

**MILITARY FAMILIES
LEARNING NETWORK**

Physical Activity Across the Lifespan for
Individuals with Disabilities

*Thanks for joining us! We will get started soon.
While you're waiting you can get handouts etc. by following the link below:*

<https://learn.extension.org/events/3286>

U.S. DEPARTMENT OF DEFENSE extension Issues - Inspire/Build - Support
A Part of the Cooperative Extension System USDA

This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, and the Office of Military Family Readiness Policy, U.S. Department of Defense under Award Number 2018-48770-24.



**MILITARY FAMILIES
LEARNING NETWORK**

Connecting military family service providers
and Cooperative Extension professionals to research
and to each other through engaging online learning opportunities

militaryfamilies.extension.org

Sign up for webinar email notifications at militaryfamilies.extension.org/webinars

Today's Presenter

Rebecca K. Lytle, Ph.D.

Education

- Ph.D. in Human Performance with an Emphasis in Movement Studies in Disability

Areas of Expertise:

- Adapted Physical Education
- Physical Activity for Person's with Disabilities
- Autism



3

Physical Activity Across the Lifespan for Individuals with Disabilities

REBECCA K. LYTTLE, PH.D.
PROFESSOR
DEPARTMENT OF KINESIOLOGY, CHICO STATE UNIVERSITY
RLYTTLE@CSUCHICO.EDU

4

Opening Questions

What age or age groups
do you work with?

What types of disabilities?



5

Agenda (Where we are going?)

- Defining physical activity
- Benefits of physical activity for individuals with disabilities.
- Recommended activities levels for individuals of all abilities.
- Learn how to match an activity to an individual's skills and interest
- Discover ways to reach out within your community



6

Defining Physical Activity (PA)

The term "physical activity" will generally refer to bodily movement that enhances health.

Health Enhancing Physical activity

- Brisk walking
- Jump roping
- Dancing
- Lifting weights
- Climbing equipment
- Yoga
- Yard work



Some jobs meet this guideline – postal worker, construction, etc. (Physical Activity Guidelines for Americans, 2008)

7

What is Physical Activity (PA)?



8

What is PA? Movement Hierarchy



9

The Language of Movement – ABC's

Skill Themes – What We Do

Locomotor

- Walk, run, hop, skip, gallop, slide, chase, flee, dodge

Nonmanipulative

- Turn, twist, roll, balance, jump and land, stretch, curl

Manipulative

- Throw, catch, kick, volley, dribble, strike with implement or racket



10

The Language of Movement – ABC's

Movement Concepts – How

Space Awareness

- Location: self or general space
- Direction: up/down, forw/back, right/left, clockwise/counter clockwise
- Levels: low/middle/high
- Pathways: straight/curved/zigzag
- Extensions: large/small, far/near

Effort

- Time: fast/slow, sudden/sustained
- Force: strong/light
- Flow: bound/free

Relationships

- Of body parts: round, curved, narrow, wide, twisted, symmetrical
- With objects/people: over/under, on/off, near/far, in front/behind, along/through, meeting/parting, surrounding, around
- With people: lead/follow, mirror/match, unison/contrast, alone in a mass, solo, partner, group, between groups

11

Why Physical Activity Important for the Non Sport Participant?



12

Head Control & Crawling in Infants are Used Later in Life



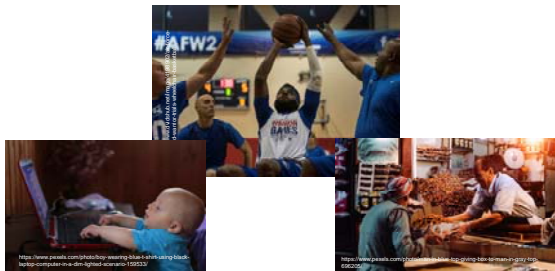
13

Crawling Later...



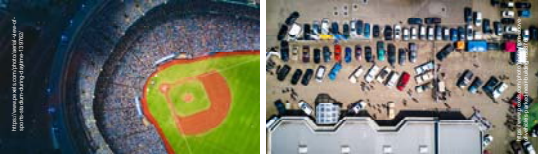
14

Reaching in Infancy, Sport, & Life Skill



15

Spatial Awareness in Sport & Life



16

Running in Sport & Life...



17

Catching in Sport & Life



18

Benefits of PA for Individuals with Disabilities

- Prevents high blood pressure and weight gain
- Protects against: heart disease, stroke, some cancers, type 2 diabetes, depression, contractures, pressure sores, spasticity, and keeps joints and ligaments flexible
- Reduces pain, increased digestion and appetite
- Exercise is better than Zoloft in treating depression in adults (Ratey, 2008)



(CDC, Step it Up!, 2018)

19

Benefits Continued...

- People with chronic disease: lessen severity, prevent disease progression and premature death, reduce symptoms, improve mobility
- Older Adults: improved quality of life, emotional well-being, positive mental health, promote healthy aging, delay cognitive decline
- In children: improve bone health, cardiorespiratory and muscular fitness, body composition, lower levels of anxiety & depression
- Schools PA: encourage participation in physical activity as part of physical education, recess, classroom lessons, or extracurricular activities, students improve their academic performance.

(CDC, Step it Up!, 2018)

20

Physical Activity can Decrease (Autism & ID)

- Stereotypic behavior
- Aggression
- Off-task behavior
- Elopement (running)
- Stress



(Lang, Koegel, Ashbaugh, Register, Ernce, & Smith, 2010)

21

Recommended Physical Activity for Children

60 min or more **EVERY** day!

- Aerobic
- Muscle strengthening
- Bone strengthening

PA should be appropriate for their age, enjoyable, and offer variety

<https://health.gov/paguidelines/pdf/paguide.pdf>



22

Recommended Physical Activity for Adults

150 min. a week of moderate PA or 75 min. of vigorous PA, or an equivalent combination

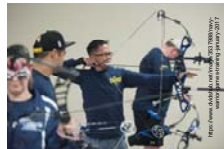
Muscle strengthening on 2 or more days per week

If not able to meet guidelines, engage in regular PA according to ability

Consult with a health care provider regarding amounts and type

<https://health.gov/paguidelines/pdf/paguide.pdf>

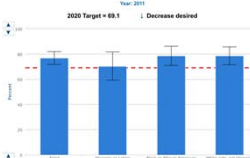
10 MINUTES AT A TIME IS FINE!



23

What barriers are there in your community to physical activity?

DH-6 Adults with disabilities with barriers to health and wellness programs (age adjusted, percent, 18+ years) @ HealthEquity



Data Source: National Health Interview Survey (NHIS), CDC/NCHS

Status:

76.8% of adults with disabilities aged 18 years and over experienced physical or program barriers that **limit or prevent** them from using available local health and wellness programs in 2011. Target is 69.1%, based on a target-setting method of 10 percent improvement

24

Barriers to Physical Activity (PA)

- Transportation
- A Buddy
- Motivation
- Physical Access
- Attitudes
- Self Perception
- Fear or anxiety
- Lack of knowledge on how to start

25

Physical Activity and Health

The benefits of physical activity may be more related to total number of calories expended than exercise intensity

The "Exercise Lite" recommendation

"Every U.S. adult should accumulate *thirty minutes* or more of moderate-intensity physical activity on most, preferably all, days of the week."

2008 Physical Activity Guidelines for Americans

26

Marta: Adult with Physical Disability

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Walk to dog 15-20 minutes	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes
Yard work 20 min	Walk from lot to work 10 min	Walk from lot to work 10 min	Walk from lot to work 10 min	Walk from lot to work 10 min	Walk from lot to work 10 min	Housekeeping 20 min Grocery shopping 20 min
Walk to dog 15-20 minutes	Yoga 50 min	Walk to dog 15-20 minutes	Yoga 50 min	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes	Walk to dog 15-20 minutes
Additional activities pending interests		Swim Program		Swim Program		Kayaking 50 minutes

27

Kevin: 10-Year Old Intellectual Disability

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Roller skating 30 minutes	Walk to/from school 20 min	Walk to/from school 20 min	Walk to/from school 20 min	Walk to/from school 20 min	Walk to/from school 20 min	Handcycle/bicycle 30 min
Walk the dog 15 minutes	Play with family 20 min	Play on playground 20 min	Play with friends 25 min	Play with family 30 min	Bicycles for 30 minutes	Swimming or water play 30 min
Climb in backyard or park 20 min	Jump rope 10 min Gymnastics 10 min	Climbs on playground equipment 20 min	Jump rope 10 min Runs 5 min Climbing in yard 10 min	Play soccer for 30minutes	Plays with friends 20 minutes	

28

What's Developmentally Appropriate?




29

How do you select?

- Is it fun?
- Is it motivating?
- Can I be successful?
- Do I have the skills? Or can I learn the skills?
- Does this program provide for variations in ability?
- Does this program have adapted equipment?
- What are the sizes of the groups?




30



FUN!

31



Functional and Enjoyable

32



Playful

33



Success

34

General Guidelines for Success

- Choose PA for joy
- Sustained (15 to 20 minutes per session), and regular (at least three times per week)
- Consult a doctor before starting any PA
- Start slowly, and increase the amount or duration of activity gradually
- Join with others (friends, family, co-workers) to get, and give support
- Keep a record of activity (distances, number of times per week, etc.) to measure progress
- Can mix up activities (garden, walk, dance, etc.)

35

Remember, you don't have to move fast.
You just have to move...



36

What's in my community, children?

- School physical education quality?
- Adapted physical education
- Access to intramural or interscholastic sports
- Special Olympics www.specialolympics.org/
- Adapted Sports Programs <http://www.disabledsportsusa.org/sports/adaptive-sports/>
- Local recreation programs
- Local youth clubs
- Neighborhood parks and school playgrounds
- My house, backyard, town



37

What's in my community, adults?

- Adapted physical activity programs – community colleges or universities
- Special Olympics www.specialolympics.org/
- Adapted Sports Programs <http://www.disabledsportsusa.org/sports/adaptive-sports/>
- Local recreation programs
- Community health clubs
- Community recreational programs
- Wounded warrior programs <https://www.woundedwarriorproject.org/programs>
- My house, backyard, town...




38

What does the individual's week look like?

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6am							
7							
8							
9							
10							
11							
12pm							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10pm							

39

Questions



© SHUTTERSTOCK/D. BOBBI/STOCK

43

Resources

World Health Organization (WHO) <http://www.who.int/mediacentre/factsheets/fs385/en/>

Department of Health and Human Services: Physical Activity Guideline <https://health.gov/paguidelines/pdf/paguide.pdf>

Center for Parent Information Resource: resources, camps, regional information, IEP supports, legal information, etc. <http://www.parentcenterhub.org>

CDC: Increasing Physical Activity for Adults with Disabilities. <https://www.cdc.gov/nbddd/disabilityandhealth/ia.html>

Devices for tracking physical activity <https://www.mcgworld.co.uk/feature/apple/alternatives-apple-watch-for-wheelchair-fitness-tracking-3842622>

Surgeon General's Call to Action https://www.cdc.gov/physicalactivity/walking/call-to-action/index.htm?rs_cid=bb-dppac-calltoaction-002

Developmentally Appropriate Practices from SHAPE https://www.shapeamerica.org/standards/guidelines/Apppractice02_download.aspx

Physical Activity Guidelines <https://health.gov/dietaryguidelines/2015/guidelines/appendix-1/>

44

CEU Credit & Certificate

One Survey, two different ways to receive a certificate

- MFLN Military Caregiving concentration area is offering 1.0 CEU credit from the UT School of Social Work to credentialed participants.
- MFLN Certificate of Completion for providers interested in receiving general training.

To receive a CEU credit OR certificate of completion, please complete the evaluation survey found at:
https://vte.co1.qualtrics.com/jfe/form/SV_5ja7bES1MS2qG7X

45



MILITARY CAREGIVING
Military Families Learning Network

Connect with MFLN Military Caregiving Online!

-  [MFLN Military Caregiving](#)
-  [MFLN Military Caregiving @MFLNMC](#)
-  [MFLN Military Caregiving @mfln_mc](#)
-  [MFLN Military Caregiving](#)
-  [Military Families Learning Network](#)

46

Upcoming Event

- **Title:** Detour Ahead: Planning for Contingencies on Your Caregiving Journey
- **Time:** 11:00 a.m. Eastern
- **Date:** Wednesday, May 23, 2018
- **Location:** <https://learn.extension.org/events/3378>

For more information on MFLN Military Caregiving go to:
<https://militaryfamilies.extension.org/military-caregiving/>

47



MILITARY FAMILIES
LEARNING NETWORK

Find all upcoming and recorded webinars covering:

Personal Finance	Family Transitions
Military Caregiving	Network Literacy
Family Development	Nutrition & Wellness
Community Capacity Building	

militaryfamilies.extension.org/webinars

U.S. DEPARTMENT OF DEFENSE



extension
Seeds • Research • Support
A Part of the Cooperative Extension System



USDA

This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, and the Office of Military Family Readiness Policy, U.S. Department of Defense under Award Number 2015-48770-24368.
