

Understanding your child's blood counts

Regular blood tests are an important part of your child's care. The most common blood test your child will have is called a complete blood count or CBC.

Complete blood count (CBC)

In a CBC, the different types of cells in a tiny sample of blood are examined and counted.

The complete blood count is a simple way to:

- measure how well the bone marrow is working, as blood cells are made in the bone marrow
- monitor the side effects of cancer treatment, as chemotherapy usually lowers blood cell counts

The health care team will closely track your child's blood cell counts. The most common information we use from a CBC are the measures of:

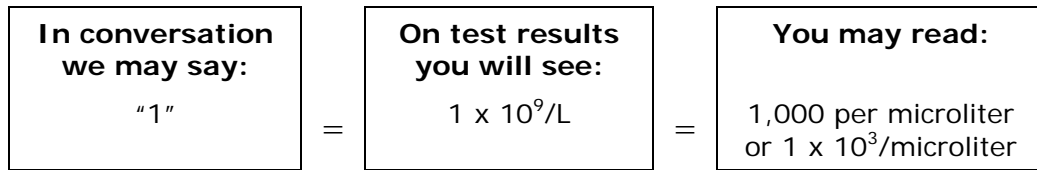
- neutrophils (one type of white blood cells)
- platelets
- hemoglobin (found in red blood cells)

There is more information about each of these counts on the following pages.

Absolute Neutrophil Count (ANC)

- Neutrophils are a type of white blood cells. White blood cells fight infection.
- Neutrophils may also be called granulocytes, 'grans' or 'neuts'.
- The total number of neutrophils in your child's blood is called the Absolute Neutrophil Count or ANC.

ANC is reported in different ways



- Cancer treatment lowers your child's ANC.
- When the ANC is low, your child has a greater chance of getting infections.
- When the ANC is less than 0.5 the risk of infection is very high.

What to do when your child's ANC is low

- Watch for these signs and symptoms of infection:
 - fever**
 - pain – earache, sore throat, headache, pain when passing urine or having a bowel movement
 - redness, discharge or swelling on a wound, cut or IV site
 - your child looks unwell and you are worried
- The best ways to protect your child from infections are:
 - Washing hands often.
 - Limiting visitors. Don't let anyone visit who is feeling ill.
 - Keeping your child away from crowded places like school and the mall. Do not take your child to public places wearing a mask. The mask will not protect your child from others' germs.

** Fever is a temperature of 38.3°C (101°F) or higher taken by mouth or 37.8°C (100°F) or higher taken under the arm.

Platelets

- Platelets help to clot blood and stop bleeding.

The platelet count is reported in different ways

In conversation we may say: "50"	=	On test results you will see: $50 \times 10^9/L$	=	You may read: 50,000 per microliter or $50 \times 10^3/\text{microliter}$
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- Your child's platelets need to be 50 to 75 to safely have a procedure or surgery.
- Cancer treatment can lower your child's platelet count. When platelets are low, your child has a greater chance of bleeding.
- Depending on your child's needs, we may give your child a transfusion of platelets:
 - If your child's platelets are less than 10.
 - If your child's platelets are less than 20 and he or she has a fever or signs of bleeding.

What to do when your child's platelets are low

- Watch for fever** and these signs of bleeding:
 - bruising
 - small red spots (petechiae) on the skin
 - bleeding from the nose, gums or elsewhere on the body, including IV sites
 - red urine or black bowel movements
- Do not let your child take part in any activities that could cause bruises, cuts or other injuries. Activities to avoid include: skateboarding, tobogganing, jumping on a trampoline and team sports, especially contact sports.

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Red blood cells and hemoglobin (Hb)

- Red blood cells contain hemoglobin, a protein that carries oxygen (and gives energy) to every part of the body.

An acceptable Hemoglobin (Hb) is 80 g/L

- Cancer and its treatment can lower your child's hemoglobin. Low hemoglobin is called anemia.
- A transfusion of red blood cells can raise your child's hemoglobin.
- If your child's hemoglobin is less than 80, we will decide if your child needs a transfusion, depending on:
 - whether blood counts are on their way up
 - whether your child has signs of low hemoglobin
 - when your child's next appointment is scheduled

What to do when your child's hemoglobin is low:

- Watch for these signs of anemia:
 - feeling weak or dizzy
 - short of breath
 - headaches
 - pale skin
 - faster heart beat
- If your child tires easily, plan times for rest.