TN Department of Education

Coordinated School Health

2022-23 Physical Education/Physical Activity (PE/PA) Annual Report

Tennessee Department of Education | October 2023

Cover image provided by Jefferson County School District

Table of Contents

Introduction

Tennessee Coordinated School Health (CHS) connects physical, emotional and social health with education through eight inter-related components. This coordinated approach improves students' health and their capacity to learn through the support of families, communities and schools working together. Physical education and physical activity create one of those components. The Tennessee Department of Education's (department) office of Coordinated School Health is responsible for monitoring the implementation of the physical activity requirements of T.C.A. § 49-6-1021:

(a) In accordance with § 49-6-1022, it shall be the duty of each LEA to integrate:

(1) For elementary school students, a minimum of one hundred thirty (130) minutes of physical activity per full school week; and

(2) For middle and high school students, a minimum of ninety (90) minutes of physical activity per full school week.

(b) Physical activity may include walking, jumping rope, playing volleyball, or other forms of physical activity that promote fitness and well-being; however, walking to and from class shall not be considered physical activity for purposes of this section. To satisfy the requirements of subdivision (a)(1), an LEA shall offer elementary students at least one fifteen-minute (15) minute period of physical activity per day.

(c) The office of coordinated school health in the department of education shall provide an annual report by October 1, to the education committee of the house of representatives and the education committee of the senate on the implementation of subsection. The report shall contain at least the following information:

(1) The percentage of public schools that integrate the required physical activity into the instructional school day in compliance with subsection (a);

(2) The types of physical activities that are used to meet the physical activity requirement;

(3) Any barriers that have limited full compliance with the physical activity requirement;

(4) Innovative methods that schools use to comply with the physical activity requirement;

(5) The ranking of Tennessee schools in providing physical activity and physical education as compared to other states;

(6) Relevant data or studies that link physical activity or physical education to academic performance in students;

(7) Relevant data or studies showing whether increased physical activity or physical education lead to better health outcomes;

(8) The annual percentage of increase or decrease in compliance with the physical activity requirement in school districts with average daily membership of twenty-five thousand (25,000) or more students; and

(9) An overall summary and a set of recommendations to promote active living in the youth of this state, including, but not limited to, suggestions for increasing compliance with the physical activity requirement that can be implemented with minimal cost.

(d) Nothing in this section shall prevent an LEA from integrating more student physical activity for elementary, middle, and high school students during the school week than required in subsection (a). The requirements of subsection (a) may work in conjunction with the school's physical education program, but subsection (a) shall not replace the current physical education program in a school.

CSH state funds are in part used by school districts to provide schools with physical activity (PA) and physical education (PE) equipment, physical activity/physical education curricula, teacher professional development, walking trails, climbing walls, fitness rooms, and student fitness assessment systems/tools. CSH also oversees state physical education standards as set forth in Tennessee curriculum standards and the Tennessee Physical Activity and Physical Education Policy 4.206 (Tennessee State Board of Education, 2020).

The Tom Cronan Act

In addition to the K-12 physical activity requirements detailed above, T.C.A. § 49-6-1021 also includes specific physical education requirements for elementary students. These requirements were included as part of Chapter 976 of the Public Acts of 2018, also known as "The Tom Cronan Act".:

(e)

(1) In addition to the integration of physical activity into the instructional school day according to subsection (a), each LEA shall require each student in elementary school to participate in a physical education class that meets at least two (2) times per full school week during the school year. The total physical education class time each full school week shall be no less than sixty (60) minutes.

(2) The physical education class shall meet the needs of students of all physical ability levels, including students with disabilities who shall participate in moderate physical activity to the extent appropriate as determined by the Individuals with Disabilities Education Act (20 U.S.C. § 1400 et seq.), Section 504 of the Rehabilitation Act (29 U.S.C. § 701 et seq.), or the student's individualized education program. An accommodation or alternative physical activity shall be provided for children with disabilities, if necessary.

(3) The physical education class required by this subsection (e) shall be taught by a licensed teacher with an endorsement in physical education or by a specialist in physical education.

(4) A student shall be excused from physical education class for medical reasons. The LEA may require a parent or legal guardian to provide documentation of a student's reason for being excused from the physical education class.

(5)

(A) This subsection (e) shall not apply to any county having a population of not less than thirty-eight thousand three hundred (38,300) nor more than thirty-eight thousand four hundred (38,400), according to the 2010 federal census or any subsequent federal census, until the 2021-2022 school year; and

(B) This subsection (e) shall not apply to any county having a population of not less than fifty-seven thousand four hundred (57,400) nor more than fifty-seven thousand five hundred (57,500), according to the 2010 federal census or any subsequent federal census, until the 2021-2022 school year.

(f) Each LEA shall file an annual report with the commissioner of education verifying that the LEA has met the physical education requirements of this section.

(g) Subsections (e) and (f) apply to the 2020-2021 school year and each school year thereafter.

U.S. Physical Activity Guidelines for Children and Adolescents

According to the U.S. Department of Health and Human Services (2018), children and adolescents need 60 minutes (one hour) or more of physical activity each day.

Aerobic activity should make up most of a child's or adolescent's daily physical activity. This can include either moderate-intensity aerobic activity, such as brisk walking, or vigorous-intensity activity, such as running. Physical activity should also include muscle strengthening activities, such as gymnastics or push-ups, and bone strengthening activities, such as jumping rope or running, at least three days per week.

Tennessee Overview

As indicated in Table 1, Tennessee student body mass index (BMI) rates have followed national trends at a steady increase in recent years, with a noticeable jump of over three percent from pre to post pandemic. Please note, a report was not generated for the 2020-21 school year due to low screening numbers as a result of the COVID-19 pandemic. For the first time, the state BMI rate for students (**42.8** percent in 2021-22) is higher than when CSH was first expanded statewide (**41.1** percent in 2007-08).

Table 1: Tennessee Student BMI Rate - Percent of Students Overweight or Obese

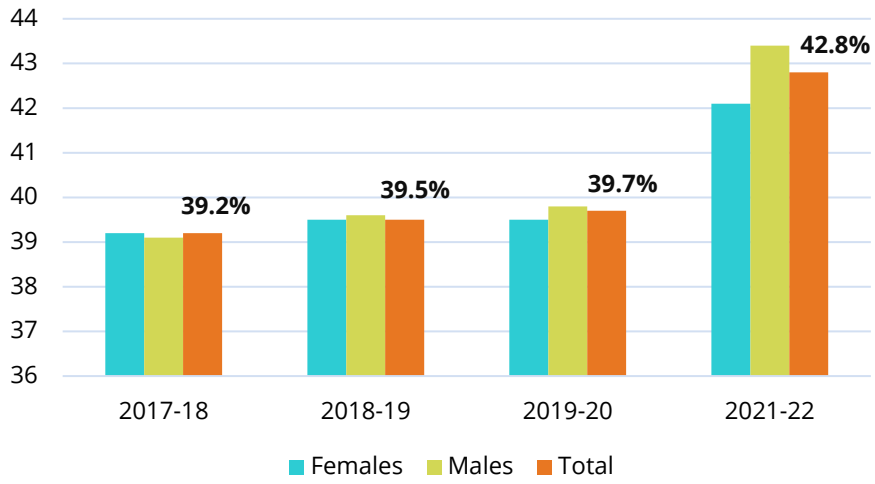
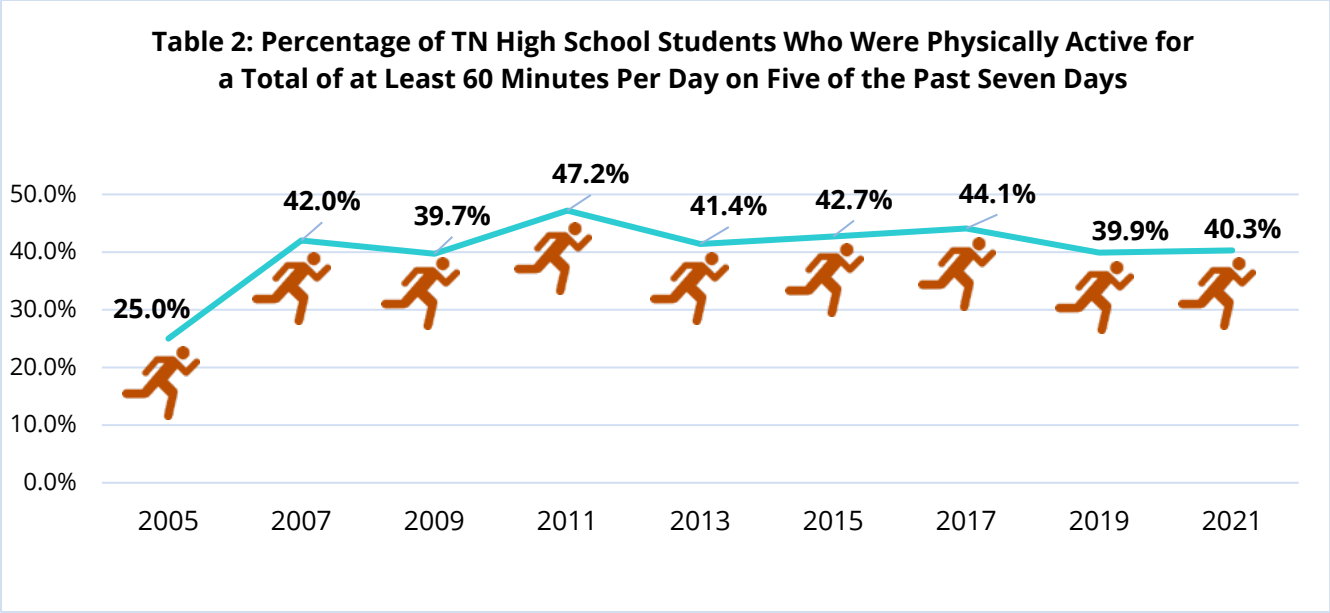


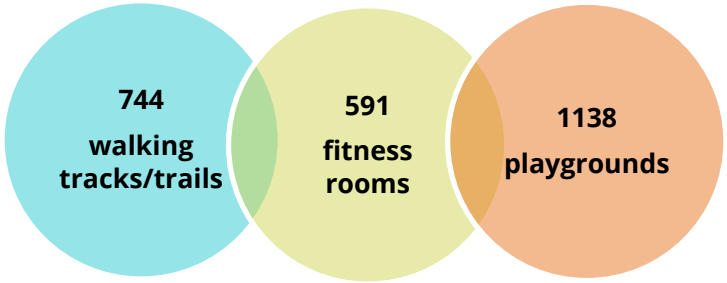
Photo provided by Germantown Municipal School District

As indicated in Table 2, according to Centers for Disease Control and Prevention's (CDC) Youth Risk Behavior Survey (CDC, 2023), the percentage of Tennessee high school students who reported being physically active for a total of at least 60 minutes per day on five of the past seven days **increased** from **25 percent** in 2005 to **40.3 percent** in 2021. This data point is of value because regular physical activity in youth may protect against chronic conditions into and through adulthood (Groβ et al., 2022).



Since the implementation of CSH statewide, coordinators have secured funds for the following (Tennessee Department of Education, 2023a):

- 744 walking tracks or trails,
- 591 in-school fitness rooms for students, and
- 1,138 new and/or updated playgrounds.



Coordinators know the benefits of having access to various physical activity opportunities, including those that can be accessed by the community outside of school hours.

Photo provided by Franklin Special School District

Physical Education versus Physical Activity

T.C.A. § 49-6-1021 allows for a variety of activities to be used for schools to provide students with opportunity to move their bodies and for schools to demonstrate compliance with the minimum requirements. It is important, however, that utilization of this variety is the key to positive health, academic, and behavioral outcomes, as opposed to limiting options.

The Society of Health and Physical Educators (2019) encourages the use of regular physical education classes in addition to other physical activities in the instructional school day and makes clear that physical activity is neither an equivalent to nor substitute for physical education—both contribute meaningfully to the development of healthy, active children.

Physical Activity and Academic Performance

As Michael et al. (2015) identifies, researchers have been examining the association between physical activity and academic achievement for almost 50 years. Physical activity has been shown to have a significant positive association with students' cognitive functioning (concentration and memory). Findings also conclude that students participating in physical activity had improved academic achievement including better concentration and attention, higher achievement tests scores, and higher math scores compared with students who did not. The CDC and SHAPE America (2017) describe how the following strategies for movement in school can positively influence a student's cognitive performance:

> *Substantial evidence shows physical activity can help improve academic achievement (including grades and standardized test scores) as well as have an impact on cognitive skills and attitudes, such as enhanced concentration and attention and improved classroom behavior.*

- **Physical Education:** Devoting time to physical education may have a positive relationship to academic achievement or may not negatively affect it. There are also favorable associations with cognitive skills and attitudes.
- **Physical Activity Breaks:** Offering breaks for physical activity may be associated with decreases in classroom misbehavior, increases in cognitive functioning (including memory and concentration), and increases in academic achievement.
- **Recess:** Recess is an essential part of students' school experience that contributes to their normal growth and development. Recess helps students practice social skills (cooperation, following rules, problem solving, negotiation, sharing, communication), positively engage in classroom activities (being on-task, not being disruptive), and enhance cognitive performance (attention, memory).

Physical Activity and Health Outcomes

According to the Physical Activity Guidelines Advisory Committee (2018), regular physical activity:

- helps build and maintain healthy bones and muscles;
- helps reduce the risk of developing obesity and chronic diseases, such as diabetes, cardiovascular disease, and colon cancer; and
- reduces feelings of depression and anxiety and promotes psychological health.

Long-term consequences of physical inactivity include:

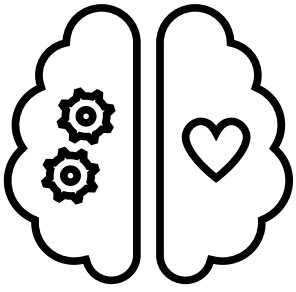
- being overweight and obese, which are influenced by physical inactivity and poor diet and can increase one's risk for diabetes, high blood pressure, high cholesterol, asthma, arthritis, and poor health status; and
- increased risk for premature death, death by heart disease, development of diabetes, colon cancer, and high blood pressure (Physical Activity Guidelines Advisory Committee, 2018).

Physical Activity and Mental Health

Physical activity has a small but significant effect on the mental health of children and adolescents ages 6 to 18. On average, young people who exercise more have lower levels of depression, stress and psychological distress, and higher levels of positive self-image, life satisfaction and psychological well-being. In one study, 6- to 8-year-olds who got more exercise had fewer symptoms of major depressive disorder two years later (American Psychological Association, 2020). A study by Groβ et al. (2022) noted a small correlation effect between physical activity and health-related quality of life and a medium to strong bidirectional effect between physical activity and health-related quality of life, reflecting an upward and downward spiral of physical activity and health-related quality of life. They concluded that "interventions for both physical activity and health-related quality of life should be used to initiate and sustain the upward spiral and prevent the downward spiral."

If regular physical activity in adolescence and youth has the potential for positive long-term effects as well as a strong effect on health-related quality of life, the academic school day provides a unique opportunity to ensure that our school age children are developing healthy minds, bodies, and relationships with movement. All of these contribute to developing a person that is more ready to learn and be a part of a community.

To support this link with concrete strategies for the classroom, the department launched a new training in the 2022-23 school year titled "Skills-Based Movement as Medicine". This skills-based training is designed to develop confidence and competence in facilitating classroom physical activity and movement opportunities for enhanced focus and attention, stress management, and a positive learning environment. Participants engage in strategies for energy, focus, and self regulation both with and without integration of academic content. School health coordinators reported that a total of **911 schools** offered professional development on the link between physical activity and mental health (Tennessee Department of Education, 2023b).

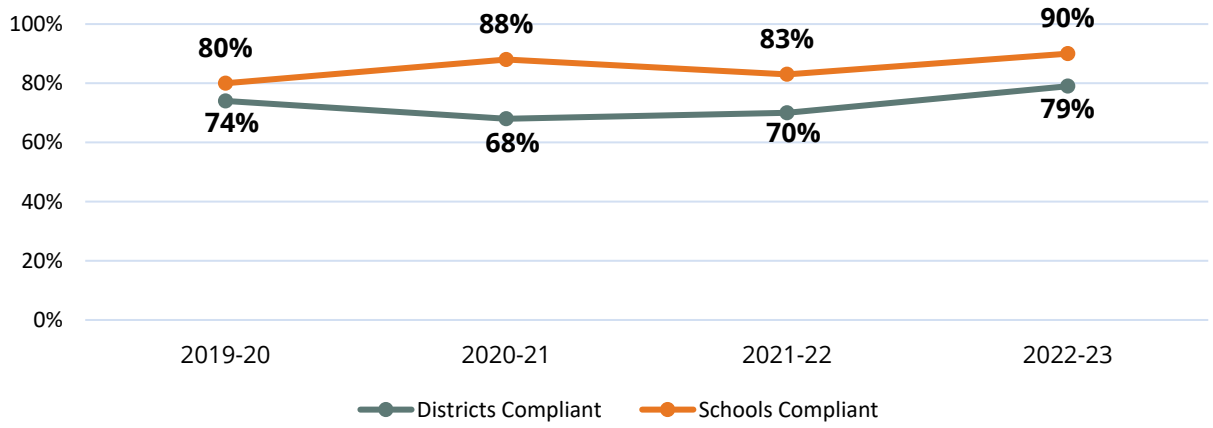


911 Schools offered PD on physical activity and mental health this school year

Tennessee 2022-23 Physical Activity/Physical Education Data

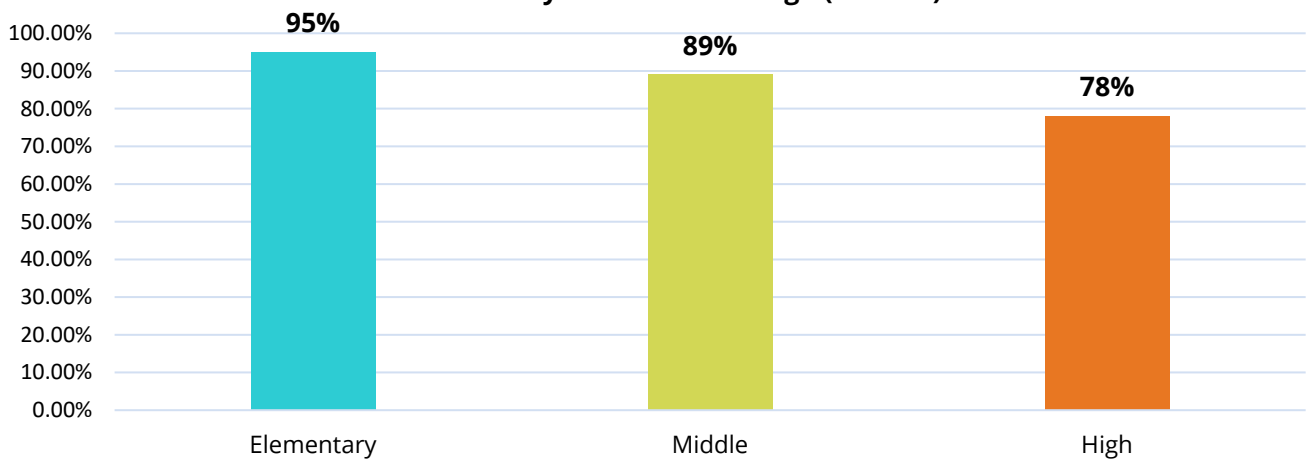
Tennessee Physical Activity and Physical Education Compliance Rates in Schools

Table 3: Tennessee Physical Activity Compliance Rates in Districts/Schools (2019-20 through 2022-23)



During the 2022-23 school year, **108** districts (**79 percent**), according to district school health coordinators, were in compliance with the minimum physical activity requirements outlined in T.C.A. § 49-6-1021(a). This total has **increased** from **70 percent** in 2021-22. (Tennessee Department of Education, 2023b). The number of individual schools in compliance with the minimum physical activity requirements outlined in T.C.A. § 49-6-1021(a) also increased from **83 percent to 90 percent** (Tennessee Department of Education, 2023b). Table 3 shows the compliance rate trend data for both districts and schools over the last four school years.

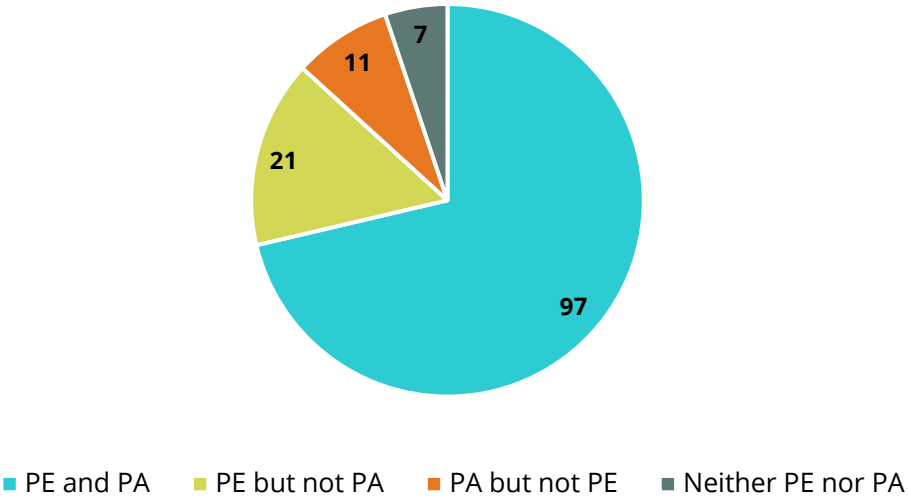
Table 4: Compliance of Physical Activity Requirements: A Comparison of Elementary vs. Middle. vs. High (2022-23)



The minimum physical activity requirements outlined in T.C.A. § 49-6-1021(a) include 130 minutes a week for elementary students, 90 minutes for middle school students, and 90 minutes for high school students. Table

4 illustrates a comparison of each respective school category meeting the physical activity requirement for all students. Elementary schools are meeting the requirements at the highest rate, **95 percent**, even though they require the most time. **89 percent** of middle schools and **78 percent** of high schools are meeting their minimum weekly physical activity requirements with all students. (Tennessee Department of Education, 2023a).

Table 5: T.C.A. § 49-6-1021 Physical Activity and Physical Education Compliance Rates in Districts (2022-23)



The Tom Cronan Act went into effect on July 1, 2020, and brought the implementation of specific minimum frequency, duration, and qualification standards for elementary physical education instruction for the first time. All students are required to participate in physical education at least twice a week, for at least 60 minutes cumulative. This class must also be taught by a licensed educator with an appropriate endorsement in physical education. Because of this change, the definition of compliance with T.C.A. § 49-6-1021 is multifaceted, requiring districts to support its schools and educators individually and in a variety of ways. Table 5 shows the district compliance rates for both the physical activity (PA) and physical education (PE) components of T.C.A. § 49-6-1021. Districts reporting full compliance with both the physical activity and physical education requirements has increased from **65 percent to 71 percent**. About **5 percent** of districts report full non-compliance. (Tennessee Department of Education, 2023b).

Photo provided by Humboldt City Schools

Physical Activity Non-Compliance Data at the School Level

Of the building principals reporting non-compliance for the physical activity requirements through the Physical Activity Compliance Report (Tennessee Department of Education, 2023c), **14 percent** are in elementary, **24 percent** are in middle schools, and **62 percent** are in high schools. Here is what some had to say when asked what they are doing to work toward compliance:

Elementary:

- "The requirements of instructional time for ELA/Math/RTI take precedence over the PE requirement, especially with the new 3rd-grade reading retention law in place this year."

Middle:

- "The school staff is working to incorporate time each day for students to engage in physical activity through walking breaks."
- "In previous years, (we) offered the students an opportunity to walk at lunch which became more of a liability due to poor supervision from volunteers."

High:

- "If students do not have PE, Wellness, JROTC, etc. on their schedule, then they may not be meeting the 90 minute/week requirement."
- "We are providing training to teachers for additional physical activities in the classroom. Funding is being acquired for exercise equipment/games for students to access during lunch."

Table 6: Level of Schools Reporting Non-Compliance with T.C.A. § 49-6-1021(a)

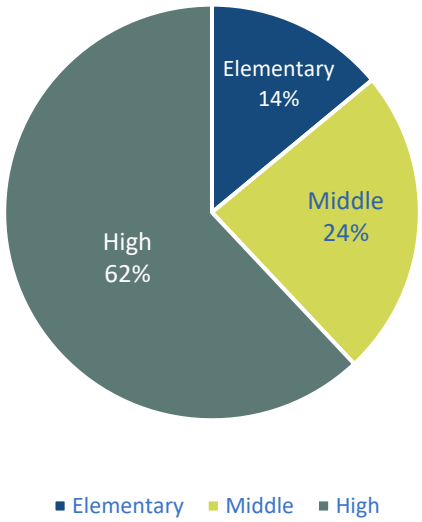
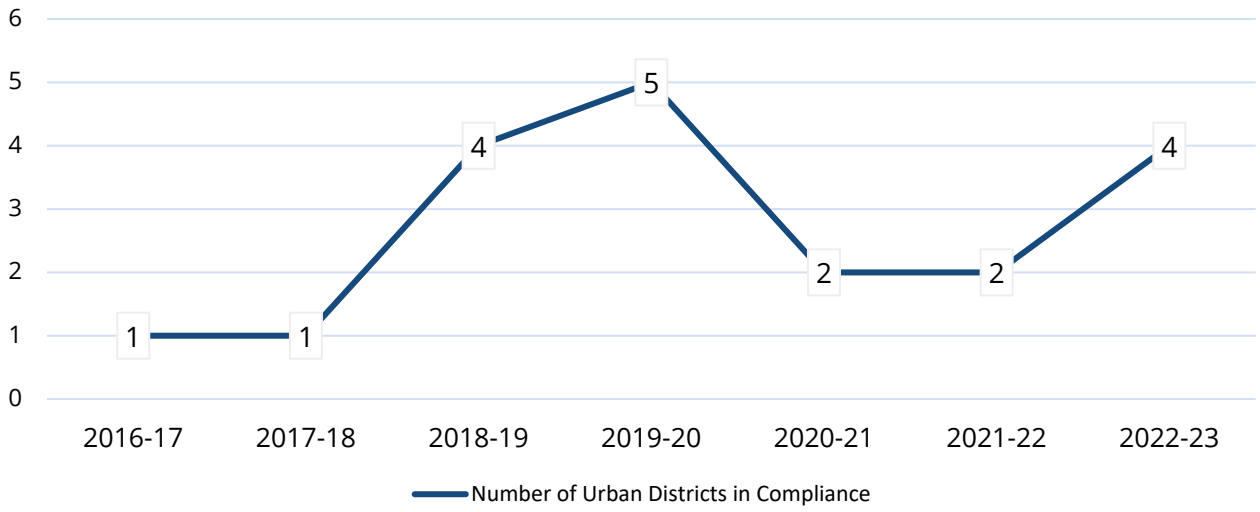


Photo provided by Germantown Municipal School District

Tennessee Physical Activity Compliance Rates Among Urban School Districts

Table 7: Number of Urban Districts in Compliance with T.C.A. § 49-6-1021(a)



Among Tennessee's eight urban school districts (districts serving 25,000 or more students), the reported rate of compliance with T.C.A. § 49-6-1021(a) is **50 percent** for the 2022-23 school year. **Four** out of **eight** urban school district coordinators reported 100 percent compliance for all schools in their district. The eight urban school districts include Hamilton County Schools, Knox County Schools, Metropolitan Nashville Public Schools, Clarksville-Montgomery County School System, Rutherford County Schools, Memphis-Shelby County Schools, Sumner County Schools, and Williamson County Schools.

Table 7 indicates the change of compliance among these districts over time, as reported by school health coordinators (Tennessee Department of Education, 2023b). Building principals also report data related to opportunities for physical activity each year (Tennessee Department of Education, 2023c), but no data was provided to that source this school year from Hamilton County Schools.

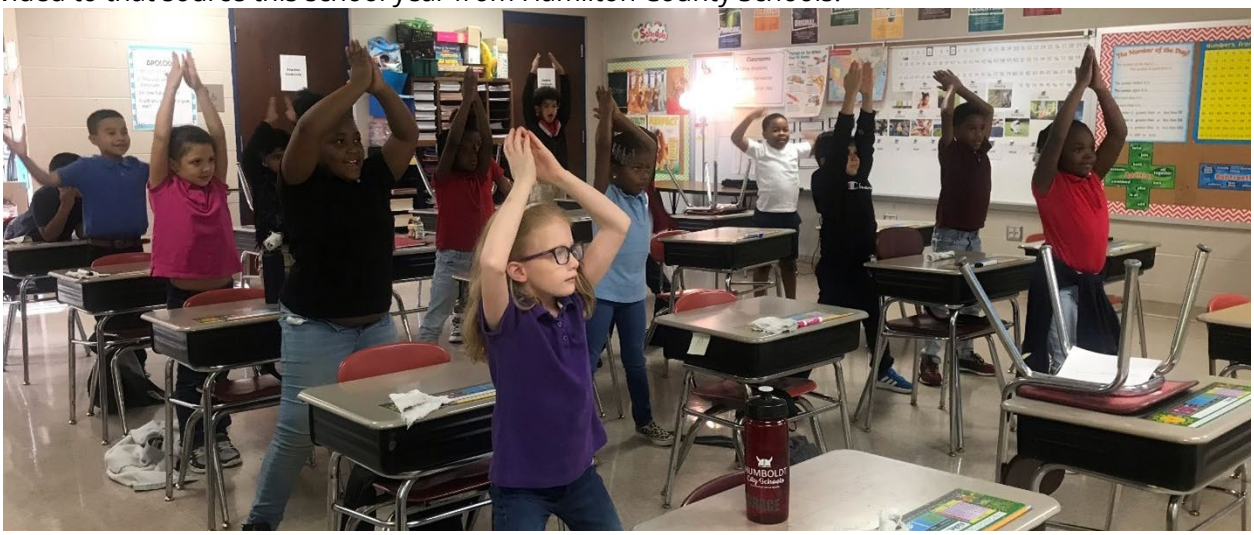
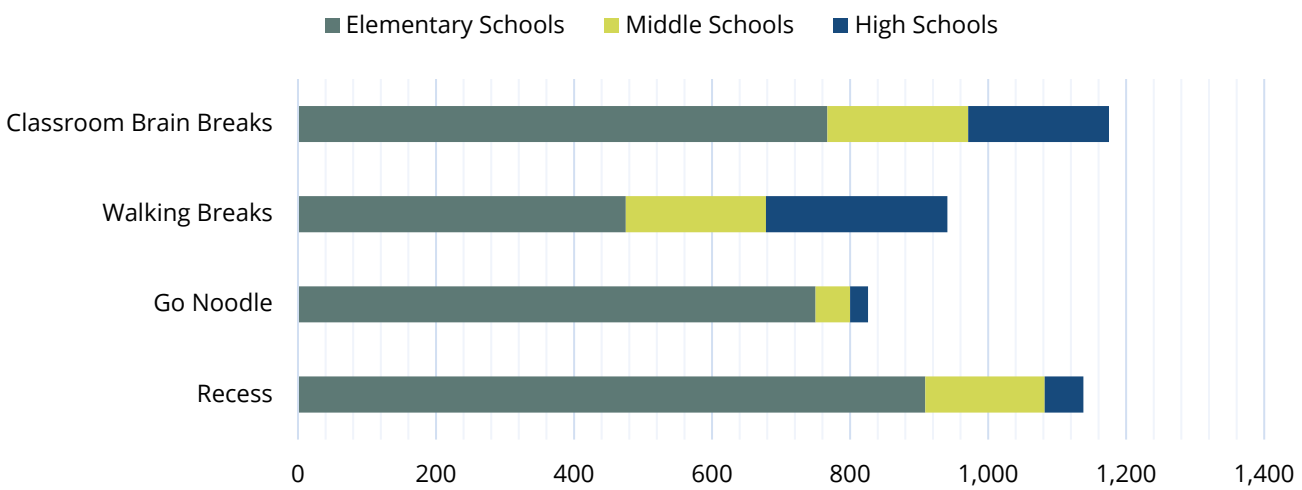


Photo provided by Humboldt City Schools

Types of Physical Activities Used in Schools to Meet Physical Activity Requirement

Table 8: Highest reported activities to facilitate compliance with T.C.A. § 49-6-1021 (2022-23)

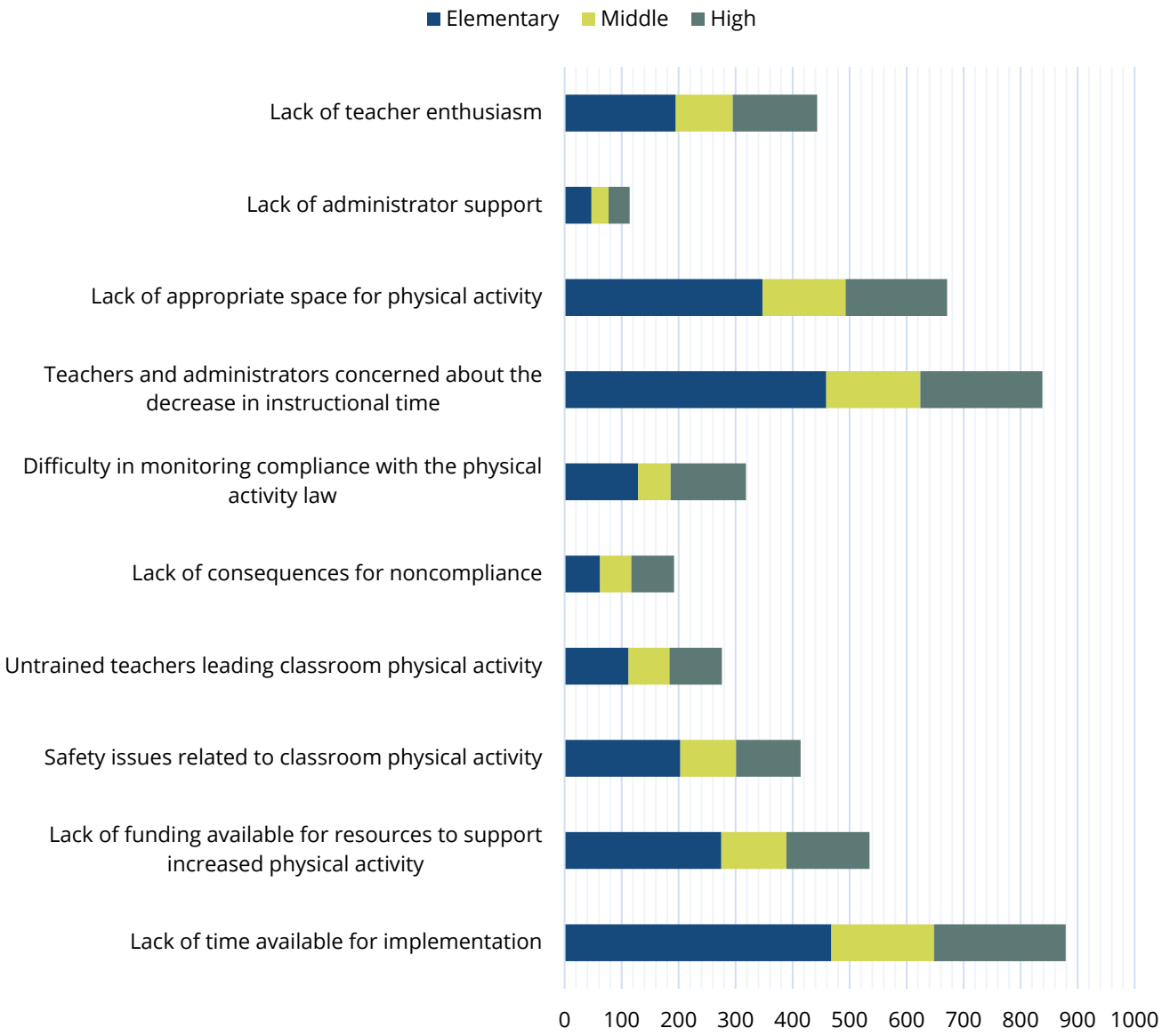


The most prevalent types of activities schools used to meet the requirements of T.C.A. § 49-6-1021 were classroom brain breaks (**70 percent** of reporting schools), recess (**68 percent** of reporting schools), and walking breaks (**56 percent** of reporting schools) (Tennessee Department of Education, 2023c).

Photo provided by Franklin Special School District

Reported Barriers Inhibiting Compliance with T.C.A. § 49-6-1021 by Type of School

Table 9: Number of schools reporting types of barriers encountered concerning compliance with T.C.A. § 49-6-1021 (2022-23)



The most often cited barrier to implementing physical activity is lack of time available for implementation (**52 percent** of all reporting schools), followed by teachers/administrators concerned about decreased academic time (**50 percent** of all reporting schools), and lack of appropriate space for physical activity (**40 percent** of all reporting elementary schools) (Tennessee Department of Education, 2023c).

Using or Denying Physical Activity, Physical Education, or Recess as Punishment

Tennessee State Board of Education Policy 4.206 states that physical activity shall not be withheld from a student as a punishment (Tennessee State Board of Education, 2020). Examples of inappropriate use of physical activity include:

- withholding physical education class or recess time for students to complete unfinished schoolwork or as a consequence for misbehavior;
- forcing students to run laps or perform push-ups because of behavioral infractions (e.g., showing up late, talking, or disruptive behavior); or
- threatening students with physical activity or no physical activity (e.g., no recess, no game time), and then removing the threat because of good behavior (SHAPE America, 2021).

Administering or withholding physical activity as a form of punishment and/or behavior management is inappropriate and constitutes an unsound education practice. Meaningful engagement in physical activity is an essential aspect of physical education and sport. Building a sense of competence, advocating the joy of physical activity, and moving, expanding movement and motor skills, and developing fitness levels are among the numerous practices that support appropriate behavior and the development of positive attitudes toward physical activity (SHAPE America, 2021).

> *A student's motivation for being physically active by engaging in the important subject matter content of physical education and sport should never fall victim to the inappropriate use of physical activity as a disciplinary consequence.*
> *–SHAPE America*

While some people believe that physical activity used as punishment and/or a behavior-management tool is effective, experts perceive this practice as a "quick fix" that might discourage the behavior it is intended to elicit. Using negative consequences to alter behavior suppresses undesirable behavior only while the threat of punishment is present; it does not teach self-discipline or address the actual behavior problem. Therefore, student behavior patterns have not changed (Weinberg & Gould, 2007).

Resources are available for alternatives to withholding recess as punishment from the CDC, Springboard to Active Schools, and the Alliance for a Healthier Generation. Suitable alternatives to using or withholding physical activity as punishment are (SHAPE America, 2021):

- including students in establishing expectations and outcomes early in the year and review those expectations and outcomes frequently,
- including students in meaningful discussions about goals and how to reach them,
- being consistent with enforcing behavioral expectations within the learning environment,
- practicing and rewarding compliance with rules and outcomes,
- offer positive feedback and catch students doing things right,
- avoiding reinforcing negative behavior by drawing attention to it,
- holding students accountable for misbehavior,
- developing efficient routines that keep students involved in learning tasks, and
- waiting for students to be attentive before providing directions.

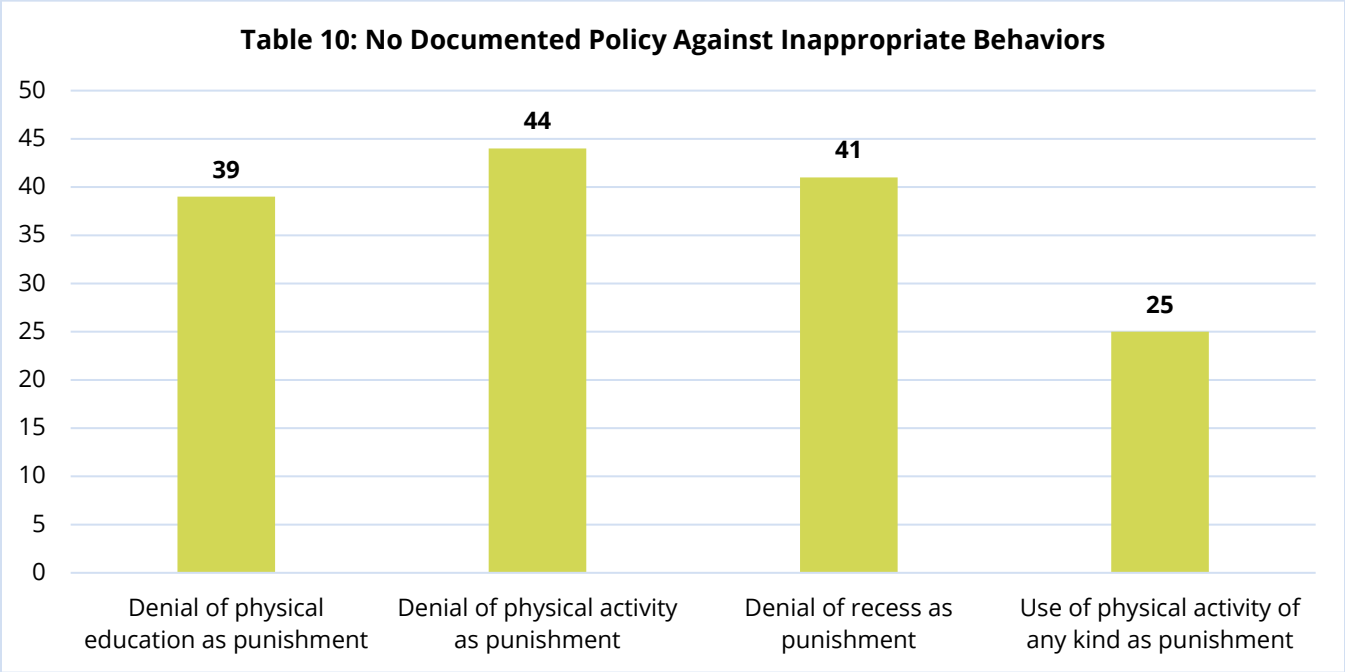
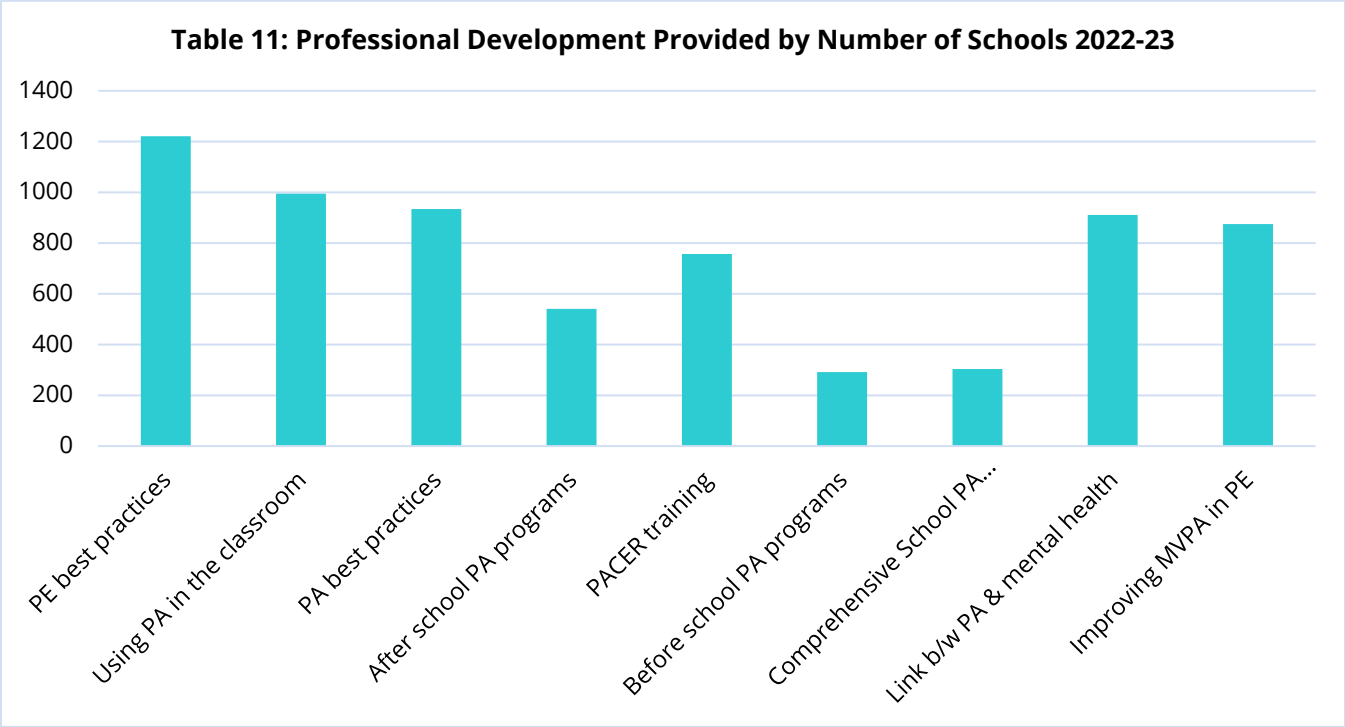


Table 10 shows the number of school districts that do not have a documented policy against specific inappropriate behaviors (Tennessee Department of Education, 2023b). Six districts stated they had at least one related policy adopted or strengthened this school year.

Photo provided by Humboldt City Schools

Photo provided by Germantown Municipal School District

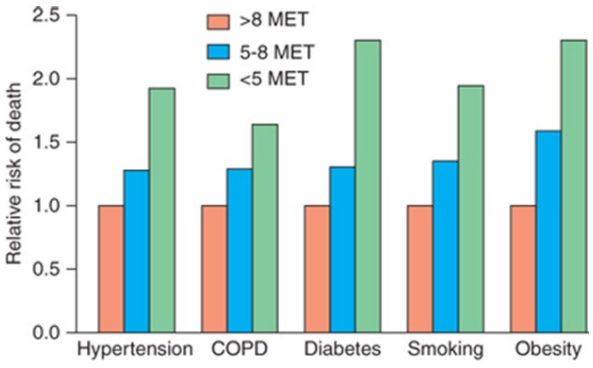
Professional Development Provided by Number of Schools



During the 2022-23 school year (Tennessee Department of Education, 2023b), school health coordinators worked to support a physically active school climate by providing relevant professional development to staff. Table 11 represents professional development provided by a number of schools. MVPA is "moderate to vigorous physical activity".

Aerobic Capacity with the PACER

Aerobic capacity is the body's ability to efficiently use oxygen and is one of the limiting factors in endurance performance. Perhaps the most valuable thing to know about aerobic capacity is that it is a more powerful predictor of mortality than any other established risk factor for cardiovascular disease, including obesity.



Source: Andrew J. Lechner, George M. Matuschak, David S. Brink: Respiratory: An Integrated Approach to Disease
www.accessmedicine.com

A Progressive Aerobic Cardiovascular Endurance Run, or PACER test, is an efficient way to estimate aerobic capacity in youth aged 10-18. Districts have been asked to report PACER scores for students in grades 4, 6, 8 and one year of high school along with other health indicators as part of the student health screening data. Less than 40% of eligible student scores have been provided in recent years, which is not enough to analyze with validity and reliability. To improve both quantity and quality of PACER data in an attempt to report on the overall aerobic capacity of our youth, the Department has developed both teacher-facing and CSH Coordinator-facing trainings on the PACER, created resources to assist with data collection, and provided a collection of resources to support facilitation on the Active Students, Active Learners website.

Physical Education in Tennessee – Survey Responses

In compliance with T.C.A. § 49-6-1021, the department worked with the American Heart Association to develop a survey to generate data on physical education in Tennessee. The survey was sent to the lead physical education teacher in each school in October 2022. Of the 1,575 schools where physical education teachers received the survey, 1,052 completed the questionnaire for an overall response rate of **67 percent**. The following data is based on these survey results from the 2022-23 school year.

Success to reinforce (Tennessee Department of Education, 2023d)**:**

- **43 percent** of Tennessee physical education teachers report their schools have physical activity clubs.
- **57 percent** of Tenessee high schools offer electives in physical education beyond the minimum graduation requirement, including but not limited to Kinesiology, Sports Officiating, and Strength and Conditioning.
- **88 percent** of Tennessee physical education teachers report that on average, their students are moderately-to-vigorosusly active at least 50% of class time. This is a best practice for physical education instruction.

Opportunities for continued improvement (Tennessee Department of Education, 2023d)**:**

- **26 percent** of Tennessee physical education teachers stated that students were withheld from physical education class for academic remediation, to prepare for other classes, or standardized tests.
- **8 percent** of Tennessee physical education teachers stated that when in-person, most of the time, they do not have adequate space for all students to safely and simultaneously participate in physical education class.
- **11 percent** of Tennessee physical education teachers stated that teachers or administrators withheld physical activity as punishment.
- **9 percent** of Tennessee physical education teachers stated that they spend six hours or more of an instructional week being utilized in other ways than teaching physical education, including but not limited to RTI, assisting classroom teachers with academics, tutoring, lunch duty, and bus duty.
- **38 percent** of Tennessee physical educators do not use a published, planned sequential physical education curriculum. These programs either do not use a currculum, or use a self-designed curriculum. While there is nothing wrong with a self-designed curriculum, these should still be reviewed using the CDC's Physical Education Curriculum Analysis Tool (PECAT) for rigor, accuracy, standards alignment, and other elements.

Physical Activity and Physical Education in Tennessee – Priority Health Behaviors

CDC Youth Risk Behavior Survey

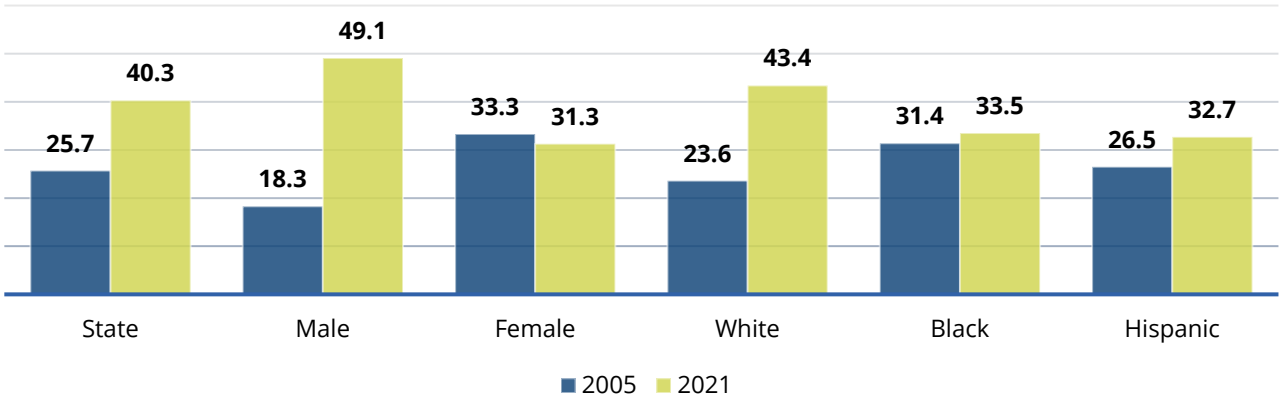
In 1991, the CDC developed the Youth Risk Behavior Surveillance (YRBS) survey, a national survey system to monitor the prevalence of youth behavior that most influences health. The priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States include tobacco use, unhealthy dietary behaviors, inadequate physical activity, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases including HIV infection, and behaviors that contribute to unintentional injuries and violence.

High school students self-reported the following weighted YRBS data related to physical activity. The Tennessee-specific data is detailed in Tables 13-15, below (CDC, 2023):

- Table 12: Percentage of high school students who were physically active for a total of at least 60 minutes per day on **five of the past seven** days.
- Table 13: Percentage of high school students who attended physical education (PE) classes on **one or more days** in an average week.
- Table 14: A Side-by-Side Comparison of screen time and meeting daily physical activity recommendations.

(Note that Hispanic data was collected during CDC's 2007 YRBS survey administration.)

Table 12: Percentage of Tennessee high school students who were physically active for a total of at least 60 minutes per day on five of the past seven days

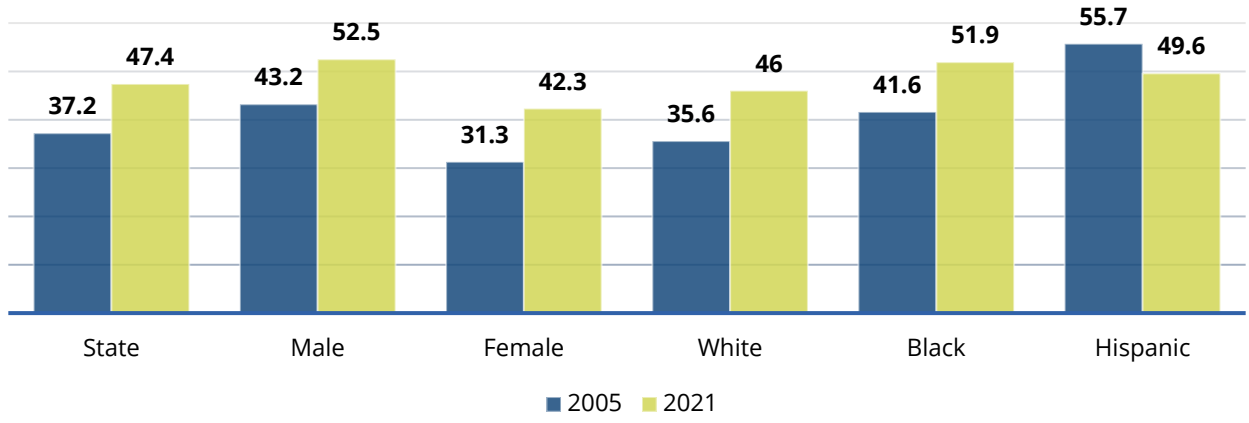


Between 2005 and 2019, the percentage of Tennessee high school students who reported being physically active for a total of at least 60 minutes per day on five of the past seven days increased from **25.7 percent** to **39.9 percent**.

Male students reported a significantly higher regular rate of physical activity at **47.7 percent** compared to female who were at **32 percent**. White students reported the greatest amount of increase in this area

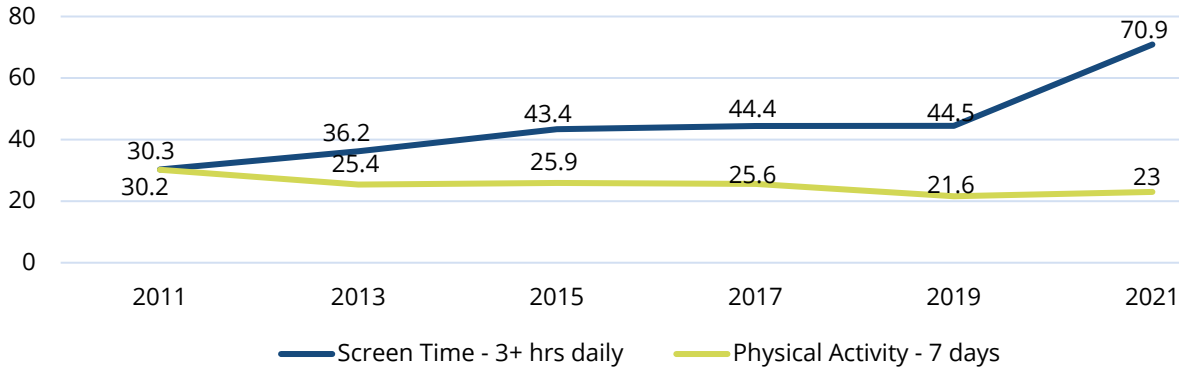
increasing from **23.6 percent** in 2005 to **40.6 percent** in 2019. Both Black and Hispanic students showed an increase on this measure from **31.4 percent** to **37.7 percent** and **26.5 percent** to **36.7 percent,** respectively.

Table 13: Percentage of Tennessee high school students who attended physical education (PE) classes on one or more days in an average week



Since 2005, the percentage of high school students reporting they attended physical education classes on one or more days in an average week when in school increased from **37.2 percent** in 2005 to **41.8 percent** in 2019. Male students reported attending classes more than female students; however, female students have increased in this area by **5.9 percent** since 2005. Black students have the highest percentage of participation over Hispanic and White students at **46 percent**.

Table 14: Screen time and Meeting Daily Physical Activity Recommendations: A Side-by-Side Comparison



Engaging in high quantities of screen time (3+ hours daily) is a health risk behavior that is showing a positive trend among Tennessee students since the question was included in 2011, represented on Table 19 by percentage of students. Conversely, the percentage of students meeting the recommended amount of physical activity daily over the course of seven days has decreased since that time.

Tennessee and the Nation

Tennessee requires 0.5 high school credit in physical education for graduation. There is also a 1 credit graduation requirement for a Lifetime Wellness course, but this course has its own set of standards and is not considered a physical education class. In the 2016 Shape of the Nation Report, more than half the nation (30 states) require 1 credit or more of physical education for high school students to graduate. Some of these credit totals represent a cumulative total of annual requirements.

U.S. Physical Education Graduation Requirements: State Totals	
2.0 or more	6
1.5	5
1.0	19
0.5	9
No Requirement	11

Photo provided by Henderson County Schools

Summary and Recommendations

Schools play a pivotal role in their capacity to support the development of life-long habits of physical activity behaviors among their students. By developing and implementing physical activity policies and practices for students, schools can create environments supportive of not only the development of healthy American adults but also increase student academic outcomes. Therefore, CSH coordinators, teachers, coaches, school administrators, and school district officials need to take a leadership role in implementing the following guidelines in Tennessee schools.

Common Misconceptions of How to Support Opportunities for Physical Activity in Schools

After thorough review of the details provided by building principals in the Physical Activity Compliance Report (TDOE, 2023c) and the Coordinated School Health District Application (TDOE, 2023b), it is clear that additional guidance would be helpful to clear up perceived barriers or limitations to compliance with the K-12 physical activity requirements of T.C.A. § 49-6-1021(a), as well as reinforce what is clearly stated in the law as what does not satisfy the definition of compliance.

Scheduling

Individual student schedules do not need to reflect the minimum amount of physical activity time in detail. In fact, it would be quite difficult to do so in most circumstances outside of scheduled recess time and physical education. This is where classroom physical activity is possible, in small amounts throughout the day, with or without content integration. A school culture of intentionally planning five minutes of movement for every hour of academic work adds up quickly and is shown to improve a student's ability to self-manage behavior for increased attention and focus. The easiest way to do this might include using a consistent movement routine for academic and schedule transitions, creating a predictable structure that reinforces best practices in trauma-informed research.

Structure

Unlike physical education, which is always structured, physical activity in a school setting can be unstructured. A teacher does not need to be directly leading the activity, nor do students need to be performing the same movement en masse.

Physical Education

Physical education is not the only physical activity opportunity in the academic school day for older students. Some building principals report that students who are scheduled for PE are getting enough physical activity, but nothing can be done for the other students. This means that it could be possible for a student to only have opportunities for physical activity in the school day just once between grades 6 and 12 while enrolled in their 0.5 credit graduation requirement for physical education. Instead, as a means to also support efforts for student focus and attention in what inevitably becomes longer class times, building leaders can provide training opportunities for all instructional staff to learn simple and brief movement strategies that don't require them to break from academic instruction, as this academic time loss is a common concern. If students consistently get 3-5 minutes of physical activity each class in a five-block schedule day, they easily build up 90+ minutes a week and will likely be more attentive.

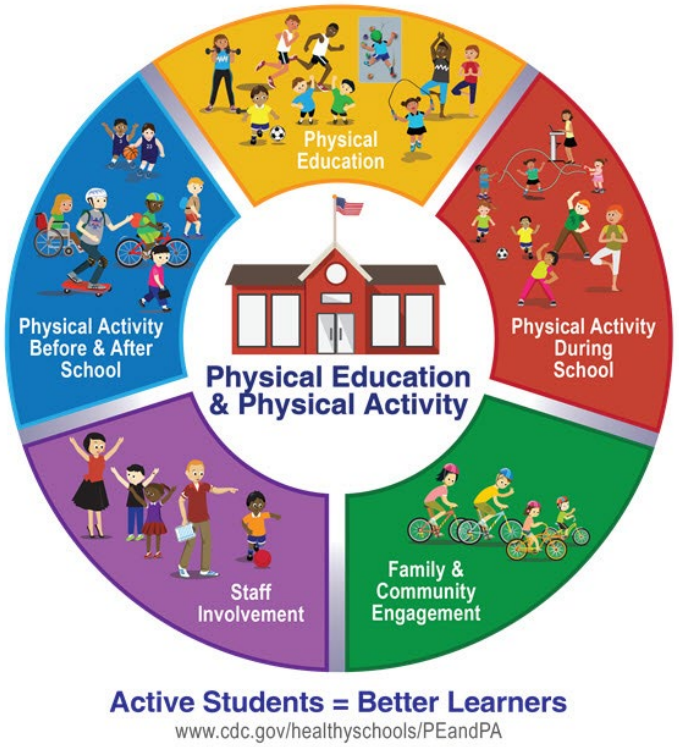
Exercise
Physical activity in the instructional school day does not need to resemble a workout class. Simple movement rendering a body non-sedentary is enough to stimulate the brain for one to reap the benefits. An example of light movement integrated with academic content might be groups circulating in a classroom creating graffiti-style brainstorm sheets, or the Kagan activity "quiz-quiz-trade." An example without academic content might be focused breathing with or without calming movements, used at a transition when students are returning to seating work or coming from a transition.

Walking to and from Class
Walking breaks are an excellent way to get movement benefits in a short amount of time. However, walking to and from scheduled locations as a whole class or for individual students changing classes on their own is not considered physical activity for the purposes of T.C.A. § 49-6-1021(a), as stated in subsection (b).

Comprehensive School Physical Activity Program

The CDC's Comprehensive School Physical Activity Program (CSPAP) is a framework for planning and organizing activities for school physical education and physical activity. The goal of a CSPAP is to increase physical activity opportunities before, during, and after school and to increase students' overall physical activity and health. Healthy and physically active students tend to have better grades, school attendance, cognitive performance (memory), and classroom behaviors (on-task behavior) (CDC, 2019).

The framework complements the coordinated school health model and is meant to be a strategic tool to address the aspect of physical education and physical activity in an integrated and ecological way. Schools can use the CDC's *Comprehensive School Physical Activity Programs: A Guide for Schools* to engage in a step-by-step process to develop, implement, and evaluate a CSPAP. This process helps schools develop a yearly plan for physical education and physical activity that they can implement and evaluate. In addition, the CSPAP framework—as a whole or as individual components—can be included in local wellness policies and school improvement plans to further support and provide guidance on school physical education and physical activity policies and practices (CDC, 2019).



References

American Psychological Association, (2020, April 24). *How and why to get children moving now*. https://www.apa.org/topics/covid-19/children-exercise-strategies

Centers for Disease Control and Prevention. (2010). The association between school-based physical activity, including physical education, and academic performance. Atlanta, GA: U.S. Department of Health and Human Services.

Centers for Disease Control and Prevention (CDC). (2019). Increasing Physical Education and Physical Activity: A framework for schools. Atlanta, GA: U.S. Department of Health and Human Services.

Centers for Disease Control and Prevention (CDC). (2023). Tennessee high school youth risk behavior survey data, 2005–2021. Retrieved March 7, 2023, from http://www.cdc.gov/healthyyouth/yrbs/index.htm.

Centers for Disease Control and Prevention (CDC) and SHAPE America – Society of Health and Physical Educators. (2017). Strategies for recess in schools. Atlanta, GA: U.S. Department of Health and Human Services.

Michael, S. L., Merlo, C. L., Basch, C. E., Wentzel, K. R., & Wechsler, H. (2015). Critical connections: health and academics. The Journal of School Health, 85(11), 740–758. https://doi.org/10.1111/josh.12309

Groβ, D., Schroder, I., Wasserfall, N., Eschenbeck, H., & Kohlmann, C. (2022). The reciprocal interplay of physical activity and health-related quality of life in children and adolescents: Evidence for both upward and downward spirals. Applied Psychology: Health and Well-Being, 15(2), 561-575. https://doi.org/10.1111/aphw.12396

Physical Activity Guidelines Advisory Committee. (2018). Physical activity guidelines advisory committee scientific report. Washington, DC: U.S. Department of Health and Human Services.

SHAPE America – Society of Health and Physical Educators. (2015). The essential components of physical education. Reston, VA: SHAPE America.

SHAPE America – Society of Health and Physical Educators. (2016). Shape of the Nation: Status of physical education in the USA

Retrieved from https://www.shapeamerica.org/uploads/pdfs/son/Shape-of-the-Nation-2016_web.pdf

SHAPE America – Society of Health and Physical Educators. (2019). The relationship between PE and PA.

Retrieved from https://www.shapeamerica.org/uploads/pdfs/2018/downloadables/pepa2.pdf.

SHAPE America – Society of Health and Physical Educators. (2021). Position statement: Physical activity should not be used as punishment and/or behavior management. Reston, VA: SHAPE America.

Tennessee Department of Education. (2021). Tennessee public schools: A summary of weight status data, 2019-20. Nashville, TN: Tennessee Department of Education, Coordinated School Health.

Tennessee Department of Education. (2023). Annual coordinated school health school district applications, 2007-08 through 2022-23. Unpublished raw data.

Tennessee Department of Education. (2023). Annual coordinated school health school district applications, 2022-23. Unpublished raw data.

Tennessee Department of Education. (2023). Physical activity compliance report, 2022-23. Unpublished raw data.

Tennessee State Board of Education. (2020). *Physical Activity and Physical Education Policy 4.206*. Retrieved from https://www.tn.gov/content/dam/tn/stateboardofeducation/documents/2020-sbe-meetings/july-24%2c-2020-sbe-meeting/7-24-20%20IV%20F%20Physical%20Activity%20Policy%204.206%20Attachment%20Clean.pdf.

U.S. Department of Health and Human Services. (2018). *Physical Activity Guidelines for Americans, 2nd edition*. Washington, DC: U.S. Department of Health and Human Services.

Weinberg, S. & Gould, D. (2007). Foundations of sport and exercise psychology. USA: Human Kinetics.