

## Appendix

### Short Blessed Test (SBT)

"Now I would like to ask you some questions to check your memory and concentration. Some of them may be easy and some of them may be hard."

- |                                |                |                  |
|--------------------------------|----------------|------------------|
| 1. What year is it now? _____  | Correct<br>(0) | Incorrect<br>(1) |
| 2. What month is it now? _____ | Correct<br>(0) | Incorrect<br>(1) |

Please repeat this name and address after me:

John Brown, 42 Market Street, Chicago  
John Brown, 42 Market Street, Chicago  
John Brown, 42 Market Street, Chicago

(underline words repeated correctly in each trial)  
Trials to learning \_\_\_\_\_ (can't do in 3 trials = C)

Good, now remember that name and address for a few minutes.

- |   |                |                  |   |        |   |   |        |
|---|----------------|------------------|---|--------|---|---|--------|
| 3. Without looking at your watch or clock, tell me about what time it is. (If response is vague, prompt for specific response)<br>(within 1 hour) _____<br>Actual time: _____   | Correct<br>(0) | Incorrect<br>(1) |   |        |   |   |        |
| 4. Count aloud backwards from 20 to 1<br>(Mark correctly sequenced numerals) If subject starts counting forward or forgets the task, repeat instructions and score one error<br><br>20 19 18 17 16 15 14 13 12 11<br>10 9 8 7 6 5 4 3 2 1 | 0              | 1                | 2 | Errors |   |   |        |
| 5. Say the months of the year in reverse order.<br>If the tester needs to prompt with the last name of the month of the year, one error should be scored.<br>(Mark correctly sequenced months)<br>D N O S A JL JN MY AP MR F J            | 0              | 1                | 2 | Errors |   |   |        |
| 6. Repeat the name and address I asked you to remember.<br>(The thoroughfare term (Street) is not required)<br>(John Brown, 42 Market Street, Chicago)<br><br>_____, _____, _____, _____, _____   | 0              | 1                | 2 | 3      | 4 | 5 | Errors |

### Source

Katzman R, Brown T, Fuld P, Peck A, Schechter R, Schimmel, H. Validation of a short orientation-memory concentration test of cognitive impairment. Am J Psychiatry 140:734-739, 1983.

## Appendix

### AD8 Dementia Screening Interview

| Remember, "Yes, a change" indicates that there has been a change in the last several years caused by cognitive (thinking and memory) problems. | <b>YES,<br/>A change</b> | <b>NO,<br/>No change</b> | <b>N/A,<br/>Don't know</b> |
|--|--------------------------|--------------------------|----------------------------|
| 1. Problems with judgment (e.g., problems making decisions, bad financial decisions, problems with thinking)                                   |                          |                          |                            |
| 2. Less interest in hobbies/activities   |                          |                          |                            |
| 3. Repeats the same things over and over (questions, stories, or statements)   |                          |                          |                            |
| 4. Trouble learning how to use a tool, appliance, or gadget (e.g., VCR, computer, microwave, remote control)                                   |                          |                          |                            |
| 5. Forgets correct month or year   |                          |                          |                            |
| 6. Trouble handling complicated financial affairs (e.g., balancing checkbook, income taxes, paying bills)                                      |                          |                          |                            |
| 7. Trouble remembering appointments  |                          |                          |                            |
| 8. <b>Daily</b> problems with thinking and/or memory   |                          |                          |                            |
| <b>TOTAL AD8 SCORE</b>   |                          |                          |                            |

Adapted from Galvin JE et al, The AD8, a brief informant interview to detect dementia, *Neurology* 2005;65:559-564 Copyright 2005. The AD8 is a copyrighted instrument of the Alzheimer's Disease Research Center, Washington University, St. Louis, Missouri. All Rights Reserved.

## Appendix

### Patient Health Questionnaire – 8 (PHQ-8)

“Over the last 2 weeks, how often have you been bothered by any of the following problems?”

|  | Not at<br>all<br>(0)     | Several<br>days<br>(1)   | More than<br>half the<br>days<br>(2) | Nearly<br>every<br>day<br>(3) |
|--|--------------------------|--------------------------|--------------------------------------|-------------------------------|
| 1. Little interest or pleasure in doing things   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 2. Feeling down, depressed, or hopeless  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 3. Trouble falling or staying asleep, or sleeping too much   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 4. Feeling tired or having little energy   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 5. Poor appetite or overeating   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 7. Trouble concentrating on things such as reading the newspaper or watching TV.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |
| 8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/>      |

#### Sources

Kroenke K, Strine TW, Spritzer RL, Williams JB, Berry JT, Mokdad AH. The PHQ-8 as a measure of current depression in the general population. *J Affect Disord.* 2009; 114(1-3):163-73.

Razykov I, Ziegelstein RC, Whooley MA, Thombs BD. The PHQ-9 versus the PHQ-8--is item 9 useful for assessing suicide risk in coronary artery disease patients? Data from the Heart and Soul Study. *J Psychosom Res.* 2012; 73(3):163-168.

## Appendix

### History of Delirium:

1. Delirium is a temporary condition that is common in hospitalized patients and after surgery. When people get delirium they experience temporary thinking problems like being disoriented, having illogical thoughts, or being unable to pay attention. Have you ever had delirium?

- Yes (ANSWER question 2)
- No (skip question 2)
- I don't know (skip question 2)

2. When have you experienced delirium? (choose all that apply)

- Yes, I experienced it after surgery when I was waking up from anesthesia or in the first few hours
- Yes, I experienced it on the day I had surgery for more than a few hours after surgery
- Yes, I experienced it after surgery and I experienced it in the days following surgery
- Yes, I experienced it after surgery but I don't know when this was in relation to the surgery
- Yes, I experienced it when I was at a hospital receiving treatment for a non-surgical problem
- Yes, I experienced it when I was at a place other than a hospital
- I don't know

## Appendix

### Visual Analog Scale (VAS)

Patient ID: \_\_\_\_\_  
POD: \_\_\_\_\_ AM/PM

1. What is your pain at **rest**?

no pain \_\_\_\_\_ worst pain  
imaginable

2. What is your pain when taking a **deep breath** (or coughing)?

no pain \_\_\_\_\_ worst pain  
imaginable

3. What is your pain when **moving** (sitting up, walking, or moving extremities)?

no pain \_\_\_\_\_ worst pain  
imaginable

Interviewer: \_\_\_\_\_ Date and Time Interviewed: \_\_\_\_\_

The above tool is not drawn to scale. Actual lines are resized to measure 10 centimeters.

Instruct the patient to point to the line indicating where the patient's pain is on a scale from "no pain" to "worst pain imaginable". Then instruct the patient to make a single dash with the pen intersecting the line. If the patient is visually impaired, ensure that glasses are used if available.





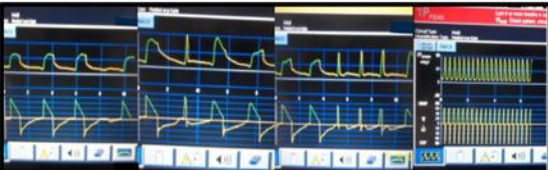
#### **Source**

Price DD, McGrath PA, Rafi A, Buckingham B (1983) The validation of visual analogue scales as ratio scale measures for chronic and experimental pain. Pain 17: 45–56.

## Appendix

### Behavioral Pain Scale/Behavioral Pain Scale – Non-Intubated (BPS/BPS-NI)

**Behavioral Pain Scale (BPS and BPS-NI) Scoring System**  
 1 + 2 + 3 = Total BPS Value; from 3(no) - 12(max) pain behavior rated

|                      | BPS (Intubated / Non-verbal)   |  |   |                                  |   | BPS-NI (Non-intubated and verbal)   |  |                                     |                                  |                      |   |  |   |   |   |   |   |
|----------------------|--|--|---|----------------------------------|---|---|--|-------------------------------------|----------------------------------|----------------------|---|--|---|---|---|---|---|
|                      | 1  | 2  | 3   | 4                                | = | 1   | 2                                      | 3                                   | 4                                |                      |   |  |   |   |   |   |   |
| <b>1</b>             |   |  |   |                                  | = |   |  |                                     |                                  |                      |   |  |   |   |   |   |   |
|                      | Relaxed  | Partially tightened =<br>brow lowering       | Fully tightened =<br>eyelids closed                           | Grimacing =<br>folded cheek      |   | Relaxed   | Partially tightened =<br>brow lowering | Fully tightened =<br>eyelids closed | Grimacing =<br>folded cheek      |                      |   |  |   |   |   |   |   |
| <b>2</b>             |   |  |   |                                  | = |   |  |                                     |                                  |                      |   |  |   |   |   |   |   |
|                      | No movement<br>(At rest: mobilize limb to check tone)                              | Partially bent                               | Very bent;<br>finger flexion                                  | Retracted;<br>opposition to care |   | No movement<br>(At rest: mobilize limb to check tone)   | Partially bent                         | Very bent;<br>finger flexion        | Retracted;<br>opposition to care |                      |   |  |   |   |   |   |   |
| <b>3</b>             |  |  |   |                                  | ≠ | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">No pain vocalization</td> <td style="width: 25%; text-align: center;">Moaning not frequent (≤3/min) and not prolonged (≤3s)</td> <td style="width: 25%; text-align: center;">Moaning frequent (&gt;3/min) or prolonged (&gt;3s)</td> <td style="width: 25%; text-align: center;">Howling or verbal complaint "Ow!," "Ouch!," or breath-holding</td> </tr> <tr> <td style="text-align: center;">⚡</td> <td style="text-align: center;">⚡</td> <td style="text-align: center;">⚡</td> <td style="text-align: center;">⚡</td> </tr> </table> |  |                                     |                                  | No pain vocalization | Moaning not frequent (≤3/min) and not prolonged (≤3s) | Moaning frequent (>3/min) or prolonged (>3s) | Howling or verbal complaint "Ow!," "Ouch!," or breath-holding | ⚡ | ⚡ | ⚡ | ⚡ |
| No pain vocalization | Moaning not frequent (≤3/min) and not prolonged (≤3s)                              | Moaning frequent (>3/min) or prolonged (>3s) | Howling or verbal complaint "Ow!," "Ouch!," or breath-holding |                                  |   |   |  |                                     |                                  |                      |   |  |   |   |   |   |   |
| ⚡                    | ⚡  | ⚡  | ⚡   |                                  |   |   |  |                                     |                                  |                      |   |  |   |   |   |   |   |
|                      | Tolerating ventilation   | Coughing, but mostly tolerating ventilation  | Fighting, but ventilation possible                            | Unable to control ventilation    |   |   |  |                                     |                                  |                      |   |  |   |   |   |   |   |

#### Sources

Payen JF, Bru O, Bosson JL, et al. Assessing pain in critically ill sedated patients by using a behavioral pain scale. *Critical care medicine* 2001;29:2258-63.

Chanques G, Payen JF, Mercier G, et al. Assessing pain in non-intubated critically ill patients unable to self report: an adaptation of the Behavioral Pain Scale. *Intensive care medicine* 2009;35:2060-7.

## Appendix

### Barthel Index

**Instructions:** Choose the scoring point for the statement that most closely corresponds to the patient's current level of ability for each of the following 10 items. Record actual, not potential, functioning. Information can be obtained from the patient's self-report, from a separate party who is familiar with the patient's abilities (such as a relative), or from observation.

1. In relation to **feeding** yourself, you are...
  - unable
  - needing some help (i.e. cutting, spreading butter)
  - independent
  
2. In relation to **bathing/showering**, you are...
  - dependent
  - independent
  
3. In relation to **grooming**, you are...
  - needing some help with personal care
  - independent (i.e. brushing hair, brushing teeth, shaving)
  
4. In relation to **dress**ing, you are...
  - dependent
  - needing some help, but can do about half unaided
  - independent (including buttons, zips, laces, etc.)
  
5. In relation to your **bowels** (defecation), you are...
  - incontinent/unable to control bowels (or need to be given enemas)
  - having occasional accidents
  - continent/able to control bowels
  
6. In relation to your **bladder** (urination), you are...
  - incontinent/unable to control bladder (or catheterized and unable to manage alone)
  - having occasional accidents
  - continent/able to control bladder
  
7. In relation to **using the toilet**, you are...
  - dependent
  - needing some help, but can do some things alone
  - independent (on and off the toilet, dressing, wiping)
  
8. In relation to **transferring from a bed to a chair** and back, you are...
  - unable (no sitting balance)
  - needing major help but are able to sit (one or two people physically helping)
  - needing minor help (verbal encouragement or physical help)
  - independent
  
9. In relation to your **mobility** (walking) on level surfaces, you are...

- immobile (unable to walk or move about) for less than 50 yards
- wheelchair independent, including corners, greater than 50 yards
- walking with the help of one person (either verbal encouragement or physical help) greater than 50 yards
- independent (with or without a cane or walker) greater than 50 yards

**10.** In relation to **climbing** a flight of stairs, you are...

- unable
- needing help (verbal encouragement, physical help, carrying aid)
- independent

**Sources**

Collin C, Wade DT, Davies S, Horne V. The Barthel ADL Index: a reliability study. *Int Disabil Stud.* 1988;10(2):61-63.

Mahoney FI, Barthel DW. Functional evaluation: the Barthel Index. *Md State Med J.* 1965;14:61-65.

Wade DT, Collin C. The Barthel ADL Index: a standard measure of physical disability? *Int Disabil Stud.* 1988;10(2):64-67.



## **Appendix**

### **NIH Toolbox Grip Strength Test**

Participants are seated in a chair with their feet touching the ground. With the elbow bent to 90 degrees and the arm against the trunk, wrist at neutral, participants squeeze the Jamar Plus Digital dynamometer as hard as they can for a count of three. The dynamometer provides a digital reading of force in pounds. A practice trial at less than full force and 1 test trial are completed with each hand. The test takes approximately 3 minutes to administer and is recommended for ages 3-85.

© 2006-2012 National Institutes of Health and Northwestern University

## Appendix

### Timed Up and Go (TUG) Test

#### Directions:

Patients wear their regular footwear and can use a walking aid if needed. Begin by having the patient sit back in a standard arm chair and identify a line 3 meters or 10 feet away on the floor.

#### Instructions to the patient:

When I say "Go," I want you to:

1. Stand up from the chair
2. Walk to the line on the floor at your normal pace
3. Turn
4. Walk back to the chair at your normal pace
5. Sit down again

On the word "Go" begin timing.

Stop timing after patient has sat back down and record.

#### Source

Podsiadlo, D. and Richardson, S. (1991). "The timed "Up & Go": a test of basic functional mobility for frail elderly persons." J Am Geriatr Soc 39(2): 142-148.

Patient: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM

### The Timed Up and Go (TUG) Test

**Purpose:** To assess mobility

**Equipment:** A stopwatch

**Directions:** Patients wear their regular footwear and can use a walking aid if needed. Begin by having the patient sit back in a standard arm chair and identify a line 3 meters or 10 feet away on the floor.

#### Instructions to the patient:

When I say "Go," I want you to:

1. Stand up from the chair
2. Walk to the line on the floor at your normal pace
3. Turn
4. Walk back to the chair at your normal pace
5. Sit down again

On the word "Go" begin timing.

Stop timing after patient has sat back down and record.

**Time:** \_\_\_\_\_ seconds

**An older adult who takes  $\geq 12$  seconds to complete the TUG is at high risk for falling.**

Observe the patient's postural stability, gait, stride length, and sway.

**Circle all that apply:**  Slow tentative pace  Loss of balance  
 Short strides  Little or no arm swing  Steadying self on walls  
 Shuffling  En bloc turning  Not using assistive device properly

Notes:

## Appendix

### Trails A and B

#### **Instructions:**

Both parts of the Trail Making Test consist of 25 circles distributed over a sheet of paper. In Part A, the circles are numbered 1 – 25, and the patient should draw lines to connect the numbers in ascending order. In Part B, the circles include both numbers (1 – 13) and letters (A – L); as in Part A, the patient draws lines to connect the circles in an ascending pattern, but with the added task of alternating between the numbers and letters (i.e., 1-A-2-B-3-C, etc.). The patient should be instructed to connect the circles as quickly as possible, without lifting the pen or pencil from the paper. Time the patient as he or she connects the "trail." If the patient makes an error, point it out immediately and allow the patient to correct it. Errors affect the patient's score only in that the correction of errors is included in the completion time for the task. It is unnecessary to continue the test if the patient has not completed both parts after five minutes have elapsed.

Step 1: Give the patient a copy of the Trail Making Test Part A worksheet and a pen or pencil.

Step 2: Demonstrate the test to the patient using the sample sheet (Trail Making Part A – SAMPLE).

Step 3: Time the patient as he or she follows the "trail" made by the numbers on the test.

Step 4: Record the time.

Step 5: Repeat the procedure for Trail Making Test Part B.

**Scoring:** Results for both TMT A and B are reported as the number of seconds required to complete the task; therefore, higher scores reveal greater impairment.

|                | <b>Average</b> | <b>Deficit</b> | <b>Rule of Thumb</b> |
|----------------|----------------|----------------|----------------------|
| <b>Trail A</b> | 29 seconds     | >78 seconds    | Most in 90 seconds   |
| <b>Trail B</b> | 75 seconds     | >273 seconds   | Most in 3 minutes    |

#### **Sources**

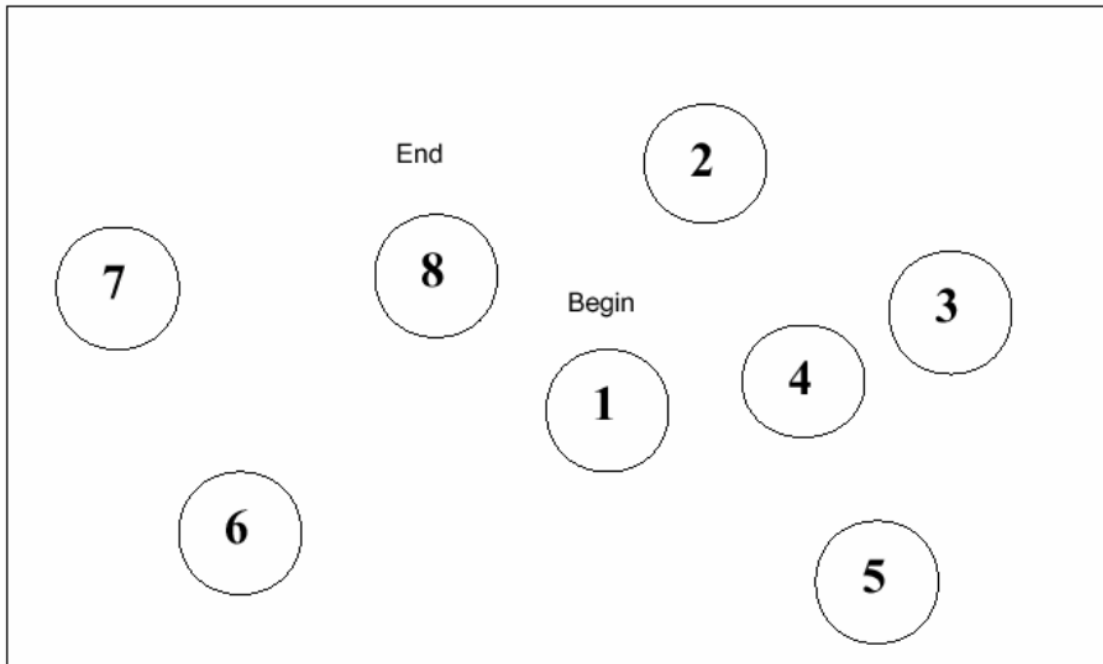
Corrigan JD, Hinkeldey MS. Relationships between parts A and B of the Trail Making Test. *J Clin Psychol.* 1987;43(4):402–409.

Gaudino EA, Geisler MW, Squires NK. Construct validity in the Trail Making Test: what makes Part B harder? *J Clin Exp Neuropsychol.* 1995;17(4):529-535.

Lezak MD, Howieson DB, Loring DW. *Neuropsychological Assessment.* 4th ed. New York: Oxford University Press; 2004.

Reitan RM. Validity of the Trail Making test as an indicator of organic brain damage. *Percept Mot Skills.* 1958;8:271-276.

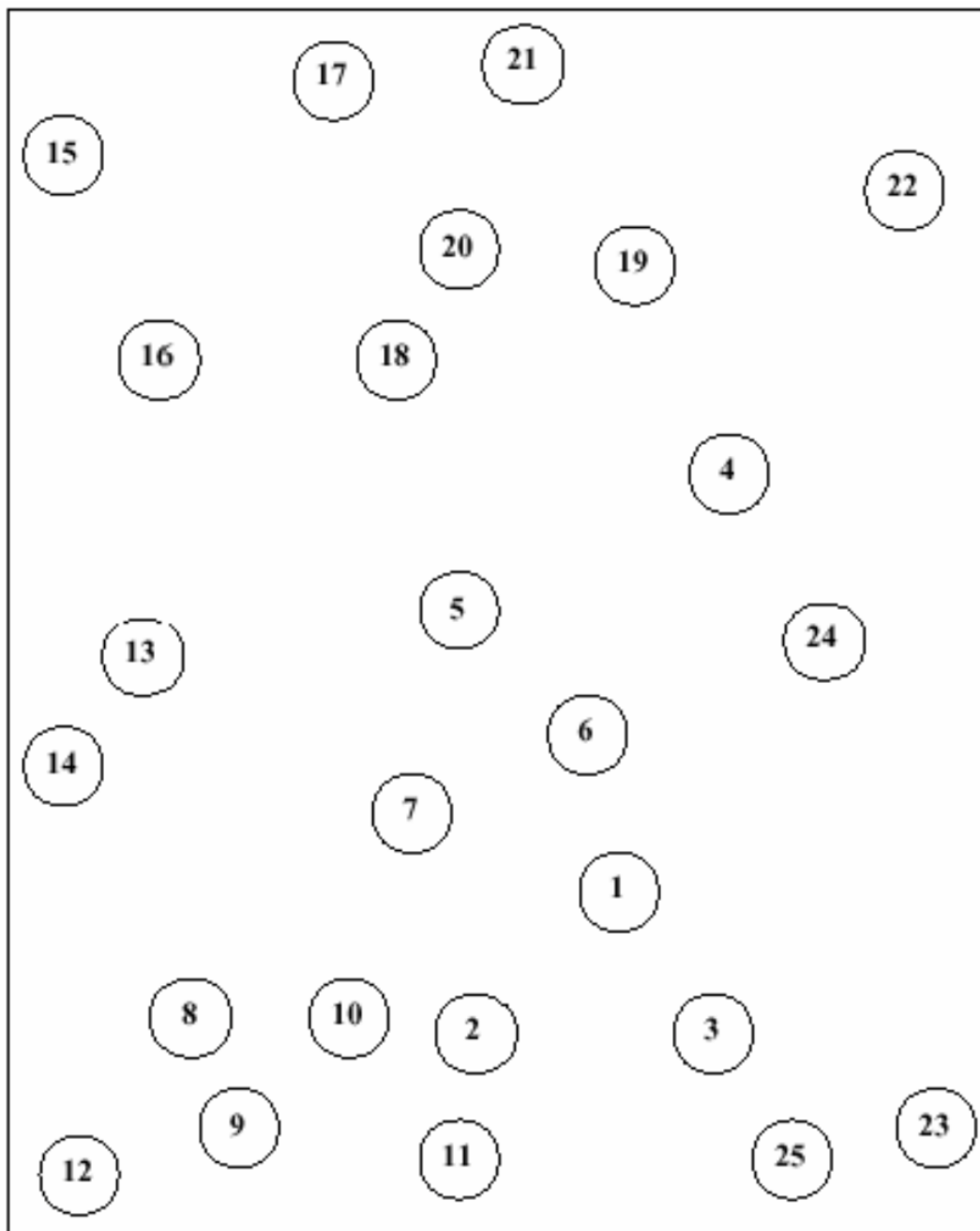
**Trail Making Test Part A – *SAMPLE***



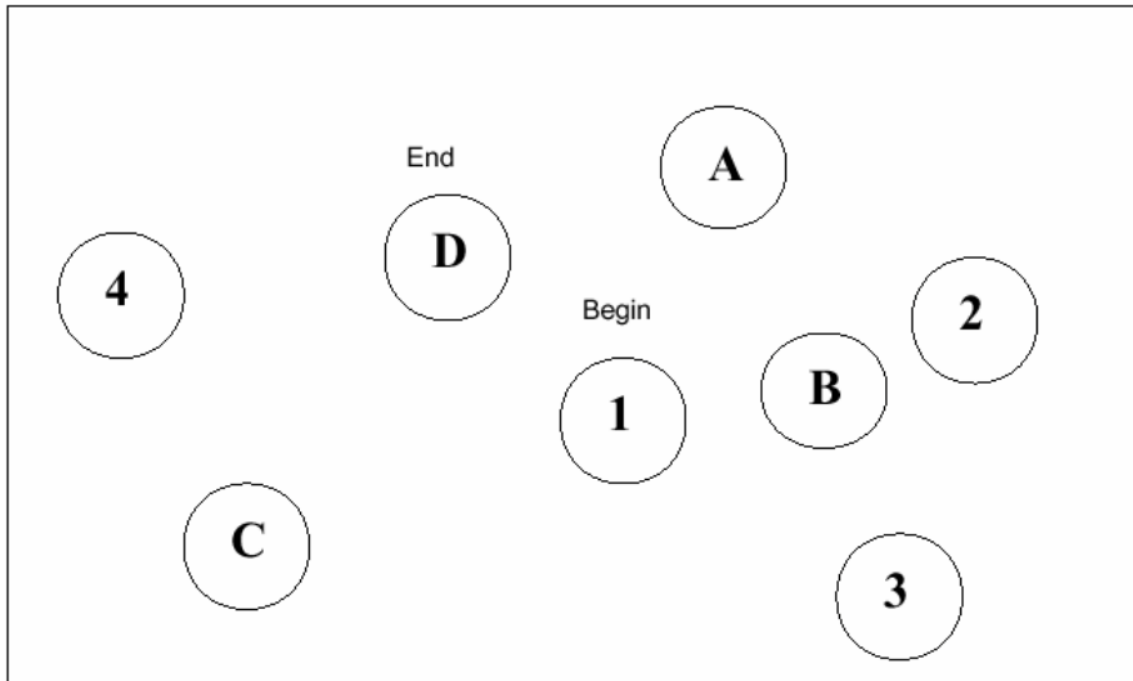
## Trail Making Test Part A

Patient's Name: \_\_\_\_\_

Date: \_\_\_\_\_



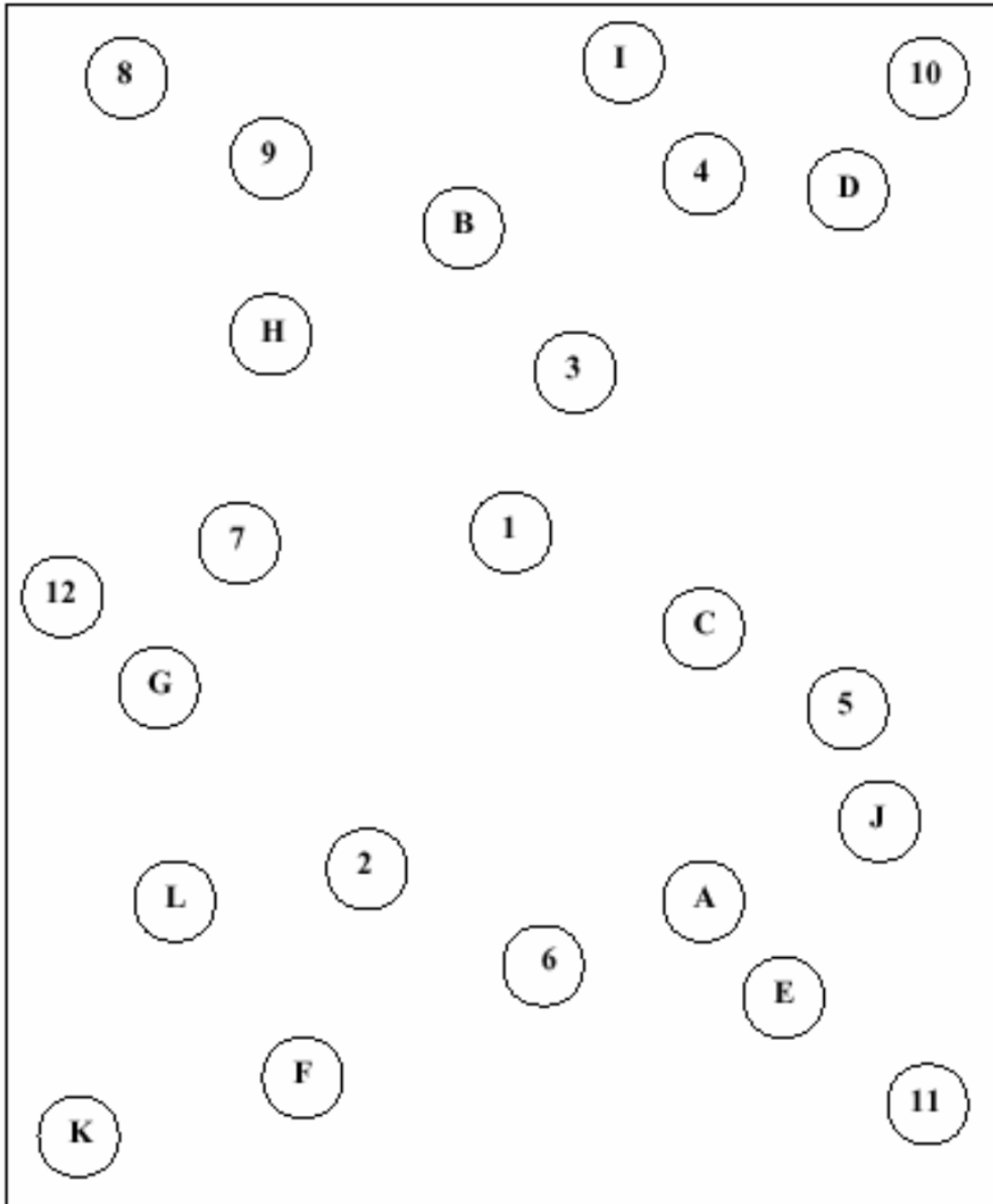
**Trail Making Test Part B – *SAMPLE***



## Trail Making Test Part B

Patient's Name: \_\_\_\_\_

Date: \_\_\_\_\_



## **Appendix**

### **Alcohol Sniff Test**

The alcohol sniff test uses a standard 70% isopropyl alcohol pad as a quick measurement of olfactory impairment. An alcohol preparation pad is opened so 0.5 cm of the pad itself is visible. The patient is asked to smell the pad to familiarize him or herself with the odor. A subject is asked to close their eyes and mouth and breath normally. A ruler is placed downward from the patient's nares and the alcohol pad is placed 30 cm below. With each expiration, the pad is moved 1 cm closer until the patient detects an odor. This is repeated two times.

### **Source**

Davidson, TM and Murphy, C. Rapid Clinical Evaluation of Anosmia: The Alcohol Sniff Test. Arch Otolaryngol Head Neck Surg. 1997;123(6):591-594



## **Appendix**

### **Prior OSA Diagnosis**

**A. Have you been previously diagnosed with obstructive sleep apnea?**

- Yes
- No (if yes complete STOP-BANG\*)

**(If yes) Is the patient currently instructed to use CPAP?**

- Yes
- No

**(If yes) Does the patient use CPAP for at least four hours per night?**

- Yes (Compliant)
- No (Noncompliant)

#### **Source**

\*Toronto Western Hospital, University Health Network, University of Toronto. 2012. Available online: [www.stopbang.ca](http://www.stopbang.ca)

## Appendix

### Modified Brice Questionnaire

#### 1. What is the last thing you remember before going to sleep?

- Being in the pre-op area
- Seeing the operating room
- Being with family
- Hearing voices
- Feeling mask on face
- Smell of gas
- Burning or stinging in the IV line
- Other [Free Text]: \_\_\_\_\_

#### 2. What is the first thing you remember after waking up?

- Hearing voices
- Feeling breathing tube
- Feeling mask on face
- Feeling pain
- Seeing the operating room
- Being in the recovery room
- Being with family
- Being in ICU
- Nothing
- Other [Free Text]: \_\_\_\_\_

#### 3. Do you remember anything between going to sleep and waking up?

- No
- Yes:
  - Hearing voices
  - Hearing events of the surgery
  - Unable to move or breathe
  - Anxiety/stress
  - Feeling pain
  - Sensation of breathing tube
  - Feeling surgery without pain
  - Other [Free Text]: \_\_\_\_\_

#### 4.) Did you dream during your procedure?

- No
- Yes  
What about [Free Text]: \_\_\_\_\_

#### 5.) Were your dreams disturbing to you?

- No
- Yes

#### 6.) Did you experience any nausea or vomiting following your operation?

- No
- Yes  
If yes, how many times? \_\_\_\_\_

#### 7.) What was the worst thing about your operation?

- Anxiety
- Pain
- Recovery process

- Functional limitations
- Awareness
- Other [Free Text]: \_\_\_\_\_

**Source**

Brice DD, Hetherington RR, Utting JE. A simple study of awareness and dreaming during anaesthesia. Br J Anaesth. 1970 Jun;42(6):535-42.

## Appendix

### Michigan Awareness Classification Instrument

Class 0: No awareness

Class 1: Isolated auditory perceptions

Class 2: Tactile perceptions (e.g., surgical manipulation or endotracheal tube)

Class 3: Pain

Class 4: Paralysis (e.g., feeling one cannot move, speak, or breathe)

Class 5: Paralysis and pain

An additional designation of “D” for distress is included for patient reports of fear, anxiety, suffocation, sense of doom, sense of impending death, *etc.*

---

#### Source

Mashour GA, Esaki RK, Tremper KK, Glick DB, O'Connor M, Avidan MS. A novel classification instrument for intraoperative awareness events. [Anesth Analg.](#) 2010 Mar 1;110(3):813-5

## Appendix

### Sensory Impairment Screen

1. Do you wear glasses or contact lenses?
  - No
  - Yes, but only for selected activities such as reading or driving
  - Yes, throughout the day
  
2. Does your vision limit your daily activities (when using glasses or contacts)?
  - No
  - Yes, to a mild extent
  - Yes, to a moderate extent
  - Yes, to a severe extent
  
3. Do you use any form of hearing aid?
  - No
  - Yes, but only sometimes
  - Yes, all the time
  
4. Does your hearing limit your daily activities (when using hearing aids)?
  - No
  - Yes, to a mild extent
  - Yes, to a moderate extent
  - Yes, to a severe extent



## Appendix

### Positive and Negative Affect Schedule (PANAS)

Please rate how you have felt since your surgery in relation to the 15 words below. For each word, please pick a number from 1 to 5 (see scale below) that best conveys the intensity of your feelings in relation to each word. Please write the numbers (from 1 to 5) in the space provided to the left of each word.

1 – Very slightly or not at all

2 – A little

4 – Quite a bit

3 – Moderately

5 – Extremely

\_\_\_\_\_ Interested

\_\_\_\_\_ Scared

\_\_\_\_\_ Nervous

\_\_\_\_\_ Distressed

\_\_\_\_\_ Enthusiastic

\_\_\_\_\_ Determined

\_\_\_\_\_ Excited

\_\_\_\_\_ Proud

\_\_\_\_\_ Attentive

\_\_\_\_\_ Upset

\_\_\_\_\_ Alert

\_\_\_\_\_ Active

\_\_\_\_\_ Strong

\_\_\_\_\_ Inspired

\_\_\_\_\_ Afraid

#### Source

Watson, D., Clark, L. A., & Tellegan, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.

## Appendix

### Home Safety Follow Up

Please complete these questions based on the Fall T.I.P. Information Sheet and the CDC Home Fall Prevention Pamphlet that was given to you after consent.

1. Did you find the information in the fall prevention packet useful?

Yes No

2. Did you conduct the Home Fall Prevention Packet in your home before surgery?

Yes No

3. How difficult was the Home Fall Prevention Packet to fill out? (1 being easiest and 10 being most difficult)

1 2 3 4 5 6 7 8 9 10

4) How much did you change your home environment?

Little to no changes

A few changes

Some significant changes

Major changes

5) How difficult were the changes to make? (1 being easiest and 10 being most difficult)

1 2 3 4 5 6 7 8 9 10

6. Did you receive a home visit from an occupational therapist working with the ENGAGES trial?

Yes (go to Q7) No (go to Q11)

If YES to question 6:

7. Do you plan to continue using the recommendations from the HOME SAFETY VISITS in the future?

Yes No Unsure

8. Did having these HOME SAFETY VISITS make you more aware of fall hazards in your home environment?

Yes No Unsure

9. Do you feel that your home is a safer place with the changes you have made?

Yes No Unsure

10. Would you recommend HOME SAFETY VISITS to patients with similar conditions?

Yes No Unsure

If NO to question 6:

11. Do you plan to use the Home Fall Prevention Packet in the future?

Yes No Unsure

12. Did having this tool make you more aware of fall hazards in your home environment?

Yes No Unsure

13. Do you feel that your home is a safer place with the changes you have made?

Yes No Unsure

14. Would you recommend the Home Fall Prevention Packet to patients with similar conditions?

Yes No Unsure



## **Appendix**

### **NIH Cognitive Toolbox**

The cognitive toolbox consists of the follow assessments:

#### **Picture Vocabulary Test**

This measure of receptive vocabulary is administered in a computerized adaptive format. The respondent is presented with an audio recording of a word and four photographic images on the computer screen and is asked to select the picture that most closely matches the meaning of the word. This test takes approximately 4 minutes to administer.

#### **Flanker Inhibitory Control and Attention Test**

The Flanker task measures both a participant's attention and inhibitory control. The test requires the participant to focus on a given stimulus while inhibiting attention to stimuli (fish for ages 3-7 or arrows for ages 8-85) flanking it. Sometimes the middle stimulus is pointing in the same direction as the "flankers" (congruent) and sometimes in the opposite direction (incongruent). Scoring is based on a combination of accuracy and reaction time, and the test takes approximately 3 minutes to administer.

#### **List Sorting Working Memory Test**

This test requires immediate recall and sequencing of different visually and orally presented stimuli. Pictures of different foods and animals are displayed with accompanying audio recording and written text (e.g., "elephant"), and the participant is asked to say the items back in size order from smallest to largest, first within a single dimension (either animals or foods, called 1-List) and then on 2 dimensions (foods, then animals, called 2-List). The score is equal to the number of items recalled and sequenced correctly, and the test takes approximately 7 minutes to administer.

#### **Dimensional Change Card Sort Test (DCCS)**

DCCS is a measure of cognitive flexibility. Two target pictures are presented that vary along two dimensions (e.g., shape and color). Participants are asked to match a series of bivalent test pictures (e.g., yellow balls and blue trucks) to the target pictures, first according to one dimension (e.g., color) and then, after a number of trials, according to the other dimension (e.g., shape). "Switch" trials are also employed, in which the participant must change the dimension being matched. For example, after 4 straight trials matching on shape, the participant may be asked to match on color on the next trial and then go back to shape, thus requiring the cognitive flexibility to quickly choose the correct stimulus. Scoring is based on a combination of accuracy and reaction time, and the test takes approximately 4 minutes to administer.

#### **Pattern Comparison Processing Speed Test**

This test measures speed of processing by asking participants to discern whether two side-by-side pictures are the same or not. Participants' raw score is the number of items correct in a 90-second period. The items are designed to be simple to most purely measure processing speed. The test overall takes approximately 3 minutes to administer. This test is recommended for ages 7-85, but is available for use as young as age 3, if requested.

#### **Picture Sequence Memory Test**

The Picture Sequence Memory Test is a measure developed for the assessment of episodic memory. It involves recalling increasingly lengthy series of illustrated objects and activities that are presented in a particular order on the computer screen. The participants are asked to recall the sequence of pictures that is demonstrated over two learning trials; sequence length varies from 6-18 pictures, depending on age.

Participants are given credit for each adjacent pair of pictures (i.e., if pictures in locations 7 and 8 and placed in that order and adjacent to each other anywhere – such as slots 1 and 2 – one point is awarded) they correctly place, up to the maximum value for the sequence, which is one less than the sequence length (if there are 18 pictures in the sequence, the maximum score is 17, because that is the number of adjacent pairs of pictures that exist). The test takes approximately 7 minutes to administer.

### **Oral Reading Recognition Test**

The participant is asked to read and pronounce letters and words as accurately as possible. The test administrator scores them as right or wrong. For the youngest children, the initial items require them to identify letters (as opposed to symbols) and to identify a specific letter in an array of 4 symbols. The test is given in a computerized adaptive format and requires approximately 3 minutes.

#### **Source**

National Institutes of Health and Northwestern University. 2012 NIH Toolbox for the Assessment of Neurological and Behavioral Function. Available online: <http://www.nihtoolbox.org/Pages/default.aspx>

## Appendix

# CDC Fall Safety Information Sheet and Partners HealthCare Falls T.I.P.S.: Tips to Avoid Falls While in the Hospital

### FALL T.I.P.S.

TAILORING INTERVENTIONS FOR PATIENT SAFETY



### *Tips to avoid falls while in the hospital.*

#### **Talk About Your Risk for Falling:**

1. Ask your nurse what puts you at risk for falls.
2. Work with your nurse on a plan to keep you safe from falls.
3. Ask your doctor, nurse or pharmacist about side effects of your medications that could make you dizzy or unsteady on your feet.

**To be safest, work with your doctors and nurses to prevent falls.**

#### **Ask for Help:**

1. Ask for help to get out of bed and whenever you are going to walk, especially if you are not feeling well. Use your call button in the hospital.
2. Ask for help when toileting.
3. Ask for a cane, walker, or other device to make walking safer.
4. Ask a family member or friend to sit with you.
5. Ask a family member or friend to bring in your glasses or hearing aid so that you can better participate in your care.

#### **Take Steps to Avoid Falling:**

1. Avoid quick, sudden movements.
  - Change position slowly and carefully.
  - Sit on the side of your bed before standing.
  - Stand up slowly and fully get your balance before you begin to walk.
2. Wear comfortable rubber-soled, low-heeled slippers or shoes that fit properly.
3. Check for a clear and safe path before you walk. Avoid walking on wet or cluttered floors.
4. If you feel unsteady or unbalanced on your feet, call for help and sit down again.
5. Use your call button to ask for help from your hospital bed.

**Together with your doctors and nurses you can prevent falls.**

# Appendix

## CDC Check for Safety: A Home Fall Prevention Checklist for Older Adults

This checklist is based on the original version printed by the Centers for Disease Control and Prevention. Support for this version was provided by MetLife Foundation.

2005

  
CDC FOUNDATION  
**MetLife Foundation**



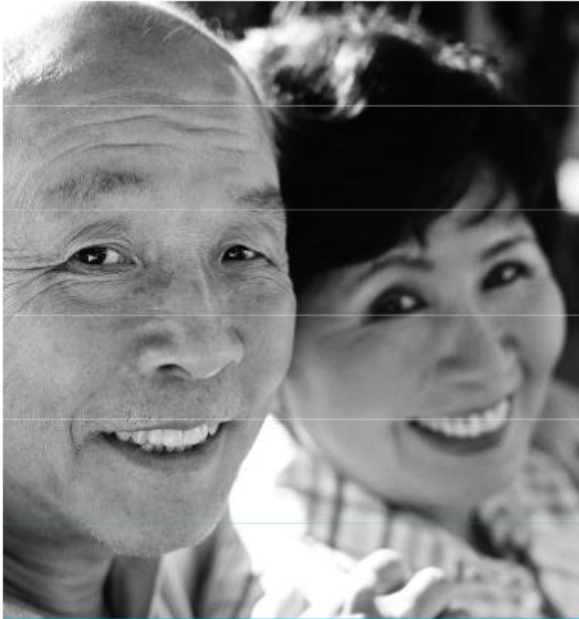
Department of Health and Human Services  
Centers for Disease Control and Prevention



For more information, contact:  
Centers for Disease Control and Prevention  
770-488-1506  
[www.cdc.gov/injury](http://www.cdc.gov/injury)







“Last Saturday our son helped us move our furniture. Now all the rooms have clear paths.”

## FLOORS: Look at the floor in each room.

**Q: When you walk through a room, do you have to walk around furniture?**

- Ask someone to move the furniture so your path is clear.

**Q: Do you have throw rugs on the floor?**

- Remove the rugs or use double-sided tape or a non-slip backing so the rugs won't slip.

**Q: Are there papers, books, towels, shoes, magazines, boxes, blankets, or other objects on the floor?**

- Pick up things that are on the floor. Always keep objects off the floor.

**Q: Do you have to walk over or around wires or cords (like lamp, telephone, or extension cords)?**

- Coil or tape cords and wires next to the wall so you can't trip over them. If needed, have an electrician put in another outlet.



## STAIRS AND STEPS: Look at the stairs you use both inside and outside your home.

**Q: Are there papers, shoes, books, or other objects on the stairs?**

- Pick up things on the stairs. Always keep objects off stairs.

**Q: Are some steps broken or uneven?**

- Fix loose or uneven steps.

**Q: Are you missing a light over the stairway?**

- Have an electrician put in an overhead light at the top and bottom of the stairs.

**Q: Do you have only one light switch for your stairs (only at the top or at the bottom of the stairs)?**

- Have an electrician put in a light switch at the top and bottom of the stairs. You can get light switches that glow.

**Q: Has the stairway light bulb burned out?**

- Have a friend or family member change the light bulb.

**Q: Is the carpet on the steps loose or torn?**

- Make sure the carpet is firmly attached to every step, or remove the carpet and attach non-slip rubber treads to the stairs.

**Q: Are the handrails loose or broken? Is there a handrail on only one side of the stairs?**

- Fix loose handrails or put in new ones. Make sure handrails are on both sides of the stairs and are as long as the stairs.



Photo courtesy of Jake Foula

## **KITCHEN:** Look at your kitchen and eating area.

**Q: Are the things you use often on high shelves?**

- Move items in your cabinets. Keep things you use often on the lower shelves (about waist level).

**Q: Is your step stool unsteady?**

- If you must use a step stool, get one with a bar to hold on to. Never use a chair as a step stool.



## **BATHROOMS:** Look at all your bathrooms.

**Q: Is the tub or shower floor slippery?**

- Put a non-slip rubber mat or self-stick strips on the floor of the tub or shower.

**Q: Do you need some support when you get in and out of the tub or up from the toilet?**

- Have a carpenter put grab bars inside the tub and next to the toilet.







## Other Things You Can Do to Prevent Falls

- Exercise regularly. Exercise makes you stronger and improves your balance and coordination.



- Have your doctor or pharmacist look at all the medicines you take, even over-the-counter medicines. Some medicines can make you sleepy or dizzy.
- Have your vision checked at least once a year by an eye doctor. Poor vision can increase your risk of falling.
- Get up slowly after you sit or lie down.
- Wear shoes both inside and outside the house. Avoid going barefoot or wearing slippers.
- Improve the lighting in your home. Put in brighter light bulbs. Florescent bulbs are bright and cost less to use.
- It's safest to have uniform lighting in a room. Add lighting to dark areas. Hang lightweight curtains or shades to reduce glare.
- Paint a contrasting color on the top edge of all steps so you can see the stairs better. For example, use a light color paint on dark wood.



"I feel stronger and better about myself since I started walking every day."

## Other Safety Tips

- Keep emergency numbers in large print near each phone.
- Put a phone near the floor in case you fall and can't get up.
- Think about wearing an alarm device that will bring help in case you fall and can't get up.