

Multiple Myeloma

Multiple myeloma is a form of cancer that affects plasma cells, which are white blood cells that make up part of the body's immune system. Normally, plasma cells help fight infections by producing antibodies that can recognize and kill germs.

Plasma cells are largely found in bone marrow, the spongy tissue inside bone that makes blood cells. In multiple myeloma, plasma cells grow uncontrollably and interfere with production of healthy blood cells, which can damage organs and other tissues.

Common Symptoms and Signs

The symptoms and signs of multiple myeloma can be caused by many other conditions. If you develop any of the following changes and they persist, see a doctor.



Bone problems, such as pain, osteoporosis



Weakness, fatigue, shortness of breath



Frequent infections (especially pneumonia)



Severe bleeding, even from minor injuries



Excessive thirst, frequent urination, constipation



Back pain that comes on suddenly and numbness in the legs



Kidney damage

Risk Factors

Multiple myeloma is most common in older people. The median age at diagnosis is **about 70**.

Multiple myeloma is somewhat more common in men compared to women, by a ratio of **about 1.4:1**.



African Americans are twice as likely as white Americans to be diagnosed with multiple myeloma. African Americans also tend to be diagnosed **at a younger age**.



Being obese seems to increase the risk for multiple myeloma.



Having a close relative who had multiple myeloma appears to modestly increase the risk for this cancer.



Having other diseases of the plasma cells (monoclonal gammopathy of undetermined significance or solitary plasmacytoma) increases the risk of developing multiple myeloma.



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How Common is Multiple Myeloma?

Multiple myeloma is relatively uncommon, accounting for fewer than two percent of all cancer cases diagnosed in the United States each year.




The American Cancer Society estimates that in 2022 about **34,470 new cases** of multiple myeloma were diagnosed in the United States and **roughly 12,640 people** died of the disease.



Around the globe, **about 160,000 people** are diagnosed with multiple myeloma each year and **roughly 106,000** die of the disease.

The highest incidence of multiple myeloma occurs in Australia and New Zealand, northern America, and northern Europe.

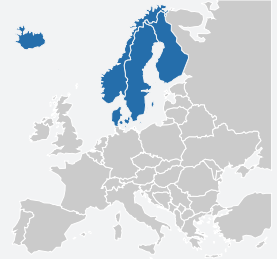
 Northern America




 Australia and New Zealand




 Northern Europe



The lowest incidence is in western Africa, Melanesia (Fiji, Vanuatu, Solomon Islands, and Papua New Guinea), and southeastern Asia.

 Western Africa



 Southeastern Asia



Number of Clinical Trials



Estimated number of clinical trials of multiple myeloma treatments around the world that are recruiting patients:

Close to 500.



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