Osteoporosis in men



Osteoporosis affects men less frequently than women, because their risk for osteoporosis tends to be lower than women's. In Canada, 1 in 5 men compared to 1 in 3 women are estimated to experience osteoporotic fracture(s) in their lifetime. The risk for osteoporosis is lower in men for various reasons, including:

- Larger bones: Men are on average bigger than women, and therefore have larger bones. All things being equal, a person with larger bones is less prone to experiencing fracture than a person with smaller bones.
- No menopause: The loss of the hormone estrogen, during a woman's transition to menopause, causes bone loss. As such, men typically experience slower bone loss than women during their 50's. However, by age 65 to 70, men and women tend to experience similar rate of bone loss.

What's osteoporosis?

Osteoporosis results from bone loss that occurs due to aging or other causes, and that makes bones less dense and more fracture-prone.

People with osteoporosis experience fractures that result from a minor injury (e.g., a fall from standing heights).

These are known as *osteoporotic or* fragility fractures.

The most common and burdensome osteoporotic fractures are hip, spine or wrist fractures.

Even though men are less frequently affected by osteoporosis than women, the burden that osteoporosis causes is quite high in men. It is estimated that 1 in 5 Canadian men will experience osteoporotic fracture(s) to put it in perspective, men are more likely to experience an osteoporotic fracture than prostate cancer. Hip fracture is one of the most common and serious osteoporotic fractures in men (and women); about 30,000 hip fractures occur in Canada each year, and their treatment typically includes a hip replacement surgery, bed-rest and rehabilitation. One quarter of hip fractures occur in men, and men's recovery from a hip fracture tends to be more challenging than women's. It is estimated that 37% of Canadian men compared to 28% of Canadian women die within a year of a hip fracture, mainly due to complications faced during the recovery.

What's a bone density test?

A bone density test measures how dense someone's bones are, in order to help estimate:

- (1) how much bone loss has occurred
 - (2) how high is someone's risk for osteoporotic fracture (low <10%, moderate 10-20%, or high >20%).

A bone density test can be typically ordered by a family physician or an osteoporosis specialist.

Because bone loss typically occurs without any noticeable symptoms, osteoporosis can progress without a person knowing about it, until an osteoporotic fracture happens. The good news is that a bone density test can tell, before an osteoporotic fracture happens, how much bone loss has taken place and whether or not a person has osteoporosis.

> Bone density test is recommended for any man who: ✓ Is 65 or older OR √ Has risk factor(s) for osteoporotic fracture(s)





Osteoporosis in men



Men's risk factors for osteoporotic fracture(s) include, having:

- Experienced previous osteoporotic fracture(s)
- A parent who experienced an osteoporotic hip fracture
- Lifestyle habits, like smoking or drinking ≥3 alcoholic drinks a day
- A history of medications that weaken bones, like hormone therapy for prostate cancer; steroid therapy for rheumatoid arthritis or chronic lung disease; or anticonvulsant therapy for epilepsy
- Chronic conditions that weaken bones, like rheumatoid arthritis, chronic kidney disease, or diseases that lowers testosterone levels
- Low body weight (<132 lbs. or 60 kg) or weight loss of more than 10% since age 25



If you are aged 65 or older or have any of the above risk factors, we recommend that you talk to your family doctor about getting a bone density test and that you try to eliminate modifiable risk factors like smoking, excessive drinking alcohol, or low body weight. You can also do the following to help lower your risk for osteoporotic fractures:

To help lower your risk for an osteoporotic fracture:	Learn more:
Take vitamin D supplement Taking a vitamin D supplement can help reduce bone loss. It is recommended to take 1000 to 2000 IU of vitamin D daily.	Vitamin D and osteoporosis Vitamin D requirements for healthy bones Our blog on vitamin D
Get enough calcium Getting adequate calcium is also important for reducing bone loss. It is recommended to get 1000 mg of calcium per day, preferably from food.	Calcium and osteoporosis Calcium requirements for healthy bones Calculator to estimate calcium intake from food
Participate in bone-healthy exercise Participating in regular exercise that strengthens muscles (especially thigh muscles) and improves balance can help prevent falls that lead to osteoporotic fractures.	Exercise and osteoporosis Exercise recommendations for healthy bones Our blogs on exercise: Consider Tai Chi, Yay or nay yoga, Precautions for osteoporosis exercises
Learn about falls prevention Learn more about how to avoid or remove daily hazards that can cause falls or other injuries and lead to osteoporotic fractures.	Falls and osteoporosis For falls prevention programs in your area, call Ontario Seniors' (1-888-910-1999) or Osteoporosis Canada's (1-800-463-6842) toll-free info line.
Are osteoporosis medications needed? Only people who are at high risk for osteoporotic fracture(s) should take osteoporosis medication to help reduce bone loss. With a bone density test, a family doctor can help assess whether or not someone has high risk.	Overview of osteoporosis medications Types of osteoporosis drugs: Osteoporosis Canada Types of osteoporosis drugs: Harvard

Prepared by Luba Slatkovska PhD, Adrian Lau MD and Christina Yan





