

information

OSTEOPOROSIS

Osteoporosis is a condition that results in loss of bone mass and weakening of the bones, increasing the risk of fractures, such as a broken hip, crushed vertebra (spine), or fractured wrist. Osteoporosis-related fractures are often called fragility fractures because they happen with little or no trauma.

More than 1.4 million Canadians suffer from osteoporosis. Although the onset of osteoporosis can begin at any age, it is more common in older adults. The Osteoporosis Society of Canada reports that one in four women over the age of 50, and one in eight men in the same age group have osteoporosis. There are three stages of bone loss:

- Osteopenia, or mild changes to bone density;
- Osteoporosis but no history of fracture; and
- Osteoporosis with a history of fracture(s).

Like every other part of the body, bone cells go through the cycle of removal and replacement by new bone cells. Adults reach their peak bone mass by the late teens or early 20s, but by the mid-30s the cells that build bones are less efficient and bone mass is gradually lost. Bone loss that is greater than the normal rate can lead to osteoporosis. Some people have a greater risk of developing osteoporosis than others. For example, women are at greater risk after menopause, because their estrogen levels fall significantly and the rate of bone loss is accelerated. Risk factors include:

- A family history of osteoporosis;
- A slight body build (small bones);
- Smoking;
- Eating disorders such as anorexia;
- Low dietary calcium intake; and
- Excessive alcohol intake

Other more serious medical conditions are considered major risk factors for developing osteoporosis. These factors include, among others:

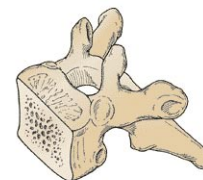
- A fragility fracture after the age of 40;
- Vertebral compression fracture;
- Osteopenia apparent on x-ray; and
- Medical conditions such as primary hyperparathyroidism or malabsorption syndrome.

Talk to a health care professional if you have questions about your level of risk for developing osteoporosis.

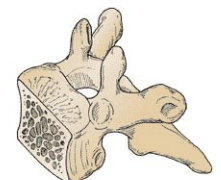
PREVENTION

You can decrease your risk of developing osteoporosis by choosing life habits that help to build and maintain healthy strong bones. A well-balanced diet with sufficient calcium and intake, along with regular physical activity during childhood play important roles in developing and maintaining good bone health.

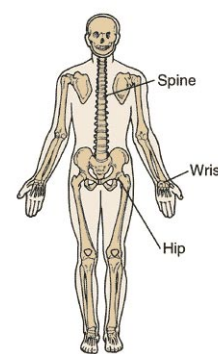
Osteoporosis



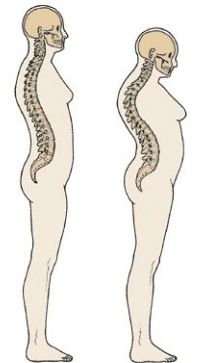
Normal bone



Bone becomes thinner and weaker with osteoporosis



Areas most commonly affected by osteoporosis



Over time, bones in the spine can become thin and collapse causing a person to hunch over.

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This information sheet is part of the CPA's **S.M.A.R.T.** approach to your mobility (focusing on **Stretching, Moving, Adding it up, Reducing Strain** and **Talking to a physiotherapist**). The information provided is intended for general use and is not meant to substitute for the professional, personal assessment your physiotherapist offers.

Cette fiche de renseignements fait partie du programme de l'ACP « **cinq points** pour assurer votre liberté de mouvement » (**1. Étirez-vous; 2. Bougez; 3. Ajoutez les minutes; 4. Réduisez la fatigue; 5. Consultez un physiothérapeute**). Ces renseignements sont fournis à titre général seulement et ne prétendent pas remplacer l'évaluation professionnelle, personnalisée offerte par votre physiothérapeute.

www.physiotherapy.ca

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cont'd: Osteoporosis

If you are at risk of developing, or have been diagnosed with osteoporosis, the Osteoporosis Society of Canada recommends a dietary intake of 1500 mg/day of calcium and 800 IU/day of vitamin D. In addition, to optimize bone health, they recommend exercising 30 minutes or more at least three times a week. Here are some ideas for enjoyable ways to get the required amount of exercise:

- Regular walking – join a walking club;
- Low impact exercise classes;
- Dancing;
- Tai Chi; and
- Strength training

PHYSIOTHERAPY AND OSTEOPOROSIS

Physiotherapists can help reduce the risk of developing osteoporosis. They can also help you manage problems related to osteoporosis including problems with balance and fractures.

Once you have been diagnosed, appropriate exercise can help improve bone mass or slow down the rate of loss of bone mass. A well-designed exercise program will help maintain optimal function and help work towards optimal bone health. Weight bearing aerobic training, and / or strength training contribute to bone health as the mechanical stresses put through the bone during exercise can affect bone density and stimulate bone remodeling. Exercise has also been shown to slow down some of the functional losses that are often associated with aging.

Research has shown that exercise can help you maintain optimal function as you age. For example:

- If you have broken a bone because you have osteoporosis, a physiotherapist can help manage the pain of the fracture, and plan a treatment program to help you regain strength, mobility and function and get you back to regular daily activities.
- If you have poor balance and have fallen or are afraid of falling, a physiotherapist can prescribe a program that meets your needs. Personally tailored exercise programs have been shown to be more effective than general programs at helping people regain good balance.

Exercise is only one part of a healthy lifestyle for optimal bone health. For complete information about the prevention and management of osteoporosis, contact the Osteoporosis Society of Canada either through their web site www.osteoporosis.ca or by mail or phone:

Osteoporosis Society of Canada

33 Laird Drive

Toronto, ON M4G 3S9

Telephone: 416-696-2663

Toll-free (English) 1 800-463-6842 (in Canada only)

Toll-free (French) 1 800-977-1778 (in Canada only)

HOW DO I FIND A PHYSIOTHERAPIST?

Finding a physiotherapist may vary from province to province. Here are some suggestions:

- Check the yellow pages of your local telephone book for listings of physiotherapists and physiotherapy clinics. You can make an appointment with a physiotherapist directly anywhere in Canada;
- Ask for a recommendation from your family doctor. While a direct referral is not necessary, your physician may be able to suggest a physiotherapist for your particular concern. Further, while many physiotherapy services are covered by provincial health care plans, Workers' Compensation plans and private insurance, some insurance companies require a doctor's referral for reimbursement;
- Visit the web site of the Canadian Physiotherapy Association at www.physiotherapy.ca to access our "Find A Physiotherapist" directory and to find out more information about physiotherapy. The CPA web site can also link you to resources for finding physiotherapists through provincial association branches and regulatory colleges.