

# LEUKAEMIA

## What is Leukemia?

To understand what leukaemia is, it is important to know the different types of cells that are in the blood. There are three types:

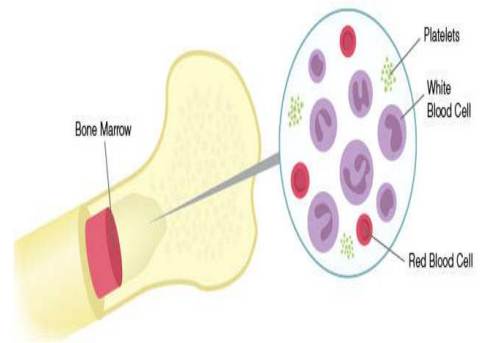


- **White blood** cells which work to fight infection in the body.

- **Red blood** cells which

carry oxygen in the blood.

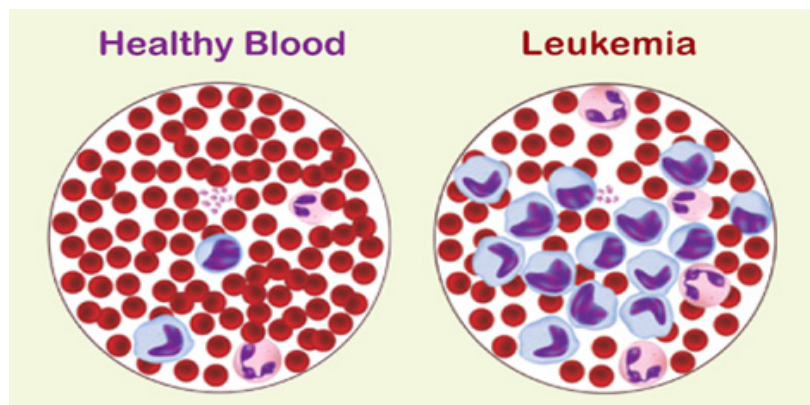
- **Platelets that** stop you from bleeding too much if you get a cut.
- These cells are all made in the bone marrow.



## How does Leukemia occur?

☐ Leukaemia is the cancer of white blood cells.

☐ When one is diagnosed with leukaemia, immature white blood cells are made in excess by the bone marrow and replace other cells in the blood-(red blood cells and platelets)



- These white blood cells are also abnormal so they don't work the way they should.

### ***How many People are affected with leukemia in Kenya?***

Children are the most affected with leukemia in Kenya. Among adults, **655** new cases per year in men and **536** new cases per year in women as of 2012. That's about 100 new cases every month.

### ***Types of Leukemia***

There are different types:

- **Acute and Chronic Leukemia**

This depends on how fast the disease has developed.

***Acute Leukemia:*** Affects Children

***Chronic Leukemia:*** Affects ,mostly adults

- **Myeloid and Lymphoid**-depending on the type of the white blood cell that is affected.

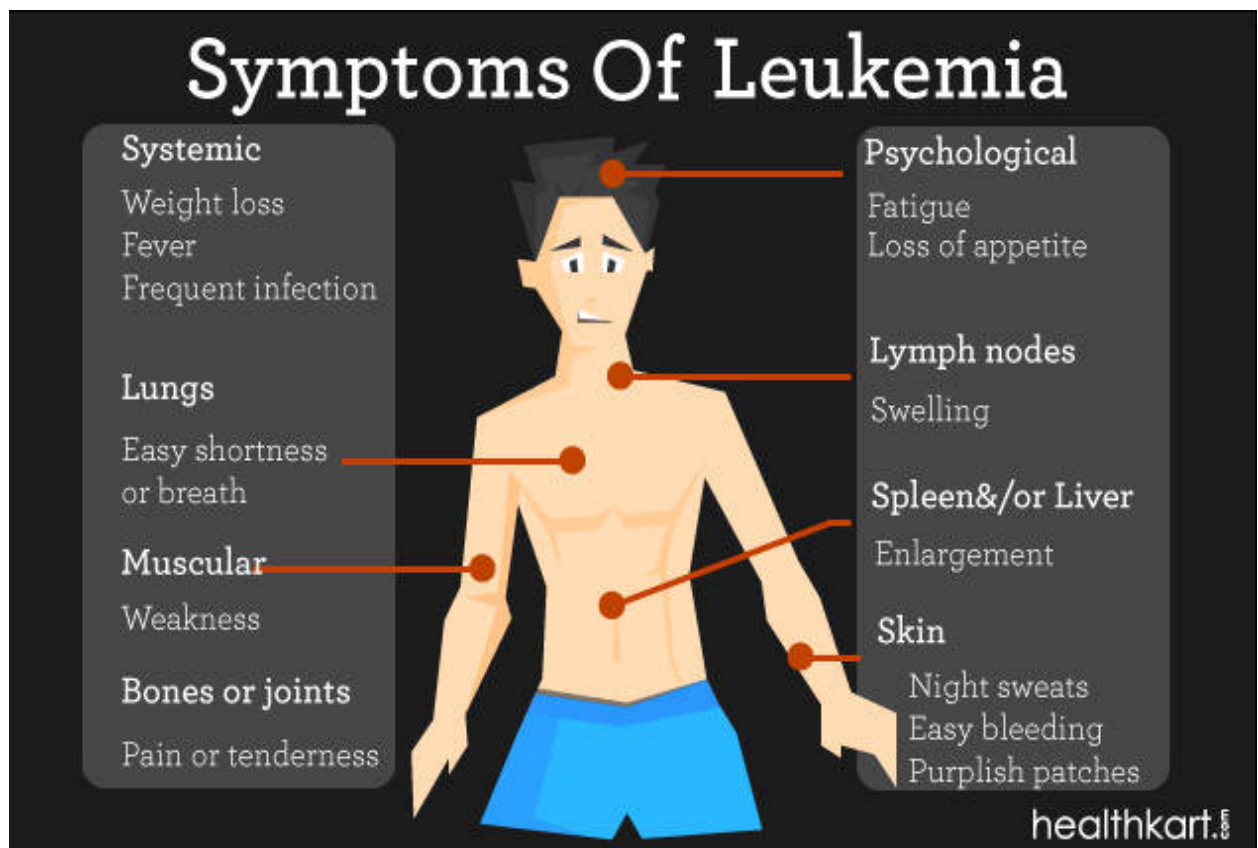
Leukaemia can also be either myeloid or lymphoid depending on the type of the white blood cell that is affected. That means there is acute lymphoid, acute myeloid, chronic lymphoid or chronic myeloid leukaemia.

### ***What risk factors increase the chance of being diagnosed with Leukemia?***

- Radiation from exposure at work or from treatment of a previous cancer
- Chemotherapy from treatment of a previous cancer

- Smoking
- Chemicals such as benzene(found in some paints)
- Long term handling of pesticides

### ***What are the Symptoms of Leukemia?***



**REMEMBER:** These symptoms **DON'T ALWAYS MEAN YOU HAVE LEUKAEMIA**. Visit a doctor early if you get any of them. The earlier the leukaemia is detected the better the cure rate.

### ***How is a diagnosis of Leukemia made?***

☐ After visiting a doctor he/she will

- Take a history of your health from you

- Do a physical examination
- Do some blood tests
- Bone marrow aspirate: A little bone marrow is gotten from a bone and checked for presence of leukaemia cells

These tests will detect whether you have a leukaemia and show the type of leukaemia

### **What are the treatment options?**

☐ There are different ways in which leukaemia is treated:



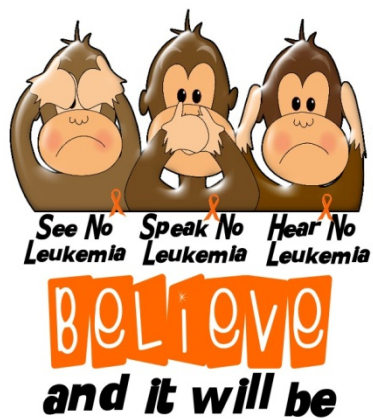
- **Chemotherapy**- This is the main mode of treatment. Drugs are given to kill the cancer cells and slow down the rate at which they are being made.
- **Bone marrow transplant**: The leukaemia cells in the bone marrow are replaced with normal bone marrow cells.

How can I prevent Leukemia?

- ☐ In children, there are no current specific prevention strategies. However, early visits to the doctor if you develop any of the above symptoms may be life-saving.
- ☐ For adults
  - ☐ Stopping smoking
  - ☐ Wear preventive clothing when working in paint, pesticides companies
  - ☐ Limit exposure to chemicals like exhaust fumes from vehicles and industries

## **REFERENCES**

1. [www.cancer.org/cancer/leukemia](http://www.cancer.org/cancer/leukemia)
2. [www.leukaemia.org.au](http://www.leukaemia.org.au)
3. [www.cancerresearchuk.org/about-cancer/type/leukaemia](http://www.cancerresearchuk.org/about-cancer/type/leukaemia)
4. Davidson's Principles and Practice of Medicine 22<sup>nd</sup> Edition pages 1035-1041.
5. Oxford Handbook of Clinical Medicine 8th Edition pages 348-358



What are the types of leukaemia? Leukaemia can be either acute or chronic depending on how fast the disease has developed. Children mostly get acute leukaemia and adults mostly get chronic leukaemia.

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*Leukemia  
Awareness*

**HOPE  
LOVE  
CURE**

