



# The 4 Stages of Osteoporosis: Changing Bone Density

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## Stages of Osteoporosis: Understanding, Identifying and Treating the Condition in Every Step

Osteoporosis is synonymous with bone loss, fragile bones and an increased risk of breaks, but there are still many facets of the condition that most people don't know. Rather than being one stagnant disease, osteoporosis is a progressive condition that occurs in stages. If you or someone you care about is at risk for osteoporosis, understanding the development of symptoms and the stages of osteoporosis is essential, so you can address and treat it effectively.

### Osteoporosis Quick Facts

Osteoporosis is a disease of the bones caused by the body's normal cycle of bone "breakdown and rebuild". When a person is young, the rebuilding of bones outweighs the breakdown, which results in strong, growing bones. As the person ages, though, the breakdown continues while the rebuilding happens at slower and slower rates. This process results in bones that are less dense and frailer.

With time, the bones become more susceptible to breaking. Advanced osteoporosis may produce fractures caused by minor falls or even coughing.

Doctors may not be able to cure osteoporosis, but they can recommend several helpful treatments that drastically improve quality of life and help to slow the advance of the condition. If you are concerned about the possible risks associated with osteoporosis, contact your doctor for options to diagnose and treat the condition.

### Osteoporosis Diagnosis

People interested in building their understanding of osteoporosis may ask questions like:

- Are there stages of osteoporosis?
- How will the stages affect me?
- Do the treatments change based on the stage?
- What is bone density, and how does it impact osteoporosis?

Some experts see osteoporosis as a condition occurring in four stages. These stages may be determined from the results of testing or based on the expected balance of the "breakdown and rebuild", given the person's age.

One model of osteoporosis stages proposes:

- **Stage one:** starts between ages 30 and 35 when the bone rebuilding slows and begins to match the rate of breakdown. Here, there is no bone loss, so there are no visible symptoms.
- **Stage two:** starts after age 35. No longer in balance, the rate of breakdown begins to exceed the rate of rebuilding. This stage marks the beginning of bone loss, so some tests could detect the early presence of

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osteoporosis.

- **Stage three:** normally occurs between ages 45 and 55. During this stage, the effects of bone loss become evident as breaks and fractures begin, despite low impact. Many cases of osteoporosis are diagnosed during this stage, as symptoms are more obvious.
- **Stage four:** the final stage tends to present when symptoms are extreme. In the fourth stage of osteoporosis, a person will have multiple fractures, increasing pain and more physical limitations. Here, the person could struggle to accomplish simple activities.

Another model uses bone density tests to measure the strength of bones and predict the level of bone health. Dense bones are durable and less likely to break, and as time goes on, bones become less dense and more brittle.

This second model offers stages based on density including:

- **Normal:** bone density that is favorably compared to the average for a young adult.
- **Low bone mass:** density that is slightly less than the average young adult.
- **Osteoporosis:** a bone density that is significantly lower than the adult average.
- **Severe or established osteoporosis:** this level of osteoporosis occurs when bone density is very low and produces the risk for additional fractures.

In either model, the condition intensifies as the stages progress. Like other diseases, better outcomes occur the earlier a person seeks medical intervention.

### **Osteoporosis Risks Factors, Prevention and Treatment**

Osteoporosis carries many risk factors. With some, a person can adjust their lifestyle to improve outcomes, but with others, the person has no control to change the impact of the condition.

Some unchangeable risk factors for osteoporosis include:

- Sex
- Age
- Family history
- Body stature
- Medical conditions
- Medications
- Hormone changes

Some changeable risk factors for osteoporosis include:

- Diet
- Exercise and physical activity levels
- Alcohol consumption
- Tobacco use

When it comes to osteoporosis prevention, a person can do well to acknowledge the ways their diet, exercise and substance use influences their osteoporosis risk. Eating foods with plenty of vitamin D, calcium and protein will go a long way to help slow the progression of osteoporosis.

Fortunately, there are plenty of options for the treatment of osteoporosis, but people should always consult their doctor before attempting any remedies. Doctors will also recommend treatments based on the stages of osteoporosis.

People in the early stages with limited effects of osteoporosis can manage the condition with supplements and lifestyle changes. People with more advanced forms of osteoporosis may benefit from medications, injections or

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infusions to slow the disease progression and prevent triggering harmful symptoms.

Like other conditions, treatment for osteoporosis is never a one-size-fits-all proposition, so each person needs options tailored to their unique situation and symptoms.