

## Physical Activity Scale for the Elderly (PASE)

The PASE is an instrument that measures the level of physical activity for individuals aged 65 and older. The PASE is comprised of self-reported occupational, household and leisure items over a one-week period and can be administered by telephone, mail or in-person. The PASE scoring was derived from movement counts from an electronic physical activity monitor, activity diaries and self-assessed activity levels in a general population of non-institutionalized older persons. The PASE can be used to measure physical activity in surveys of older person and to assess the effectiveness of interventions.

The leisure activity items require participants to first report the number of days per week the activity was performed and then the number of hours per day. PASE scores are calculated from weights and frequency values for each of the 12 types of activities. Responses to the first question about sitting are not scored. The validity and reliability of PASE were established in a random sample of 222 individuals ages 65-100y, and scores were significantly correlated with balance, grip strength, leg strength and health status. Scores range from 0 to 361. A general population (from NERI) had mean score of 103 (SD 64.1). Means by age groups were:

	<b>65-69y</b>	<b>70-75 y</b>	<b>76-100y</b>
<b>MEN</b>	144.3 ± 58.6	102.4 ± 53.7	101.8 ± 45.7
<b>WOMEN</b>	112.7 ± 64.2	89.1 ± 55.5	62.3 ± 50.7

## General Queries and Prompts

If a participant asks about the last 7 days, you can clarify: e.g., if today is Tuesday and participant asks about the time frame, then you could say “that is, since LAST Tuesday”. If participant gives response that is not echoing responses listed, refer back to the responses on the questionnaire (e.g., if a participant answers “I do that every day” to the how-often items, repeat the possible responses until participant chooses one category. Alternatively for the how-many-hours items, if a participant answers “I do it all day long”, again refer back to the responses on the card). If a participant answers “5 hours” or a number larger than 4, you can check the box “More than 4 hours” rather than making the participant state category specifically. If a participant refers to a timeframe that is not within past 7 days (e.g., I did activity two weeks ago or a month ago), refer him/her back to the past 7 days.

Appendix A lists extensive examples of applicable activities for each of the activity levels queried in the following items. If it is unclear as to what level an activity should be coded, refer to the list in Appendix A. If an activity is not on the list and it is not clear where it should be included in the PASE, write appropriate notes in the questionnaire (e.g., square-dancing twice week for 3 hours each

time) and have the Project Director refer to the principal investigators (Kiel and Hannan) for clarification.

**Q1. Over the past 7 days, how often did you participate in sitting activities such as reading, watching TV, or doing handcrafts?**

Visiting with others, sewing, paperwork, playing musical instruments, playing cards, and/or bingo are considered sitting activities.

Example: The participant watches TV every day, code sitting activities as often (5-7 days)

**Q1b. On average, how many hours per day did you engage in these sitting activities?**

The two items that ask about sitting activity are for the participant to think of activities and time spent. However, these items are not included in the PASE scoring of overall physical activity.

**Q2. Over the past 7 days, how often did you take a walk outside your home or yard for any reason? For example, for fun or exercise, walking to work, walking the dog, walking in a mall, etc?**

This level of activity includes treadmill walking. See Appendix A for other applicable activities.

Any specific leisure time, household or work related activity that involves walking is coded entirely under the appropriate activity category (light, moderate, or strenuous sport and recreation, muscle strength and endurance, or work related). Hence, walking as part of golf would be coded only as moderate sport and recreation (see other item) and not as walking. A key component here is walking outside the home, so if a participant says "I walk around my building", leaving the apartment or flat is important, but only if leaving the home area. Walking to the mailbox or mail area is NOT walking outside the home (typically, unless a rural area). Walking within the participant's yard is not included.

Example: The participant walks three times a week, 3-4 times each day for 15 minutes. Throughout the PASE, the number of days rather than the number of occasions is coded. Therefore, the participant walked sometimes (3-4 days).

**Q2a. On average, how many hours per day did you spend walking?**

Example: The participant walks 30 minutes to 1.5 hours per day. The average time spent walking was 1 hour. Code one but less than 2 hours per day.

**Q3. Over the past 7 days, how often did you engage in light sport or recreational activities such as bowling, golf with a cart, shuffleboard, fishing from a boat or pier or other similar activities?**

Example: The participant plays golf 4 days per week for 4 hours/day. Three days a week, the golfer uses a power cart. One day a week, the golfer walks the course either pulling a cart, carrying the clubs or the caddy carries the clubs. Only golf with a power cart would be coded under light sport and recreation. Specifically, the participant golfed with a cart sometimes (3-4 days/week) for 2-4 hours/day. Golfing without a cart would be marked under moderate sport and recreation as seldom (1-2) days for 2-4 hours/day. Putting or hitting golf balls at a driving range are coded for light sport and recreation

Stretching is not coded under any activity category in the PASE.

**Q3b. On average, how many hours per day did you engage in these light sport or recreational activities?**

Example: The participant golfs using a power cart 3 days a week for 2-4 hours a day. Code 2-4 hours.

If a participant considers an activity "LIGHT Sport/Recreational" that Appendix A or an example on the questionnaire places in a different category, **THE PASE CATEGORY IS USED AND NOT THE RESPONDENT'S CHOICE.** For example, a participant swims laps and considers this activity Light rather than Strenuous Sport & Recreation. Swimming laps is coded a Strenuous Activity regardless of the respondent's assessment of the activity's intensity. Appendix A lists pre-assigned categories of activities.

**Q4. Over the past 7 days, how often did you engage in moderate sport or recreational activities such as doubles tennis, ballroom dancing, hunting, ice skating, golf without a cart, softball or other similar activities?**

This level of activity includes most types of dancing, square dancing, ballet, social as well as ballroom dancing listed above. See Appendix A for applicable activities.

Gardening and lawn work are not coded under leisure time activities. Gardening and lawn work are considered household activities. Q9b addresses lawn work and Q9c pertains to gardening.

**Q4b. On average, how many hours per day did you engage in these moderate sport or recreational activities?**

**Q5. Over the past 7 days, how often did you engage in strenuous sport or recreational activities such as jogging, swimming, cycling, singles tennis, aerobic dance, skiing (downhill or cross country or other similar activities)?**

Example: The participant swims laps but considers the activity light rather than strenuous sport and recreation. This participant would get coded into this category. As noted above, swimming laps is coded a strenuous sport and recreational activity regardless of the participant's assessment of the activity's intensity. See Leisure time activities categories in Appendix A.

**Q5b. On average, how many hours per day did you engage in these strenuous activities?**

Example: The participant takes a one-hour aerobics class, 3 days per week. The class consists of 20 minutes of stretching and 40 minutes of aerobic dance. The 40 minutes of aerobic dance would be coded under strenuous activities, The 20 minutes of stretching would not be coded under any activity category. Under strenuous activities, the interviewer would choose less than one hour a day for 3-4 days per week.

Climbing stairs as part of an exercise regimen is coded under strenuous sport and recreation. However, stair climbing as part of daily activities is not coded in the PASE.

**Q6. Over the past 7 days, how often did you do any exercises specifically to increase muscle strength or endurance, such as lifting weights or pushups, etc?**

Strenuous work activity, such as moving furniture, is not included in this question. Only activities that are done specifically to increase muscular strength and endurance are used in this question.

**Q6a. On average, how many hours per day did you engage in exercises to increase muscle strength or endurance, such as lifting weights, pushups, or physical therapy with weights, etc.?**

The exercise activities also may include isometrics. Physical therapy with weights includes hand-held weights and resistance therapy bands.

**Q7. During the past 7 days, have you done any light housework, such as dusting, washing or drying dishes, or ironing?**

Drying dishes, clothes washing, ironing, hanging up laundry, taking out the garbage and preparing meals are considered light housework. See Appendix A for applicable activities.

**Q8. During the past 7 days, have you done any heavy housework or chores such as vacuuming, scrubbing floors, washing windows, or carrying wood?**

This level of activity includes moving heavy boxes. Stacking wood as a household chore is considered to be heavy housework. See Appendix A for applicable activities.

**Q9a. During the past 7 days, did you engage in home repairs like painting, wallpapering, electrical work, etc.?**

Home repair includes home improvement and maintenance projects such as painting, plumbing, and carpentry. See Appendix A for applicable activities.

**Q9b. During the past 7 days, did you engage in lawn work or yard care, including snow or leaf removal, chopping wood, etc?**

Snow removal (sweeping snow, shoveling snow or using a snow blower) is considered to be lawn work or yard care. Lawn mowing is counted as lawn work regardless of the type of mower (riding, power or push) used. Chopping wood outdoors should be coded in this item.

**Q9c. During the past 7 days, did you engage in outdoor gardening?**

Example: Participant does outdoor gardening in season. In February, the participant has not yet started the garden yet. In this example, Outdoor gardening is coded "no." Only activities performed during the past seven days are coded. If the participant does not have a garden, the item is coded "no".

**Q9d. During the past 7 days, did you engage in caring for another person such as a child, dependent spouse, or another adult?**

Dependency is defined as a person requiring assistance with activities of daily living (food preparation, personal hygiene, household cleaning). Division of labor within a household (i.e. meal preparation, laundry, yard work) is not considered dependency.

Babysitting is included in this item. Babysitting is not included in Q10 (below) as a work related activity. Pet care is not considered part of this item.

**Q10. During the past 7 days, did you work for pay or as a volunteer?**

Only work (paid or volunteer) performed during the past 7 days is coded.

**Q10a. How many hours per week did you work for pay and/or as a volunteer?**

Participants should be encouraged to give their best estimate of the number of hours they worked during the previous seven days. However, if a range of hours is reported (e.g. 15-20 hours), use the midpoint of the range as an estimate.

If a participant did both paid and volunteer in past 7 days, sum the number of hours.

**Q10b. Which of the following categories best describes the amount of physical activity required on your job and/or volunteer work?**

Category 1 (“Mainly sitting with slight arm movements”) includes examples such as: office worker, watchmaker, seated assembly line worker, bus driver, etc.

Category 2 (“Sitting or standing with some walking”) includes examples such as: cashier, general office worker, light tool and machinery worker.

Category 3 (“Walking, with some handling of materials generally weighing less than 50 pounds”) includes examples such as: mailman, waiter/waitress, construction worker, heavy tool and machinery worker.

Category 4 (“Walking and heavy manual work often requiring handling of materials weighing over 50 pounds”) includes examples such as: lumberjack, stonemason, farm or general laborer].

If the participant indicates two categories of physical activity required on the job or volunteer work, the higher rather than lower activity levels are coded.

Example: The participant works half the time sitting or standing with some walking, and the other half of the time walking, with some handling of materials.