

[Myelodysplastic Syndromes - MDS - Overview](#) [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 11/2015

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Myelodysplastic Syndromes (MDS). To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

About the blood and bone marrow

The bone marrow is the soft, spongy tissue found in the center of large bones that stores immature cells called stem cells. Stem cells usually mature into white blood cells, red blood cells, and platelets during a process called hematopoiesis. In the body, white blood cells fight infections, red blood cells carry oxygen throughout the body, and platelets help the blood to clot.

About myelodysplastic syndromes

Myelodysplastic syndromes, also known as MDS, are a group of blood and bone marrow disorders. In MDS, stem cells do not mature as expected, and the number of immature cells, called blasts, and abnormally developed cells, called dysplastic cells, increases. Also, the number of healthy mature cells decrease, which causes the bone marrow to not work well or to stop working. This means that there are fewer healthy red blood cells, white blood cells, and platelets. The numbers of blood cells are often called blood cell counts (see [Diagnosis](#) [3]).

Because of the decrease in healthy cells, people with MDS often have anemia, a low red blood cell count. They may also have neutropenia, a low white blood cell count, and thrombocytopenia, a low platelet count. Also, the chromosomes, or long strands of genes, in the

bone marrow cells may be abnormal. Sometimes, the numbers of blood cells can be normal, but the blood and bone marrow cells are still abnormal.

There are several [subtypes](#) [4] of MDS, and some subtypes of MDS may eventually turn into [acute myeloid leukemia \(AML\)](#) [5], a cancer of the blood in which immature cells called blasts increase and grow uncontrollably.

The [next section in this guide is Statistics](#) [6] and it helps explain how many people are diagnosed with MDS and general survival rates. Or, use the menu on the side of your screen to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/myelodysplastic-syndromes-mds/overview>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/19385>

[4] <http://www.cancer.net/cancer-types/myelodysplastic-syndromes-mds/subtypes-and-classification>

[5] <http://www.cancer.net/node/31280>

[6] <http://www.cancer.net/node/19382>