



Alliance  
for a  
**Healthier  
Generation**

# Physical Activity Toolkit

Toolkits are published for the benefit of schools enrolled  
in the Healthy Schools Program

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# Physical Activity

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Increasing rates of obesity in children and teenagers have occurred at the same time that physical activity in schools has been decreasing. An estimated 31.2 percent of children ages 6 to 11 in the United States are overweight or at risk for overweight. In adolescents, ages 12 to 19, 30.9 percent are overweight or at risk for overweight. While childhood obesity rates increase, opportunities for students to be active have decreased. Between 1991 and 2003, enrollment of high school students in daily physical education classes decreased from 41.6 percent to 28.4 percent. Fewer and fewer children walk or ride bicycles to school, eliminating that source of daily physical activity. Recess has been reduced or eliminated in many elementary schools.

Today, obesity is one of the most pressing health concerns for children and physical inactivity is a leading contributor to the epidemic. Children who are overweight or obese face many of the same health problems as adults: high blood pressure, type 2 diabetes and high cholesterol. The Surgeon General recommends children should engage in 60 minutes of moderate activity most days of the week; yet most youth are accumulating far less. Schools serve as an excellent venue to provide students with the opportunity for daily physical activity, to teach the importance of regular physical activity for health and to build skills that support active lifestyles. Unfortunately, most children get little to no regular physical activity while in school.

Physical activity should not be confused with physical education or exercise. Physical activity in an educational setting is defined as behavior consisting of bodily movement that requires energy expenditure above the normal physiological (muscular, cardio-respiratory) requirements of a typical school day (Tennessee Association of Health, Physical Education, Recreation and Dance).

## **Principles That Guided The Development of The Physical Activity Criteria**

- Students are on school grounds a significant amount of time each day and physical activity can be integrated in many ways
  - Schools have several opportunities to promote and provide physical activity which can lead to the adoption of a physically active lifestyle outside of the school environment

## Checklist Items

- All students have the opportunity to participate in physical activity breaks on a daily basis
- School has an annual plan for integrating physical activity into most subject areas
- At the elementary school level, school offers at least 20 minutes of recess daily
- School offers a range of non-competitive physical activity opportunities aimed at engaging students in fun, recreational and life-long learning opportunities before or after the school day
- School offers a range of non-competitive physical activity opportunities aimed at engaging students in fun, recreational and life-long learning opportunities before or after the school day
- School has a plan in place to promote safe walking and bicycling to school

### **Bronze**

Meets at least two of the checklist items

### **Silver**

Meets at least four checklist items.

### **Gold**

Meets at least five items.

**Checklist Criteria:**

**All students have the opportunity to participate in physical activity breaks on a daily basis.**

**Why?**

Regular physical activity, even modest forms, has significant health benefits for students. Because students spend many hours in school, it is an ideal place to provide physical activity. Classroom teachers can help provide some of the recommended 60 minutes of daily physical activity throughout the school day. Several studies indicate that activity breaks can improve cognitive performance and classroom behavior.

**How?**

- Provide multiple opportunities for students to engage in physical activities
- Participate in fitness alarms. For example, ring the bell at 10 am and 2 pm and have all staff and students participate in physical activity
- Incorporate brief physical activity breaks, one to two minutes, into each class period. Have students take turns leading various movement activities
- Integrate movement within core academic lessons, tying physical activity to learner objectives
- Provide “brain break” opportunities, which involve some type of movement or allows students to be creative. Have students practice spelling or vocabulary words while walking around the room or play a game of charades based on a topic the class is studying
- Implement physical activity during the “homeroom” or “advisory” period in middle and high schools
- Utilize a video exercise library for classroom use
- Include physical activity opportunities in the school news or morning announcements
- Incorporate “walk and talk” breaks—take your class out for a walk and have students discuss what they have learned during the class period
- Model enthusiasm for physical activity by participating in breaks with students and in school employee wellness opportunities

**Action Step Example:**

Provide all students with the opportunity to participate in physical activity breaks on a daily basis.

**What We Are Looking For:**

Describe how the school integrates physical activity breaks into daily activities for all students. Examples may include details from teacher lesson plans that describe how he/she integrates physical activity breaks into daily activities.

**Resources:****Alliance for a Healthier Generation's Indoor Fitness Trail**

[http://www.healthierGeneration.org/uploadedfiles/for\\_schools/09-877.pdf](http://www.healthierGeneration.org/uploadedfiles/for_schools/09-877.pdf)

**Alliance for a Healthier Generation's Secondary Classroom Physical Activity Ideas**

See Appendix B

**JAMmin' Minutes One-Minute Physical Activity Breaks**

<http://www.healthtips.com/jam-program.php>

**North Carolina Energizers (free elementary school activities linked to core academics)**

<http://www.ncpe4me.com/energizers.html>

**North Carolina Middle School Energizers (free middle school activities linked to core academics)**

<http://www.nchealthyschools.org/msenergizers>

**Michigan Brain Breaks (free elementary physical activity ideas for classroom teachers)**

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

**You Inspire Strong Minds—a brochure for teachers from the CDC with ideas for teaching physical activity**

<http://www.maclearinghouse.com/PDFs/Health&Wellness/NP2008.pdf>

**Checklist Criteria:****School has an annual plan for integrating physical activity into most subject areas.****Why?**

A plan is necessary to provide guidance to staff and students. The more prescribed the plan is, the more likely physical activity will be integrated into most subject areas on a regular basis.

**How?**

- Create a plan that describes the amount of time and frequency that physical activity should occur in classrooms
- Collaborate with the physical educator to identify developmentally appropriate activities for each grade level
- Distribute the plan to teachers, assistants, parents and students

**Action Step Example:**

Implement an annual plan for integrating physical activity into most subject areas.

**What We Are Looking For:**

Provide a written plan for integrating physical activity into most subject areas. Provide detail on amount of time and frequency of physical activity. This plan should include all grades and all classes.

**Resources:****Alliance for a Healthier Generation's Sample Plan for Integrating Physical Activity into Most Subject Areas**

See Appendix A

**Comprehensive School Physical Activity Programs: A Position Statement from the National Association for Sport and Physical Education**

(<http://www.aahperd.org/naspe/standards/upload/Comprehensive-school-physical-Activity-programs2-2008.pdf>)

**Take Ten (classroom based physical activity program for grades K-5)**

<http://www.take10.net/whatistake10.asp?page=new>

**Checklist Criteria:****School offers at least 20 minutes of recess daily at the elementary school level.****Why?**

Recess provides the opportunity to accumulate part of the daily physical activity recommendation of 60 minutes of moderate activity most days of the week. Recess is regularly scheduled time within the elementary school day for unstructured physical activity and play and provides physical activity, social and cognitive benefits. Recently, some schools have eliminated recess altogether, reportedly due to safety concerns and a desire to increase time for academic instruction. However, studies have found that students who do not participate in recess become fidgety and less able to concentrate on tasks and the longer children sit in classrooms without a recess break, the less attentive they become. Recess also offers students one of their few opportunities during the school day to interact and develop social skills, such as negotiating and cooperating, with minimal adult interference. The National Association of Elementary School Principals has endorsed recess as “an important component in a child’s physical and social development.”

(Source: Wechsler H, Devereaux AB, Davis M, Collins J. Using the school environment to promote physical activity and healthy eating. *Preventive Medicine* 2000;31:S121-S137).

**How?**

- Evaluate the master schedule to determine the number of minutes dedicated to recess each day
- Work with scheduling committee and administration to ensure 20 minutes of recess each day. (This can be broken into multiple sessions)
- Provide training to recess supervisors so they can facilitate and encourage physical activity
- Provide enough trained adults on hand to enforce safety rules and prevent aggressive, bullying behavior
- Provide space, facilities, equipment, and supplies that can make active participation in physical activity during recess appealing to children
- Encourage students to be active
- Schedule recess before, rather than after, lunch. Studies have found that students eat more of their lunches, lunchroom behavior improves and time on task after lunch increases when recess comes before lunch
- Complement, rather than substitute for, the physical activity and instruction children receive in physical education classes
- View recess as a necessary educational support component for all children—students should not be denied recess so they can complete class work or as a means of punishment
- Ensure adequate, safe and developmentally appropriate equipment is provided for students to engage in enjoyable physical activities
- Reinforce students’ positive personal and social skills (e.g., cooperation, conflict resolution)

**Action Step Example:**

At the elementary school level, ensure at least 20 minutes of recess daily.

**What We Are Looking For:**

Indicate how many minutes of recess each grade receives each week.

**Resources:**

**Recess Rules**

<http://www.rwjf.org/files/research/sports4kidsrecessreport.pdf>

**Recess for Elementary Students: A position paper by the National Association for Sports and Physical Education**

<http://www.aahperd.org/naspe/standards/upload/recess-for-elementary-school-students-2006.pdf>

**Recess Before Lunch Resources**

<http://www.opi.mt.gov/schoolfood/recessBI.html>

**Playworks USA Playbook**

[http://www.playworks.org/files/Playbook\\_final\\_09-10.pdf](http://www.playworks.org/files/Playbook_final_09-10.pdf)

**Checklist Criteria:**

**School offers a range of competitive physical activity opportunities (intramural or interscholastic sports) before or after the school day.**

**Why?**

Intramural and interscholastic sports allow students to take their learning in physical education to the next level: competition. Some individuals are motivated to stay active based on the competitive aspect. These activities can help provide students with opportunities to engage in physical activity and to further develop the knowledge, attitudes, motor skills, behavioral skills and confidence needed to adopt and maintain physically active lifestyles. (Adapted from Morbidity and Mortality Weekly Report, Volume 46, No. RR-6). Intramural and interscholastic sports are most developmentally appropriate at the middle and high school levels.

**How?**

- Provide intramural or interscholastic opportunities for all students, regardless of socio-economic status
- Utilize the input of students to determine which sports and activities should be offered
- Follow your school/district's process to increase intramural/interscholastic sports, if needed
- Work with local community resources to expand their sport opportunities

**Action Step Example:**

Ensure a range of competitive physical activity opportunities (intramural or interscholastic sports) before or after the school day.

**What We Are Looking For:**

Provide a schedule and descriptions of the regularly scheduled competitive physical activity opportunities offered to students outside of the school day.

**Resources:**

**Guidelines for Afterschool Physical Activity and Intramural Sport Programs, National Association for Sport and Physical Education**

<http://www.aahperd.org/naspe/standards/upload/Guidelines-for-After-school-pA-intramural-sport-programs-2001.pdf>

**Guidelines for School Intramural Programs: A Position Paper from the National Intramural Sports Council**

[http://www.fitness.gov/betterhealth/ppar\\_a20.pdf](http://www.fitness.gov/betterhealth/ppar_a20.pdf)

**North Carolina Intramural Sports Handbook**

<http://www.fitkidsnc.com/resourcesforintramurals.pdf>

**Checklist Criteria:**

**School offers non-competitive physical activity opportunities aimed at engaging students in fun, recreational and life-long learning opportunities before or after the school day.**

**Why?**

Interscholastic athletic programs are typically limited to the secondary school level and usually consist of a few highly competitive team sports. Intramural sports programs are not common but, where they are offered, usually emphasize competitive team sports. Such programs usually under serve students who are less skilled, less physically fit or not attracted to competitive sports. One reason that participation in sports declines steadily during late childhood and adolescence is that undue emphasis is placed on competition. After the needs and interests of all students are assessed, interscholastic, intramural and club programs should be modified and expanded to offer a range of competitive and noncompetitive activities. For example, noncompetitive lifetime physical activities include walking, running, martial arts, yoga, dance, strength training, group exercise, swimming and bicycling. (Adapted from Morbidity and Mortality Weekly Report, Volume 46, No. RR-6).

**How?**

- Provide non-competitive opportunities for all students, regardless of socio-economic status
- Utilize the input of students to determine which activities should be offered
- Follow your school/district's process to increase afterschool or club activities that are geared toward lifetime physical activity
- Work with local community resources to expand their lifetime physical activity opportunities

**Action Step Example:**

Ensure a range of non-competitive physical activity opportunities aimed at engaging students in fun, recreational and life-long learning opportunities before or after the school day.

**What We Are Looking For:**

Provide a description and schedule of non-competitive activities offered to students.

**Resources:****Alliance for a Healthier Generation's Indoor Fitness Trail Guide**

[http://www.healthierGeneration.org/uploadedfiles/for\\_schools/09-877.pdf](http://www.healthierGeneration.org/uploadedfiles/for_schools/09-877.pdf)

**After School Physical Activity Website**

<http://www.afterschoolpa.com/home.html>

**Playworks USA Playbook**

[http://www.playworks.org/files/Playbook\\_final\\_09-10.pdf](http://www.playworks.org/files/Playbook_final_09-10.pdf)

**Checklist Criteria:****School has a plan in place to promote safe walking and bicycling to school.****Why?**

Walking to school is a missed opportunity for physical activity. Roughly 10 percent of children nationwide walk to school regularly. Even among those kids living within a mile of their school, only 25 percent are regular walkers. Walking and bicycling to school can provide children with more opportunities to be physically active at no extra cost to parents.

**How?**

- Convene a group and hold an informative kick-off meeting
- Conduct a walk/bike audit
- Identify issues, such as community design, safety, time and convenience
- Identify solutions, such as safe routes; crossing guards; educate staff, students and parents on pedestrian and bicycling safety; provide secure bicycle parking
- Make a plan—include solutions, resources necessary, timeline, etc.
- Fund the plan—federal funding is available through state departments of transportation
- Act on the plan
- Evaluate, make improvements and keep moving

**Action Step Example:**

Create and implement a plan to promote safe walking and bicycling to school.

**What We Are Looking For:**

Describe how safe walking and biking to and from school is promoted by the school. For example, provide information on safety curriculum taught, utilization of Safe Routes to School programs, crossing guards or crosswalks, walking school buses, designated routes and bicycle parking and how safe routes information is promoted to students, staff and parents.

In a comprehensive Safe Routes to School plan, most of the following items are included:

- Students receive instruction on walking/bicycling safety
- Safe Routes program is promoted to students, staff and parents via newsletter, website or local newspaper
- Crossing guards are utilized
- Crosswalks exist on streets leading to schools
- Walking school buses are utilized
- Bicycle parking is provided
- Number of children walking to and from school is documented
- Number of children biking to and from school is documented
- Maps of school environment (sidewalks, crosswalks, roads, pathways, bike racks etc) have been created and distributed

**Resources:**

**Safe Routes to School Online Guide**

<http://www.saferoutesinfo.org/guide/>

**Centers for Disease Control and Prevention Kids Walk to School**

<http://www.cdc.gov/nccdphp/dnpa/kidswalk/>

**Federal Safe Routes to School**

<http://safety.fhwa.dot.gov/saferoutes/>

**International Walk to School Day Registration**

<http://www.walktoschool.org/>

**Walkability and Bikeability Checklists**

<http://www.walktoschool.org/eventideas/checklists.cfm>

**The Safe Routes to School National Partnership provides information for each state**

<http://www.saferoutespartnership.org/state/5043>

## Sample Plan for Integrating Physical Activity into Most Subject Areas

### Elementary School

ABC Elementary School is committed to provide opportunities for students and staff to integrate physical activity throughout the school day. Each day, classroom teachers provide at least one physical activity break by leading his/her students in JAMmin' Minutes, North Carolina Energizers, Michigan Brain Breaks, or similar physical activity break. Teachers also have the option to create physical activity breaks that relate to their core content lesson plans.

Physical activity breaks will be documented in all teachers' lesson plans and will note the amount of time for the break and the type of physical activity that takes place.

### Middle/High School

ABC Middle/High School is committed to provide opportunities for students and staff to integrate physical activity throughout the school day. Each day, classroom teachers provide at least one physical activity break each period by leading his/her students in JAMmin' Minutes or similar physical activity break. Teachers also have the option to create physical activity breaks that relate to their core content lesson plans.

Physical activity breaks will be documented in all teachers' lesson plans and will note the amount of time for the break and the type of physical activity that takes place.

## Secondary Classroom Physical Activities

Engaging secondary students in physical activity throughout the school day can be a challenge. Do not be afraid to try new activities to get the students moving. Here are some tips and lesson integration ideas that may be helpful for classroom teachers.

1. Start slowly and have patience. Be persistent about encouraging movement in class
2. Ask for student input on what they would like to do for physical activity (PA) breaks
3. Ask students to lead classroom PA breaks
4. Use appropriate music that appeals to teens to encourage movement
5. Create a voluntary PA program during lunch periods that could include Dance, Dance Revolution, Wii Fit, yoga, Pilates, Taebo or exercise videos
6. Integrate movement into your class content

### Stand Up, Hand Up, Pair Up

Use to organize students into groups, giving them an opportunity to stretch and move. Also use to review lesson content or to prompt collaboration.

1. Walk 10-15 steps (to get blood out of feet and seat-- this is the number of steps needed to get blood and oxygen to the brain).
2. Head up with a smile (the brain does not know a real smile/laugh from a fake one, this boosts serotonin and mood).
3. Partner shoulder to shoulder (this is less threatening than face-to-face).
4. Pick a characteristic to determine who goes first. Some examples: which person lives closer to \_\_\_\_, which person ate Mexican food most recently, etc.
5. Have them introduce themselves, share lesson content and reflect on what they learned. It is helpful to have a timer. Have each person share for a limited time and then switch to ensure no one is able to dominate the conversation and that all are learning.

NOTE: When you need groups of four have partners pair up. Partners put hands up and find another group of two.

ALTERNATIVE: Have students raise their hand up with a number of fingers and then they have to find a partner who has the same number of fingers up.

### Gallery Walk

On the walls around the room, post chart paper. Have students use Post-it notes to answer critical thinking questions about the lesson. Allow students to use some time during the lesson to take a gallery walk. Music can be used to begin and end the activity. Students can also use markers to write directly on the chart paper.

## Poker Reflection Activity

A closure activity used to identify concrete learning concepts. Also use to reflect on feelings.

1. Different colored cards are put on tables for students.
2. Students write down one thing they learned during the lesson on one side of index card.
3. Students draw a face showing how they feel about the class, the concepts introduced or their learning.
4. Students place card, with face showing, on forehead and glance around the room at others. Think humor!
5. Leader initiates movement with music (ex. "I Feel Good") after giving directions to find a partner, and share what is on your card.
6. Students are asked to move around room for duration of song, sharing their key learning with several different partners.

## Reflection Walk

Use with students to incorporate movement, socialization and reflection during instruction.

1. Have students form small groups.
2. Explain that groups will be taking a walk together. On their walk, they should share something with the group about the current class content or review yesterday's content. You may determine the topic depending on the type of session you are leading. Some examples might be:
3. Share at least one thing you remember from class.
4. Share something new or interesting you learned this morning/afternoon.
5. You can also create a specific list of questions you want students to discuss.
6. Send them on a walking course outside (weather permitting) or throughout the building. Be specific about the return time and possibly have a song or signal to guide students back to their seats.
7. Upon returning to the session, allow 2-3 minutes for students to write down items they want to remember from their walk. Depending on your schedule, or the desired outcome, you can extend this by having students share with their table group's items they discussed outside of the group during the walk.

## Different Colored Cards

Use to encourage movement and allow students to discuss or talk with others outside of their table group.

1. Prior to class, place a stack of index cards in the center of each table. Each table group is given a different color of cards.
2. At the point in the class when you want movement and discussion, pose a question or issue to the group. Ask students to write their thoughts on the index card. Allow 1-2 minutes for writing.
3. When given a signal, students are to stand, pair off with a person with a different colored card and share what they wrote.

## Lazy Eights

Use these strategies to get students up and out of their seats. Ideal for breaks after intense or mentally challenging activities.

1. Extend one arm in front of you with your thumb pointing upwards.
2. Trace the shape of a figure eight in the air. The eight should be on its side and as you trace it out in large, slow movements focus your eyes on your thumb. Without moving your head trace three eights in successively larger movements.
3. Now do it with your other hand and then clasp them together and do it with both hands

## Card Organizing

Use to mix students into groups, help stretch and move or prepare for a collaborative effort. Distribute playing cards 2-9 (by suit if possible) to each table. Place them face down.

1. Students each take a card and (without looking at the card) place it on their foreheads.
2. Now students are instructed to organize themselves without talking by number. This is easily accomplished, and the group is ready to hear the next instruction.

*Once the group has become a line, it is easy to subdivide the group by number or assign individual numbers with a role: "recorder" "timekeeper" etc.*

*These ideas have been adapted from brain-based learning strategies and are meant to encourage mild physical activity during core content classes.*

U.S. Department of Health and Human Services new Physical Activity Guidelines for Americans recommends one hour or more of moderate or vigorous aerobic physical activity a day for teens, including vigorous intensity physical activity at least 3 days a week. Both groups should do muscle-strengthening activities (which might include sit-ups or rope-climbing) 3 days a week, and bone-building exercise (running, jumping) also 3 days a week.

<http://www.health.gov/paguidelines/default.aspx>