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## VISION AND BACKGROUND

The U.S. National Physical Activity Plan is based on a vision: One day, all Americans will be physically active, and they will live, work and play in environments that encourage and support regular physical activity.

The Plan is a comprehensive set of policies, programs, and initiatives designed to increase physical activity in all segments of the U.S. population. The Plan aims to foster a national culture that supports physically active lifestyles. Its ultimate purpose is to improve health, prevent disease and disability, and enhance quality of life.

The Plan was developed by a coalition of organizations that came together to form the National Physical Activity Plan Alliance. (Now a component of the Physical Activity Alliance.) The Physical Activity Alliance is a non-profit organization committed to developing the Plan and taking actions that will enhance its effect on physical activity in the U.S. population.

The 2016 Plan builds on the first U.S. National Physical Activity Plan, which was released in 2010. Like the original Plan, the 2016 Plan was developed through a process that engaged hundreds of professionals, researchers, and leaders from public and private organizations. These individuals contributed to the work of ten Expert Panels, each of which focused on one societal sector. These ten sectors – Business and Industry; Community Recreation, Fitness and Parks; Education; Faith-Based Settings; Healthcare; Media and Communications; Military Settings; Public Health; Sport; and Transportation, Land Use and Community Design – provide the organizational framework for the Plan. Each Expert Panel reviewed the 2010 Plan and recommended enhancements, refinements, and additions to the Strategies and Tactics that comprise the core content for its sector.

The Expert Panels' work was informed by public comment, which was solicited at the beginning of the revision process, during a National Summit in 2015, and after a draft of the revised plan was released in early 2016. A Revision Executive Committee oversaw the process of producing the current Plan. Ultimately, the Plan is the responsibility of the Board of Directors of the Physical Activity Alliance.

\* For more information about the Physical Activity Alliance, visit our website at <a href="https://www.paamovewithus.org">www.paamovewithus.org</a>.



## ORGANIZATION OF THE NATIONAL PLAN

The Plan is comprised of Overarching Priorities and Strategies and Tactics for each of ten societal sectors.

**Overarching Priorities** – A set of initiatives that the Physical Activity Alliance views as critical to moving the physical activity and public health field forward and accomplishing the overall goal of increasing physical activity in the U.S. population. These priorities are relevant to all components of the Plan.

Strategies, Tactics, and Objectives for Ten Societal Sectors – Strategies, Tactics, and Objectives for the Societal Sectors – Specific evidence-informed approaches designed to promote physical activity through actions taken in each of ten societal sectors. Strategies are broad approaches, to be achieved through implementation of specific tactics. Objectives are associated with tactics and identify measurable outcomes that should be attained within a specified time period. The National Physical Activity Plan is comprised of recommendations that are organized in ten societal sectors:

- Business and Industry
- Community, Recreation, Fitness, and Parks
- Education
- Faith-Based Settings
- Healthcare
- Media and Communications
- Military Settings
- Public Health
- Sport
- Transportation, Land Use, and Community Design

Each sector presents strategies aimed at promoting physical activity. Each strategy also outlines specific tactics that communities, organizations and agencies, and individuals can use to address the strategy. Recognizing that some strategies encompass multiple sectors, the Plan also has several overarching priorities.



## **GUIDING PRINCIPLES**

In developing the content of the Plan, the Expert Panels and Revision Executive Committee applied the following guiding principles:

- The Plan is grounded in a socio-ecological model of health behavior. This model holds that physical activity behavior is influenced by a broad constellation of factors operating at the personal, family, institutional, community and policy levels. Sustainable behavior change is most likely when influences at all the levels are aligned to support change.
- The Plan consists of initiatives that are supported by evidence of effectiveness.
   Levels of evidence range from findings of controlled research studies to best practice models.
- The Plan includes recommendations for actions at the national, state, local and institutional levels, but fundamentally it is a roadmap for change at the community level that facilitates personal behavior change.
- Although reduction of time spent in sedentary behavior is recognized as a worthy goal, the Plan focuses on strategies for increasing the types and amounts of physical activity recommended by current public health guidelines.

## **NEW KNOWLEDGE**

The National Physical Activity Plan is intended to be a "living document" that is updated on a regular basis. Each edition of the Plan will be informed by new knowledge, some of which will be the product of evolving professional practice. But a growing body of knowledge, fed by an expanding physical activity–public health research enterprise, will be needed too. Accordingly, the National Physical Activity Plan Alliance calls on public, non-profit and private research funding agencies to make greater investments in research that will generate the knowledge needed to increase physical activity in communities across the U.S.



## **INCLUSION**

In order to increase physical activity in all segments of the U.S. population, the Alliance recognizes that the Plan must address the substantial disparities in physical activity that exist across groups based on gender, age, race, ethnicity, socioeconomic status, physical, cognitive or sensory ability, and geography.

Further, the Alliance recognizes the remarkable diversity of the American population and has been committed to producing a Plan that will encourage persons of all religious, cultural, ideological, sexual orientation, and gender identity groups to become more physically active. Toward this end, the Alliance formed a Diversity Committee that played a central role in developing the Plan and ensuring that the needs of a diverse population were incorporated. An overriding goal has been to produce a Plan that, as a whole and in its many elements, is inclusive of all segments of the American population.

The goal of the National Physical Activity Plan is to increase physical activity in the U.S. population. For the Plan to succeed, many people and groups will need to play a role in implementing it. Individuals can educate leaders in all sectors and encourage them to adopt elements of the Plan. Organizations can take leadership roles in implementing the Plan's strategies and tactics at the community, state or national level. And government agencies at all levels can take actions that promote physical activity and create environments that support it. No single, central organization is responsible for implementing the Plan or providing the funding that will be needed. Instead, it will be the American people, working as individuals or through their organizations or government entities, who put the Plan's strategies and tactics to work in ways that benefit everyone.



## **OVERARCHING PRIORITIES**

A key objective of the Physical Activity Alliance is to support implementation of the strategies and tactics that comprise the core content of the Plan. During the Plan's development several initiatives were identified that, if carried out, would facilitate successful implementation of strategies across multiple sectors represented in the Plan. These Overarching Priorities, taken individually and collectively, would markedly strengthen the physical activity-public health community's ability to pursue the goal of increasing physical activity in all segments of American society.

The Physical Activity Alliance will work independently as well as collaboratively with its organizational partners, other non-profit organizations, for-profit organizations, and government agencies to advocate for and implement the following Overarching Priorities:

#### FEDERAL OFFICE OF PHYSICAL ACTIVITY AND HEALTH

Establish at the U.S. Centers for Disease Control and Prevention an Office of Physical Activity and Health, and allocate to that Office the resources needed to provide effective national leadership.

#### COMPREHENSIVE SURVEILLANCE SYSTEM

Establish a robust and comprehensive surveillance system for monitoring: 1) compliance with physical activity guidelines in all segments of the U.S. population, and 2) the status of environments, policies, and programs designed to promote physical activity.

#### NATIONAL PHYSICAL ACTIVITY REPORT CARD

Develop and disseminate a comprehensive physical activity report card that, at regular intervals, evaluates the status of physical activity and physical activity promotion efforts in the United States.

#### PHYSICAL ACTIVITY POLICY DEVELOPMENT

Promote translation of evidence-based strategies for promoting physical activity to policies for adoption at the national, state, community, and institutional levels.

#### NATIONAL PHYSICAL ACTIVITY CAMPAIGN

Launch a national physical activity campaign coordinated with state and local resources to guide Americans toward effective behavioral strategies, programs, and places for increasing physical activity.

#### STATE AND LOCAL PHYSICAL ACTIVITY ACTION PLANS

Support development and implementation of comprehensive physical activity strategic plans at the state, regional, and community levels.



## INCREASED FUNDING FOR PHYSICAL ACTIVITY INITIATIVES

Advocate to local, state, and national policy makers for increased funding to implement the physical activity promotion strategies identified in the National Physical Activity Plan.



# **10 SOCIETAL SECTORS**

**Business and Industry** 

Community Recreation, Fitness and Parks

Education

Faith-Based Settings

Healthcare

Media and Communications

Military Settings

Public Health

Sport

Transportation, Land Use and Community Design



## **BUSINESS AND INDUSTRY**

The Business and Industry Sector combines two subdivisions of the economic system into a single sector. The business subdivision refers to organizations that provide goods and services to consumers, governments, and other businesses. The industry sector refers to activities related to manufacturing finished, usable goods and products from raw materials.

The health of the U.S. workforce is a major concern for the U.S. business community. The total annual national healthcare expenditure is approximately \$3 trillion, or close to 18% of the Gross Domestic Product (GDP), and a large portion of these costs are borne by employers. Approximately 80% of healthcare costs are associated with non-communicable diseases (NCDs), such as obesity, heart disease, and diabetes. NCDs reduce workforce productivity when employees are absent due to illness as well as when they are at work but unable to be as efficient or effective as when they are fully healthy. Healthy people are an asset to successful business endeavors, and collaboration between this sector and the health sectors can have significantly positive results. Business benefits from public health programs that reduce costly health risks, and the health of the public benefits when the business and industry sector addresses pressing public health concerns, such as NCDs.

Lack of physical activity is an important underlying health risk for NCD-related costs and is associated with reduced worker performance.<sup>2</sup> The potential for business and industry to improve the level of physical activity among workers at the workplace is strong.<sup>3</sup> However, the role of business and industry in promoting physical activity should go beyond the workplace itself and reach deep into the family and the community. Business can play an important leadership role in creating, coordinating, supporting, and sustaining public-private partnerships and cross-sectoral strategies that promote physical activity.

The National Physical Activity Plan strategies for the Business and Industry Sector range from those at the individual level to the organizational level and include partnerships with other sectors. They focus on programs, policies, and practices and support the development of surveillance and evaluation activities to monitor physical activity in U.S. workers.



## **STRATEGIES**

#### **STRATEGY 1**

Businesses should provide employees and their families/dependents opportunities and encouragement to adopt and maintain a physically active lifestyle. (BI-1)

#### **STRATEGY 2**

Businesses should engage in cross-sectoral partnerships to promote physical activity within the workplace, and such efforts should extend to local communities and geographic regions. (BI-2)

#### **STRATEGY 3**

Professional and scientific societies should create and widely communicate/share a concise, powerful, and compelling business case for investment in physical activity promotion. (BI-3)

#### **STRATEGY 4**

Professional and scientific societies should develop and advocate for policies that promote physical activity in workplace settings. (BI-4)

#### STRATEGY 5

Physical activity and public health professionals should support the development and deployment of data collection and benchmarking systems that monitor physical activity in U.S. workers and physical activity promotion efforts in U.S. workplaces. (BI-5)



## STRATEGIES AND TACTICS

#### **STRATEGY 1**

Businesses should provide employees and their families/dependents opportunities and encouragement to adopt and maintain a physically active lifestyle. (BI-1)

### **TACTICS:**

- Adopt policies that support implementation of evidence-based programs and initiatives
  to promote physical activity in the workplace setting (e.g., CDC Healthy Worksite
  Initiative). (BI-1.1)
- Create or enhance access to places for employees to engage in physical activity before, during, and after work hours; combine with informational outreach activities. (BI-1.2)
- Design safe and accessible workplace settings that encourage employees to incorporate physical activity into their daily routines. (BI-1.3)
- Promote physical activity across multiple environments within the workplace setting, including the physical, psychosocial and cultural, and socio-economic environments. (BI-1.4)
- Conduct periodic workplace-based health screenings that measure physical activity and fitness levels of workers. Include measures of fitness components that are relevant to the job types of the workers. (BI-1.5)
  - **Objective 1.1:** By 2025, adopt consensus physical activity, physical fitness, and sedentary behavior assessment standards for physical activity screening within the workplace.<sup>4,5</sup>
- Provide resources necessary to support physical activity behavior adoption and maintenance among employees, including access to relevant expertise, evidence-based behavioral change programs, and well-qualified fitness and behavior change professionals. (BI-6)

## STRATEGY 2

Businesses should engage in cross-sectoral partnerships to promote physical activity within the workplace, and such efforts should extend to local communities and geographic regions. (BI-2)



- Identify promising cross-sectoral partnerships that can promote physical activity within the workplace, community, and throughout society. (BI-2.1)
- Develop a communication strategy to inform relevant constituents about these cross-sectoral partnerships to promote physical activity within the workplace setting. (BI-2.2)
- Explore innovative methods to expand products, marketing, sponsorship, and other efforts to promote physical activity. (BI-2.3)
- Collaborate with partners to develop and implement a plan for evaluating the effectiveness of workplace physical activity programs. (BI-2.4)

Professional and scientific societies should create and widely communicate/share a concise, powerful, and compelling business case for investment in physical activity promotion.<sup>6,7</sup> (BI-3)

### **TACTICS:**

- Ensure the business case addresses the needs of all workplaces (remote and/or in person), especially small and medium size businesses (100 or fewer employees and 101-999 employees, respectively). Ensure that the needs of organized labor, diverse populations, and low-resource populations are addressed. (BI-3.1)
- Develop specific approaches to promoting physical activity and reducing prolonged sitting time that are appropriate for large, medium, and small sized businesses as well as workplaces with large numbers of lower income workers and workers of diverse racial and ethnic backgrounds. (BI-3.2)
- Encourage businesses to invest in physical activity programming by providing them with documented business case language and approaches. (BI-3.3)
- Identify, summarize, and share best practice policies, models, tools, and interventions for physical activity promotion and reduction of prolonged sitting in the workplace. (BI-3.4)

## **STRATEGY 4**

Professional and scientific societies should develop and advocate for policies that promote physical activity in workplace settings.<sup>8</sup> (BI-4)



## **TACTICS:**

- Create a policy resource that highlights applicable policy considerations and provides examples of best practices and resources for promoting physical activity in the workplace. (BI-4.1)
- Recognize and reward organizations that are exemplary examples of innovative and best practices for promoting physical activity in the workplace. (BI-4.2)
- Educate and engage business and industry leaders regarding their role as change agents to promote physically active and healthy lifestyles within the workplace and throughout all levels of society. (BI-4.3)
- Develop and make available a toolkit that provides guidance on the process for policy implementation and enforcement in the workplace setting. (BI-4.4)
- Use legislative, regulatory, and organizational priorities to develop policy agendas that promote employer-sponsored physical activity programs and healthy environments (physical, psychosocial and cultural, socio-economic) while protecting individual employees' and dependents' rights. (BI-4.5)
- Recruit key business and industry leaders to play central roles in influencing their peers and other decision-makers in their communities and at state, national, and global levels. (BI-4.6)
- Advocate for the integration of physical activity promotion in existing leadership development curricula at business schools and continuing education programs for executives throughout the country. (BI-4.7)

## **STRATEGY 5**

Physical activity and public health professionals should support the development and deployment of data collection and benchmarking systems that monitor physical activity in U.S. workers and physical activity promotion efforts in U.S. workplaces. <sup>9</sup> (BI-5)

## **TACTICS:**

• Advocate for the development of data collection and benchmarking systems that include, at a minimum, the measurement of physical activity across types of occupation and industry; worker race and gender; and physical, psychosocial and cultural, and socio-economic environments. (BI-5.1)



- Identify and partner with appropriate agencies on the data collection needs relative to physical activity among the U.S. workforce. (BI-5.2)
- Monitor actions that companies are implementing to promote physical activity and reduce prolonged sitting. (BI-5.3)
- Provide organizational-level data collection, using environmental audits that assess workplace characteristics, physical, psychosocial and cultural, and socioeconomic environments.<sup>10</sup> (BI-5.4)
- Advance physical activity environmental assessment and improvement planning tools for workplaces to help companies build environments that support active, healthy living as a behavior. (BI-5.5)
- Plan and conduct a national longitudinal study of workplace physical activity programming, engagement, and outcomes. (BI-5.6)



# **COMMUNITY RECREATION, FITNESS, AND PARKS**

The Community Recreation, Fitness, and Parks (CRFP) Sector includes a wide range of close-to-home facilities and services available at low or no cost to most Americans. Collectively, this sector manages more than 108,000 outdoor public park and recreation facilities and 65,000 indoor facilities. Facilities and services provided through this sector cover a diverse array of environments, programs, and services provided through non-profit and local government community centers; public parks, trails, nature, and open spaces; and personal trainers and private fitness and health clubs/facilities.

The sector contributes to physical activity across all ages and many populations. Generally, the literature demonstrates a positive relationship between programming, facility condition/ quality, close-to-home access, activity variety, connectivity, and higher levels of physical activity.<sup>2</sup> A 2001 survey found that 30% of U.S. adults engaged in physical activity at a park, 25% on a walking and jogging trail, 25% on a treadmill, and 21% at an indoor gym.<sup>3</sup> Local government park and recreation agencies, national/local non- profit organizations, and commercial entities often partner with the Education Sector to provide greater access to physical activity and fitness for youth. Further, a recent study of the sector found that 7 in 10 American adults used local parks and 3 out 10 participated in community programs in 2015. The most frequent benefits Americans felt the sector provided through programs and parks were exercise/activity and physical fitness.<sup>4</sup>

Despite these encouraging statistics, many Americans remain insufficiently active in their leisure and recreation pursuits. This sector could help all those in the United States to incorporate enjoyable and meaningful leisure-time physical activity into their daily lives through strategies to provide better access to, and education about, available parks and recreations resources. The National Physical Activity Plan has identified five strategies to better leverage the sector's impact on physical activity: 1) improving availability of and access to safe, clean, and affordable community recreation, fitness, and parks facilities, 2) enhancing existing and developing new resources, 3) recruiting and training a diverse cadre of recreation, parks, and fitness leaders, staff, and volunteers, 4) advocating for increased and sustainable funding and resources to support this sector, and 5) improve monitoring and evaluation of participation in community-based physical activity programs.

Sector members and their partners also have numerous opportunities to collaborate with their core partners—organizations within the Education; Transportation, Land Use and Community Design; and Public Health sectors—as well as with other sectors in the National Physical Activity Plan to promote enhanced physical activity through increased use of community recreation, parks, and fitness facilities, programs, and services.



## **STRATEGIES**

#### **STRATEGY 1**

Communities should develop new, and enhance existing, community recreation, fitness, and park programs that provide and promote healthy physical activity opportunities for diverse users across the lifespan. (RFP-1)

#### **STRATEGY 2**

Communities should improve availability of and access to safe, clean, and affordable community recreation, fitness, and park facilities to support physical activity for all residents. (RFP-2)

#### **STRATEGY 3**

Community recreation and park organizations, the fitness industry and private business should recruit, train, and retain a diverse group of leaders, staff, and volunteers to promote, organize, lead, and advocate for initiatives that encourage physical activity in their communities. (RFP-3)

#### **STRATEGY 4**

Community recreation and park organizations, the fitness industry and private business should advocate for increased and sustainable funding and resources to create new, or enhance existing, physical activity facilities and services in areas of high need. (RFP-4)

#### STRATEGY 5

Community recreation and park organizations and the for- and not-for-profit fitness industry should improve monitoring and evaluation of participation in community-based physical activity programs to gauge their effectiveness in promoting increased levels of physical activity for all. (RFP-5)



## STRATEGIES AND TACTICS

### **STRATEGY 1**

Communities should develop new, and enhance existing, community recreation, fitness, and park programs that provide and promote healthy physical activity opportunities for diverse users across the lifespan. (RFP-1)

- Conduct periodic evaluation of existing community physical activity programs to ensure that all community members have the opportunity to engage in evidence-based/informed physical activity promoting programs and develop new programs as gaps in coverage are identified. (RFP-1.1)
- Provide and prioritize evidence-based and evidence-informed physical activity program interventions in the community recreation, fitness, and park contexts that are targeted toward preventing and managing common chronic disease conditions. (RFP-1.2)
  - Objective 1.1: By 2025, community park departments and recreation organizations will identify and implement evidence-based and evidence-informed physical activity programs that reach the awareness of 50% of adults and seniors through public and private sectors.
  - **Objective 1.2:** By 2025, a majority of parks and greenspaces should have at least one free physical activity program per week.
- Work with the public health and medical communities to promote evidence-based or evidence-informed exercise is medicine or park prescription programs, which encourage youth and families to be physically activity indoors and outdoors. (RFP-1.3)
  - **Objective 1.3:** By 2025, community recreation, fitness, and parks organizations will provide practicing primary care providers with information for patients about available community-based physical activity programs and parks with physical activity facilities from the public and/or private sectors.
  - **Objective 1.4:** By 2025, community recreation, fitness, and parks organizations will partner with primary care providers to promote routine physical activity.
- Develop partnerships with school districts and local businesses to offer physical activity programs before and after school/work, with special attention given to diverse and underserved populations. (RFP-1.4)
  - **Objective 1.5:** By 2025, CRFP organizations will partner with school districts and private sector entities to develop shared use programs to make



recreational facilities available to the community outside of school hours and school use.

- **Objective 1.6:** By 2025, partnerships between the CRFP Sector and the Sports and Education Sectors will increase the percentage of youth participating in physical activity out-of-school.
- Objective 1.7: By 2025, partnerships between the CRFP Sector and the Sports and Education Sectors will support adults and seniors engaging in organized sports and other physical activity programs, especially in underserved communities.

#### STRATEGY 2

Communities should improve availability of and access to safe, clean, and affordable community recreation, fitness, and park facilities to support physical activity for all residents. (RFP-2)

- Rehabilitate and upgrade existing public and non-profit community recreation, fitness, and parks facilities to encourage widespread use across the communities they serve, particularly in disadvantaged communities. (RFP-2.1)
  - **Objective 2.1:** By 2025, community park departments and recreation organizations will identify and implement evidence-based and evidence-informed physical activity programs that reach the awareness of 50% of adults and seniors through public and private sectors.
- Design and build new public and non-profit facilities, such as recreation and fitness centers, parks, trails, playgrounds, waterways to expand access to physical activity in communities, especially those with limited recreational opportunities. (RFP-2.2)
  - **Objective 2.2:** By 2025, the percentage of urban residents that have a park or publicly accessible space to be physically active within a  $\frac{1}{2}$  mile radius of their home will increase by 10%.
  - **Objective 2.3:** By 2025, the percentage of residents that have a recreation or fitness facility to be physically active within a  $\frac{1}{2}$  mile radius of their home will increase by 10%.
- Partner with government, community organizations, and businesses to fund and support practices and policies to maintain the infrastructure of community recreation, fitness, and parks facilities and spaces. (RFP-2.3)



- **Objective 2.4:** By 2025, the percentage of communities that have a documented policy or community coalition to maintain or build infrastructure of community recreation, fitness, and parks facilities and spaces will increase by 10%.
- Become engaged in community planning efforts to ensure the presence of sidewalks and other physical connections that allow people to walk to community recreation, fitness, and park facilities. (RFP-2.4)
  - Objective 2.5: By 2025, the percentage of communities that have a documented plan or community coalition to maintain or build pedestrian or active transportation infrastructure will increase by 10%.
- Increase access to existing community facilities and properties, such as schools, hospitals, businesses, and community organizations, through shared use or open use policies and agreements, increased operating hours, and affordable user fees and scholarships. (RFP-2.5)
  - **Objective 2.6:** By 2025, the percentage of communities that have a documented policy or use agreement plan for community facilities and properties will increase by 10%.
- Adopt strategies that improve safety and security of community recreation, fitness, and park facilities (especially in low-resource, geographically isolated and/or high-crime communities), including lighting, design features, and community policing. (RFP-2.6)
  - **Objective 2.7:** By 2025, a majority of recreation, fitness, and parks facilities will be upgraded to modern safety and security standards to increase real and perceived safety.

Community recreation and park organizations, the fitness industry and private business should recruit, train, and retain a diverse group of leaders, staff, and volunteers to promote, organize, lead, and advocate for initiatives that encourage physical activity in their communities. (RFP-3)

- Encourage interdisciplinary curricula in physical activity, fitness, recreation and parks, public health, and urban planning in institutions of higher education to increase physical literacy among future professionals. (RFP-3.1)
  - **Objective 3.1:** By 2025, an inter-organizational, interdisciplinary taskforce will be established to promote physical activity literacy among future professionals.



- **Objective 3.2:** By 2025, community parks departments and recreation organizations will create internships in the public and private sectors of these same organizations to foster service-learning opportunities and establish career connections and opportunities.
- Create evidence-based, evidence-informed, and best practice resources to educate and credential recreation, fitness, and park leaders and staff who deliver physical activity programming in community settings. (RFP-3.2)
- Advocate for strong governor advisory panels on physical activity to ensure development of state-level physical activity policies and partnerships between government, community-based organizations, and the private sector. (RFP-3.3)
  - **Objective 3.3:** By 2025, a majority of states should be in the process of creating an advisory panel with community, recreation, university, fitness and parks professionals and representing diverse populations to ensure development of state-level physical activity policies, partnerships, and programs involving government, university, community-based organizations, and the private sector.

Community recreation and park organizations, the fitness industry and private business should advocate for increased and sustainable funding and resources to create new, or enhance existing, physical activity facilities and services in areas of high need. (RFP-4)

- Develop partnerships to increase and protect dedicated funding for community recreation, fitness, and park facilities and services, especially in areas of high need. (RFP-4.1)
  - **Objective 4.1:** By 2025, community parks departments and recreation organizations will develop and expand partnerships that would enhance funding for facilities and programming.
  - **Objective 4.2:** By 2025, CRFP organizations will protect and further increase national, state, and local partnerships whose charge is to advocate for and protect dedicated funding sources for community recreation, fitness, and park facilities capital improvements and services by 20%.
  - **Objective 4.3:** By 2025, public and private CRFP organizations will work towards increasing capital and operational funding for community recreation, fitness, and park services restoring them to pre-Great Recession levels or greater.



- Identify and pursue creative and alternative sources of funding for community sites and places for physical activity from local business, community foundations, and partnerships. (RFP-4.2)
  - **Objective 4.4:** By 2025, public and private Community Recreation, Fitness and Park organizations will increase the range of community recreation, fitness, and park funding sources derived from local business, foundations, and public-private partnerships.
- Advocate for tax incentives to promote the development and use of community-based facilities and spaces for physical activity programs. (RFP-4.3)
  - **Objective 4.5:** By 2025, the CRFP Sector will partner with the Healthcare, Business and Industry, and Education sectors to develop policies that would provide incentives for individuals to engage in more physical activity.
  - **Objective 4.6:** By 2025, the CRFP Sector will partner with the Healthcare Sector to increase the number of private provider incentives through insurance programs.
- Promote federal and state mechanisms (e.g., grant matching programs, easements) to leverage local dollars and other resources to build capacity for physical activity in communities with low capacity, but high need. (RFP-4.4)
  - **Objective 4.7:** By 2025, state and national organizations will work towards increasing the number of matching federal and state capital funding mechanisms (e.g., grant matching programs, Land & Water Conservation Fund) available to low income, diverse communities by 20%.
- Promote policies and strategies that specifically support funding for community trails, multi-use recreation and fitness facilities, playgrounds, and public access to waterways. (RFP-4.5)
- Advocate for the establishment of Interagency Council on Outdoor Recreation in each state to develop policies and partnerships between federal, state, and local land management agencies and encourage partnerships that promote physical activity. (RFP-4.6)

Community recreation and park organizations and the for- and not-for-profit fitness industry should improve monitoring and evaluation of participation in community-based physical activity programs to gauge their effectiveness in promoting increased levels of physical activity for all. (RFP-5)



## **TACTICS:**

• Measure and evaluate the impact and efficacy of community-wide campaigns, programs, and policies on physical activity levels of diverse segments within local populations. (RFP-5.1)

Objective 5.1: By 2025, a majority of fitness, recreation and parks agency or organizations should biannually assess by age group and gender the number and percentage of community members served by existing programs, including those offered by the private sector. After each assessment, goals and plans should be developed to increase or maintain participation at a level of 50% of the local population. All assessments should be published online.

- Evaluate community recreation, fitness, and park facility/environment construction, redesign, and upgrades in terms of their impact upon public use and physical activity by diverse individuals in those settings. (RFP-5.2)
- Expand efforts to monitor contributions of recreation, fitness, and park facilities and services to physical activity and related health outcomes through existing (e.g., Behavioral Risk Factor Surveillance System) and potentially new surveillance systems at a community level. (RFP-5.3)

Objective 5.2: By 2025, a majority of local departments of recreation and parks will conduct routine surveillance of the use of physical activity facilities using systematic direct observation. These efforts should have a dedicated funding stream in local budgets.

- Examine associations between sector-level capacity measures (e.g., number and type of facilities and services) and physical activity and health outcomes among diverse groups within local populations. (RFP-5.4)
- Evaluate the impact of private businesses of the CRFP sector to better understand the impact of tax incentives/membership subsidies upon physical activity levels as well as the cost-effectiveness/efficiency of these policies. (RFP-5.5)

**Objective 5.3:** By 2025, community parks and recreation organizations will partner with federal, state and local governments should sponsor research that rigorously evaluates promising physical activity promotion programs, dedicating 5% percent of all research dollars towards physical activity research, commensurate with the importance of physical activity to health.



# **EDUCATION**

School is a central focus of daily life for most children, adolescents, and young adults in the United States. Approximately 12 million individuals are enrolled in early childhood (preschool) programs, 50 million in K-12 programs, and 20 million in post-secondary institutions. Because they directly affect approximately 25% of the U.S. population, education settings can play a huge role in public health initiatives related to physical activity. School-based personnel, such as teachers, administrators, and other staff, as well as education decision makers and policy makers can significantly affect the development of and quantity and quality of physical education and physical activity programs. Working together they can assure schools provide all the essential components of comprehensive and high-quality programs.<sup>1</sup>

Numerous reports and recommendations from professional and scientific organizations identify the important influence that education settings can have on public health. They also describe the goals and procedures for developing, implementing, and evaluating programs intended to help students adopt and maintain physically active lifestyles. Some important initiatives and resources for those in education settings desiring to enhance physical education and physical activity experiences include:

- Comprehensive School Physical Activity Programs (CSPAP)<sup>2</sup>
- Educating the Study Body: Taking Physical Activity and Physical Education to School<sup>3</sup>
- Physical Activity Guidelines for Americans 2<sup>nd</sup> Edition<sup>4</sup>

The Education Sector of the National Physical Activity Plan developed strategies aimed at:
1) adopting strong policies (e.g., those that include oversight, reporting requirements on policy adherence) that support implementation of the CSPAP model, 2) providing high-quality, standards-based physical education programs, 3) encouraging afterschool, holiday, and vacation programs for children and youths to adopt strong policies and practices that ensure participants are physically active, 4) adopting physical activity standards for childcare and early childhood education programs, 5) promoting opportunities and effective incentives programs for college and university students and university faculty/staff members to adopt and maintain physically active lifestyles, 6) providing pre-service professional training and in-service continuous professional development programs, and 7) developing and advocating for strong policies that promote physical activity EQUITABLY among all students.

Successful implementation of the strategies in the Education Sector has the potential to support high-quality program delivery from early childhood through post-secondary



education. Their adoption has potential for a broad, lifelong impact, not only for students, but also for teachers, administrators, policymakers, health professionals, and parents who serve and care for them.

Central to the successful implementation of any effective physical activity programming in educational settings, the US National Physical Activity Plan (NPAP) is committed to providing inclusionary educational experiences and programming for **ALL** students. The United Nations Educational, Scientific and Cultural Organization<sup>11</sup> defines *inclusion* as a "process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education." Accordingly, the NPAP recognizes and values student diversity that encompasses a broad range of human representations, attributes, dimensions, and characteristics such as, but not limited to, culture, ethnicity, race, socioeconomic status, geographic origin, religion, language, sex, gender and sexual identity, accessibility, and cognitive and physical abilities. Equity, diversity, and inclusion (EDI) are essential to facilitating an inclusionary and equitable culture that serves as the foundation of instructional excellence and the educational environment.

#### **CRITICAL NOTE:**

Objectives are provided for all strategies and their associated tactics below. The structure of these objectives varies in specificity depending on the availability of national surveillance systems and assessment tools for the specific constructs. For several of the objectives listed there currently is no national surveillance system available. Because of that, no improvement targets are included. Such objectives are followed by an asterisk (\*) and, while they are currently aspirational, coordinated efforts are needed to establish these baselines with uncompromised rigor.

To allow for long-term tracking of all objectives in the NPAP, a high-quality surveillance infrastructure must be developed and supported by continuous and stable funding. Without such an infrastructure, it will be challenging for the Physical Activity Alliance (PAA) to accomplish its important mission and goals. In the future, when surveillance data become available for a given objective, that objective will be updated to reflect the baseline and specific improvement targets.



## **STRATEGIES**

#### **STRATEGY 1**

States and school districts should adopt strong policies that support the implementation of the Comprehensive School Physical Activity Program model. (ED-1)

#### STRATEGY 2

Schools should provide high-quality physical education programs. (ED-2)

#### **STRATEGY 3**

Providers of afterschool, holiday, and vacation programs for children and youths should adopt policies and practices that ensure participants are appropriately physically active throughout the program. (ED-3)

#### STRATEGY 4

States should adopt evidence-based standards for childcare and early childhood education programs to ensure children aged zero to five years are appropriately physically active throughout their time in such programs. (ED-4)

#### STRATEGY 5

Colleges and universities should provide students and employees with opportunities and incentives to adopt and maintain physically active lifestyles. (ED-5)

#### STRATEGY 6

Educational institutions should provide pre-service professional training and in-service continuous professional development programs that prepare educators to deliver effective physical education and activity programs for students of all types. (ED-6)

#### STRATEGY 7

Professional and scientific organizations should develop and advocate for strong policies that promote physical activity among all students. (ED-7)



## STRATEGIES AND TACTICS

#### **STRATEGY 1**

States and school districts should adopt policies that promote the implementation of the Comprehensive School Physical Activity Program model. (ED-1)

- Support schools in adopting and implementing the Comprehensive School Physical Activity Program model. (ED-1.1)
  - **Objective 1.1**: By 2025, the percentage of states that have policies supporting the implementation of CSPAP will increase by 5%.
  - Objective 1.2: By 2025, the percentage of school districts in each state that implements at least two CSPAP components in addition to physical education programming in their local wellness policy will increase.\*
  - **Objective 1.3**: By 2025 the percentage of schools using the School Health Index, or other school-based assessment tool, to assess the school's policies, activities, and programs on physical activity will increase by 50%.
  - **Objective 1.4**: By 2025, at least 50% of secondary schools in each state will have a written plan for implementing a Comprehensive School Physical Activity Program.
- Provide professional development on the Comprehensive School Physical Activity Program model at the state, district, and school levels. (ED-1.2)
  - **Objective 1.5**: By 2025, 25% of states will establish a training cadre that supports the implementation of CSPAP. This cadre is tasked with providing inservice training to school districts to support the implementation of CSPAPs.\*
  - **Objective 1.6**: By 2025, 80% of school districts will provide relevant professional development related to components and processes of implementing a CSPAP.\*
  - Objective 1.7: By 2025, all secondary schools in each state will have one or more physical education teachers or specialists with professional development in physical education.\*
- Disseminate best practices that exemplify effective adoption of the Comprehensive School Physical Activity model. (ED-1.3)



- **Objective 1.8:** By 2025, 75% of secondary school students participate in at least 60 minutes of physical activity on at least 1 day of the week (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time.
- <u>**Objective 1.9:**</u> By 2025 State Health and Physical Education Associations will have the web-based ability to disseminate exemplary CSPAP practices.\*
- Objective 1.10: By 2025, professional organizations in the education sector will create an online template for CSPAP success stories that schools can complete and submit.\*
- Support adoption of school design strategies to support active transport to and from school campus, and increased student physical activity throughout the school day, beyond participation in physical education. (ED-1.4)
  - **Objective 1.11:** By 2025, 60% of school districts will provide supports for active transportation to and from schools (i.e., walk and or bike to school programs).\*
  - **Objective 1.12:** By 2025, the number of states with laws that require at least 20 minutes of daily recess will increase by 50%.
  - Objective 1.13: By 2025, 45% of schools in each state will have students participating in physical activity breaks in classrooms or outdoors during the school day.\*
  - **Objective 1.14:** By 2025, 40% of secondary schools in each state will provide opportunities for students to participate in recreational physical activity before the school day through organized activities and/or access to facilities and equipment.\*
  - **Objective 1.15:** By 2025, 70% of secondary schools in each state will offer intramural sports programs or physical activity clubs.
  - <u>Objective 1.16:</u> By 2025, 90% of secondary schools in each state will offer interscholastic sports while maintaining compliance with Title IX stipulations.
  - **Objective 1.17:** By 2025, the percentage of schools providing school staff with professional development on providing physical activity programming beyond physical education that are safe, developmentally and culturally appropriate, and inclusive for all students will increase by 5%.



- Encourage schools to adopt reciprocal shared use agreements that enhance student access to school and community-based physical activity facilities. (ED-1.5)
  - **Objective 1.18:** By 2025, the percentage of state laws that require schools to allow communities or organizations access to schools' recreational facilities outside of school hours will increase by 5%.

Schools shall provide high-quality physical education programs. (ED-2)

- Assure that schools comply with the 'Every Student Success Act' (ESSA) which requires physical education to be delivered as part of a "well-rounded" education. (ED-2.1)
  - Objective 2.1: By 2025, the percentage of schools requiring that a physical education course be taught to all students in each grade level will increase.\*
- Provide daily physical education for students in grades K-12, with instructional periods totaling at least 150 minutes per week in elementary schools and 225 minutes per week in middle and high schools. (ED-2.2)
  - **Objective 2.2:** By 2025, increase the percentage of schools requiring (or students taking) physical education for at least 150 minutes/week in elementary and 225 minutes/week in middle and high school in specific grade levels.\*
  - **Objective 2.3:** By 2025, increase the percentage of states with laws requiring 150 minutes/week of physical education in elementary and 225 minutes/week of physical education in middle and high school in each grade level.
  - **Objective 2.4:** By 2025, the percentage of school districts requiring 150 minutes/week in elementary and 225 minutes/week of physical education in middle and high school in each grade level will increase.\*
- Ensure that ALL students are engaged in moderate-to-vigorous intensity physical activity for at least 50% of physical education class time. (ED-2.3)
  - **Objective 2.5:** By 2025, the percentage of states with laws that require at least 50% of physical education class time that students are engaged in moderate to vigorous physical activity will increase by 5%.
  - Objective 2.6 By 2025, the percentage of schools having teachers that allocate at least 50% of physical education class time for students to be physically active will increase.\*



- Provide students with opportunities to engage in the types of physical activity recommended in the Physical Activity Guidelines for Americans 2<sup>nd</sup> Edition. (ED-2.4)
  - **Objective 2.7**: By 2025, 75% of schools will have sufficient type and amount of equipment available that is dedicated to providing a minimum of 10 different types of recreational physical activity choices beyond the delivery of physical education.\*
- Ensure that physical education class sizes and teacher/student ratios are comparable to those for other subject areas. (ED-2.5)
  - **Objective 2.8:** By 2025, increase the percentage of schools having a maximum student-to-teacher ratio allowed for physical education, comparable to other subject areas, will increase.\*
- Adopt district level policies that preclude the withholding of physical activity or using it as punishment. (ED-2.6)
  - **Objective 2.9:** By 2025, the percentage of states that have state laws prohibiting the use of physical activity as punishment for inappropriate behavior (e.g., laps or push-ups), will increase.\*
  - **Objective 2.10:** By 2025, the percentage of schools prohibiting staff from withholding physical education and other activity programs to punish students for inappropriate behavior will increase.\*
- Eliminate waivers and substitutions for physical education. (ED-2.7)
  - **Objective 2.11:** By 2025, the percentage of states with laws prohibiting the use of program substitutions or waivers (e.g., JROTC, marching band, athletics) for satisfying physical education requirements will increase to 50%.
  - **Objective 2.12:** By 2025, the percentage of schools prohibiting exemptions or waivers from physical education requirements for one grading period or longer will increase by at least 5%.
- Adopt physical education curricula for grades K-12 that specify grade level student outcomes that meet national and/or state standards. (ED-2.8)
  - **Objective 2.13:** By 2025, the percentage of states with laws that meet national, state, or related physical education standards will increase by at least 5%.
  - **Objective 2.14:** By 2025, all states will adopt policies requiring a school to complete a physical education program evaluation.\*
- Employ instructional practices that are consistent with the school's and or district's physical education curriculum. (ED-2.9)



- **Objective 2.15:** By 2025, the percentage of schools providing those who teach physical education or physical education teachers with goals, objectives, and expected outcomes for physical education; a chart describing the annual scope and sequence for physical education instruction; and a written physical education-specific yearly block plan based on a set curriculum, will increase by at least 5%.
- Employ student assessment procedures that are consistent with national and/or state standards. (ED-2.10)
  - **Objective 2.16:** By 2025, the percentage of schools providing physical education teachers with subject-specific professional development training and plans on how to assess student performance in physical education will increase by 5%.\*
  - **Objective 2.17:** By 2025, the percent of schools providing physical education teachers with resources for validated fitness testing (i.e., FitnessGram, or other validated fitness assessment tools) will increase by 5%. \*
- Implement adaptations to ensure students with disabilities are provided with quality physical education. (ED-2.11)
  - **Objective 2.18:** By 2025, the percentage of states with laws that require adapted physical education and provide funding for and offering subject- specific professional development to those teaching physical education to students with short- or long-term physical, medical, visual, hearing impaired, or cognitive disabilities will increase by 5%.\*
  - **Objective 2.19**: By 2025, the percentage of states with laws that require adapted physical education be made available to every child who needs it, without providing a benchmark for qualification will increase by 5%.

Providers of afterschool, holiday, out-of-school time, and vacation programs for children and youths should adopt policies and practices ensuring that participants are appropriately physically active. (ED-3).

- Adopt standards ensuring that children and youths in afterschool, holiday, out-of-school time, and vacation programs engage in physical activity for 60 minutes per full-day or 30 minutes per half-day participation. (ED-3.1)
  - Objective 3.1: By 2025, national afterschool organizations will partner with physical activity coalitions to develop and implement out-of-school



program standards to ensure children and youths engaged in afterschool, holiday, out-of-school time, and vacation programs participate in at least 60 minutes of health-enhancing physical activity during full day programs and at least 30 minutes of physical activity during half day programs.

- Ensure that students attending afterschool, holiday, out-of-school time, and vacation programs engage in the types of physical activity recommended in the most recent Physical Activity Guidelines for Americans. (ED-3.2)
  - **Objective 3.2:** By 2025, the percentage of out-of-school programs implementing developmentally appropriate physical activities as recommended in the Physical Activity Guidelines for Americans 2<sup>nd</sup> edition will increase by at least 5%.\*
- Require that physical activities children and youths (including activities for those with disabilities) be supervised by adults trained in physical activity programming and promotion. (ED-3.3)
  - **Objective 3.3:** By 2025, all adults supervising children and youths physical activity programs will have special education/training/certification in ageappropriate physical activity programming and promotion.
- Adopt standards requiring that afterschool, holiday, out-of-school time, and vacation physical activity programs provide and maintain facilities and equipment be safe and, developmentally- and age-appropriate. (ED-3.4)
  - **Objective 3.4:** By 2025, national afterschool organizations will partner with physical activity coalitions to develop and adopt standards requiring out-of-school programs to utilize safe, age-appropriate equipment, and to maintain facilities that ensure a safe play/learning environment.
- Ensure that afterschool, holiday, out-of-school time, and vacation physical activity programs are free of screen time (TV, video, video games, computers) except for educational purposes. (ED-3.5)
  - <u>Objective 3.5</u>: By 2025, national after-school organizations will partner with physical activity coalitions to develop standards that limit out-of-school screen time to no more than one hour per day for full day programs and for educational purposes only.
- Implement adaptations to ensure that students with disabilities are provided with equitable developmentally appropriate physical activity opportunities during afterschool, holiday, and vacation programs. (ED-3.6)
  - **Objective 3.6:** By 2025, national after-school organizations will partner with physical activity coalitions to develop standards that ensure that children with disabilities are provided with developmentally appropriate physical activities during out-of-school programming.



States should adopt standards for childcare and early childhood education programs to ensure children aged zero to five years are appropriately physically active. (ED-4)

- Encourage early childhood education programs to adopt standards that ensure young children are appropriately physically active when in early care and education settings that afford at least 60 minutes of health-enhancing physical activity in full-day programs and at least 30 minutes in half-day programs. (ED-4.1)
  - Objective 4.1: By 2025, national childcare organizations and physical activity coalitions will convene a national panel of experts and state/national agencies to develop model physical activity quality standards for early care and education settings.
  - Objective 4.2: By 2025, national childcare organizations and physical activity coalitions will work with national/state/local agencies to develop and disseminate childcare standards for physical activity experiences in all Head Start, centers, school-based programs, group/family homes, and Pre-K and Kindergarten classes/programs.
  - **Objective 4.3**: By 2025, at least half of US states (25) will identify explicit standards for the amount of time per day for physical activity that children should receive while in early care and education programs.
- Provide professional development at the state, district/organization, and center/school levels to ensure effective implementation and assessment of physical activity standards specific to early childhood education. (ED-4.4)
  - **Objective 4.4**: By 2025, all states will provide annual access to at least one professional development opportunity (e.g., face-to-face, on-line training) to guide and educate early care and education providers (both centers and home) on strategies how to support children's physical activity in early care and education programs.
  - Objective 4.5: By 2025, all states will create a directory of, and provide continuous professional development opportunities (e.g., face-to-face, on-line training) be available to staff in childcare and early childhood education programs in both centers and homes.
  - **Objective 4.6**: By 2025, all states will create the infrastructure to train owners, directors, or other administrative personnel in childcare and early education programs to enable them to develop and assess appropriate organizational policies and, practices targeting daily physical activity.



- Objective 4.7: By 2025, at least 25% of states will integrate content for the promotion of physical activity in early care and education programs into the training of early education specialists at community college and university levels.\*
- Compile and disseminate best practices that exemplify the effective implementation of physical activity standards in early care and education programs. (ED-4.8)
  - **Objective 4.8:** By 2025, all states will provide documents illustrating examples of comprehensive, evidence-based practices associated with creating high quality environments (policies, practices, and built environments) that support physical activity at early childcare and education programs.
- Develop outdoor education models that integrate physical activity, natural settings, and learning in early care and education programs. (ED-4.9)
  - **Objective 4.9:** By 2025, at least 50% of US states will include explicit standards requiring children to have daily outdoor time during early care and education programs (centers and homes), weather permitting).\*
  - **Objective 4.10:** By 2025, national childcare organizations will partner with physical activity coalitions and experts in the Community Recreation, Fitness and Parks sectors to identify a set of evidence-based design principles for creating age- and developmentally appropriate outdoor learning environments for centers and homes that support active and educational play.

Colleges and universities should provide students and employees with opportunities and long-term incentive programs aimed at adopting and maintaining physically active lifestyles. (ED-5)

- Provide physical activity opportunities through credit-bearing courses that contribute to minimum credit requirement for graduation for undergraduate students. (ED-5.1)
   Objective 5.1: By 2025, 75% of community and four-year colleges and universities will offer credit-bearing physical activity-based courses that are available to all enrolled students.\*
- Offer a broad spectrum of health-enhancing physical activity courses and programming that are available on both academic credit and non-credit bases. (ED-5.2)



- Objective 5.2: By 2025, all colleges and universities will make a broad variety of inclass and online physical activity opportunities on both a credit and noncredit basis to all students.
- Establish and maintain campus recreational resources, including dedicated physical activity facilities and programs that provide access and promote physical activity for all students and employees. (ED-5.3)
  - **Objective 5.3:** By 2025, all colleges and universities will have campus recreation centers, virtual activity centers, and/or programs that offer no- or limited cost physical activity opportunities for all students and employees.
- Include a focus on enhancing student and employee physical activity in campus long-term strategic plans. (ED-5.4)
  - **Objective 5.4:** By 2025, campus recreation or sports organizations (e.g., NIRSA) will provide administrators at colleges and universities with materials documenting the benefits of physical activity and how it should be integrated into long-term campus strategic plans.
- Design walkable campuses that promote safe and accessible active transportation options for students, employees, and visitors. (ED-5.5)
  - **Objective 5.5:** By 2025, all colleges and universities will implement plans for enhancing active transportation (e.g., walking and/or bicycling) on campus and in the local community.
- Coordinate with human resources officers in managing and incentivizing physical activity programs for ALL employees. (ED-5.6)
  - **Objective 5.6:** By 2025, 60% of campus recreation or sports organizations will provide human resource officers with materials that can be used for developing programs at colleges and universities that incentivize physical activity.\*

Four-year colleges and universities should provide pre-service professional training through adapted/physical education teacher education (A/PETE) programs, as well as inservice professional development programs for motor development, motor skills, and fitness that prepare educators to deliver effective physical activity programs for diverse students in a variety of settings (e.g., schools, sports programs, community recreation programs). (ED-6)



- Support A/PETE programs at colleges and universities to ensure the supply for certified adapted physical education teachers in K-12 schools meets the demand.
  - **Objective 6.1:** By 2025, establish/maintain Adapted/Physical Education Teacher Education (A/PETE) programs for delivering professional training for certified school adapted physical educators. (ED-6.1)
  - Objective 6.2: By 2025, increase the number of certified/licensed physical education teachers who graduate from state or nationally accredited Adapted/Physical Education Teacher Education (A/PETE) programs. (ED-6.2)
- Prepare physical education teachers to assume a campus-level leadership in promoting physical activity, including being able to coordinate programs that are consistent with the Comprehensive School Physical Activity Program model. (ED-6.3)
  - **Objective 6.3:** By 2025, to be accredited, all college and university teacher certification programs in physical education will include coursework addressing the Comprehensive School Physical Activity Program model and provide knowledge and experiences that develop competencies to be a school physical activity leader and advocate.
- Include a focus on population-based promotion of physical activity in educational programs for a broad range of physical activity professionals. (ED-6.4)
  - **Objective 6.4:** By 2025, to be accredited, 60% of college and university teacher certification programs will include at least one course for elementary classroom teachers that emphasizes the promotion and delivery of physical education and/or health-promoting physical activity beyond physical education classes.\*
  - **Objective 6.5**: By 2025, 100% of college and university teacher education programs will include at least one course that includes a focus on population-based promotion of physical activity.\*
- Prepare professionals who will deliver equitable and inclusive physical activity programs across settings for students of all ages that provide significant and equitable doses of moderate-to-vigorous physical activity, that promote the adoption and maintenance of a physically active lifestyle. (ED-6.)
  - Objective 6.6: By 2025, individuals seeking physical education teacher certification will demonstrate the effective use of physical activity tracking tools aimed at keeping all students engaged in moderate to vigorous physical activity for the majority of a class or activity period.
- Prepare educators and other physical activity professionals who will serve as sport coaches and/or recreation leaders in school- and community-based programs to deliver



programs that provide children and youths with safe, enjoyable, health-promoting sport and recreational experiences. (ED-6.7)

- **Objective 6.7**: By 2025, colleges and universities, specifically those offering a teacher certification program in physical education, will provide at least one course on safe and effective physical activity/sport coaching.
- **Objective 6.8**: By 2025, colleges and universities offering education leadership certification programs will include coursework that targets the promotion of physical activity for children and youths.

### STRATEGY 7

**Professional and scientific organizations** shall develop and advocate for strong policies that promote physical activity among ALL students, faculty, and staff. (ED-7)

- Advocate for the enactment of federal and state policies that establish physical education as a component of a "well-rounded education". (ED-7.1)
  - **Objective 7.1:** By 2025, a professional educational organization will create evidence-based "fast facts" documents for use by physical educational professionals and the public in grass roots advocacy efforts to establish physical education as a component of a well-rounded education.
    - **Action Step**: A professional educational organization will conduct a review of the literature and/or meta-analysis regarding the impact of physical education and physical activity on various areas including physical fitness, fine- and gross motor, social, cognitive, emotional skills.
    - **Action Step**: Through literature or analysis, a professional organization in the education sector will assess how PE/PA contributes to and does not impede academic performance (e.g., test scores).
- In each state, establish a process for holding school districts accountable for delivering physical education programs that comply with meeting state content standards. (ED-7.2)
  - **Objective 7.2**: By 2025, 35% of states will specify the following criteria for statewide physical education policies.
    - Establish district-level standards for the weekly minutes dedicated to physical education (≥150 for elementary; ≥225 for MS/HS) and the proportion of class time students spend in moderate-to-vigorous physical activity (at least 50%).



- Establish district-level evidence showing that 90% of all students demonstrate mature levels of performance in at least X fundamental motor skills (e.g., kicking, striking, throwing, catching) by the end of 3rd grade.
- Objective 7.3: By 2025, states will establish a committee of certified physical education teachers to serve as a resource for state policy administrators to provide guidance regarding a balanced and sequenced curriculum, appropriate physical education activities, and their corresponding levels of intensity.
- **Objective 7.4:** By 2025, state education agencies will complete a review of existing policies and make recommendations for those school districts not in compliance.
- Encourage policy makers to establish state-level policies requiring elementary schools to provide daily recess, beyond lunch recess, and physical education to all students. (ED-7.5)
  - **Objective 7.5:** By 2025, professional educational organizations will create evidence-based "fast facts" documents for the public to use in supporting grass roots advocacy efforts to encourage policy makers to establish policies requiring elementary schools to provide all students daily recess, beyond the lunch period, and physical education.
    - **Action Step**: A professional educational organization will create a review of the literature and/or meta-analysis regarding the benefits of recess for both developmental and behavioral purposes. They will use the result to establish recess and physical education as two distinct aspects for physical activity opportunities. Use data to inform district-level administrators.
- Support adoption of strong policies requiring students at all levels be provided multiple physical activity classroom breaks during every school day. (ED-7.4)
  - **Objective 7.6:** By 2025, the proportion of school districts that require classroom physical activity breaks each school day will increase to at least 35%; and those that recommend physical activity breaks will increase to 65%.\*
    - **Action Step**: Professional educational organizations will partner with national physical activity coalitions to conduct a review of literature regarding the academic and behavioral benefits of classroom physical activity breaks.
    - **Action Step**: Professional educational organizations will partner with national physical activity coalitions to create a resource bank of activities that are made freely available.
    - **Action Step**: Professional educational organizations will partner with national physical activity coalitions to conduct a series of workshops for



continuing education credits wherein teachers can learn through examples the benefits of physical activity throughout the day (train the trainer model).

- Educate school and district administrators and other key stakeholders (e.g., state legislators) about the beneficial effects of physical activity on learning and lifelong health. (ED-7.8)
  - **Objective 7.7**: By 2025, a national physical activity coalition will disseminate existing neuroscience evidence about the cognitive and mental health benefits of physical activity to 75% of key educational stakeholders.\*
  - **Objective 7.8**: By 2025, a national physical activity coalition will disseminate evidence-based materials that identify the relationship between physical activity and academic performance to school administrators, teachers, childcare providers, and parents outlining the relationship between physical activity and academic performance.



# **FAITH-BASED SETTINGS**

The Faith-Based Settings Sector includes diverse religious organizations, and can include religious congregations or houses of worship, organized religious denominations, faith-based social service agencies, and faith-based charities. The National Physical Activity Plan Faith-Based Settings Sector focuses primarily on religious congregations and organized religious denominations. However, it is recognized that faith-based organizations come in all sizes, from those that are very small to those that are very large. In most communities there are faith-based organizations that are serving people in some capacity. The Faith-Based Settings Sector is designed to include diverse religious organizations including religious congregations, organized religious denominations, faith-based social service agencies, and faith-based charities.

This sector plays a large role in the lives of those living in the United States, for a large proportion of Americans report a religious affiliation (76.5%), with 70.6% affiliating with a Christian tradition.¹ Relative to the general population, religious affiliation is higher in older generations, among non-Hispanic Blacks, and in the South.¹ The Harford Institute for Religion Research estimates that the United States has roughly 350,000 religious congregations.²

Although the primary mission of religious congregations is the spiritual growth and wellbeing of its members, most faith-based organizations promote community service, outreach, and volunteerism. This inclusive mission, combined with broad reach across diverse communities, makes religious congregations well-positioned to play an important role in public health practice.<sup>3,4</sup> Yet, churches are often overlooked as settings for public health disease prevention and health promotion programs.<sup>3</sup> Like worksites and schools, faith-based organizations have unique social systems, environments, and physical structures (e.g., fellowship halls), communication channels, policies and practices, and often, health-related goals and supports (i.e., health ministries), which make them particularly conducive to promoting physical activity.

Faith-based health promotion programs have generally yielded positive changes in health behaviors.<sup>5-7</sup> A 2012 review of faith-based physical activity interventions found significant increases in physical activity in 16 of the 27 papers reviewed.<sup>8</sup> However, many of the interventions reviewed were small short-term, pilot studies not guided by theoretical frameworks.<sup>8</sup> In addition, the majority of interventions focused on individual behaviors rather than the church environment, systems, and policies, thereby limiting program reach and sustainability.

The Faith-Based Settings Sector of the National Physical Activity Plan developed strategies and tactics aimed at: 1) including physical activity promotion in health ministries, 2) encouraging faith-based organizations to partner with organizations from other sectors to



promote physical activity, 3) institutionalizing physical activity programs for employees in large faith-based organizations, 4) identifying or developing marketing materials about physical activity tailored for faith community leaders, 5) encouraging physical activity and public health organizations to partner with faith-based organizations to develop and deliver accessible and tailored physical activity programs for diverse groups, and 6) creating and maintaining an electronic resource of evidence-based programs and best practices for promoting physical activity in faith-based settings.

Implementation of this sector's strategies and tactics has the potential to greatly broaden the reach and impact of physical activity promotion by empowering faith-based organizations to deliver effective physical activity programs to their employees and constituents. Partnerships with organizations in other sectors will help ensure that faith-based organizations are using tailored materials and following best practices to promote physical activity within their sector.



# **STRATEGIES**

#### **STRATEGY 1**

Faith-based organizations should identify effective applications of their health ministries to promote physical activity. (FB-1)

#### **STRATEGY 2**

Faith-based organizations should establish partnerships with organizations from other sectors to promote physical activity in a manner that is consistent with their values, beliefs, and practices. (FB-2)

#### **STRATEGY 3**

Large faith-based organizations should institutionalize physical activity promotion programs for their employees. (FB-3)

### **STRATEGY 4**

Large faith-based organizations should identify or develop marketing materials tailored for faith community leaders to enhance their perceptions of the value of physical activity. (FB-4)

#### **STRATEGY 5**

Physical activity and public health organizations should create and maintain an electronic resource for faith-based organizations to access evidence-based programs and best practices for promoting physical activity in faith-based settings. (FB-5)



# STRATEGIES AND TACTICS

#### **STRATEGY 1**

Faith-based organizations should identify effective applications of their health ministries to promote physical activity. (FB-1)

- Identify published and other literature regarding the structure and utility of health ministries. (FB-1.1)
  - **Objective 1.1:** By 2025, the National Physical Activity Plan Alliance will conduct a review to identify those within faith-based organizations (e.g., parish nurses, lay helpers) who are leading successful health ministries.
- Identify the individuals and groups who will lead implementation of physical activity promotion strategies in faith-based settings. (FB-1.2)
  - **Objective 1.2:** By 2025, an academic group, in collaboration with faith-based leaders, will conduct a review of literature regarding the structure and utility of health ministries to establish guidelines for successful health ministries.
  - **Objective 1.3:** By 2025, identify a coalition of researchers, practitioners, and representatives of faith-based organizations to establish a clearinghouse where information can be shared.
- Establish, if necessary, health ministries that are consistent with the faith community's religious beliefs to promote physical activity among the faith community. (FB-1.3)
- Create an environment supportive of physical activity by delivering evidence-based physical activity messaging and programs that are consistent with the faith community's religious beliefs. (FB-1.4)
- Develop in-person, online, and other training programs to support the health ministries of diverse faith-based organizations that seek to create programs to promote physical activity. (FB-1.5)
  - **Objective 1.4:** By 2025, include training programs to address the creation and implementation of health ministries in the clearinghouse.



Faith-based organizations should establish partnerships with organizations from other sectors to promote physical activity in a manner that is consistent with their values, beliefs, and practices. (FB-2)

- Support existing and seed new ministries and meeting groups in faith-based organizations, such as youth, women's, and men's groups, who seek to promote and incorporate physical activity. (FB-2.1)
  - Objective 2.1: By 2025, the Physical Activity Alliance will identify best practices for promoting physical activity in faith-based organizations and disseminate these best practices through various channels (e.g., clearinghouse, website, bulletin); as possible, identify population-specific programs relevant for people of all ages.
- Partner with other sectors (e.g., business; community recreation, fitness and parks; public health; education) locally for funding, specialized assistance, and expertise to implement evidence-based/informed physical activity and other health programs. (FB-2.2)
  - <u>Objective 2.2:</u> By 2025, the Physical Activity Alliance will develop a list of potential partners that could provide funding, specialized assistance, and expertise to implement physical activity programs.
  - Objective 2.3: By 2025, the Physical Activity Alliance will develop sample materials that can be used as templates for building collaborative relationships, requesting funding, requesting specialized assistance, and seeking expertise.
- Partner with higher education particularly private religious institutions and researchers and academics interested in promoting physical activity with faith-based organizations – to develop and implement inclusive physical activity programs and to provide specialized assistance and expertise when requested. (FB-2.3)
  - Objective 2.4: By 2025, a coalition of researchers, educators and faith-based organization leaders will develop content that could be incorporated into relevant higher education courses to educate students on physical activity promotion within faith-based organizations.
- Partner with local healthcare delivery systems (particularly those with a religious affiliation), public health agencies, and faith-based organizations to develop and implement inclusive physical activity programs and to provide specialized assistance and expertise when requested. (FB-2.4)



- Objective 2.5: By 2025, the Physical Activity Alliance will develop/identify a list of types of suggested potential local healthcare and public health partners who could provide relevant expertise and specialized assistance for promoting physical activity in faith-based organizations.
- Objective 2.6: By 2025, the Physical Activity Alliance will develop sample materials (e.g., case studies, vignettes) for partnerships that faith-based organizations could use to build collaborative relationships and request specialized assistance and expertise from local healthcare delivery systems and public health agencies.
- Support the promotion of reimbursable faith-based physical activity programs as a provider of community-based or culturally tailored health promotion (FB-2.5)
  - **Objective 2.7:** By 2025, identify health promotion programs that include the promotion of physical activity that are reimbursable and identify supplier eligibility and enrollment criteria.
  - **Objective 2.8:** By 2025, develop a training plan to assist faith-based organizations with becoming eligible program providers.

Large faith-based organizations should institutionalize physical activity promotion programs for their employees. (FB-3)

- Support the promotion of physical activity programs within faith-based organizations and wellness among employees, volunteers, and lay-leaders. (FB-3.1)
  - **Objective 3.1:** By 2025, the National Physical Activity Plan Alliance will identify best practices for faith-based organizations to promote physical activity among employees, volunteers, and lay leaders.
- Communicate with faith leaders regarding the importance of inclusive physical activity promotion as a component of wellness programs for employees, volunteers, and lay leaders, sensitive to gender, culture, ability level, age, fitness level, etc. (FB-3.2)
  - Objective 3.2: By 2025, disseminate best practices for faith-based organizations to promote physical activity among employees, volunteers, and lay-leaders through the clearinghouse.
- Support training programs that train faith-based leaders who will be prepared to see the value of and advocate for physical activity planning in their faith-based organizations. (FB-3.3)



- Objective 3.3: By 2025, identify collaborations with the Education sector to support the inclusion of physical activity in faith-based organizations and places where faith leaders are trained.
- Provide seed grants for faith-based organizations to design and implement physical activity and other health promotion initiatives. (FB-3.4)

Large faith-based organizations should identify or develop marketing materials tailored for faith community leaders to enhance their perceptions of the value of physical activity. (FB-4)

- Identify existing messages and materials that effectively address the beneficial effects of physical activity programs on faith-based organizations' members' health and spirituality. (FB-4.1)
  - Objective 4.1: By 2025, the Physical Activity Alliance will compile a list of existing resources that outline the benefits of including physical activity programming for faith-based organizations and disseminate these resources.
- Support the development of messages from all religions and denominations that demonstrate how scripture and religious law can support and encourage engagement in physical activity and other positive health behaviors in a modern world. (FB-4.2)
  - <u>Objective 4.2:</u> By 2025, the Physical Activity Alliance will develop resources that identify relevant scriptures/religious references and list existing tools that include these elements, and disseminate these resources.
- Encourage all faith leaders and leadership, to communicate age-appropriate physical activity and other health messages using religious beliefs or scripture unique to their specific faith doctrine. (FB-4.3)
  - Objective 4.3: By 2025, an academic group, in collaboration with faith-based leaders, will develop a resource that will provide information on best practices on the incorporation of religious beliefs/scripture into physical activity and health communications, and disseminate this resource to faith-based leaders and institutions that train them.
- Develop programs that incorporate physical activity into faith-based organization education, worship, and social activities. (FB-4.4)



- Support individual faith-based organizations by identifying appropriate marketing strategies/tools to help communicate about physical activity and other health programs. (FB-4.5)
  - Objective 4.4: By 2025, the Physical Activity Alliance will develop accessible resources of evidence-based strategies for promoting physical activity in faith-based organizations.

Physical activity and public health organizations should create and maintain an electronic resource for faith-based organizations to access evidence-based programs and best practices for promoting physical activity in faith-based settings. (FB-5)

- Support faith-based organizations in addressing, where possible, physical activity programs for different populations at multiple levels, including individual, family, organization, and community. (FB-5.1)
  - Objective 5.1: By 2025, share resources to address physical activity programming for multiple populations (e.g., women, youth, older adults) through the clearinghouse.
  - **Objective 5.2:** By 2025, share strategies that target multiple levels of influence of physical activity.
- Update the evidence and characteristics of physical activity programs in faith-based settings. (FB-5.2)
  - <u>**Objective 5.3:**</u> By 2025, complete a literature review of physical activity-programs in faith-based settings.
- Provide resources for faith-based leaders and lay community members for implementing evidence based physical activity programs-(FB-5.3)
  - <u>Objective 5.4:</u> By 2025, provide electronic links and resources of faith based physical activity programs.
  - **Objective 5.5:** By 2025, create a guide of steps to consider in implementing and adapting faith based physical activity programs.



# **HEALTHCARE**

Regular physical activity promotes health, prevents disease, and improves quality of life. Healthcare providers are trusted and effective advocates and educators for physical activity and exercise with their patients. The average U.S. adult sees a primary care provider 2.8 times per year, and all physicians 3 times per year, which presents many opportunities to assess and counsel on physical activity.¹ However, patients report receiving physical activity counseling in only 32% of clinical office visits.² Clinical tools, such as the physical activity vital sign, and programs like Exercise Is Medicine® aim to enhance the efforts of healthcare providers in assessing and promoting regular physical activity.³ Key to those efforts is expanded the education of learners (e.g., medical students and residents) and practicing clinicians. Educating and including advanced practice clinicians and allied health professionals (e.g., physical therapists, dietitians, pharmacists) is crucial as we seek to deliver a consistent, coherent, and comprehensive physical activity message to patients.

In the past decade, incremental improvement has occurred in healthcare sector efforts in physical activity promotion. Healthcare systems like Kaiser Permanente and Intermountain Healthcare have integrated exercise vital signs and physical activity vital signs, respectively, in their electronic health records.<sup>4,5</sup> A U.S. medical school has implemented a curriculum aimed at educating medical students about the importance of physical activity.<sup>6</sup> Programs such as Walk With A Doc™ and Exercise Is Medicine® have expanded in the United States and globally.<sup>7,8</sup> Among adults ages 65 years and older, the proportion reporting advice from their healthcare provider regarding physical activity increased from 43.7% in 2005, to 51.3% in 2014.<sup>9</sup> Likewise, the percentage of children who received advice about exercise increased from 27.5% in 2002, to 37.4% in 2010, representing a 27% increase in 8 years.<sup>10</sup>

The Healthcare Sector of the National Physical Activity Plan developed strategies and tactics aimed at: 1) prioritizing efforts in health care to promote physical activity, 2) recognizing physical inactivity and insufficient activity as preventable and treatable conditions with health and cost implications, 3) partnering across sectors to improve access to physical activity-related services, particularly for disadvantaged populations with limited access, and 4) expanding education on physical activity in the training of all healthcare professionals.

Successful implementation of the Healthcare Sector plan will require healthcare systems, healthcare providers in practice, and learners, to recognize, embrace, and adopt physical activity promotion as a key strategy to improve population health and reduce the overall financial burden of healthcare to the nation and to individuals. The strategies and tactics in the Healthcare Sector plan can help to achieve those goals. Broad implementation of the physical activity vital sign, in addition to inclusion of physical activity promotion in



clinical guidelines (alongside the use of medications, or even before medications), are critically important tactics. Partnering across sectors, along with community partners and health and fitness professionals will be key in linking patients to community resources to support regular physical activity. Finally, advances in the education of ALL healthcare professionals, and especially primary care providers, to support physical activity assessment and counseling is an imperative, along with efforts to encourage healthcare providers themselves to be active role models for their patients, their families, and their communities.



# **STRATEGIES**

#### **STRATEGY 1**

Healthcare systems should increase the priority of physical activity assessment, promotion, and counseling. (HC-1)

#### **STRATEGY 2**

Healthcare systems and professional societies should recognize physical inactivity and insufficient physical activity as treatable and preventable with profound health and cost implications. (HC-2)

#### **STRATEGY 3**

Healthcare systems should partner with other sectors to promote access to evidence-based physical activity-related services that increase health equity. (HC-3)

### **STRATEGY 4**

Universities, post-graduate training programs, and professional societies should include basic physical activity education in the training of all healthcare. (HC-4)



# STRATEGIES AND TACTICS

#### **STRATEGY 1**

Healthcare systems should increase the priority of physical activity assessment, promotion, and counseling. (HC-1)

- Use a systems approach (defined as an approach that understands how elements of care operate individually and in connection with each other) to implement, evaluate, and fund interventions that are effective in improving physical activity in children, adolescents, adults, and older adults. (HC-1.1)
  - **Objective 1.1:** By 2025, at least two nationally recognized healthcare systems, that combined served at least ten million individuals, will have developed and disseminated approaches for team-based care to address physical activity and sedentary behavior in the healthcare setting.
  - **Objective 1.2:** By 2025, at least two academic healthcare systems will have developed and disseminated approached for team-based case to address physical activity and sedentary behavior in the healthcare setting.
  - **Objective 1.3:** By 2025, at least two nationally recognized healthcare systems, that combined serve at least ten million individuals, will have implemented and evaluated evidence-based behavior change strategies that address physical activity and sedentary behavior in healthcare settings.
  - **Objective 1.4:** By 2025, at least one high quality pilot program will utilize a teambased care model to increase physical activity assessment, counseling, and referral in ambulatory care settings.
- Make physical activity a patient "vital sign" that all healthcare providers assess and discuss with their patients. (HC-1.2)
  - **Objective 1.5:** By 2025, at least two nationally recognized healthcare systems, that combined serve at least 10 million individuals, will have developed a standardized and validated approach (e.g., self-report instrument, objective physical activity measurement) to assess and document aerobic physical activity in children and adolescents, adults, and older adults.
  - **Objective 1.6:** By 2025, at least two academic healthcare systems will have developed a standardized and validated approach (e.g., self-report instrument, objective physical activity measurement) to assess and



document aerobic physical activity in children and adolescents, adults, and older adults.

- Objective 1.7: By 2025, ten healthcare delivery systems will have implemented a physical activity vital sign in their electronic health record and clinical workflow.
- **Objective 1.8:** By 2025, at least one nationally recognized healthcare system will pilot test clinical assessment for muscle strength training and sedentary behavior in ambulatory care settings.
- Integrate a physical activity vital sign into electronic health records. (HC-1.3)
  - **Objective 1.19:** By 2025, at least seven nationally recognized healthcare delivery systems will have integrated physical activity vital signs into existing electronic health records.
  - **Objective 1.10:** By 2025, at least ten additional leading healthcare systems that serve at least 500,000 individuals each will have developed a plan for integrating physical activity vital signs into existing electronic health records.
  - **Objective 1.11:** By 2025, at least two of the top electronic health record vendors include a physical activity vital sign in their electronic health record.
- Develop physical activity as a healthcare quality measure for adult patients ages 18 to 64 years; and expand utilization of existing physical activity measures for children and adolescents, and older adults. (HC-1.4)
  - Objective 1.12: By 2025, leading healthcare organizations will have partnered with the National Committee for Quality Assurance or the National Quality Forum to support the development of an acceptable healthcare quality measure for physical activity for adults.
  - **Objective 1.13:** By 2025, measures of physical activity assessment and counseling will be included as a quality incentive in at least 2 value-based health models (e.g., Accountable Care Organizations).
  - **Objective 1.14:** By 2025, 60% of all children and adolescents ages 3 to 17 years will have received physical activity assessment and counseling by a healthcare provider, according to NCQA HEDIS collection data.
  - **Objective 1.15:** By 2025, 60% of all older adults will have received physical activity assessment and counseling from a healthcare provider, according to NCQA HEDIS data.



- Develop, implement, and evaluate strategies to integrate into healthcare settings objective measures of physical activity that are derived from wearable devices and smartphone applications. (HC-1.5)
  - Objective 1.16: By 2025, at least three leading healthcare systems that serve at least 500,000 individuals each will have partnered with electronic health record vendors and wearable technology and mobile health companies to implement the integration of objectively measured physical activity data into healthcare settings.
  - **Objective 1.17:** By 2025, at least two leading healthcare systems, that serve at least 500,000 individuals each, will pilot test integration of objectively measured physical activity data into clinical care.
  - Objective 1.18: By 2025, at least two leading healthcare systems, that serve at least 500,000 individuals each, will have evaluated the impact of objective physical activity data on health outcomes in common health conditions (e.g., diabetes, coronary artery disease, depression).
- Encourage healthcare professionals to be role models for active lifestyles for patients. (HC-1.6)
  - **Objective 1.19:** By 2025, at least two leading healthcare systems that combined serve at least five million individuals will have expanded, developed, disseminated, and evaluated programs that encourage their healthcare providers to engage in active lifestyles.
  - **Objective 1.20:** By 2025, a recognition program for both exemplary "physically active clinicians" and/or "physical activity promoting healthcare systems" will be in place.

Healthcare systems and professional societies should recognize physical inactivity and insufficient physical activity as treatable and preventable with profound health and cost implications. (HC-2)

#### **TACTICS**:

• Expand the evidence on the cost-effectiveness of promoting physical activity in inactive patients with and without chronic disease, including evidence on the effect of therapeutic physical activity for existing conditions on patient outcomes and costs of care. (HC-2.1)



- Objective 2.1: By 2025, at least two healthcare systems that combined serve at least 500,000 individuals each will have partnered with research/academic institutions to build evidence (e.g., original research, systematic reviews, and meta-analyses) on the cost-effectiveness of a systems approach to physical activity assessment and counseling in healthcare settings.
- <u>Objective 2.2:</u> By 2025, at least three peer-reviewed publications will address the cost- effectiveness of physical activity assessment and counseling in the U.S. healthcare system.
- Embed physical activity promotion in clinical guidelines where sufficient evidence exists for both positive health and cost outcomes. (HC-2.2)
  - **Objective 2.3:** By 2025, at least seven leading medical professional societies will advocate for the inclusion of physical activity assessment and counseling in guidelines for conditions where there is moderate to strong evidence of health benefits associated with regular physical activity.
  - **Objective 2.4:** By 2025, at least two professional societies from each of the fields of physical therapy, nursing, dietetics, mental health, and exercise science will have an effort in place that examines their role in promoting physical activity assessment and counseling with patients/employees across the care continuum.
  - **Objective 2.5:** By 2025, clear roles will be delineated for the healthcare teams in physical activity assessment, counseling, and referral to community-based physical activity resources including standards and workflow, as evidenced by published recommendations from each team member's respective professional organizations or other leading entity.
- Ensure that priority is given to the treatment of physical inactivity in population groups with the lowest levels of physical activity. (HC-2.3)
  - Objective 2.6: By 2025, at least two healthcare systems, that combined serve at least 10 million individuals, will have in place an evaluation plan for how they promote physical activity in their highest risk patients (e.g., those with prediabetes and type 2 diabetes mellitus, risk for cardiovascular disease, etc.).
  - **Objective 2.7:** By 2025, healthcare professional societies for clinicians who work in at least four different disease-specific areas (e.g., diabetes, mental health, cancer, cardiovascular disease) will each have taskforces in place that are identifying effective strategies in clinical settings to promote physical activity among their respective patient groups.



Healthcare systems should partner with other sectors to promote access to evidence-based physical activity-related services that increase health equity. (HC-3)

- Establish partnerships with state and local health departments to fund and implement inclusive physical activity policies and programs for underserved groups, and ensure that they are tailored to the cultures and needs of these groups. (HC-3.1)
- Partner with faith-based organizations to increase access to physical activity opportunities and programs. (HC-3.2)
- Support the capacity of school-based health clinics and programs to promote physical activity. (HC-3.3)
- Develop partnerships with community-policing groups, government units, and other community organizations to promote safe access to opportunities to walk, bicycle, swim, and play outdoors. (HC-3.4)
- Partner with community planners to ensure equitable access to active transportation and to expand opportunities for active transportation and recreational activity. (HC-3.5)
  - Objective 3.1: By 2025, at least two systematic reviews of collaborations between healthcare systems and partners that identifies best practices in PA promotion of will be published in a peer-reviewed journal. This review will synthesize the evidence on the value of these collaborations and provide case studies of successful ones.
  - **Objective 3.2:** By 2025, there will be at least four symposia at national meetings that discuss best practices for collaborations between healthcare systems and diverse community partners (e.g., schools, faith-based organizations).
- Support the capacity of school-based health clinics and programs to promote physical activity. (HC-3.6)
  - **Objective 3.3:** By 2025, at least ten healthcare systems serving a combined population of 10 million individuals will have in place referral agreements/arrangements with community providers of physical activity services.
  - **Objective 3.4:** By 2025, 10% of patients eligible for intensive behavioral counseling for cardiovascular disease prevention participate in a community-based



program covered by commercial insurers as a US Preventive Services Task Force (USPSTF) recommendation for counseling to increase physical activity.

- Reduce financial barriers to use of community physical activity services by including reimbursement to community providers as part of healthcare benefit packages, including funding of programs likely to reach diverse populations in the community and subgroups with lowest levels of physical activity. (HC-3.7)
  - **Objective 3.5:** By 2025, Medicare and Medicaid will reimburse evidence-based programs that provide therapeutic physical activity (e.g., diabetes prevention programs, chronic disease self-management programs, Silver Sneakers).
  - <u>Objective 3.6:</u> By 2025, at least 20 commercial payers serving a combined population of 20 million individuals will provide coverage for physical activity services provided by community providers.

#### **STRATEGY 4**

Universities, post-graduate training programs, and professional societies should include basic physical activity education in the training of all healthcare professionals. (HC-4)

- Include basic physical activity education during assessment, brief counseling, and referrals as part of the required curriculum in medical school. (HC-4.1)
  - **Objective 4.1:** By 2025, the curriculum of 25% of medical schools will cover the health benefits of physical activity and training in physical activity assessment and promotion.
- Foster health professional student interest in physical activity. (HC-4.2)
  - Objective 4.2: By 2025, the curriculum of 25% of health professional education (nursing, advanced practice clinician, physical therapy, and dietetics) programs will cover the health benefits of physical activity and training in physical activity assessment and promotion.
- Include physical activity content in licensing exams and in board certification exams for clinicians involved in physical activity promotion. (HC-4.3)
  - **Objective 4.3:** By 2025, the American Board of Medical Specialties examinations will assess knowledge/performance in acquisition related to physical activity assessment, brief counseling, and referral processes.



- Provide an array of evidence-based curricular resources to support physical activity education throughout all health professional training. (HC-4.4)
  - Objective 4.4: By 2025, at least two professional societies for physicians who serve each of the groups of children and adolescents, adults, and older adults will collaborate in the development and publication of a position stand on best practices for physical activity assessment, counseling, and referral strategies in healthcare settings.
  - **Objective 4.5:** By 2025, professional societies representing at least the following five populations: children and adolescents, adults, older adults and those with diabetes/prediabetes and cardiovascular disease risk will have developed and disseminated physical activity educational resources (e.g., didactics, self-directed learning, videos) for different faculty and student audiences.
- Include physical activity content in continuing education professional development programs. (HC-4.5)
  - **Objective 4.6:** By 2025, at least seven professional societies offer physical activity training in continuing education professional development programs.
  - **Objective 4.7:** By 2025, at least two professional societies will have created 'Certificates of Completion' for professional development programs that include physical activity training.



# MEDIA AND COMMUNICATIONS

Media and communications strategies are designed to increase awareness and/or knowledge, influence attitudes and beliefs, and eventually result in behavior change. They have been effectively used to influence health behaviors at the community, state, and national level. Media and communications approaches can be deployed as stand-alone interventions or as part of broader multicomponent interventions. In either instance, such campaigns can have a population-wide reach using a variety of communication channels, such as television, radio, phone, websites, social-media, and online-advertising. The media and communications sector can also allow stakeholders in the physical activity community to reach key opinion leaders and policy makers to help them make informed decisions as they shape our environments and develop new policies.

Research has demonstrated that media and communications campaigns can play an important role in promoting physical activity at the population level. Although the effects of stand-alone mass media campaigns promoting physical activity have been modest and inconsistent, strong evidence supports the effectiveness of media campaigns conducted in conjunction with broader multicomponent interventions. Further, a recent review concluded that well-designed campaigns can result in increased activity levels, specifically a significant increase in walking behavior. In addition, individually-adapted behavior change programs, delivered through computer, tablet, and smartphone platforms, have been shown to be effective in increasing physical activity.

Research around specific messages and frames to best communicate about physical activity is growing. Continued research into successful framing and messaging strategies that can help change the public's knowledge, attitudes, and beliefs about physical activity is needed. Collaboration between academics, government, the public sector, and private organizations to support these research activities will allow for maximum impact.

The Media and Communication sector emphasizes the importance of developing and disseminating messages that are evidence-based, grounded in theory, and reframe the public's understanding of physical activity.

The Media and Communications Sector of the National Physical Activity Plan includes strategies and tactics aimed at 1) unifying communications around a standardized brand ties to the Physical Activity Guidelines, 2) creating opportunities for physical activity and media professionals to collaboratively reframe physical activity, and 3) optimizing the application of social media and innovative technologies to promote physical activity.

Given the power of the Media and Communications Sector in the daily lives of the entire population, successful implementation of these strategies and tactics has the potential to



become a powerful and promising avenue to inform, educate, and motivate the U.S. population to be active.



# **STRATEGIES**

#### **STRATEGY 1**

Government health agencies, in collaboration with non-profit and private sector organizations should use a unified physical activity brand and launch/promote a physical activity campaign across the country to educate individuals about effective behavioral strategies for increasing physical activity. (MC-1)

#### **STRATEGY 2**

Professionals in physical activity and public health should work with media professionals to reframe physical activity and inform the public about effective strategies for increasing physical activity at the individual and community levels. (MC-2)

#### **STRATEGY 3**

Professionals in physical activity and public health should collaborate with social media platforms and technology companies to optimize application of social media and innovative technologies to promote physical activity. (MC-3)



# STRATEGIES AND TACTICS

#### **STRATEGY 1**

Government health agencies, in collaboration with non-profit and private sector organizations should use a unified physical activity brand and launch/promote a physical activity campaign across the country to educate individuals about effective behavioral strategies for increasing physical activity. (MC-1)

### **TACTICS:**

- Expand application of Move Your Way<sup>®</sup>, the national physical activity campaign associated with the *Physical Activity Guidelines for Americans*, to support individuals in being regularly physically active. (MC-1.1)
- In collaboration with communications experts, identify and test evidence-based messages and campaign strategies grounded in theory to influence population physical activity levels across sectors. (MC-1.2)
- Disseminate evidence-based messages and campaign strategies through collaboration across sectors. (MC-1.3)

### STRATEGY 2

Professionals in physical activity and public health should work with media professionals to reframe physical activity and inform the public about effective strategies for increasing physical activity at the individual and community levels. (MC-2)

- Create an open dialogue with media professionals to communicate the broad effects of physical activity on physical and mental health. (MC-2.1)
- Collaborate with media professionals to reframe the public's understanding of physical activity, including the immediate benefits of physical activity and the benefits of modest increases in physical activity. (MC-2.2)
- Increase awareness of sector-based strategies included in the National Physical Activity Plan to broaden the public's understanding of factors that influence physical activity. (MC-2.3)
- Encourage widespread participation and engagement in CDC's Active People Healthy



Nation<sup>SM</sup> initiative to promote the implementation of evidence-based strategies to increase physical activity across sectors and settings. (MC-2.4)

• Design materials to inform media professionals about effective strategies for increasing physical activity at the individual and community levels. (MC-2.5)

### **STRATEGY 3**

Professionals in physical activity and public health should collaborate with social media platforms and technology companies to optimize application of social media and innovative technologies to promote physical activity. (MC-3)

- Support public health agencies and key stakeholders at all levels in incorporating sustained social media techniques in physical activity promotion programs. (MC-3.1)
- Collaborate with social media platforms in targeting dissemination of physical activity messages to population sub-groups. (MC-3.2)
- Support public health agencies and key stakeholders at all levels in applying evidence-based technologies (e.g., biometry, active video games) in physical activity promotion programs. (MC-3.3)
- Partner with technology companies in the design and evaluation of physical activity promotion strategies, including mobile health and social media interventions. (MC-3.4)



# **MILITARY SETTINGS**

The Military Settings Sector recognizes that physical inactivity is more than a public health epidemic, it is also a significant threat to U.S. national security. Physical activity is vital to increasing the health and military readiness of our nation's warfighters, and improving the quality and length of life among Veterans, civilian employees of the U.S. Department of Defense (DoD) and the U.S. Department of Veterans Affairs (VA), and families of service members. The evidence-based recommendations within the Military Settings Sector provide opportunities to realize practical and economic returns on investment that will simultaneously improve the health and security of our nation.

The Military Settings Sector is designed to support existing lines of effort within the DoD and VA, such as DoD's *Total Force Fitness Framework* and *Building Healthy Military Communities* program, and the VA's *Whole Health* and *MOVE!* programs. In an effort to cultivate a culture of physical activity across the DoD and VA, the Military Settings Sector addresses four key sub-populations: Service Members, Veterans, Families of Service Members, and Civilians working for the DoD and/or VA.

Low physical activity and poor physical fitness threaten health and military readiness across all branches (Air Force, Army, Marine Corps, Navy, and Space Force) and components (Active, National Guard, Reserve) of the U.S. Armed Forces, and the health and readiness of other uniformed services (e.g., U.S. Coast Guard, U.S. Public Health Service, and National Oceanic and Atmospheric Association). Secular declines in physical activity and fitness are a major contributing factor in the roughly 75% of American youth failing to qualify for military service,<sup>4</sup> and the growing economic and logistical burden of musculoskeletal injury-related attrition and non-deployability.<sup>5-7</sup> Increasing the physical activity and fitness of Service Members will result in tangible improvements in Service Members' readiness, lethality, and resilience while reducing economic burden from musculoskeletal injuries, non-communicable disease, and poor mental health.

Veterans suffer from disproportionately higher mental and physical chronic disease burden in comparison to the general U.S. population.<sup>8</sup> Overwhelming evidence demonstrates physical activity to be an effective form of prevention and treatment for many such diseases, including stress, anxiety, depression, Post Traumatic Stress Disorder, heart disease, stroke, diabetes, and certain cancers.<sup>9</sup> Increasing physical activity of Veterans will improve their quality and length of life, while reducing VA healthcare costs associated with treating these diseases.

Together, the DoD and VA are the largest of all U.S. employers. As such, increasing physical activity among all civilian DoD and VA employees can increase workplace productivity, reduce turnover, and reduce healthcare costs across a large segment of the United States' workforce.<sup>10, 11</sup>



Increasing physical activity among families of service members creates several short- and long-term benefits to the DoD and VA. Families are an essential part service members' social network and evidence clearly shows that having strong social support is critical to maintaining an active, healthy lifestyle, during and after service. Furthermore, children of service members are more likely to join the US Armed Forces than are members of the general population. Therefore, involving the children of service members in physically active lifestyles will increase the number of viable candidates for service, helping minimize the current, significant recruiting challenges.<sup>12</sup>

Historically, the DoD and VA have developed and/or implemented innovative solutions to some of the nation's most pressing clinical and public health problems (e.g., surgical interventions, vaccinations)<sup>13</sup> independently, and in collaboration with other government agencies, industry, and academia. The DoD and VA can yet again innovate and lead the nation by using recommendations from the Military Settings Sector's Six Strategies as a road map for improving physical activity, fitness, and health among the American subpopulations they directly affect, while increasing the safety and security of all Americans.



# **STRATEGIES**

#### **STRATEGY 1**

Leadership

Establish a strong leadership model that sets the tone for system transformation and supports continuous monitoring and improvement to enhance physical activity and fitness. (MS-1)

#### **STRATEGY 2**

Education and Employment of Qualified Personnel

The DoD and VA should invest in educating and employing personnel with appropriate credentials and/or qualifications to develop and implement evidence-based physical activity programs as part of a team-based approach to improving physical fitness, in order to reduce incidence and prevalence of musculoskeletal injuries, mental illness, and communicable and noncommunicable diseases among service members, veterans, their families, and civilians working for the military and the VA. (MS-2)

#### **STRATEGY 3**

Surveillance and Technology

The DoD and VA should collaborate, along with other government agencies, industry, and academia, to improve existing health surveillance systems to routinely monitor physical activity-related injuries and illnesses and to link existing and emerging technologies for standardized surveillance of physical activity, over secured platforms. (MS-3)

#### **STRATEGY 4**

Physical Activity and Physical Training Programs

To support the DoD's Total Force Fitness (TFF) and VA's Whole Health (WH) initiative, the DoD and VA should further invest in existing, and should begin investing in new evidence-based physical activity and physical training programs, delivered by credentialed and/or qualified professionals, to improve individual- and population-level health and fitness outcomes. (MS-4)

### **STRATEGY 5**

**Partnerships** 

To support an enterprise-wide, whole-of-government approach to national physical activity implementation, the DoD and VA, along with other government agencies, industries, and academia, should engage in multi-sectoral partnerships to implement policies and programs to enhance physical activity on and around military installations and VA medical centers, and in settings where access to facilities is limited. (MS-5)

#### STRATEGY 6

Communication



The DoD and VA, in collaboration with other public stakeholders, should invest in developing, implementing, and evaluating enterprise-level, multimedia campaigns to educate military members, veterans, civilian DoD and VA employees, and military families about physical activity and effective behavioral strategies for increasing physical activity to improve holistic health and performance. (MS-6)



# STRATEGIES AND TACTICS

#### **STRATEGY 1**

Leadership

Establish a strong leadership model that sets the tone for system transformation and supports continuous monitoring and improvement to enhance physical activity and fitness. (MS-1)

- The DoD and VA should identify a functional lead to drive organizational change and transform current strategy and doctrine into actionable policies, systems, and/or environmental changes, prioritizing physical activity as a fundamental component of Total Force Fitness (TFF) and Whole Health (WH). (MS-1.1)
  - **Objective 1.1:** In 2023, the DoD-VA Joint Executive Committee (JEC) should review the NPAP Military Settings Sector and incorporate physical activity as a unified JEC priority to be outlined in the Joint Strategic Plan.
  - **Objective 1.2:** In 2023, the DoD-VA JEC should consider establishing a separately chartered Physical Activity Team, similar to the Suicide Prevention Team, to assess and align interagency physical activity coordination efforts.
  - Objective 1.3: In 2023, the Under Secretary of Defense for Personnel and Readiness (USDP&R) should consider establishing a Federal Office for Physical Activity and Health, similar to the Suicide Prevention Office, to advance holistic, data-driven health-readiness metrics through policy, oversight, and engagement to positively impact individual behaviors and beliefs, as well as instill systemic cultural change.
  - Objective 1.4: By 2024, the Federal Office for Physical Activity and Health should establish an annual forum to solicit feedback on the implementation of physical activity initiatives, encourage organizational engagement, maintain momentum, and create a positive environment for future development.
  - **Objective 1.5:** By 2024, the Federal Office for Physical Activity and Health should work with the Office of Personnel Management and DoD Military Decorations and Awards Program to enact policy through which leaders receive formal recognition and reward for implementation of policy, systems and/or environmental changes that enhance physical activity literacy, TFF and WH.



Objective 1.6: By 2024, the Federal Office for Physical Activity and Health should work with the Secretary of Defense for Public Affairs on public communication and community engagement stories that promote the importance of physical activity as it relates to military readiness and national security.

#### STRATEGY 2

Education and Employment of Qualified Personnel

The DoD and VA should invest in educating and employing personnel with appropriate credentials and/or qualifications to develop and implement evidence-based physical activity programs as part of a team-based approach to improving physical fitness, in order to reduce incidence and prevalence of musculoskeletal injuries, mental illness, and communicable and non-communicable diseases among service members, veterans, their families, and civilians working for the military and the VA. (MS-2)

- Identify existing personnel within the DoD and VA workforce with requisite subject matter expertise in physical activity and health, physical fitness, and/or tactical strength conditioning, who can be immediately leveraged as subject matter experts within their organizations. (MS-2.1)
  - Objective 2.1: In 2023, the DoD and VA should determine the physical activity and health credentials and/or qualifications that can be effectively leveraged for subject matter expertise, and conduct a systems record review to identify existing personnel, (e.g., Army Wellness Centers) that may be utilized in support of physical activity initiatives.
  - Objective 2.2: In 2023, the VA and/or Veteran-based organizations (e.g., the Student Veterans Association) should develop and disseminate a list of institutions of higher education with an active Office of the Student Veterans Association that offer degree programs in the areas of exercise science, strength and conditioning, or tactical strength and conditioning.
  - Objective 2.3: In 2023, the DoD should leverage existing resources (e.g., DOD Credentialing Opportunities Online) to identify credentialing and/or qualifying opportunities for existing personnel in the areas of physical activity, health promotion, physical fitness, and/or tactical strength and conditioning.
  - Objective 2.4: In 2023, the DoD should establish a method of identifying Reserve Officers' Training Corps students majoring in an exercise-related field (e.g., Exercise Science, Kinesiology, Strength and Conditioning, Physical



Education) in order to recognize their potential capacity to provide subject matter expertise within their assigned unit and to prioritize their continuing education.

- Collaborate with government agencies, industry, and academia to identify existing, or to develop new, progressive levels of subject matter expertise through internal mechanisms, external professional credentialing bodies, and institutions of higher education, to support and sustain physical fitness, performance, and readiness of personnel, that can then be evaluated (e.g., U.S. Air Force and American College of Lifestyle Medicine's Lifestyle & Performance Medicine Working Group Charter). (MS-2.2)
  - Objective 2.5: By 2023, the VA should adapt or adopt an existing curriculum for physical activity and health (e.g., the American College of Sports Medicine (ACSM) Physical Activity in Public Health Specialist) to establish a Certificate Program focused specifically on Physical Activity and Health in order to create workplace champions.
  - **Objective 2.6:** In 2023, Veterans should be prioritized for educational opportunities to become qualified and/or credentialed physical activity and health, physical fitness, or tactical strength and conditioning experts.
  - **Objective 2.7:** By 2023, the VA and/or Veteran-based organizations should partner with professional certifying bodies (e.g., ACSM, National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM), American Council on Exercise (ACE) and/or institutions of higher education for developing, implementing, and having a plan to evaluate programs for Veterans that lead to professional certifications or academic degrees in support of Whole Health and *Let's Move*!
  - **Objective 2.8:** By 2024, each branch of the U.S. Armed Forces should establish and/or optimize existing internal schools (e.g., U.S. Army Master Fitness Trainer, U.S. Marine Corps High Intensity Tactical Training), and/or career pathways (e.g., U.S. Army Voluntary Transfer Incentive Program) in support of the Physical Fitness dimension of TFF to develop entry-level tactical strength and conditioning subject matter experts.
  - Objective 2.9: By 2024, each branch of the U.S. Armed Forces, and all uniformed services should establish and/or optimize existing internal programs and facilities and/or external professional certifying bodies (e.g., ACSM, NSCA, NASM, ACE) in support of the Physical Fitness domain of TFF to develop entry-level physical and health promotion experts.
- Use credentialed and/or qualified subject matter experts to drive individual- and



population-level programs to improve physical activity, health, and readiness of personnel. (MS-2.3)

- Objective 2.10: In 2023, the DoD should consider reviewing designated physical activity providers that exist within the North Atlantic Treaty Organization (NATO) and Five Eyes (FVEY) partner nations to assist in the establishment and sustainment of physical activity career pathways within the U.S. military.
- Objective 2.11: In 2023, the VA should develop and deliver a standardized, baseline education module on physical activity and health for delivery to every employee, contractor, health profession trainee, volunteer, veteran, and beneficiary of the VA.
- **Objective 2.12:** In 2024, all components and branches of the U.S. Armed Forces should consider presenting courses of action for establishing a military occupational specialty (MOS), with progressive levels of qualification/education/promotion relevant to tactical strength and conditioning.
- **Objective 2.13:** In 2024, the DoD and the nation's senior military colleges should formalize and implement a scholarship program to train future health and human performance leaders for the U.S. Armed Forces similar to its Cyber Scholarship Program (CySP).
- **Objective 2.14:** In 2024, the DoD and VA should collaborate with the newly established Federal Office for Physical Activity and Health to provide incentives for completion of physical activity and health education that leads to a professional certification and/or qualification in health, physical fitness, or tactical strength and conditioning training.
- Collaborate with government agencies, academia, and/or industry leaders with expertise in program evaluation to develop and implement process, impact, and outcome measures to assess the efficacy and effectiveness of educating and employing credentialed and/or qualified personnel. (MS-2.4)
  - Objective 2.15: In 2023, the DoD and VA should convene a panel of experts in program evaluation to identify the most salient process, impact, and outcome measures, and the costs associated with conducting thorough evaluation, building on established models (e.g., Army Wellness Centers).
  - **Objective 2.16:** In 2023, the DoD should collaborate with government agencies, industry, and/or academia to conduct evaluations of tactical strength and



conditioning programs across all branches and components, and to report process, impact, and outcomes findings.

- **Objective 2.17:** In 2024, the VA and/or Veteran-based organizations should identify meaningful outcomes for assessing the efficacy of educational programs aimed at helping Veterans achieve professional certifications or degrees and subsequent employment as a qualified professional.
- Objective 2.18: In 2024, the DoD and VA should establish a forum for consolidating evidence of best practice for development and training of qualified personnel.
- **Objective 2.19:** In 2025, the DoD and VA should implement best practices and lessons learned from findings.

#### **STRATEGY 3**

Surveillance and Technology

The DoD and VA should collaborate, along with other government agencies, industry, and academia, to improve existing health surveillance systems to routinely monitor physical activity-related injuries and illnesses and to link existing and emerging technologies for standardized surveillance of physical activity, over secured platforms. (MS-3)

- Develop a plan to integrate physical activity as a vital sign into electronic health records, such that physical activity can be monitored from the point of accession into the military through the lifespan of a Veteran. (MS-3.1)
  - **Objective 3.1:** In 2023, the DoD and VA should formalize the common data elements across DoD and VA systems to ensure longitudinal connections from recruitment through the lifespan of Service Members and Veterans.
  - **Objective 3.2:** In 2023, the DoD and VA should establish policy, procedures and practices to strengthen physical activity monitoring and reporting, such that the effect on health behaviors, and benefit of targeted prevention programs, can be justly recognized.
  - **Objective 3.3:** In 2024, the DoD and VA should develop predictive models and tracking tools to determine optimal physical training metrics, and relative interventions, across the lifespan of Service Members and Veterans.
- Ensure that electronic health records systems are capable of supporting routine health



surveillance functions to monitor incidence and prevalence of physical activity-related injuries and illnesses. (MS-3.2)

- Objective 3.4: In 2023, the DoD should routinely monitor, in a standardized manner across the military services, health conditions that have been demonstrated to be associated with low levels of physical activity and fitness, such as overuse musculoskeletal injuries, heat illnesses and obesity.
- Objective 3.5: By 2024, DoD and VA health records systems should have standard medical record code sets for physical activity-related conditions including not just injuries and obesity, but also stress, anxiety, depression, Post Traumatic Stress Disorder, heart disease, stroke, diabetes, and certain other conditions that should be routinely monitored and reported.
- Conduct periodic worksite-based health screenings and/or telehealth visits that measure physical activity and fitness levels of DoD/VA workers. (MS-3.3)
  - Objective 3.6: By 2024, use standardized population health measurements to capture longitudinal information on employees to track effective interventions.
  - **Objective 3.7:** By 2025, evaluate, prescribe, and monitor physical activity for efficacy in the employee population.
- Develop, implement, evaluate, and fund strategies to effectively integrate objective measures of physical activity derived from wearable devices, smartphones, tablets, and applications into workplace and healthcare settings. (MS-3.4)
  - **Objective 3.8:** In 2023, the DoD should consider expanding upon, and effectively communicating, the VA's encrypted and protected Apple Health Records capability to include physical activity tracking.
  - Objective 3.9: In 2023, the DoD should consider expanding upon the use of mobile health technologies and patient-generated data, as demonstrated by the VA's Office of Connected Care, to enable the development of tailored physical activity programs across broad demographics.
  - Objective 3.10: In 2023, the DoD and VA should consolidate and publicize key initiatives (e.g., the VA's Fitbit pilot<sup>14</sup>, the mobile health technologies within the DoD's Building Healthy Military Communities initiative) that demonstrate potential for enhanced physical activity amongst at-risk population groups, and enable the DoD and VA to quickly assess effectiveness.
- Replace lagging indicators of health and performance with leading Key Performance



Indicators (KPIs) of human movement (e.g., force plate technology, movement screens, isometric assessments) to enhance measurement of physical fitness and performance. (MS-3.5)

- Objective 3.11: In 2023, the DoD should invest in developing a secure, unified data management system capable of integrating disparate and disaggregated data into synthesized reporting.
- Objective 3.12: In 2024, the DoD should integrate training and assessment outcomes with leading KPIs to effectively engage the holistic health team (clinician, leadership, end-user) with enhanced physical fitness and performance measures.

# **STRATEGY 4**

Physical Activity and Physical Training Programs

To support the DoD's TFF and VA's WH initiative, the DoD and VA should further invest in existing, and should begin investing in new evidence-based physical activity and physical training programs, delivered by credentialed and/or qualified professionals, to improve individual- and population-level health and fitness outcomes. (MS-4)

- Develop and implement comprehensive and immersive physical activity and physical training prescriptions for the U.S. Armed Forces to ensure the delivery of safe and effective training and subsequent assessments of the Physical Fitness Dimension of TFF. (MS-4.1)
  - Objective 4.1: In 2022, the DoD should review the Physical Fitness and Body Fat Program Directive, and any associated policy, procedures, and practices with a view to better enabling an enterprise-approach to physical training progression across the U.S. Armed Forces.
  - Objective 4.2: In 2022, as part of the Physical Fitness and Body Fat Program Directive review, the DoD should consider developing physical training policy, procedures, and practices that effectively address pre-accession fitness training, recruit conditioning, and periodized sustainment training, with a focus on injury prevention.
  - Objective 4.3: In 2022, as part of the Physical Fitness and Body Fat Program Directive review, the DoD should consider incorporating mandated periods of instruction/allocated time for all pre-accession, recruitment, and sustainment physical training as a means of prioritizing the importance of individual- and population-level program delivery.



- **Objective 4.4:** By 2023, the U.S. Armed Forces should apply best practices and technologies observed and/or validated from NATO, FVEY, Special Operations Command, and sport communities to optimize warfighter readiness and performance.
- **Objective 4.5:** By 2024, the DoD should be in a position to comprehensively assess the physical activity and physical fitness of Service Members, as a foundation for safe and effective physical training.
- Adequately fund physical training and education programs to ensure optimal readiness from recruitment through the lifespan of Service Members and Veterans. (MS-4.2)
  - **Objective 4.6:** In 2023, the DoD-VA JEC should consider utilizing a separately chartered Physical Activity Team to identify and assess existing preaccession, recruitment and sustainment programs that have evidence to support efficacy for improving physical fitness (e.g., the U.S. Army National Guard Recruitment Sustainment Program, the U.S. Army Holistic Health and Fitness).
  - **Objective 4.7:** In 2023, the Physical Activity Team should make known to the USDP&R the resources required to employ evidence-based pre-accession, recruitment, and sustainment programs, with particular emphasis in states and localities shown to have the highest number of personnel with the lowest fitness levels and/or largest number of musculoskeletal injuries.
  - **Objective 4.8:** In 2024, the National Defense Authorization Act should include an allocation of resources for evidence-based pre-accession, recruitment, and sustainment physical training programs.
- Establish a Tri-Service Component Center of Excellence aimed at optimizing the Physical Domain of TFF by providing training and education, and sharing evidence of best practices specific to DoD physical activity, physical fitness, and performance. (MS-4.3)
  - Objective 4.9: In 2022, the Reserve Component should convene a Joint Task Force, including representation from academia and industry, to share evidence of current best practices, needs, and concerns as they relate to the Physical Domain of TFF.
  - Objective 4.10: By 2023, the Reserve Component should Identify and utilize an established training site with the capacity to provide equipment, classroom space, lodging, and infrastructure in order to provide training to all Reserve Component Soldiers, Sailors, Airmen, and Marines on how to increase physical activity, physical fitness, and overall performance.



- Objective 4.11: In 2023, Subject Matter Experts from across the Tri-Services should be stationed at the COE to provide Branch Specific training and education, while also coordinating and sharing best practices with other Branch Subject Matter experts.
- Objective 4.12: In 2024, MOUs/MOAs should be established, as necessary, in order for the COE to serve as a testing and evaluation arm for DoD Research Labs in order to validate and provide feedback on the latest equipment, technology, training, and services.
- **Objective 4.13:** In 2024, the Reserve Component should retain properly educated and qualified professionals at state- and local-levels to implement established best practices for the TFF Physical Domain.
- **Objective 4.14:** In 2025, the Reserve Component should host an annual meeting and publish a Joint Annual Report on evidence-based best practices for physical activity and physical fitness programs. That meeting should also be used as a platform for a Reserve Component Awards program (see NPAP Military Settings Sector Strategy 1, Tactic 1, Objective 5).
- **Objective 4.15:** In 2025, the DoD should consider establishing regional COEs based upon best practices and lessons learned from having established the initial COE.
- Provide resources and training necessary to support Veterans and VA employees in adopting and maintaining physical activity behaviors, including providing access to relevant expertise, evidence-based behavioral change programs, and qualified fitness and behavior change professionals. (MS-4.4)
  - **Objective 4.16:** In 2023, the VA should ensure employees, veterans and veteran's families are connected with the VA's Fitbit pilot and other ongoing activities to enable the VA to quickly assess cost-benefit effectiveness.
  - Objective 4.17: In 2023, the VA should adapt existing Wellness in the Workplace programming and expand existing Veterans Health Administration Employee Health Promotion Disease Prevention Program<sup>15</sup> to include physical activity incentives.
  - **Objective 4.18:** In 2023, the VA should promote and encourage every employee to participate in VA's Whole Health<sup>16</sup> programming in order to create role models and champions for the program, and support participation in the employee satisfaction models to promote rewards for adoption.



Objective 4.19: In 2023, the VA should collaborate with the National Academies Physical Activity and Health Innovation Collaborative<sup>17</sup> to promote and monitor physical activity and encourage uniformity of best governmental and public health practices.

# **STRATEGY 5**

**Partnerships** 

To support an enterprise-wide, whole-of-government approach to national physical activity implementation, the DoD and VA, along with other government agencies, industries, and academia, should engage in multi-sectoral partnerships to implement policies and programs to enhance physical activity on and around military installations and VA medical centers, and in settings where access to facilities is limited. (MS-5)

- Establish an interagency advisory committee on physical activity within the Physical Activity Alliance (PAA), with representation from all PAA entities, to enable effective multi-sectoral collaboration. (MS-5.1)
  - **Objective 5.1:** In 2022, the PAA should identify key representatives from all PAA entities to establish an interagency PAA Advisory Committee.
  - **Objective 5.2:** In 2023, the PAA Advisory Committee should have established an effective framework for the management of multi-sectoral partnerships at the federal/national level, including the means by which they will review and evaluate the effectiveness of collaborative, multi-agency implementation of physical activity-based initiatives.
  - **Objective 5.3:** In 2023, the PAA Advisory Committee should disseminate a progress report on the physical activity-based initiatives selected for multiagency implementation at the federal/national level.
  - **Objective 5.4:** In 2024, the PAA Advisory Committee should disseminate a report on best practices and lessons learned for multi-agency implementation of physical activity-based initiatives at the federal/national level.
  - <u>Objective 5.5:</u> In 2025, the PAA Advisory Committee should identify additional federal/national level physical activity-based initiatives for prioritization and inclusion in the next iteration of the NPAP.
- Provide key DoD and VA leadership to the PAA Advisory Committee to represent the Military Settings Sector's priorities and ensure engagement with federal and national functional leads responsible for enhancing physical activity. (MS-5.2)



- **Objective 5.6:** In 2023, the DoD and VA PAA Advisory Committee representatives should have established a formal feedback loop with the DoD-VA JEC.
- Objective 5.7: In 2023 and 2024, the DoD and VA PAA Advisory Committee representatives should work in an advisory role to inform any newly established USDP&R Physical Activity Teams/Offices.
- **Objective 5.8:** In 2023 and 2024, the DoD and VA PAA Advisory Committee representatives should make recommendations to functional leads within the Military Settings Sector on physical activity-based initiatives that enhance multi-sectoral partnerships and raise the profile of the DoD and VA as a leader in the improvement of physical activity.
- Ensure collaboration between the DoD Education Activity (DoDEA) and NPAP's Education Sector and Sport Sector to identify opportunities to advance existing recommendations from those Sectors, and to identify new opportunities to increase physical activity and fitness in DoDEA schools and among military connected students. (MS-5.3)
  - **Objective 5.9:** In 2022, leadership from DoDEA and the NPAP's Education Sector should convene to identify and report on existing Strategies and Tactics from the Education Sector that are currently being implemented in DoDEA Schools and among military-connected students.
  - Objective 5.10: In 2022, leadership from DoDEA and the NPAP's Sport Sector should convene to identify and report on existing Strategies and Tactics from the Sport Sector that are currently being implemented in DoDEA Schools and among military-connected students.
  - Objective 5.11: In 2023, leadership from the NPAP's Education Sector and Sport Sector should collaborate with the DoDEA and industry to pilot test a national martial arts initiative in DoDEA schools and among military-connected students.
  - <u>Objective 5.12:</u> In 2024, leadership from DoDEA and the NPAP's Education Sector should disseminate evidence of best practices for implementation and evaluation of existing Strategies and Tactics from the Education Sector.
  - <u>Objective 5.13:</u> In 2024, leadership from DoDEA and the NPAP's Sport Sector should disseminate evidence of best practices for implementation and evaluation of existing Strategies and Tactics from the Sport Sector.
- Use the DoD's United Facilities Criteria (UFC) Installation Master Planning document<sup>18</sup> and its Building Healthy Military Communities (BHMC) initiative, perhaps



in collaboration with the NPAP's Transportation, Land Use, and Community Design Sector and/or the NPAP's Community Recreation, Fitness and Parks Sector, to implement and evaluate their physical activity-related recommendations (e.g., "Healthy Community Planning," "Connected Transportation Networks," and "Horizontal and Vertical Mixed Use" within the UFC, and State Coordinators for the BHMC). (MS-5.4)

# **STRATEGY 6**

Communication

The DoD and VA, in collaboration with other public stakeholders, should invest in developing, implementing, and evaluating enterprise-level, multimedia campaigns to educate military members, veterans, civilian DoD and VA employees, and military families about physical activity and effective behavioral strategies for increasing physical activity to improve holistic health and performance. (MS-6)

- Invest in efforts to understand what motivates military members, veterans, civilian DoD and VA employees, and military families to establish physically active lifestyles and identify strategically compelling physical activity messaging. (MS-6.1)
  - Objective 6.1: By 2023, the DoD and VA should establish a formal collaboration with the FrameWorks Institute, as part of the larger, multi-method project sponsored by the NPAPA and the Centers for Disease Control (CDC), to study better ways to frame physical activity amongst sub-populations within the Military Settings Sector.
  - **Objective 6.2:** In 2023, the DoD and VA should develop and test communication narratives that ensure sub-populations within the Military Settings Sector understand the various types of physical activity and behavior strategies needed to create lasting cultural change.
  - Objective 6.3: In 2024, the DoD and VA should engage in cross-sectoral partnerships to ensure marketing campaigns effectively target all demographics and disparities within the Military Settings Sector.
- Work with other public stakeholders to invest in developing, implementing, and evaluating physical activity communication campaigns that are effective in increasing individual-level physical activity. (MS-6.2)
  - **Objective 6.4:** In 2023 the newly established Federal Office for Physical Activity and Health should work with the Secretary of Defense for Public Affairs to develop an evidence-informed strategic communication plan focused on



improving physical activity amongst sub-populations within the Military Settings Sector.

- **Objective 6.5:** In 2024, the Federal Office for Physical Activity and Health, in collaboration with the Secretary of Defense for Public Affairs, should identify federal funding lines to effectively resource physical activity communication and marketing campaigns for the Military Settings Sector.
- Incorporate DoD and VA physical activity marketing campaigns into policy, procedures, and practices. (MS-6.3)
  - **Objective 6.6:** By 2024, the DoD and VA should introduce physical activity messaging into annual and biennial guidance documents.
  - **Objective 6.7:** By 2025, the DoD and VA, in collaboration with relevant constituents, should lead efforts to promote and share best practices and lessons learned from incorporating physical activity messaging into guidance documents.
  - **Objective 6.8:** By 2025, the DoD and VA should ensure full awareness and education is provided to the Military Settings Sector through dissemination of tools and resources important for promoting physical activity to improve health, prevent disease and disability, and enhance quality of life.
- Partner with broadcasting agencies to highlight Military Physical accomplishments, such as Best Ranger Competition, or Best Sapper Competition, to bring positive attention to the physical aspect of the military. (MS-6.4)



# **PUBLIC HEALTH**

The overarching goals of the Public Health Sector are to promote, protect, and maintain health and prevent disease at the population level. Public health initiatives historically have focused on controlling communicable diseases. In recent years, in response to the rise in rates of obesity, heart disease, diabetes, cancer, and other chronic conditions, public health efforts have increasingly focused on preventing these non-communicable diseases. The public health sector consists of governmental organizations, such as public health agencies and federal, state, county, and local health departments. It also includes non-governmental organizations that seek to address public health goals, such as institutions of higher education, professional societies, non-profit organizations, think tanks, and advocacy groups. Organizations within the public health sector perform a variety of functions, including research, surveillance, program development and delivery, evaluation, training, and advocacy\*. These functions complement and support the goals of several of the National Plan sectors, including Healthcare; Education; Community Recreation, Fitness and Parks; and Transportation, Land Use and Community Design.

Given the potential reach of public health organizations across wide segments of the population, the public health sector plays a critical role in promoting physical activity in the United States. As evidence linking physical activity to the reduction of chronic disease risk grows, public health organizations are increasingly focusing on programs and initiatives to promote physical activity. Educational and multi-strategy campaigns to increase physical activity have been implemented and evaluated at the national¹ and community² level. Policy strategies also can potentially influence physical activity at the population level through systems change in organizations, environments, and communities. For example, a recent review of physical activity policies in rural communities found that those targeting enhanced infrastructure for walking and increased opportunities for extracurricular physical activity were implemented most commonly.³ To deliver evidence-based physical activity programming and advocate for policy change, however, the public health workforce may require greater competence in these areas. Physical activity and public heath training programs with online⁴ and inperson⁵ delivery formats may serve as models for training and capacity-building.

The National Physical Activity Plan provides six strategies to promote physical activity through the Public Health Sector. These strategies focus on 1) developing a competent workforce, 2) building partnerships, 3) developing policy and advocacy efforts, 4) improving surveillance and evaluation of programs, 5) disseminating tools and resources, and 6) providing funding and resources. Recommendations that are new to this update of the National Physical Activity Plan include a call for the creation and funding of an Office of Physical Activity and Health within the National Center for Chronic Disease Prevention and Health Promotion at CDC. Also, these updated Public Health Sector strategies recommend the creation of an Office within the NIH Office of the Director that would be



Physical Activity Plan, responsible for coordinating and monitoring research funding for physical activity across all NIH Institutes.



# **STRATEGIES**

#### **STRATEGY 1**

Public health organizations should develop and maintain an ethnic, cultural, ability and gender diverse workforce with competence and expertise in physical activity promotion. (PH-1)

#### STRATEGY 2

Public health organizations should create, maintain, and leverage cross-sectoral partnerships and coalitions that implement evidence-based strategies to promote physical activity. (PH-2)

#### **STRATEGY 3**

Non-profit public health organizations should engage in policy development and advocacy to elevate the priority of physical activity in public health practice, policy, and research. (PH-3)

#### **STRATEGY 4**

Public health organizations should expand surveillance capabilities of policy and environmental correlates of physical activity and the levels of physical activity in communities, and should monitor implementation of evidence-based public health strategies to promote physical activity (evaluation). (PH-4)

# STRATEGY 5

Public health organizations should disseminate tools and resources important to promoting physical activity, including resources that address the burden of disease due to inactivity, the implementation of evidence-based strategies, and funding opportunities for physical activity initiatives. (PH-5)

#### **STRATEGY 6**

Public health organizations should invest equitably in physical activity, commensurate with its scale and impact on disease prevention and health promotion. (PH-6)



# STRATEGIES AND TACTICS

# **STRATEGY 1**

Public health organizations should develop and maintain an ethnic, cultural, ability and gender diverse workforce with competence and expertise in physical activity promotion. (PH-1)

- Identify opportunities provided by CDC, professional societies, and academic institutions for inclusive and equitable training and capacity building efforts in the implementation, adaptation, and evaluation of evidence-based physical activity promotion strategies. (PH-1.1)
  - **Objective 1.1:** By 2025, CDC, professional societies, and academic institutions will inventory existing physical activity promotion trainings on implementation, adaptation, and evaluation of physical activity strategies efforts.
  - **Objective 1.2:** By 2025, CDC, professional societies, and academic institutions will increase participation in these trainings by 20%.
  - **Objective 1.3:** By 2025, all providers of trainings will collect and analyze diversity statistics on participants.
- Enhance academic programs with physical activity practitioner core competencies embedded into the curricula of public health and other disciplines (e.g., healthcare, education, transportation and planning, parks and recreation). (PH-1.2)
  - **Objective 1.4:** By 2025, physical activity practitioner organizations will partner with academic collaborators to increase the number of programs with physical activity practitioner core competencies to at least 20 programs.
- Expand recruitment, outreach, and training efforts to engage students of diverse racial, ethnic, and cultural backgrounds; students with disabilities; and students representing groups at particular risk of physical inactivity. (PH-1.3)
  - **Objective 1.5:** By 2025, public health professional organizations will develop resources for training and mentorship of underrepresented groups.
- Encourage professional societies to sponsor scholarship programs for students of diverse racial, ethnic, and cultural backgrounds; students with disabilities; students representing groups at particular risk of physical inactivity. (PH-1.4)
- Collaborate with a wide range of organizations, including those representing minority



ethnic groups and persons with disabilities, to build a diverse public health work force that is well prepared to promote physical activity. (PH-1.5)

- Support and expand training opportunities (e.g., Physical Activity and Public Health Course) based on core competencies for practitioners, paraprofessionals, community health workers, and professionals from other sectors. (PH-1.6)
- Develop interdisciplinary training to ensure that physical activity and public health concepts are connected to other disciplines; also include leadership development and team-building. (PH-1.7)
- Increase the number of professionals who are certified Physical Activity and Public Health Specialists. (PH-1.8)
  - Objective 1.6: By 2025, the Physical Activity Collaborative will increase the number of Physical Activity and Public Health Specialists to 500 active certifications.
  - **Objective 1.7:** By 2025, the Physical Activity Collaborative will increase the number of Physical Activity and Public Health Specialists to 750 active certifications.
- Support the creation of a physical activity and health unit in state health departments that functions as part of an integrated and coordinated approach to chronic disease prevention. (PH-1.9)
  - **Objective 1.8:** By 2025, state health departments in at least 40 states will have a physical activity and health unit.
  - **Objective 1.9:** By 2030, all state health departments will have a physical activity and health unit.
- Staff these units with certified Physical Activity and Public Health Specialists and with professionals from other disciplines with whom public health must collaborate in order to provide opportunities for physical activity within communities. (PH-1.10)
- Encourage national and state public health associations to form physical activity sections within their organizations. (PH-1.11)
  - **Objective 1.10:** By 2025, at least 75% of national and state public health associations will have a physical activity section within their organization.

# **STRATEGY 2**

Public health organizations should create, maintain, and leverage cross-sectoral partnerships and coalitions that implement evidence-based strategies to promote physical



activity. (PH-2)

# **TACTICS:**

- Examine successful cross-sectoral partnerships to identify and incorporate key elements of success into physical activity initiatives. (PH-2.1)
  - **Objective 2.1:** By 2025, NPAP Public Health committee will recommend a cross-sectoral framework to be used when planning collaborative physical activity initiatives.
- Encourage and train public health professionals to work with, educate, and learn from partners in order to strengthen the effectiveness of the partnership and the efforts of each member. (PH-2.2)
- Increase networking and collaboration between practitioners, researchers, community-based organizations, and advocates. (PH-2.3)
- Collaborate with agencies representing persons with disabilities and other populations affected by health disparities. (PH-2.4)
- Collaborate with "non-traditional" partners to increase the reach of interventions and encourage social capital. Encourage partnerships between local and state health agencies and scientists in academic and private settings to conduct community participatory research to facilitate the dissemination of evidence-based practices to promote physical activity. (PH-2.5)

# STRATEGY 3

Non-profit public health organizations should engage in policy development and advocacy to elevate the priority of physical activity in public health practice, policy, and research. (PH-3)

- Advocate for the creation and funding of an Office of Physical Activity and Health within the National Center for Chronic Disease Prevention and Health Promotion at CDC. (PH-3.1)
  - Objective 3.1: By 2022, create advocacy products for funding of an Office of Physical Activity and Health within the National Center for Chronic Disease Prevention and Health Promotion at CDC.
- Advocate for the creation of an Office within the NIH Office of the Director, to be responsible for coordinating and monitoring research funding for physical activity



across all NIH Institutes. (PH-3.2)

- Advocate for a policy that ensure the *Physical Activity Guidelines for Americans* are updated every ten years. (PH-3.3)
  - **Objective 3.2:** By 2025, the Physical Activity Guidelines for Americans Committee will develop and distribute key talking points to policy/advocacy sections of professional societies for advocacy efforts.
- Advocate for an update in the CDC's *Guide to Community Preventive Services* on approaches aimed to increase physical activity. (PH-3.4)
- Develop an advocacy strategy for coordinated and appropriately funded physical activity research in multiple funding agencies. (PH-3.5)
- Engage decision makers in funding research on policy development and evaluation of the effects of existing policies related to physical activity. (PH-3.6)
  - **Objective 3.3:** By 2025, NPAP Public Health committee, in partnership with physical activity practitioner and research organizations, will develop aggregated advocacy information on evidence-based policies related to physical activity to be used in educating policy makers at local, state, and national levels.
- Encourage local, state, and national public health organizations to collaboratively engage in policy development and advocacy. (PH-3.7)
- Engage community-based organizations that represent neighborhoods in policy development, accountability, and advocacy activities. (PH-3.8)
- Engage grassroots organizations that have demonstrated success in other public health arenas (e.g., tobacco control), and provide incentives for training and participation in population-based physical activity promotion. (PH-3.9)
- Tailor policy messages for diverse audiences and settings. Identify and engage underserved populations. Target policy messages for each population, segment, and setting. (PH-3.10)
- Create a long- and short-term communication schedule for advocacy. (PH-3.11)
- Create an interdisciplinary policy and advocacy center to support advocacy efforts and policy development for physical activity in public health agencies and support advocacy efforts. (PH-3.12)
- Identify and promote advocacy training opportunities for public health professionals



and professionals from other sectors with whom public health can work to promote physical activity. (PH-3.13)

• Disseminate information on evidence-based policies related to physical activity by participating in advocacy networks, with emphasis on educating partners at local, state, and national levels. (PH-3.14)

**Objective 3.4:** By 2025, create a tracking system for evaluating the use of advocacy networks for physical activity policy change.

# **STRATEGY 4**

Public health organizations should expand surveillance capabilities of policy and environmental correlates of physical activity and the levels of physical activity in communities, and should monitor implementation of evidence-based public health strategies to promote physical activity (evaluation). (PH-4)

- Identify and promote a common set of measures that can be applied across diverse populations to track progress in physical activity policy and environmental changes at state and national levels. (PH-4.1)
  - Objective 4.1: By 2025, professional societies with a physical activity focus will develop consistent measures for physical activity policy and environmental surveillance.
  - **Objective 4.2:** By 2030, professional societies with a physical activity focus will implement surveillance plan in partnership with key national, state, and local partners.
- Define a common framework to evaluate policy and environmental change processes, outcomes, and impacts. (PH-4.2)
- Build the capacity of practitioners to monitor key outcome measures of chosen interventions. (PH-4.3)
- Develop a national physical activity report card that is informed by evidence and tracks actions taken and progress in reducing burden of disease due to inactivity in the United States. Use the report card to regularly assess and report on progress toward increasing physical activity and reducing physical inactivity. (PH-4.4)
  - **Objective 4.3:** By 2023, the NPAPA in partnership with key experts will develop a reporting framework and template to document and report key surveillance indicators for physical activity (i.e., a national report card template).



- Objective 4.4: By 2025, NPAPA will produce the physical activity report card using data at various levels (e.g., National, State, Local) where available.
- Improve and expand surveillance of physical fitness and physical activity, including light activity, using objective measures of physical activity when feasible. (PH-4.5)
- Expand surveillance systems to monitor the status of environmental and policy determinants of physical activity and the disparities in resource availability and utilization. (PH-4.6)
  - Objective 4.5: By 2025, NPAPA Public Health committee in partnership with key national state and local partners will develop a surveillance plan and timeline to implement surveillance of key environmental and policy determinants of physical activity and disparities in physical activity resource availability and utilization.
  - **Objective 4.6:** By 2025, NPAP Public Health committee in partnership with key national state and local partners will implement surveillance plan.
- Expand surveillance systems to include the systematic assessment of physical activity and fitness levels of diverse populations of children and youth, including those with different abilities and socioeconomic status, by partnering with schools. For relevant surveillance systems, include state-level reporting, when feasible. (PH-4.7)
- Improve linkages between local policy and environmental change and national and state data collection systems. (PH-4.8)
- Create and expand relevant local surveillance or other physical activity data collection systems. (PH-4.9)
  - **Objective 4.7:** By 2025, NPAP Public Health committee will assess examples of innovative approaches to local physical activity surveillance.
- Provide health data that allows communities to understand the burden of inactivity in their communities, and to tailor approaches to increase physical activity to local circumstances. (PH-4.10)
- Promote the use of existing tools and resources and identify promising practices, particularly those addressing the needs of underserved populations. (PH-4.11)

Public health organizations should disseminate tools and resources important to promoting physical activity, including resources that address the burden of disease due to



inactivity, the implementation of evidence-based strategies, and funding opportunities for physical activity initiatives. (PH-5)

# **TACTICS:**

- Create repositories and clearinghouses of information on public health practices, tools, and resources, including evidence-based and promising physical activity interventions and practices. (PH-5.1)
  - **Objective 5.1:** By 2025, NPAPA Public Health committee will create a resource checklist with at least 100 evidence-based or evidence-informed resources across all categories (measures, toolkits/programs, policies, experts).
  - <u>Objective 5.2:</u> By 2027, State Health department websites will include link to resource checklist.
- Disseminate physical activity-promoting practices and policies targeted at agencies and professional societies outside of public health (e.g., youth-serving social services, non-profits in under-resourced communities, transportation and planning, sports and recreation, education, environmental protection). (PH-5.2)
- Identify and support expansion of culturally relevant tools that build upon community assets to promote physical activity across all population groups. (PH-5.3)

#### STRATEGY 6

Public health organizations should invest equitably in physical activity, commensurate with its scale and impact on disease prevention and health promotion. (PH-6)

- Provide resources in state and local health agencies and programs for physical activity comparable to resources provided for tobacco and nutrition. Provide sustainable funding for state and local health departments so that Physical Activity and Public Health Specialists can create and implement initiatives that promote physical activity. (PH-6.1)
- Fund public health professional societies, schools of public health, and other academic units engaged in physical activity research to develop tools and resources for policymakers and practitioners that support the promotion of physical activity in communities. (PH-6.2)
- Provide sustained funding and resources to local, state, and national public health agencies that support physical activity practitioners to act as conveners of multi-sector



coalitions and to provide leadership for strategic partnerships. (PH-6.3)

- Encourage CDC and the U.S. Department of Health and Human Services to invest in capacity building by supporting MPH and PhD programs, continuing medical education, short courses, and distance-based training for physical activity and public health through the Prevention Research Centers (PRCs) and other mechanisms. (PH-6.4)
- Increase funding of CDC, Prevention Research Centers, the Physical Activity Policy Research Network (PAPREN), and the National Institutes of Health to conduct research on policy development and its impact on physical activity. (PH-6.5)



# **SPORT**

The Sport Sector represents a powerful opportunity to make transformative progress in youth and adult physical activity and health in the United States. Sports play a unique and profound role in American society, with more than 200 million youth and adults participating in some form of sports broadly defined.¹ In the United States and internationally, sport is widely seen as a platform for progress on many fronts. Promoting overall health and providing specific health benefits associated with increased physical activity, is an obvious focus. Other aims include advancing health equity, supporting child development, assisting academic achievement, accelerating inclusion, serving as a social movement strategy, stimulating economic growth, making broad cultural impacts and contributions, and, in the case of the United Nations, facilitating overall national development and progress toward global goals.

This importance of sports is borne out both in public opinion and participation. In 2015, National Public Radio, the Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health conducted a survey series that revealed 73% of all adults in the United States played sports as a youth, but that only 23% of adults continued to play a sport. Most parents (76%) who have children in middle and high school encourage their children to play sports, with 88% of parents feeling that the most important reason was that it benefitted their child's physical health. Parents also see other benefits of sports for their children, from learning about discipline or dedication (81%) to gains in mental health (73%). For adults who play sports, a majority report gains in stress reduction (58%), mental health (54%), and physical health (51%).

Even with all its benefits, the sports experience is not the same for all. Many youths are insufficiently physically active while waiting their turn to practice or play sports. Some become disappointed by sports or suffer avoidable injuries. Other youth find an array of barriers to sports participation. The overall result has been that youth participation in sports, while still large, has experienced a notable decline in recent years.<sup>3</sup> Additionally, many adults find it difficult to find the time or to identify an enjoyable, safe, and appropriate sport as they age.

Given this context, sport within the 2016 National Physical Activity Plan is of key importance. The strategies in this sector present an integrated approach to using sports as a vehicle to increase levels of physical activity and to promote health. These strategies focus on 1) policy change, 2) added infrastructure, 3) expanded access for all, 4) improved safety and care, 5) elevated surveillance, 6) more knowledgeable and purposeful roles by



key professionals as well as parents and caregivers, and 7) enlarged innovation and use of technology. The strategies and tactics in this Sport Sector form a national approach to progress, but also, they will prove useful to individuals and organizations at the community level as a framework for increasing physical activity and health in communities all across America.



# **STRATEGIES**

#### **STRATEGY 1**

Sports organizations should collaborate to establish a national policy that emphasizes the importance of sports as a vehicle for promoting and sustaining a physically active population. (SP-1)

#### STRATEGY 2

Sports organizations should establish an entity that can serve as a central resource to unify and strengthen stakeholders in the sports sector. (SP-2)

# **STRATEGY 3**

Leaders in multiple sectors should expand access to recreational spaces and quality sports programming while focusing on eliminating disparities in access based on race, ethnicity, gender, disability, socioeconomic status, geography, age, and sexual orientation. (SP-3)

# **STRATEGY 4**

Sports organizations should adopt policies and practices that promote physical activity, health, participant growth, and development of physical literacy. (SP-4)

# **STRATEGY 5**

Sports organizations should ensure that sports programs are conducted in a manner that minimizes risk of sports-related injuries and illnesses. (SP-5)

#### **STRATEGY 6**

Public health agencies, in collaboration with sports organizations, should develop and implement a comprehensive surveillance system for monitoring sports participation in all segments of the population. (SP-6)

#### STRATEGY 7

Coaches, game officials, parents, and caregivers should create safe and inclusive environments for sports participation that promote physical activity and health for youth and adult participants. (SP-7)

#### **STRATEGY 8**

Sports organizations should use advances in technology to enhance the quality of the sport experience for participants. (SP-8)



# **STRATEGIES & TACTICS**

# **STRATEGY 1**

Sports organizations should collaborate to establish a national policy that emphasizes the importance of sports as a vehicle for promoting and sustaining a physically active population. (SP-1)

# **TACTICS:**

- Build support for development of a national policy on sport by increasing awareness of the importance of such a policy among key stakeholders. (SP-1.1)
  - **Objective 1.1:** A leading sports-, university-, or government-based entity will stage a roundtable that produces a "Call to Action" expert paper on the need for and benefits of a national sport policy in the United States.
- Engage public agencies and private organizations from multiple sectors in development of a national policy on sport. (SP-1.2)
  - **Objective 1.2:** A national multi-sector committee will be convened to produce a national policy on sport, built on soliciting and curating input from professional organizations and the public.
  - **Objective 1.3:** The national multi-sector committee will invite a breadth of multi-sector organizations to become official signatories and supporters of the national sport policy once it is finalized.
- Identify an organization, either public of private, that will "house" a national policy on sport. (SP-1.3)
  - **Objective 1.4:** A national multi-sector committee will select and announce an organization(s) responsible for the national policy on sport and that will promote, update, and gain support for the national policy on sport.

#### STRATEGY 2

Sports organizations should establish an entity that can serve as a central resource to unify and strengthen stakeholders in the sports sector. (SP-2)

# **TACTICS:**

• Build awareness, among sport organizations, of the value of "backbone" entities, which leverage and coordinate resources across affiliated organizations. (SP-2.1)



- Objective 2.1: A multi-sector consortium that includes leading organizations in sports, health, and collective impact will produce a "Call to Action" expert paper on the need for and benefits of a national sport policy in the United States; concurrently focusing on organizational leadership needs, roles, and responsibilities for "backbone" entities to attract, unify, activate, and strengthen stakeholders in the sport sector.
- Engage sport organizations that currently play a coordinating role (e.g., the U.S. Olympic Committee) in the process of developing an entity that provides broad leadership for the sport sector. (SP-2.2)
  - **Objective 2.2:** A multi-sector consortium will proactively identify and engage individually and collectively existing organizations that could play a coordinating role in the process of creating a new backbone entity and/or recruiting existing organizations to help play a backbone role.
- Develop a funding mechanism for an entity that serves as a central resource for stakeholders in the sport sector. (SP-2.3)
  - **Objective 2.3:** A multi-sector consortium will secure funding, resources, and capacity for one or more "backbone" entities to serve as a central resource that progressively provides more service to unify and strengthen stakeholders in the sports sector.

Leaders in multiple sectors should expand access to recreational spaces and quality sports programming while focusing on eliminating disparities in access based on race, ethnicity, gender, disability, socioeconomic status, geography, age, and sexual orientation. (SP-3)

- Use data to identify populations who are at risk of physical inactivity, understand their specific barriers, and devise targeted initiatives to reduce disparities. (SP-3.1)
  - <u>**Objective 3.1:**</u> A leading sport organization will connect with and integrate all existing sources that track and analyze sports participation.
  - **Objective 3.2:** A leading sport organization will develop and launch a plan of action to address in a targeted fashion the most meaningful opportunities to increase physical activity through sports with a focus on increasing access and reducing disparities and barriers.
- Create opportunities for free and loosely supervised play. (SP-3.2)



- **Objective 3.3:** A national consortium will develop a plan of action aimed at progressively increasing free play in the United States and a campaign that underscores the importance of free play as a right of every child.
- **Objective 3.4:** A consortium of leading institutions and organizations will launch a comprehensive campaign to make free play a high national priority for children and youth, and to measurably increase annually the level of free play occurring in the U.S.
- Prioritize community-based, affordable forms of organized play, such as in-town leagues. Continue offering these formats into and beyond adolescence. (SP-3.3)
  - **Objective 3.5:** A national consortium will adopt, adapt, and/or develop best practices for organized play, and develop strategies to further underscore those best practices and to recognize exemplar organizations and programs.
  - **Objective 3.6:** Leading institutions and programs that focus on organized play will launch a national campaign to educate about and measurably increase organized play.
- Incorporate sports activities into before- and after-school programming. (SP-3.4) **Objective 3.7:** A national consortium will launch a national campaign to continuously increase the number of high quality before-, during-, and after-school programs in the United States.

Sports organizations should adopt policies and practices that promote physical activity, health, participant growth, and development of physical literacy. (SP-4)

- Identify and disseminate evidence-based practices that prioritize moderate- to vigorous-intensity physical activity for all participants during practices and games. (SP-4.1)
  - **Objective 4.1:** Leading youth sports and physical activity organizations will hold a roundtable or other means to identify high quality and evidence-based approaches for sports to ensure adequate physical activity for all, and to create a campaign to inform and persuade sports organizations to undertake effective approaches.



- **Objective 4.2:** Leading youth sports and physical activity organizations will execute a campaign to effectively persuade sports organizations to implement strategies that prioritize moderate to vigorous physical activity during practices and games.
- Identify and reward sport organizations that foster sports models that are inclusive of groups that are underserved by traditional sports programs. (SP-4.2)
  - **Objective 4.3:** A national consortium of leading sports and inclusion organizations will identify criteria that identifies exemplar programs that foster inclusion of underserved groups, with an emphasis on evidence-based and evidence-informed characteristics.
  - **Objective 4.4:** A national consortium of leading sports and inclusion organizations will develop and launch a national recognition strategy and reward structure for exemplar programs.
- Establish pricing models and sport season timelines that encourage multi-sport participation. (SP-4.3)
  - **Objective 4.5:** A leading sport organization in partnership with other organizations will develop and launch a national campaign for encouraging multi-sport participation as a fundamental goal for youth sports with major benefits.
- Embrace developmentally appropriate forms of play, through frameworks, such as the U.S. Olympic Committee's American Development Model. (SP-4.4)
  - **Objective 4.6:** All sport governing bodies will include the general principles of the American Development Model in their education and programming.

Sports organizations should ensure that sports programs are conducted in a manner that minimizes risk of sports-related injuries and illnesses. (SP-5)

- Establish policies and practices that ensure sports programs put the highest priority on the health and safety of participants. (SP-5.1)
  - **Objective 5.1:** A consortium of leading organizations with interest in sports safety will develop and disseminate a minimal list and an exemplar list of safety standards to be implemented at practice and competitions ambiguous to sport.
  - **Objective 5.2:** A majority of sports organizations will have adopted at least the minimal list of safety standards and 50% have adopted the exemplar list.



- Educate parents, athletes, coaches, teachers, and others about the signs and symptoms of sports injuries and conditions (e.g., brain injury, heat illness, and exertional sickling). (SP-5.2)
  - **Objective 5.3:** Youth sports and medical organizations will increase the number of sports organizations that use effective education and training for parents, athletes, coaches, teachers, and others.
- Ensure that sports equipment, uniforms, playing surfaces, and environmental conditions are checked for safety and best conditions. (SP-5.3)
  - **Objective 5.4:** A consortium of leading sports safety organizations will develop and disseminate a national standard for environmental safety standards (e.g., lightning safety, heat index, etc.) to be used by all sport organizations.
  - **Objective 5.5:** Leading sports safety organizations will develop and disseminate national safety standards on the minimal and exemplary maintenance and safety standards for playing surfaces.
  - **Objective 5.6:** Youth sports and medical organizations will increase the number of sports organizations and facilities that meet the minimum and exemplary maintenance and safety standards.
- Encourage importance of collaboration with medical professionals to ensure safe outcomes during play. (SP-5.4)
  - **Objective 5.7:** A consortium of leading youth sports and medical organizations will develop and disseminate basic principles and guidance sport organizations can refer when seeking guidance from or inclusion of local medical professionals.
  - **Objective 5.8:** A consortium of leading youth sports and medical organizations will create and populate an online resource that allows sports organizations to connect with medical professionals.
  - **Objective 5.9:** Youth sports and medical organizations will increase the number of sports and other organizations that collaborate with medical professionals for practice and competition.

Public health agencies, in collaboration with sports organizations, should develop and implement a comprehensive surveillance system for monitoring sports participation in all segments of the population. (SP-6)



- Develop and implement a roadmap that will lead to the establishment of a comprehensive National Surveillance Collaborative for Sports, Physical Activity, and Health in the United States for all populations. The aim of the Collaborative will be to expand the use of data made available to, translated for, and used by all stakeholders to design and improve sports programs at all levels. (SP-6.1)
  - **Objective 6.1:** A consortium of sports, technology and data, and physical activity organizations will establish National Surveillance Collaborative for Sports, Physical Activity, and Health which will identify a central agency/repository for participation common data elements.
- Create a national survey tool that measures the overall experience of participants. (SP-6.2)
  - **Objective 6.2:** A consortium of leading sports and other organizations will hold a convening to develop a national survey tool, methodology, and data collection, analysis, and reporting.
  - **Objective 6.3:** A consortium or dedicated organization will launch an annual national survey that measures the overall experience of sports participants.

Coaches, game officials, parents, and caregivers should create safe and inclusive environments for sports participation that promote physical activity and health for youth and adult participants. (SP-7)

- Align coaching accreditations and curricula with best practices. (Sp-7.1)
  - **Objective 7.1:** A consortium of leading organizations in sports, health, and coaching will define essential educational content, identify coaching best practices across all sports, and develop strategies to encourage adoption.
  - <u>Objective 7.2:</u> A consortium will launch an ongoing campaign to have all sports organizations to adopt and require standards of excellence in education, accreditation, and practices.
- Use mandates and incentives to increase the number of coaches trained in key competencies, including basic safety and immediate care, plus sport-specific rules. (SP-7.2)



- **Objective 7.3:** A consortium of leading organizations in sports, health, and coaching will identify feasible mandates and incentives that would bolster coach participation in basic safety and immediate care programs.
- **Objective 7.4:** A consortium will partner with sports and coaching organizations to continually increase the number of coaches training in key competencies.
- Develop and promote educational resources outlining important factors related to parental and caregiver behavior that affects the development of youth athletes, including information about creating a positive environment with a focus on fun and discovery, being a good role model, and other topics, such as goal setting, good sportsmanship, and importance of sustained physical activity levels. (SP-7.3)
  - **Objective 7.5:** A consortium of leading coaching, parent, and sports health organizations will launch a campaign to significantly advance the education and improve the behavior of parents and caregivers in youth sports.
- Increase awareness about the need for parents and caregivers (and others who can properly advocate for children other than their own) to encourage sport sampling, where youth play multiple sports throughout the year, including formal (sports leagues) and informal (pick-up games) sports to ensure increased levels of physical activity. Allow youth to self-select their sport(s) of choice as they get older and have experienced a variety of sports. (SP-7.4)
  - **Objective 7.6:** Create a multi-sector coalition to promote the merits of sports sampling.
- Support parents and caregivers in efforts to demand that all youth sports facilities and equipment are safe and that leagues adopt and follow the guidelines established by the United States Olympic Committee's SafeSport program (SafeSport.org). Require that all coaches be required to take the SafeSport training course. (SP-7.5)
  - Objective 7.7: Leading sports and sports medicine organizations will set measurable goals for annual progress; identify mechanisms to collect, analyze, use, and promote performance data in this area and what it demonstrates as to trends, needs, and new developments, aiming at major increases in the number of youth sport coaches across sports who have completed the SafeSport program; with the ultimate aim of 100% of coaches completing SafeSport program.
- Encourage communication between medical professionals and coaches to ensure safe outcomes during play. (SP-7.6)
  - **Objective 7.8:** Leading sports medicine and youth sports organizations will develop and launch a campaign to improve and enlarge the effective



communication and collaboration between coaches and medical professionals.

#### STRATEGY 8

Sports organizations should use advances in technology to enhance the quality of the sport experience for participants. (SP-8)

- Leverage emerging technologies in collaboration with recreational, competitive, and elite sport organizations – to connect all people with the full array of sports and recreation options in their geographic communities for people of all abilities and levels of physical activity. (SP-8.1)
  - **Objective 8.1:** A consortium of leading sports and technology organizations will launch a campaign that includes multiple components, foremost a web resource to connect people with sports and recreation opportunities in every community in the United States.
- Make advances in sports technology more widely known and available to all. (SP-8.2)
  Objective 8.2: A consortium of leading sports and technology organizations will identify practical strategies for making sports technology more known, used, and accessible, including sports technologies that promote physical activity (e.g., inexpensive pedometers) at the community level.
  - **Objective 8.3:** A consortium will develop and disseminate strategies and guides communities can use to promote technologies that make physical activity fun and accessible to all.
- Use technological resources to identify or create tools and apps that can produce customizable surveys for teams and leagues to use to better understand the sport experience of their participants. (SP-8.3)
  - **Objective 8.4:** A consortium of leading sports and technology organizations will support the creation, identification, and usage of technological solutions to better understand and respond to the sport experiences of participants.
  - <u>**Objective 8.5:**</u> A consortium will launch a campaign to expand the uses of technology in understanding and improving the sports experiences.
- Use technological innovation to promote physical activity to spectators and fans of sports at events. (SP-8.4)



- **Objective 8.6:** A consortium of leading sports and technology organizations will launch a campaign to develop content that promotes physical activity that can be widely used at sport events.
- Create a national coordinating network of leaders and hubs focused on promoting existing and future technological innovation that can increase participation in quality sports programs and enhance the quality of the sport experience for participants. (SP-8.5)
  - **Objective 8.7:** Leading sports and technology organizations will formally launch the national coordinating network, aimed at achieving widespread participation and adoption of hub and content by sport organizations; and an ongoing examination and promotion of existing, promising, and emerging technologies.



# TRANSPORTATION, LAND USE, AND COMMUNITY DESIGN

We must be intentional in the design and development of our communities to make it easier for people to be active on a daily basis. Equitable design of communities and transportation systems can make walking and biking both safe and enjoyable, provide housing that is conducive to healthy lifestyles with affordable transportation options, and offer ample space for active recreation. Other co-benefits include increasing access to essential destinations, such as grocery stores, schools, jobs and healthcare services; improving quality of life and access to economic opportunity; improving air quality and decreasing energy consumption; and strengthening social networks.

Policy and program actions in this sector have great potential to improve people's lives. For example, effective land use policies put common destinations near where people live, with ample safe and accessible places for active recreation, preferably all with walking and biking connections. Land use and zoning decisions do as much to reinforce active behavior as transportation investments, keeping in mind that some policies need to be changed to support the diversity of communities and the changing fabric of the demographics.

High-quality pedestrian and bicycle facilities can make it possible, safe, and enjoyable to walk and bicycle for transportation. Design that supports walking and biking also promotes the use of public transportation because it improves access to the transit station or bus stop; and it supports communities of color, people with disabilities and communities with lower socioeconomic status, all of whom need transportation options that are affordable and safe.

At a fine-grain level, the characteristics of transportation networks (e.g., the width of trails and street crossings) along with the aesthetics of buildings, layout of parks, and the design of landscaping are all important elements that, when combined with decisions on a larger scale, enhance opportunities for the greatest number of people to be active.

Fortunately, the demand for such places is growing steadily and the need for these places is growing as well. A 2014 Transit Center survey of nearly 12,000 individuals in regions across the country found that regardless of where they live now, most people would like to live in places where amenities (a mix of shops, services, schools, and offices) are within walking distance, regardless of urban, suburban, or rural setting. More than 600 local and state ordinances for Complete Streets guidelines direct transportation engineers' efforts to balance all modes on our streets. With diminished federal funding, localities are passing local ballot measures to increase funds for transit investment, including provisions for transit connectivity, essentially the biking and walking legs of transit trips.



Support by local, state, and national leaders is also growing. The National League of Cities and the First Ladies Let's Move! initiative joined forces to promote "Let's Move Cities and Towns," which is embraced across the nation. People are driving less: vehicle miles traveled have plateaued since 2008 and continue to plateau in spite of the slow upturn in the economy.<sup>4</sup> In addition, opportunity exists to convert short trips, as 41% of all trips taken in the U.S. are three miles or less and nearly 19% are one mile or less.<sup>5</sup> Yet, nearly 60% of trips one mile are driven.<sup>6</sup>

The Transportation, Land Use and Community Design Sector of the National Physical Activity Plan has developed strategies that focus on: 1) integrating active design principles into community planning process, 2) changing zoning laws to favor mixed use developments that encourage physical activity, 3) advocating for funding and policies that increase active transportation, 4) investing in data collection to inform policy, and 5) implementing initiatives to encourage and reward more active transportation. Equity is a principle that permeates the recommendations in this section, for we must make decisions and create conditions that enable all people to have better and safer environments conducive for improved health, access to jobs and other benefits.

Immediate and near-term changes to improve access and support active transportation networks will require many strong multi-sectoral partnerships and collaborations that represent, at a minimum, the sectors/disciplines within the National Physical Activity Plan. This collaborative work can be guided by the strategies in this section.



# **STRATEGIES**

#### **STRATEGY 1**

Community planners should integrate active design principles into land-use, transportation, community, and economic development planning processes. (T-1)

#### STRATEGY 2

Communities should change zoning laws to require or favor mixed-use developments that place common destinations within walking and bicycling distance of most residents and incorporate designated open space suitable for physical activity. (T-2)

# **STRATEGY 3**

Physical activity and public health organizations should advocate for funding and policies that increase active transportation and physical activity through greater investment in bicycle and pedestrian infrastructure and transit to create equitable opportunities for all. (T-3)

#### **STRATEGY 4**

Transportation and public health agencies should invest in and institutionalize the collection of data to inform policy and to measure the impacts of active transportation on physical activity, population health, and health equity. (T-4)

# **STRATEGY 5**

Transportation and public health agencies should implement initiatives to encourage, reward, and require more walking, bicycling, transit, and other active mobility uses for routine transportation. (T-5)



# STRATEGIES AND TACTICS

# **STRATEGY 1**

Community planners should integrate active design principles into land-use, transportation, community, and economic development planning processes. (T-1)

- Integrate considerations for non-motorized travel and public health into formalized planning processes, such as master plans, comprehensive plans, zoning code updates, housing and commercial developments, metropolitan planning organizations' (MPO) transportation improvement project lists, trail plans, and regional transportation plans, with specific focus on improving environments in low-income communities. (T-1.1)
  - Objective 1.1: By 2025, Metropolitan Planning Organizations, or similar agencies, will convene multi-disciplinary regional stakeholder committees to integrate considerations for non-motorized travel and public health into formalized planning processes.
  - **Objective 1.2:** By 2030, multi-disciplinary regional stakeholder committees, across the U.S., will establish a baseline inventory of plans that have integrated active design principles within them.
- Encourage local and state jurisdictions to adopt regulations that require buildings and transportation facilities to be designed according to principles that maximize safety and attractiveness for all pedestrians and bicyclists. (T-1.2)
  - **Objective 1.3:** By 2025, Metropolitan Planning Organizations, or similar agencies, will convene multi-disciplinary regional stakeholder committees to encourage adoption of regulations that require buildings and transportation facilities to be designed according to principles that maximize safety and attractiveness for all pedestrians and bicyclists.
  - **Objective 1.4:** By 2030, the multi-disciplinary regional stakeholder committees will track local jurisdictions that adopt building and streetscape design guidelines based on consensus documents.
- Establish parking policies that encourage and support active living and active transportation. (T-1.3)
  - **Objective 1.5:** By 2025, at least one national city planning or transportation organization will incorporate an organizational goal for promoting best practices that encourage active living and active transportation into all of



the organization's relevant activities, such as educational accreditation, continuing education, guidelines, and other publications.

- **Objective 1.6:** By 2030, the multi-disciplinary regional stakeholder committees will track local jurisdictions that remove parking minimums and enact parking maximums in order to identify best parking-related policies that encourage and support active living and active transportation.
- **Objective 1.7:** By 2030, a national city planning or transportation organization will take the lead in compiling an inventory of planning documents that remove parking minimums and enact parking maximums, especially those that also encourage active living and active transportation.

# **STRATEGY 2**

Communities should change zoning laws to require or favor mixed-use developments that place common destinations within walking and bicycling distance of most residents and incorporate designated open space suitable for physical activity. (T-2)

- Encourage local jurisdictions to replace separate-use zoning laws with those that require or favor mixed-use zoning or provide incentives for using a mixed use code. (T-2.1)
  - Objective 2.1: By 2025, national transportation and city planning organizations will partner with professional, industry, advocacy, and technical assistance organizations to develop a set of model zoning codes, practices, and procedures that require or favor mixed-use zoning and protect open space, farmland, and natural resources.
  - **Objective 2.2:** By 2026, a multi-disciplinary committee will convene to develop a national database of land-use zoning policies.
- Encourage state governments to provide incentives for local jurisdictions to adopt mixed-use zoning laws. (T-2.2)
  - **Objective 2.3:** By 2030, national transportation organizations will partner with state governments to increase the number of states that provide requirements or incentives for mixed-use zoning and related policies.
  - **Objective 2.4:** By 2030, national and state transportation organizations will partner with state governments to increase the number of local jurisdictions that adopt mixed-use zoning and related policies.



- Develop and disseminate policy tools to reduce the possible impacts of gentrification on low-income neighborhoods that adopt healthy design principles, as they become more desirable and experience rising home values. (T-2.3)
  - Objective 2.5: By 2025, state and local transportation, city planning, and housing organizations will partner with professional, industry, advocacy, and technical assistance organizations to develop and promote model codes, policies, and practices designed to reduce gentrification and displacement in housing while promoting equitable economic development.
  - **Objective 2.6:** By 2030, a national transportation, city planning, or housing organization will take the lead in compiling an inventory of state and local organizations that have adopted codes, policies, and practices designed to reduce gentrification and equitable economic development.

Physical activity and public health organizations should advocate for funding and policies that increase active transportation and physical activity through greater investment in bicycle and pedestrian infrastructure and transit to create equitable opportunities for all. (T-3)

- Increase federal, state, and local investments, including the prioritization of lowincome communities, to create and maintain seamless networks of high-quality sidewalks, crosswalks, bike facilities, greenways, trails, and transit that are compliant with the Americans with Disabilities Act, to provide individuals of all ages and abilities with safe opportunities for active transportation. (T-3.1)
  - **Objective 3.1:** By 2025, transportation advocacy organizations will track and rank (as a percentage of each state's total budget) state-level spending that promotes active transportation.
- Prioritize federal, state, and local resources to ensure that low-income communities (rural, urban and suburban), which are disproportionately affected by higher rates of bicycle and pedestrian deaths and injuries and which generally lack safe infrastructure for walking and bicycling, are able to access funds and technical assistance to improve bicycle and pedestrian infrastructure and transit. (T-3.2)
  - <u>Objective 3.2:</u> By 2025, transportation advocacy organizations will collect and disseminate sample active transportation policies that include a strong emphasis on transportation equity.



- **Objective 3.3:** By 2030, transportation advocacy organizations will establish a database to track states and localities which adopt policies that prioritize active transportation funds for low-income communities.
- Reform transportation spending at all levels to tie it to larger goals for health, safety, equity, and the environment—rather than to a focus only on traffic volumes and speeds. (T-3.3)
  - **Objective 3.4:** By 2025, transportation advocacy organizations will track the number of states and localities that utilize public health-related performance measures and impacts to determine transportation projects and priorities.
- Use the tax code to provide incentives to private employers and businesses to implement programs and infrastructure that support bicycling, walking, and public transit. (T-3.4)
  - **Objective 3.5:** By 2025, transportation advocacy organizations will track the number of federal, state, and county laws that provide tax or other incentives designed to increase active transportation and related infrastructure.
  - **Objective 3.6:** By 2030, transportation advocacy organizations will establish a database to track which states and localities provide tax or other incentives designed to increase active transportation and related infrastructure.

Transportation and public health agencies should invest in and institutionalize the collection of data to inform policy and to measure the impacts of active transportation on physical activity, population health, and health equity. (T-4)

- Improve and expand existing data collection sources to assess active transportation patterns and trends that include local-area data. (T-4.1)
  - Objective 4.1: By 2025, transportation organizations will partner with local metropolitan planning organizations to build data analysis capacity to collect, maintain, and analyze active transportation data for all localities within the metropolitan planning organization's jurisdiction.
  - Objective 4.2: By 2028, transportation organizations will advocate for the addition of two questions to the American Community Survey (ACS) that gather



more specific information about using active transportation for tripmaking outside of work trips.

- **Objective 4.3:** By 2030, transportation organizations will track improvements in national, state, and local data collection on active transportation.
- Develop new data collection sources for pedestrian and bicyclist counts and impacts of bicycle and pedestrian trips on economic and personal health that consider age, race/ethnicity, gender, ability and income. (T-4.2)
  - **Objective 4.4:** By 2025, transportation organizations will partner with metropolitan planning organizations to expand data collection capacity of metropolitan planning organizations for pedestrian and bicycle trips.
  - **Objective 4.5:** By 2035, transportation organizations will regularly track new data collection on pedestrian and bicycle mode shift and related impacts at the national, state, regional, and local levels and expand efforts to track demographics with these metrics.
- Develop performance metrics for walking and bicycling for transportation. (T-4.3)
- Improve transportation modeling of active transportation trips and use of multimodal travel demand models. (T-4.4)
  - **Objective 4.9:** By 2025, a majority of local jurisdictions will have created internal departments and capacity to incorporate active transportation data and goals in transportation planning models.
  - **Objective 4.10:** By 2030, traditional models used to predict automobile movements will be replaced by Activity Based Models that consider trip purpose and individual characteristics in order to assign the most appropriate travel mode to the trip (e.g., walk, bike, transit, or auto).

# **STRATEGY 5**

Transportation and public health agencies should implement initiatives to encourage, reward, and require more walking, bicycling, transit, and other active mobility uses for routine transportation. (T-5)

# **TACTICS:**

• Provide requirements and incentives for employers and municipalities to implement comprehensive transportation demand management programs to encourage increased active commuting (walk, bike, transit). (T-5.1)



- **Objective 5.1:** By 2030, transportation and government entities will partner with national employer wellness organizations to provide a baseline of best-practice comprehensive transportation demand management programs that encourage active commuting.
- Objective 5.2: By 2035, transportation and government entities will partner with national employer wellness organizations to promote best-practice requirements and incentives that have been shown to effectively increase transportation demand management programs encouraging active commuting.
- **Objective 5.3:** By 2035, transportation and government entities, in partnership with national employer wellness organizations, will track and report on transportation demand management programs that encourage active or remote commuting.
- Develop and disseminate market-based tools to encourage active transportation. (T-5.2)
  - **Objective 5.4:** By 2030, national active transportation leaders will develop and promote a database of existing evidence-based and market-oriented transportation demand management tools that encourage active transportation.
- Support community bicycle sharing programs. (T-5.3)
  - **Objective 5.5:** By 2025, a national committee composed of leaders from local jurisdictions, public health, and transportation will be convened to track the existence, location, and quality of bicycle sharing and other active micro-mobility programs.
  - **Objective 5.6:** By 2030, the national committee will identify bicycle sharing best practices and the quality of existing bicycle sharing and other active micro-mobility programs in the United States.
  - Objective 5.7: By 2030, the national committee will promote and assist regional and local leaders with implementing and expanding community bicycle sharing and other active micro-mobility programs within their jurisdictions.
- Promote and expand existing Bicycle-Friendly and Walk-Friendly Community, Campus, and Business award programs. (T-5.4)
  - <u>Objective 5.8:</u> By 2030, national active-transportation organizations will identify and disseminate findings on equitable economic, environmental, and health benefits of high performing communities.



- Objective 5.9: By 2035, national pedestrian and bicycle advocacy and education organizations will promote and expand existing Bicycle-Friendly and Walk-Friendly Community, Campus, and Business award programs.
- Develop and implement best-practice programs and policies that support Safe Routes to Schools programming that support equitable opportunities for active travel to K-12 schools. (T-5.5)
  - <u>Objective 5.10:</u> By 2025, a national transportation or education advocacy organization will develop a database to track changes in school siting policies.
  - **Objective 5.11:** By 2025, a national transportation or education advocacy organization will develop a database to annually measure and track school travel mode share, documenting disparities by age, gender, income and race/ethnicity.
  - **Objective 5.12:** By 2030, school districts will track and report changes in school travel mode shares in the database.
- Institutionalize professional education and certification programs' inclusion of best practices and evolving research in active transportation design and policies, for engineers, planners, architects, landscape architects, public health, public policy, and related professions. (T-5.6)
  - **Objective 5.13:** By 2025, professional education and certification programs will establish best practice criteria for course content related to active transportation in city planning, public administration, transportation engineering and planning, and public health courses.
- Implement comprehensive transportation safety programs using best practices to minimize pedestrian and bicycle collisions, injuries, and fatalities. (T-5.7)
  - **Objective 5.14:** By 2025, national transportation partners will develop and disseminate a comprehensive list of best-practice transportation safety programs that have been shown to minimize pedestrian and bicycle collisions, injuries, and fatalities.
  - **Objective 5.15:** By 2030, state and regional transportation partners will develop a baseline of state, regional, and local jurisdictions that adopt evidence-based pedestrian and bicyclist safety programs.
- Use events, short-term interventions, and demonstration and pilot projects to create knowledge of and demand for permanent infrastructure and policy improvements for walking, cycling, transit, and other forms of transportation. (T-5.8)



- Objective 5.16: By 2025, state and local transportation partner agencies and national advocacy organizations will have developed a national communication strategy for sharing success stories of short-term interventions, demonstrations, and pilot projects that create knowledge of and demand for permanent infrastructure and policy improvements for walking, cycling, and transit.
- Adjust physical activity outreach, promotion, and messages appropriately for various target audiences; do not focus solely on "exercise" promotion, but include utility and commute trips. (T-5.9)
  - **Objective 5.17:** By 2025, transportation and government entities will partner to develop physical activity outreach, promotion, and messaging resources that recognize the benefits of active transportation-oriented designs.



# **REFERENCES**

# **Business and Industry**

- 1. Institute of Medicine, The Future of the Public's Health in the Twenty-first Century. Washington: National Academies Press, 2003.
- 2. Pronk NP. Fitness of the U.S. workforce. Annual Review of Public Health. 2015
- 3. Pronk NP. Physical activity promotion in business and industry: Evidence, context, and recommendations for a national plan. *Journal of Physical Activity and Health*. 2009;6(Suppl 2):S220-S235.
- 4. Physical activity assessment at work PAA. (n.d.).
- 5. Whitsel, L. P., Pate, R. R., Ablah, E., Lemon, S. C., Pronk, N. P., Wojcik, J. R., Walker, A., Grossmeier, J., Pollack, K. M., Whitsel, L. P., Bryant, C. X., Whitsel, L. P., Arena, R., Kaminsky, L. A., Berrigan, D., Katzmarzyk, P. T., Calitz, C., Grossmeier, J., Pshock, J., ... Pronk, N. P. (2019). Editor's desk: Promoting physical activity in the workplace. *American Journal of Health Promotion*, 33(2), 312–326. doi: 10.1177/0890117118816750
- 6. Physical Activity Assessment at Work Importance of Using Standardized Measures. (n.d.).
- 7. Fang, K., & Pronk, N. (2022). Assessment of fitness, health, and well-being in the occupational setting: A pragmatic approach. *ACSM'S Health & Fitness Journal*, *26*(5), 58–67.
- 8. Physical Activity Alliance. (2022, August 23). CEO Pledge. PAA.
- 9. Whitsel, L. P., Huneycutt, F., Anderson, D. R., Beck, A. M., Bryant, C., Bucklin, R. S., Carson, R. L., Escaron, A. L., Hopkins, J. M., Imboden, M. T., McDonough, C., Pronk, N. P., Wojcik, J. R., Zendell, A., & Ablah, E. (2021). Physical activity surveillance in the United States for work and commuting. *Journal of Occupational & Environmental Medicine*, 63(12), 1037–1051.
- 10. Centers for Disease Control and Prevention. (2021, August 4). *Planning, assessment, and evaluation tools*. Centers for Disease Control and Prevention.

# **Community Recreation, Fitness, and Parks**

- 1. Spangler KJ. Doing our part to promote healthy lifestyles. Parks & Recreation (Ashburn). 1997;32(10):55-61.
- 2. Godbey G, Mowen A, Ashburn VA. The benefits of physical activity provided by park and recreation services: The scientific evidence. Ashburn, VA, USA: National Recreation and Park Association; 2010.
- 3. Brownson RC, Baker EA, Housemann RA, Brennan LK, Bacak SJ. Environmental and policy determinants of physical activity in the United States. *American Journal of Public Health*, 2001;91(12):1995–2003.



4. Mowen, A. J., Graefe, A. R., Barrett, A. G., Roth, K., & Godbey, G. C. (2016). Americans' Broad-based Support for Local Recreation and Park Services: Results from a Nationwide Study. Ashburn, VA: National Recreation and Park Association.

#### **Education**

- 1. SHAPE America. The Essential Components of Physical Education, 2015.
- 2. Centers for Disease Control and Prevention. Comprehensive School Physical Activity Program (CSPAP), 2013.
- 3. Institute of Medicine. Educating the Study Body: Taking Physical Activity and Physical Education to School. Washington, DC: National Academies Press, 2013.
- 4. U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity Among Youth, 2012.
- 5. Institute of Medicine. Early Childhood Obesity Prevention Policies. Washington, DC: National Academies Press, 2011.
- 6. American College Health Association. Healthy Campus 2020, 2012.
- 7. Centers for Disease Control and Prevention. School Health Guidelines to Promote Healthy Eating and Physical Activity, 2011.
- 8. Centers for Disease Control and Prevention. School Health Policies and Practices Study (SHPPS), 2014.
- 9. National Association for Sport and Physical Education. SHAPE of the Nation Report, 2012.
- 10. Centers for Disease Control and Prevention. Whole School, Whole Community, Whole Child (WSCC).
- 11. United Nations Educational, Scientific and Cultural Organization [UNESCO]. (2005). Guidelines for Inclusion: Ensuring access to education for all.

# Faith-based Settings

- 1. Pew Research Center. America's Changing Religious Landscape 2015.
- 2. Hartford Institute for Religion Research. Fast Facts about American Religion.
- 3. Levin J. Engaging the faith community for public health advocacy: an agenda for the Surgeon General. Journal of Religion & Health 2013; 52(2):368-385.
- 4. Lasater TM, Wells BL, Carleton RA, et al. The role of churches in disease prevention research studies. Public Health Reports 1986; 101(2):125-131.
- 5. Campbell MK, Hudson MA, Resnicow K, et al. Church-based health promotion interventions: evidence and lessons learned. Annual Review of Public Health 2007; 28:213-234.
- 6. DeHaven MJ, Hunter IB, Wilder L, et al. Health programs in faith-based organizations: are they effective? American Journal of Public Health 2004; 94(6):1030-1036.



- 7. Newlin K, Dyess SM, Allard E, et al. A methodological review of faith-based health promotion literature: Advancing the science to expand delivery of diabetes education to Black Americans. Journal of Religion & Health 2012; 51(4):1075-1097.
- 8. Bopp M, Peterson JA, Webb BL. A comprehensive review of faith-based physical activity interventions. American Journal of Lifestyle Medicine 2012; 6(6):460-478.

# **Healthcare**

- 1. CDC/NCHS, 2012 National Ambulatory Medical Care Survey
- 2. Trends in Adults Receiving a Recommendation for Exercise or Other Physical Activity from a Physician or Other Health Professional.
- 3. Exercise is Medicine®: A Standard in the Clinical Setting.
- 4. Coleman KJ, Ngor E, Reynolds K, Quinn VP, Koebnick C, Young DR, Sternfeld B, Sallis RE. Initial validation of an exercise "vital sign" in electronic medical records. *Medicine & Science in Sports & Exercise*, 2012 Nov;44(11):2071-6.
- 5. Ball TJ, Joy EA, Gren LH, Cunningham R, Shaw JM. Predictive Validity of an Adult Physical Activity "Vital Sign" Recorded in Electronic Health Records. *Journal of Physical Activity and Health*, 2015 Oct 7.
- 6. Pojednic RM, Trilk J, Phillips EM. Lifestyle Medicine Curricula: An Initiative to Include Lifestyle Medicine in Our Nation's Medical Schools. *Academic Medicine*, 2015 Jul;90(7):840-1.
- 7. Freeman AM, Curran-Everett D, Sabgir D. How starting a patient education/fitness program can improve health. 'Walk with a Doc' program shows you how to model healthy behaviors and strengthen the patient-physician bond. *Medical Economics*, 2014 Jan 10;91(1):42-4, 47-8.
- 8. Lobelo F, Stoutenberg M, Hutber A. The Exercise is Medicine Global Health Initiative: a 2014 update. *British Journal of Sports Medicine*, 2014 Dec;48(22):1627-33.
- 9. NCQA. (2020, December 28). Physical activity in older adults. NCQA.
- 10. National Healthcare Quality Report, 2013: Chapter 3. Effectiveness of Care Across the Lifespan.

#### **Media and Communications**

- 1. Brown, D. R., Soares, J., Epping, J. M., Lankford, T. J., et al. (2012). Standalone mass media campaigns to increase physical activity: a community guide updated review. *American Journal of Preventive Medicine*, 43(5), 551-561.
- 2. Leavy, J. E., Bull, F. C., Rosenberg, M., & Bauman, A. (2011). Physical activity mass media campaigns and their evaluation: a systematic review of the literature 2003–2010. *Health Education Research*, 26(6), 1060-1085.
- 3. Ajibola, A. I., Hajifathalian, K., & Danaei, G. (2013). Do mass media



- campaigns improve physical activity? a systematic review and meta-analysis. *Archives of Public Health*, 71(1), 20.
- 4. Guide to Community Preventive Services. Campaigns and informational approaches to increase physical activity: Community-wide campaigns.
- 5. Guide to Community Preventive Services. Behavioral and social approaches to increase physical activity: Individually adapted health behavior change programs.

# **Military Settings**

- 1. Bornstein D, Grieve G, Clennin M, McLain A, Whitsel L, Beets M, Hauret K, Jones B, Sarzynksi M. Which U.S. states pose the greatest threats to military readiness and public health? Public health policy implications for a cross-sectional investigation of cardiorespiratory fitness, body mass index, and injuries among U.S. Army recruits. *Journal of Public Health Management and Practice*. 2019;25(1):36–44. doi: 10.1097/PHH.00000000000000778.
- 2. Knapik J, Sharp M, Steelman R. Secular trends in the physical fitness of United States Army recruits on entry to service, 1975–2013. *Journal of Strength and Conditioning Research*. 2017;31(7):2030–2052. doi: 10.1519/JSC.000000000001928.
- 3. Malecki HL, Gollie JM, Scholten J. Physical activity, exercise, whole health, and integrative health coaching. *Physical Medicine and Rehabilitation Clinics of North America*. 2020;31(4):649–663. doi: 10.1016/j.pmr.2020.06.001. Epub 2020 Sep 3. PMID: 32981584.
- 4. Gilroy C. Recruiting, Retention and End of Strength Overview. Prepared statement of Dr. Curtis Gilroy, Director of Accession Policy in the Office of the Under Secretary of Defense for Personnel and Readiness, before the House Armed Services Personnel Subcommittee. March 3, 2009.
- 5. Molloy JM, Pendergrass TL, Lee IA, Chervak MC, Hauret KG, Rhon DI. Musculoskeletal injuries and United States Army readiness. Part I: Overview of injuries and their strategic impact. *Military Medicine*. 2020;185(9-10): e1461–e1471.
- 6. Hauret KG, Jones BH, Bullock SH, Canham-Chervak M, Canada S. Musculoskeletal injuries description of an under-recognized injury problem among military personnel. *American Journal of Preventive Medicine*. 2010;38(1 Suppl):S61–70.
- 7. Grimm PD, Mauntel TC, Potter BK. Combat and noncombat musculoskeletal injuries in the US military. *Sports Medicine and Arthroscopy Review.* 2019;27(3):84–91. doi: 10.1097/JSA.000000000000246.
- 8. Hoerster KD, Lehavot K, Simpson T, McFall M., Reiber G, Nelson KM. Health and health behavior differences: U.S. military, veteran, and civilian men. *American Journal of Preventive Medicine*. 2012;43(5):483–489.
- 9. 2018 Physical Activity Guidelines Advisory Committee. 2018 Physical Activity



- Guidelines Advisory Committee Scientific Report. Washington, DC: U.S. Department of Health and Human Services, 2018.
- 10. Pronk NP, Martinson B, Kessler RC, Beck AL, Simon GE, Wang P. The association between work performance and physical activity, cardiorespiratory fitness, and obesity. *Journal of Occupational and Environmental Medicine*. 2004;46(1):19–25.
- 11. Pronk NP, Goodman MJ, O'Connor PJ, Martinson BC. Relationship between modifiable health risks and short-term health care charges. *JAMA*. 1999;282(23):2235–2239.
- 12. Spoehr TW. Improving America's long-term military recruiting outlook. The Heritage Foundation Center for National Defense. October 5, 2021.
- 13. Tulchinsky TH, Varavikova EA. *The New Public Health, Third Edition*. San Diego (CA): Elsevier Academic Press, 2014.
- 14. *VA* and Fitbit Help Support Veterans' Health and wellness during COVID-19 pandemic. VA News. (2021, January 12).
- 15. Employee health promotion disease prevention guidebook. (2011).
- 16. U.S. Department of Veterans Affairs. (2013, August 15). *Whole health*. U.S. Department of Veterans Affairs.
- 17. National Academies. (n.d.). *Physical Activity and Health Innovation Collaborative*. National Academies.
- 18. WBDG. (2020, September 30). *UFC 2-100-01 installation master planning, with change 1.* Whole Building Design Guide.

# **Public Health**

- 1. Donato, K. A. (2006). National health education programs to promote healthy eating and physical activity. *Nutrition Reviews*, 64(suppl 1), S65-S70.
- 2. Baker, P. R., Francis, D. P., Soares, J., Weightman, A. L., & Foster, C. (2015). Community wide interventions for increasing physical activity. Cochrane Database of Systematic Reviews, 1, CD008366.
- 3. MR, U. M., Perry, C. K., Sumrall, J. C., Patterson, M. S., Walsh, S. M., Clendennen, S. C., & O'Hara Tompkins, N. (2015). Physical Activity-Related Policy and Environmental Strategies to Prevent Obesity in Rural Communities: A Systematic Review of the Literature, 2002-2013. *Preventing Chronic Disease*, 13, E03-E03.
- 4. Engelen, L., Bauman, A., Bellew, B., Caillaud, C., Merom, D., Singh, M. F., et al. (2015). Capacity building in physical activity and non-communicable disease prevention: a low-cost online training course can reach isolated practitioners. *Global Health Promotion*, 1757975915586957.
- 5. Evenson, K. R., Dorn, J. M., Camplain, R., Pate, R. R., & Brown, D. R. (2015). Evaluation of the Physical Activity and Public Health Course for Researchers. *Journal of Physical Activity & Health*, 12(8).



\*Advocacy refers to educating decision makers at all levels while honoring the legal limitations associated with the use of public funds.

# **Sport**

- 1. The Physical Activity Council. 2016 Participation Report.
- 2. NPR, Robert Wood Johnson Foundation, Harvard T.H. Chan School of Public Health. Sports and Health in America, 2015.
- 3. Aspen Institute Project Play. Sport for All, Play for Life: A Playbook to Get Every Kid in the Game, 2015.

# Transportation, Land Use, and Community Design

- 1. TransitCenter, "Who's on Board: 2014 Mobility Attitudes Survey," September 2014.
- 2. Complete streets policies. Smart Growth America. (2022, September 29).
- 3. Transportation for America, "Dangerous by Design 2014," May 2014.
- 4. USPIRG, "A New Direction: Our Changing Relationship with Driving and the Implications for America's Future," May 14, 2013.
- 5. Litman, T. (2011). Short and sweet: Analysis of shorter trips using national personal travel survey data. Victoria Transport Policy Institute.
- 6. Federal Highway Administration. (2009). National Household Travel Survey.

<sup>\*</sup> For more information, visit our website at <u>www.paamovewithus.org</u>