

OSTEOPOROSIS

In Canada, about one out of four women and one out of eight men over 50 years of age have osteoporosis. This disease can have a devastating effect on people’s lives, causing painful fractures, disability or deformity. Unfortunately, there’s no evident warning sign until a fracture occurs.

What is osteoporosis?

Bone is a living tissue, constantly renewed through a natural process in which new bone replaces old bone. As we age, the process becomes less efficient and we begin to gradually lose bone. In someone with osteoporosis, bone loss occurs more rapidly, causing the bones to become very thin and weak over time. When bones become severely weakened by osteoporosis, simple movements – such as bending over to pick up a heavy bag of groceries or sneezing forcefully – can lead to fracture. Wrist, spine and hip fractures are the most common fractures associated with osteoporosis. Hip fractures related to osteoporosis are a serious problem in seniors, resulting in death in up to 20 % of cases and disability in up to 50 % of those who survive. Following a hip fracture, many seniors can no longer live independently, and may require nursing home care.

Who is at risk?

Women are especially at risk of osteoporosis because of the important role that the hormone estrogen plays in keeping their bones healthy. At menopause, estrogen levels fall dramatically, and many women experience an accelerated rate of bone loss. Although men usually have a greater bone mass than women, they are not immune. As they age, they also lose bone mass and should follow the lifestyle changes recommended to prevent or delay osteoporosis. Even though no single cause for osteoporosis has been identified, certain factors seem to play a role in the development of the disease. If you have some of these risk factors, you should speak to your doctor about getting a bone density test and take preventive action to reduce the risk.

What are some risk factors?

Some risk factors present a higher risk than others. They are indicated by *.

- Slender, small bones
- Low calcium diet
- Low physical activity
- Ovaries removed, or menopause before age 45*
- Past menopause
- Vitamin D deficiency
- Cigarette smoking
- Too much caffeine or alcohol intake
- Family history of osteoporosis*
- Excessive use of some medications (eg. Cortisone, prednisone, anticonvulsants)*
- Previous fracture*

What can I do to prevent osteoporosis?

Include calcium in your diet: Individuals over the age of 50 need 1000 to 1500 mg of calcium each day. As you age, your body doesn’t absorb calcium as well, so it’s very important to have calcium-rich foods in your diet. If you don’t eat enough calcium-rich foods, you may require a calcium supplement.

Get enough vitamin D: Calcium is not easily absorbed by the body without vitamin D. Sunlight is the main source of natural vitamin D. Most seniors don’t get enough of this vitamin, and a daily supplement of 400 to 800 IU (International Unit) may be recommended (especially in Canada where there’s little sun intensity during the winter months).

Be active every day: Your bones react to increased activity by getting stronger. Regular weight-bearing activities such as dancing, walking, hiking and tennis are recommended. In addition, exercise that improves balance and coordination (tai chi, swimming and flexibility exercises) can help reduce falls and fractures. Keep experimenting until you find an activity that's right for you!

Avoid smoking: Smokers have faster rates of bone loss and a higher risk of fractures than non-smokers. Women smokers also tend to enter menopause at a slightly younger age than non-smokers. This causes the period of rapid bone loss to occur at an earlier age.

What is hormone therapy and how is it used?

In addition to adopting a bone healthy diet and lifestyle, some people may also require drug treatment to prevent or treat osteoporosis. Hormone supplements replace the hormones that a woman's ovaries stop making at menopause. By reducing the drop in estrogen levels, these supplements can prevent or correct bone loss. But estrogen is not always suitable. The decision to take or not to take estrogen should be made with your doctor, taking your individual circumstances into consideration. Bisphosphonates, selective estrogen receptor modulators (like raloxifene), or nasal calcitonin are other possible treatments that may be prescribed.

How can I manage my pain?

If you suffer a fracture, the pain can be very sudden and intense. Rehabilitation can take time but the pain intensity will usually decrease gradually and eventually go away. Unfortunately, some osteoporosis sufferers will experience chronic pain. As chronic pain can also be the result of compression fractures of the spine or muscle spasms, it's important that you get an accurate diagnosis to ensure appropriate, effective treatment. Pain is the body's first signal to urge you to attend to your health. You can do that by adjusting your activities and routines so that you're accommodating your pain without giving in to it.

Ice and heat: Applications of ice and heat can help relieve pain. To apply ice, try dampening a towel and freezing it. Soft cold packs (or a bag of frozen peas) also work well by adapting to your body curves. Heat can be applied using a hot water bottle, hot towels or hot packs. Use caution when applying heat or ice since burns may occur in either case.

Medication: Pain relievers (acetaminophen and aspirin-like medications) are usually effective and well tolerated but they do have their limits. Your doctor will be able to tell you when and how medication can be useful.

Other therapies: People experience pain differently just as they respond differently to treatment. While there are no miracle cures, positive thinking, relaxation, meditation, acupuncture, visualization, TENS (transcutaneous electrical nerve stimulation) are all ways that have been used by people living with chronic pain due to osteoporosis. Some methods will work for you and some won't. Keep an open mind: don't miss something that can be of help.

Where can I get more information and support?

Help, support, referrals and information can be obtained from Osteoporosis Canada at 1-800-463-6842. If you want to get referred to an Osteoporosis clinic near you, enrol for exercises and education that are suitable for you, contact your doctor or speak to a nurse 24 hours a day, seven days a week by calling: Alberta Health Link toll free at 1-866-408-LINK (5465). Mandarin Health Link Calgary at 403-943-1554, Cantonese Health Link Calgary at 403-943-1556

Source: Osteoporosis Info-sheet for seniors, Public Health Agency of Canada www.phac-aspc.gc.ca/seniors-aines

If you want to read any of the previous 'Road To Healthy Living' series articles, please go to http://www.calgaryhealthregion.ca/programs/diversity/multilingual_health_services.htm and get health information in your own language