

### How is ONJ treated?

The treatment of ONJ will be under the direction of your dentist and/or oral surgeon and includes maintaining good oral hygiene, removing infected dead bone, controlling pain and treating areas of infection with antibiotics and oral antibiotic mouth rinses. Making sure you get lots of fluids and appropriate nutrition is also necessary. In certain circumstances, some limited surgery to remove dead bone tissue may be necessary and will be determined by your dentist and oral surgeon.



### What are new directions for research?

A Canadian Task Force on Osteonecrosis of the Jaw has been established to look at research priorities in order to help us understand the causes of ONJ as well as the most effective forms of treatment.

Osteoporosis is a serious disease. Treatment with bisphosphonates is a safe and effective way to reduce your chances of breaking a bone. Talk to your doctor about your concerns and make sure your dentist is aware if you are on a bisphosphonate.

For more information visit Osteoporosis Canada's website: [www.osteoporosis.ca](http://www.osteoporosis.ca) or call toll-free at **1-800-463-6842**.

#### A JOINT MESSAGE FROM

THE CANADIAN TASK  
FORCE ON ONJ



#### References

ALIYA A. KHAN, et al. Bisphosphonate- associated Osteonecrosis of the jaw – literature review. *J of Rheumatol* March 2009 36(3): 478-490.

Khan AA, et al. Canadian Consensus Practice Guidelines for Bisphosphonate Associated Osteonecrosis of the Jaw. *J Rheumatology* July 2008 35(7):1391-1397.

Osteoporosis  
bisphosphonate  
medications,  
**dental health**  
*and* osteonecrosis  
of the jaw (ONJ).

What  
you  
need  
to  
know.



the Canadian Task Force  
on ONJ, Osteoporosis  
Canada, Ontario Dental  
Association, Canadian  
Association of Oral and  
Maxillofacial Surgeons,  
Society of Obstetrics and  
Gynecology of Canada,  
Canadian Society of  
Endocrinology and  
Metabolism

Osteoporosis causes bones to become weak, with the result that they break (fracture) very easily. These fractures can happen from simple falls or even from regular day to day activities (eg lifting, bending). Any bone can fracture with osteoporosis but the most common fractures are of the spine, hip, and wrist. Osteoporosis can affect men and women of all ages but is more common in women after menopause.

Fractures from osteoporosis are preventable with appropriate medications. Bisphosphonates are a class of drugs which can safely and effectively decrease the risk of fracture in osteoporotic patients. They represent a major advance in the treatment of osteoporosis and other bone diseases. Some of the oral bisphosphonates which are commonly prescribed include alendronate (Fosamax®), risedronate (Actonel®). Zoledronic acid (Aclasta®) IV form given once yearly is also used for osteoporosis. Bisphosphonates remain in the bones for several years even after they are stopped. Bisphosphonates help reduce the risk of fracture and help maintain healthy bones.

### What is osteonecrosis of the jaw?

Osteonecrosis of the jaw (ONJ) is a rare dental condition in which the jaw *bone's* ability to heal is impaired and may cause a painful wound that does not heal. The affected bone can become infected and die. ONJ does not affect the jaw *joint*, only the jaw's *bone* and pain or discomfort in the jaw *joint* is not related to ONJ or to bisphosphonate treatment.



### How is ONJ diagnosed?

Your dentist cannot diagnose ONJ before it causes any problems, not even with xrays or scans. Your dentist can only diagnose ONJ by examining the soft tissue covering the jaw bones in the mouth. If the jaw bone is not covered by a healthy soft tissue lining and remains uncovered or exposed for more than 8 weeks, this confirms the diagnosis of ONJ.

ONJ can occur in the general population in the absence of any bisphosphonates or other drugs and usually heals within 12 weeks. ONJ can also develop in people who have risk factors for poor blood supply to the bone cells in the jaw. ONJ has typically occurred following radiation treatment to the jaw (ONJ does not occur from regular jaw X-rays). It can also develop after dental surgery/trauma, chemotherapy, steroid therapy (such as prednisone) and from poor dental hygiene or diabetes. We now know that bisphosphonates, especially at higher doses, increase your risk of developing ONJ.

### Is ONJ caused by bisphosphonates?

ONJ has been noted in some cancer patients receiving high doses of intravenous bisphosphonates every month to reduce spread of their cancer to bone. In these patients, the risk increases with higher doses and with longer duration of bisphosphonate treatment. In cancer patients, ONJ has been estimated to occur in 1 to 12% of those receiving high dose bisphosphonates.

In osteoporosis patients, bisphosphonate medications are used in very low doses (much lower than in cancer patients) and there is currently no definite proof that there is an increased risk of ONJ at these lower doses. The risk of ONJ with low dose bisphosphonate treatment in osteoporosis patients is estimated to be between 1 in 10,000 and 1 in 100,000 and may be no greater than the risk for ONJ in the general population who have not taken any bisphosphonates.



### How can ONJ be prevented?

The Ontario Dental Association recommends that everyone maintain good oral hygiene and that you see your dentist every 6 months. It is important to stop smoking and to limit your consumption of alcohol. If possible, before starting high dose intravenous bisphosphonate therapy in cancer patients, a detailed dental examination should be completed with X-rays of the jaw bones. Any necessary dental surgery should be completed before starting high dose intravenous bisphosphonate therapy.

The recommendations for osteoporosis patients on low dose bisphosphonates are much the same as for all Canadians. Maintain good oral hygiene and visit your dentist every 6 months. If oral surgery is needed, it is ideal to have this surgery completed before starting low dose oral or intravenous yearly bisphosphonate therapy if possible. Some individuals on bisphosphonate therapy may be advised by their dentist to stop treatment 3 months before dental surgery and to restart therapy after the surgical site has completely healed. As bisphosphonates are extremely important in preventing fractures, this should be discussed with your family physician or specialist first before stopping your treatment.

Routine dental work such as dental cleaning, fillings or root canals do not require temporary stopping of your bisphosphonate treatment.