The 2024 United States Report Card on

Physical Activity for Children and Youth

PHYSICAL ACTIVITY ALLIANCE

MOVE WITH US

Table of Contents

2024 United States Report Card on Physical Activity for Children and Youth

10 Years of Reporting

The 2024 Report Card is the fifth comprehensive assessment of physical activity in U.S. children and youth, updating the Report Cards released in 2014, 2016, 2018, and 2022.

Primary Goal

The Report Card summarizes national data on levels of physical activity and influences of physical activity among American children and youth.

The tracking of physical activity indicators over time is an important surveillance tactic that allows for an assessment of population-level changes in behavior. The Report Card is a resource that summarizes health statistics related to physical activity levels among children and youth in the United States. More importantly, the Report Card is an advocacy tool that provides a level of accountability and call-to-action for decision makers regarding how we, as parents, teachers, health professionals, community leaders, and policy makers, can implement new initiatives, programs, and policies in support of healthy environments to improve the physical activity levels and health of our children and youth.

The Report Card is available at https://paamovewithus.org/us-report-card-on-physical-activity-for-children-and-youth/

Report Card Partner Organizations

THE PHYSICAL ACTIVITY ALLIANCE AND THE NATIONAL PHYSICAL ACTIVITY PLAN

The Physical Activity Alliance (PAA) is the nation's largest coalition dedicated to advancing regular participation in physical activity. The National Physical Activity Plan, an initiative of the PAA, aims to foster a national culture that supports physically active lifestyles and lead the population to achieve the US Physical Activity Guidelines for Americans. The Plan itself is a comprehensive set of policies, programs, and initiatives that aim to increase physical activity in all segments of the American population. The U.S. Report Card Research Advisory Committee responsible for developing this report card is a sub-committee of the National Physical Activity Plan.

To learn more about the Physical Activity Alliance and National Physical Activity Plan, please visit: https://paamovewithus.org.

THE ACTIVE HEALTHY KIDS GLOBAL ALLIANCE

The U.S. Report Card on Physical Activity for Children and Youth is a member of the Active Healthy Kids Global Alliance. The Active Healthy Kids Global Alliance is a network of researchers, health professionals and stakeholders who are working together to advance physical activity in children and youth from around the world.

To learn more about the Active Healthy Kids Global Alliance, please visit: www.activehealthykids.org.

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SUGGESTED CITATION

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Methodology

OVERVIEW

The Report Card Research Advisory Committee, a sub-committee of the Physical Activity Alliance, included experts in diverse areas of physical activity and health behaviors from academic institutions and partner organizations across the country. The Report Card Research Advisory Committee was charged with the development and dissemination of the U.S. Report Card, which included determining the indicators to be graded, identifying data sources, and assigning a letter grade to each indicator based on the evidence.

DATA SOURCES

Data from multiple nationally representative surveys were used to provide a comprehensive evaluation of each selected indicator. A description of each data source is provided at the end of this report. The data sources that were updated since the 2022 Report Card include the National Survey of Children's Health, Youth Risk Behavior Surveillance System, School Health Profiles, National Household Travel Survey, and Classification of Laws Associated with School Students. Most of these updated datasets provided data collected after the start of the COVID-19 pandemic, which in some cases helps to show the extent to which the pandemic may have contributed lasting impacts on the indicators.

The curated data were examined for all included U.S. children and youth overall and, when possible, separately by subgroups based on age group, sex, race/ethnicity, and disability status. The available data sources had several limitations when examining subgroups, including that biological sex was most often measured as male or female without attention to gender identity, and race/ethnicity was most often measured as White, non-Hispanic; Black, non-Hispanic; Asian, non-Hispanic; Other, non-Hispanic (including American Indian/Alaska Native, Pacific Islander/Native Hawaiian, and multiple races); and Hispanic, which does not reflect all racial/ethnic groups in the United States.

INDICATORS

The Report Card Research Advisory Committee selected 11 indicators related to physical activity in children and youth: (1) overall physical activity, (2) active transportation, (3) organized sport participation, (4) active play, (5) sedentary behavior, (6) sleep, (7) physical fitness, (8) family and peers, (9) schools, (10) community and the built environment, and (11) early childcare settings.

Each indicator was assigned a grade based on one or more metrics that generally aligned with those established by the Active Healthy Kids Global Alliance. The grade reflects how well the United States is succeeding at providing children and youth opportunities and/or support for physical activity. Table 1 presents the standard rubric the Committee used to determine a grade for each indicator.

Table 1:Report Card grading rubric*

Grade	Interpretation	Benchmark
A	We are succeeding with a large majority of children and youth (≥80%)	A+ = 94-100% A = 87-93% A- = 80-86%
B	We are succeeding with well over half of children and youth (60-79%)	B+ = 74-79% B = 67-73% B- = 60-66%
C	We are succeeding with about half of children and youth (40-59%)	C+ = 54-59% C = 47-53% C- = 40-46%
D	We are succeeding with less than half but some children and youth (20-39%)	D+ = 34-39% D = 27-33% D- = 20-26%
F	We are succeeding with very few children and youth (<20%)	F = 0-19%
INC	Incomplete—insufficient or inadequate information to assign a grade	

*developed by the Active Kids Global Alliance

ADDITIONAL SECTIONS

In addition to the graded indicators, three sections are provided to highlight critical aspects of physical activity in children and youth and complement the data provided throughout the Report Card. These sections include:

- Government Strategies and Investment
- Health Equity
- Children and Youth with Disabilities

A DECADE OF THE REPORT CARD

The 2024 U.S. Report Card marks 10 years of the Report Card series, with the first being released in 2014. To reflect on the past decade, the 2024 Report Card presents data on key metrics over this time period when available. Since some data sources have changed or changed the way they measure physical activity metrics, the time series often span about 8 rather than 10 years, and some indicators lack time series data altogether. When reflecting on changes over time, the committee chose to focus on key metrics that have been consistently measured over time rather than indicator grades which can comprise multiple metrics and occasionally change over time due to data availability.

Physical Activity Guidelines for Children and youth

The *Physical Activity Guidelines for Americans, 2nd Edition*[1] recommend that children and youth ages 6 to 17 years participate in 60 minutes (1 hour) or more of moderate-to-vigorous intensity physical activity (MVPA) every day of the week. They recommend the 60 minutes include:

Aerobic Activity: Most of the daily 60 minutes should be moderate-to-vigorous aerobic physical activity that makes children breathe hard and sweat. Children should include vigorous intensity aerobic activity on at least 3 days of the week.

Muscle-Strengthening Activity: The 60 daily minutes should include muscle-strengthening activities on at least 3 days of the week.

Bone-Strengthening Activity: The 60 daily minutes should include bone-strengthening activities on at least 3 days of the week.

Table 2: Examples of MVPA, muscle-strengthening, and bone-strengthening activities for children and youth[1]

Type of Physical Activity	Example Activities
Moderate-to-Vigorous Intensity (MVPA)	• Hiking • Biking and Skateboarding • Walking and running • Rock climbing • Martial arts such as karate or taekwondo • Playing sports such as golf, gymnastics, basketball, soccer, or football
Muscle Strengthening	• Climbing trees • Lifting weights • Playing on playground equipment
Bone Strengthening	• Running • Jumping rope • Playing hopscotch • Skipping • Weight-bearing sports such as gymnastics or tennis

Summary of the 2024 Indicators and Grades

Indicator	Grade
Overall Physical Activity	D-
Active Transportation	D-
Organized Sport Participation	C-
Active Play	INC
Sedentary Behaviors	D-
Sleep	C+
Physical Fitness	INC
Family and Peers	INC
School	D-
Early Care and Education Settings	B-
Community and Built Environment	C+

Indicators

Children & Youth

OVERALL PHYSICAL ACTIVITY

Authored by:
***Paul R. Hibbing**, **PhD**, Assistant Professor, Department of Kinesiology and Nutrition, University of Illinois Chicago*

Year	2014	2016	2018	2022	2024
Grade	D-	D-	D-	D-	D-

METRICS:

- Percentage of children and youth who meet the *Physical Activity Guidelines for Americans*, which recommend that children and youth accumulate at least 60 minutes of daily moderate-to-vigorous physical activity (MVPA)

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are well aligned with the metric.

RATIONALE FOR GRADE

- **The 2024 Overall Physical Activity Grade remains a D-.** The updated sources generally show similar level of physical activity since the last Report Card, but the overall implication remains unchanged, namely, that American children and youth are insufficiently active.

KEY FINDINGS:

Children & Youth Overall

- Few children and youth report meeting the physical activity guidelines: Between 20% and 28% of children and youth ages 6-17 years participate in 60 minutes of physical activity every day (NSCH 2021-2022 and NHANES 2017-2020).

- Many children and youth are physically active some of the time, despite not meeting the physical activity guidelines: While 28% of children and youth report engaging in at least 60 minutes of activity every day of the week, 66% report doing so on at least 4 days (NHANES 2017-2020). Similarly, 25% of high school-age youth report daily activity, but 46% report it on at least 5 days of the week (YRBSS 2023).
- Overall levels of physical activity have decreased slightly since the first Report Card based on the NSCH **(Figure 1)**.
- Physical activity levels decline with age: Between 26% and 42% of 6-11 year olds report meeting the physical activity recommendations, while rates for 12-17 year olds appear to lie around 15% (NSCH 2021-2022 and NHANES 2017-2020). Somewhat higher estimates have been obtained for high schoolers specifically (YRBSS 2023), yet still show declines from 9th grade (27%) to 12th grade (21%).

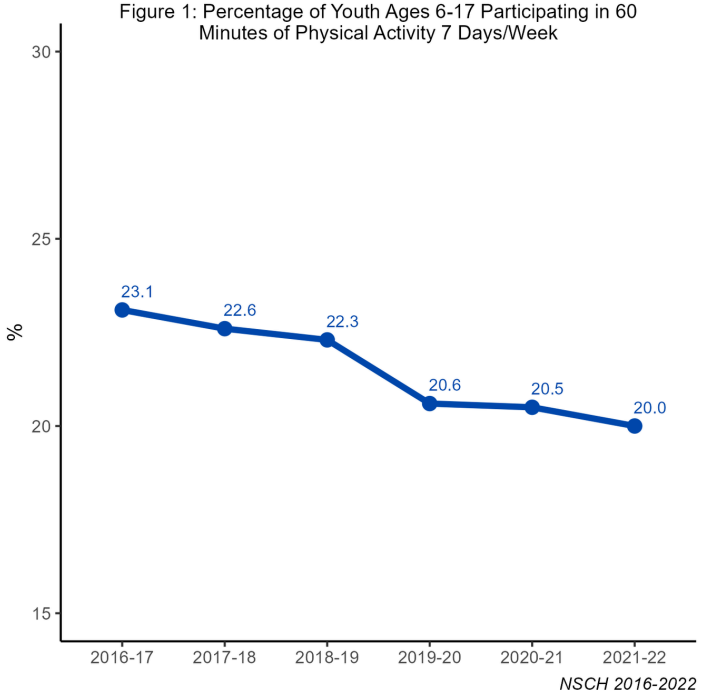
Young Children (0-5 Years)

- Parents report young children being active: 88% of children ages 2-5 years participate in at least 60 minutes of physical activity four or more days of the week (NHANES 2017-2020).

Weight Status

- Physical activity levels differ by weight status: 20% of children and youth with obesity report meeting the guidelines, whereas rates are higher for those with overweight (30%) or healthy weight (31%) (NHANES 2017-2020).

Figure 1: Percentage of Youth Ages 6-17 Participating in 60 Minutes of Physical Activity 7 Days/Week



NSCH 2016-2022

Race and Ethnicity

- Physical activity levels differ by race/ethnicity: 23% of non-Hispanic White children and youth participate in at least 60 minutes of physical activity every day of the week, while rates are lower for those who are Black (17%), Hispanic (17%), or Asian (14%) (NSCH 2021-2022).

Sex and Gender

- Physical activity levels differ between males and females: Among 6-17 year olds, 23% of males and 17% of females report meeting the physical activity guidelines (NSCH 2021-2022). Similarly, rates of 32% and 17% have been reported for high school males and females, respectively (YRBSS 2023).

Disabilities

- Approximately 17% of children and youth with disabilities (broadly defined) ages 6-17 participate in at least 60 minutes of daily physical activity. Sex differences persist in this group with 10.8% of females and 21.3% of males with disabilities meeting the guidelines (NSCH 2020-2021).
- Expectedly, there are differences in the percentage of children and youth with specific disabling conditions who meet the PA guidelines. About 28% of children and youth with intellectual disabilities and 27.4% of those with Down syndrome engage in 60 minutes of daily PA, while fewer children and youth with cerebral palsy (12%), autism spectrum disorder (19%), attention deficit hyperactivity disorder (19%), or visual impairments (3.7%)[2] do so (NSCH 2020-2021).
- This indicator does not consider that children and youth with disabilities may engage in different types of movement (e.g., seated play, physical therapy) or that access to resources/programming may be limited. As such, these individuals may be more physically active than the data make them appear.

KEY INSIGHTS AND NEW DIRECTIONS

- The COVID-19 pandemic was a key disruptor of physical activity as summarized in the 2022 Report Card. A small decline in activity levels appears to have occurred near the start of the pandemic, attributable to barriers that arose from lockdowns, remote learning, and other protective measures. Unfortunately, the more recent data do not show a rebound to pre-pandemic levels. These trends will be critical to continue monitoring.
- There has been a rapid rise of consumer-grade activity trackers, which have now become a commonplace accessory. The first Fitbit Charge was released in 2014, and the first Apple Watch was released the following year, marking serious inflection points in the history of smartwatch growth. Per Statista, the market size for smartwatches in 2014 was $1.5 billion,[3] and is expected to reach nearly $30 billion in 2024.[4] This staggering growth has included the release of devices such as Fitbit Ace and Garmin Vivofit Jr, which are specifically marketed to children and youth and may have implications for both promotion and surveillance of activity.
- MVPA is the main target of the physical activity guidelines, but step count has emerged as the focal measurement for many wearable devices, especially those oriented toward consumers. Step counts are highly intuitive and translatable, and thus researchers have worked to equate steps with MVPA for children and youth, suggesting that 12,000 steps are needed to achieve 60 minutes of MVPA (i.e., 2,000 steps per 10 minutes).[5]
- Step-based frameworks open the door for considering evidence from studies such as the Adolescent Brain Cognitive Development study (ABCD), in which Fitbit devices were worn by a sample of 10-14 year olds whose characteristics were loosely representative of the US population. 17% met the step-based activity guidelines, with males engaging in higher step counts than females (by 1544 more steps per day, equating to roughly 7-8 minutes per day of MVPA). Although this is somewhat lower than the estimates of 20%-30% from other studies, it is broadly consistent and may help to establish the utility of consumer-grade and step-oriented activity trackers for population-level surveillance in children and youth.

RESEARCH GAPS

1. There continues to be a need for updated device-based data from population-level samples, as well as a need to collect specific data on muscle- and bone-strengthening activities in addition to general MVPA measurements.
2. More population-based data are needed on how children and youth accumulate physical activity across the day and how these patterns (times of day, bouts of activity) may relate to meeting guidelines.

RECOMMENDATIONS

1. Considering the persistently low levels of physical activity among youth nationwide, urgent action is required to increase national public awareness campaigns. These campaigns should educate parents, caregivers, clinicians, community workers, school administrators, and policymakers on the significance of physical activity for child and adolescent health, well-being and achievement. They should also offer practical tips for seamlessly incorporating physical activity into daily routines.
2. When designing new activity promotion efforts, it is important to note that children and youth can still benefit from increased physical activity, even when not reaching the 60 minutes per day physical activity guideline. This may influence how promotion strategies are evaluated and perceived, ultimately informing conclusions about which ones are the most effective.
3. New initiatives to promote physical activity should include tailored strategies for different demographic groups. This involves creating age-specific programs that adapt to children's evolving needs and interests to better combat the decline in physical activity during adolescence. Culturally sensitive approaches are equally important; acknowledging and respecting cultural differences in physical activity preferences and providing programming that meets these needs has been shown to effectively increase physical activity levels among communities of color.
4. Given the modern role of technology and media during childhood and adolescence, it may be possible to promote greater engagement in physical activity by embracing certain aspects of technology and media. For example, many technology-based activities can be performed simultaneously with physical activity, and some can directly promote it. Thus, it may be a useful strategy for large scale activity promotion efforts to leverage existing interests in technology and media by connecting them with engagement in physical activity.
5. Socioeconomic barriers to physical activity participation affect all demographic groups. To overcome these barriers, it is crucial to focus on providing financial support, such as subsidies and scholarships, for low-income families to join sports leagues, camps, and recreational activities. Additionally, improving transportation access for children in underserved areas to reach recreational facilities and community programs can help reduce disparities in youth physical activity levels.

ACTIVE TRANSPORTATION

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Year	2014	2016	2018	2022	2024
Grade	F	F	D-	D-	D-

METRICS:

- Percentage of children and youth who use active transportation to get to and from places (e.g., school, park, mall, friend's house)

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are only somewhat aligned with the metric.

RATIONALE FOR GRADE

- **The 2024 Active Transportation grade remains a D-** due to low rates of active transportation and updated sources showing a continuing decline in active travel to school among elementary and middle school students.

KEY FINDINGS:

Children & Youth Overall

- Approximately 10.3% of children and youth ages 5-14 years usually walk or bike to school (NHTS 2022).
- Rates of active travel to school increase as children become older: 8.6% of elementary school students and 12.0% of middle school students walk or bike to school (NHTS 2022).
- The proportion of 5-14 year olds who walk or bike to school has been steadily decreasing over the past 10 years (NHTS) (Figure 2).

- Approximately 38% of youth ages 12-19 years walk or use a bicycle for at least 10 minutes continuously once or more in a typical week to get to and from places, with 15% and 23% doing so on 1-4 and 5-7 days per week, respectively (NHANES 2015-2016).
- Youth from high income households engage in less active transportation than those from lower income households: 46% of youth ages 12-19 years living in households earning less than 130% of the federal poverty level report engaging in active transportation in a typical week, whereas 36% and 34% of those in households earning 130-349% of the federal poverty level and 350% or more of the federal poverty level report engaging in active transportation in a typical week, respectively (NHANES 2015-2016).

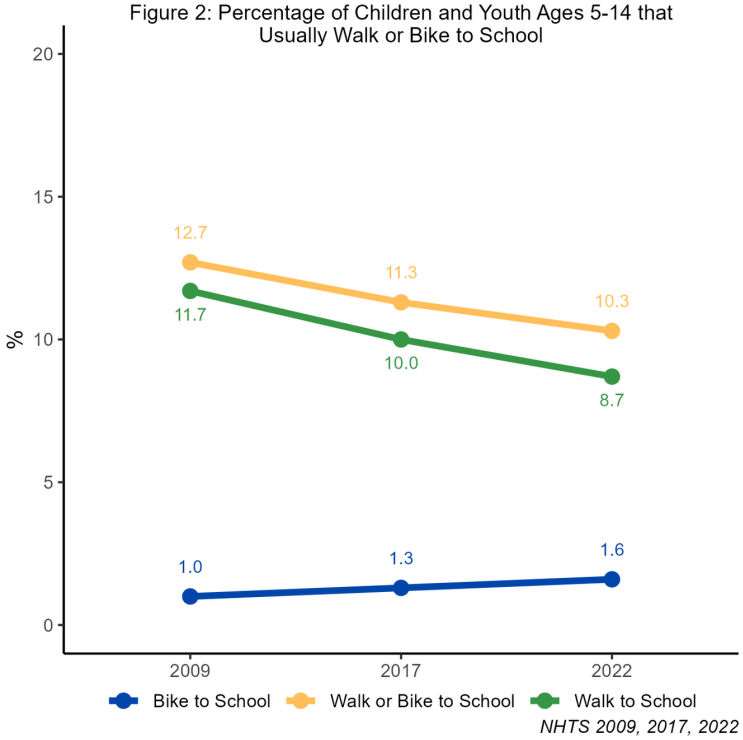
Young Children (0-5 Years)

- Data unavailable

Race and Ethnicity

- Race/ethnicity differences exist in reported active transportation among youth ages 12-19 years: Approximately 35%, 42%, 43%, and 45% of non-Hispanic White, Hispanic/Mexican American, Asian, and Black youth report engaging in active transportation in a typical week, respectively (NHANES 2015-2016).

Figure 2: Percentage of Children and Youth Ages 5-14 that Usually Walk or Bike to School



NHTS 2009, 2017, 2022

Sex and Gender

- Males are more likely to walk or bike to school than females, across age groups, with rates of 11.6% and 7.5%, respectively (NHTS 2022).
- Large differences exist in reported active transportation: Approximately 45% of males and 32% of females ages 12-19 years report engaging in active transportation in a typical week (NHANES 2015-2016).

Disabilities

- Data unavailable

KEY INSIGHTS AND NEW DIRECTIONS

- Active transportation, consisting of walking, biking, and other human-powered means of getting to and from places, plays a crucial role in enhancing overall physical activity levels among children and youth.
- The overall assessment for this grade focuses on active transportation for various destinations, with school being a primary destination for children and youth. Active travel to school is a fraction of what is once was, having declined from 41% of students in 1969 to just 10% in 2022. Despite investments aimed at reversing this trend, the use of active transportation has continued to decline, pointing to the need for more effective and widespread approaches.[6-9]
- The low rates of active transportation among youth are a consequence of decades of vehicle-centric policies and practices that have made walking and biking impractical or dangerous in many communities.
- To achieve the U.S. Department of Health and Human Services' *Healthy People 2030*[10] target of increasing the proportion of adolescents who walk or bike to get places in a typical week to 45%, a meaningful increase over the current rate of 38%, there is a pressing need for additional funding, policy support, and the implementation of evidence-based interventions aimed at promoting safe active transportation.
- A national workshop aimed at improving surveillance of youth active travel to school was held in 2020.[11] Resulting recommendations included to enhance funding and surveillance, integrate active travel to school in existing surveys, develop interactive online toolkits, align performance metrics, use consistent data collection across levels, and incorporate equity in data analysis.
- Age and sex disparities often root from neighborhood safety and distance. For racial and ethnic differences, deeper analysis is needed. Communities of color typically have fewer supports for physical activity and higher pedestrian accident rates. Despite this, they show higher active transportation rates, possibly due to necessity and socioeconomic factors.

RESEARCH GAPS

1. Better surveillance of active transportation is needed, particularly outside of active travel to school, as these data have been absent from the latest NHANES cycles.
2. More research is needed on strategies for increasing active transportation to/from places other than school, particularly those that complement environmental approaches.
3. There is an increasing need to better understand environmental barriers for children and youth with disabilities who may interact differently with their environments.
4. Given that many initiatives exist to increase active transportation, more large-scale natural experiment studies are needed to identify the most effective combinations of strategies across diverse environments to better inform policy and practice.

RECOMMENDATIONS

1. Pedestrian safety concerns are major barriers to active transportation and should be addressed through collaborations among multiple sectors, spanning health, transportation, public policy, and others.
2. Cultural changes around active transportation are occurring through efforts related to Complete Streets, Visions Zero, Public Transit, and carbon reduction, among others, and should be synergized to increase opportunities for active transportation among all youth.
3. Safe Routes to School and similar initiatives provide a good model for supporting active transportation throughout communities through multilevel and multisectoral approaches that include built environment improvements, programming and education, and promotion and encouragement.

ORGANIZED SPORT PARTICIPATION

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Year	2014	2016	2018	2022	2024
Grade	C-	C-	C	C	C-

METRICS:

- Percentage of children and youth who participate in organized sport and/or physical activity programs

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are generally well aligned with the metric.

RATIONALE FOR GRADE

- **The 2024 Organized Sport Participation grade was lowered to a C-** due to updated sources showing decreases in sports participation as well as large economic disparities.

KEY FINDINGS:

Children & Youth Overall

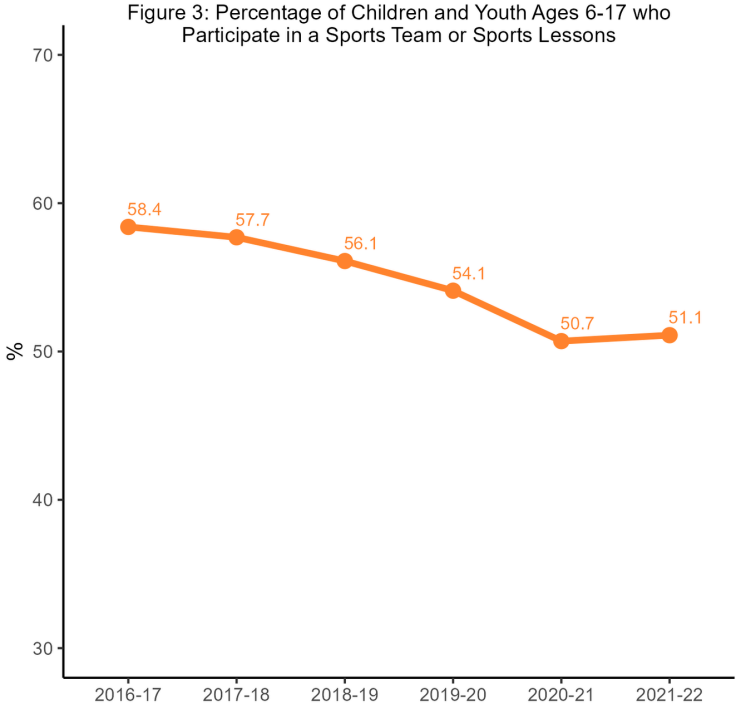
- About half (51%) of children ages 6-17 participate in sports teams or lessons after school or on weekends (NSCH 2021-2022).
- Participation in sports has declined among 6-17 year olds, from 58% in 2016-2017 to 51% in 2021-2022 (NSCH) **(Figure 3)**.
- Approximately 51.9% of high school students report playing on at least one sports team during the previous year (YRBSS 2023).

- High school sports participation in the previous 12 months has also shown an overall decline, with 64.0% of males and 52.6% of females reporting participation in 2011 compared to just 55.7% of males and 48.1% of females reporting participation in 2023 (YRBSS).
- Approximately 62.6% of 6-12 year olds and 57.3% of 13-17 year olds report playing an organized or unorganized team sport at least once a year (State of Play 2023).
- Approximately 52.3% of 6-12 year olds and 51.8% of 13-17 year olds report playing an organized or unorganized individual sport at least once a year (State of Play 2022).
- Approximately 36.2% of 6-12 year olds and 39.1 % of 13-17 year olds report playing a team sport (organized or unorganized) on a regular basis (State of Play 2023).
- A significant socioeconomic disparity in sports participation exists: approximately 25.8% of children from low-income households (<$25,000 per year) compared to 42.7% of children from high-income households (≥$100,000 per year) engage in regular sport activity during the year (State of Play 2023).

Young Children (0-5 Years)

- Data unavailable

Figure 3: Percentage of Children and Youth Ages 6-17 who Participate in a Sports Team or Sports Lessons



NSCH 2016-2022

Race and Ethnicity

- Racial disparities in youth sports participation are apparent: According to the State of Play Report (2022), among 6-12 year olds 38.0% of non-Hispanic White children played a sport on a regular basis compared to 31% of Black children of the same age. Among older children the rates are less disparate, with 43.9% of non-Hispanic White 13-17 year olds playing a sport on a regular basis compared to 42.4% of their Black counterparts.

Sex and Gender

- There is a gap between high school males and females in sports participation: 55.7% of males and 48.1% of females reported past-year participation in organized sports (YRBSS 2023).

Disabilities

- About one third, 33%, of children and youth with disabilities (broadly defined) ages 6-17 report participating on a sports team or taking part in sports lessons during the past 12 months (NSCH 2020-2021), which is down from 38% in 2019-2020 (NSCH).
- Fewer females (29.8%) with disabilities participate in sports or lessons compared to males (35.5%).
- Variations exist in current participation as well as levels of decline (from NSCH 2019-2020) among children and youth with different chronic conditions. For example, 14.1% with cerebral palsy (down from 22.8%), 18.5% with autism spectrum disorder (down from 24.8%), 15.7% with intellectual disabilities (down from 27.2%), and 28.8% with Down syndrome (down from 42.6%) report participating on a sports team or taking sports lessons during the previous year compared to 51% of the full NSCH sample of children (NSCH 2020-2021).

KEY INSIGHTS AND NEW DIRECTIONS

- Organized sports are critical to the physical and social development of youth and are an important approach to increase physical activity. Participation in organized sports increases the odds of meeting physical activity recommendations two-fold, however sport participation is not solely sufficient to meet physical activity recommendations and therefore should be promoted alongside other modes of physical activity.[12]
- While sex disparities persist, the gap between male and female organized sport participation has decreased. Data from the 2014 report card showed an 11.4% difference in participation compared to a 7.6% difference in participation between males and females in the current report card. It should be noted that this improvement in sex disparity is occurring in the context of an overall decline in organized sport participation for both males and females, with male participation declining more substantially than female participation.
- Income disparities in organized sport participation are stark. More than half of U.S. schools have fees associated with school sports[13] resulting in lower participation rates among children and youth from lower income households. Further, many low-income schools lack the facilities and resources to provide ample opportunities for sport participation.[14] Income disparities in youth sport participation are exacerbated by shifts away from school sports to private-based sports. This trend has created a "pay to play" model that introduces financial barriers to low-income families and other barriers such as transportation challenges.[15]
- The disparity in regular sports participation between non-Hispanic White and Black children is more pronounced in the younger age group (6-12 years old) than in the older age group (13-17 years old). This suggests that initiatives to reduce physical activity disparities might need to place a greater emphasis on younger children. Early intervention could be crucial in ensuring equitable access to sports and physical activities, potentially leading to more equal participation rates as children grow older.
- There appears to be a trend away from team sports that began before the COVID-19 pandemic, but the trend is believed to be accelerated by the pandemic.[16] Switching to other activities can have a negative impact on youth's physical activity if sports are replaced with inactive activities, highlighting the need for youth to receive a diversity of physical activity opportunities.

RESEARCH GAPS

1. Surveillance data and research are most robust for high school students and limited for younger children and particularly those 5 years and younger. This gap in data reflects a time of great change in the physical activity of youth, which we need to better understand to promote physical activity more successfully in these transition years.
2. There is a notable gap in surveillance data on the sports participation of children and youth with disabilities. Unlike sex, household income, and race/ethnicity, disability status is not a demographic considered in some key data sources (e.g., State of Play).
3. To better understand trends in sport participation it is important to examine the context around sport participation (e.g., setting and individual or team sport) on a national level.

RECOMMENDATIONS

1. Increase surveillance data for children under 13 years of age and particularly for children 5 years of age and younger.
2. Expand low-cost and free opportunities for sport participation in school- and community-based sports.
3. Encourage multi-sport participation and discourage sport specialization to reduce burn-out and over-use injuries, and increase overall sport participation.
4. Invest in local school- and community-based facilities to increase availability of settings for sport participation. Additionally, enhance school and community partnerships to expand available facilities for youth sports.
5. Create environments that capitalize on the social aspects of sport, which are known to be predictors of sport initiation and continued participation.

ACTIVE PLAY

Authored by:
***Yang Bai, PhD**, Associate Professor, Health and Kinesiology, The University of Utah*

Year	2014	2016	2018	2022	2024
Grade	INC	INC	INC	INC	**INC**

METRICS:

- Percentage of children and youth who engage in unstructured/unorganized active play for several hours a day
- Percentage of children and youth who report being outdoors for several hours a day

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are not well aligned with the metrics except for data in 3–5 year olds.

RATIONALE FOR GRADE

- **The 2024 Active Play grade remains incomplete** due to a lack of recent nationally representative data.

KEY FINDINGS:

Children & Youth Overall

- Approximately 53.6% of schools allow youth to participate in physical activity in classrooms during the school day outside of PE classes (SHP 2022).
- State recess policies vary: Two states mandate over 30 minutes of daily recess; five states require 20-30 minutes, while another five stipulate less than 20 minutes. Ten states require recess without specifying duration, and 28 (56%) have no requirements (CLASS 2021).

- Sports-related free play: TeamSnap and the Aspen Institute's Sports & Society Program surveyed parents whose children were participating regularly in sports. The children and youth engaged in an average of 3.4 hours per week of sports-related free play. An age-related decline was observed in free play time, with the 5-10 age group spending more time (3.4 hours per week) compared to the 11-14 age group (3.2 hours), and the 15-18 age group (2.6 hours) (State of Play 2022).

Young Children (0-5 Years)

- Approximately 64% of 3-5 year old preschoolers spend more than 2 hours playing outdoors on most weekdays, and 77% do so on weekend days (NSCH 2021-2022).

Race and Ethnicity

- Among preschoolers ages 3-5 years, the proportion who spent over 2 hours playing outdoors was highest among non-Hispanic White children (NSCH 2021-2022) **(Figure 4)**.
- Sports-related free play: Hispanic children engaged in an average of 4.5 hours of free play per week, exceeding non-Hispanic White children who participated for 3.8 hours, and Black children who engaged for 3.5 hours (State of Play 2022).

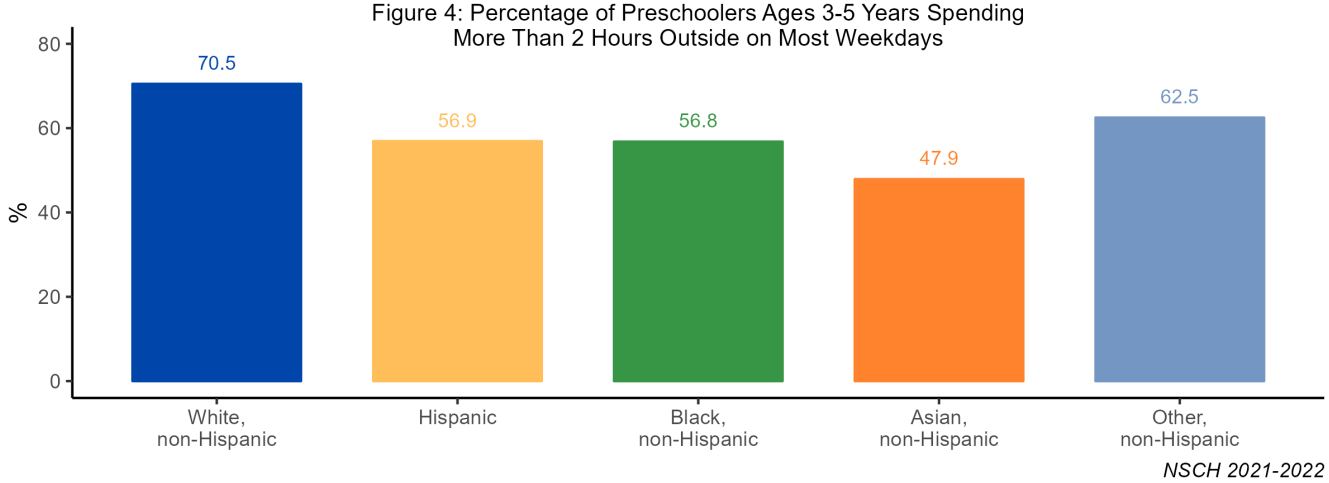
Sex and Gender

- The proportion of preschoolers who spend over 2 hours playing outdoors is slightly higher among males (weekdays: 65.9%; weekend: 78.2%) than females (weekdays: 60.9%; weekend: 75.2%) (NSCH 2021-2022).

Disabilities

- Data unavailable

Figure 4: Percentage of Preschoolers Ages 3-5 Years Spending More Than 2 Hours Outside on Most Weekdays



KEY INSIGHTS AND NEW DIRECTIONS

- Over the past decade, Active Play has consistently received an INC grade in the Report Card. This is primarily attributed to insufficient surveillance data. Although the National Survey of Children's Health incorporated questions about outdoor play among preschoolers with a nationally representative sample, there remains a significant dearth of surveillance data for children and youth.
- Active play is a type of physical activity that children enjoy and engage in spontaneously. It is typically unplanned, unstructured, and self-directed, often involving games and activities that promote movement. Active play is vital for children's physical and mental health, cognitive development, motor skills, and vision, as well as vitamin D levels when done outdoors. Additionally, it can help children develop important social and emotional skills like conflict resolution, teamwork, problem-solving, self-confidence, and resilience.
- Despite the benefits of outdoor play, children in the United States today appear to spend less time playing outdoors than previous generations. The COVID-19 pandemic has worsened this situation. A nationally representative survey of 624 youth ages 10–18 across the United States found that 64% reported decreased outdoor recreation participation in 2020.[17]
- One way to increase outdoor active play is through school recess. Recess is a significant source of physical activity at school for younger children, contributing up to 44% of all physical activity during school hours.[18] Recent research analyzed six nationally representative data sets collected over the past decade to estimate adherence to CDC recess guidelines.[19] Findings indicate that while 65-80% of elementary school children receive the recommended 20+ minutes of daily recess, recess time significantly drops by the sixth grade. Additionally, many schools withhold recess as punishment (around 50%) and do not provide training for recess staff (over 50%). In a separate study,[20] children living in states with a recess law were 2.8 times more likely to be physically active every day and 2.9 times more likely to have no difficulty making or keeping friends compared to those in states without such a law.
- A recent systematic review explored factors influencing active play and identified individual, parental (e.g., attitude, support, behavior, parenting practices), and proximal home (e.g., residence type) and social environments, such as peer influence, as significant contributors to children's outdoor play and time. Additionally, ecological factors like seasonality and rurality were found to correlate with outdoor play/time.[21]

RESEARCH GAPS

1. Given the importance of active play on physical activity and a plethora of health and social outcomes, there is a critical need for more surveillance and research data focused on active play.
2. The intermittent bursts of moderate to vigorous physical activity inherent in active play pose challenges for assessment via parent- or self-report methods. Employing device-based measures to evaluate active play can aid in establishing guidelines for daily outdoor time and elucidating the dose-response relationship between outdoor time and various health indicators.

RECOMMENDATIONS

1. Researchers should establish consensus-based measures of active play that can be used to effectively monitor this behavior on a national scale and operationalize it for surveillance purposes. The measures should consider children and youth with disabilities who may play and move differently, and whose access to outdoor spaces could be compromised.
2. Public health surveillance systems should integrate active play measurement to track representative data on children's daily outdoor activity and active play.
3. Schools should require regular recess and physical activity breaks, supported by additional resources like staff training and more accessible playground equipment to enhance active play during the school day.
4. Parents, particularly those with children under 12, should encourage daily outdoor play in safe environments for their children, participating whenever feasible to engage in outdoor activities together as part of a family physical activity plan.

SEDENTARY BEHAVIOR

Authored by:
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Katherine E. Spring, PhD, *Post-Doctoral Research Fellow, Pennington Biomedical Research Center, Louisiana State University*

Year	2014	2016	2018	2022	2024
Grade	D	D-	D	D	D-

METRICS:

Percentage of children and youth engaging in 2 hours or less of screen time per day

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are well aligned with the metric.

RATIONALE FOR GRADE

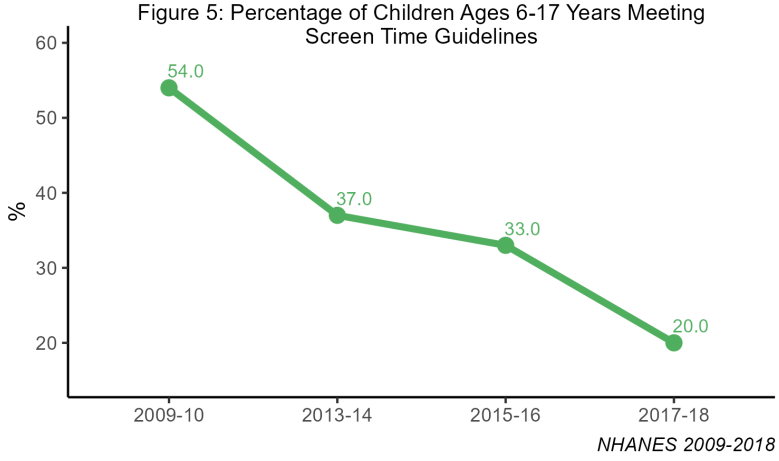
- **The 2024 Sedentary Behavior grade was lowered from a D (2022) to a D-** as national data indicate fewer kids (both younger and older) meet the international recommendations of 2 or fewer screen time hours per day.[22-24]
- Sedentary behaviors (i.e., sitting, reclining, or lying down)[25] are difficult to measure in population-based surveillance studies. Because of this, the grade focuses on screen time, which is a major contributor to sedentary behavior.

KEY FINDINGS:

Children & Youth Overall

- Approximately 20% of children and youth ages 6-17 years report engaging in 2 hours or less of screen time per day (NHANES 2017-2018) **(Figure 5)**.
- One-quarter (24.1%) of high school-aged students report using a computer or other electronic device for less than 3 hours per day (YRBSS 2021).
- When not counting screen time that is related to school work, 58.1% of children ages 6-17 engage in 2 hours or less of screen time (NSCH 2021-2022)
- Younger children ages 6-11 years are more likely to meet screen time guidelines than adolescents ages 12-17 years: 60.5% and 36.0%, when excluding school work, respectively (NSCH 2021-2022).
- Over the last decade, there has been a large decline in children meeting screen time recommendations. In 2009-2010,[26] 53.5% of children ages 6-17 years met the guidelines compared to only 20.0% in 2017-2018 (NHANES).

Figure 5: Percentage of Children Ages 6-17 Years Meeting Screen Time Guidelines



Young Children (0-5 Years)

- Less than half (44.5%) of children ages 2-5 years met screen time guidelines (NHANES 2017-2018).
- There has been a slight decrease in young children meeting the screen time guidelines. In 2016,[27] 47.1% of children ages 2-5 years met the recommendations.

Weight Status

- Fewer children who have obesity met the screen time recommendations (13.7%) compared to children who have overweight (21.1%) or have a normal weight (21.1%) (NHANES 2017).
- Over the last decade, more children who have a normal weight met the recommendations compared to those who are overweight or have obesity (NHANES 2014-2020).

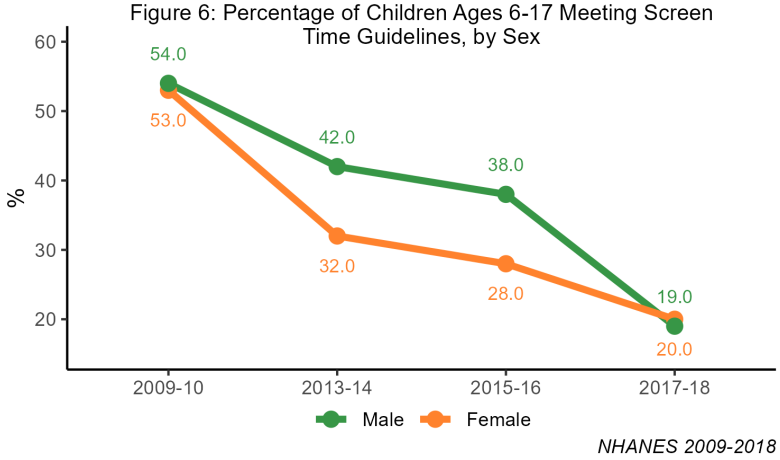
Race and Ethnicity

- Significant race/ethnicity differences are observed in reported screen time, with non-Hispanic Black children reporting the most screen time. Prevalence of children ages 6-17 meeting the screen time guidelines is 21% (non-Hispanic White), 20% (Hispanic/Mexican American), 19% (Asian), and 13% (Black) (NHANES 2017-2018). These disparities have persisted over the past decade.
- Black children ages 9-10 years have reported 1.6 more hours of screen time per day than non-Hispanic White children (for an average of 5.1 hours per day for Black children and 3.5 hours per day for non-Hispanic White children). Hispanic children reported 0.2 more hours of screen time per day compared to White children, whereas Asian children reported 0.4 less hours of screen time per day compared to non-Hispanic White children.[28]
- Problematic screen use behaviors (i.e. the tendency to display more uncontrolled and compulsive screen use) were higher among Native American, Black, and Hispanic adolescents compared to non-Hispanic White adolescents.[29]

Sex and Gender

- A similar percentage of females (19%) and males (20%) ages 6-17 years met the screen time recommendations (NHANES 2017-2018).
- Ten years ago, national data[26] indicated that females were more likely to meet recommendations than males. While this trend has remained consistent over time, differences in screen time between sexes have been minor **(Figure 6)**.
- Males reported spending more time playing video games and exhibited more problematic video game use than females. Problematic video game use is characterized by preoccupation with and loss of control over playing video games, which can lead to numerous negative consequences in an individual's personal, home, and school life.[29]
- Females spent more time using social media and mobile phones and reported more problematic social media use and problematic smartphone use. Problematic smartphone use refers to an obsessive use of smartphones in general that is often characterized by "addiction-like" symptoms and results in harm to an individual's daily function. Similarly, problematic social media use refers to an individuals' uncontrolled and compulsive use of engaging with social media networks. Problematic social media use is associated with negative consequences, including issues at school and fights with friends and family.[30]

Figure 6: Percentage of Children Ages 6-17 Meeting Screen Time Guidelines, by Sex



NHANES 2009-2018

Disabilities

- Approximately 35% of children and youth with disabilities (broadly defined) ages 6-17 years engaged in 2 hours or less of screen time per day (NSCH 2020-2021), down from 39% (NSCH 2019-2020).
- Analyses of 2019-2020 NSCH data estimate that the majority (58%) of youth ages 6-17 years with disabilities, identified as receiving special education services, did not meet screen time guidelines.[31]
- Disparities in screen time based on disability status are notable.
- About 25% of youth with disabilities ages 12-15 years met the screen time guidelines compared to 34% of youth with typical development; and 45% of children with disabilities ages 6-11 years met the guidelines compared to 56% of peers with typical development.
- Published reports using 2020-2021 NSCH data indicate that low percentages (weighted) of children and youth ages 6-17 years with specific disability conditions met the screen time guidelines; 10.5% with learning disabilities,[32] 9.9% with autism,[33] 10.8% with attention deficit hyperactivity disorder,[34] and 10.2% with visual impairments.[2]
- Data analyzed from the Adolescent Brain Cognitive Development (ABCD) Study indicate that, compared to children with typical development, males with autism spent 26% more time (2.9 hours per day vs. 2.3 hours per day) and females with autism spent 50% more time (3.0 hours per day vs. 2.0 hours per day) watching TV, movies or videos. Both males and females with autism played approximately 25 minutes per day more video games than their peers with typical development.[35]

KEY INSIGHTS AND NEW DIRECTIONS

- Current evidence suggests adolescents (12-13 years) had a 3.8 hour per day increase in screen time across the COVID-19 lockdowns. Additionally, higher total screen time use was associated with poor mental health and greater perceived stress.[36]
- There could be a rebounding effect in the coming years returning to pre-pandemic levels, or the increases in screen time may persist. There is insufficient evidence to draw conclusions at this time.
- Current evidence suggests that sedentary behaviors, measured as screen time, are increasing at an alarming rate.
- High amounts of time in sedentary behaviors increases several health risks (i.e., obesity,[37] insulin resistance,[38] cardiovascular disease[39,40]) and may displace opportunities to be physically active.
- Neighborhood environments and negative perceptions of safety are associated with decreased physical activity and increased screen time.[41,42] These factors could contribute to the increased screen time trends in minority racial groups.
- Parent-child interactions are another factor that could contribute to increased screen time and disparities in problematic screen use. Lower socioeconomic status is associated with fewer parent-child interactions (i.e., field trip frequency, screen-free conversations).[43]
- Whereas many screen time questions in surveillance studies focus on television viewing, smartphone use continues to increase and proliferate. The percentage of Americans who own a smartphone increased from 35% (2011) to 90% (2023).[44] Additionally, one in five parents of a child 11 years of age or younger report that their child has their own smartphone, and 65% of parents say it is acceptable for children to own a personal tablet before the age of 12.[45]
- If excessive amounts of sedentary screen time continue, children could develop worsening health habits, thereby increasing their chance of disease, mortality, and mental health issues as they age.

RESEARCH GAPS

1. Further research is needed to identify the long-term effects of the COVID-19 pandemic shutdowns and school closures on screen time among children.
2. With many schools and families switching to online learning, more research is needed to understand the impact of sedentary online learning on child health indicators.
3. More research is needed to understand the impacts and opportunities of switching sedentary screen time for more active screen time, such as active video games.
4. More population-based research is needed on how sedentary time is accumulated throughout the day, specifically around prolonged periods of sitting.

RECOMMENDATIONS

1. Develop federal guidelines and recommendations for sedentary behavior and screen time in children and youth.
2. Design public health initiatives to counteract the increased screen time due to the COVID-19 pandemic.
3. Develop and implement state and local built environment policies targeting walkability and neighborhood safety to encourage children and youth to be more physically active.
4. Include different electronic devices (smartphones and tablets, not only television) into population surveillance to account for the shifts in screen usage.
5. Implement surveillance studies to capture all types of sedentary behavior, not just screen time.

SLEEP

Authored by:
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Year	2014	2016	2018	2022	2024
Grade	Not in Report Card			C+	C+

METRICS:

- Percentage of children and youth who obtain the recommended age-appropriate hours of sleep on weekdays

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are well aligned with the metric.

RATIONALE FOR GRADE

- **The 2024 Sleep grade remains a C+** as national data indicate little change in how much sleep children and youth are getting and that many children are not sleeping enough.

The American Academy of Sleep Medicine recommends:[46]

- Infants (4 to 12 months) should sleep for 12 to 16 hours (including naps)
- Toddlers (1 to 2 year olds) should sleep for 11 to 14 hours (including naps)
- Young children (3 to 5 year olds) should sleep for 10 to 13 hours (including naps)
- Children (6 to12 year olds) should sleep for 9 to 12 hours per night
- Youth (13 to18 year olds) should sleep for 8 to 10 hours per night

KEY FINDINGS:

Children & Youth Overall

- When parents reported for their children and youth **(Figure 7)**:
  - 64% of 6-11 year olds slept the recommended age-appropriate hours on weeknights (NSCH 2021-2022).
  - 67% of 12-17 year olds slept the recommended age-appropriate hours on weeknights (NSCH 2021-2022).
- When adolescents reported their own sleep:
  - 62% of 16-19 year olds reported bed and wake up times that equaled at least 8 hours on an average weekday night (NHANES 2017-2020).
  - 23% of high school students reported at least 8 hours on weeknights (YRBSS 2023).

- Sleep hygiene:
  - 16% of 6-11 year olds did not have consistent bedtimes on weeknights (NSCH 2021-2022).
  - 1 in 5 (21%) adolescents (12-17 years old) did not have consistent bedtimes on weeknights (NSCH 2021-2022).
- Social Jet Lag:
  - Social jet lag has been defined as a mismatch between biological and social sleep timing and can be measured as the difference in midpoint of the sleep period between weekends/free days and weekdays/school days. For example, midpoint of 2 a.m. on weekdays (bedtime of 10 p.m. and wake up of 6 a.m.) vs 3:30 a.m. on weekends (bedtime of 11 p.m. and wake up of 8 a.m.). It usually means someone has earlier and shorter sleep on weekdays and later and longer catch-up sleep on weekends.
  - Adolescents appear to experience social jet lag, having an earlier sleep midpoint by 2.0 hours on weeknights as compared to weekend nights (NHANES 2017-2020).
  - Adolescents also sleep less on weeknights (8.1 hours) compared to weekend nights (9.4 hours) (NHANES 2017-2020).
- Family income
  - Those from lower socioeconomic status (SES) households (0-199, 200-299, 300-399 % FPL) are less likely to meet recommendations (56%, 65%, 68%) compared with those from higher SES households (≥400% FPL) (74%) (NSCH 2021-2022).

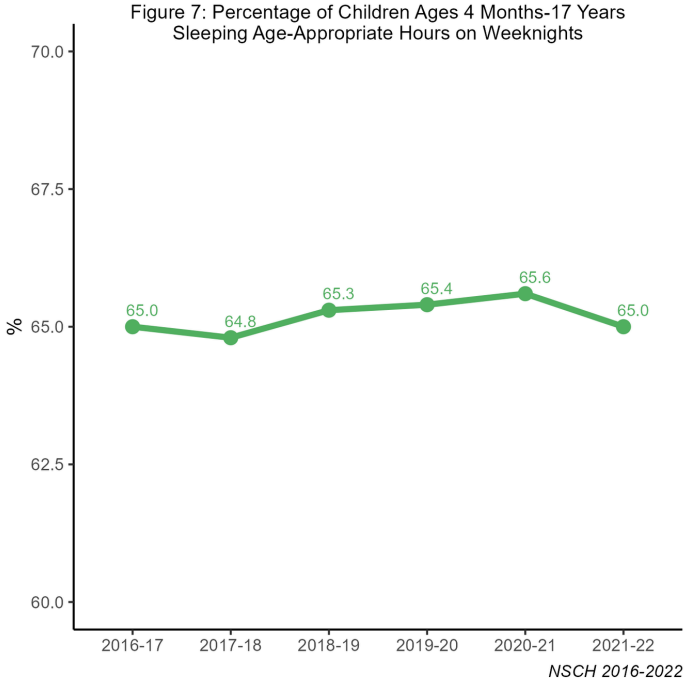
Young Children (0-5 Years)

- 64.3% of children ages 4 months-5 years sleep the recommended age-appropriate hours (NSCH 2021-2022).
- 10.7% do not have consistent bedtimes on weeknights (NSCH 2021-2022).

Sleep hygiene includes bedtime routines, behaviors, and environments that promote healthy sleep.

- Inconsistent bed and wake times and TV and electronic device use around bedtime have been shown to negatively impact sleep.

Figure 7: Percentage of Children Ages 4 Months-17 Years Sleeping Age-Appropriate Hours on Weeknights



Race and Ethnicity

- Non-Hispanic Black adolescents, non-Hispanic Asian adolescents, and adolescents who report multiple races have the lowest prevalence of meeting recommendations (17-19%) when compared with 24-26% of Hispanic/Latino, Native Hawaiian/Pacific Islander, and White non-Hispanic adolescents (YRBSS 2023).
- 48% of Black children and youth meet recommendations compared with >61% for all other race/ethnicities (NSCH 2021-2022).
- 48% of Asian adolescents meet recommendations compared with 63-68% of Mexican American, Other Hispanic, and non-Hispanic White adolescents (NHANES 2017-2020).

- Fewer Asian adolescent females meet recommendations (34%) compared with Asian adolescent males (61%) (NHANES 2017-2020).
- 37% of adolescents who reported multiple races meet recommendations compared with 63-68% of Mexican American, Other Hispanic, and non-Hispanic White adolescents (NHANES 2017-2020).

Sex and Gender

- 22% of adolescent females meet recommendations compared with 25% of adolescent males (YRBSS 2023).
- 56% of adolescent females meet recommendations compared with 67% of adolescent males (NHANES 2017-2020).
    - This equates to about 7.9 hours of sleep on weekdays for females vs 8.2 hours of sleep for males (NHANES 2017-2020).

Disabilities

- 55% and 61% of children and youth with a disability (broadly defined) ages 6-11 and 12-17 years, respectively, sleep the recommended age-appropriate hours on weeknights (NSCH 2020-2021).
- Children and youth with a disability who are also non-Hispanic Black, have a very low prevalence of meeting sleep recommendations at 42%.
- Based on NSCH 2020-2021 data, only 33% of children with a visual impairment,[2] 11% of children with a learning disability,[32] and 27% of children with attention deficit/hyperactive disorder [34] ages 6-17 years meet the 24-hour movement behavior guidelines for sleep.[24]

KEY INSIGHTS AND NEW DIRECTIONS

- Sleep is important for good brain and body development, and is associated with emotional well-being, cognition and academic performance, and adiposity development in children and youth.[47] However, not getting enough sleep is a major public health problem.[48]
- As we've grown in the last 10 years of the report card, sleep has been recognized as a primary component of the 24-hour Activity Cycle.[49]
    - The relationship between sleep, sedentary behaviors, and physical activity is important for health. Increasing time in one behavior must be offset by decreases in another.
    - Several comprehensive 24-hour movement guidelines for youth have been developed, including in Canada (2016) and Australia (2019). However, current U.S. *Physical Activity Guidelines for Americans* do not include sleep and a 24-hour approach.
- Adolescents are prone to experiencing social jet lag, meaning a mismatch between their biological and social sleep timing.
    - The earlier sleep midpoint on weeknights compared to weekend nights indicates adolescents are going to bed earlier and getting up earlier on weekdays than what would be consistent with their biological sleep timing.
    - This social jet lag appears to be contributing to shorter, less healthy sleep durations on weeknights.
    - Greater social jet lag has also been found to be associated with adiposity.[50]

- Sex, race/ethnicity, SES, and disability disparities in sleep duration among youth could be a driver of health disparities.
  - Not meeting the recommended sleep guidelines is more prevalent in females, Non-Hispanic Black children and youth, those from lower SES households, children and youth with disabilities, and those with healthcare needs.
  - Non-Hispanic Asian and those with multiple races are also at higher risk for short sleep duration.[51]
  - Race/ethnicity, SES, and self-reported discrimination have been found to be associated with self-reported sleep disturbances.[52]

RESEARCH GAPS

1. Differences in the prevalence between parent report (NSCH) and adolescent self-report (YRBSS and NHANES) should be noted.
   - Parents have been found to estimate earlier adolescent bedtimes, resulting in overestimating sleep duration.[53] Parent-reported sleep data for adolescent populations (e.g., NSCH) should be interpreted with caution.
   - Quantitative device-based estimates (NHANES) and best approximation estimates (YRBSS) may be best for sleep indicators in older children.
2. Large-scale surveillance on sleep practices around bedtime for youth and children are needed.
3. Most of the available surveillance data focus on sleep duration. Research on sleep hygiene practices, sleep disorders, sleep quality, including device-based assessment of sleep, are needed to better understand sleep health among children and youth.

RECOMMENDATIONS

1. Parents and caregivers should be encouraged to support good sleep hygiene practices, such as sleep schedules, bedtime routines, and limiting screen use prior to bed.
2. Youth and adolescents should be encouraged to be mindful of their screen usage before bed and not to skip sleep to socialize or study.
3. Schools may consider later school start times to support longer sleep duration, particularly for adolescent students.[54]
4. Physical activity and sleep have an important relationship. Being physically active can support going to bed earlier, having longer sleep duration, and better quality sleep.[55]

PHYSICAL FITNESS

Authored by:
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Year	2014	2016	2018	2022	2024
Grade	INC	D	C-	C-	INC

METRICS:

- Percentage of children who meet criterion-referenced standards for 1) cardiorespiratory fitness, 2) muscular strength, and 3) muscular endurance
- Morphological fitness (body composition)

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are not well aligned with the metric.

RATIONALE FOR GRADE

- **The grade for 2024 is an incomplete,** based on the lack of recent nationally representative data related to the fitness components of cardiovascular and muscular strength and endurance.

KEY FINDINGS:

Children & Youth Overall

- There are no current data for primary metrics (fitness, strength, and endurance).

Young Children (0-5 Years)

- There are no current data for primary metrics (fitness, strength, and endurance).

Weight Status

- There continue to be high levels of overweight and obesity, with the average total body fat percentage in children 8-17 years being 30.0%. Body mass index (BMI) is indicated as a screening tool for body composition; among children 2-19 years the 2017-March 2020 prevalence of obesity was 19.7% with a higher prevalence of obesity in 12-19 year olds (22.2%) compared to 2-5 year olds (12.7%) (NHANES 2017-2020).

Race and Ethnicity

- Differences based on race or Hispanic origin were not observed in adequate cardiorespiratory fitness levels in the 2012 National Youth Fitness Survey.[56]
- Differences in percentage of total body fat are evident based on race/ethnicity; non-Hispanic Black youth had the lowest percentage of body fat (28.8%) and Mexican-American youth had the highest percentage of body fat (32.5%) (NHANES 2017-2018).

Sex and Gender

- Differences in muscular strength varied between sexes when using different indicators. Exercise test indicators using larger muscle groups (i.e., pull ups) indicate females were less fit than males with 28% of females compared to 15% of males unable to perform any modified pull ups.[57,58]
- For cardiorespiratory fitness, fewer females (33.8%) than males (50.2%) were categorized in the "Healthy Fitness Zone."[56]
- Females (8-17 years) have a higher percentage of total body fat than males (33.5% vs 26.8% total body fat, respectively). The difference is attributed to biological differences between sexes, along with behavioral factors and environmental differences. Based on age and sex growth curves for BMI in children and youth 2-19 years, obesity prevalence was similar between females (20.9%) and males (18.5 %) (NHANES 2017-2020).

Disabilities

- Similar to data on children in the general population, there is no nationally representative data available on fitness level nor body composition in youth with disabilities. Some large datasets that include BMI data suggest that youth with intellectual disabilities are more at risk for overweight and/or obesity than their peers without an intellectual disability.[59,60]
- Recently published analyses of the NSCH 2020-2021 data indicate that about 15.6%, 16.8%, 17.1%, and 15.0% of children and youth ages 6-17 years with visual impairments,[2] autism,[33] learning disabilities,[32] and attention deficit hyperactivity disorder,[34] respectively, were reported to have overweight.

KEY INSIGHTS AND NEW DIRECTIONS

- The Card has consistently based fitness indicators on a health-related fitness definition.[61,62] This definition highlights five areas of fitness that are associated with health outcomes: cardiorespiratory endurance (aerobic fitness), muscular endurance, muscular strength, flexibility, and body composition. However, many components of this definition have not been measured in surveillance systems (flexibility) or have not been updated in the last 10 years (cardiorespiratory fitness, muscular strength and endurance).
- The most recent, publicly available and nationally representative youth fitness data used by the Report Card is from the NHANES National Youth Fitness Survey (NNYFS) conducted in 2012. The NNYFS estimated low to moderate levels of children meeting fitness criteria including: 42% of youth (12 to 15 years) categorized in the "Healthy Fitness Zone" using FitnessGram criteria,[63] based on submaximal exercise test performed on a treadmill; 52% of youth (7 to 15 years) categorized as having adequate muscular endurance, based on the number of modified pull-ups completed.[56]
- BMI is the most commonly collected measure of health-related fitness as it is a widely accepted and integrated screening for body size and there are age and sex-based percentiles for health-related criteria.[64,65] The prevalence of obesity among children and youth, measured by BMI, since 2014 has increased from 17.2%[66] to 19.7% (NHANES 2017-2020). However, BMI may not equally predict body fat mass across race/ethnicity groups[67,68] as percentile classifications were developed on a sample of non-Hispanic White youth.

RESEARCH GAPS

1. There is a need for population-level research to understand temporal changes in fitness, reasons for changes, if and/or how those changes correspond to the cardiovascular health of children presently and as they age, and which components of fitness have the strongest associations with the potential changes in cardiovascular health.
2. More research is needed to develop age/puberty and sex-specific criterion values for body composition (body fat) recommendations anchored in health-related outcomes.
3. There is a need to understand the effectiveness and large-scale implementation of programs aimed at improving youth fitness.
4. More intervention work is needed to understand the contributions of biology, behavioral factors, and environment on disparities in child and youth fitness, as these are hard to disentangle from surveillance data.

RECOMMENDATIONS

1. Develop, implement, and promote opportunities to improve fitness levels in youth, including engagement in moderate-to-vigorous intensity physical activity.[1] These programs should especially focus on youth who may be at a higher risk for lower fitness and higher risk for adverse health (e.g., children with overweight/obesity, disabilities, or from low-income areas).
2. Incorporate standardized, objective measures of youth fitness into public health surveillance evaluated at a regular interval and provide support for datasets on youth fitness to be made publicly available (e.g., FitnessGram). Ensure that measures of fitness are accessible, adaptable, and have accurate standards for children and youth with disabilities who may have different ways of moving.
3. Focus on multiple components of health-related fitness (e.g., cardiorespiratory and muscular fitness and flexibility) in research and practice, and, in line with the American Medical Association, use BMI in conjunction with other measures.[69]

Indicators

Societal Supports

FAMILY AND PEERS

Authored by:
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***Andrew T. Fox, PhD**, Research Scientist, Health Services and Outcomes Research, Children's Mercy Kansas City*

Year	2014	2016	2018	2022	2024
Grade	INC	INC	INC	INC	**INC**

METRICS:

- Percentage of family members (e.g., parents, guardians) who facilitate physical activity and sport opportunities for their children (e.g., volunteering, coaching, driving, paying for membership fees and equipment)
- Percentage of family members (e.g., parents, guardians) who are physically active with their kids
- Percentage of parents who meet the adult Physical Activity Guidelines for Americans
- Percentage of children and youth with friends and peers who encourage and support them to be physically active

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are not well aligned with the metrics.

RATIONALE FOR GRADE

- Despite the growing body of literature supporting the role of parents and friends in increasing physical activity, **the incomplete grade in this report card as reported in previous Report Cards indicates that we still lack nationally representative data in this area.**

KEY FINDINGS:

Children & Youth Overall

- About 70% of adults living in households with children met the recommended physical activity guideline of >150 minutes per week (NHANES 2017-2018), which is slightly higher than for adults without children (66%).
- Approximately 58% of parents report always participating in their child's events and activities, while 12% report rarely or never participating (NSCH 2021-2022**).** These data are not specific to physical activity and instead cover events and activities generally. There are insufficient data to assess possible disparities related to weight status, race/ethnicity, sex, or disability status at this time.

KEY INSIGHTS AND NEW DIRECTIONS

- Vast evidence shows that both peer and family support have a significant influence on youth physical activity, specifically the promotion and adherence of regular physical activity during adolescence which is a crucial period when physical activity decreases with age.[70-73]
- Parents can provide positive social influence for their children's physical activity in multiple ways, such as through approval, support/assistance, recognition/reward, and role modeling.[74]
- The role of social connections on physical activity has also been shown among ethnically and racially diverse adolescents, indicating that supporting youth to establish a network of active peers may contribute to reductions in health disparities.[75]
- Empowering peers to lead physical activity and related activities is a promising approach in settings such as schools.[72] Peers can provide social support, information about health behaviors, and demonstration of the behavior. Additionally, older adolescents leading younger peers and younger adolescents leading peers of the same age should be considered.
- There are numerous opportunities to better incorporate families into programs aimed at supporting children's and adolescents' physical activity. While setting-based interventions, such as those in schools, are important for promoting regular physical activity, greater family involvement may improve their effectiveness and better address children's physical activity across settings.[76-78] For example, family and community involvement provides the opportunity for families to be active together, spend time together, and experience numerous health benefits according to the Comprehensive School Physical Activity Program (CSPAP) framework.[79] However, family and community engagement remains an understudied component of CSPAP.[80] Additionally, improving the environmental supportiveness of the household setting, such as by providing physical resources (e.g., equipment) and opportunities (e.g., activities) is crucial for supporting children's physical activity.[81,82]

- Parents play a crucial role in their children's physical activity. Family Systems Theory has recently emerged as a guiding theoretical framework that highlights the important role of family functioning and support (e.g., involvement, communication, reinforcement/encouragement, and problem-solving) in influencing health behavior.[83] Figure 8 depicts the role of familial characteristics including culture (ethnicity and traditions), family functioning, family structure, household environment, and social influences on youth physical activity. Proponents of Family Systems Theory have emphasized the importance of testing interventions that facilitate improvements across multiple dimensions of family functioning, both generally and specifically around health behaviors.[84]
- The provision of educational material to families is insufficient for changing child and youth physical activity. Current evidence states the need to implement behavioral approaches with families, including planning and setting goals, for success. Strategies taking Family Systems Theory into account focus on parent-child interactions and parenting skills and cognitions around physical activity (e.g., attitudes, perceived control, confidence, intentions). Given the large role parents and household environment play in sustaining physical activity engagement in youth, direct contact with parents, assessment of progress, and encouraging adherence are essential for intervention strategies to be effective.[85]
- Current evidence on the role of parental involvement in improving the physical activity of youth consists of samples with a larger number of cis-gender female participants.[86] A complete understanding of peer and parental involvement and how to involve parents and peers requires the views and needs of historically marginalized youth, cis-gender males, transgender population, and children with disabilities.

Figure 8: Family Systems Theory framework around child physical activity. Figure adapted from Rhodes et al. (2020)[83]

RESEARCH GAPS

1. Although there are applications of Family Systems Theory in promoting healthy movement behaviors, high-quality research evaluating the effectiveness of Family Systems Theory-informed interventions in improving youth physical activity is needed.
2. There is a need to better understand the complexity of barriers parents face when supporting their children to be physically active, which relate to the child, parent, and environment. Such work should be used to identify and evaluate strategies for supporting families to overcome these barriers.
3. With the great potential of setting-based interventions in increasing physical activity in youth, further research is warranted on involving families in physical activity interventions in these settings (e.g., schools) and their effectiveness in integrating the participation and goal setting of family members together.
4. More research is needed on the role of peers (friends and siblings) and adults (parents, primary caregivers, relatives, and teachers) in diverse samples including different age groups, genders and gender identity, race/ethnicities, youth with disabilities and special needs, and socioeconomic status. Qualitative investigation can shed light on the nuances of perspectives and experiences of individuals.

RECOMMENDATIONS

1. Incorporate parents and other family members in efforts to support children's physical activity.
2. Given that parents intend to support their children to be active, the focus should move beyond education to helping parents improve their skills and confidence around problem solving, communicating, and reinforcing and motivating their children's physical activity.
3. Leverage the perspectives of diverse families—parents and youth, with diverse family structures (grandparents, caregivers, etc.)—to inform how to facilitate physical activity opportunities for that family. Cultural considerations should also be made to ensure that recommendations are inclusive and respectful of different traditions and practices. This can guide healthcare providers in counseling youth and their families in engaging in physical activity goals that are achievable.

EARLY CARE AND EDUCATION SETTINGS

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Year	2014	2016	2018	2022	2024
Grade	Not in Report Card		Not Graded		B-

METRICS:

- Average score of all states on the physical activity sub-section of the CDC's Early Childcare and Education (ECE) State Licensing Scorecards
- Number of outdoor physical activity opportunities per 8-hour day in Head Start and other ECE settings
- Minutes per day of physical activity opportunities per 8-hour day in Head Start and other ECE settings

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The metrics were developed based on available data and thus are closely aligned.

RATIONALE FOR GRADE

- **The 2024 Early Care and Education Settings grade was assigned as a B-.** Two new sources of national data were identified, allowing a grade to be assigned for the first time.
- Data on actual physical activity at the level of individual children in early childcare settings is scant, hence the reliance on policy-level and center-level indicators.

KEY FINDINGS:

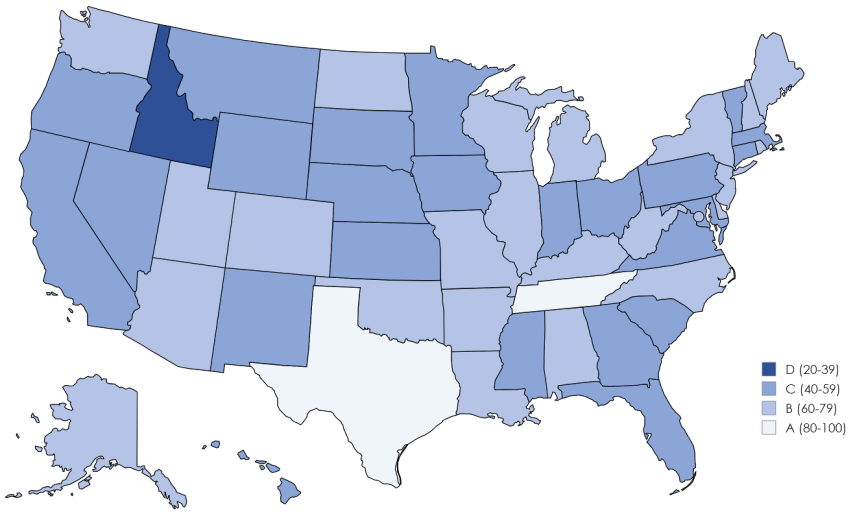
Overall

- On the CDC's ECE State Licensing Scorecards, which provide a 0-to-100 summary score for each state based on 11 physical activity-related policy/regulation criteria **(Table 3)**, the national average for the physical activity policy score was 59 in 2022 (ECE State Licensing Scorecards, 2023). This is a two point increase from the score of 57 in 2019.

Table 3: Early childcare policy/regulation criteria for physical activity

1.	Provide children with adequate space for both inside and outside play
2.	Provide orientation and annual training opportunities for caregivers/teachers to learn age-appropriate gross motor activities and games that promote physical activity
3.	Develop written policies on the promotion of physical activity and the removal of potential barriers to physical activity participation
4.	Require caregivers/teachers to promote children's active play, and participate in active games at times when they can safely do so
5.	Do not withhold active play from children who misbehave
6.	Provide daily for all children, birth to 6 years, two to three occasions of active play outdoors, weather permitting
7.	Allow toddlers 60-90 minutes per 8-hour day for moderate to vigorous physical activity
8.	Allow preschoolers 90-120 minutes per 8-hour day for moderate to vigorous physical activity
9.	Provide daily for all children, birth to six years, two or more structured or caregiver/ teacher/adult-led activities or games that promote movement over the course of the day – indoor or outdoor
10.	Ensure that infants have supervised tummy time every day when they are awake
11.	Use infant equipment such as swings, stationary activity centers, infant seats, molded seats, etc. only for short periods if at all

Figure 9: 2022 Center-based ECE State Licensing Scorecards Physical Activity Average



- According to the Study of Nutrition and Activity in Childcare Settings (SNACS),[87] most (73.7%) of the early care and education settings supported by USDA programs are compliant with the *Caring for Our Children*[88] guideline of providing 2 or more opportunities per 8-hour day. On average, these settings provided an average of 1.6 outdoor physical activity opportunities per day, which amounted to an average of 65 minutes of physical activity opportunity per day.
- Only half (50.2%) of early care and education settings supported by the USDA are compliant with the *Caring for Our Children* standard of providing 60 or more minutes of physical activity per day. On average, these settings provided the opportunity for 104.5 minutes of physical activity per 8-hour day.[87]
- Less than half (43.1%) of early care and education settings are compliant with standards for both outdoor physical activity opportunities and physical activity opportunity duration.[87]

Race and Ethnicity

- Data unavailable

Disabilities

- Data unavailable

Sex and Gender

- Data unavailable

KEY INSIGHTS AND NEW DIRECTIONS

- Early childhood is a critical time period for the development health behaviors including physical activity.[89]
- *The Physical Activity Guidelines for Americans, 2nd Edition*[1] recommends that preschool-age children (ages 3-5 years) should be physically active throughout the day to enhance growth and development and that light, moderate, and vigorous activities should sum to about 3 hours per day. 24-hour movement guidelines with similar recommendations have been adopted by Canada,[24] Australia,[90] and the World Health Organization.[23]
- While school-age children are the main focus of the Report Card, ECE settings provide important opportunities for promoting physical activity in younger children. Of the over 12.1 million 3-5 year old children in the United States, roughly 64% (~7.7 million) are enrolled in some kind of preprimary program.[91] This figure jumps to 85% when only considering 5-year-olds. Thus, any policy or regulation that impacts early childhood education could improve the health of millions of younger children.
- The CDC's ECE State Licensing Scorecards help identify where center-based ECE regulations support prevention practices, and where there is a need for improvement. Using the Scorecards, childcare licensing officials and decision makers can plan and prioritize childhood obesity prevention efforts in their state. ECE directors and teachers can ensure they are meeting their state's obesity-prevention standards, as well as see where they need to put in additional standards to support the health of the children in their care. Furthermore, parents and caregivers can learn about their state's regulations and discuss how standards are being implemented with their child's ECE provider.
- A key purpose of SNACS was to describe physical activity opportunities for children served by early care and education programs supported by USDA's Child and Adult Care Food Program, which represents the first large-scale attempt to surveil these practices in ECE settings in the United States. *Caring for Our Children*[88] recommends that children be provided with two or more outdoor physical activity opportunities per day and that at least 60 minutes be allotted for physical activity per day; the data from 2017 indicate that many centers are not meeting this basic guideline.
- Environmental components that can have an impact on children's physical activity are known to include:
  - Provisions (e.g., outdoor time, equipment/space)
  - Provider practices (e.g., teacher-led activities and prompts)
  - Policies (e.g., staff training, mandatory outdoor time)

RESEARCH GAPS

1. Further research is needed to identify and test interventions to increase physical activity in ECE settings.
2. There is little to no information on the extent to which ECE centers are able to comply with state regulations, even when robust regulations are in place. The SNACS, while a great step in this direction, does not explicitly address the 11 CDC scorecard criteria and compliance with only a few of the criteria can be determined.
3. More research is needed to fill the gap in understanding of how ECE providers can best incorporate physical activity into their overall daily activities and overcome barriers experienced at multiple levels. Additionally, research should identify effective ways to train providers in being knowledgeable about physical activity in young children.
4. Any future surveillance should provide detailed demographic information on the children in ECE settings to allow for assessment of possible disparities related to weight status, race/ethnicity, sex, and/or disability status.

RECOMMENDATIONS

1. States should continue to bring licensure policies in line with physical activity and obesity prevention guidelines.
2. The granularity of surveillance data should be improved to better capture the level of individual children and track children's activity levels in ECE settings.
3. ECE programs/practitioners should adhere to physical activity best-practice recommendations, such as those provided by *Caring for Our Children*. Physical activity opportunities should be fun and flexible to meet diverse needs of children.
4. ECE leaders should monitor and incentivize the provision of standards-based physical activity opportunities.

SCHOOL

Authored by:
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Year	2014	2016	2018	2022	2024
Grade	C-	D+	D-	D-	**D-**

METRICS:

- Percentage of schools with active school policies (e.g., daily Physical Education (PE), recess, "everyone plays" approach, bike racks at school, traffic calming on school property, outdoor time)
- Percentage of schools where the majority (>80%) of students are taught by a PE specialist
- Percentage of schools where the majority (>80%) of students are offered the mandated amount of PE (for the given state/territory/region/country)
- Percentage of schools that offer physical activity opportunities (beyond PE) to the majority (>80%) of their students
- Percentage of parents who report their children and youth have access to physical activity opportunities at school in addition to PE classes
- Percentage of schools with students who have regular access to facilities and equipment that support physical activity (e.g., gymnasium, outdoor playgrounds, sporting fields, equipment in good condition)

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are somewhat aligned with the metrics.

RATIONALE FOR GRADE

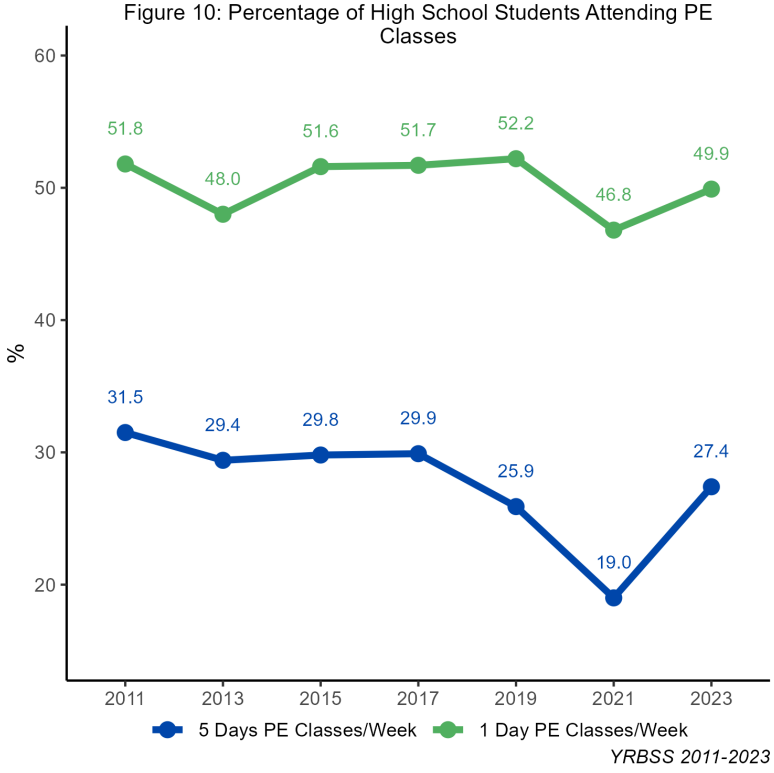
- **The 2024 School grade remains a D-.** Some metrics improved slightly, while others have decreased, including PE participation.

KEY FINDINGS:

Children & Youth Overall

- Approximately 27.4% of high school-age students attend PE classes 5 days a week, and 49.9% attended PE classes 1 day a week (YRBSS 2023).
- The number of high school students who participate in PE classes on a daily basis has decreased from 31.5% in 2011 to 27.4% in 2023 (YRBSS 2023) **(Figure 10)**. The trend is less severe when considering attendance of at least one day per week (51.8% to 49.9%).
- The percentage of schools requiring a PE course be taught in each grade decreases from 94.3% in 6th grade to 56.1% in 12th grade (SHP 2022). Similarly, PE attendance declines as children become older (YRBSS 2023) **(Figure 11)**.
- Approximately 53.6% of schools allow youth to participate in physical activity in classrooms during the school day outside of PE classes (SHP 2022).
- Approximately 51.2% of secondary schools have established and implemented a Comprehensive School Physical Activity Program (SHP 2022).
- Approximately 25% of secondary schools have a written plan for providing opportunities for students to be physically active before, during, and after school (SHP 2022).
- Trends over time in the adoption of Comprehensive School Physical Activity Programs are not available. However, when looking at components of these programs, some have improved slightly from 2018 to 2022 **(Table 4)**, though the percentage of schools with joint use agreements has declined slightly.

Figure 10: Percentage of High School Students Attending PE Classes



YRBSS 2011-2023

- Laws exist for elementary schools (21 states), middle schools (13 states), and high schools (9 states) which specify and require a certain amount of physical activity be provided during the school day (CLASS 2021).
- Only 12 states require daily recess with a specified minimum duration: Two states (AR, IL) mandate over 30 minutes of daily recess; five states (RI, NJ, CT, MO, FL) require 20-30 minutes, while another five (VA, AZ, TN, DC, TX) stipulate less than 20 minutes. Ten states (AK, VT, MN, IN, CA, WV, KS, SC, OK, MS) require recess without specifying duration, and 28 have no requirements (CLASS 2021).

Table 4: Comprehensive School Activity Programs trends from 2018-2022

	SHP 2018	SHP 2022
Students participate in physical activity in classrooms during the school day	50.2%	53.6%
Schools offer opportunities for students to participate in physical activity before the school day	42.1%	46.0%
Schools offer opportunities for students to participate in physical activity after the school day	81.3%	87.4%
Schools have a joint use agreement for shared use of physical activity or sports facilities	66.9%	63.0%

Race and Ethnicity

- Although no significant differences were shown between non-Hispanic White (48.4%), Asian (53.2%), Black (48.1%) and Hispanic (51.9%) students attending PE 1 or more days per week, there was a noticeable difference in attending physical education 5 days per week: non-Hispanic white students 26.2%, Asian students 20.6%, Black students 24.4%, and Hispanic students 30.9% (YRBSS 2023).

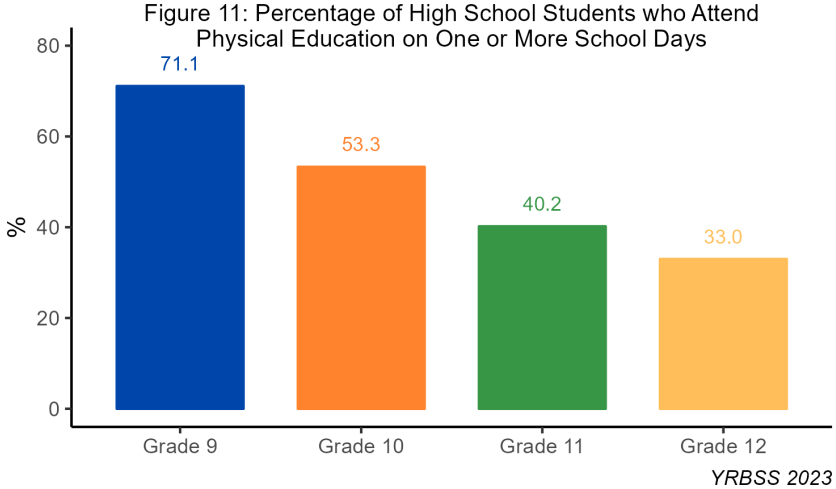
Sex and Gender

- 31.4% of males participate in PE all 5 days of the week, whereas only 23.1% of females participate for all 5 days of the week. Additionally, 54.7% of males participate in at least one day per week of PE as opposed to 44.6% of females (YRBSS 2023).

Disabilities

- 34 states have laws which meet the Free Appropriate Public Education requirement to make adapted PE available to every student with a disability who is eligible (CLASS 2021).
- Almost all secondary schools (99%) report including students with disabilities in regular PE courses, which is beneficial for integrating these students with their peers. However, it's not clear to what extent these schools provide the support and/or adapted activities within regular PE courses that are needed for students with disabilities to successfully participate. Approximately 81% of secondary schools report offering students with disabilities adapted PE that is separate from regular PE courses (SHP 2022).
- Only 27.9% of children receiving special education services participated in school sports and physical activity.[92]

Figure 11: Percentage of High School Students who Attend Physical Education on One or More School Days



YRBSS 2023

KEY INSIGHTS AND NEW DIRECTIONS

- Schools play an integral role in providing equitable opportunities for youth to meet the physical activity guidelines and are recommended to provide opportunities to acquire the 60 minutes of physical activity through PE, before school programming, recess, classroom physical activity breaks, and afterschool clubs, intramural and interscholastic sports.[76]
- The slight decrease in PE participation in high school since 2011 is concerning and provides a justification and an opportunity for states to adopt stronger PE and physical activity policies, including mandatory days per week and minutes per day, with accountability for the implementation and adherence of those policies.
- The decline in school-based physical activity participation is further compounded by, and in part attributed to, school closures between mid-school year 2019-2020 and the opening of school in the Fall of 2021 due to the concern over COVID-19. PE clearly declined drastically during the pandemic, though has rebounded since. However, PE attendance is still generally lower than before the pandemic, which could reflect the efforts to catch students up in math, reading, and other academic subjects, which require state assessments.
- Recess is a particularly important opportunity for children to engage in free and structured play. In addition to providing physical activity, recess supports positive behavioral, social, and academic outcomes.[93]
- The use of waivers has been shown to be counterproductive in providing students with the opportunities to meet the 60 minutes of daily physical activity. Yet, one analysis indicated that only 24 of the 42 states that were assessed had laws addressing PE waivers, exemptions, or substitutions.[94]
- The implementation of the Comprehensive School Physical Activity Program (CSPAP),[76] using PE as the hub, can serve as a multicomponent system to increase PA among youth by engaging families, community organizations, and school staff in offering inclusive programs for all students.

RESEARCH GAPS

1. More research is needed to better understand sex, race/ethnicity, disability, and socioeconomic status differences in school-provided physical activity opportunities and participation to identify and address disparities.
2. There is a need to identify ways to support schools which could include greater participation from other sectors.

RECOMMENDATIONS

1. States should expand and monitor the implementation of physical education policies, which include number of days per week and times per day of physical education instruction.
2. State and Local Educational Agencies should enact and adopt policies to implement the physical education and physical activity recommendations by the physical activity guidelines and the *Healthy People 2030* Objectives (ECBP-01).[95]
3. States should eliminate waivers and substitutions for physical education requirements to ensure students meet the nationally recommended minutes of physical education.
4. Funding should be made available to continue, expand, and re-implement national surveillance of physical activity and physical education to monitor progress and inform policymakers.
5. Classroom teachers should be provided with professional development opportunities to ensure that classroom activity breaks are delivered in a safe and age-appropriate manner in support of Comprehensive School Physical Activity Programs.
6. Cross-sector partnerships should be built to implement inclusive physical activity and sports programs for youth with disabilities.

COMMUNITY AND BUILT ENVIRONMENT

Authored by:
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Year	2014	2016	2018	2022	2024
Grade	B-	B-	C	C	C+

METRICS:

- Percentage of communities/municipalities that report they have infrastructure (e.g., sidewalks, trails, paths, bike lanes) specifically geared toward promoting physical activity
- Percentage of children or parents who report having facilities, programs, parks and playgrounds available to them in their community
- Percentage of children or parents who report living in a safe neighborhood where they can be physically active
- Percentage of children or parents who report having well maintained facilities, parks and playgrounds in their community that are safe to use

ALIGNMENT OF METRICS WITH AVAILABLE DATA:

The available data are only in alignment with some metrics. Additional data were able to be incorporated.

RATIONALE FOR GRADE

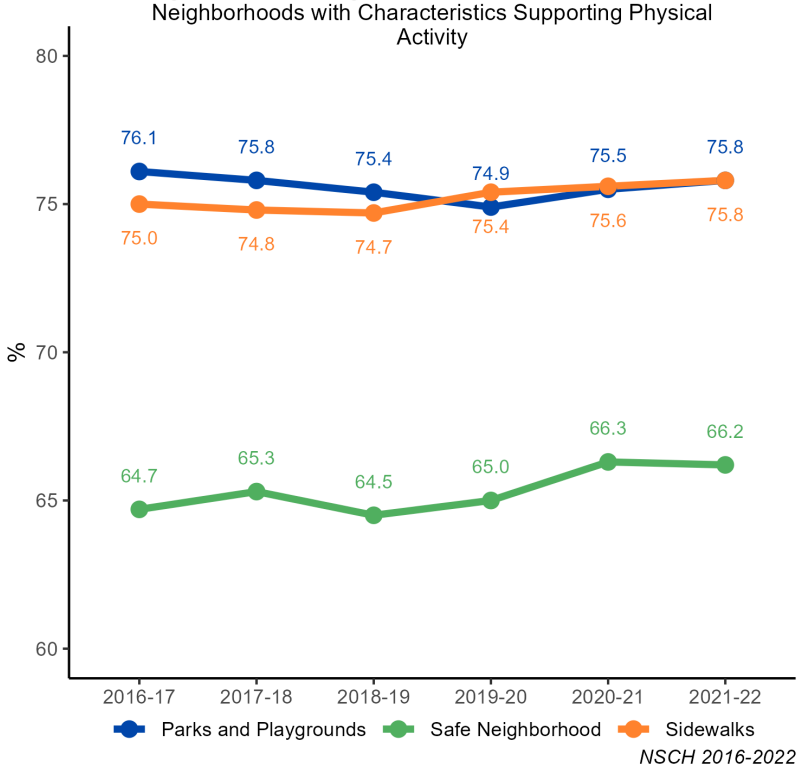
- **The 2024 Community and Built Environment Grade increased from a C to a C+.** Most metrics remained unchanged, though some experienced slight improvement, such as the number of states with a strong complete streets policy. Additionally, the metrics used to inform the grade changed slightly, such as the removal of the national walkability index due to lack of comparability across years, which contributed to a small improvement in the grade.

KEY FINDINGS:

Children & Youth Overall

- Access to sidewalks and parks or playgrounds is high: Approximately 75% of children and youth ages 6 to 17 years live in a neighborhood with sidewalks or walking paths, and 75% live in a neighborhood with a park or playground area (NSCH 2021-2022).
- Many children live in a safe environment where they can be physically active: Approximately 66% of children and youth ages 6 to 17 years live in a safe environment for physical activity (NSCH 2021-2022). These rates are similar when comparing those ages 6 to 11 and 12 to 17. When exploring factors that may contribute to perceptions of safety, in children ages 6 to 17 years approximately 80% live in a neighborhood with no litter or garbage on sidewalks or streets, 88% live in a neighborhood with no poorly kept or rundown housing, and 93% live in a neighborhood with no vandalism (NSCH 2021-2022).
- The primary community and built environment metrics have remained mostly unchanged in the decade since the first report card. The percentage of children and youth who live in a neighborhood with parks or playgrounds or with sidewalks and walking paths has remained consistent since 2016 at approximately 76%, while the percentage of children and youth who live in a safe neighborhood has remained around 65% (NSCH 2016-17 to 2021-2022) **(Figure 12)**.
- Access to transportation systems that are supportive of physical activity remains mixed: Approximately 70% of states have a complete streets policy (SRP 2022), however, when further examining the quality of state policies beyond adoption, only 45% of states have strong complete streets and active transportation policies based on previously established criteria (SRP 2022). This percentage (45%) is a slight increase from 2020, when 41% of states had a strong complete streets policy based on comparable criteria (SRP 2020). Additionally, only 42.7% of communities have access to public transit (EPA National Walkability Index 2021).

Figure 12: Percentage of Children and Youth who Live in Neighborhoods with Characteristics Supporting Physical Activity



NSCH 2016-2022

Young Children (0-5 Years)

- Data unavailable

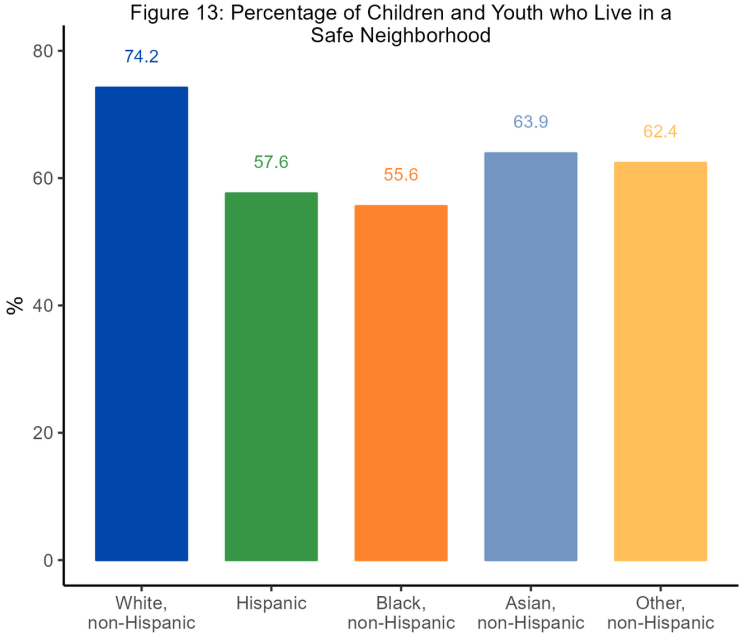
Race and Ethnicity

- Fewer Black and Hispanic children live in a safe environment for physical activity: Compared to 74% of non-Hispanic White children and youth ages 6 to 17 years, only 56% of Black and 58% of Hispanic children and youth ages 6 to 17 years live in a safe environment for physical activity, and rates are also lower for Asian children and those from the Other racial/ethnic background category (Figure 13). Similarly, approximately 85% of non-Hispanic White children and youth ages 6 to 17 years live in a neighborhood with no litter or garbage on sidewalks, while 74% and 76% of Black and Hispanic children respectively live in a neighborhood with no litter or garbage on sidewalks.

Sex and Gender

- There are limited differences in access to sidewalks, access to parks or playgrounds, or neighborhood safety. For neighborhood safety, parents of females (66%) are almost as likely as parents of males (67%) to report living in a safe environment (NSCH 2021-2022).

Figure 13: Percentage of Children and Youth who Live in a Safe Neighborhood



NSCH 2021-22

Disabilities

- Fewer families with children and youth with disabilities report living in a safe environment: 59% of families with children and youth with disabilities versus 66% of all families (NSCH 2020-2021). It may be that families of children with disabilities conceptualize safety differently than families of children with typical development. For example, inaccessible spaces and/or facilities, lack of accessible parking or public transportation, and poorly maintained sidewalks may be considered unsafe to families of children with disabilities.
- There are some differences across disability types; 54.9% of families with children with intellectual disabilities live in a neighborhood perceived to be safe compared to 64.1% of families with children with ADHD (NSCH 2020-2021). It may be that the type and severity of disability impact parent perceptions of safety.
- While most children with disabilities ages 17 and younger live in neighborhoods with a park or playground (72.2%) and sidewalks or walking paths (71.8%) (NSCH 2020-21), the accessibility of the neighborhood and the infrastructure and amenities within it are not well evidenced.

KEY INSIGHTS AND NEW DIRECTIONS

- Need for scaling up community and built environment improvements: The updated data do not reflect meaningful improvements in access to infrastructure and recreational facilities or in neighborhood safety. Accelerating implementation efforts for improved transportation systems and changes in land use and community design are vital for improving opportunities for physical activity in all children and youth.[96]
- Potential for policy: Zoning strategies, such as zoning code reform, can help make it easier and safer to be active in neighborhoods through transportation infrastructure, street connectivity, open space, mixed-use development, and higher density.[97] These "pedestrian-oriented" zoning strategies, including zoning code reform, can lead to more sustainable efforts of creating pedestrian-oriented community and built environment characteristics. However, only 26% of municipalities in the United States have adopted any zoning code reform.[98] Not only have several studies highlighted the link between zoning and physical activity, but there is also some evidence to suggest that zoning strategies may help alleviate disparities in physical activity for persons of lower income and persons from marginalized racial and ethnic groups.[99,100]
- Need for more equitable implementation efforts: Despite the potential of policy and different approaches to improve physical activity, there are still disparities faced by traditionally disadvantaged communities, including for persons from marginalized racial and ethnic groups, persons of lower income, and persons with disabilities. These disparities, including differences in neighborhood safety regarding physical activity, suggest a need for more equitable access to physical activity opportunities.[101] Further, there is a lack of existing data on the accessibility of recreational facilities, especially for children with disabilities. Community engagement and community benefit agreements can be vital in ensuring community development that is representative of the needs of all community members. Though evidence suggests there is strong support of community development for active living opportunities, there is also concern of the impacts of higher costs of living as well.[102] Strategies that support affordable housing and prevent displacement, such as inclusionary zoning policies, are important for supporting equity.[103]
- Still room for improvement after a decade: A lack of meaningful change in community and built environments for physical activity over the last decade is highlighted by inconsistent measurement and consistent disparities, particularly for children and youth from marginalized racial and ethnic groups. Still, there are some positive takeaways, including high overall access to infrastructure and transportation systems that support physical activity, as well as generally safe neighborhood environments for physical activity. Utilizing policy approaches and more equitable implementation efforts may help close the gap in disparities and create sustainable community and built environment improvements for physical activity.

RESEARCH GAPS

1. Standards and consistent surveillance of community and built environment characteristics are needed that are specific to children and youth.
2. More detailed data are needed on potential disparities in the community and built environment, especially with regards to race and ethnicity, and for persons with disabilities.
3. Studies are needed to inform implementation of community development for improved transportation systems, as well as changes in land use and community design.
4. Research utilizing an equity lens is needed to better understand and address issues related to costs of living changes including housing stability, gentrification, and displacement.

RECOMMENDATIONS

1. Apply equitable community engagement practices in community development efforts that promote physical activity.
2. In support of environmental justice, prioritize infrastructure and access improvements for physical activity in communities that have been historically disadvantaged.
3. Address structural barriers and issues such as segregation, gentrification, housing status, and displacement.
4. Implement a multifaceted approach of supportive infrastructure, improved transportation systems, and access to recreational opportunities for physical activity.
5. Utilize policies (e.g., zoning ordinances, complete streets policies) that govern pedestrian-oriented built environments to create more sustainable community improvements for physical activity.

GOVERNMENT STRATEGIES AND INVESTMENTS

Authored by:
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THE IMPACT OF POLICY ON PHYSICAL ACTIVITY

What is policy and how can it impact physical activity?

"Science can identify solutions to pressing public health problems, but only politics can turn most of those solutions into reality."[104]

- A policy is a formal or informal plan or action designed to influence groups of people. Policies are noted to include laws, regulations, codes, ordinances, written standards, and guidelines.
- Unlike interventions designed to address specific individuals, policies can change physical and sociopolitical environments, thereby impacting entire populations. Policies are often more permanent and far-reaching than many public health programs focused on individual behavior change.
- In a series of reports highlighting notable public health achievements of the 20th century, the CDC named 10 successes, each of which involved policy. Examples include vaccination, motor-vehicle safety, safer workplaces, control of infectious diseases, fluoridation of drinking water, and recognition of tobacco use as a health hazard.[105]
- Evidence-based policies exist that can be used to promote physical activity and remove barriers to regular physical activity, making it easier for individuals to be active.

Sectors in which policy can impact physical activity

- Efforts to increase physical activity may be most effective when implemented in a variety of sectors beyond just the health sector **(Figure 14)**. Such holistic or ecological approaches recognize that a problem often has multiple, complex, and interrelated causes.
  - Example problem: insufficient physical activity in school-age children may be influenced by decreased physical education in schools, a lack of safe places for physical activity in the community, targeted media encouraging children to increase screen or sedentary time, and a host of other influences.
  - Example solution: An ecological approach designed to increase physical activity in this population might include improving physical activity policies in schools, collaborating with transportation departments and local decision makers to improve sidewalks and bike paths, involving parks and recreation departments to improve access to green spaces, and advocating for appropriate marketing of media to youth that encourages physical activity and reduces sedentary behavior.
- There are multiple sectors in which policies can be implemented to impact physical activity. Many effective physical activity policies involve creating or improving safe places for individuals to be active.

Figure 14: Sectors in which policies may be implemented to support physical activity

Transportation, Land Use, and Community Design

- Design Complete Streets policies ensuring that streets are safe and accessible for all users
- Ensure sidewalks are in good repair with sufficient lighting
- Utilize zoning and land use ordinances that promote biking and walking

Education/Schools

- Increase access to regular physical education
- Incorporte short physical activity bursts throughout the school day
- Provide safe routes to school

Business and Industry/Workplaces

- Provide access to facilities encouraging physical activity during the day, including walking paths, exercise equipment, bike locks, showers, accessible stairways, etc.
- Use prompts to encourage use of stairs instead of elevators
- Provide incentives for physical activity

Community Recreation, Fitness, and Parks

- Promote shared-use agreements, permitting use of existing recreational facilities (e.g., school track) to be used after hours by community members
- Create and maintain public green spaces

Early Childhood

- Limit sitting time for young children
- Child-care regulatory agencies require child-care providers and early-childhood educators to provide opportunities for physical activity throughout the day
- Train individuals working with young children in ways to increase children's physical activity

More information on sector-specific strategies can be found in the National Physical Activity Plan at https://paamovewithus.org/national-physical-activity-plan/

Physical Activity Policies at Multiple Levels of Government

- As with multiple sectors, there are multiple levels of government (i.e., local, state, and federal) in which policies to increase physical activity may be implemented. Further, policies may be used within multiple sectors at each different level of government. For example, within the Community Recreation, Fitness, and Parks sector, policies designed to improve access to places for physical activity may be implemented at the local, state, and/or federal level.
- Federal policies and guidelines may impact physical activity for all Americans. For example, the *Physical Activity Guidelines for Americans*,[1] based on current scientific evidence, provide specific physical activity recommendations for various age groups that health practitioners and policymakers may use as they design physical activity and education programs and policies.
- Likewise, state-level policies may impact physical activity for state residents. For example, school recess time is an important means of encouraging all students to participate in some physical activity during the school day. Research indicates that in states where recess policies are recommended or required, students are more likely to be physically active.[20]
- While federal policies may provide an opportunity to change policy for all Americans, local policies have enormous potential to impact health and may be easier to pass and implement. Local policies can also build momentum and support for state and federal policies. The Complete Streets movement,[106] which is designed to promote policies that make streets safe and accessible for all users (e.g., people with disabilities, pedestrians, cyclists, motorists) is an excellent example of the power of local policy.

WHAT WORKS?

Model Policies for Physical Activity

- Multiple policy options exist as possible interventions and research is ongoing to test the efficacy of existing policy interventions. To date, the evidence base of effective policies for addressing physical activity is informed by a robust review conducted by the Community Preventive Services Task Force (Community Guide).[107]
- The Community Guide offers a repository of existing interventions targeting over 20 public health topics, which can be implemented at multiple levels and involve various sectors. Through a rigorous systematic review process, the Task Force has determined which interventions may be recommended with strong or sufficient evidence of effectiveness.
- Policymakers, advocates, and public health practitioners can promote the use of Community Guide-recommended policies knowing they are supported by evidence. Table 5 shows policy and environmental interventions for impacting physical activity that have been recommended with strong or sufficient evidence.

Table 5: Community Preventive Services Task Force Findings on Physical Activity[108]

Built environment approaches combining transportation system interventions with land use and environmental design	Recommended (sufficient evidence)
Creating or improving places for physical activity	Recommended (strong evidence)
Interventions to increase active travel to school	Recommended (sufficient evidence)
Park, trail, and greenway infrastructure interventions when combined with additional interventions	Recommended (sufficient evidence)
Point-of-decision prompts to encourage use of stairs	Recommended (strong evidence)

Policy Priorities of the Physical Activity Alliance

The Physical Activity Alliance has developed strategic policy priorities as part of its mission to advocate for policy and system changes enabling all Americans to enjoy active lives.[109] These priorities are aimed at using policy change to transform the places where people spend their time into places that encourage people to be more physically active. Specific areas of engagement include physical activity assessment, prescription and referral in healthcare; improving physical activity surveillance across the federal government; supporting a federal interagency task force to promote physical activity and fitness as they impact national security, social, mental, and emotional health; and amplifying the work of other partners working to promote physical activity-friendly policies, including Safe Routes National Partnership, American Heart Association, The Department of Health and Human Services, and coalitions leading efforts to pass legislation that would provide tax incentives for physical activity and increase medical school training in an integrated nutrition and physical activity curriculum.

RESEARCH GAPS

1. Many studies evaluating physical activity policies have been conducted after policies have been implemented. More longitudinal studies of existing physical activity policies are needed to examine policy impacts on physical activity levels over time.[110]
2. Policy studies have often focused on a particular sector, though evidence suggests that ecological approaches providing interventions at multiple levels may be more effective at increasing physical activity. More studies are needed that examine the combined effect of multiple interventions implemented in different sectors.[110]
3. Many evaluation studies of the efficacy of physical activity policies have been conducted in schools; more studies are needed on physical activity policies in various sectors.[110]

RECOMMENDATIONS

1. Physical activity surveillance systems, which are essential for informing and evaluating policies, should be strengthened, as existing systems have significant gaps in populations covered, content, and use of device-based measures.[111]
2. Because recent data indicate that over 80% of adolescents worldwide are inactive, implementation of policies to address inactivity must be increased. While effective policies exist, their implementation has been slow, inconsistent, and unequal across locations, sexes, and age groups. Policies to increase physical activity in youth should be utilized in multiple sectors and across multiple levels of government.[112]
3. Policies should create or enhance places for all people to be physically active, such as encouraging active transport for pedestrians, bikers, and users of public transit.[113]
4. People with disabilities often experience unique challenges to engaging in physical activity because of environmental or other barriers. Public policies supporting physical activity in this population are insufficient. More support is needed for such policies at all levels of government.[114]

HEALTH EQUITY

Authored by:
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KEY FINDINGS

- The 2021-2022 National Survey of Children's Health (NSCH) and the 2023 Youth Risk Behavior Surveillance System (YRBSS) reveal significant disparities in physical activity, sports participation, sedentary behavior, sleep patterns, and access to school and community resources among different racial and ethnic groups **(Figure 15)**:
    - Non-Hispanic White children have the highest rates of meeting the daily recommendation of 60 minutes of physical activity.
    - In contrast, non-Hispanic Black children have lower rates of physical activity, sports participation, and sleep hours as well as higher rates of sedentary behavior compared to most other groups.
    - Hispanic children also experience significant disparities across all indicators, particularly in overall physical activity and sports participation.
    - Non-Hispanic Asian children generally show better outcomes in sedentary behavior and sleep patterns, though they still exhibit disparities in overall physical activity and sports participation.
    - Children from marginalized racial and ethnic groups are more likely to attend PE class but are less likely to live in safe environments, which likely contributes to the disparities in physical activity observed.
- These findings highlight the need for targeted interventions and policies to address the specific barriers that different racial and ethnic groups face in improving physical activity, health, and overall well-being.

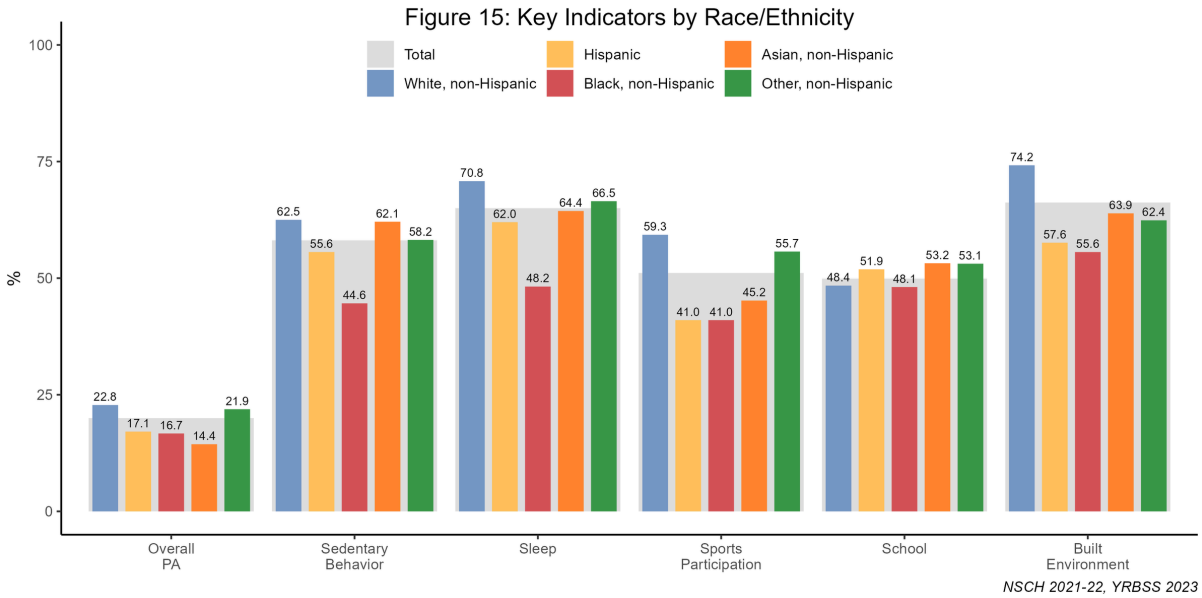

Table 6: Indicator Metrics for Data Represented in Figure 15

Label	Indicator Used
Overall PA	Percentage of Youth Ages 6-17 Participating in 60 Minutes of Physical Activity 7 Days/Week (NSCH 2021-22)
Sedentary Behavior	Percentage of Children Ages 6-17 Years with Screen Time 2 Hours or less/Day Excluding School Work (NSCH 2021-22)
Sleep	Percentage of Children Ages 4 Months-17 Years Sleeping Age-Appropriate Hours on Weeknights (NSCH 2021-22)
Sports Participation	Percentage of Children and Youth Ages 6-17 who Participate in a Sports Team or Sports Lessons (NSCH 2021-22)
School	Percentage of High School Students Attending PE Classes at least 1 Day/Week (YRBSS 2023)
Built Environment	Percentage of Children who Live in a Safe Neighborhood (NSCH 2021-22)

KEY INSIGHTS

Root causes of racial and ethnic disparities in youth physical activity participation often involve a complex interplay of social, economic, and environmental factors. Here are some key contributors:

- **Socioeconomic Status:** Lower-income families may have less access to resources such as sports programs,[15] recreational facilities, or safe areas for physical activity.[116] Economic constraints can limit opportunities for extracurricular activities and equipment.[116]
- **Access to Facilities and Programs:** Disparities in access to quality recreational facilities[117] and organized sports programs can affect participation rates. Communities with fewer resources often lack safe and well-maintained parks and sports fields.[118]
- **Cultural Factors:** Cultural attitudes towards physical activity and sports can influence participation.[119] Some communities may prioritize academic achievement over physical activities or may have different views on the role of sports.[120]
- **Safety Concerns:** Perceptions of safety in neighborhoods and local parks can deter physical activity.[121] Areas with higher crime rates or less secure environments may discourage outdoor play and recreational activities.[122,123]

- **Education and Awareness:** Differences in awareness and knowledge about the importance of physical activity and available programs can affect participation.[124] Parents and guardians play a crucial role in encouraging and facilitating their children's involvement in physical activities.[125]
- **School Resources:** Variations in school resources and funding can impact the quality and frequency of physical education classes and extracurricular sports opportunities.[126-129] Schools in underserved areas may have limited programs or outdated facilities.[130,131]
- **Transportation:** Lack of transportation can be a barrier, especially if sports programs or recreational facilities are not within walking distance. This can be particularly challenging for families without reliable transportation options.[132]
- **Health Disparities:** Pre-existing health conditions or concerns such as asthma may limit some children's ability or willingness to participate in physical activities.[133,134] Addressing these health issues can be essential for increasing participation.

Addressing these root causes requires comprehensive strategies that involve improving access to resources, enhancing community safety, increasing cultural competence in program delivery, and ensuring equitable distribution of educational and recreational opportunities.

RESEARCH GAPS

1. Surveillance data and research are most robust for Hispanic and non-Hispanic White, Black and Asian youth but limited for American Indian/Alaska Native and Native Hawaiian/Pacific Islander youth. With the recent addition of a Middle Eastern or North African category to the United States census, this presents a new opportunity to obtain physical activity surveillance data on this population. Additionally, improving surveillance data for individuals who identify as more than one race is needed. In California alone, the previously released 2020 census data explained that this population increased by 276%, growing from 9 million in 2010 to 33.8 million in 2020.[135]
2. Surveillance data and research are needed for gender and sexual minority youth. Previous research suggests gender and sexual minority youth report 1.2-2.6 hours per week less moderate-to-vigorous physical activity than their heterosexual cisgender counterparts.[136]
3. Surveillance data and research are needed for socioeconomic status, as it is a key determinant of youth physical activity levels. A recent study showed that eliminating or reducing disparities in youth physical activity between high and low socioeconomic groups could save the United States $4.34 to $15.6 billion in direct medical costs and productivity losses over the lifetime of the 6-17 year old cohort.[137] Incorporating the different dimensions of socioeconomic status which include parental education, occupation, income, and wealth into surveillance data can elucidate mechanisms that can inform interventions and policies.

RECOMMENDATIONS

Here are several recommendations for parents, practitioners, and policymakers to help reduce racial and ethnic disparities in youth physical activity participation:

1. Policymakers should invest in creating and maintaining safe, accessible, and affordable recreational facilities in underserved communities. This includes funding for public parks, sports complexes, and after-school programs that offer a range of physical activities. Practitioners can advocate for and help design community-based programs that are delivered in these spaces.
2. Public health departments should launch educational campaigns to raise awareness about the importance of physical activity and the availability of local programs. Parents should be informed about the benefits of regular physical activity and encouraged to participate in or support their children's involvement in sports and exercise. Practitioners can provide resources and workshops for parents on how to integrate physical activity into daily routines and leverage available community resources. Social services that can help increase parents' capacity are also critical for supporting children's physical activity, including those related to childcare, employment, housing, and nutrition.
3. Policymakers should ensure that schools in all communities have the resources needed to provide high-quality physical education programs. This includes adequate funding for equipment, trained staff, and facilities. Practitioners and educators can work to make physical education classes more inclusive and engaging for students from diverse backgrounds and advocate for policies that support daily physical activity in schools.
4. Local government and community organizations should work to improve neighborhood safety and transportation options to ensure that all children have access to safe areas for physical activity. This might involve investing in community safety measures, improving lighting in parks, and providing reliable transportation for children to reach recreational facilities. Practitioners can collaborate with local organizations to address safety concerns and work with families to overcome transportation barriers.
5. Practitioners should continue to develop and support physical activity programs that are culturally relevant and responsive to the needs of different racial and ethnic groups. This can include incorporating cultural practices and preferences into program design and delivery. Practitioners should be trained in cultural competence to better engage with diverse communities, while policymakers can support funding for programs that celebrate and respect cultural differences.

Implementing these recommendations can help bridge the gap in physical activity participation among different racial and ethnic groups, leading to improved health outcomes and greater equity in opportunities for all youth.

CHILDREN AND YOUTH WITH DISABILITIES

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National surveillance data used to inform this report card indicates that children and youth with disabilities are significantly less likely to adhere to physical activity guidelines, participate in sports, and limit screen time (i.e., sedentary behaviors). However, comparing children with disabilities to standard benchmarks or their peers without disabilities requires careful consideration of differences in participation formats and contexts. For instance, children with disabilities may move differently, engage with their environment in unique ways, and face distinct challenges in accessing physical activity opportunities, all of which contribute to experiences not fully captured by traditional physical activity indicators.

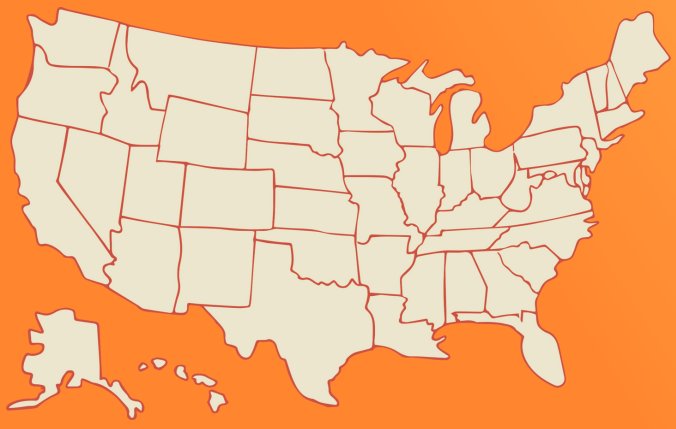
In response to growing evidence of disparities in physical activity and related health outcomes among youth with disabilities, the first *United States Physical Activity Para Report Card for Children and Adolescents with Disabilities*,[138] part of the *Global Matrix of Para Report Cards*,[139] was published. The report card was based on nationally representative data and expanded indicators of physical activity.

Four out of ten indicators (overall physical activity, sedentary behavior, school, and organized sports) received grades ranging from F to D+ for children and adolescents with disabilities. The grades reflect low adherence to physical activity benchmarks and highlight the urgent need for promoting physical activity within this population. Six other indicators received "INC" (incomplete) grades, reflecting the insufficient representation of children and adolescents with disabilities in U.S. national surveillance efforts.

Both the Para Report Card and the current *Physical Activity Report Card for Children and Youth* underscore that only a small percentage of U.S. children with disabilities meet physical activity guidelines, emphasizing the need for better data and increased attention to this population. The following recommendations aim to address this issue:

1. **Reevaluate Indicators and Benchmarks:** Develop metrics that better reflect the diverse ways children and youth with disabilities engage in physical activity.
2. **Enhance Research Instruments and Protocols:** Design tools that more accurately capture the physical activity experiences and participation patterns of this group, rather than relying on a one-size-fits-all approach.
3. **Consider Influencing Factors:** Children and youth with disabilities have fewer physical activity opportunities, face access barriers, and may experience limited social support, inadequate instruction, and low physical activity self-efficacy. Consideration of these obstacles and other subgroup characteristics is needed in the development and evaluation of physical activity measures to ensure data is representative of this diverse population.

These steps are essential for promoting more inclusive and effective physical activity interventions for children and youth with disabilities.



HOW IS YOUR STATE DOING?

State	Physically Active 7 Days/Week	Screen Time Usage less than 2 Hours/Day, Excluding School Work	Sleep Age Appropriate Hours/Weeknight
	NSCH 2021-22	NSCH 2021-22	NSCH 2021-22
Alabama	22.2%	57.9%	55.5%
Alaska	29.7%	62.6%	71.8%
Arizona	17.3%	55.3%	64.2%
Arkansas	21.3%	54.5%	61.0%
California	18.3%	62.1%	69.3%
Colorado	20.2%	59.3%	71.4%
Connecticut	21.5%	56.7%	69.9%
Delaware	21.0%	56.5%	61.0%
District of Columbia	19.2%	67.4%	63.2%
Florida	18.0%	52.4%	66.2%
Georgia	19.2%	59.5%	60.0%
Hawaii	16.3%	55.8%	62.2%
Idaho	21.7%	61.0%	66.1%
Illinois	27.0%	55.9%	64.6%
Indiana	23.2%	62.3%	62.0%
Iowa	26.0%	61.5%	66.1%
Kansas	23.3%	60.4%	68.2%
Kentucky	21.6%	60.2%	58.3%
Louisiana	18.6%	52.7%	51.2%
Maine	24.5%	62.1%	70.7%
Maryland	18.8%	57.5%	64.3%
Massachusetts	18.4%	58.0%	68.8%
Michigan	21.7%	58.5%	68.6%
Minnesota	24.9%	63.1%	72.0%
Mississippi	20.7%	55.5%	52.3%
Missouri	24.5%	59.3%	66.9%
Montana	27.7%	62.9%	69.7%
Nebraska	25.1%	61.7%	67.8%
Nevada	13.3%	51.1%	63.4%
New Hampshire	23.8%	60.6%	71.7%
New Jersey	18.9%	54.3%	63.9%
New Mexico	17.7%	54.9%	59.6%
New York	20.1%	58.7%	64.9%
North Carolina	17.0%	57.9%	61.3%
North Dakota	26.3%	63.8%	69.3%
Ohio	22.7%	58.8%	65.4%
Oklahoma	19.5%	58.3%	63.7%
Oregon	22.1%	58.0%	72.3%
Pennsylvania	23.5%	60.8%	67.1%
Rhode Island	17.0%	56.7%	67.7%
South Carolina	21.3%	55.3%	56.6%
South Dakota	23.8%	64.4%	67.0%
Tennessee	20.1%	58.6%	61.1%
Texas	15.8%	55.2%	60.5%
Utah	17.6%	60.1%	73.3%
Vermont	25.4%	65.0%	73.0%
Virginia	17.9%	56.6%	64.8%
Washington	18.1%	56.7%	73.4%
WestVirginia	26.3%	59.4%	61.0%
Wisconsin	23.1%	62.2%	70.3%
Wyoming	26.1%	64.7%	68.5%

Data for U.S. Territories are not available.

State	Participation in Sports Teams or Lessons in the past 12 months	Attendance of PE Class at least 1 Day/Week	Resides in a Safe Neighborhood	State Licensing Physical Activity Score
	NSCH 2021-22	YRBSS 2023	NSCH 2021-22	CDC State Licensing Scorecards
Alabama	52.4%	-	71.7%	69
Alaska	52.0%	-	63.4%	66
Arizona	44.9%	36.7%	58.3%	61
Arkansas	48.2%	37.6%	68.0%	67
California	50.2%	-	58.8%	51
Colorado	52.6%	43.8%	65.8%	69
Connecticut	56.8%	-	70.0%	51
Delaware	48.1%	-	69.0%	77
District of Columbia	55.4%	-	41.7%	67
Florida	44.0%	37.9%	66.6%	56
Georgia	46.5%	55.7%	70.2%	57
Hawaii	52.1%	36.9%	56.3%	47
Idaho	55.2%	40.7%	73.2%	34
Illinois	55.9%	41.7%	67.2%	66
Indiana	55.1%	-	68.1%	50
Iowa	64.2%	59.1%	74.8%	51
Kansas	59.7%	53.8%	72.8%	55
Kentucky	49.6%	35.6%	71.7%	66
Louisiana	45.1%	48.0%	63.4%	65
Maine	58.9%	32.9%	76.4%	66
Maryland	53.6%	35.3%	65.6%	54
Massachusetts	61.6%	46.5%	73.7%	55
Michigan	56.5%	27.2%	72.1%	61
Minnesota	64.6%	-	73.6%	58
Mississippi	45.2%	36.4%	72.5%	57
Missouri	53.1%	46.9%	72.7%	64
Montana	58.3%	52.2%	64.8%	44
Nebraska	60.7%	52.9%	73.7%	40
Nevada	42.4%	57.7%	58.4%	51
New Hampshire	60.7%	-	78.3%	64
New Jersey	51.5%	-	68.1%	74
New Mexico	39.8%	50.6%	55.7%	47
New York	50.1%	-	57.8%	65
North Carolina	45.5%	-	68.3%	63
North Dakota	64.0%	-	76.3%	73
Ohio	56.3%	-	72.1%	50
Oklahoma	51.1%	36.3%	64.5%	74
Oregon	49.6%	-	61.3%	51
Pennsylvania	51.6%	51.6%	69.7%	40
Rhode Island	53.8%	-	68.5%	66
South Carolina	45.7%	38.6%	68.8%	44
South Dakota	57.4%	-	76.3%	47
Tennessee	50.3%	47.4%	70.7%	89
Texas	48.6%	51.0%	61.9%	87
Utah	54.3%	51.7%	71.3%	60
Vermont	64.4%	-	76.6%	54
Virginia	48.0%	-	69.0%	46
Washington	51.0%	-	63.6%	75
WestVirginia	46.6%	31.3%	69.9%	66
Wisconsin	58.7%	-	73.8%	64
Wyoming	60.1%	-	71.0%	50

Data for U.S. Territories are not available.

Report Card Development and Data Sources

An interdisciplinary team of scientists and professionals compiled the available resources to determine this year's grades. Several sources of data were available to inform the grades:

Classification of Laws Associated with School Students (CLASS)

- CLASS uses a standard scoring system to code state laws as they compare to national standards and recommendations for physical education and nutrition. CLASS scores are available overall and by school level (elementary, middle, and high school). Scores and policy maps by state are available for 11 physical education-related and 21 nutrition related policy areas. CLASS data are regularly updated with the most recent information from 2021. Data are available in a summary format or for download for analysis. For more information on CLASS, please visit: https://class.cancer.gov/

ECE State Licensing Scorecards

- The Centers for Disease Control (CDC) and the University of Colorado release annual scorecards to assess how well a state's Early Care and Education licensing regulations support High-Impact Obesity Prevention Standards (HIOPS). There are 47 HIOPS standards, 11 of which specifically focus on Physical Activity. Each of these is scored from 0-100 based on how well the state's licensing regulation supports the standard, and the overall score is the average of all 47 HIOPS scores. The 11 Physical Activity HIOPS were averaged to create a Physical Activity subscore. For more information on State Licensing Scorecards, please visit: https://www.cdc.gov/early-care-education/php/state-childcare-licensing/index.html

Environmental Protection Agency (EPA) Smart Location Dataset and National Walkability Index

- The EPA developed the Smart Location Dataset National Walkability Index, which is a nationwide geographic data resource that includes information on neighborhood built environment features related to land use and transportation infrastructure at the block group level. The U.S. Report Card examined access to public transit based on an easily interpretable metric. The EPA dataset also includes a National Walkability Index Score that ranges from 1 (least walkable) to 20 (most walkable). The data are available for viewing on an interactive map online or for download and analysis. For more information on the National Walkability Index, visit: https://www.epa.gov/smartgrowth/national-walkability-index-user-guide-and-methodology

National Household Travel Survey (NHTS)

- The NHTS is the only nationally representative survey that collects detailed information on Americans' transportation patterns to inform national and state transportation programs and policies. The U.S. Department of Transportation Federal Highway Administration has conducted the NHTS or its predecessor the Nationwide Personal Transportation Surveys, since 1969. The most recent NHTS was conducted during 2022-2023 and collected data from 7,893 households. Data are collected on all trips taken on a randomly assigned day, including the purpose and duration of each trip, mode of transportation, time and day of the trip, vehicle occupancy, demographics of driver, vehicle characteristics, public perceptions of the transportation system, and many additional factors that may relate to transportation patterns. For more information on the NHTS, please visit: https://nhts.ornl.gov/

National Health and Nutrition Examination Survey (NHANES)

- NHANES involves a series of surveys designed to assess the health and nutritional status of adults and children in the United States conducted by the National Center for Health Statistics. A nationally representative sample of approximately 5,000 persons living in the United States is examined each year. The survey combines interviews and physical examinations. The interview includes information on demographics, socioeconomic, dietary, and health related questions. The NHANES examination consists of medical, dental, and physiological measurements, as well as laboratory tests performed by trained medical personnel. The most recent data available from NHANES are from the 2017-20 cycle. More information on NHANES can be found at: http://www.cdc.gov/nchs/nhanes/about_nhanes.htm

NHANES National Youth Fitness Survey (NNYFS)

- The CDC's National Center for Health Statistics conducted the inaugural NNYFS in response to the lack of nationally representative fitness testing data of American children and youth. The NNYFS combines interviews and a battery of fitness tests designed to collect data on the fitness and physical activity levels and nutritional behaviors of United States children and youth between the ages of 3-15 years. The 2012 NNYFS includes a nationally representative random sample of approximately 1,500 children and youth living in the United States. Interviews include both a family and participant questionnaire. The family questionnaire collects demographics and socioeconomic status information while the participant questionnaire includes information on dietary and other health-related behaviors and activities. Fitness measurements include anthropometric measurements, accelerometry and performance on age-specific physical activities to assess the different components of physical fitness, including body composition, cardiorespiratory endurance, musculoskeletal strength and endurance, and flexibility. Background information is derived from the NNYFS website: http://www.cdc.gov/nchs/nnyfs/about_nnyfs.htm

National Survey of Children's Health (NSCH)

- The NSCH is a national survey that is conducted every four years by the Maternal and Child Health Bureau within the United States Department of Health and Human Services, with the latest data release covering 2021-2022. Telephone numbers are called at random to identify households with one or more child less than 18 years of age. The NSCH is administered to the parent or guardian concerning one child randomly selected to be the subject of the interview. Thus, children's health measures are collected by proxy report. The NSCH collects data on over 100 indicators of children's health, including: BMI, physical activity, screen time, and the environment. Survey responses are weighted to be representative of each state and the national population. The NSCH reports race/ethnicity in the following categories: White, non-Hispanic; Black, non-Hispanic; Asian, non-Hispanic; Other, non-Hispanic (this includes all other races grouped together); and Hispanic. Due to data availability, data from the 2020-2021 cycle was used to calculate statistics for children and youth with disabilities throughout the report card. The NSCH data used in this report can be accessed at: http://childhealthdata.org/learn/NSCH

Safe Routes Partnership Report Card: Making Strides 2022 (SRP)

- The Safe Routes Partnership has produced the State Report Cards on Support for Walking, Bicycling and Active Kids and Communities every two years since 2016 with the most recent report published in 2022. The report provides information on how states are doing in their support of walking, bicycling, and active kids and communities. The report provides grade categories (Lacing Up, Warming Up, Making Strides, and Building Speed) for each state to show where progress has been made, where states are doing well, and where states can improve across four key topics: 1) Complete Streets and active transportation policy and planning, 2) federal and state active transportation funding, 3) Safe Routes to School funding and supportive practices, and 4) active schools and neighborhoods. The report cards can be found at: https://www.saferoutespartnership.org/resources/2022-state-report-map

School Health Profiles (SHP)

- School Health Profiles evaluates school health guidelines by surveying principals and health education teachers from middle and high schools across the U.S. The surveys are conducted every other year with support from the CDC's Division of Adolescent and School Health, with the most recent data available being from 2022. Among other policies, School Health Profiles monitors school health and PE, physical activity, and family and community involvement. Survey results are weighted to represent the state, district or territory from which they were sampled when at least 70% of those sampled completed the survey; unweighted data are only representative of the school-level. Information about School Health Profiles, including results, data and participation by state can be found at: http://www.cdc.gov/healthyyouth/data/profiles/index.htm

State of Play Report

- The Aspen Institute released the first State of Play Report in 2016 and the most recent report in 2023 to track trends in children and youth sports participation over time. The report includes nationally representative data on youth sports participation from the Sports & Fitness Industry Association's annual household survey and detailed information on key developments related to youth sports. It also provides grades on how well adult stakeholders are providing access to and opportunity for youth sports participation in 8 key areas: ask kids what they want, reintroduce free play, encourage sport sampling, revitalize in-town leagues, think small, design for development, train all coaches, and emphasize prevention. Data included in this report are from the 2022 and 2023 State of Play reports. For more information and to read the both reports, please visit: https://projectplay.org/reports

Youth Risk Behavior Surveillance System (YRBSS)

- The YRBSS is a school-based adolescent survey conducted by state, territorial and local education and health agencies and tribal governments. National data are collected by the CDC under the Division of Adolescent and School Health. The YRBSS is administered every other year and is designed to assess health-risk behaviors and the prevalence of obesity and asthma among middle and high school students. The sampling frame for the 2023 YRBSS consisted of all public and private schools with students in at least one of grades 9-12 in participating U.S. states and the District of Columbia. Survey results are weighted to be representative of 9th through 12th grade students in public and private schools throughout the United States YRBSS reports race/ethnicity in the following categories: American Indian/Alaska Native; Asian; Black or African American; Hispanic or Latino; Native Hawaiian or Other Pacific Islander; White, non-Hispanic; and Multiple Race. Data from multiple years of YRBSS is used in the Report Card as some questions changed between survey cycles. The YRBSS data used in this report card can be accessed at: http://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Method of Data Analysis

For the 2024 Report Card, original data analyses were performed on data collected by both the NHANES and NSCH using SAS (version 9.4; SAS Institute Inc., Cary, NC). NHANES data were analyzed to inform the grades for Physical Activity, Sedentary Behaviors, Active Transportation, and Sleep. NSCH data were analyzed to provide information on children with disabilities within the indicator sections. Participants were excluded on an individual basis if they were missing data for variables used in each distinct analysis. Cases with non-positive sample weights were also excluded. Categories of BMI were established using age- and sex-specific percentiles calculated using the CDC growth charts.

SAS survey procedures were utilized to account for the stratification, clustering and unequal weighting that is a product of the complex, multistage probability designs of NHANES and NSCH.

Abbreviations and Definitions

Abbreviation	Definition
AAP	American Academy of Pediatrics
BMI	Body Mass Index
CDC	Centers for Disease Control and Prevention
CLASS	Classification of Laws Associated with School Students
the Committee	Report Card Research Advisory Committee
COVID-19	Coronavirus Disease
CSPAP	Comprehensive School Physical Activity Program
ECE	Early Care and Education
EPA	Environmental Protection Agency
FPL	Federal Poverty Level
INC	Incomplete
MVPA	Moderate-to-Vigorous Physical Activity
NHANES	National Health and Nutrition Examination Survey
NHTS	National Household Travel Survey
NNYFS	NHANES National Youth Fitness Survey
NPAP	National Physical Activity Plan
NSCH	National Survey of Children's Health
PE	Physical Education
SES	Socioeconomic Status
SHP	School Health Profiles
SNACS	Study of Nutrition and Activity in Childcare Settings
SRP	Safe Routes Partnerships
U.S.	United States
YRBSS	Youth Risk Behavior Surveillance System

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