity children should accumulate each day they attend the program. Because children are intermittently active, scheduled time for physical activity needs to be at least two or three times more than the expected levels of physical activity. For example, if the goal is for children to accumulate 30 minutes of moderate-to-vigorous physical activity, the after-school program should schedule 60 minutes to 90 minutes of time for physical activity.
- Several aspects of the after-school program environment should be considered as interventions for supporting physical activity are developed. For example, promising strategies include maximizing the amount of time children spend in physical activity within the period of time already allocated for activity; refining existing evidence-based curricula to improve its effectiveness at increasing physical activity; ensuring that activities appeal to boys and girls; improving indoor and/or outdoor play space and the availability of play equipment; and creating effective professional development trainings to help after-school program staff better promote physical activity.²⁴
- Low-cost and scalable strategies, such as those previously described, need to be evaluated to determine if they contribute to meeting physical activity policy goals.
- Feasible and low-cost methods for assessing physical activity during after-school programs should be validated in research, then used to monitor adherence to policy goals.²⁰

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Active Living Research, a national program of the Robert Wood Johnson Foundation, stimulates and supports research to identify environmental factors and policies that influence physical activity for children and families to inform effective childhood obesity prevention strategies, particularly in low-income and racial/ethnic communities at highest risk. Active Living Research wants solid research to be part of the public debate about active living.

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Endnotes

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