

Taskforce on Childhood Obesity

A Case for Physical Activity in
Schools and Communities

The Task Force on Childhood Obesity

Objective:

- To gather and maintain current information regarding childhood obesity that can be used to better understand the impact of obesity on children's health
- This Physical Activity Presentation will show the importance and benefits of physical activity , and explore ways to increase physical activity in children in school and community

- This presentation will not address nutrition specifically. We recognize that Nutrition and Physical Activity are both essential and interconnected components of health and healthy lives
- We appreciated the previous presentations outlining CT food service guidelines and nutritional standards

History of physical activity in school environment

- US Department of Health and Human Services recommends that children and adolescents receive 60 minutes of physical activity each day
- Historical perspective – recess was once conventional practice driven by wisdom that children need to move and play
- Now recess must be legislated, and still some administrators are trying every angle to eliminate it
- Physical fitness -- 1 out of 3 of CT students do not have healthy aerobic capacity [CT Physical Fitness Assessment data, actual 29%]

Physical Activity – National Data

58.9% of districts required and 34.2% recommended that elementary schools provide students with regularly scheduled recess for students.

Among the 93.1% of districts that required or recommended that elementary schools provide students with regularly scheduled recess:

1.1% required or recommended less than 10 minutes per day.

24.3% required or recommended 10 to 19 minutes per day.

32.8% required or recommended 20 to 29 minutes per day.

CT: 20 minutes daily “period of physical exercise” for K-5

CDC does not count “period of physical exercise” as “recess”

30.2% required or recommended 30 or more minutes per day.

11.5% did not have specified time requirements or recommendations.

[SHPPS 2012] About SHPPS: SHPPS is a national survey periodically conducted to assess school health policies and practices at the state, district, school, and classroom levels. SHPPS was conducted in 1994, 2000, and 2006. The 2012 study collected data at the state and district levels only. School- and classroom-level data collection will take place in 2014.

Taking Away PA

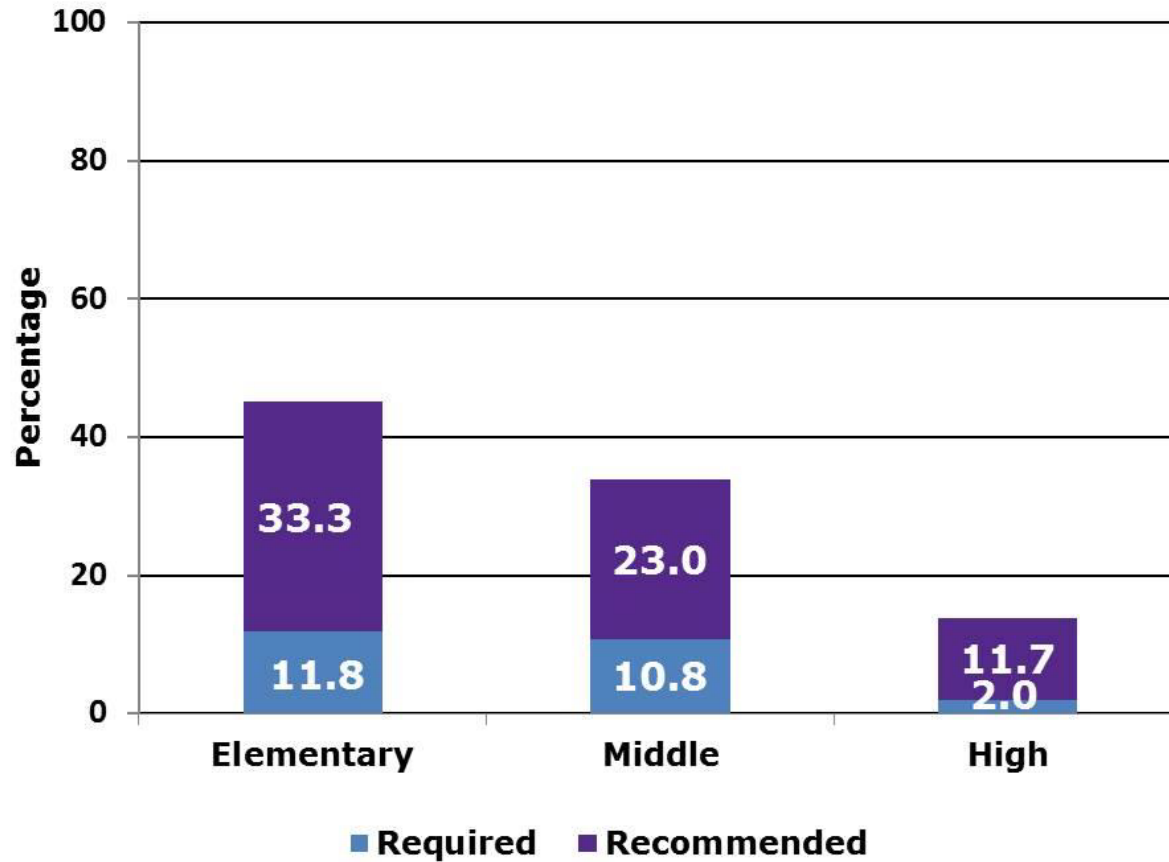
Percentage of Districts That Prohibited or *Actively Discouraged* Schools From Using Physical Activity as Discipline

Discipline	Districts	= %age of districts that allow it
Excluding students from all or part of physical education to punish students for bad behavior or failure to complete class work in another class	71.0	29
Excluding students from all or part of physical education to punish students for bad behavior in physical education	63.9	36.1
Excluding students from all or part of recess for bad behavior or failure to complete class work	44.2	55.8
Using physical activity to punish students for bad behavior in physical education	68.4	31.6
Using physical activity to punish students for poor performance or bad behavior in interscholastic sports	63.5	36.5

National Data SHPPS 2012

CT Public Act No. 13-173 (the Childhood Obesity Task Force bill) requires local districts to have a policy regarding using or withholding PA as punishment

Percentage of Districts That Required Schools to Provide Students with Regular Physical Activity Breaks at Each School Level



Current School Environment

- 58.9% of districts required and 34.2% recommended that elementary schools provide students with regularly scheduled recess. [SHPPS 2012]
- Increased academic and testing requirements have led to reduction of time spent for physical activity, even though sustained physical activity helps students succeed academically

[Youth Risk Behavior Surveillance System (YRBSS), CDC, 2013;

The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance, CDC & USDHHS, 2010]

Current School Environment

Recommendations for PE and PA during the school year

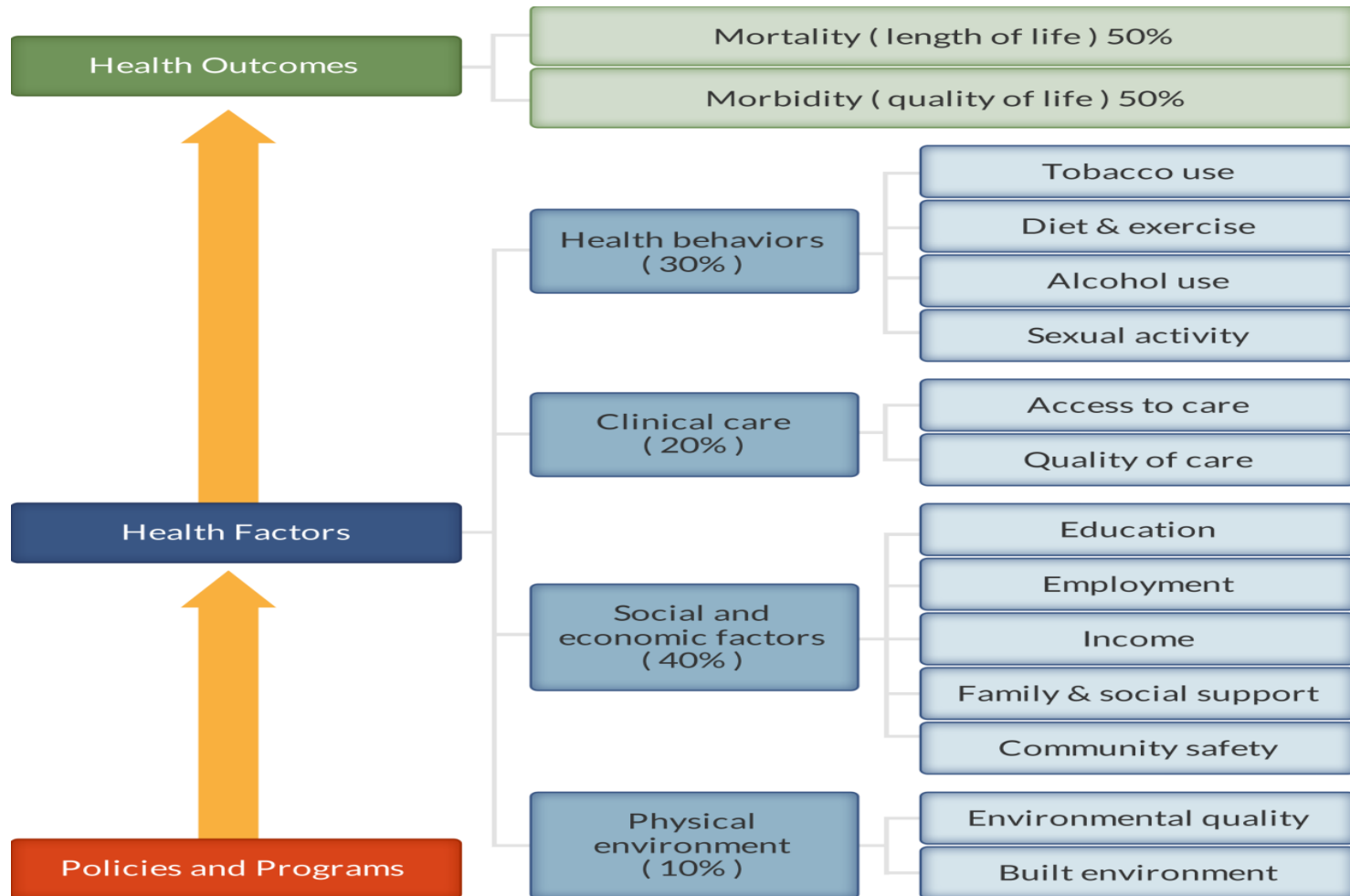
Recommended	PK-5	6-8	9-12
PE CT	92 hrs/year	139 hrs/year	139 hrs/year
PA CT	184 hrs/year	184 hrs/year	184 hrs/year

Actual 2010-11	PK-5	6-8	9-12
PE CT	38 hrs/year	55 hrs/year	46 hrs/year
PA CT	37 hrs/year	0 hrs/year during school day 15/218 schools w/7-8 offer 20 min recess	

Sources: CT Education Data and Research (CEDaR) Data Tables, 2014; CDC. Youth Risk Behavior Surveillance—United States, 2011. *MMWR* 2012;61(SS-4).

108,720 students participating in extramural physical activities i.e. interscholastic sports and Unified Sports) [168,606 students enrolled in CT high schools in 2012-13 = 64%] 2012-2013 school year, 31543 participated in interscholastic athletics in Connecticut - 17437 boys / 14106 girls. A good portion of them play more than one sport. Middle school data unavailable. For intramural sports. for the number of participants in intramural sports. (CT Interscholastic Athletics Conference (CIAC), 2014)

Barriers to Physical Activity – Social Determinants of Health County Health Rankings



Barriers to Physical Activity

Health behaviors(30%) – diet and exercise important for short and long term health, builds strong muscles and bones, maintains lean body mass, decrease obesity and chronic diseases such as diabetes and heart disease

Social and economic factors(40%) – education, employment and income levels directly impact families access and quality of health care(20%)

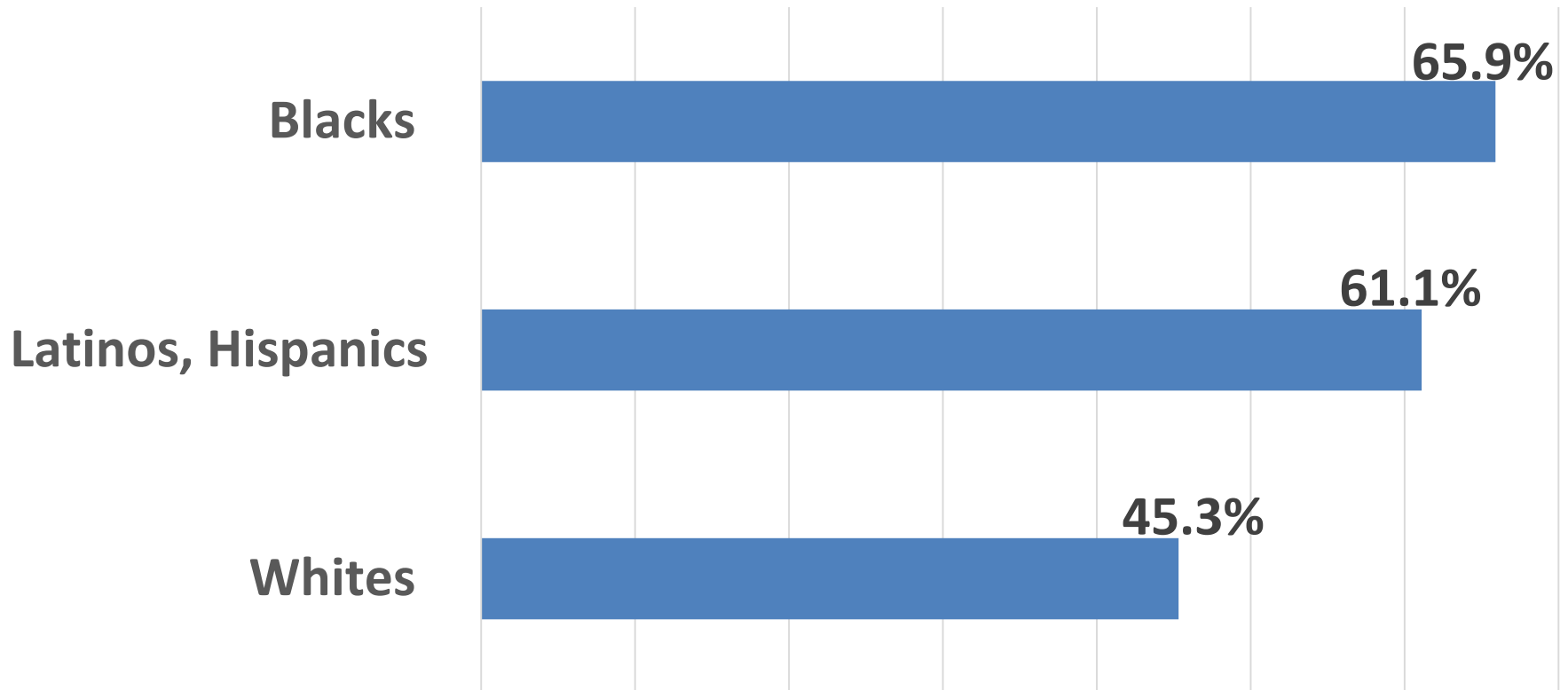
Income linked to inability to pay for gym or sport clubs membership, or school based sports that may require uniforms and equipment

*Family and community support includes culture, ethnic and gender differences and their attitudes towards physical activity (or lack of) or body size: cultural acceptance of girls larger body size (Preventing Chronic Disease: Volume 5:No2, April 2008); boys encouraged to be more physical activity than girls (Childhood Obesity: Volume 8, No 5, Oct 2012)

Physical environment(10%) – environmental quality and built environments – conditions of environment from side walks, cross walks or roads, are their open green spaces or parks to play – is it safe?

Physical Inactivity

The lack of engagement in the recommended level of physical activity varies among cultural and ethnic groups



- High School Students, YRBS
- CT DPH, "Nutrition- Physical Activity and Obesity Program", Fall 2013

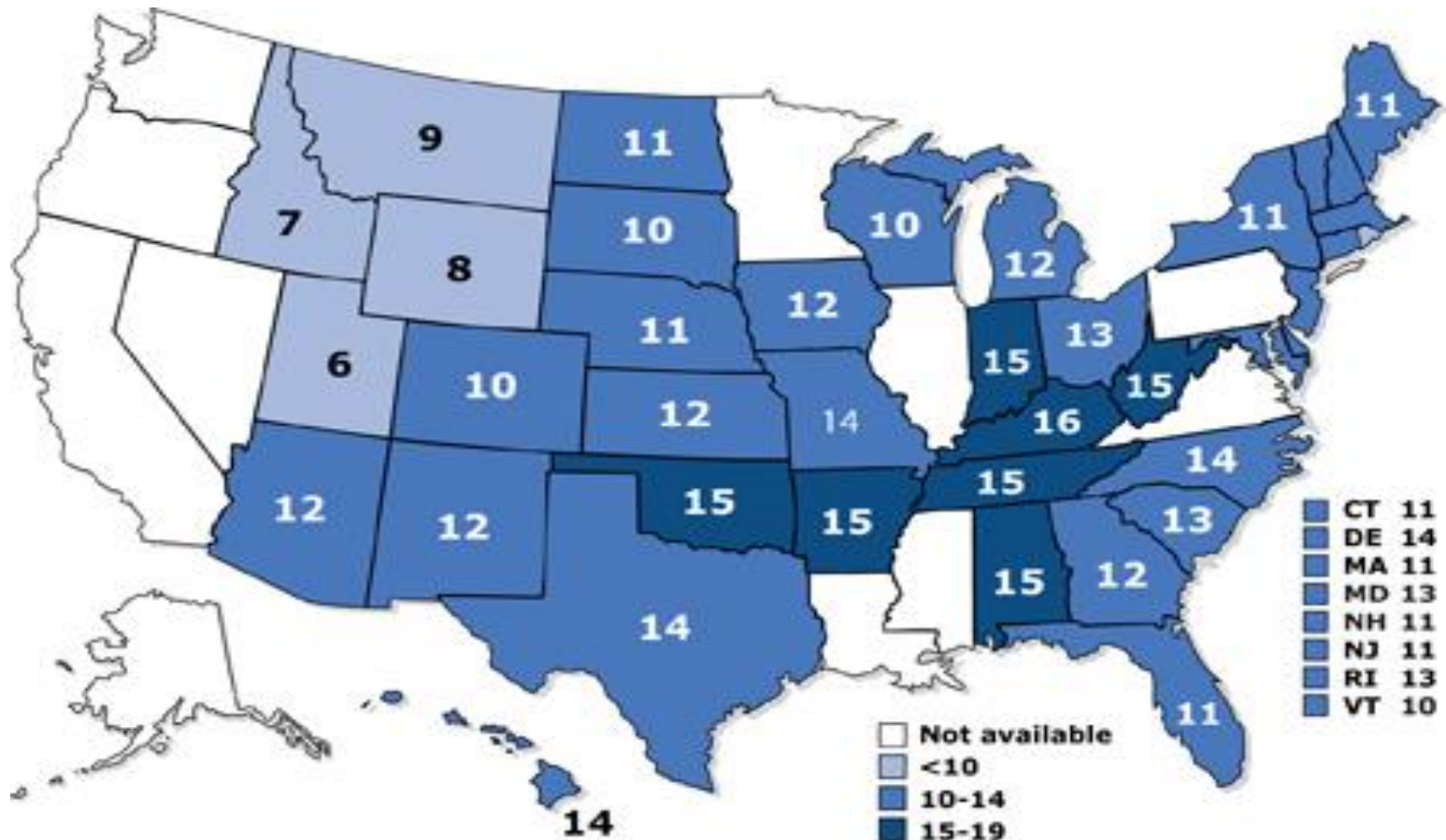
Consequences of Physical Inactivity

In CT:

- One in two adults (59.6%) are reportedly overweight or obese (24.5%). And 15.8% of children ages 2-5 are obese (F as in Fat 2012 Issue Report)
- More than one in three Hispanic children (48.3%) and African American children (43.6%) are overweight or obese. Compared to 24.7% white children being overweight or obese (2011/2012 National Survey of Children's Health)
- An estimated 54.9% of Connecticut children do not meet the recommended levels of physical activity. (Connecticut Association of Health, Physical Education, Recreation and Dance (CTAHPERD))

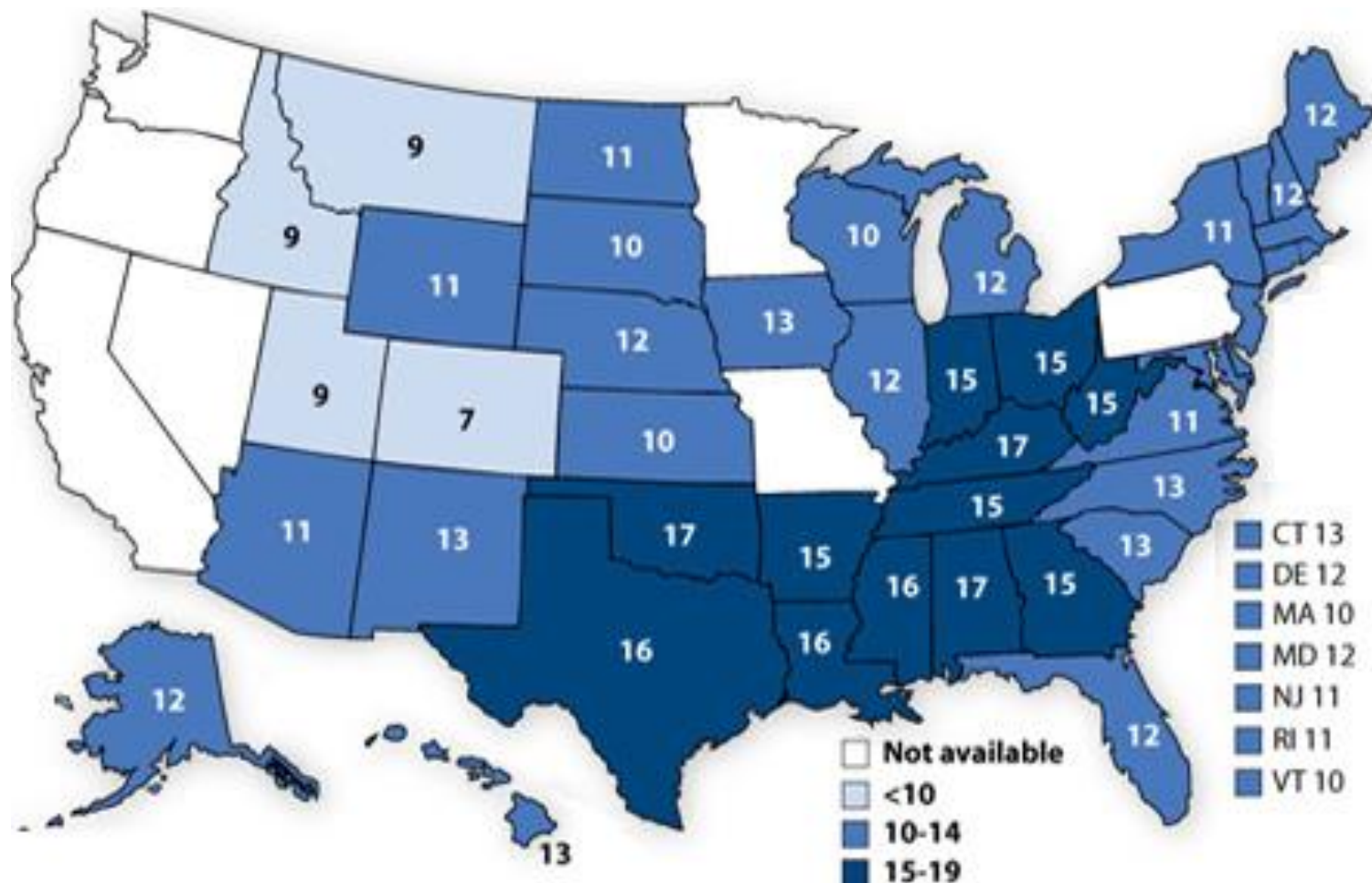
Obese Youth Over Time

Percentage of high school students who were obese* —
selected U.S. states, Youth Risk Behavior Survey, 2005



Obese Youth Over Time

Percentage of high school students who were obese* — selected U.S. states, Youth Risk Behavior Survey, 2011



Consequences of Obesity

- Children who are overweight or obese are at risk for heart disease, high blood pressure, strokes, diabetes, cancer, joint problems leading to arthritis, sleep apnea
- Additionally , these children may feel depressed and may be at greater risk for lower self-esteem, and self-consciousness due to being bullied or teased about their weight. They may also experience discrimination, be socially marginalized, and have a decreased quality of life (CT DPH, Fall 2013)
- Nationally, childhood obesity direct cost is \$14.1 billion
- In 2006, obese patients spent an average of \$1,429 more for their medical care than did people within a normal weight range. That is a 42 percent higher cost for people who are obese [CDC].

Cost of Obesity

- Connecticut taxpayers paid \$665 million for obesity-related illnesses in 2003.
- 2008 study found that both the nutrition situation and the lack of physical activity in the Connecticut schools were alarming, and that local boards of education had done little.

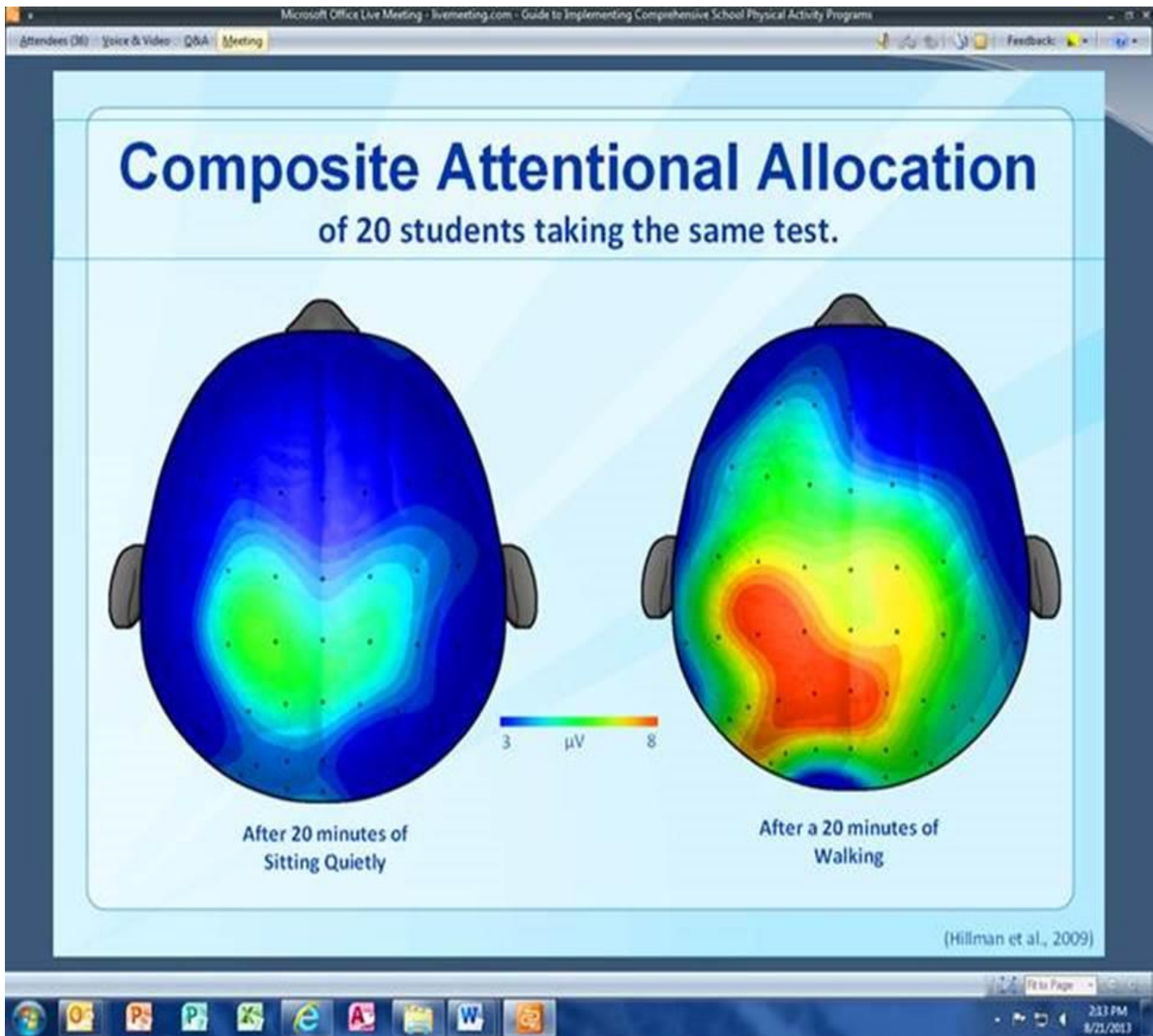
[Journal of the American College of Physicians, April 2005
Environment and Human Health, Inc. (EHHI), 2008.]

Benefits of Regular Physical Activity

- Helps build and maintain healthy bones and muscles.¹
- Helps reduce the risk of developing obesity and chronic diseases, such as diabetes, cardiovascular disease, and colon cancer.¹
- Reduces feelings of depression and anxiety and promotes psychological well-being.¹
- Helps improve students' academic performance, including
 - Academic achievement and grades
 - Academic behavior, such as time on task
 - Factors that influence academic achievement, such as concentration and attentiveness in the classroom.⁴

1. U.S. Department of Health and Human Services. *Physical Activity Guidelines Advisory Committee report*. Washington, DC: U.S. Department of Health and Human Services, 2008.

4. CDC. *The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance*. Atlanta, GA: U.S. Department of Health and Human Services; 2010.



Hillman in Castelli, 2009. *Physical Activity, Fitness, & Academic Achievement*

Long-Term Consequences of Physical Inactivity

- Overweight and obesity, which are influenced by physical inactivity and poor diet, can increase one's risk for diabetes, high blood pressure, high cholesterol, asthma, arthritis, and poor health status.⁵⁻⁷
- Physical inactivity increases one's risk for dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.¹

1. Daniels S, Arnett D, Eckel R, et al. Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment. *Circulation* 2005;111:1999-2012.
2. Institute of Medicine. *Preventing Childhood Obesity: Health in the Balance*. Washington, DC: The National Academies Press; 2004.
3. Dietz WH. Overweight in childhood and adolescence. *New England Journal of Medicine* 2004;350:855-857.

Recommendations for Increasing Physical Activity in Schools and Communities

- Implement **free or low cost activities** for children and families both in schools and in communities
- **Educate communities** on the benefits of creating safe walkable and/or bikeable opportunities for its residents
- **Train school and community (lay and faith) personnel** to provide physical activity opportunities for youth
- **Involve parents** in discussions about the impact of being overweight on the physical and emotional health of their children – avoid “fat” and “obesity”. Also, involve parents in creating solutions; share information with them about current initiatives that appear to be effective.
- **Engage pediatricians and other health care providers** – create scripts or provide information that facilitate conversations with parents

Current Best Practices in CT Schools

Town	Program / Activities	Grades PK-6	Grades 7-12
Southington	Activate Southington Project Origin of P.A.S.S. Physically Active School Systems	✓	✓
New Haven	Mighty Milers school running project	✓	
West Haven	Movement Enhanced Learning	✓	
Hartford	Activity Works	✓	
Wallingford	ABCs for Fitness	✓	
Hamden	ABCs for Fitness Physically Active Health Education	✓	✓
Portland	Physically Active High School English		✓
East Hartford	physical activity prior to standardized testing	✓	

Current Best Practices in CT Schools

Town	Program / Activities	Grades PK-6	Grades 7-12
West Hartford	<p>physically active 2nd Grade classroom; 3rd Grade using dances to remember steps in solving word problems; 5th Grade team building and bonding; Special Education connecting physical movement to sign language, numeric patterns, vowels. In Art, using physical/kinesthetic components to help students understand and apply concepts of horizontal, vertical and diagonal, working out the physical/visual relationships of the arm-body-leg-etc. relationships In Math, using different movements to count steps in a dance and convert decimal-based to metric equivalents.</p>	✓	
Connecticut Technical High School System	Teaching about trade-specific fitness, i.e. electrical and plumbing trades require flexibility, construction trades require upper body strength		✓
Ridgefield	<p>Physically active classrooms promote learning environments to engage in active learning, problem solving, inquiry, choices, peer interaction and creativity with active academic learning breaks; energizers, transition stretches, using movement songs to dance and academic learning breaks; “Movement birthday” celebrations</p>	✓	

Current Best Practice in CT Schools

Town	Program / Activities	Grades PK-6	Grades 7-12
Naugatuck River Valley	Valley Initiative to Advance Health & Learning in Schools (VITAHLS) ABC for Fitness & Nutrition Detectives	✓ ✓	✓
Plymouth / Terryville	Middle and high schools opening new wellness centers; purchase of kinesiology tables [kin-tables]; outdoor bicycles for use during PE classes; after school cardio fitness and running clubs at the elementary schools.	✓ ✓	✓ ✓
CT State Department of Education / Coordinated School Health Partnership	<p>Training for Classroom Teachers CT Cadre of Physical Education Trainers professional development workshops on relevant topics, i.e.:</p> <ul style="list-style-type: none"> • P.A.S.S.: Physically Active School Systems • Interdisciplinary Activities for Elementary • Interdisciplinary Activities for Secondary • Physically Active Learning: Incorporating Physical Activity into Academic Teaching and Learning <p>Physically Active Classrooms Institute multi-disciplinary teams of all grade levels and subjects; introduced concept of physically active learning through academic subject lessons and curricula, teaching and classroom management strategies and assessments of students learning.</p>	✓	✓

Current Best Practice in CT Schools

Town	Program / Activities	Grades PK-6	Grades 7-12
<p>Hartford Public Schools</p> <p>New London Schools & Community Center</p> <p>New Fairfield Public Schools</p> <p>Litchfield Public Schools & Regional Education Resource Center</p>	<p>SPARK: SPARK is a research-based, public health organization dedicated to creating, implementing, and evaluating programs that promote lifelong wellness.</p> <p>SPARK strives to improve the health of children, adolescents, and adults by disseminating evidence-based Physical Education, After School, Early Childhood, and Coordinated School Health programs to teachers and recreation leaders serving Pre-K through 12th grade students.</p> <p>Each SPARK program fosters environmental and behavioral change by providing a coordinated package of highly active curriculum, on-site teacher training, extensive follow-up support, and content-matched equipment.</p> <p>See more at: http://www.sparkpe.org/what-is-spark/#sthash.2YPjO5dt.dpuf</p> <p>Elementary Physical Education: K-2 PE, 3-6 PE Secondary Physical Education: Middle School PE, High School PE See more at: http://www.sparkpe.org/physical-education/#sthash.JO2hsGfX.dpuf</p>	<p>✓</p>	<p>✓</p>

Best practice highlight :

ABC for Fitness

- Developed by Dr. David Katz, MD, MCP, Yale University's Prevention Research Center
- ABC (Activity Bursts in Classrooms) for Fitness designed to “convert wasted time in school into productive, health-promoting activity bursts” taking place right in the classrooms throughout the day
- ABC for Fitness is offered to schools at no cost in dollars
- Proven effective for Grades K-5
- Complimentary version ABE: Activity Breaks Everywhere

Best practice - Physically Active Classrooms: ABC for Fitness

- At least 30 minutes of physical activity, five minutes bursts for grade levels, K-5 (six minutes per session – warm-up, core activity, and cool down)
- Complements existing class curriculum – Language Arts, Social Studies, Math, Science, Health
- Physical active learning improves retention and learning
- Training for teachers and other implementers of ABC for Fitness already developed and conducted for schools in New Haven, Hamden and Wallingford, CT and Independence, MO
- Yale-Griffin Preventive Research Center conducted pilots, research and implementer training

Best practice: Physically Active Classrooms Ready-Made Programs

Physical activity idea books for elementary classroom teachers to help increase physical activity in the classroom and during the school day

Brain Breaks

Take 10

Energizers!

BeActive

Eat Smart Move More

Fuel Up To Play 60 In-ClassPlaybook

ABC for Fitness *and*

ABE for Fitness

Let's Move *and*

Let's Move! Active Schools

<http://www.emc.cmich.edu/brainbreaks/>

www.responsiveclassroom.org/product/energizers

<http://www.davidkatzmd.com/abcforfitness.aspx>

www.Take10.net

school.fueluptoplay60.com/playbook/play.php?id=15812259

<http://abeforfitness.com/page.php?p=3>

Best practice highlight: Physically Active School Systems

Embed physical activity throughout the school day:

Improve/maintain fitness, health & wellness

Incorporate activity before/after school, at home, in the community

P.A.S.S. Training Programs for schools and communities

Promising Practices

Recess Before Lunch

- a change in the traditional scheduling order of lunchtime and recess: allows students to go to recess first, and then eat lunch
- policy change requires careful planning and efficient communication
- strong commitment from school administrators, educators, and food service staff to make the change successful
- in theory, beneficial to the students and staff in creating a better eating environment

Best Practices: National Models

- **Let's Go! 5210** *www.letsgo.org*
- Childhood obesity prevention message founded in Greater Portland Maine in 2006, now works with more than 1,000 sites in Maine to promote consistent messaging to increase physical activity and healthy eating for children, and youth, from birth to 18
- Recommendations: 5 fruits and vegetables, 2 hours or less of recreational screen time, 1 hour or more of physical activity and 0 sugar-sweetened drinks
- Evidence-based message that offers 10 strategies that can be adapted to change behaviors and bring about policy and environment change in the following sectors: afterschool, early childhood, health care, schools, work places and community.
- Out of their 10 strategies, Let's Go! has prioritized the following for the most impact within afterschool, early childhood and schools:
 - Provide healthy choices for snacks and celebrations
 - Provide water and low fat milk, limit sugary beverages
 - Provide non-food rewards
 - **Provides opportunities for physical activity every day**
 - Limit recreational screen time

Best Practices: National Models

- 5210 message has been adapted by:
 - Healthy Numbers for Kentucky Families
 - 5210 Steps Up! Portsmouth, New Hampshire
 - 5210 Healthy New Hampshire
 - 5210 Everyday, San Diego
 - Hawaii 5210 Let's Go!

www.lets-go.org

Best Practices: National Models

- **Let's Move** –launched in 2010 to address childhood obesity with comprehensive strategies with common sense.
- Addresses health disparities with African American and Hispanic communities; empowers all parents and caregivers to get involved
- Emphasizes USDA's MyPlate as an important tool to communicate healthy eating every day
- Encourages neighborhood and faith-based organizations, schools and healthcare centers to get active through
 - Safe Routes to Walk and Bike, walking clubs, community gardens
- In more than 400 cities across the country

www.letsmove.gov



Recommendation:

SPAC

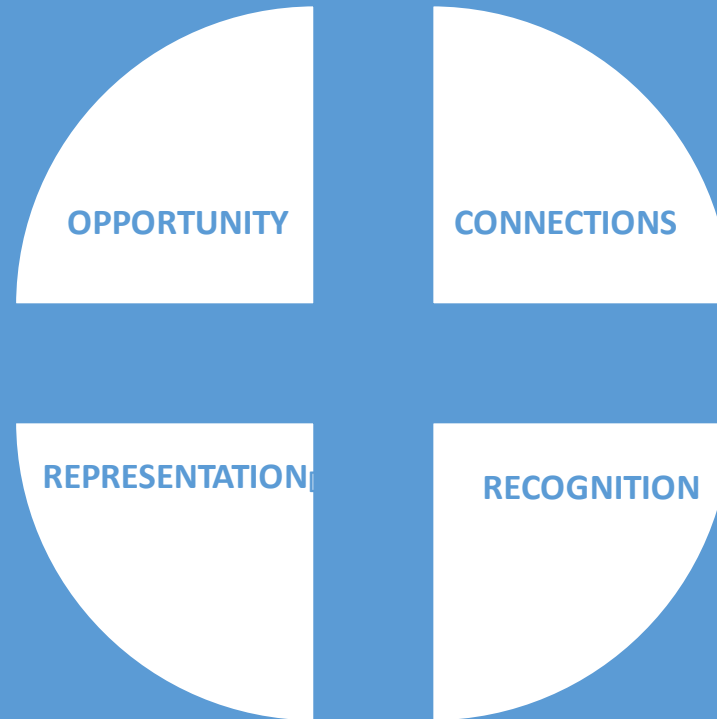


Statewide Physical Activity Commission

Members of the commission would serve as volunteers, and would be responsible to organize and maintain a clearing house of information and activities to support physical activity throughout the state

Promoting Physical Activity for Everyone Everywhere

PHYSICAL ACTIVITY COMMISSION



CONNECTIONS

Web site

- ☞ Resources, including contacts for assistance and support
- ☞ Best practices
- ☞ Featured schools and communities / success stories

RECOGNITION

Recognition program for physically active schools (PAS's) & physically active communities (PAC's)

- ☞ Criteria to be established based on evidence and best practice
- ☞ Selection committee for awarding grants, special projects and awards
- ☞ Physically Active Community (PAC) Recognition award (e.g. "Heart Safe Community" signs example can be seen at <http://heartsafe-community.org/>)
- ☞ Annual ceremony to feature legislators' local PAS's and PAC's

REPRESENTATION

Partners and stakeholders to be represented on commission, at least:

- Students, Parents, Teachers, Coaches
- United Way
- DOT – Safe Routes to School
- Commission on Children
- CIAC – Kidsmarathon
- Recreation & Parks Association
- CT Coalition Against Childhood Obesity
- DEEP
- YMCA and other youth and family organizations
- Faith-based organizations
- State education agency (SDE)
- Representative of diverse socio-economic strata, genders, ethnicities, cultures

OPPORTUNITY

Provide open grants for promoting physical activity in early childhood programs (i.e. private, charter, small, underfunded, faith-based)

SPAC



CONNECTIONS



Web site

- Resources, including contacts for assistance and support
- Best practices
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Promoting Physical Activity for Everyone Everywhere

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Promoting Physical Activity for Everyone Everywhere

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DOT – Safe Routes to School

Commission on Children

CIAC – Kidsmarathon

State education agency (SDE)

DEEP

Recreation & Parks Association

Students, Parents, Teachers

CT Coalition Against Childhood Obesity

YMCA and other youth and family organizations

Faith-based organizations

Representative of diverse socio-economic strata, genders, ethnicities, cultures

Promoting Physical Activity for Everyone Everywhere

OPPORTUNITY

SPAC

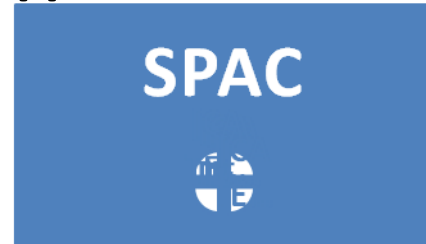


Provide open grants for promoting physical activity in:

- early childhood programs (i.e. private, charter, small, underfunded, faith-based)
- At-risk populations
- Capacity-building projects

Promoting Physical Activity for Everyone Everywhere

Physical Activity Commission



- Web site
 - Resources, including contacts for assistance and support
 - Best practices
 - Featured schools and communities / success stories
- Recognition program for **physically active schools (PASs)** & **physically active communities (PACs)**
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Reflection

Do you model 5-2-1-0 in your daily life?

Why or why not?

What would you need to happen to get you on the path to a healthy lifestyle?

What can be done to get youth, families and communities on the path and stay on the path?

Closing comments or questions

We appreciate your time
and attention!