

## Learn more about bone cancer:

American Cancer Society (2014). Bone Cancer.  
<http://www.cancer.org/cancer/bonecancer/index>

University of Maryland Medical Center (2014).  
Bone cancer. <http://www.umm.edu/altmed/articles/bone-cancer-000023.htm>

National Cancer Institute (2014). Bone Cancer.  
<http://www.cancer.gov/cancertopics/factsheet/Sites-Types/bone>

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# Bone Cancer

## An Overview



Prepared by

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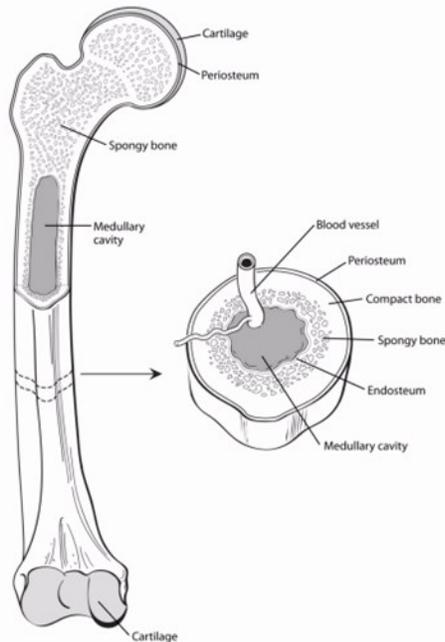
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## What is bone cancer?

Bone cancer is the abnormal growth of cells within the bones of the body. While this cancer may affect any bone in the body, it is most frequently found in the body's longer bones. Primary bone tumors begin in the bone itself, and they are considered a sarcoma. Primary cancers of bones account for less than 0.2% of all cancers<sup>1</sup>.



Credit: American Cancer Society

## What are the symptoms of bone cancer?

- Bone Pain
- Swelling or tenderness of the joints
- Bone Fractures
- Fatigue
- Fever
- Weight loss
- Anemia
- Stiffness

## How is bone cancer diagnosed?

**Imaging tests** use x-rays, magnets, sound waves, or radioactive chemicals to produce pictures of the inside of the body. For bone cancer, imaging tests include x-rays, computed tomography (CT) scans, magnetic resonance imaging (MRI) scans, radionuclide bone scans, and positron emissions tomography (PET) scans.

**Biopsies** involve removing and studying a small portion of the bone tumor under a microscope. Biopsies remain the only way to differentiate between bone cancer and other bone diseases.

## What are the risk factors of bone cancer?

- **Bone Marrow Transplants:** Osteosarcoma has been reported by a few patients who have had bone marrow (stem cell) transplants.
- **Radiation:** Bone exposure to radiation at high levels may also increase the risk of developing bone cancer.
- **Genetic disorders:** Hereditary mutations in certain genes are the root cause of some bone cancers; Osteosarcoma is one bone cancer that appears to have a genetic basis.
- **Paget disease:** Bone cancer develops in about 1% of those with Paget disease, usually when many bones are affected.
- **Radiation exposure:** Previous extended radiation exposure increases the chances of developing bone cancer.

## How is bone cancer prevented?

There has been no indication of preventing bone cancers through lifestyle changes.