



Introducing the *Physical Activity Guidelines for Americans*, 2nd edition

Information adapted from the Physical Activity Guidelines for Americans, 2nd edition. Available at health.gov/PAGuidelines.

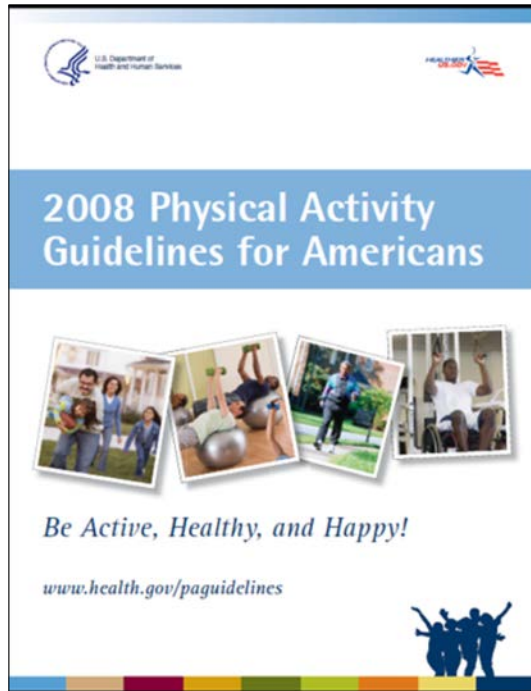




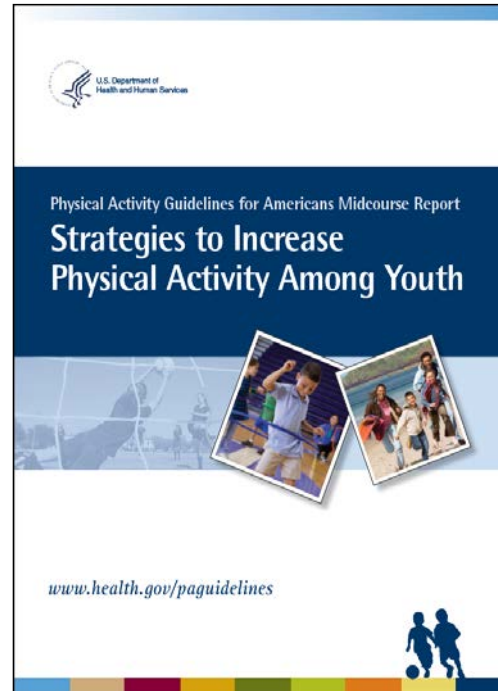
Background and Development Process



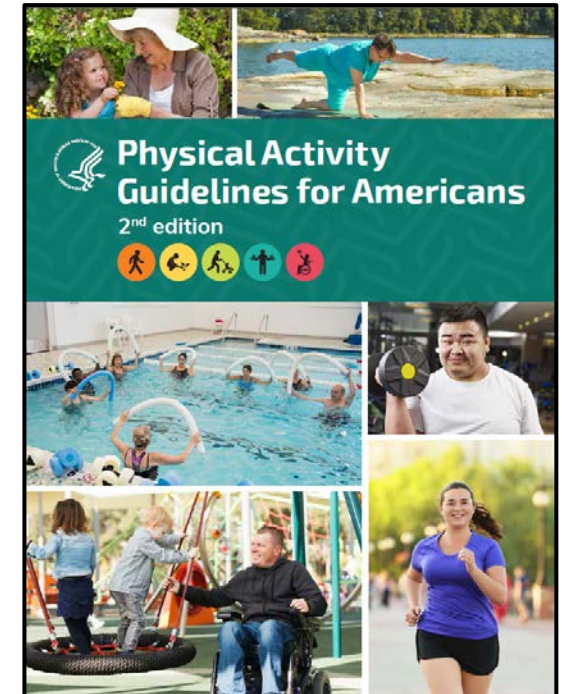
History of the Physical Activity Guidelines



2008



2013



2018

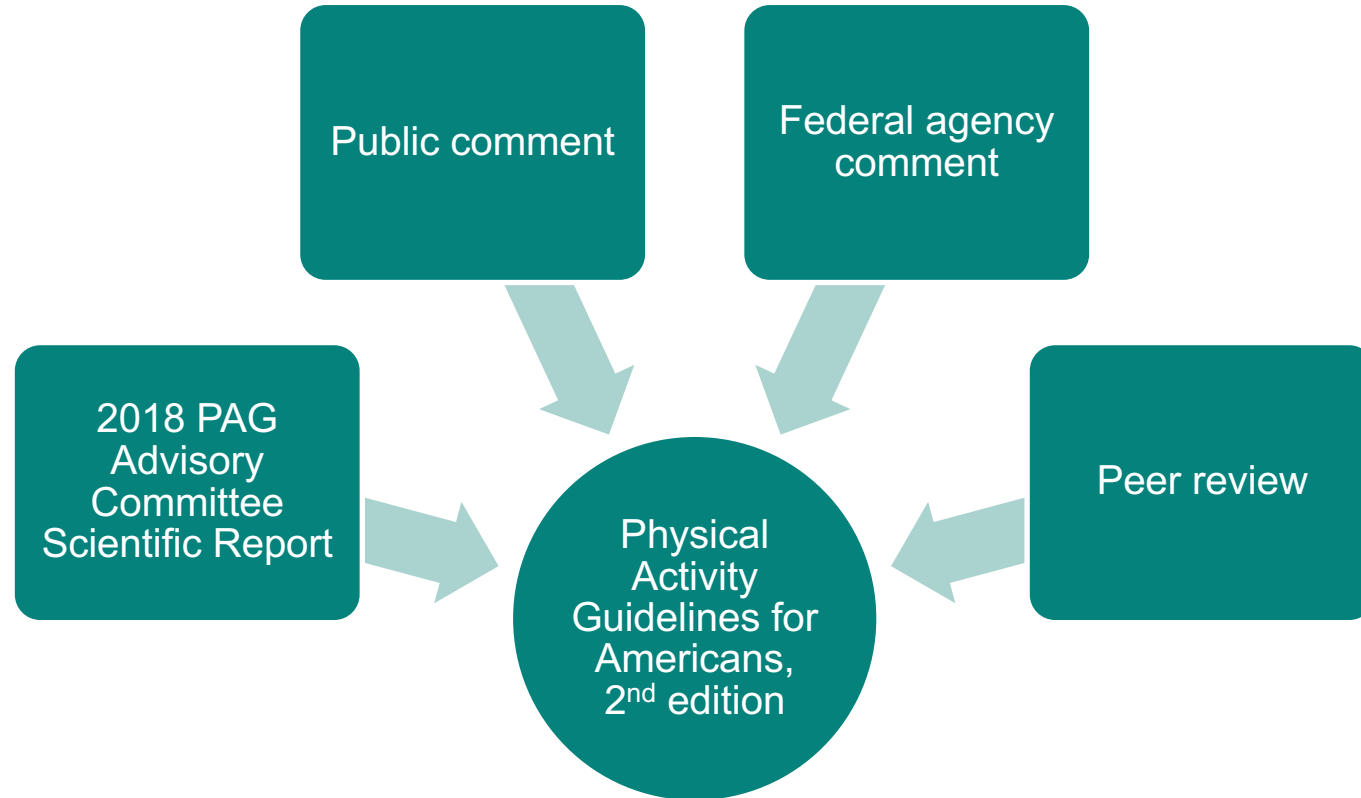


Development and Implementation of the Guidelines





Developing the Guidelines





Defining Terms



Types of Activity: Aerobic

- Definition:
 - Activity in which the body's large muscles move in a rhythmic manner for a sustained period of time.
- Examples:
 - Brisk walking
 - Running/jogging
 - Swimming
 - Bicycling
- Aerobic activity has 3 components:
 - **Intensity**, or how hard a person works to do the activity. The intensities most often studied are moderate (equivalent in effort to brisk walking) and vigorous (equivalent in effort to running or jogging);
 - **Frequency**, or how often a person does aerobic activity; and
 - **Duration**, or how long a person does an activity in any one session.



Types of Activity: Muscle-Strengthening

- Definition:
 - Physical activity, including exercise, that increases skeletal muscle strength, power, endurance, and mass.
- Examples:
 - Lifting weights
 - Using resistance bands
 - Bodyweight exercises
 - Carrying heavy loads
 - Heavy gardening
- Muscle-Strengthening activity has 3 components:
 - **Intensity**, or how much weight or force is used relative to how much a person is able to lift;
 - **Frequency**, or how often a person does muscle-strengthening activity; and
 - **Sets and repetitions**, or how many times a person does the muscle-strengthening activity, like lifting a weight or doing a push-up (comparable to duration for aerobic activity).



Types of Activity: Bone-Strengthening

- Definition:
 - Physical activity that produces an impact or tension force on the bones that promotes bone growth and strength.
 - Also called weight-bearing or weight-loading activity
- Note: bone-strengthening activities can also be aerobic and muscle strengthening.
- Examples:
 - Running
 - Jumping Rope
 - Lifting Weights



Defining Intensity

Moderate Intensity

- Absolute scale: 3.0-5.9 METs
- Relative scale: 5 or 6 on a scale of 0 to 10

Vigorous Intensity

- Absolute scale: 6.0 or more METs
- Relative scale: begins at a 7 or 8 on a scale of 0 to 10

Talk Test

As a rule of thumb, a person doing moderate-intensity aerobic activity can talk, but not sing, during the activity. A person doing vigorous-intensity activity cannot say more than a few words without pausing for a breath.



What's New In the Physical Activity Guidelines for Americans



What's New: *Physical Activity Guidelines for Americans*, 2nd edition

- Expanded science base
- New to this edition:
 - Guidance for preschool-aged children (3-5 years)
 - Discussion of sedentary behavior
 - Removal of 10-minute bout length requirement
 - Evidence for even more health benefits – including immediate effects
 - Tested strategies for physical activity promotion





NEW: Guidelines for Children Ages 3 Through 5



- ✓ Preschool-aged children (ages 3 through 5 years) should be physically active throughout the day to enhance growth and development.
- ✓ Adult caregivers of preschool-aged children should encourage active play that includes a variety of activity types.

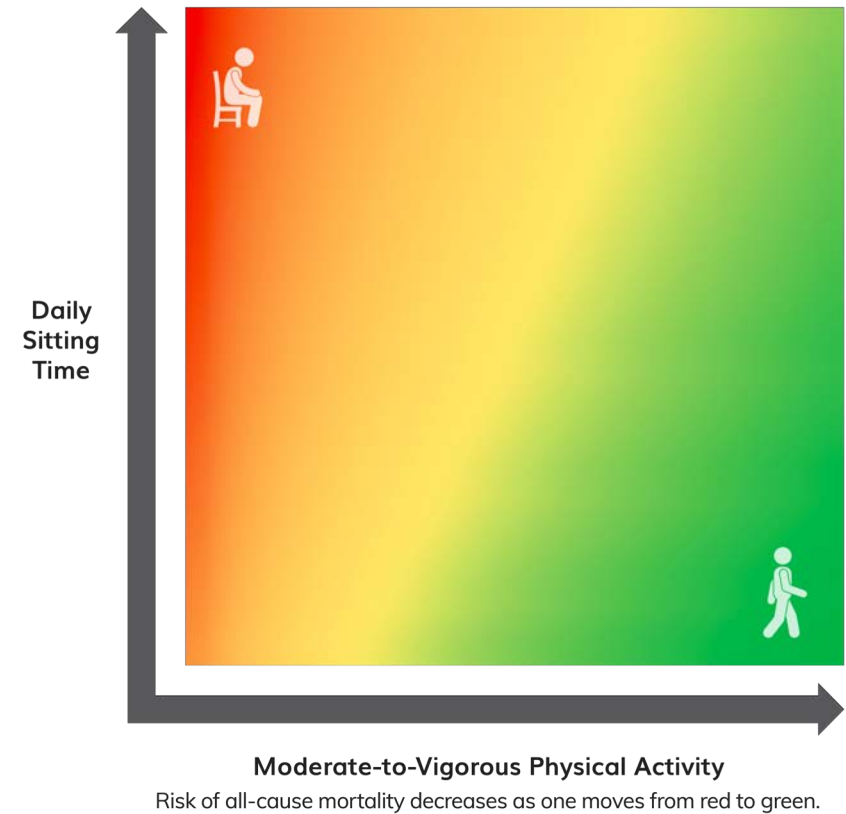


Move More and Sit Less

Sedentary behavior increases risk of:

- All-cause mortality
- Cardiovascular disease mortality
- Cardiovascular disease
- Type 2 diabetes
- Colon, endometrial, and lung cancers

Relationship Among Moderate-to-Vigorous Physical Activity, Sitting Time, and Risk of All-Cause Mortality in Adults

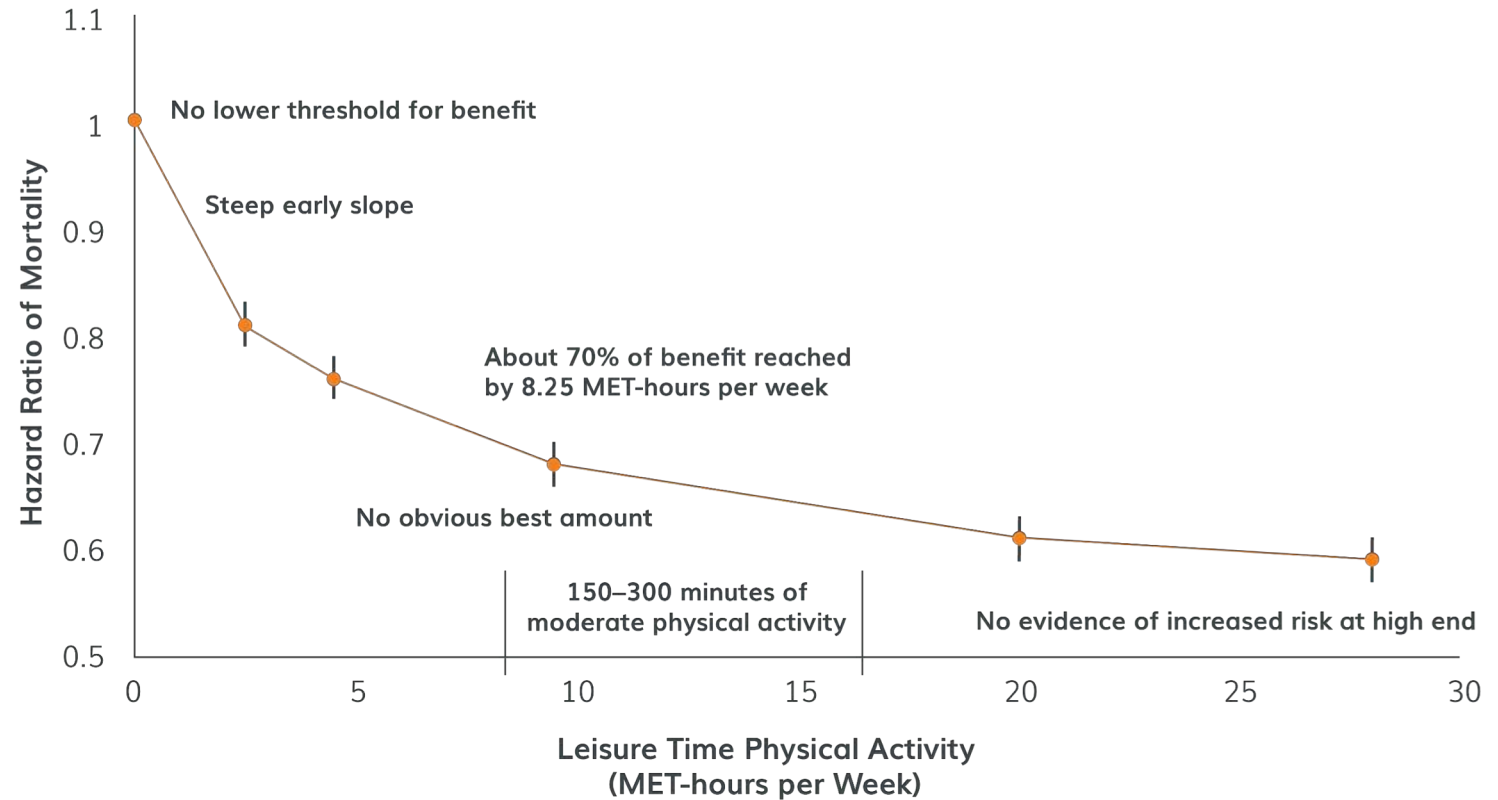




Any Activity Counts

- No lower threshold for benefits from physical activity
- Most benefits are attained with at least 150-300 minutes of moderate physical activity per week
- Some health benefits are immediate

Relationship of Moderate-to-Vigorous Physical Activity to All-Cause Mortality





Benefits of Physical Activity for Adults and Older Adults

- Lower risk of all-cause mortality
- Lower risk of cardiovascular disease mortality
- Lower risk of cardiovascular disease (including heart disease and stroke)
- Lower risk of hypertension
- Lower risk of type 2 diabetes
- Lower risk of adverse blood lipid profile
- Lower risk of cancers of the bladder,* breast, colon, endometrium,* esophagus,* kidney,* lung,* and stomach*
- Improved cognition*
- Reduced risk of dementia (including Alzheimer's disease)*
- Improved quality of life
- Reduced anxiety
- Reduced risk of depression
- Improved sleep
- Slowed or reduced weight gain
- Weight loss, particularly when combined with reduced calorie intake
- Prevention of weight regain following initial weight loss
- Improved bone health
- Improved physical function
- Lower risk of falls (older adults)
- Lower risk of fall-related injuries (older adults)*

**New health benefit*



Benefits of Physical Activity for Youth

- Improved bone health (ages 3 through 17 years)
- Improved weight status (ages 3 through 17 years)
- Improved cardiorespiratory and muscular fitness (ages 6 through 17 years)
- Improved cardiometabolic health (ages 6 through 17 years)
- Improved cognition (ages 6 to 13 years)
- Reduced risk of depression (ages 6 to 13 years)



New Health Benefits

Short Term Benefits

- Improve quality of life
- Reduce anxiety
- Reduce blood pressure
- Improve insulin sensitivity
- Improve sleep outcomes

Long Term Benefits

- For youth, improve cognition
- For adults, prevent 8 types of cancer (previously 2)
- For adults, reduce risk of dementia, including Alzheimer's disease
- For older adults, lowers risk of injuries from falls
- For pregnant women, reduces the risk of postpartum depression.
- For all groups, reduces the risk of excessive weight gain

Disease Management

- Decrease pain of osteoarthritis
- Reduce disease progression for hypertension
- Reduce disease progression for type 2 diabetes
- Reduce symptoms of anxiety and depression
- Improve cognition for those with dementia, multiple sclerosis, ADHD, and Parkinson's disease



Brain Health

Outcome	Population	Benefit	Acute	Habitual
Cognition	Children ages 6 to 13 years	Improved cognition (performance on academic achievement tests, executive function, processing speed, memory)	●	●
	Adults	Reduced risk of dementia (including Alzheimer's disease)		●
	Adults older than age 50 years	Improve cognition (executive function, attention memory, crystallized intelligence,* processing speed)		●
Quality of life	Adults	Improved quality of life		●



Brain Health, cont.

Outcome	Population	Benefit	Acute	Habitual
Depressed mood and depression	Children ages 6 to 17 years and adults	Reduced risk of depression Reduced depressed mood		●
Anxiety	Adults	Reduced short-term feeling of anxiety (state anxiety)	●	
	Adults	Reduced long-term feeling and signs of anxiety disorders		●
Sleep	Adults	Improved sleep outcomes (increased sleep efficiency, sleep quality, deep sleep; reduced daytime sleepiness frequency of use of medication to aid sleep)		●
	Adults	Improved sleep outcomes that increase with duration of acute episode	●	



What Works to Increase Physical Activity?

For Individuals or Small Groups

- Guidance from peers or professionals
- Support from others
- Technology

For Communities

- Point of decision prompts
- School policies and practices
- Access to indoor or outdoor recreation facilities or outlets
- Community-wide campaigns
- Community design



Key Guidelines



Key Guidelines for Preschool-Aged Children



- ✓ Preschool-aged children (ages 3 through 5 years) should be physically active throughout the day to enhance growth and development.
- ✓ Adult caregivers of preschool-aged children should encourage active play that includes a variety of activity types.



Key Guidelines for School-Aged Children and Adolescents



- ✓ It is important to provide young people opportunities and encouragement to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.
- ✓ Children and adolescents ages 6 through 17 years should do 60 minutes (1 hour) or more of moderate-to-vigorous physical activity daily:
 - Aerobic: Most of the 60 minutes or more per day should be either moderate- or vigorous-intensity aerobic physical activity and should include vigorous-intensity physical activity on at least 3 days a week.
 - Muscle-strengthening: As part of their 60 minutes or more of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least 3 days a week.
 - Bone-strengthening: As part of their 60 minutes or more of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days a week.



Key Guidelines for Adults



- ✓ Adults should move more and sit less throughout the day. Some physical activity is better than none. Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.
- ✓ For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- ✓ Additional health benefits are gained by engaging in physical activity beyond the equivalent of 300 minutes (5 hours) of moderate-intensity physical activity a week.
- ✓ Adults should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.



Key Guidelines for Older Adults



The key guidelines for adults also apply to older adults. In addition, the following key guidelines are just for older adults:

- ✓ As part of their weekly physical activity, older adults should do multicomponent physical activity that includes balance training as well as aerobic and muscle-strengthening activities.
- ✓ Older adults should determine their level of effort for physical activity relative to their level of fitness.
- ✓ Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.
- ✓ When older adults cannot do 150 minutes of moderate-intensity aerobic activity a week because of chronic conditions, they should be as physically active as their abilities and conditions allow.



Key Guidelines for Adults with Chronic Health Conditions and Adults with Disabilities



- ✓ Adults with chronic conditions or disabilities, who are able, should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- ✓ Adults with chronic conditions or disabilities, who are able, should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.



Key Guidelines for Adults with Chronic Health Conditions and Adults with Disabilities, continued



- ✓ When adults with chronic conditions or disabilities are not able to meet the above key guidelines, they should engage in regular physical activity according to their abilities and should avoid inactivity.
- ✓ Adults with chronic conditions or symptoms should be under the care of a health care provider. People with chronic conditions can consult a health care professional or physical activity specialist about the types and amounts of activity appropriate for their abilities and chronic conditions.



Key Guidelines for Women During Pregnancy and the Postpartum Period



- ✓ Women should do at least 150 minutes (2 hours and 30 minutes) of moderate-intensity aerobic activity a week during pregnancy and the postpartum period. Preferably, aerobic activity should be spread throughout the week.
- ✓ Women who habitually engaged in vigorous-intensity aerobic activity or who were physically active before pregnancy can continue these activities during pregnancy and the postpartum period.
- ✓ Women who are pregnant should be under the care of a health care provider who can monitor the progress of the pregnancy. Women who are pregnant can consult their health care provider about whether or how to adjust their physical activity during pregnancy and after the baby is born.



Key Guidelines for Safe Physical Activity



To do physical activity safely and reduce risk of injuries and other adverse events, people should:

- ✓ Understand the risks, yet be confident that physical activity can be safe for almost everyone.
- ✓ Choose types of physical activity that are appropriate for their current fitness level and health goals, because some activities are safer than others.
- ✓ Increase physical activity gradually over time to meet key guidelines or health goals. Inactive people should “start low and go slow” by starting with lower-intensity activities and gradually increasing how often and how long activities are done.
- ✓ Protect themselves by using appropriate gear and sports equipment, choosing safe environments, following rules and policies, and making sensible choices about when, where, and how to be active.
- ✓ Be under the care of a health care provider if they have chronic conditions or symptoms. People with chronic conditions and symptoms can consult a health care professional or physical activity specialist about the types and amounts of activity appropriate for them.



Promoting Physical Activity



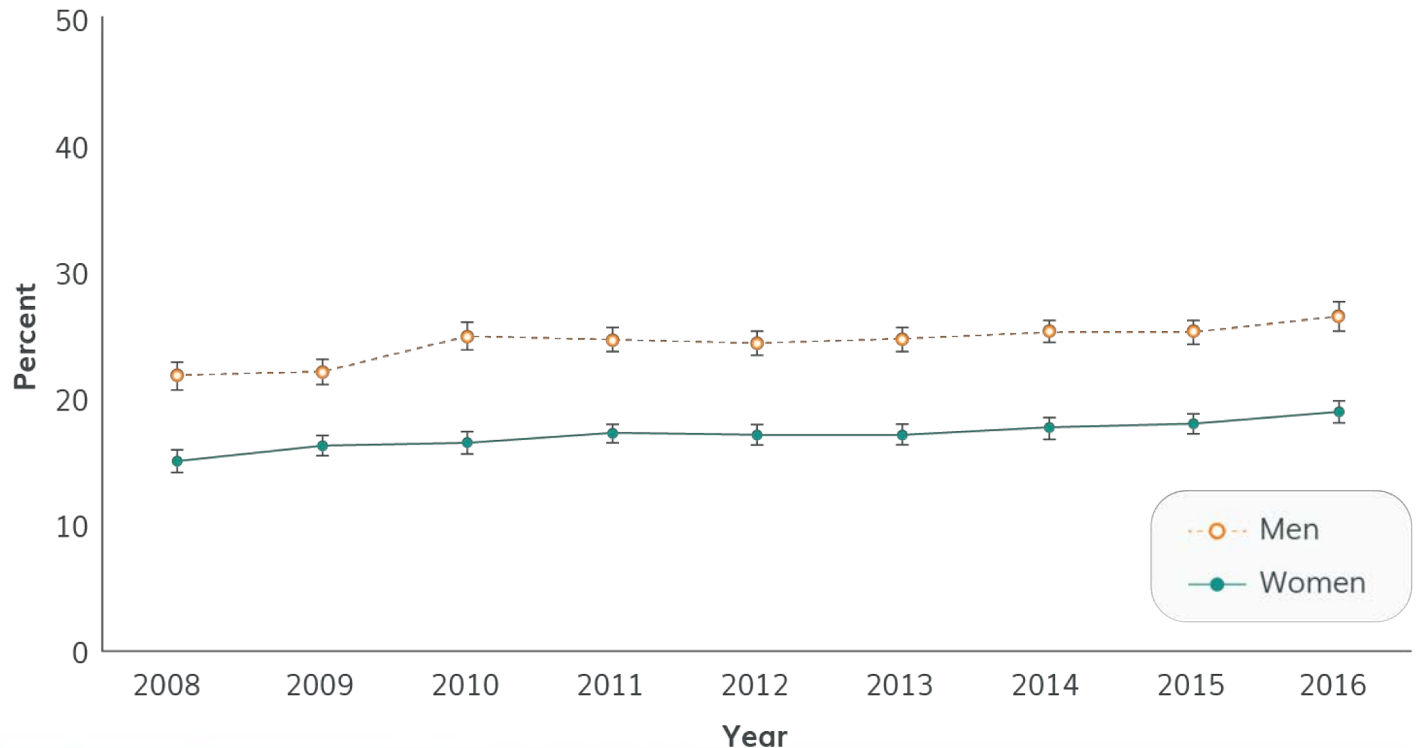
Why We Need to Promote Physical Activity

Costs of Inadequate Physical Activity*

- \$117 billion dollars in annual health care costs
- 10 percent of premature mortality

*Defined as not meeting the key guidelines for adults

Percentage of U.S. Adults Ages 18 Years or Older Who Met the Aerobic and Muscle-Strengthening Guidelines, 2008–2016

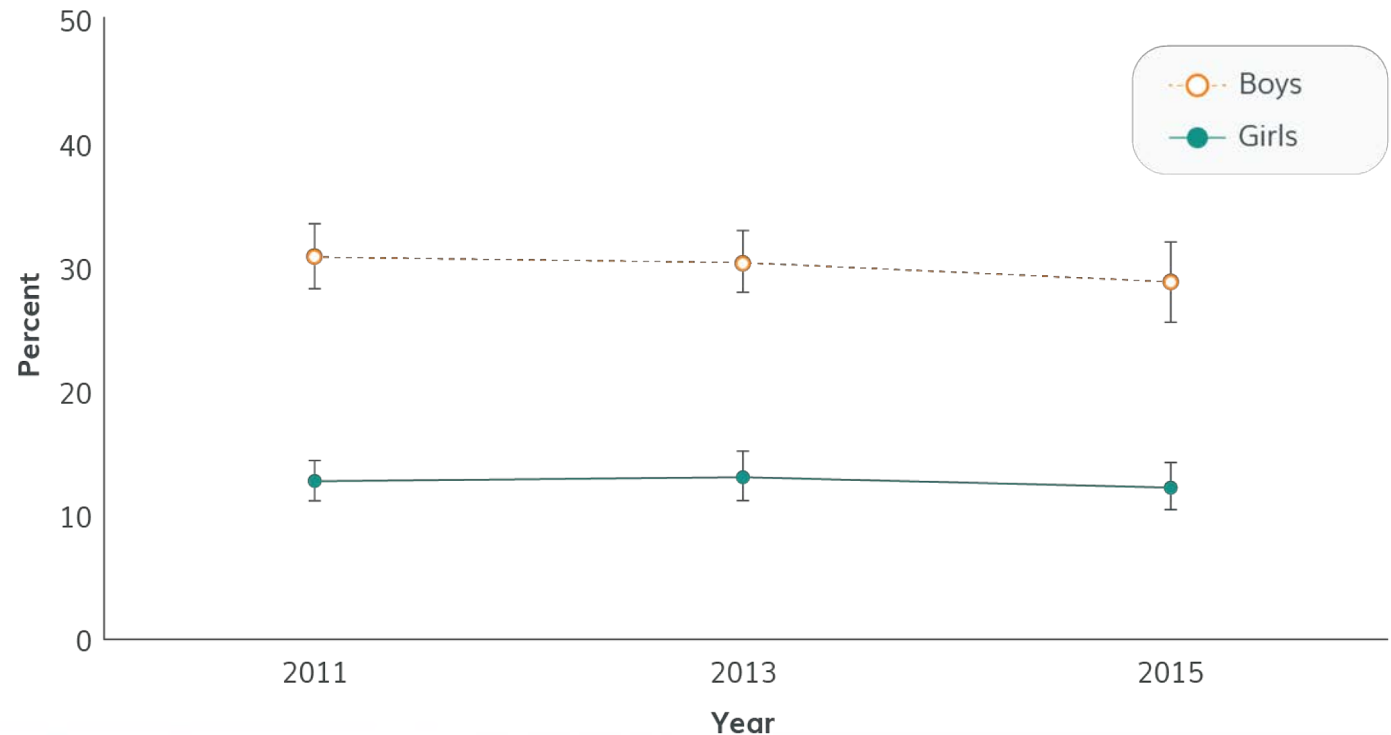




Why We Need to Promote Physical Activity, cont.

- Childhood obesity rates have tripled since the 1970s
- Obesity disqualifies nearly one-third of American youth, ages 17 to 24, from military service

Percentage of U.S. High School Students Who Met the Aerobic Physical Activity and Muscle-Strengthening Guidelines, 2011–2015





Everyone Has a Role to Play

Individuals

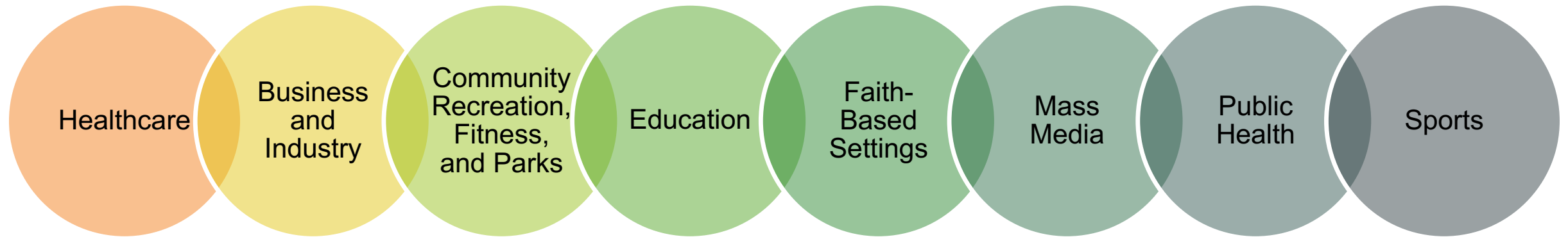
- Personalize the benefits of physical activity
- Set personal goals for physical activity
- Develop knowledge and skills to attain goals

Families and Caregivers

- Start early
- Provide time for both structured and unstructured physical activity during school and outside of school
- Provide youth with positive feedback and good role models
- Help young people learn skills required to do physical activity safely
- Promote activities that set the basis for a lifetime of activity



Take Action: Strategies to Promote Physical Activity





Promoting the Guidelines: The Move Your Way Campaign



Move Your Way Campaign

- **Vision:** Consumer-focused campaign to promote physical activity recommendations in the second edition of the Physical Activity Guidelines
- **Purpose:**
 - Raise awareness of recommendations
 - Change behavior among consumers
- **Target audiences:** physical activity contemplators, or those who are not yet meeting the recommendations in the Physical Activity Guidelines and health professionals (as conduit to consumers)



Adults need a mix of physical activity to stay healthy.

Moderate-intensity aerobic activity*	Muscle-strengthening activity
Anything that gets your heart beating faster counts.	Do activities that make your muscles work harder than usual.
at least 150 minutes a week	at least 2 days a week
	

* If you prefer vigorous-intensity aerobic activity (like running), aim for at least 75 minutes a week.

If that's more than you can do right now, **do what you can.** Even 5 minutes of physical activity has real health benefits.

Walk. Run. Dance. Play. What's your move?



Move Your Way Audience Research

Environmental scan

- Fitness and exercise companies
- Organizations that promote physical activity
- Government physical activity campaigns
- Non-government physical activity campaigns

Focus groups

- Adult physical activity contemplators (12 in-person groups, 6 with parents, 3 in Spanish, n=95)
- Health professionals (3 virtual groups, n=19)
- Children ages 8-12 (n=25)
- Teens ages 13-16 (n=31)
- Parents of children ages 3-6 (n=28)

Online survey (n=2050)

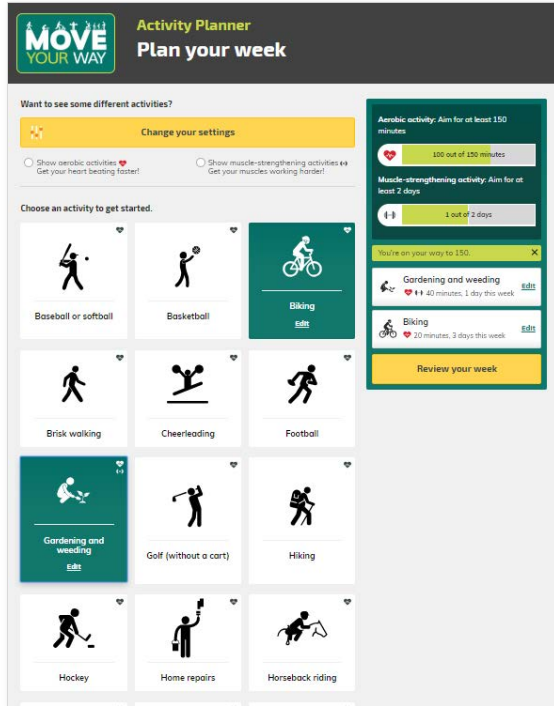
- Level of familiarity with PAG recommendations
- Attitudes around physical activity
- Behavioral intention around physical activity
- Promising channels for message delivery

Icon and message testing

- Consumers (9 in-person groups, 2 in Spanish, n=72)
- Health professionals (2 virtual groups, n=9)
- Stakeholders (9 in-depth interviews)



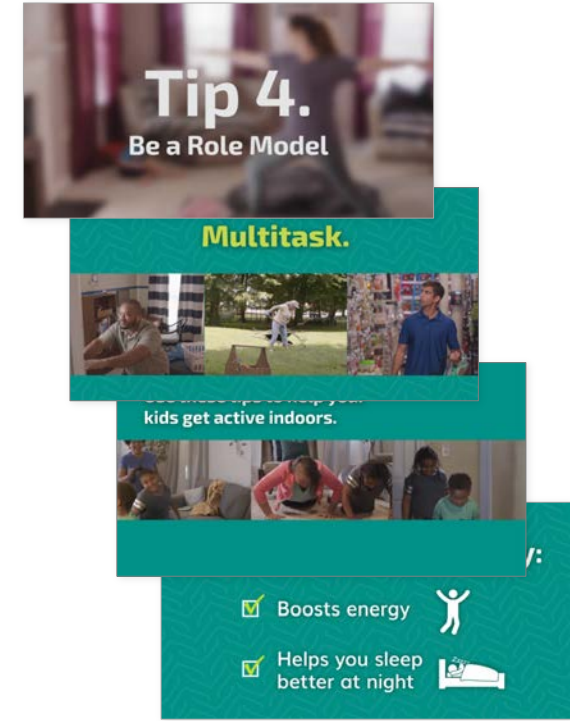
Move Your Way Campaign Resources



Interactive tools



Posters and factsheets



Series of videos



Move Your Way Web Badges and Widget

Content can be added to your digital platform and HHS will update the web badge and widget content automatically.

- **Move Your Way Activity Planner web badge** links people to the HHS interactive tool to help them build a personalized weekly activity plan.
- **Move Your Way Activity Planner widget** lets people start personalizing their weekly activity plan right on your website. Then it links them to the HHS interactive tool to continue building their plan.
- **Move Your Way Parent Interactive Graphic web badge** links parents to the HHS interactive infographic to see how their kids can get 60 minutes of activity a day.



Find Out More

- **For health professionals:**
<https://health.gov/PAGuidelines>
- **For consumers:**
<https://health.gov/MoveYourWay/>

