

POLICY INTERVENTION BRIEFS > PHYSICAL ACTIVITY INTERVENTION: PHYSICAL ACTIVITY IN SCHOOLS

- The following brief reports the effects of policies that increase physical activity in schools on the reduction of childhood obesity prevalence in the state of Louisiana, from an evidence-based modeling program.
- This policy intervention represents the establishment, implementation, and enforcement of physical activity (PA) and physical education (PE) requirements in schools, including before- and after-school programs.
- Policies may also limit school-based screen time.

Policy Goals

- Ensure that all students, including those in special education programs, in elementary, middle, and high schools meet daily PA guidelines.
- Assist schools in fulfilling the laws regarding PE and PA requirements.
- Minimize the amount of screen time children are exposed to while in class and during before- and after-school programs.
- Reduce the amount of time youth spend sitting.

What Does the Research Tell Us?

- Less than half (42.5%) of LA adolescents in grades 9-12 participate in daily PE at school.¹¹¹
- Consistent PA during childhood and adolescence improves strength and endurance, promotes bone and muscle growth, assists in weight-control, reduces overall anxiety and stress, promotes better self-esteem, and improves blood pressure and cholesterol levels.¹⁴⁴
- Quality PE classes that include PA are associated with the following: preventing disease, fighting obesity, promoting lifetime wellness and physical fitness, teaching self-management and motor skills, stimulating learning and a well-rounded education, and providing unique opportunities for activity and social development.¹⁸⁸⁻¹⁹⁰

Current Policy Environment in Louisiana

- In 2009, legislation was passed that expanded a prior bill that promoted improved PA programs in schools and mandated PA guidelines (for K-6). The amendment extended its PA mandates to grades 7 and 8 and required the establishment of local school health advisory councils to advise school boards on students' PA health education, and nutrition standards.¹⁹¹
- Additionally, in 2009, a policy enabled the implementation of state-wide health-related fitness assessments designed to determine the physical fitness levels of students in schools and to measure the effectiveness of PA interventions.¹⁹²
- In 2012, a Senate Resolution was adopted that requests state education agencies to conduct a study or survey to determine compliance with state law regarding vending machines and PA requirements in schools.¹⁹³

LA Dept of Education Guidelines:

Public schools¹⁹⁴

- Require elementary and middle schools to provide 150 minutes minimum of PE per week
- Require high school students to take at least 1.5 units of PE and 0.5 units of health education

Private schools¹⁹⁵

- Require 2 units of PE with at least 30 hours of daily health instruction taught in each unit

What is Screen Time?

“The number of minutes/hours that a child spends each day looking at a screen - TV, movie, cell phone or handheld/ personal computer.”¹⁹⁶

Recommended amount of screen time for children and youth is: **2 hours MAXIMUM**¹⁹⁷

WAYS TO SUPPORT

Physical Activity in Schools

- Enforce the PE and PA requirements for all grade levels.
- Regulate screen time limits of non-educational screen time (computer/television) during school hours and for before- and after-school programs.
- Develop school-based parent & child PA programs and groups.
- Join Safe Routes to School to promote walking and biking to school.
- Encourage students to spend breaks being physically active.
- Encourage children and adolescents to play sports and promote the formation of non-competitive (e.g. intramural) sports teams and leagues.

Achieving Maximum Intervention Results

- Initial conditions for this policy intervention were determined from estimates of the percentage of children meeting the recommended levels of PA and screen time daily, and based on the survey data reported in conjunction with established policy mandates.^{111,198} Because PA policies in Louisiana's elementary, middle, and high schools are not fully enforced, the initial conditions level was set at the lowest value (0%).
- Maximum intervention (100%) reflects a scenario where all Louisiana's children and adolescents are meeting recommended PA levels (60 minutes) and screen time limits (less than two hours) at school.



Projected Effect on Louisiana's Childhood Obesity Prevalence

PRISM Results: Can a Policy Intervention to Support Physical Activity in Schools Reduce the Prevalence of Childhood Obesity?

Policy Strength	Maximum (100%)	Maximum (100%)	Moderate (50%)	Moderate (50%)
Year Implemented	2013	2016	2013	2016
% Change [ROU [^]]	↓ 5% [3-7%]	↓ 4% [2-5%]	↓ 1% [0-2%]	↓ 1% [0-2%]

[^] ROU refers to the Range of Uncertainty determined by the PRISM sensitivity analysis
 Note: The symbol ↓ signifies that the percent change is negative, and the percent represents a decrease.

- Supporting and enforcing physical activity policies in schools may play a role in incrementally moving the needle to reduce childhood obesity.
- Maximum strength policy interventions project a higher reduction in childhood obesity prevalence in Louisiana.

Implementing the Policy

Recently enacted policies have established and re-defined guidelines for PE in Louisiana. However, these policies may not be implemented or enforced because children still are not participating in enough PA. While teachers and principals attempt to meet performance standards for statewide standardized testing, time allotted for PA or PE is often eliminated so students can concentrate on their academic studies.¹⁹⁹ However, many studies have shown that PE does **NOT** negatively affect academic performance, and actually has favorable effects on academic achievement.²⁰⁰⁻²⁰² As outlined by the National Association for Sport and Physical Fitness, there are many resources that assist teachers in finding ways to incorporate PA into their lesson plans.^{203,204}

Although schools bear the burden to offer comprehensive PE classes by qualified teachers, parents and community groups can assist schools in helping youth participate in out-of-school-time PA.²⁰⁵ Recreational organizations can promote or offer affordable sports activities at or near schools. Parents or caregivers can form a "walking school bus" to actively transport children to nearby schools.

Additionally, physicians and nurses in clinics or in schools can support active school communities and be important advocates for policy changes that support healthy nutrition, increase PA levels, and reduce sedentary time, as well as provide information for families about regular PA and reduced sedentary time in their clinical practices and school based health centers.^{206,207}

! "Physical education is at the core of a comprehensive approach to promoting physical activity through schools. All children, from pre-kindergarten through grade 12, should participate in quality physical education classes every school day with a qualified and appropriately trained physical education specialist. Physical education has the potential to help students develop the knowledge, attitude, skills, behavior, and confidence needed to be physically active for life."²⁰⁸
 ~Bulletin 102: Louisiana Physical Education Content Standards: State Standards for Curriculum Development

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