

## Physical Activity Globally

- Globally, insufficient physical activity is the 4<sup>th</sup> leading risk factor for mortality
  - 1 in 4 adults not active enough
  - Over 80% of adolescent population not active enough
- Lack of physical activity a key contributor to noncommunicable diseases
- Multiple benefits of physical activity
- Physical activity important across the lifespan
- Important to tailor physical activity
- Globally nurses can and should provide
  - Physical activity counseling
  - Physical activity assessment



## Physical Activity Benefits

- Decreases risk of early death
- Lowers risk of cardiovascular diseases
- Lowers risk of Type 2 diabetes and metabolic syndrome
- Lowers risk of breast and colon cancer
- Improves cognitive function in older adults
  - Reduces depression symptoms
  - Decreases fall risk
  - Improves self-perception
  - Can be a part of family and friend activities
  - Is more powerful than any pharmaceutical class of drugs in improving health
  - Walking is the "perfect preventive medicine"



## Steps per Day

### Daily Walking Steps

Physical Activity Classification	Steps Per day
Sedentary	<5,000
Low active	5,000-7,499
Somewhat active	7,500-9,999
Active	10,000-12,499
High Active	≥12,500
Reference: Tudor-Locke, C. et al. (2008). Revisiting "how many steps are enough?" Medicine & Science in Sports & Exercise 40(7 Suppl)	

## Assessment Tools

- Questionnaires
  - Global Questionnaires
  - Short Recall Questionnaires
  - Quantitative History Recall Questionnaires
- Records and Logs
- Objective Monitors
  - Pedometers
  - Accelerometers
  - Fitness Monitors



## Individualized Physical Activity Prescription

- Exercise is Medicine®
- Healthcare Providers' Action Guide:
  - [http://www.exerciseismedicine.org/assets/page\\_documents/Complete%20HCP%20Action%20Guide.pdf](http://www.exerciseismedicine.org/assets/page_documents/Complete%20HCP%20Action%20Guide.pdf)
- Prescribing physical activity to your patients
  - Step 1 – Safety Screening
  - Step 2 – Determining your patient's readiness to change
  - Step 3 – Providing your patient with an exercise prescription
  - Step 4 – Providing your patient with a more advanced exercise prescription

## Physical Activity in WHO Regions

- African Region
  - <http://www.who.int/dietphysicalactivity/implementation/AFROtemp/en/>
- Region of the Americas
  - <http://www.who.int/dietphysicalactivity/implementation/AMROtemp/en/>
- Eastern Mediterranean Region
  - <http://www.who.int/dietphysicalactivity/implementation/EMROtemp/en/>
- European Region
  - <http://www.who.int/dietphysicalactivity/implementation/EUROtemp/en/>
- South-East Asia Region
  - <http://www.who.int/dietphysicalactivity/implementation/SEAROtemp/en/>
- Western Pacific Region
  - <http://www.who.int/dietphysicalactivity/implementation/WPROtemp/en/>



### Global Health Observatory data

- Prevalence of insufficient physical activity
- Interactive graphs available at [http://www.who.int/gho/ncd/risk\\_factors/physical\\_activity/en/](http://www.who.int/gho/ncd/risk_factors/physical_activity/en/)

## Physical Activity Minutes and Health Benefits

### Physical Activity Minutes and Relationship to Health Benefits

Level of Physical Activity	Moderate-intensity Minutes per Week of Physical Activity	Health Benefits
Inactive level	Obtaining no additional physical activity throughout the day beyond baseline	Unhealthy
Low level	Obtaining some physical activity beyond baseline but < 150 minutes a week of moderate-intensity physical activity	Partial health benefits
Medium level	Obtaining the recommended amount of physical activity on a scale of 150 minutes to 300 minutes a week of moderate-intensity physical activity	Substantial health benefits
High level	Obtaining > 300 minutes a week of moderate intensity physical activity	Additional health benefits, but evidence not yet available to know upper limit for benefits

Reference: U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans.

## Physical Activity Guidelines

### Physical Activity Guideline Examples (Global, USA, Canada)

	Website URL	Children	Adults	Older Adults
Global Recommendations on Physical Activity for Health	<a href="http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/">http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/</a>	Children age 5–17 years	Adults age 18-64 years	Adults age ≥65 years
2008 Physical Activity Guidelines for Americans	<a href="http://health.gov/paguidelines/pdf/paguide.pdf">http://health.gov/paguidelines/pdf/paguide.pdf</a>	Children & adolescents age 6 to 17 years	Adults age 18-64 years	Adults age ≥65 years
Canadian Physical Activity Guidelines, Canadian Sedentary Behavior Guidelines	<a href="http://www.csep.ca/CFiles/Guidelines/CSEP_Guidelines_Handbook.pdf">http://www.csep.ca/CFiles/Guidelines/CSEP_Guidelines_Handbook.pdf</a>	<ul style="list-style-type: none"> <li>Infants (&lt; 1 year)</li> <li>Toddlers (1-2 years) and preschoolers (3-4 years)</li> <li>Children (5-11 years)</li> <li>Youth (12-17 years)</li> </ul>	Adults age 18-64 years	Adults age ≥65 years

## Physical Activity and Specific Diseases

### Physical activity for asthma patients

- Use asthma medications as prescribed
- Use rescue inhaler as recommended
- Warm-up and cool-down
- If not feeling well, postpone activity
- Breathe through nose as much as possible
- Check air quality index
- Reduce allergen exposure

### Physical activity for COPD patients

- Use COPD medications as prescribed
- Use rescue inhaler as recommended
- Avoid sitting for prolonged periods
- Make physical activity a regular part of everyday
- Pace self, warm up and cool-down
- Build up activity slowly

### Physical activity for cardiovascular disease patients

- Follow recommendations of health care providers
- Important for patient to engage in the phases of cardiac rehabilitation
- Work closely with cardiology on physical activity plan
- Individualize warm-up, cool-down, progression, resistance training

### Physical activity for diabetes patients

- Physical activity a critical part of management of diabetes
- If target organ disease present, work with health care provider
- Be aware of implications of oral and injectable diabetes agents
- Review the relationship between hypoglycemia and physical activity



## Physical Activity and Pregnancy

- Physical activity important during pregnancy
- Sedentary behavior during pregnancy poses risks
- Follow health care provider's recommendations
- <https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Physical-Activity-and-Exercise-During-Pregnancy-and-the-Postpartum-Period>

## Physical Activity and Individuals with Disabilities



- Adults with disabilities are living to an older age
- Physical activity is an important part of health promotion
- Nurses need to tailor physical activity programs individually
- Physical activity allows for self-management of health

## Step It Up!

Campaign to Increase Walking in the United States (2015): <https://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/index.html>



## Nurses Also Need to be Physically Active



- Create your own physical activity journey
- Make your own health a priority
- Overcome your physical activity barriers
- Model healthy behavior

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