

# Menopause

Estrogen plays an important role in maintaining bone and decreasing fracture risk.



With the onset of menopause, a woman's risk of osteoporosis increases and 1 in 3 women over the age of 50 will experience a fracture due to osteoporosis in their lifetime.

## What is Menopause?

Menopause is a natural process that marks the end of a woman's reproductive years. It occurs when the ovaries stop releasing eggs and producing the hormones estrogen and progesterone. Menopause is confirmed once a woman has gone 12 consecutive months without a menstrual period.

In Canada, the average age of natural menopause is around 51, however the range is between 45 to 55 years. Menopause may also be induced due to medical treatments such as chemotherapy or radiation or following surgical removal of both ovaries. Menopause before age 45 is considered early menopause, while menopause before age 40 is called premature, also known as premature ovarian insufficiency.

## Stages of Menopause

Menopause is a transition that unfolds over time, with three phases: perimenopause, menopause, and postmenopause. Each woman's experience is unique, and the timing and symptoms can vary.

**Perimenopause** is the stage leading up to menopause, often beginning in the 40s and lasting several years. Hormone levels, especially estrogen, rise and fall unpredictably, which can lead to symptoms such as hot flashes, night sweats, mood changes, or sleep difficulties, as well as menstrual cycle changes causing irregular or heavy menstrual periods. Of note, that menopause symptoms can start even before menstrual cycle changes begin.

**Menopause** is confirmed once 12 consecutive months have passed without a period. It signals the end of egg production by the ovaries and a significant drop in hormone levels.

**Postmenopause** is the time after menopause. While some symptoms fade with time, other symptoms such as vaginal dryness or painful intercourse (called genitourinary syndrome of menopause or GSM) may persist or even worsen. This is also a time of greater bone loss due to low estrogen levels.

## What Is Osteoporosis?

Osteoporosis is a disease characterized by low bone mass and deterioration of bone tissue, which can lead to increased risk of fracture.

The most common fractures associated with osteoporosis are in the hip, spine, wrist, and shoulder.

At least 1 in 3 women will suffer from an osteoporotic fracture in their lifetime.

# Menopause

Menopause is associated with a range of symptoms that can affect physical, emotional, cognitive, and sexual health. The experience varies widely, but some symptoms are very common and can significantly impact daily life.

## List of Possible Symptoms

Hot flashes	Greater risk of UTI's	Anxiety	Low libido
Night sweats	Joint and muscle aches	Depression	Dry eyes
Difficultly sleeping	Headaches and migraines	Brain Fog	Tingling sensations in hands/feet
Fatigue	Bloating	Memory issues	Bone Loss
Poor Focus	Skin changes	Lack of concentration or	
Irritability	Hair loss	attention to detail	

## Menopause and Bone Health

The drop in estrogen during menopause speeds up bone loss. Estrogen is essential for bone health because bone cells have estrogen receptors. Bone is constantly being renewed in a process called remodeling. Old bone is broken down by cells called osteoclasts while new bone is built by osteoblasts. Estrogen plays an important role in keeping this process in balance. When estrogen levels drop at menopause, bone breakdown speeds up and bone building is not able to keep up leading to bone loss.

Bone loss starts during perimenopause, but the greatest decline occurs in the first 10 years after the final menstrual period. After that, the rate of loss slows but continues over time. Women who enter menopause early or prematurely start losing bone at a younger age, leaving them at greater risk of low bone density and fractures later in life. Although bone loss from menopause cannot be fully reversed, it can be managed. Lifestyle choices such as regular physical activity, quitting smoking, limiting alcohol and caffeine, and ensuring enough calcium, protein, vitamin K, vitamin D and magnesium all help protect bones.

For women at higher risk, treatment options are available, including menopausal hormone therapy and other osteoporosis medications designed to slow bone loss and lower fracture risk.



Visit the menopause section on the Osteoporosis Canada website to learn more.

[osteoporosis.ca/menopause](https://osteoporosis.ca/menopause)