



Osteoporosis Post-Fracture Care Patient Education Chapter Book

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Osteoporosis Post-Fracture Care: Helping You Reduce the Risk of Another Fracture



Reduce the Risk of Another Fracture

At-Home Basics

A Helpful Guide for Caregivers

If you have had a fracture, it may be a sign of osteoporosis.¹ It is very important that you take care of yourself in order to recover and reduce the risk of another fracture. This resource provides information to help you take care of your bones after a fracture and reduce the risk of osteoporosis-related fractures.

After an osteoporosis-related fracture, postmenopausal women are

5x
more likely

to fracture again within a year^{2,*}

WHAT IS OSTEOPOROSIS?^{1,3,4}

Osteoporosis is a bone disease that develops when the body loses too much bone, makes too little bone, or both. This can lead to a decrease in bone strength that can increase the risk of fractures (broken bones). Fractures can potentially lead to pain, loss of mobility, a change in lifestyle, and additional fractures in the future.

WHO CAN GET OSTEOPOROSIS?⁵⁻⁹

Osteoporosis is a very common disease. In fact, 1 in 2 women and 1 in 4 men over the age of 50 will break a bone due to osteoporosis. But **some people have a greater risk** of developing fractures due to osteoporosis. According to experts, your risk for osteoporosis is higher if you

- Are age 65 or older
- Have a parent who had a hip fracture
- Previous fragility fracture
- Have low body weight

WHAT FACTORS MAY INCREASE YOUR RISK OF ANOTHER OSTEOPOROSIS-RELATED FRACTURE?^{3,7,9}

- Previous osteoporosis-related fracture
- Cigarette smoking
- Excessive alcohol intake[†]
- Certain preexisting conditions such as
 - Rheumatoid arthritis
 - Diabetes
- Risk of falling

Drugs can affect your bone health.

Be aware of medications that can contribute to bone loss and fracture, including long-term corticosteroid use (such as prednisone)

Ask your doctor about steps you can take to **help** reduce your risk of falling

^{*}Data represent a population-based study of 4,140 postmenopausal women aged 50-90 years.²

[†]More than 3 alcoholic drinks per day.⁷



Monitoring Your Bone Density Is Important to Help Reduce Your Risk of an Osteoporosis-Related Fracture¹⁰



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HOW IS OSTEOPOROSIS DIAGNOSED AND MONITORED?^{4,7,10}

Osteoporosis is typically diagnosed based on your experience of a prior fracture or the results of a bone density test that your physician may order. A bone density test is also called a DXA scan, which stands for dual-energy X-ray absorptiometry.

- With most types of bone density tests, a person remains fully dressed
- The test usually takes less than 15 minutes
- Bone density tests are noninvasive and painless
- A central DXA uses very little radiation. You are actually exposed to 10-15 times more radiation when you fly roundtrip between New York and San Francisco

Your bone density is given as a T-score. A T-score of -2.5 or lower means you have osteoporosis. If you have already had a fracture at the hip or spine, your doctor may diagnose osteoporosis with a bone density test. If your T-score is higher than -2.5 and your doctor determines that you have other risk factors, you could also be diagnosed with osteoporosis. **It is important that your bone density be monitored periodically** to evaluate your bone health.

HOW OFTEN SHOULD YOU HAVE A BONE DENSITY TEST?⁷

After starting treatment for osteoporosis, your doctor will most likely recommend that you have a bone density test every 1 or 2 years to monitor your response to treatment.

You and your doctor will decide on the best care plan for you based on your individual needs. Your care plan is a key to helping strengthen your bones and helping you reduce your risk of another fracture

TAKING STEPS TO TAKE CARE OF YOUR BONES AFTER AN OSTEOPOROSIS-RELATED FRACTURE

If you have had a fracture, it may be a sign of osteoporosis.¹ It is very important that you take care of yourself in order to recover and reduce the risk of another fracture. This resource provides information to help you take care of your bones after a fracture and reduce the risk of osteoporosis-related fractures.

ESSENTIAL NUTRIENTS FOR BONE HEALTH^{11,12}

Getting Enough Calcium and Vitamin D Is Important to Maintain Strong Bones

Many adults are not getting the calcium they need to maintain healthy bones. Vitamin D is needed to help absorb calcium. Without enough calcium and vitamin D, **you could be at risk for bone loss, low bone density, and even broken bones.**



Calcium

WHAT DOES IT DO?	HOW DOES YOUR BODY GET IT?
<ul style="list-style-type: none"> • Calcium is needed to build new bones and help prevent bone loss • Calcium also helps your blood to clot, your heart to beat, and your muscles to contract 	<ul style="list-style-type: none"> • Your primary source of calcium is through diet and supplements • If you do not take in adequate calcium, your body will remove it from your bones

Vitamin D

WHAT DOES IT DO?	HOW DOES YOUR BODY GET IT?
<ul style="list-style-type: none"> • Vitamin D plays an important role in bone health • Vitamin D helps your body to absorb calcium • Skin makes vitamin D in reaction to sunlight and stores it in fat for later use 	<ul style="list-style-type: none"> • Sunlight* • Vitamin D supplements • Some foods and fortified beverages

*Talk to your healthcare provider about whether it is safe for you to spend time in the sun.

ESSENTIAL NUTRIENTS FOR BONE HEALTH^{11,13}

This chart shows you some of your healthy-bone food choices. Your doctor or other healthcare providers may be able to give you additional suggestions.

How Much Calcium Do You Need?

The amount of calcium you need depends on your age and sex.



Women

Age 50 and younger 1000 mg* daily
Age 51 and older 1200 mg* daily



Men

Age 70 and younger 1000 mg* daily
Age 71 and older 1200 mg* daily



WHERE CAN YOU GET IT?	HOW MUCH CALCIUM WILL YOU GET?†
Dairy products such as Frozen yogurt (vanilla) Milk (skim, low-fat, or whole) American cheese Vanilla ice cream	8 oz = 105 mg 8 oz = 300 mg 1 oz = 195 mg 8 oz = 85 mg
Produce, including Collard greens (frozen) Kale (frozen) Broccoli (fresh, cooked) Figs (dried) Orange	8 oz = 360 mg 8 oz = 180 mg 8 oz = 60 mg 2 figs = 65 mg 1 whole = 55 mg
Fish/seafood, including Sardines (canned with bones) Salmon (canned with bones)	3 oz = 325 mg 3 oz = 180 mg
Other choices Almond milk, rice milk, soy milk (fortified) Orange and other fruit juices (fortified) Tofu (prepared with calcium) Waffle (frozen, fortified) Beans (baked, canned)	8 oz = 300 mg 8 oz = 300 mg 4 oz = 205 mg 2 pieces = 200 mg 4 oz = 160 mg

How Much Vitamin D Do You Need?

The amount of vitamin D you need depends on your age.



Women and Men

Under age 50 400–800 IU‡ daily
Age 50 and over 800–1000 IU‡ daily



WHERE CAN YOU GET IT?	HOW MUCH VITAMIN D PER SERVING?
Foods such as Fish, including mackerel, salmon, light tuna, flounder, halibut, sardines, sole Shiitake mushrooms (fresh) Cow's milk (skim or low-fat, fortified) Almond, rice, coconut, or soy beverages, fortified with 25% or more vitamin D Orange juice with added vitamin D	1 serving = 3–4 oz 1 serving = 8 oz 1 serving = 8 oz 1 serving = 8 oz 1 serving = 8 oz

A balanced diet rich in calcium and vitamin D may help reduce the risk of fracture.^{1,11}
Your doctor can determine if you need an osteoporosis medication in addition to diet and exercise¹

IU=international units; mg=milligrams; oz=ounces.

*This includes the total amount of calcium you get from food and supplements.

†The calcium content listed for most foods is estimated and can vary due to multiple factors. Check the food label to determine how much calcium is in a particular product.

‡Some people need more vitamin D.¹⁴

Trips and slips can happen throughout your home. You can make some small changes that can help limit your fall risk and reduce your risk of a fracture.

WHAT MAKES YOU MORE LIKELY TO FALL?^{15,16}

Slippery floors, stairs, cluttered areas, or loose rugs or carpets underfoot may increase your risk of falling

Things that affect your vision may increase your chances of falling, such as



Reduced eyesight



Stairways or rooms that are too dark



Medications that can make you dizzy

USE THIS CHECKLIST TO HELP YOU SEE IF YOUR LIVING SITUATION PUTS YOU AT RISK OF FALLING^{12,15-17}

	YES	NO
Is there clutter around your home that may cause you to slip or trip?		
Are the stairways too dark?		
Is there enough light everywhere in your home so you can see everything clearly?		
Do you wear supportive shoes with nonslip soles?		
Has your doctor asked you if you have issues with your balance or strength?		
Do you take medications that may have side effects of dizziness or low blood pressure? For example, some blood pressure pills, heart medications, diuretics (water pills), muscle relaxants, and tranquilizers can make you dizzy.		

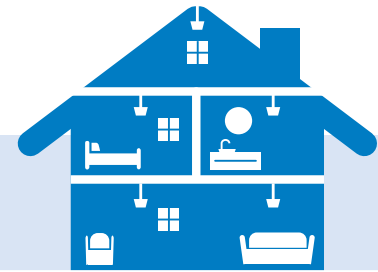
If you checked “Yes” for any of the items on the chart above, you may be at risk for a fall.

STEPS YOU CAN TAKE TO REDUCE YOUR FALL RISK^{15,16}

Make the time to **reduce clutter** and make sure there is **enough light** around your home. Make sure to **choose the right shoes**.

Talk with your doctor about the right exercises for you and **ask any questions** you have about the medications you are taking.

This blueprint can help you look at areas in your home where you can make small, easy changes that may make falls less likely.^{12,15,17}



Inside Your Home

Make sure the lighting is bright enough. Use night-lights throughout the house and always have flashlights on hand.



Kitchen

- Be careful of slippery floors



Floors and Rugs

- Remove throw rugs
- Secure larger rugs with rubber, slip-resistant backing
- Keep floors free of clutter
- Make sure carpets and rugs don't have loose edges sticking up



Stairways

- Make sure there is plenty of light
- Add light switches at the top and bottom of stairs
- Fix any loose or broken steps
- Place nonslip rubber treads on stairs
- Make sure handrails are tight and secure
- Install handrails on both sides of stairs



Bathroom

- Use a rubber mat in your shower/bath and a nonslip mat on the floor
- Install grab bars around shower, bath, and toilet
- Have a night-light or motion-activated light
- Consider a shower chair with a back and nonskid leg tips or a bath bench

Some tips for when you are inside your house

- Wear shoes that are supportive and have nonslip soles
- Check for cords or pets that could trip you

Outside Your Home



- Remove leaves, snow, and ice from walkways



- Fix holes



- Make sure you have secure handrails for entrances/exits



- Make sure there is plenty of light



Some tips for when you are outside your house

- You may want to use a walker or cane for added stability
- Wear nonslip shoes for added traction
- Pay attention to the surfaces in public buildings
- Stop at curbs and check the height before you step down
- Use a shoulder bag, hip pack, or backpack to leave hands free

Exercise Can Help Make You Stronger and Help Reduce Your Risk of Falling



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Exercise can help you **gain strength and flexibility** and **improve your balance and posture**. You should talk to your doctor about what kinds of exercise are right for you before starting any exercise program.^{12,15,18}

Talk to Your Doctor or Other Healthcare Professionals About an Exercise Plan That Works for You^{12,19}

There are **3 main types of exercises** that can help your bone health:

Weight bearing



Fast walking on a treadmill or outside



Climbing stairs



Dancing



Low-impact aerobics

Resistance



Lifting weights



Using elastic exercise bands

Flexibility



Tai chi



Yoga



Stretching

Weight bearing and resistance training may help **build muscles** and **maintain bone density**

Flexibility training may help you keep your **balance**

The information included in this tool is for educational purposes only. It is not intended nor implied to be a substitute for professional medical advice. You should always consult your healthcare provider to determine the appropriateness of the information for your own situation or if you have any questions regarding a medical condition or treatment plan.

Talk to your doctor about how to help keep your bones healthy. **Diet, exercise, and ongoing monitoring** are all important parts of your osteoporosis management plan.^{1,7} Your doctor can determine if you need an osteoporosis medication in addition to diet and exercise

YOU ARE A CORE PARTNER IN YOUR LOVED ONE'S POST-FRACTURE CARE^{20,21}

As a caregiver, you are a vital link between the patient and members of their healthcare team. This support guide contains helpful tips and information for you as a member of someone's care team. It also gives you information about taking time to take care of yourself.

Communication Is Key²⁰



Try to stay in touch with the doctors and nurses who provide care for the patient. As a key player on the care team, it is important that you keep the lines of communication open.

Be familiar with the patient's healthcare providers, as well as with their case manager and other members of the care team. Staying involved is a huge part of caregiving.

Learn About the Disease and the Patient's Medical and Other Needs^{20,21}



As a caregiver, you may be called upon to handle a range of different things. These may include attending medical appointments, assisting with meal preparation, helping to modify the patient's home or living space, and assisting with changes to the patient's home routine to aid with recovery and reduce future fall risk.



Find out facts about osteoporosis and other conditions the patient may have²⁰



Understand the current and potential impacts of osteoporosis on the life of the person you are caring for, such as pain, loss of mobility, and a change in lifestyle^{7,9,20,22}



Write important information down and keep it organized in one place so you can easily find it, such as²⁰

- Names and phone numbers of healthcare providers and the pharmacy
- Test results and medications
- Dates of follow-up appointments



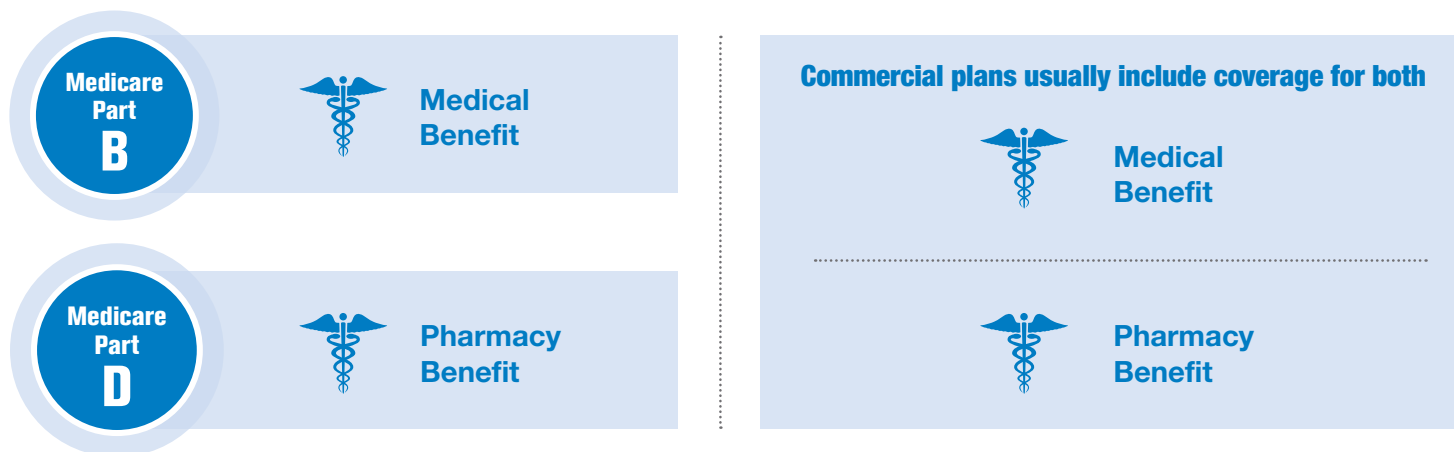
Discuss any concerns about possible side effects of osteoporosis medications with the patient's healthcare provider²⁰



UNDERSTAND HOW INSURANCE COVERAGE CAN IMPACT PRESCRIPTION COST²³⁻²⁶

The patient may have one or more prescriptions from their doctor. It is helpful to understand how prescriptions are paid for by Medicare or a commercial (private) insurance company.

Insurance plans can include **both medical benefits and pharmacy benefits**. In Medicare plans, the **medical benefit is known as Medicare Part B** and the **pharmacy benefit is known as Medicare Part D**.



MEDICATIONS CAN BE COVERED UNDER A MEDICAL OR PHARMACY BENEFIT^{24,27-31}

Some prescriptions are **filled under Medicare Part B or medical benefit in a commercial plan**.

An example of this is a medication that is injected in a doctor's office. Or, a doctor may refer patients to a different location, such as a hospital outpatient center, to receive their medication.

Some prescriptions **can also be filled through Medicare Part D** (also known as the the pharmacy benefit). An example of this is a prescription drug that someone takes on their own.

Some patients may have Medicare Supplement insurance (also known as Medigap) that helps fill "gaps" in Medicare medical benefits. A Medigap policy can help pay some additional costs such as deductibles, co-payments, and co-insurance. A deductible is the annual amount of money that you pay for health care before your Medicare benefits start.

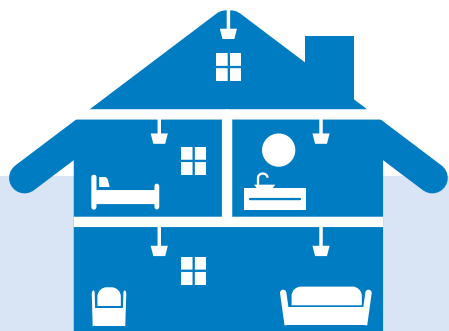
WHY IS THIS IMPORTANT?^{24,31}

Your loved one's out-of-pocket costs for treatment may vary depending on their insurance plan. Each plan has different out-of-pocket costs, and most include an annual deductible.

Talk to the patient's doctor about their medications and out-of-pocket costs to understand options for paying for treatment.

ENCOURAGE SAFE HABITS^{12,20,32}

Conducting a home safety assessment for the person you are taking care of can help to ensure that there are no barriers to easy movement around the home. Some of the things you can check for include



In the Living Areas

- ✓ Good lighting everywhere
- ✓ No clutter on the floor that could prevent easy walking
- ✓ No slippery floors, loose rugs, or cords that could cause slipping or tripping
- ✓ Handrails on both sides of the stairs
- ✓ Nightstand for glasses and a phone
- ✓ Grab bars, shower seat, and nonslip bath mats if needed



Outside the House

- ✓ A well-lit path outside the house
- ✓ No cracks or buckles in the sidewalks or driveway
- ✓ No obstacles, such as leaves or trash, in the walkways
- ✓ A plan to remove snow and ice in the winter

TAKE THE TIME TO TAKE CARE OF YOURSELF^{20,21}

As a caregiver, you devote time to caring for the needs of your family member or friend. It can be a 24/7 job. You need to take care of yourself, too, so that you can be the most help to your loved one.

Avoid Burnout by Asking for Help

Don't neglect your own healthcare. Make sure you talk to your doctor regularly, and ask for help if you

- Are sick often
- Feel overwhelmed, angry, or anxious
- Experience fatigue, poor sleep, or pain

ESTABLISH A CARE TEAM TO GIVE YOURSELF A BREAK^{20,21}

Reach out to the people around you to help



Neighbors



Relatives



Friends



Professional caregivers

TAKE CARE OF BOTH YOURSELF AND YOUR LOVED ONE²⁰

- Eat a healthy diet and make time to exercise together
- Ask your doctor about medication and support to help with depression or other issues

Helpful Links to Online Information for Caregivers of Patients With Osteoporosis

Family Caregiver Alliance

National Center on Caregiving

Website: <https://www.caregiver.org/>

Includes information and tools to help manage the complex demands of caregiving. Free newsletter and access to online support groups are also available.

National Caregivers Library

Website: www.caregiverslibrary.org

Featuring an extensive library of resources for caregivers, this website features hundreds of articles and other materials arranged by topic.

National Osteoporosis Foundation

Website: <https://www.nof.org/patients/>

Helpful information about living with osteoporosis as well as caregiver and patient support resources.

Note: These resources and links were created by independent third parties, and Amgen and UCB do not endorse any of these resources or the entities sponsoring these links.

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