

Link to Voiceover Version of This Presentation:

https://youtu.be/coEtz_BN8iQ

Link to How to Screen Record on iPad/iPhone:

<https://youtu.be/Nv5dGWnZ9Lc>

Physical Activity for Physical Wellness

Module 2/5

Essential Questions

What are the physical activity (PA) recommendations for my age group?

Why should I avoid being sedentary throughout my day?

How can meeting weekly PA engagement recommendations benefit me physically?

Challenge!

Students (ages 6-17), please pause this video and **reflect on all the PAs you performed over the last 7 days.**

Grab a pencil & paper, and draw a 7-day chart.

Then, fill in all the PAs you performed each day - including the name of the activity and the time spent performing the activity.

Lastly, reflect on your 7-day PA chart as we learn about the PA Recommendations for your age group.

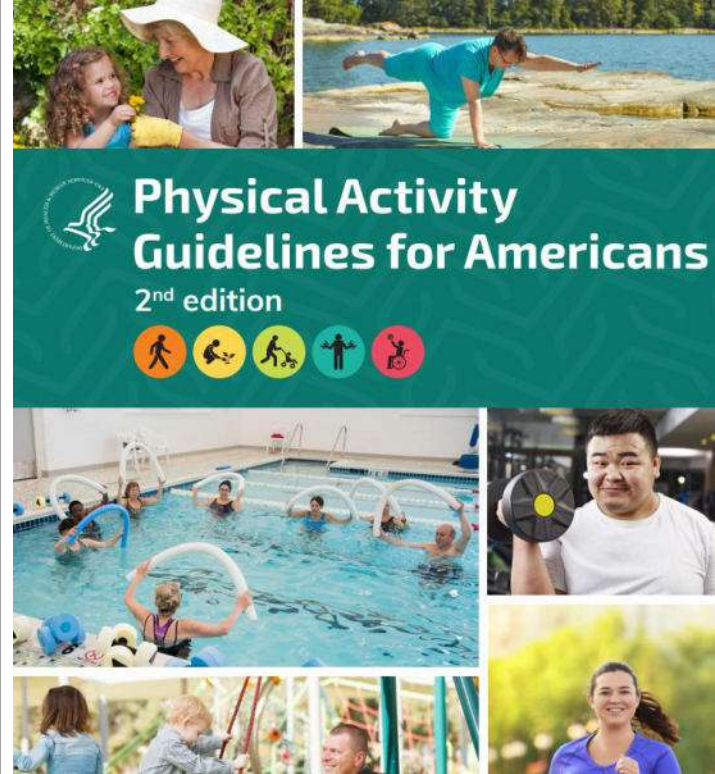
A 7-day chart template consisting of seven vertical rectangular boxes arranged horizontally. Each box has a colored header with a day of the week: Sunday (purple), Monday (blue), Tuesday (green), Wednesday (yellow), Thursday (orange), Friday (red), and Saturday (pink). The boxes are empty, designed for students to draw and record their physical activities for each day.

sunday	monday	tuesday	wednesday	thursday	friday	saturday

What are “The Physical Activity Guidelines”?

Physical Activity Recommendations

- Recommendations on **physical activity, sedentary behavior, and health**
 - Categorized by age and other factors which may impact PA (i.e. health status, pregnancy, etc.)
- Provided by a **federal advisory committee**, comprised of leading researchers in the fields of physical activity, health, and medicine.
- The compiled findings from the committee's research is titled “**The Physical Activity Guidelines (PAG) for Americans**”. *(available to the public in a PDF document online)*
- In **2008**, the first set of PAGs was released, our current set of PAGs was released in **2018**, and every **10-years** the PAG will continue to be updated.





PA Recommendations for ages 6-17



Key Guidelines for 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.

Understanding Key Terms

For Adolescents (ages 6-17) PA Recommendations



Aerobic Activities <i>(cardio activity)</i>	aerobic= “with oxygen”; activities in which the large muscles of the body are moving in a rhythmic manner for a sustained period of time; causes heart to beat faster and breathing harder than normal
Intensity of Aerobic Activities <i>(how hard a person works)</i>	Moderate intensity: <i>brisk walking; leisurely biking/swimming/dancing; kayaking; hiking; playing catch, house and yard work</i>
	Vigorous intensity: <i>running; bicycle riding with higher speed and/or resistance, running and chasing activities, jumping rope, dancing with large movements & speed</i>
Muscle-strengthening <i>(resistance training activity)</i>	Activities that provide resistance for our muscles and therefore strengthen our muscles; we can strengthen our muscle through bodyweight activities (such as squats, push-ups, and rock climbing) and through the use of equipment (such as dumbbells, resistance bands, etc.)
Bone- strengthening <i>(weight-bearing activity)</i>	Activities that produce a force on the bones (such as jumping) are bone-strengthening because the force (or impact with the ground) promotes bone growth and strength

Ages 6-17 examples of meeting PA recommendations

sunday

VPA:
60 min -
Playing
basketball
with
friends
**bone
strengthening*

monday

MPA:
60 min -
Kayaking
with
family
**muscle
strengthening*

tuesday

MPA:
50 min -
Brisk walk
with pet

VPA:
10 min -
Jump Rope
**bone
strengthening*

wednesday

VPA:
30 min -
dancing to
The
Fitness
Marshall's
YouTube
workouts
**bone
strengthening*

MPA:
30 min -
Brisk walk
with
friends

thursday

VPA:
15 min -
run
outside
**bone
strengthening*

MPA:
45 min -
Yoga with
Adrian
YouTube
Video
**muscle
strengthening*

friday

MPA:
20 min -
strength
exercises from
ACE Exercise
Library
**muscle
strengthening*

MPA:
40 min -
playing "Just
Dance" or
other
continuous
movement
video game
**bone
strengthening*

saturday

MPA:
60 min -
riding bike
with
family

Darius: A 16-Year-Old Adolescent

Darius does 60 or more minutes of daily physical activity that is at least moderate intensity. Here are the daily activities he participates in during a sample week when school is not in session:

- **Monday and Wednesday:** Walks dog (10 minutes); plays basketball at a nearby school gym that has a shared-use agreement for community physical activity during the summer (50 minutes)
- **Tuesday and Thursday:** Walks dog (10 minutes); plays doubles tennis (30 minutes); does planks and push-ups (5 minutes) with his dad in the evening; rides his bicycle to a friend's home (15 minutes)
- **Friday:** Plays Frisbee in the park with friends (60 minutes)
- **Saturday:** Vacuums his family's home and cleans the bathrooms (30 minutes); rides his bike on a local trail (30 minutes)
- **Sunday:** Plays an active video game with his family that involves continuous movement at a moderate intensity (30 minutes); does body-weight exercises in his room (30 minutes)



Darius meets the key guidelines by doing vigorous-intensity aerobic activities, bone-strengthening, and muscle-strengthening activities on at least 3 days a week:

- **Vigorous-intensity** activities on 4 days: basketball and bicycling
- **Bone-strengthening** activities on 4 days: basketball, tennis
- **Muscle-strengthening** activities on 3 days: body-weight exercises, including planks and push-ups

*Example of
Finding Your Fit
with the
Physical Activity
Recommendations*

*...how can YOU find
your fit?*

Challenge!

Students, this time let's pause this video and talk with an adult family member (ages 18-64), asking them to reflect on all of the PAs they performed over the last 7 days.

Grab a pencil & paper, and draw a 7-day chart.

Then, fill in all the PAs your family member performed each day - including the name of the activity and the time spent performing the activity.

Lastly, talk with your family member about how you can work together as a family to incorporate movement into your lives.

A 7-day chart template consisting of seven vertical rectangular boxes arranged horizontally. Each box has a colored header with the day of the week written in lowercase: Sunday (purple), Monday (blue), Tuesday (green), Wednesday (yellow), Thursday (orange), Friday (red), and Saturday (pink). The boxes are empty, designed for students to draw and record physical activities performed each day.

sunday	monday	tuesday	wednesday	thursday	friday	saturday

MOVE

Adults need a mix of physical



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.

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

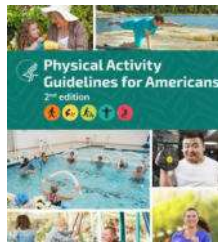


PA Recommendations
for ages
18-64



Understanding Key Terms

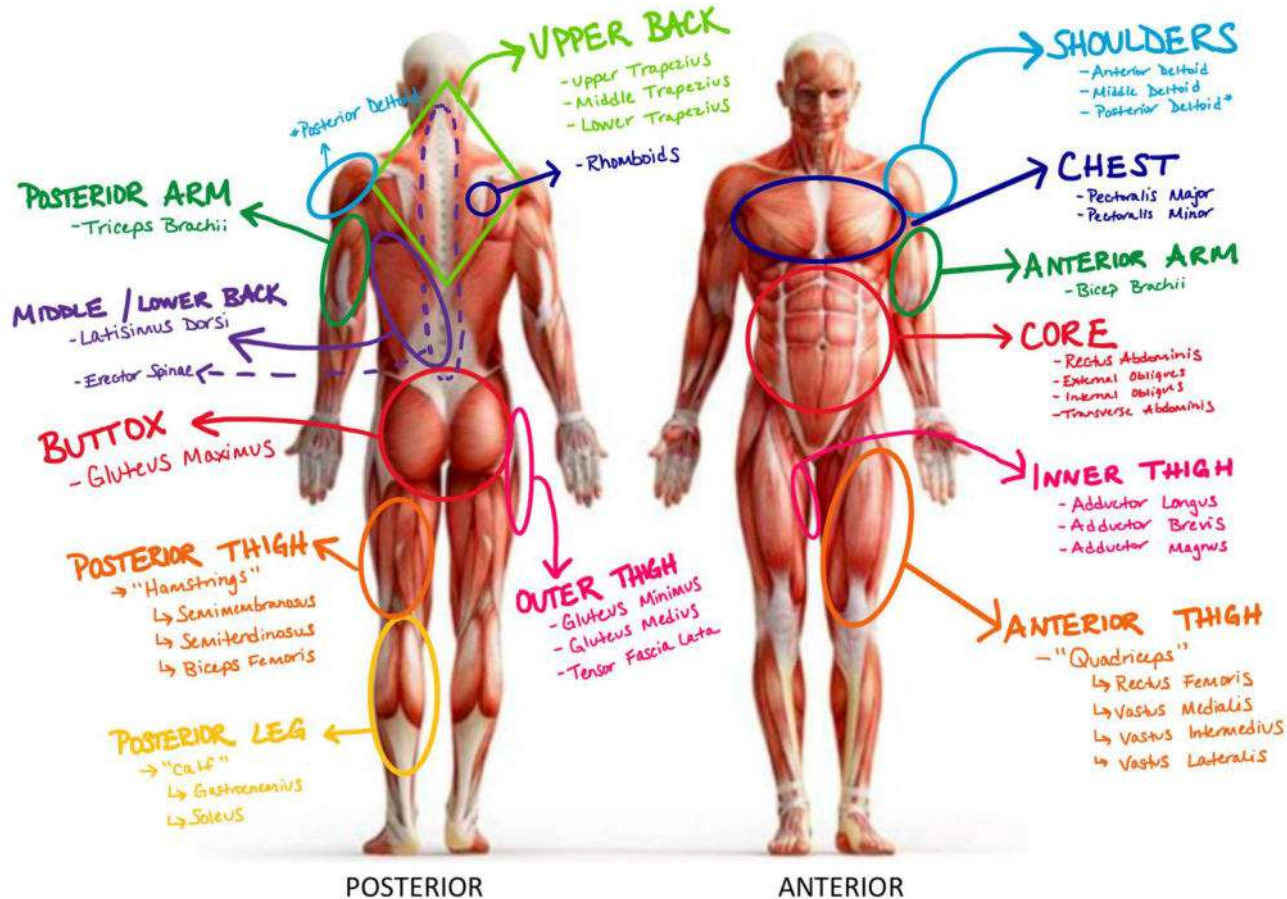
For Adults (ages 18-64) PA Recommendations



Aerobic Activities <i>(cardio activity)</i>	aerobic= “with oxygen”; activities in which the large muscles of the body are moving in a rhythmic manner for a sustained period of time; causes heart to beat faster and breathing harder than normal
Intensity of Aerobic Activities <i>(how hard a person works)</i>	Moderate intensity: <i>walking briskly, recreational swimming, biking slower than 10 mph, active forms of yoga, doubles tennis, half court basketball</i>
	Vigorous intensity: <i>jogging/running, swimming laps, vigorous dancing, biking faster than 10 mph, hiking uphill, HIIT, Group Fitness classes like step or kickboxing, singles tennis, full court basketball</i>
Muscle-strengthening <i>(resistance training activity)</i>	For adults, the guidelines specifically state that muscle-strengthening activity should be performed at a moderate intensity or greater, for all the major muscles of the body



Major Muscles of the Body



Ages 18-64 examples of meeting PA recommendations

sunday

MPA:
30 min -
swimming

monday

MPA:
2-3 sets of
chest &
back
strength
exercises
**muscle
strengthening*

tuesday

MPA:
30 min -
brisk walk

VPA:
20 min -
run
outside

wednesday

MPA:
2-3 sets of
anterior &
posterior
thigh body
exercises
**muscle
strengthening*

thursday

friday

MPA:
2-3 sets of
shoulder,
glutes, and
calf
exercises
**muscle
strengthening*

VPA:
10 min -
HIIT
workout

saturday

MPA:
60 min -
bike ride

To reduce the risk of injury and other negative events, people should:

- Choose types of PA that are appropriate for their current fitness level and health goals
- Increase PA gradually over time – people who are currently inactive should “start low and go slow” by starting with lower intensity activities and gradually increasing how often and how long activities are done
- Wear appropriate clothing/gear, use appropriate equipment, choose a safe environment, and make sensible choices about when, where, and how to be active
- If you have any chronic health conditions or symptoms, consult a health care professional or a physical activity specialist about the types and amounts of activity that is appropriate for you

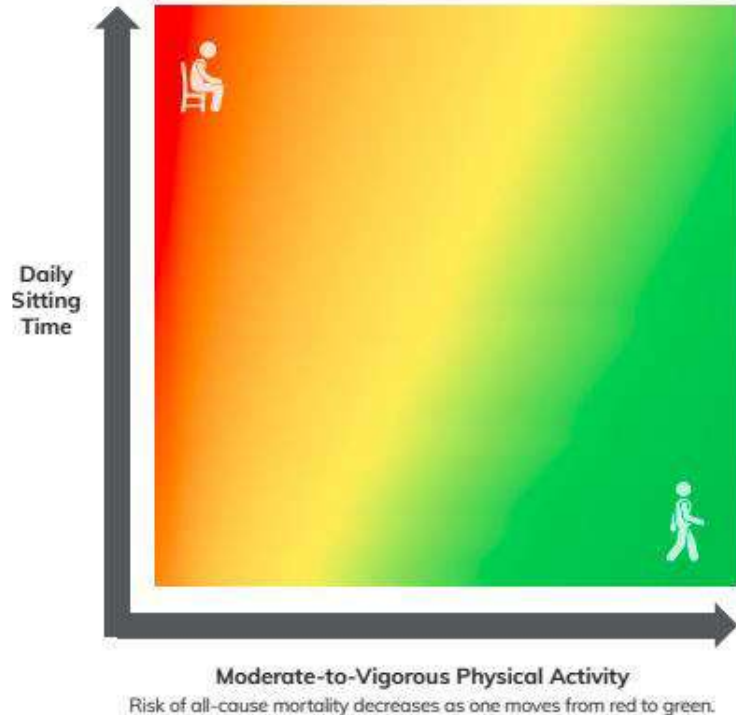
Safety & Physical Activity

(page 10, 2018 PAG for Americans)



The Risks of Sedentary Behavior

Figure 1-3. Relationship Among Moderate-to-Vigorous Physical Activity, Sitting Time, and Risk of All-Cause Mortality in Adults



This **figure**, found on pg 22 of the 2018 PAG, illustrates **3 main conclusions**:

- High volumes of MVPA appear to remove the excess risk of all-cause mortality that is associated with high volumes of sitting
- Very low time spent sitting reduces, but does not eliminate, the risk of no MVPA
- Given the high levels of sitting and low levels of physical activity in our population, most people would benefit from both **increasing MVPA & reducing time spent being sedentary**

Physical Health Benefits of PA

- Improved bone health
- Improved weight status
- Improved cardiorespiratory and muscular fitness
- Improved cardiometabolic health
 - The American College of Cardiology states:
*"Cardiometabolic disorders represent a cluster of interrelated risk factors, primarily **hypertension, elevated fasting blood sugar, dyslipidemia, abdominal obesity and elevated triglycerides.**"*
- Improved sleep
- Lower risk of all-cause mortality, cardiovascular disease, type 2 diabetes, and some cancers
- PLUS psychological & social benefits (presented in Modules 3 & 4)

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120



**During this module,
try to get to a point where you...**

Know...

- ...the PA recommendations for their age-group
- ... the physical benefits of PA engagement
- ... how to create two (2) SMART goals for engaging in PA for physical benefits

Perform...

- ...movement breaks which interrupt sedentary behavior every 30-minutes
-three (3) physical activities *of your choice*

Reflect...

- ...on your personal strategies for increasing PA engagement to support the achievement of your SMART goals

Resources

- Content for this presentation was guided, in part, by the Physical Activity Guidelines for Americans, 2nd edition. For more information, please visit:
 - https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf
 - U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S. Department of Health and Human Services; 2018.
- Plutchik, R. (1991). Emotion Wheel. In Edlin, G. & Golanty, E. (2019), *Health & Wellness*. (p. 66). Burlington, Massachusetts: Jones & Bartlett Learning.
- *American College of Cardiology*: <https://www.acc.org/tools-and-practice-support/quality-programs/cardiometabolic-health-alliance>
- *American Heart Association*: <https://www.heart.org/en/health-topics/high-blood-pressure/understanding-blood-pressure-readings>