Physical Activity Recommendations for Children and Adolescents: More Important Than Ever

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Call to Action

Physical activity is critically important to the development of the whole child and to establishing positive health behaviors that can be maintained throughout life. It provides important benefits for children that include physical, mental, social, and cognitive health. The Physical Activity Guidelines for Americans (2^{-d} edition) recommend that children and adolescents should participate in 60 minutes or more of moderate-to-vigorous physical activity daily. Children and adolescents typically get a large part of their physical activity at school in physical education class, recess, during classroom movement, and before and after school activities. In addition, youth are physically active in sports, at community recreational facilities and green spaces, and while playing with friends in their neighborhoods and homes.

As we all strived to provide as much normalcy as possible during the trying times of the COVID-19 pandemic, studies are showing adverse effects of on children's physical activity such as more leisure-related sitting and overall, more sedentary behavior. During the pandemic, there have been many lessons learned from our experiences in providing youth with physical activity opportunities – new program delivery methods, new modes of teaching, new safety precautions, changing and adapting new policies, altering the environments (school, community, home) for physical activity participation, using new technologies, relying on media, recommending new guidelines and strategies as developed by national organizations, and the list goes on. The pandemic has caused us to look upstream as we anticipate the future, focusing not only on how we have changed due to the pandemic, but what we should consider in promoting physical activity opportunities and participation in the years ahead.

We envision that physical activity promotion in children and adolescents will be anchored in local schools and communities when influencers will be fully engaged in mobilizing the community, educating leaders and the public, increasing access to and awareness of physical activity opportunities, and empowering community members and families/caregivers to take action to facilitate change. Creating collaborative partnerships through community engagement will help to identify the health policy landscape and implement a shared vision through developing strategies to discover and implement promising practices.

The National Physical Activity Plan provides a policy foundation based on scientific evidence and encourages all societal sectors of the population to make systems, environment, and policy changes to increase access to physical activity opportunities and to increase physical activity participation in our children and youth. The Plan provides a vision to encourage policy makers, educators, community leaders, media, and the general public to act.

The purpose of this series of papers is to outline key considerations for influencers, decision makers, and the public overall from all societal sectors of our population to take action to change or enhance the landscape of physical activity promotion for the overall health of our children and youth.

Executive Summary

The COVID-19 pandemic has brought about many changes to society - including limiting the opportunities children and adolescents have to be physically educated and active in schools, at home, and in communities. We have yet to understand the full impact of COVID-19 related school closures, cancellations of youth sports and other after-school and community-based physical activities on children and adolescents' health. Disparities and limited access to resources have also accentuated the existing inequities that leave youth with fewer opportunities to be active. However, the lessons learned from these experiences have better positioned stakeholders to adjust and better advocate for improvements to promote physical activity in children and youth.

This executive summary outlines key considerations for promoting physical activity for children and adolescents moving past the COVID -19 pandemic. Each section, Schools, Home, and Communities, provides recommendations 1) to increase access to and awareness of opportunities, 2) to empower stakeholders to address issues, advocate for change, and engage in social action, and 3) to create collaborative partnerships across societal sectors. These recommendations will hopefully aid decision makers, policy leaders, educators, parents, community leaders, media, healthcare systems, public health, and others in developing strategies to implement promising practices.

Recommendations specific to each developmental level – elementary, middle school, and high school – are available at the following links:

- Physical Activity Recommendations for Elementary Children
- Physical Activity Recommendations for Middle School Youth
- Physical Activity Recommendations for High School Youth
- Sports Across All Developmental Levels K-12

SCHOOLS

Schools in the United States serve as educational institutions providing services and physical connection points for more than 56 million children and their families. There are approximately 98,000 public schools in the US, according to the National Center for Education Statistics (NCES) that are expected to offer safe, inclusive, and quality educational experiences. Given the importance of schools in the lives of children and adolescents, continued efforts must be made to develop contextual and culturally relevant approaches to meet the diverse needs of learners. Beyond the traditional education and socialization roles, it is important to recognize the role schools serve as community focal points, or hubs, through which a variety of information and services can be implemented. This unique positioning in a community can be leveraged to facilitate meaningful collaborations to effectively address the physical activity needs of students and their families.

As children grow and change, the focus of physical education and physical activity changes, and the types of physical activity opportunities that are age-appropriate and desirable shifts. Elementary age children initially focus on the development of fundamental movement skills and the enjoyment of structured and unstructured play. As motor skills develop and children transition to middle school, a wide range of sports activities and health-related fitness activities are needed to allow youth to find their interests and develop abilities in physical activity participation. By high school, students exhibit diverse skills and interests and need the opportunities to learn and embrace lifelong skills and chart their own course for engagement in lifelong health-promoting behaviors.

The following recommendations focus on enhanced access to quality physical education and varied physical activity and sports opportunities, increased awareness of the importance of physical activity, empowerment of stakeholders to get involved, and partnership-building with other societal sectors (US National Physical Activity Plan). In these post Covid-19 recommendations for the school environment, the focus is on both physical education and physical activity, and the roles that principals, teachers, district and state school boards and superintendents, and other school site personnel play in putting into action these recommendations that will aid in implementation of promising practices in promoting physical activity and physical literacy.

Enhancing Access and Awareness

School-based Physical Education

- Re-examine the most critical aspects of a quality standards-based physical education curriculum and explore creative ways of engaging learners across all three learning domains psychomotor, affective, and cognitive.
- Ensure that all students have access, opportunity, and equity in physical education programs.
- Ensure that all students are engaged and continually assessed.
- Focus physical education on learning, enjoyment, and inclusivity with decreasing emphasis on competition.
- Maintain or increase daily-allocated physical education time and ensure that physical education is not marginalized.
- Continue to deliver interactive virtual/remote physical education lessons to students when a lack of time is allocated for physical education, when schools are not in session, and when students move to remote or home-school learning.
- Become familiar with and utilize enhanced educational technologies and digital tools to engage and assess cognitive and affective concepts and promote learning of psychomotor skills.
- Provide new technology-based resources to students and families to promote physical activity.
- Engage in proactive advocacy to ensure the viability and capacity building of physical education programs.
- Maintain or improve the budget for enhancing physical education programming.

School-based Physical Activity

- Formalize the Comprehensive School Physical Activity Program (CSPAP) framework to foster an active environment and a culture of physical activity inside and outside the classroom (before, during, and after school)
- Increase the total allocated time and number of unstructured/semi-structured outdoor physical activity sessions throughout the school day.
- Offer active class sessions in alternative spaces, such as outdoor classrooms and open spaces with alternative seating options for students and teachers.
- Encourage movement in the classroom through environmental modifications (ex. playing music) and providing resources to help teachers add movement to academic lessons (ex: activeacademics.org)
- Design physical activity programs and offerings with a lens of social justice, diversity, equity, and inclusion.
- Promote active transport programs such as the walking school bus, walk, roll, and ride to school days, and partner with local departments of transportation and law enforcement to create safe routes to school and provide appropriate storage for modes of active transport (i.e. bike and skateboard racks)

MOVE WITH US

- Provide funding to implement and sustain intramural programs and extracurricular clubs for the student population to engage in physical activity in the school environment.
- Deliver sports programs in a manner that creates suitable entry points across ability ranges, ensuring that children and youth of all ability levels are included.
- Provide or create both competitive and non-competitive team sports to ensure mass youth participation across abilities, genders, and sociodemographic categories.
- Develop a systematic approach to continually evaluate changing needs of the school.

Empowering Stakeholders

School-based Physical Education

- Adopt strong policies by districts and states that support the implementation of quality physical education programs that are standards-based, employ assessment for student learning outcomes, employ days and time per week requirements, and provide for accountability of physical education program implementation (i.e., oversight, annual reporting requirements).
- Provide adequate level of funding to implement a quality physical education program and other physical activity programs in the school setting.
- Expand adapted physical education programming and provide certified and trained staff to deliver appropriate instruction.
- Incorporate social justice into the design and delivery of the physical education curriculum.
- Implement activist and student-centered approaches in the design of PE curriculum, continuous professional development of physical education teachers, and physical activity promotion training for community members and school stakeholders.
- Provide professional development for teachers to improve their mental health literacy to offer supportive learning environments and to integrate social and emotional learning in their programs.
- Improve other professional development opportunities for teachers to assist them in providing quality physical education and physical activity programs, such as utilizing virtual learning and the use of current media platforms, incorporating active lessons into core curricula with corecurricular collaborations, and implementing an inclusive teaching environment addressing equity, diversity, discrimination, and social justice.
- Consider the parents and the students as stakeholders and utilize their voices in developing contextually and culturally appropriate curriculum and physical activity programs.

School-based Physical Activity

- Establish school wellness committees to plan and implement strategic school-wide physical activity and wellness promotion events, initiatives, and programs.
- Encourage older youth to be physically active during the school day by providing opportunities for them to choose physical activities on their own during mid-day breaks or drop-in sessions during lunchtime.
- Adopt policies that support implementation of the Comprehensive School Physical Activity Program (CSPAP) within the Whole School, Whole Community, Whole Child (WSCC) model.
- Establish or update district-wide and school wellness committees to implement physical activity guidelines for students, staff, and families to promote programs, events, and initiatives.

Building Partnerships/Collaborations

School-based Physical Education

• Support parents in their advocacy of physical education and regular physical activity breaks throughout the school day.

- Develop partnerships with community-based organizations, universities/colleges, and health care providers to assist in the delivery of physical education instruction either through use of facilities during the school day (such as swimming pools and skating rinks), or as human resources.
- Work with technology-based companies to ensure that students in marginalized communities have access to the Internet at home to close the digital divide and ensure equity and access to online instruction and instructional materials.

School-based Physical Activity

- Reach out and build collaborative initiatives and partnerships with community-based groups that have similar interests with regard to improving the physical health and wellness of children and youth.
- Build cross-sector partnerships with community organizations that can provide children and families with affordable movement and low-organized game/sports programming beyond the school hours.
- Use the school's role as the community hub to share physical activity messaging and resources with families, and to make meaningful connections for collaboration with other NPAP sections (Healthcare, Business/Industry, Public Health, Faith-based organization)
- Partner with community recreation centers in efforts to develop and formalize shared-use agreements for indoor and outdoor spaces.
- Develop partnerships with local healthcare systems in order for school-based health centers (SBHC) to address disparities in health care access, transportation, and other determinants of health.
- Implement inclusive sports programs and secure funding for programs (ex. Para Sports and Special Olympics).

HOME

Over the course of the COVID-19 pandemic, the changing roles of parents and caregivers often times made them solely responsible for providing opportunities to foster good health for their children, including physical activity. Recognizing that COVID-19 has created new stressors in families and homes including financial insecurity, mental and behavioral health issues associated with social isolation and increased anxiety, lack of self-care, and others, some of these hardships may continue beyond the pandemic. This establishes an even greater need for families and caregivers to view physical activity as a positive means of addressing social and emotional issues and providing health benefits to reduce unhealthy behaviors that lead to health risks such as weight gain, some chronic illnesses such as diabetes, high blood pressure, and others. Sedentary behavior has increased dramatically during the COVID-19 pandemic, so it is the responsibility of parents and caregivers to encourage physical activity in their children, and to engage their families in activities that everyone can enjoy.

It is important for parents to be provided access to and awareness of physical activity opportunities that they can consider implementing in their homes, and with their children. These post-COVID-19 recommendations are not only for parents/caregivers, but also for communities, including local public health departments, parks and recreational facilities, healthcare, schools, faith-based and non-profit organizations, and media, in helping to provide opportunities for families to engage in and promote physical activity.

Enhancing Access and Awareness

- Access national guidelines and recommendations to become better educated on the need for daily physical activity for your child, and ways to encourage activity (CDC Physical Activity Guidelines for school-age children and adolescents)
- Consider activities such as active transportation, chores, social-media challenges, and active volunteer opportunities in addition to more traditional physical activities.
- Improve or maintain access to remote resources that provide direct access to free, open-source information related to health, physical activity, nutrition, sleep, and screen time.
- Create family time to be physically active maintain or improve family connections fostered during COVID-19.
- Explore community organizations and others who are offering free or low-cost physical activity opportunities.
- Seek advice from the school physical education teacher on how to promote physical education for your child, and what activities to utilize to help meet the grade-level content standards.

Empowering Stakeholders

- Be confident as a parent/caregiver in your own abilities to participate in physical activity and act as a role model in prioritizing physical activity participation each day.
- Support and encourage all family members to participate in some type of physical activity, both indoors and outside.
- Explore outdoor opportunities within the community for physical activity including trails and greenways, sports leagues, and parks.
- Advocate for increased support from schools, policy makers, and community stakeholders to provide free or low-cost physical activity opportunities.
- Encourage a brainstorming meeting to be held between multi-sector community leaders to identify the strengths and needs of families in promoting physical activity outside of school, and how to make meaningful changes to facilitate opportunities.
- Advocate for community stakeholders' understanding of the need to provide physical activity opportunities for families at a free or reduced cost, and for the development of neighborhood walking, biking, and fitness trails.
- Create a voice for parents as teachers and make your advocacy and actions well known.
- Encourage support for physical activity in the home environment from schools, healthcare providers, community influencers, faith-based organizations, and others.
- Advocate for increased community security and policy officers so that recreating outdoors in the evenings becomes a safe space.

Building Partnerships/ Collaborations

- Develop a network of neighbors and friends that can support physical activity and share supervision of outings and be aware of opportunities for physical activity offered within their broader community.
- Address disparities in internet access and ensure availability of broadband technology access to all citizens through collaboration with local government, local public health, community decision makers, local businesses, schools, healthcare providers, and others.
- Discuss physical activity and associated benefits with your healthcare providers and seek advice on structured programming and support for interventions at home.
- Work with your school and other community recreation facilities to support physical activity that can be done at home.

- Advocate for free or reduced-fee youth sports opportunities.
- Encourage local organizations to host/promote intergenerational family-friendly events at no/low costs in conjunction with schools or faith-based organizations.
- Develop and disseminate more virtual resources for children and parents through partnerships with technology/media companies, universities, content experts, businesses.
- Encourage faith-based organizations to invite families to participate in physical activity opportunities that they can provide (outdoor adventures, classes, facilities use).
- Encourage multi-sector collaboration to provide funding for more youth sports and other physical activities, such as infrastructure for biking, walking, running, etc.
- Contract local Parks and Recreation department to seek support for free family-friendly activities on the weekends.

COMMUNITIES

Neighborhoods and rural versus urban environments play a role in physical activity participation in youth. Community settings such as parks and recreation areas, faith-based organization facilities, healthcare locations, and extracurricular sports and physical activities are important and influential to the promotion of physical activity for their well-being. Due to the diverse nature of these locations around the country, barriers exist to children's access to spaces and programs, transportation to and from various locations, resources to pay for these opportunities, and the time afforded to engage in the activities. As a result of select closures and loss of income, it becomes even more important for community-based organizations to work collaboratively to rise above the unsolicited devastation of COVID-19, and to develop new opportunities for physical activity. The target audience for this section includes city and county government officials, religious leaders in the community, healthcare workers, business owners, parks and recreation managers, and youth sports coaches, among others who affiliate with community personnel. Following are opportunities for these individuals and groups to promote physical activity in youth with some specific recommendations post-COVID.

Enhancing Access and Awareness

- Build collaborations between community-based organizations (e.g. recreation centers, healthcare providers, faith-based organizations) and schools to increase physical activity participation before, during, and after school.
- Focus on culturally and geographically relevant unstructured physical activities that most youth will enjoy.
- Collaborate with local schools to launch media campaigns to promote in-school and out-ofschool physical activity opportunities at low or no-cost to families.
- Seek opportunities for shared-use agreements between schools, community facilities, and other available physical activity spaces.
- Highlight outdoor spaces available for physical activity within the community by creating resource maps of greenways and trails and other areas that provide open spaces for recreation.
- Utilize Complete Streets policies to encourage active transportation.
- Design communities that provide access to green spaces and trails and develop strategies to encourage youth to actively commute to everyday destinations (e.g., school, sports, play).
- Create visible environmental prompts (signage with people of all sizes, races, genders, ages represented], well-lit pathways) that encourage safe, socially responsible, and intergenerational play/physical activity in public spaces.
- Publicize opportunities for involvement in community volunteer activities that include physical activity such as trash pick-up, meal delivery programs, etc.

- Advertise physical activity facts, programs, and opportunities on earned, paid, and free media (i.e. TV, billboards, newspapers, websites, social media) targeting immediate and short-term benefits and local opportunities available for all.
- Recognize disparities in access to places to be physically active in the community, and work to reduce disparities through collaboration with multi-sector partnerships.
- Implement the Family Nutrition and Physical Activity screening tool to all well child visits (healthcare providers/systems).

Empower Stakeholders

- Work with school system administrators to re-purpose limited use land for community-wide physical activity spaces.
- Consult with direct and related service personnel and parents when developing new physical activity programs for all children and youth, including individuals with disabilities.
- Collaborate with school superintendents, city-owned parks and recreation buses, and others to transport students to parks for after school activities at no or little cost.
- Address the income disparity in youth athletics/club sports and work to include youth from lowincome families by providing financial support (i.e. financial scholarships for underrepresented youth, grants for costly equipment).
- Focus on hiring certified professionals and require/provide access to certification programs for all volunteers, employees, officials, and coaches. Trainings should focus on holistic health (including mental health) rather than competitive performance or weight management.
- Encourage faith-based leaders, business leaders, and community leaders to share messages regarding how children can take care of their bodies through healthy lifestyle choices.
- Seek donations of physical activity kits and provide drop-off locations of gently used physical activity equipment for pick-up/distribution.
- Establish partnerships to fund or implement inclusive physical activity policies and programs, especially for underserved groups.
- Work together across sectors to provide financial support, space, or personnel to develop and implement environmental changes (i.e. walking tracks, playgrounds, ball field, new programs).
- Develop inclusive sports programs that benefit all children and youth regardless of race, socioeconomic status, gender, and physical or cognitive abilities.

Building Partnerships/Collaborations

- Use formal reciprocal joint-use agreements between the school district and another public or private entity to jointly use or share either school facilities or community facilities to share costs and related responsibilities.
- Adopt physical activity as a pediatric vital sign in children's routine health checks to determine if a child is meeting the national physical activity guidelines (US Physical Activity Guidelines for Americans).
- Consult with the child and caregiver at primary care visits about the benefits and risks associated with physical activity and lack thereof and write individualized physical activity prescriptions to encourage participation. (healthcare providers/systems)
- Develop "physical activity kits" through a school/healthcare/public health partnership to be sent home with a child that includes information about community physical activities and sport resources and programming, a goals and activity tracker, and a reminder about annual healthcare visits.

- Engage university personnel to help develop master plans for towns and cities that include development of policies and community design to support a physically active lifestyle.
- Invest financially in a community health initiative or wellness program that provides education and encourages youth to improve their health through physical activity and good nutrition
- Create partnerships with health professionals, medical professionals, fitness experts, and others
 to provide family screening services and a comprehensive physical activity opportunity for
 families.
- Collaborate with the surrounding community to assist and support master plans that include a focus on environmental, systems, and policy changes to enhance physical activity opportunities and participation. (Universities)

Closure: Multi-Sector Collaboration and Policy Levers

In order to promote policy change in public health, an important role is to review evidence-informed practices that facilitate action and build partnerships and resources that can make it happen. Recommendations to promote physical activity in school-aged children post COVID-19 takes into consideration opportunities in the school, home, and community. These recommendations may be used as a guide for development of collaborative community partners as they engage in the establishment of a shared vision that will produce strategies to implement promising practices in their communities.

Looking across all three environments where children and adolescents will be active, there are common examples of partnerships and collaborative efforts between varieties of societal sectors, as identified in the US National Physical Activity Plan. For example, teachers and parents are encouraged to partner to increase engagement in physical activity and in the development of motor skills and movement in physical education, both at school and at home. Schools, businesses, media outlets, universities, and others should expand the development of web-based resources and instructional tools to deliver physical activity information. Community and school leaders should partner with healthcare systems, faith-based organizations, local businesses, and others who want to support physical activity promotion through the development of new opportunities and programs for youth and families. Healthcare systems and schools, parks, and community facilities can partner to provide children with informational materials and programming. The importance of leveraging cross-sector commitment is critical to the success of policy change. It is important to include representatives from a variety of disciplines across the community when action planning, including representatives with expertise in development and implementation of policies, planning, and processes. Also important are team members with expertise in funding, technology, and other resources.

The COVID-19 pandemic revealed gaps in our physical activity environments, systems, and policies. The policy levers that are evident for change in physical activity promotion for youth include access, awareness raising, empowerment, engagement, strategic planning, multi-sector partnering, financial support, and elimination of disparities. Both within and across all societal sectors, stakeholders must work together to improve equitable access to physical activity opportunities, regardless of location, socioeconomic status, or ability level.

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