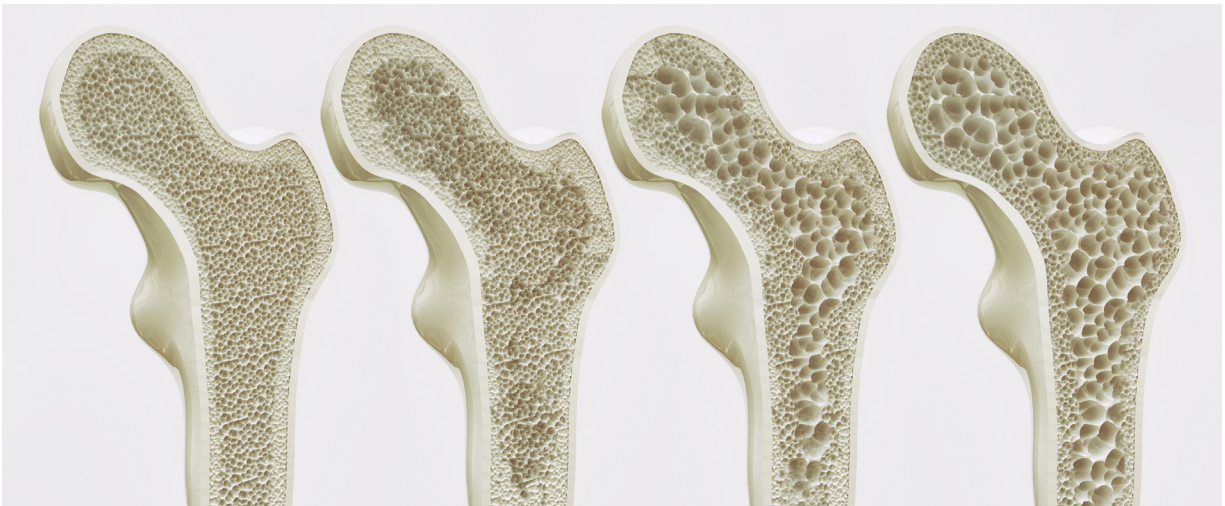


## OVERVIEW

Osteoporosis is a common bone disease that causes a thinning and weakening of the bones, potentially increasing the risk of fractures. Women tend to be at the greatest risk of developing osteoporosis, though it can affect people of any age and gender. Reduced bone strength is the cause of 1.5 million fractures per year in the United States. Hip fractures alone result in 300,000 hospitalizations. When osteoporosis is diagnosed early enough, important steps can be taken to reduce bone loss and the risk of fractures.



## CAUSES OF OSTEOPOROSIS

Osteoporosis has several potential origins which are both controllable and uncontrollable.

Noncontrollable Risks:

- Gender
- Small frame
- Advanced age
- Hormone levels
- Heredity
- Predisposing medical conditions

Controllable Risks:

- Lack of weight-bearing exercise
- Smoking
- Excessive alcohol intake
- Inactive lifestyle
- Excessive caffeine intake
- Low weight
- Calcium-poor diet
- Low vitamin D levels

## SYMPTOMS OF OSTEOPOROSIS

- There are typically no symptoms in the early stages of bone loss related to osteoporosis. However, once bones have been affected, you may have signs and symptoms that include:
- A bone fracture that occurs much more easily than expected
- Back pain, caused by a fractured or collapsed vertebra
- Loss of height over time
- A stooped posture

### TREATMENT FOR OSTEOPOROSIS

The most important time to build bone strength is in our 40's and 50's, not after we notice the symptoms of osteoporosis. Your primary care physician may prescribe medication to aid in bone strength. Hormone therapies may also be suggested in addition to:

- Weight bearing exercises
- Lifestyle changes
- Functional movement training

### EXERCISE 1: Heel Drops



#### Instructions:

Raise up on both toes and then drop down the heels onto a firm surface.

You should feel an impact that translates up the leg and spine.

### EXERCISE 2: Forward Step Up



#### Instructions:

Begin in a standing upright position with a small step or platform in front of you and your hands resting on a counter.

Step up onto the platform with one foot then follow with your other foot. Return to the starting position and repeat.

Make sure to maintain an upright posture and use the counter to help you balance as needed.

#### Important:

The therapeutic exercises described on this page are for reference purposes only and may or may not apply directly to your condition. Only perform the exercises assigned by your physician. By using this information, you understand the potential risks connected with activity in any exercise, physical fitness or training program.