

# Osteoporosis Medications and Your Dental Health

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## Osteoporosis

From the moment we are born until sometime in our early twenties, our bones grow denser and thicker as our skeletons develop. We continue to build bone mass until our early twenties, when our bones are at their strongest. As we grow older, our bones begin to lose their density and strength as part of the aging process, especially after we reach our fifties. Many factors affect bone density, including diet, physical activity, family history, hormones, life style, and certain conditions and medications.

**Osteoporosis** (os-tee-oh-puh-roh-sis), or porous bone, is a disease that weakens bones and makes them more likely to break. Osteoporosis can lead to broken bones, especially of the hip, spine and wrist. Osteoporosis affects about 10 million Americans, 8 million of whom are women.

Some people who are losing bone density may have a condition called osteopenia. People who have osteopenia have less bone loss than people who have the disease of osteoporosis. Osteopenia is a condition in which a person's bones are losing density and may lead to osteoporosis if bone loss increases. Thirty-four million Americans have low bone density and are at risk for developing osteoporosis. Osteoporosis affects more women than cancer, heart disease and stroke combined.

## Osteoporosis and Broken Bones

Osteoporosis and broken bones are serious. Broken bones are also called fractures. Broken bones of the spine and hip are linked to an increased chance of death. According to the National Osteoporosis Foundation (NOF), one in two women and one in five men over age 50 will break a bone due to osteoporosis. The disease causes more than 2 million fractures each year, including about:

- 3,000 hip fractures
- 50,000 vertebral (spinal or back bone) fractures
- 400,000 wrist fractures
- 135,000 pelvic fractures
- 375,000 other fractures

These broken bones can cause problems that affect a person's quality of life. Some people with low bone density or osteoporosis

take one of the medications from a group of drugs called bisphosphonates (bis-**fos**-fonates). These medications include alendronate (Fosamax), ibandronate (Boniva), risedronate (Actonel) and zoledronic acid (Reclast).

Studies indicate that in many people, bisphosphonate medications help reduce the chance of broken bones by reducing bone loss and increasing bone density. To illustrate why this is important, let's consider what may be the most serious type of fracture caused by osteoporosis, a broken hip. Some reports estimate that bisphosphonate medications reduce the chance of breaking a hip by as much as 40% or 50% in people who have osteoporosis. As a result, bisphosphonates could prevent almost 100,000 hip fractures and many fracture-related deaths annually.

## Bisphosphonate-Associated Osteonecrosis of the Jaw

**“Your chance of developing BON if you are taking bisphosphonate medications for osteoporosis is unknown. However, researchers agree that the chance appears to be very small.”**

Recent news reports have alarmed and confused people who take bisphosphonates to prevent or treat osteoporosis. That’s because a condition known as osteonecrosis (os-tee-oh-ne-**kro**-sis) of the jaw (also called ONJ) has been reported in some patients who have taken these medications. Bisphosphonate-associated osteonecrosis of the jaw, or BON, is a rare but serious condition that can cause severe damage to the jawbone. BON is diagnosed in a patient: 1) who has an area of exposed bone in the jaw that persists for more than 8 weeks, and 2) who has no history of radiation therapy to the head and

neck, and 3) who is taking, or has taken, a bisphosphonate medication.

The overwhelming majority (94 %) of people diagnosed with BON are cancer patients who are receiving or did receive repeated high doses of bisphosphonates through an intravenous (IV) infusion. The other 6% of people with BON were taking oral bisphosphonates for treatment of their osteoporosis.

Recently, the FDA approved Reclast as the only medication to be given intravenously to osteoporosis patients once a year. Presently, it is unknown if this medication regimen increases

a patient’s chance for developing BON. Because the dose is so much lower for osteoporosis than the dose given to patients with cancer, it is likely that BON will be much less common in the osteoporosis patient. More information is needed.

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### Tell Your Dentist

Tell your dentist if you are prescribed a bisphosphonate medication. Your dentist will show you good oral hygiene practices, as well as monitor your dental and oral health while you take the medication. The medical and dental communities continue to research how to prevent and treat BON to ensure the safety of patients taking bisphosphonate medications.

The ADA believes that your doctor and/or healthcare provider is the best source of information regarding your need for bisphosphonate medications. You should not stop taking these medications without speaking to your doctor or other healthcare provider. If you have osteoporosis or are at high risk for bone breaks, the benefits of these medi-

cations greatly outweigh the low risk of developing BON. Presently, there is no known prevention for BON. However, regular dental visits and excellent oral hygiene practices may be the best ways to reduce your risk.

**Talk to your doctor or other health care provider**