

Physical Activity Assessment at Work

Importance of Using Standardized Measures



Why Physical Activity?

- ✓ Lowers the risk of disease and death from all causes
- ✓ Improves physical and mental function, quality of life, sleep, mental health, bone health, + more



Physical Activity Guidelines for Americans

≥ 150 min/week of moderate-intensity OR
 ≥ 75 min/week of vigorous-intensity OR
 Equivalent combination of both

AND

≥ 2 days/week muscle-strengthening

AND

Minimize sedentary behavior



Benefits of Physical Activity at Work

- ✓ Reduced absenteeism related to injury, illness
- ✓ More productive workforce
- ✓ Increased job satisfaction
- ✓ Lower HR, healthcare, lost-productivity costs



Get Started Using Standardized Measures

- ✓ Identify improvement needs areas and determine appropriate intervention
- ✓ Validated assessment of physical activity for improved benchmarking capacity



What to measure

Aerobic physical activity

Muscle strengthening

Sedentary behavior

Cardiorespiratory fitness



How to measure

Minutes MVPA per week

Times per week

Minutes/hours per week (excludes sleep)

VO2 max

For more information and guidance on measurements, [see table from validated research.](#)



PSE Supports to Promote Physical Activity



Policies

- Paid time to exercise
- Stretching at the beginning of shifts
- Flex-time for physical activity
- Booster break policy
- Allow walking meetings



[Get more PSE examples and ideas from the CDC.](#)



Systems

- Increase parking fees
- Integrate program with benefit plan (subsidize gym membership; incentives for public transit)
- Consider employee's family in benefit design program to promote healthy behavior at home



Environment

- Onsite fitness room, changing area, lockers, showers
- Motivational prompts, signage
- Prominently featured stairs
- Walking/biking trails
- Bike racks, sheltered areas

The above supports are:



Evidence based



Grounded in equity and in leadership engagement, buy-in, and modeling



Low cost

Physical Activity Assessment at Work

Definitions & Resources



Definitions

- **Cardiorespiratory fitness** — The ability of the cardiovascular and respiratory systems to transport oxygen to the muscles to perform physical work, reflecting a person's aerobic exercise capacity and total body health.
- **Physical activity** — Any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level.
- **MET** — Metabolic Equivalent of Task refers to the energy expenditure required to carry out a specific activity. 1 MET is the rate of energy expenditure while sitting at rest.
- **MVPA** — Moderately-to-Vigorous Physical Activity requires expending 3.0 or more METs. Moderate intensity (3.0-6.0 METs) examples include walking briskly at 2.5 or 4 mph, playing doubles tennis or raking the yard. Vigorous-intensity activities (6.0+ METs) include jogging, running, carrying heavy groceries or other loads upstairs, shoveling snow, or participating in a strenuous fitness class.
- **Muscle strengthening activities** — Physical activity, including exercise, that increases skeletal muscle strength, power, endurance and mass. Muscle-strengthening activity has three components: intensity, frequency, and sets and repetitions. Examples include lifting weights, working with resistance bands, doing calisthenics that use body weight (e.g., push-ups, pull-ups), carrying heavy loads, and heavy gardening.
- **PSE** - Policy, Systems and Environment(s)
- **Sedentary behavior** — Any behavior characterized by a low level of energy expenditure (less than or equal to 1.5 METs) while sitting, reclining, or lying.
- **VO2 max** — Maximal oxygen consumption, that is, the maximum amount of oxygen that an individual can utilize during intense or maximal exercise.



Resources

- [U.S. Department of Health and Human Services. Change Tool \(Worksite Sector\)](#)
- [U.S. Department of Health and Human Services. Move Your Way® Community Resources](#)
- 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
- [U.S. Department of Health and Human Services. What's Your Role – Employers](#)
- [U.S. Department of Health and Human Services. Worksite Physical Activity](#)
- Whitsel LP, Pate RR, Ablah E, et al. Editor's Desk: Promoting Physical Activity in the Workplace. *Am J Health Promot.* 2019;33(2):312-326. doi:10.1177/0890117118816750



Thank you

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