

## Preventing Falls and Fractures

Falls and fractures are not a certain fact of growing older. Many can be prevented. To reduce your risk of falls and fractures, there are things you can do.

- Make personal changes in your lifestyle or physical well-being.
- Consider using walking aids.
- Take steps to maintain or improve your bone health.
- Make changes in your home.

Talk with a member of your health care team about how to prevent falls.

### Personal Changes

Many falls result from personal or lifestyle factors that can be changed. A member of your health care team can assess your risk of falling and suggest ways to prevent falls. You might be referred to someone else who can help. Also, let a member of your health care team know if you've fallen or almost fallen. Here are some changes you might make:

- Be physically active.
- Have your medicines reviewed.
- Have your blood pressure checked when lying down and standing up.
- Get a vision check-up.
- Choose safe footwear.

### Be Physically Active

Regular physical activity is a first line of defense against falls and fractures. It strengthens muscles and increases flexibility and endurance. Your balance and the way you walk may change, it will decrease the chances of a fall. Work with a member of your health care team to plan a program that is right for you.

A group program can help. You can exercise at home which can also reduce your risk of falls. Whether done with a group or on your own, be sure your program becomes more of a challenge over time.

Tai Chi is one type of exercise that may help improve balance and control. This exercise uses slow, flowing movements to help people relax the mind and body. It can also boost your self-confidence. Dancing and other rhythmic movements can help as well.

Mild weight-bearing exercise, such as walking or climbing stairs, may help slow bone loss. Having strong bones can prevent fractures if you do fall.

Your health care provider or a physical therapist can check your walking and balance. They might do a "Get-Up and Go" test. This simple test shows how steady you are when you get up from a chair. The test also is used to check your walking ability.

### Benefits of Being Active

- Reduce your risk of falls and harm.
- Improve how well you sleep.
- Decrease pain and disability from arthritis.
- Avoid bone weakness and muscle shrinkage.
- Help your heart and lungs to work their best.
- Improve blood flow and prevent clots.
- Increase energy and endurance.
- Improve your mental well-being.
- Promote independence.

### **Medicine Review**

Find out about the possible side effects of medicines you take. Some might affect your balance, or cause dizziness, confusion, or make you sleepy. Some medicines do not work well together, adding to the side effects of each.

Bring your prescribed and over-the-counter medicines with you when you visit your clinic. Also bring any vitamins, minerals, and herbal products you are taking. Ask if any of your medicines or over-the counter products could increase your risk of falling. Ask if you no longer need to take any of your medicines or if the doses might be decreased. Never stop taking your medicines unless you talk with your health care team first.

Limit the amount of alcohol you drink. Even a small amount can affect your balance and reflexes.

### **Blood Pressure Checks Standing and Sitting**

Most often your blood pressure is checked when you are sitting. However, some older people have normal or increased blood pressure while seated, but their blood pressure drops too much on standing. There is no way to know unless you check.

A member of your health care team should check your blood pressure and pulse after you have been lying down for at least 5 minutes and again after you get up. If it drops too much when you get up, ask if any of your medicines should be decreased or if you should make other changes. Other things can help.

- Drink more water.
- Get up more slowly.
- Pump your feet or hands before getting up.
- Wear special stockings.

### **Get a Vision Check-up**

Have your vision tested regularly or if you think it has changed. Even small changes in sight can make you less stable. Wear your eyeglasses or contacts so you can see around you clearly. Keep eyeglasses clean and check to see that the frames are straight. When you get new glasses, be extra cautious while you are getting used to them. If you use reading glasses or multi-focal lenses, take them off when you are walking.

### **Choose Safe Footwear**

The soles of our feet have nerves that help us judge the position of our bodies. To work correctly, our feet need to be in touch with the ground and our shoes need to stay securely on the foot as we take each step.

To help prevent falls be careful when you pick your footwear. Wear sensible, low-heeled shoes that fit well and support your feet. There should be no marks on your feet when you take off your shoes and socks. Your shoes should fully surround your feet. Wearing only socks or wearing floppy, backless slippers or shoes without backs can be unsafe. Also, choose shoes with non-slip soles. Smooth soles can cause you to slip on waxed or polished floors.

### **Helpful Devices**

Use of assistive devices can prevent harmful falls. These devices include canes, walkers, and “reachers.” A physical or occupational therapist can help you decide which devices might be helpful and teach you how to use them safely. Talk with your doctor or nurse about having a physical therapist assess your device needs.

A cane or walker can help you feel more stable when you walk. Walking aids are very helpful when you are in places you do not know or where walkways are uneven. There are many types of canes. Some have grips

made of foam or that fit the shape of your hand. Many canes can be adjusted, but some cannot. A physical therapist can advise you about which cane to choose. Be sure the length fits you well. Your elbow should be at a comfortable angle. A cane that is too short may make you unsteady. A cane that is too long is harder to use. If you use a cane, be sure to learn how to walk with it the correct way.

If you are at risk of falling, a member of your health care team might suggest using a walker. A walker will help you stay balanced by giving you a wide base of support. Be sure to choose a walker that fits you and gives the level of stability that is best for you. Use it when needed and use it properly. The types of walkers vary. Some have two wheels so the walker should not roll away from you. These work well if you need to put weight on the walker when you move. Others have four wheels and brakes for going down inclines. You can add a basket, tray, or pouch to some walkers to carry items. This will make it handy to use the walker.

A “reacher,” or “grabber,” can also help prevent falls. This simple tool lets you take lightweight items from high shelves, from the floor, and other places. Use a reacher rather than standing on a stool to get something from above.

When bending over to pick up items from the floor or a lower level like a step or low shelf, use one hand on counter top, furniture, or a walker for support. When able, use a reacher to pick up lightweight items.

Another helpful device is a portable telephone or cell phone. Carry the phone with you from room to room. When it rings, you won’t have to rush to answer it.

## **Bone Health**

You can help prevent fractures if you maintain strength of your bones. Having healthy bones won’t prevent a fall. If you do fall, having healthy bones can help prevent hip or other fractures that may lead to a hospital or nursing home stay, disability, or even death. You are never too old to improve your bone health.

Osteoporosis makes bones thin and more likely to break. It is a major reason for fractures in people past menopause. It also affects older people. If bones are fragile, even a minor fall can cause fractures.

At any age, you can take steps to keep your bones strong. Be sure to consume enough amounts of calcium and vitamin D. People over age 50 should consume 1,200 mg of calcium daily by eating calcium-rich foods and taking calcium supplements.

Good sources of calcium in your diet include:

- Dairy products such as low-fat milk, yogurt, and cheese.
- Orange juice, cereals, and other foods fortified with calcium.
- Dark green, leafy vegetables such as broccoli, collard greens, and bok choy.
- Sardines, salmon with bones, soybeans, tofu, and nuts such as almonds.

Vitamin D helps your body absorb calcium. Being out in the sun causes your body to make vitamin D. Many older people do not get enough vitamin D this way. Eating foods with vitamin D and taking supplements can help.

As you grow older, your need for vitamin D increases. People ages 51 to 70 should consume at least 600 international units (IU) of vitamin D daily. People over age 70 should consume at least 800 IU daily. Talk with a member of your health care team about how much vitamin D you need.

Good sources of Vitamin D in your diet include:

- Herring, sardines, salmon, tuna
- Liver
- Eggs
- Milk
- Foods fortified with vitamin D
- Vitamin D supplements

Physical activity is another way to keep your bones strong. Try to get a total of at least 30 minutes of activity a day. This does not need to be 30 minutes at one time but can be shorter sessions multiple times a day. For example, three 10-minute sessions would meet this need. Find time for things like walking, dancing, stair climbing, gardening, and weightlifting.

Talk with your doctor or nurse about having a bone density test. This safe, painless test will assess your bone health and risk of future fractures. Medicare and many private insurers cover this test for eligible people. People over age 65 and over 70 should have a bone density test.

A member of your health care team can also advise you about whether you should consider taking prescription medicines to improve bone health. These medicines can slow bone loss, improve bone density, and lessen the risk of fractures.

Quit smoking and limit alcohol use to improve your bone health. Smoking and heavy alcohol use can decrease bone mass and increase the chance of fractures.

Maintain a healthy weight. Being underweight increases the risk of bone loss and broken bones.

### **If You Fall**

Whether you are at home or somewhere else, a sudden fall can be startling and upsetting. If you do fall, stay calm. Take deep breaths to try to relax. Remain still on the floor or ground for a few moments. This will help you get over the shock of falling. It will also give you time to decide if you are hurt before getting up. Getting up too quickly or in the wrong way could make an injury worse.

If you think you can get up safely without help, roll over onto your side. Push yourself up into a seated position. Rest again while your body and blood pressure adjust. Slowly get up on your hands and knees, and crawl to a sturdy chair.

Put your hands on the chair seat and slide one foot forward so that it is flat on the floor. Keep the other leg bent so the knee is on the floor. From this kneeling position, slowly rise and turn your body to sit in the chair.

If you are hurt or cannot get up on your own, ask someone for help or call 911. If you are alone, try to get into a comfortable position and wait for help to arrive.

If you have problems with balance or dizziness and are often alone, consider getting a personal emergency response system. This service, which works through your telephone line, provides a button or bracelet to wear at all times in your home. If you fall or need emergency help for any reason, a push of the button will alert the service. Emergency medical services will be called. There is a fee but your safety is worth the cost.

Carry a cordless phone or cell phone with you as you move about your house. It could make it easier to call someone if you need help. You might also put a telephone in a place that you can reach from the floor in case you fall and need help.

Be sure to discuss any fall with a member of your health care team. Write down when, where, and how you fell so you can discuss the details. This will help to find the cause of the fall. Knowing the cause can help you plan to prevent future falls. You may need to see a physical or occupational therapist who can suggest changes that may lower your risk of falls.

Many older people who have fallen are afraid of falling again. Even if a fall doesn't cause injury, the fear of falling again might prevent you from doing the things you enjoy or need to do. Fear of falling also might cause you to stay at home away from your friends, family, and others.

Your muscles and bones can weaken over time without the physical activity that comes with doing daily tasks or exercise. As a result, you could become more -- not less -- likely to fall.

**Source:** NIH Senior Health: National Institutes of Health, National Institute on Aging.

<https://www.nia.nih.gov/health/topics/falls-and-falls-prevention>

<https://www.nia.nih.gov/health/osteoporosis>

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 9/2023 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF#5234.