## Promoting Physical Activity to Reduce Chronic Disease:

Resources from the Physical Activity Guidelines and the Move Your Way® Campaign

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Office of Disease Prevention and Health Promotion October 6, 2021

#### Outline

- The Science Behind the Guidelines
- The Physical Activity Guidelines, 2<sup>nd</sup> edition
- How to Communicate the Guidelines – the Move Your Way® Campaign



# The Science Behind the Physical Activity Guidelines

#### Development and Implementation Process

Appointment of PAG Advisory Committee

Review of the current science

Review of the current science

PAGAC Scientific Report

PAGAC Scientific Report

Development of Physical Activity Guidelines

Development of Physical Activity Guidelines

Implemented in Federal programs and initiatives

PAG = Physical Activity Guidelines PAGAC = Physical Activity Guidelines Advisory Committee

## 2018 Physical Activity Guidelines Advisory Committee

#### Subcommittees and Work Group

- Aging
- Brain Health
- Cancer Primary Prevention
- \*Cardiometabolic Health & Weight Management
- Exposure
- \*Individuals with Chronic Conditions
- Promotion of Physical Activity
- Sedentary Behavior
- Youth
- Pregnancy Work Group

#### Evidence Grading Criteria

Criteria	STRONG	MODERATE	LIMIITED	NOT ASSIGNABLE
Applicability	Study populations, exposures, and outcomes are directly related to the question	Some of the study populations, exposures, or outcomes are directly related to the question	Most of the study populations, exposures, and outcomes relate to the question indirectly	All of the study populations, exposures, and outcomes relate to the question indirectly
Generalizability (to the US population of interest)	Studied population, exposure, and outcomes are free from serious doubts about generalizability	Minor doubts about generalizability	Serious doubts about generalizability due to narrow or different study population, exposure, or outcomes studied	Highly unlikely that the studied population, exposure, and/or outcomes are generalizable to the US population
Risk of bias or study limitations (as determined by NEL BAT and/or AMSTAR <sub>EXBP</sub> )	Studies are of strong design; free from methodological concerns, bias, and execution problems	Studies are of strong design with minor methodological concerns OR studies of weaker study design	Studies of weak design OR inconclusive findings due to design flaws, bias, or execution problems	Serious design flaws, bias, or execution problems across the body of evidence
Quantity and Consistency (of the results across the available studies)	Many studies have been published and the results are highly consistent in direction and approximate size of effect	A moderate number of studies have been published with some inconsistency in direction or size of effect	Few studies have been published with some inconsistency in direction or size of effect	Findings are too disparate to synthesize OR single small study unconfirmed by other studies
Magnitude and precision of effect	The magnitude and precision of the estimated effect provide considerable confidence in the accuracy of the findings	The magnitude and precision of the estimated effect provide confidence in the accuracy of the findings	The magnitude and precision of the estimated effect provide some but not a lot of confidence in the accuracy of the findings	Magnitude and precision of effect cannot be determined

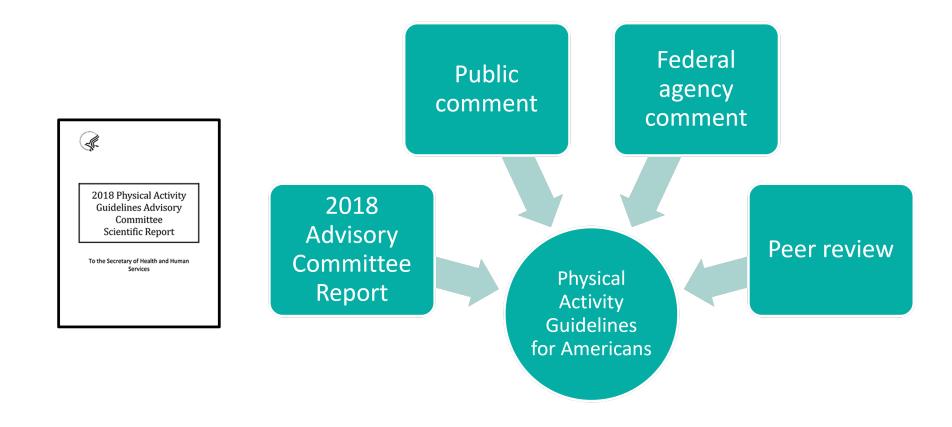
## PAGAC Conclusion Statements on Diabetes Prevention

- Strong evidence demonstrates a significant relationship between a higher volume of physical activity and lower incidence of type 2 diabetes. PAGAC Grade: Strong.
- Strong evidence demonstrates that an inverse curvilinear doseresponse relationship exists between the volume of physical activity and incidence of type 2 diabetes, with a decreasing slope at higher levels of physical activity. PAGAC Grade: Strong.
- Moderate evidence indicates no effect modification by weight status.
   An inverse relationship exists between a higher volume of physical activity and lower incidence of type 2 diabetes for people who have normal weight, overweight, or obesity. PAGAC Grade: Moderate.

## PAGAC Conclusion Statements on Diabetes Management

- Strong evidence demonstrates an inverse association between volume of physical activity and risk of cardiovascular mortality among adults with type 2 diabetes. PAGAC Grade: Strong.
- Strong evidence demonstrates an inverse association between aerobic activity, muscle-strengthening activity, and aerobic plus muscle-strengthening activity with risk of progression among adults with type 2 diabetes, as assessed by overall effects of physical activity on four indicators of risk of progression: glycated hemoglobin A1C, blood pressure, body mass index, and lipids. PAGAC Grade: Strong.
- Moderate evidence indicates an inverse, curvilinear dose-response relationship between physical activity and cardiovascular mortality among adults with type 2 diabetes. PAGAC Grade: Moderate.
- Moderate evidence indicates an inverse dose-response relationship between volume of aerobic activity and two indicators of risk of progression—blood pressure and hemoglobin A1C —among adults with type 2 diabetes. PAGAC Grade: Moderate.
- Moderate evidence indicates that the effects of physical activity on the disease progression indicator
  of blood pressure are larger in hypertensive individuals with type 2 diabetes than in those without
  hypertension. Similarly, moderate evidence indicates that the effects of physical activity on the disease
  progression indicator of hemoglobin A1C are larger in individuals with type 2 diabetes who have
  higher levels of hemoglobin A1C than in those with lower hemoglobin A1C. PAGAC Grade: Moderate.

#### Developing the Guidelines



## Physical Activity Guidelines for Americans, 2<sup>nd</sup> edition

## Physical Activity Guidelines for Americans, 2<sup>nd</sup> edition Outline

- Expanded science base
  - Discussion of sedentary behavior
  - Removal of bout length requirement
- Health benefits
  - Evidence for even more health benefits including immediate effects
- Key guidelines
- Tested strategies for physical activity promotion

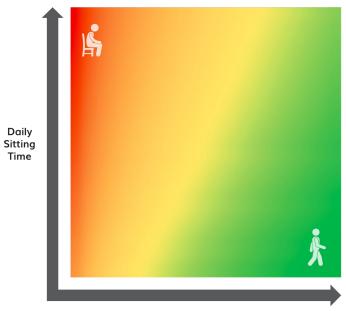


#### Move More and Sit Less

#### 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

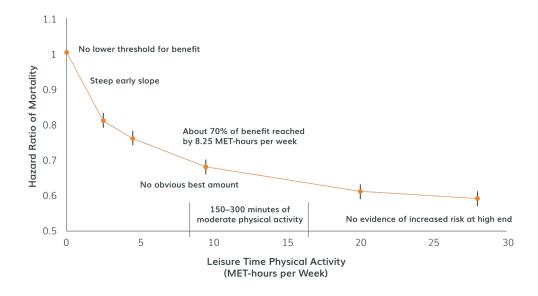


Moderate-to-Vigorous Physical Activity
Risk of all-cause mortality decreases as one moves from red to green.

#### **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



#### **New Health Benefits**

Short Term Benefits	Long Term Benefits	Disease Management
<ul> <li>Improve insulin sensitivity</li> <li>Improve quality of life</li> <li>Reduce anxiety</li> <li>Reduce blood pressure</li> <li>Improve sleep outcomes</li> </ul>	<ul> <li>For youth, improve cognition</li> <li>For adults, prevent 8 types of cancer (previously 2)</li> <li>For adults, reduce risk of dementia, including Alzheimer's disease</li> <li>For older adults, lowers risk of injuries from falls</li> <li>For pregnant women, reduces the risk of postpartum depression</li> <li>For all groups, reduces the risk of excessive weight gain</li> </ul>	<ul> <li>Reduce disease progression for type 2 diabetes</li> <li>Decrease pain of osteoarthritis</li> <li>Reduce disease progression for hypertension</li> <li>Reduce symptoms of anxiety and depression</li> <li>Improve cognition for those with dementia, multiple sclerosis, ADHD, and Parkinson's disease</li> </ul>

#### What Works?

#### 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

#### **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.

#### Key Guidelines for Americans Ages 3 and Over



Preschool-Aged Children

Children and Adolescents

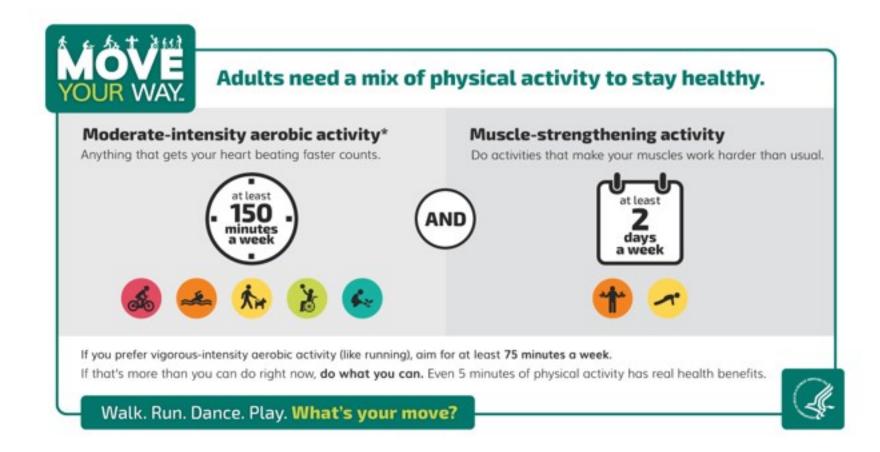
Adults

**Older Adults** 

Pregnancy/
Postpartum

Chronic Health Conditions/ Disabilities

#### **Adult Guidelines**



#### 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.
- 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.
- 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.

#### 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:

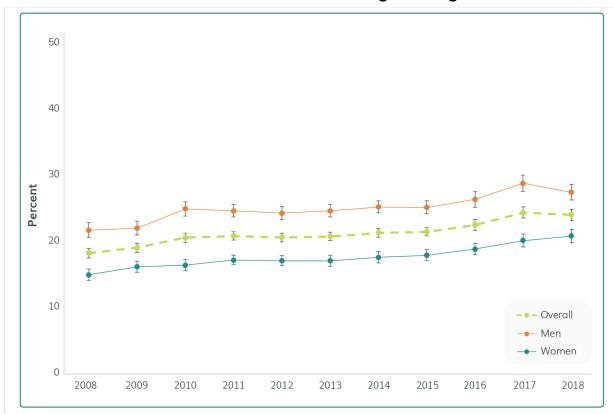
- As part of their weekly physical activity, older adults should do multicomponent physical activity that includes balance training as well as aerobic and muscle-strengthening activities.
- Older adults should determine their level of effort for physical activity relative to their level of fitness.
- 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.

#### Who is Meeting the Guidelines?

Adults Who Met the Aerobic and Muscle-Strengthening Guidelines, 2008–2018



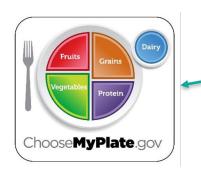
# Communicate about the Guidelines Using the Move Your Way Campaign

#### 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
- Behavior change get more people moving!



Do you know MyPlate? Move Your Way is the physical activity equivalent!



Adults need a mix of physical activity to stay healthy.

Anything that gets your heart beatina faster counts.







Do activities that make your muscles work harder than usual.









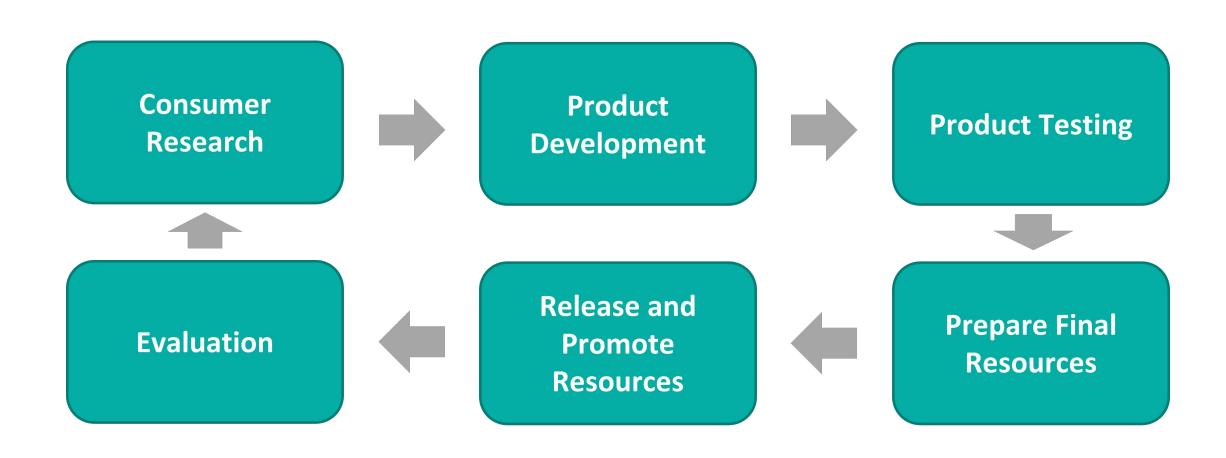


\* If you prefer vigorous-intensity aerobic activity (like running), aim for at least 75 minutes a week.

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?

#### Developing the Campaign

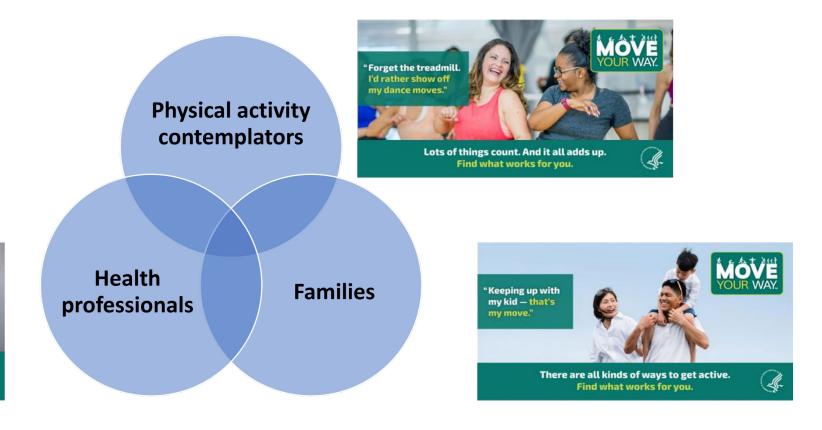


#### Partnerships

- Federal Steering Committee:
  - Administration for Children and Families (ACF)
  - Administration for Community Living (ACL)
  - Centers for Disease Control and Prevention (CDC)
  - Health Resources and Services Administration (HRSA)
  - National Institutes of Health
  - Office of the Assistant Secretary for Health (including OMH, OPA, OSG, OWH, RHO)

- External Partners:
  - Physical Activity Alliance (PAA)
  - National Association of City and Country Health Officials (NACCHO)
- Other Federal Partners and Collaborators:
  - Indian Health Service (IHS)
  - National Institutes of Health National Cancer Institute (NIH-NCI)
  - OASH Office on Women's Health (OWH)
  - United States Department of Agriculture (USDA)

## Who is the Move Your Way<sup>®</sup> Campaign for?





#### Move Your Way® Audiences







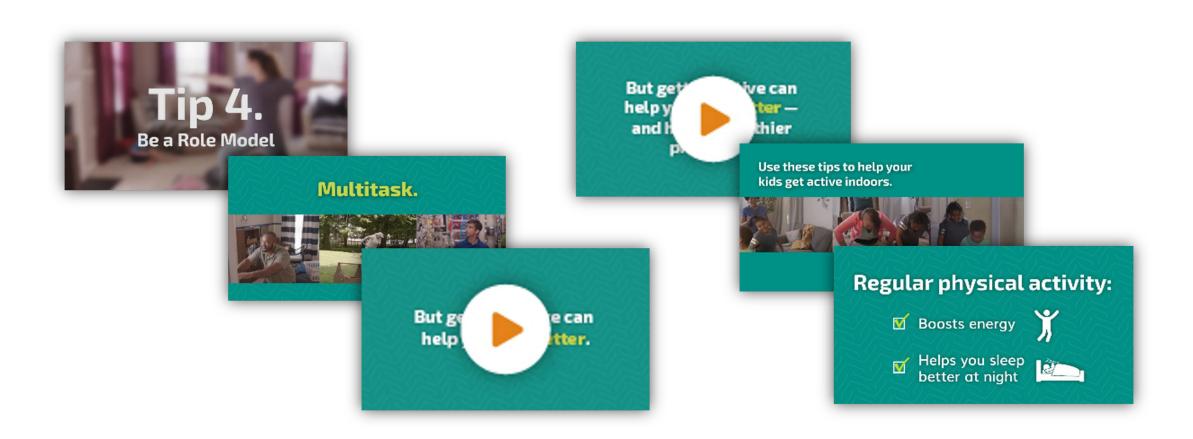




#### Move Your Way® Posters and Fact Sheets



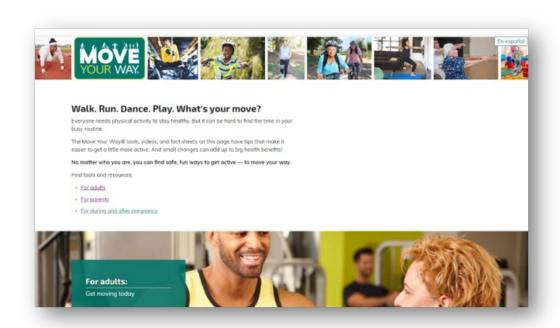
#### Move Your Way® Videos



#### Move Your Way® Social Media Graphics



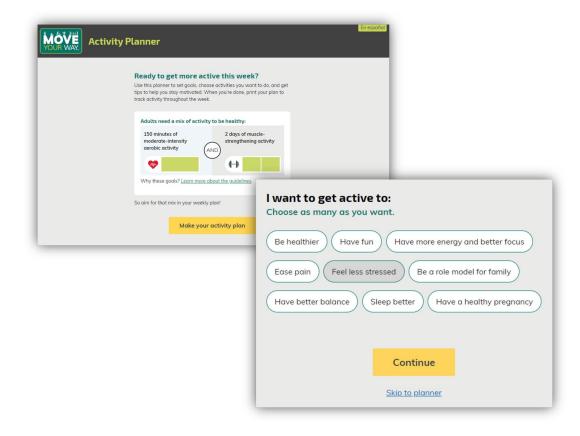
#### Move Your Way® Consumer Microsite



Health.gov/MoveYourWay

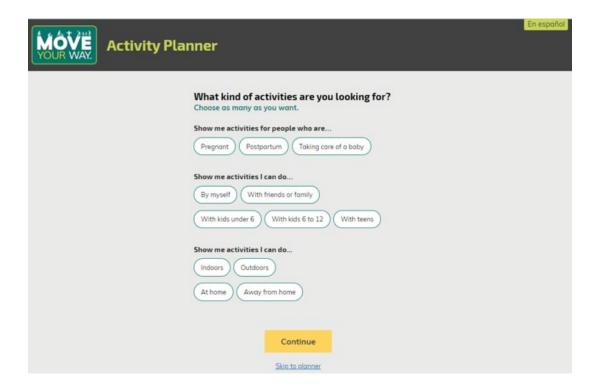
#### Online Activity Planner

- Make a plan based on selected preferences
- Choose motivators for getting active
- Select activities that meet aerobic and/or muscle strengthening recommendations
- See progress toward meeting recommendations



#### Online Activity Planner (con't)

- Make a plan based on selected preferences
- Choose motivators for getting active
- Select activities that meet aerobic and/or muscle strengthening recommendations
- See progress toward meeting recommendations



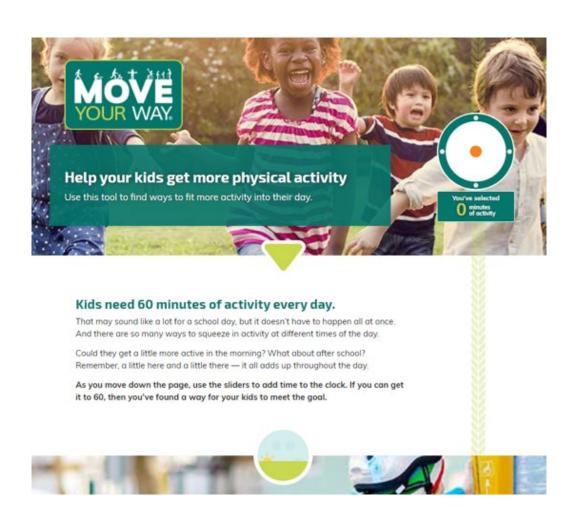
#### Online Activity Planner (more)

- Make a plan based on selected preferences
- Choose motivators for getting active
- Select activities that meet aerobic and/or muscle strengthening recommendations
- See progress toward meeting recommendations



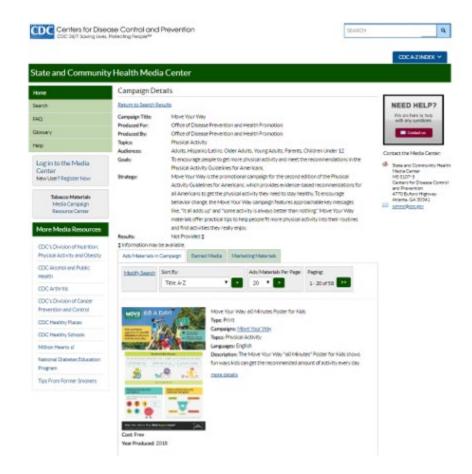
#### Parent Interactive Tool

- Helps parents assess amount of physical activity their children are getting
- Offers opportunities for increased activity before, during, and after school
- Interactive tool shows progress towards guidelines (60 minutes)



# Customize Move Your Way Resources

- Centers for Disease Control and Prevention (CDC) <u>State</u> and <u>Community Health Media</u> <u>Center</u>
- Customize the Move Your Way campaign resources to specific audiences
  - Add a logo
  - Replace an image with a photo from the Media Center's image library



# Campaign Implementation

## Campaign Implementation in Communities

- Uses the Community-based Prevention Marketing Framework
  - Combines social marketing and community organizing
  - Uses a place-based approach
- ODPHP works with communities to drive behavior change
- Lead organizations work with partners to tailor outreach activities to local needs and resources



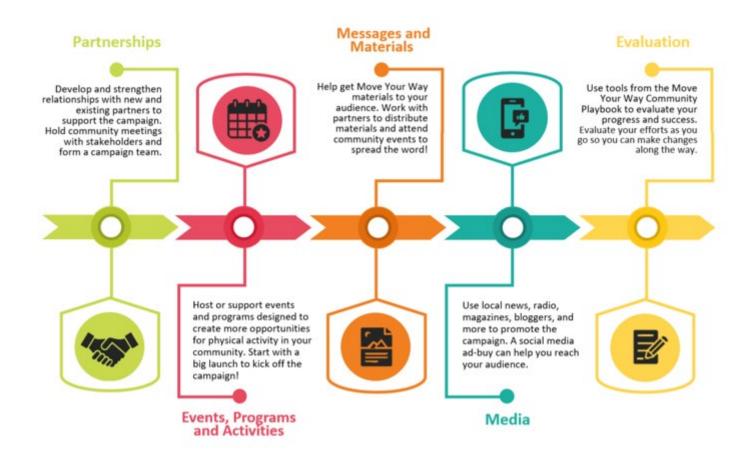
# Move Your Way® Community Playbook

- Find tips and resources to help implement the campaign at the local level
- Use the sections of playbook that support your needs

Health.gov/MoveYourWay/Playbook



### Elements of Campaign Implementation



### **Pilot Communities**

#### 2019

- Jackson, Mississippi
- Las Vegas, Nevada\*

### 2020

- Cabarrus County, North Carolina
- Chicago, Illinois\*
- Columbus, Ohio
- Fairfax County, Virginia
- Sioux City, Iowa\*
- Southern West Virginia\*
- Streator, Illinois
- Wyandotte County, Kansas

#### 2021

- Little Rock, Arkansas
- 4 Returning Communities\*



## Community Pilot Implementation

- Distribution of printed materials in community centers, health care settings, recreation facilities, schools, and workplaces
- Geographically targeted ad buy
- 5-7 community events/activities











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## Community Pilots Spread the Word



• 143 community events and activities



• 283 partnerships



• 967,000 social media impressions



• 68,000 campaign materials distributed

# Community Pilots Spread the Word (con't)



4 million video views



• 104 million ad buy impressions



• 250 million impressions of #MoveYourWay

### Outcome Evaluation

Respondents who reported being exposed to Move Your Way reported:



### **Awareness**

More aware of the *Physical Activity Guidelines for Americans* 



### **Self-Efficacy**

More confident in ability to be active despite barriers



### Knowledge

More likely to know correct dosage recommendations



### **Behavioral Intent**

More likely to intend to be more active in near-future

# Healthcare Providers Play an Important Role

- Research shows that consumers consider healthcare providers a trusted source for health information
- Move Your Way resources for healthcare providers include information about common barriers and conversation starters



You know it's important to help your pregnant and postpartum patients get physical activity. But it can be challenging to talk about activity in the short time you have for pre- and post-notal visits.

The second edition of the Physical Activity Guidelines for Americans can help! The Guidelines includes evidence-based physical activity guidance for pregnant and postparturu women — guidance that many maternal health organizations, including the American College of Obstetricians and Gynecologists, cite and promote in their own materials. Share the recommendations from the Guidelines and inspire your patients to get active.

#### Start the conversation.

Patients who were active before pregnancy might be eager to ask you about physical activity. But with patients who haven't been active before, you may need to be more proactive about raising this topic. Try these quick conversation starters.

#### How much activity do you get now — and how much did you get before pregnancy?

Meet your patients where they are. Once you have an idea of their current and previous activity levels, you can suggest small changes to help them get active — or get back to their normal routine after pregr

#### Do you have any concerns about being active?

Your patients may get conflicting advice about what's safe during and after pregnancy. Tell them that being active is safe and healthy. Physical activity can even lower their risk for some complications during pregnancy

#### Does activity ever feel uncomfortable or painful?

It's normal for activity to feel different during or just after pregnancy. But check in with your patients about any pain they're feeling and make a plan to address it. Pain could be a sign of a health problem — or it may mean they need to switch to applied problems.



As a health care provider, you know it's important to help your patients get more physical activity. But it can be challenging to motivate patients in the short time you spend together

The second edition of the Physical Activity Guidelines for Americans offers evidence-based physical activity guidance that can make your job easier. Share the recommendations with your patients and inspire them to get more active.

#### Start the conversation.

When you bring up physical activity with your patients, it helps to keep the tone friendly and encouraging. Try these quick conversation starters.

How much physical activity do you get in an average week? Meet your patients where they are. Once you have an idea of their current activity level, you can suggest small changes to help them get more active.

What are some things your family likes to do together? Does family time mean watching TV on the couch? Offer tips for getting the whole family more active, like turning commercials into family fitness breaks.

#### Are there activities you'd like to be able to do?

Do your patients want to run a 5K? Climb stairs more easily? Pick up grandkids without pain? Knowing their motivations can help you work together to set achievable goals.





# Healthcare Providers Play an Important Role (con't)

- Share Move Your Way resources
- Emphasize key message when engaging with patients
  - Lots of activities count
  - Short term benefits
  - Long term benefits
  - Anyone can be active



### Partnering with Diabetes Prevention

"The Move Your Way campaign has been a helpful resource for the Southern Nevada Health District's Clark County Diabetes Group. Many of our clinical and community partners are regularly looking for physical activity resources to share with their clients and class participants. The Move Your Way factsheets are an easy way for our group members to share with clients the message of being more physical activity and how that can support keeping blood glucose in a healthy range."

 Representative of Southern Nevada Health District



#### Weekly Newsletter March 2021

Hi Everyone: Happy Friday!

I hope that you are all doing as well as possible. Thankfully, many community partners compiled lists of community resources and that is good news! I hope you find these resources to be helpful during these challenging times. Find more resources at: gethealthyelarkounty.org





The Move Your Way campaign provides ways for you and your family to get moving! Share these fact sheet available in English and Spanish during March for Move Your Way Week (March 1-6). For more helpful physical activity tips, see my colleague Mindy's blog post: https://gethealthyclarkcounty.org/move-your-way-week-march-1st-6th





The Southern Nevada Health District provides a free online diabetes prevention program and free mobile apps so get moving, explore trails, and keep half your plates filled with vegetables and fruit.

Dignity Health offers free online classes and virtual care: <a href="https://conta.ce/33PbPQh">https://conta.ce/33PbPQh</a> Classes include: fitness, wellness (mind-body), Freedom from Smoking Plus, etcl Call: 702-616-4902 or 702-616-4916.

The Nevada Diabetes Association offers an emergency prescription program which allows a one month refill on your current, in date prescription for insulin, oral medication, glucose test strips, ketone test strips, etc. Call 775-856-3839 or visit diabetesnv.org to learn more.

iDO quarterly meeting, April 14th from 3-4:30 pm. See attached agenda and Zoom Link: https://healthinsight.zoom.us/j/370109579
Call-In: +1 669 900 6833 or +1 346 248 7799
Meeting ID: 370 109 579
Email: jreeves@comagine.org

#### JDRF:

For the most up to date information about T1D and Coronavirus, please visit jdrf.org/coronavirus.

# Partnering with Diabetes Prevention (con't)

"The Move Your Way partnership adds value to our messaging from a trusted source. These added materials help to keep our National Diabetes Prevention Program (NDPP) participants motivated and reminds them of the recommended physical activity guidelines for American's. The Move You Way material offers easy to read messaging and images our diabetes prevention participants can relate to. The Move You Way material is an added resource for the NDPP coaches to utilize when helping participants stay motivated and accountable in the year long program."

- Active Southern West Virginia

# Learn More About the PAG and Move Your Way

- Read the Executive Summary or Full Second Edition: <a href="https://health.gov/our-work/nutrition-physical-activity/physical-activity-guidelines/current-guidelines/">https://health.gov/our-work/nutrition-physical-activity/physical-activity-guidelines/current-guidelines</a>
- Share the Move Your Way website with consumers: <a href="https://health.gov/moveyourway">https://health.gov/moveyourway</a>
- Find, download, and print campaign materials: <a href="https://health.gov/our-work/physical-activity/move-your-way-campaign/campaign-materials">https://health.gov/our-work/physical-activity/move-your-way-campaign/campaign-materials</a>
- Watch Move Your Way videos: <a href="https://www.youtube.com/user/ODPHP/playlists">https://www.youtube.com/user/ODPHP/playlists</a>
- Follow ODPHP on twitter (@Healthgov) and Facebook (@HHSHealthGov)
- Join the ODPHP Physical Activity Listserv on <a href="https://health.gov/our-work/physical-activity">https://health.gov/our-work/physical-activity</a>

### Questions

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### Related Publications

- Journal of the American Medical Association (JAMA): The Physical Activity Guidelines for Americans
- JAMA Viewpoint: Physical Activity Guidelines for Health and Prosperity in the United States
- JAMA Research Letter: Joint Prevalence of Sitting Time and Leisure-Time Physical Activity Among US Adults, 2015–2016
- Circulation: Cardiovascular Quality and Outcomes: Physical Activity Guidelines for Americans from the U.S. Department of Health and Human Services: Cardiovascular Benefits and Recommendations
- Journal of Physical Activity and Health (JPAH): Umbrella and Systematic Review Methodology to Support the 2018 Physical Activity Guidelines Advisory Committee
- **JPAH**: The Scientific Foundation for the "Physical Activity Guidelines for Americans, 2<sup>nd</sup> Edition"
- JPAH: The Move Your Way Campaign: Encouraging Contemplators and Families to Meet the Recommendations From the Physical Activity Guidelines for Americans
- Medicine and Science in Sports and Exercise: 14 ACSM Scientific Pronouncements led by the Physical Activity Guidelines Advisory Committee members (June 2019)