

Slips, Trips and Falls Avoid Them All

A Falls Risk Reduction Program



Presenter's Guide & Participant Handouts

Developed by:
The NH Falls Risk Reduction Task Force
www.NHfallstaskforce.org



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NOTES TO SPEAKER

This guide was developed to assist you in planning and presenting an educational program to help reduce the risk of falls among older adults. The program uses the SAFE HOUSE model and audio-visual materials - which are available for loan from the NH Department of Health and Human Services. If the SAFE HOUSE is not available, you can do a presentation using PowerPoint. This is also available from the Department of Health and Human Services.

The program is designed to be presented to older adults and their caregivers. It can be modified to be more appropriate for other audiences including young people and professionals. If using the SAFE HOUSE, you should plan to limit your audience to about 10 to 15 to ensure that everyone can see well enough to participate. If using audio-visuals alone, you can present to a larger audience. You can display the SAFE HOUSE ahead of time and let people look at it, listing differences they see. Then refer to the house as you take them on the “tour”.

If you wish to include the screening tools in the program, plan a few minutes to set those up before you begin your presentation.

To be effective, a falls risk reduction effort should include several components:

- Education - the program contained in this guide
- Environmental Modifications based on the Home Safety Checklist
- Exercise and other changes in personal behavior based on the Self-Assessment, and
- Emergency planning to minimize the severity of injuries should a fall occur.

The program and the participant materials introduce all these concepts to your audience.

The full program will take between one and a half and two hours. For each section there is an expected duration so you can tailor a program based on your time frame. Keep in mind that including all the components will increase the effectiveness of your program. Most audiences, however, have limited attention spans, so several short sessions provided as a series are likely to be more effective than one long program.

Program Presentation

I. INTRODUCTION (5 min.)

- Introduce yourself. Thank any program sponsors or people who helped organize the program.
- Thank everyone for coming and for showing interest in reducing the risk of falls.
- Refer to the participant packet. Make sure everyone has one.
- Make sure that everyone can see and hear. If not, make adjustments.

II. BACKGROUND INFORMATION ON FALLS (5 min.)

(Use PowerPoint and/or refer people to the Fact Sheet in their packets)

Why are we concerned about falls? As the facts below indicate, falls are a significant problem for older people and for those who care for and about them.

1. Each year, **one-third** of people aged 65 and older and **one-half** of those 80 and older will fall.
2. Among older adults, falls are the **leading cause of injury death**. On average, **more than 70 older people die each year in New Hampshire as a result of a fall**.
3. The **majority** of falls (60%) occur at **home**.
4. More than **90% of hip fractures** among adults ages 65 and older are **caused by falls**.
5. In 2004, there were more than **320,000 hospital admissions for hip fractures**. Half could not return home or live independently.
6. In 2000, the total direct cost of all **fall injuries for people 65 and older exceeded \$19 billion**. The financial toll of older adult falls is expected to increase as our population ages, and may reach **\$54.9 billion by 2020**.
7. **Falls are not a normal part of aging**. Older adults can **take several steps to protect their independence and reduce their risk of falling**.

Sources:

1. CDC Falls Fact Sheets: <http://www.cdc.gov/homeandrecreationalafety/falls/adultsfalls.html> accessed 11/05/09
2. CDC, National Center for Injury Prevention and Control, WISQARS, 2002-2006 New Hampshire Unintentional Fall Deaths and Rates per 100,000, All Races, Both Sexes, Ages 65 to 85+
3. JAGS 55:S327-S334, 2007: Quality Indicators for Falls and Mobility Problems in Vulnerable Elders

III. PERSONAL RISK FACTORS (30 min.)

Background Information: Some falls are beyond our control. However, certain risk factors that are associated with falls can be modified or fully corrected to reduce fall risk. This section contains a Personal Fall Risk Checklist for participants to complete in Section A. The more factors you have the higher your risk of falls. Section B is a discussion of common risk factors associated with falls and Section C includes two screening tools to assess individual fall risks. Suggestions for how to decrease fall risk associated with these personal factors or physical status are included in Section IV on Prevention. Listed below are those risk factors that have been associated with falls.

A. Personal Fall Risk Checklist (10 min.)

Use the **Personal Fall Risk Checklist** provided (below and separate sheet for participants) to help you assess your personal risk of falling. An individual's fall risk is higher with a greater number of "yes" answers.



Are you at risk of a fall?

PERSONAL FALL RISK CHECKLIST

Please read the following questions and answer them by checking **YES** or **NO**. Your risk to fall increases with the greater number of "YES" answers. Consult your primary-care provider with concerns.

1. Have you fallen in the past 6 months? Yes No
2. Do you feel unsteady reaching for objects overhead? Yes No
3. Do you have difficulty or dizziness getting up from a chair? Yes No
4. Do you have difficulty picking objects up from the floor? Yes No
5. Are you unsteady with quick turns or on uneven ground? Yes No
6. Are you unsteady at night when lighting is low? Yes No
7. Do you take 4 or more medications daily? Yes No
8. Does your alcohol use affect your balance? Yes No
9. Have you noticed a decrease in hearing? Yes No
10. Have you noticed a decrease in vision? Yes No
11. Have you had a recent illness or injury that has caused a lifestyle change? Yes No
12. Do you have a chronic neurological condition or other chronic medical problem? Yes No
13. Do you have a condition that affects feeling in your feet or ankles? Yes No
14. Have you become fearful of walking or leaving your home due to decreased sense of balance? Yes No

B. Are You At Risk For Falling? (10 min.)

Refer the audience to the handout and/or visual aides listing risk factors. Their packet includes suggestions for correction of the risk. You may wish to save this part for the prevention section of the presentation or do this now if the presentation is shortened. Review the list of risk factors with the audience. Remind them that their fall risk increases with increased number of problems identified.

Common Risk Factors for Falls:

BALANCE AND GAIT PROBLEMS: Unsteadiness with standing or walking or a change in activity level due to unsteadiness may indicate a balance problem. Poor or ill-fitting footwear can also adversely affect balance and gait.

DECREASED STRENGTH AND FLEXIBILITY: Common problems include decreased neck and trunk flexibility, decreased hip and ankle strength and decreased ankle flexibility.

LOW LEVELS OF VITAMIN D: Vitamin D is important for strong muscles and bones for fall risk reduction.

IMPAIRED HEARING: It may be difficult to localize the source of a sound or one may not hear a vehicle or person approaching.

DIZZINESS: Dizziness can result from many conditions and should be evaluated by your primary health care provider if present. A common problem is low blood pressure when standing causing one to feel lightheaded. Another common source of dizziness is inner ear or vestibular problems. Dizziness caused from vestibular problems can often be treated successfully with exercise.

ALTERED MENTAL STATUS: Depression or dementia can decrease activity level and one's ability to attend to environmental changes.

USE OF MULTIPLE MEDICATIONS: Many medications have side effects that can impair your coordination and balance or cause dizziness. Medication risk increases with the number of medications that are taken. Four or more have been shown to increase fall risk. Speak with your pharmacist or physician about the medications you are taking.

ALCOHOL USE: Excessive alcohol use can also negatively affect balance.

IMPAIRED VISION: Inability to accurately see one's environment can lead to falls. A change to bifocals may temporarily affect your balance. Changes in depth perception may also contribute toward falls.

CHRONIC AND/OR ACUTE ILLNESS: Many chronic neurological conditions (such as Parkinson's Disease, stroke and head injury) and other chronic illnesses may impair balance. Inactivity or weakness following an acute illness or hospitalization may also impair balance and increase fall risk.

RECENT FALLS: A fall within the past 6 months may put you at greater risk of another fall. This is especially true if the fall occurs without apparent cause, such as with walking from one room to the next.

ENVIRONMENTAL HAZARDS: See Home Safety Checklist in Section IV.A. for suggestions.

C. Screening Tools (10 min.)

A quick screen can help assess risk of falling. This portion of the activity can be interactive and provide the audience with a sense of fall risk. The audience should understand that more testing should be done if they have any concerns or have answered “yes” to some of many risk factors on the questionnaire.

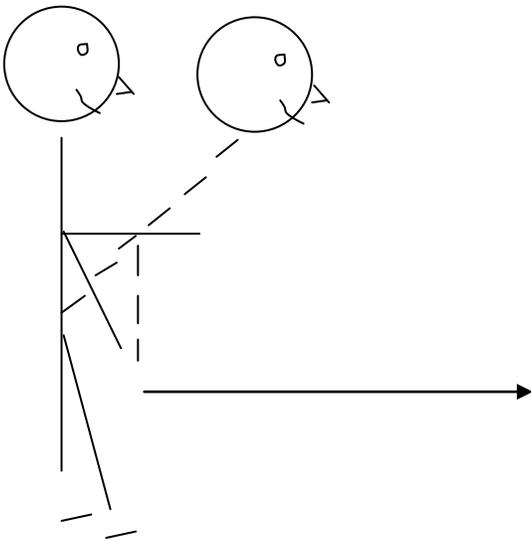
Screen 1: Functional Reach

Source: Duncan, P.W., Weiner, D.K., Chandler, J., and Studenski, S.A. (1990). Functional reach: a new clinical measure of balance. Journal of Gerontology: Medical Sciences, 45 M192-M197

Equipment: Tape Measure. Set up before program begins.

Criteria: Individuals must be able to stand for at least one minute without any type of assistance.

Description: Individual stands with one side next to a wall, feet shoulder width apart. Attach a tape measure to the wall at shoulder height parallel to the floor. The individual is asked to make a fist and raise the arm nearest the wall to 90 degrees (arm will be parallel to the floor), fist at beginning of tape. The individual is asked to lean forward as far as possible without touching the wall and without moving the feet (the individual may bend at the waist). The examiner notes the finish position of the fist on the tape.



Procedures: Allow one or two practice trials and then perform the test trial.

Interpretation of results:

- (a) High Risk for falls : < 6 inch reach
- (b) Moderate Risk for falls: 6-10 inch reach
- (c) Low Risk for falls: > 10 inch reach

Screen 2: Timed “Up and Go” Test

Sources: Podsiadlo, D., & Richardson, S. (1991). The timed “up and go”: a test of basic functional mobility for frail elderly persons. *Journal of the American Geriatric Society*, 39, 142-148, Shumway-Cook, A. et al. (2000), *Predicting the Probability for Falls in Community-Dwelling Older Adults Using the Timed Up and Go Test*, *Physical Therapy*, Vol 80(9), 896-903.

Equipment: Chair (with arms) and stopwatch. Ten feet must be marked.

Criteria: Individuals must be able to walk at least 200 feet with/without any type of assistive device.

Description: Start with individual seated with back against chair. Individuals are asked to rise from the chair on the signal “GO”, walk 10 feet, turn, walk back to the chair, turn and sit down. The total time to complete the test is recorded in seconds. The goal is to complete the test in the shortest time possible.

Interpretation of results

Individuals taking 13.5 seconds or longer to complete the test are at risk to fall.

IV. PREVENTION PROGRAMS (40 min.)

Prevention programs can help to reduce falls among older people. Research by the National Institute on Aging has shown that older persons who participate in a "Fall Prevention" program can lower their rate of falls compared to those not in such a program. To be most effective, programs should include a number of different components. To make it easy to remember, we call them the four "E's"

- **Education** - this program and the materials you will take home
- **Environmental Modifications** - changes you make to your home based on what you learn here and from completing your own Home Safety Checklist
- **Exercise** and other changes that you make in your behavior, and
- **Emergency Planning** to minimize the severity of injuries should a fall occur.

We will touch on all of these during today's program.

A. Safe House and Home Safety Checklist (20 min.)

The easiest way to prevent injuries is to make and keep the environment as safe as possible. Some people live in homes or apartments that were designed with safety in mind. Most of us, however, do not.

Knowing what can cause falls or fires in our homes can help us make changes to reduce our chances of being hurt. Most of you have heard or seen a lot of this before. You might not have thought about it in terms of your own home though. Today, we will use the model houses (and/or these pictures) to remind us of practical things we can do to prevent us from being one of the people who will fall this year.

Keep in mind that a lot of the changes that can make the most difference are easy to do and are not expensive. Proper lighting, reducing clutter and putting electrical cords out of the way can all play a big part in reducing your risk of falling. Items marked with an asterisk are those that are fairly easy to correct.



How safe is your home?

HOME SAFETY CHECKLIST

Read the following questions and answer them by checking **YES** or **NO**. **YES** means **SAFE** and **NO** means **UNSAFE** and should be corrected. Asterisk (*) indicates easy items to correct.

Kitchen

- Are drawers and cupboards closed to avoid bumping into them?*
- Is the floor made of a slip resistant material?
- Do floor mats have a slip resistant backing?*
- Are spills cleaned up quickly to prevent slipping?*
- Is a washed floor allowed to dry before walking on it?*
- Are regularly used items reachable without climbing, bending or stooping?*
- If there is a step stool, does it have a wide leg base, rubber tips, and handrails?
- Is there good lighting around the stove, sink, and counters, but doesn't cause a glare?
- Can you safely carry hot food from the stove to the table?
- Are electrical cords from appliances safely stored and off the floor?*

Hallway and Stairs

- Are your railings sturdy, waist high, and easy to grasp along both sides of stairway, including those to the basement?
- Are stairs in good repair?
- Are stairs free of clutter?*
- Is bright, non-skid tape placed on the top and bottom steps to indicate where they begin and end?
- Are step surfaces non-skid and even?
- Are all carpets and runners secured?
- Are light switches at the top and bottom of the stairs?
- Is the hallway and stairway adequately lit?
- If there is a change in the level between rooms, is it easily seen?

Bathrooms

- Do the tub and shower have rubber mats, non-skid strips or non-skid surfaces?*
- Are towels, shampoo, and soap within easy reach?*
- Is there a grab bar on the wall or the side of the tub or shower, which is both properly installed and designed to hold the weight of a person?
- Is there a tub seat?
- Is there a portable hand held showerhead?
- Is there an appropriate toilet seat and grab bars around the toilet?
- Is the floor slip-resistant? Is it free of loose rugs and loose tiles?
- Is there a way to prevent slippery floors after bathing?
- Are electrical cords from appliances safely stored and off the floor?*

Bedrooms

- Is there a well-lit pathway from the bedroom to the bathroom?* Yes No
- Do you have a light or flashlight within easy reach of the bed?* Yes No
- Is there a telephone that’s easy to reach from the bed?* Yes No
- If there are extension cords, are they secured to the wall, not across the floors or under carpets?*
- Is there something sturdy to hold on to next to the bed to assist in getting in and out? Yes No
- Are small rugs secured with carpet tape or non-skid backing? Yes No
- Is there a bedside table for glasses, books, etc rather than cluttering the floor beside the bed? Yes No
- If a cane or walking device is needed, is it kept at hand but not in the way?* Yes No

Living Room/General Living Areas

- Are the carpets flat and in good condition? Yes No
- Are small rugs and runners secured with carpet tape or non-skid backing? Yes No
- Is the furniture placed to allow wide walkways?*
- Are walkways clear of tripping hazards such as low furniture, grandchildren’s toys and electrical and telephone cords?*
- Are chairs and sofas high enough for easy sitting and standing? Yes No
- Are the chairs and tables stable enough to support weight if leaned on? Yes No
- Is there adequate light when entering each room/area? Yes No

Entrances and Outdoor Walkways

- Are the outdoor stairs and walkways free from cracks, dips, obstacles, leaves, ice, snow and holes? Yes No
- During the winter, is sand and/or salt available for slippery surfaces to ensure safety? Yes No
- Do the stairways have secure handrails? Yes No
- Is the entrance well lit at night? Yes No

Additional Home Safety Questions

- Is there a way to access Emergency Services in each room if you fall or need help, for instance by phone, pull cord, or personal alert device? Yes No
- Is the hot water temperature set to 120 degrees or lower to avoid scald burns? Yes No
- Is there at least one working smoke detector on each level of the home and near each bedroom? Yes No
- Are smoke detectors tested monthly?*
- Are the batteries replaced twice a year?*
- Is there a carbon monoxide detector on each level of the home? Yes No
- Is there a fire extinguisher in the home? Yes No
- Are emergency phone numbers beside each phone?*
- Are fireplaces protected by a screen or glass door? Yes No

ACTION PLAN

Please indicate areas needing attention. Include a brief correction plan and if an alteration has been made.

B. Changes in Behavior to Reduce Risk Factors (10 min)

As there are many factors that can increase the risk of falling, there are also many things you can do to reduce the risk. Making your home and environment safer is only one of them. Changes in your personal habits are also important. Let's review some of these. (Refer back to Personal Fall Risk Checklist if that has been completed by this audience.)

BALANCE AND GAIT PROBLEMS: Unsteadiness with standing or walking or a change in activity level due to unsteadiness may indicate a balance problem. Poor or ill-fitting footwear can also adversely affect balance and gait.

→**What to do:** Exercise regularly and stay active. Balance and strength exercises have been shown to be the most effective in reducing fall risk. Whole body exercises such as T'ai Chi have been found to improve balance. The Activity and Exercise Sheet has additional ideas. You may also ask your primary health care provider for a referral to a balance program or physical therapist. This is especially important if you are unsteady or are afraid of falling. Also remember to wear supportive shoes without heels. Loose slippers should be avoided.

DECREASED STRENGTH AND FLEXIBILITY: Common problems include decreased neck and trunk flexibility, decreased hip and ankle strength and decreased ankle flexibility. A physical therapy referral may be helpful. Please refer to exercise sheet in this packet for other ideas.

→**What to do:** Exercises that strengthen weak muscles and increase flexibility of tight muscles can help improve balance and ability to walk. You may consult with your primary care provider strengthening ideas.

LOW LEVELS OF VITAMIN D: Recent studies have shown that it is common for individuals 65 years and older to have low levels of Vitamin D in their bodies. Vitamin D is needed for absorbing calcium into our bones and muscles. Low levels of Vitamin D can lead to bone and muscle weakness.

→**What to do:** Healthy adults can improve balance, muscle strength, and bone strength and reduce the risk of falls and fractures by taking 800 IUs of Vitamin D3 or Cholecalciferol/day. Ask your primary care provider if this is right for you.

IMPAIRED HEARING: It may be difficult to localize the source of a sound or one may not hear a vehicle or person approaching.

→**What to do:** Schedule regular hearing checks.

DIZZINESS: Dizziness can result from many conditions and should be evaluated by your primary health care provider if present. A common problem is low blood pressure when standing causing one to feel lightheaded. Another common source of dizziness is inner ear or vestibular problems. Dizziness caused from vestibular problems can often be treated successfully with exercise.

→**What to do:** Contact your primary health care provider with any symptoms of dizziness. He or she will evaluate this and determine the cause. If the cause is thought to be due to inner ear problems you may be referred to an ENT physician specializing in this and/or a physical therapists specializing in vestibular or inner ear problems. Make sure you are steady and not dizzy when coming to stand before you begin to walk.

ALTERED MENTAL STATUS: Depression or dementia can decrease activity level and one's ability to attend to environmental changes.

→**What to do:** Contact your primary health care provider with any symptoms or concerns.

USE OF MULTIPLE MEDICATIONS: Many medications have side effects that will affect your coordination and balance or cause dizziness. Medication risk increases with the number of medications that are taken. Four or more have been shown to increase fall risk. Speak with your pharmacist or physician about the medications you are taking.

→**What to do:** Consult with your primary health care provider and pharmacist for more information regarding the medications you take and their potential side effects and interactions with each other. Your primary health care provider may choose to decrease or change medications if appropriate. You should NEVER change your medication regime without consulting with your treating primary health care provider first.

ALCOHOL USE: Excessive alcohol use can also negatively effect balance.

→**What to do:** Limit alcohol intake. This may be especially important if you are taking medication.

IMPAIRED VISION: Inability to accurately see one's environment can lead to falls. A change to bifocals may temporarily affect your balance. Changes in depth perception may also contribute toward falls.

→**What to do:** Schedule regular vision checks.

CHRONIC AND/OR ACUTE ILLNESS: Many chronic neurological conditions (such as Parkinson's Syndrome, stroke and head injury) and other chronic illnesses may impair balance. Inactivity or weakness following an acute illness or hospitalization may also impair balance and increase fall risk.

→**What to do:** Consult with your primary health care provider with any symptoms of unsteadiness, weakness or difficulty with walking during your daily tasks. A physical therapy referral may be appropriate.

RECENT FALLS: A fall within the past 6 months may put you at greater risk of another fall. This is especially true if the fall occurs without apparent cause, such as with walking from one room to the next.

→**What to do:** Assess the cause of the fall and make appropriate corrections to personal risk factors or the environment if appropriate.

C. Emergency Preparation (10 min.)

Not all falls can be prevented. With planning, however, you can have some things in place to reduce the severity of an injury if you do fall. Let's discuss what some of these things might be.

Let the audience suggest things to add to the list. When complete, make sure that the following are included:

Be ready to get EMERGENCY HELP when needed

- Have a personal alert system if possible.
- Have telephones (cell phones, hand-held phone) accessible in all areas of the house.
- Have emergency numbers (9-1-1, personal physician, emergency contact name) on or near all phones.
- Have your address and directions beside each phone so that someone other than you can give directions if necessary.
- Make sure your house number is highly visible from the road.
- Have a "daily check" system in place with a friend or neighbor.
- If you feel yourself falling, drop anything in your hands and use your hands to break your fall.
- After a fall, try to assess your situation before moving to prevent further injury to any affected parts.
- If you are injured, or unable to get up on your own, try to activate a personal alert system, reach a phone or try to get the attention of a neighbor or passer-by.
- Later, think about what happened to prevent future injuries.

V. CONCLUSION (10 min.)

That is all the material for today. Does anyone have any questions?

For further information, refer participants to the materials in their packets including the Resource List and to local resources if known.

Ask everyone in the audience to identify at least one change in each category that they will make to prevent a fall from occurring. Invite willing participants to share their idea. Encourage participants to promise themselves to make this change within 24 hours.

Remember one third of older people will fall this year. To reduce your own risk of falling, remember that this educational program is only the FIRST step. Making changes in your home, in your personal habits especially exercise and emergency planning are ALL important. Don't let it be you!

Please complete your evaluations. And THANK YOU for coming

Facts on Falls

1. Each year, **one-third** of people aged 65 and older and **one-half** of those 80 and older will fall.
2. Among older adults, falls are the **leading cause of injury death**. On average, **more than 70 older people die each year in New Hampshire as a result of a fall**.
3. The **majority** of falls (60%) occur at **home**.
4. More than **90% of hip fractures** among adults ages 65 and older are **caused by falls**.
5. In 2004, there were more than **320,000 hospital admissions for hip fractures**. Half could not return home or live independently.
6. In 2000, the total direct cost of all **fall injuries for people 65 and older exceeded \$19 billion**. The financial toll of older adult falls is expected to increase as our population ages, and may reach **\$54.9 billion by 2020**.
7. **Falls are not a normal part of aging**. Older adults can **take several steps to protect their independence and reduce their risk of falling**.

Sources:

1. CDC Falls Fact Sheets: <http://www.cdc.gov/homeandrecreationalafety/falls/adultsfalls.html> accessed 11/05/09
2. CDC, National Center for Injury Prevention and Control, WISQARS, 2002-2006 New Hampshire Unintentional Fall Deaths and Rates per 100,000, All Races, Both Sexes, Ages 65 to 85+
3. JAGS 55:S327-S334, 2007: Quality Indicators for Falls and Mobility Problems in Vulnerable Elders

Activity and Exercise

Physical activity has been proven to prevent declines in health and physical ability as we age. Moderate physical activity - about thirty minutes per day - can help you live longer, and enjoy your life more.

This doesn't mean that you have to take up a new sport, buy new exercise equipment, or join a health club. The chart below lists a variety of activities and which of the benefits it provides. This is only a sample of the types of activities you can get involved with.

REMEMBER: Check with your health care provider before you begin any new physical activity.

ACTIVITY	Well-Being	Overall Strength	Balance	Endurance	Social Benefits
Bicycling	✓	✓	✓	✓	P
Bowling	✓		✓		✓
Dancing	✓	P	✓	P	✓
Strength & Balance	✓	✓	✓	✓	P
Gardening	✓	P	P	P	P
Golf	✓		✓	✓	✓
Rowing/Canoe	✓	✓		✓	P
Skiing/ X- Country	✓	✓	✓	✓	P
Swimming	✓	✓	✓	✓	P
Tai Chi	✓	✓	✓		P
Yoga	✓	✓	✓		P
Tennis	✓	✓	P	P	✓
Walk/Hike	✓	P	✓	✓	P
Strength Training	✓	✓	✓	✓	P
WII Fit	P	✓	✓	✓	P

Key: ✓ = Activity provides benefit

P = Activity can possibly provide benefit, depending on how it is done.

Resource List

For additional information contact:

For information about this program:

Injury Prevention Program

NH Department of Health and Human Services
1-800-852-3345 ext. 4700 or 271-4700

For information about services for older people in NH:

Division of Elderly and Adult Services

NH Department of Health and Human Services
1-800-852-3345 ext. 4680 or 271-4680

ServiceLink

A statewide network of community based connections for elders, adults with disabilities and their families.

1-866-634-9412 or www.nh.gov/servicelink/

Northern New England Geriatric Education Center (NNEGEC)

The mission of the northern New England Geriatric Education Center is to provide interdisciplinary and experiential education and training in evidence-based geriatrics to healthcare professionals in New Hampshire and Vermont.
603-653-0857

211 United Way National Referral Line for Human Services Assistance

Dial 211

For information about Osteoporosis:

Osteoporosis Prevention Program

NH Department of Health and Human Services
1-800-852-3345 ext. 4830 or 271-4830

For information about your personal health and exercise:

Your health care provider

For information about preparing your home for an emergency:

Your local Emergency Medical Services Program

Developed by the NH Falls Risk Reduction Task Force, 1-800-852-3345 ext 4700

Reference List

Chang JT and Ganz DA. Quality Indicators for Falls and Mobility Problems in Vulnerable Elders. JAGS 2007; 55:5327-5334.

Daubney EM. Lower-Extremity Muscle Force and Balance Performance in Adults Aged 65 Years and Older. Phys Ther 1999; 79:1177-1185.

Heike A. Bischoff-Ferrari, MD, MPH; Bess Dawson-Hughes, MD; Walter C. Willett, MD, DrPH; Hannes B. Staehelin, MD; Marlet G. Bazemore, MD; Robert Y. Zee, MD; John B. Wong, MD. JAMA. 2004;291:1999-2006

Podsiadlo, D., & Richardson, S. (1991). The timed "up and go": a test of basic functional mobility for frail elderly persons. Journal of the American Geriatric Society, 39:142-148.

Shumway-Cook, A. et al. (2000). Predicting the Probability for Falls in Community-Dwelling Older Adults Using the Timed Up and Go Test. Physical Therapy, 80(9), 896-903.

Province M, et al. The Effects of Exercise on Falls in Elderly Patients: A Preplanned Meta-analysis of the FICSIT Trials. JAMA 1995;273:1341-1347.

Shumway-Cook A. Predicting the Probability for Falls in Community-Dwelling older adults. Phys Ther 1997; 77(8):812-819.

Shumway-Cook A. The Effect of Multidimensional Exercises on Balance, Mobility, and Fall Risk in Community-Dwelling Older Adults. 1997; 77(1):46-57.

Tinetti ME. Does Multiple Risk Factor Reduction Explain the Reduction in Fall Rate in the Tale FICSIT Trials? American Journal of Epidemiology. 1996; 144(4):389-399.

Tinetti ME. A Multifactorial Intervention to Reduce the Risk of Falling Among Elderly People Living in the Community. The New England Journal of Medicine. 1994;331:821-827.

Tinetti ME. Prevention of Falls Among the Elderly. New England Journal of Medicine. 1989;16:1055-1059.

Wolfson L. Strength is a Major Factor in Balance, Gait, and the Occurrence of Falls. Journals of Gerontology. 1995; 50: 64-7.

Wolfson L. Balance and Strength Training in Older Adults: Intervention Gains and Tai Chi Maintenance. JAGS. 1996; 44(5):498-506.

