

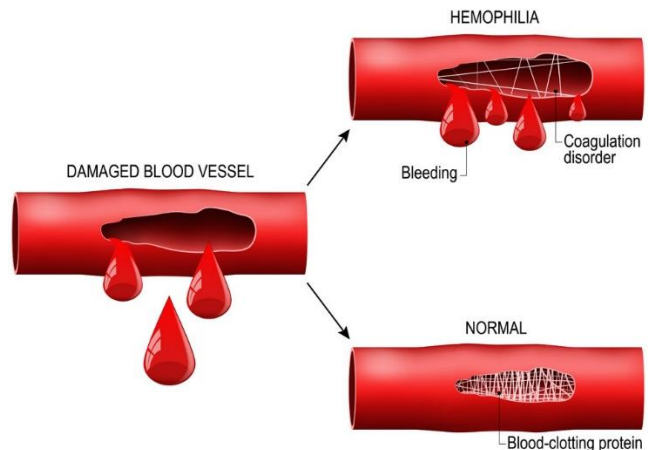
# Hemophilia

**What is hemophilia?** Hemophilia is a bleeding disorder caused by a problem in blood's ability to form a clot. Hemophilia causes person to bleed more and longer than normal. Certain blood cells and substances normally form clots and stop from bleeding too much. These include platelets, clotting factors, vitamin K, and fibrinogen. Platelets are a type of blood cell that helps form blood clots. Clotting factors are proteins that work with platelets to clot the blood. Hemophilia usually occurs only in men.

## What are the types and levels of hemophilia?

The 2 common types of hemophilia are hemophilia A and hemophilia B. Hemophilia A means the level of clotting factor VIII (eight) is lower than normal. Hemophilia B means the level of clotting factor IX (nine) is lower than normal. Hemophilia can be mild, moderate, or severe. This is based on the amount of clotting factor or the kind of bleeding episodes you have. A bleeding episode is bleeding that lasts longer than several minutes. Bleeding episodes can occur with or without injury.

- **Mild:** person have some clotting factor activity in blood. Person may only have severe bleeding after surgery or a severe injury.
- **Moderate:** person have a low level of clotting factor activity in blood. Person may have bleeding episodes that occur suddenly. Person is likely to bleed heavily if person have any type of injury or surgery.
- **Severe:** person have very little clotting factor in blood. Person may have sudden bleeding in joints, muscles, and other body areas.



**What causes haemophilia?** Person is born with haemophilia. Haemophilia A and B are usually inherited. This means that haemophilia runs in family. The gene is passed from a parent to the child. A woman may carry and pass the gene that causes haemophilia, but not have haemophilia. In some cases, it is not inherited.

## What are the signs and symptoms of hemophilia?

- Frequent bleeding from gums or nose
- Heavy bleeding from injuries or after surgeries or dental work
- Painful bruises that form easily after you bump a body area
- Bowel movements that are black
- Urine that is pink or red
- Stiff, painful, or swollen joints

## How is haemophilia diagnosed?

- Blood test

**How is haemophilia treated? Replacement therapy:** Certain blood cells, called factor concentrates, help the blood to clot and the bleeding to stop. They replace the missing clotting factor in blood. For severe hemophilia, this treatment may be scheduled for 2 or more times each week.

- **Medicines:**
  - **Antifibrinolytic proteins:** These medicines keep blood clots from breaking down. They may be used to stop bleeding in mouth, nose, or abdomen.
  - **Desmopressin:** This is medicine that will help increase the amount of clotting factors in blood.
  - **Pain medicines:** Avoid aspirin and NSAIDs because they increase your risk of bleeding.
  - **Steroid medicine:** This may be given to decrease swelling in joints or tissues.

- **Physical and occupational therapy:** Patient may need physical therapy if joints or muscles have been damaged from bleeding. A physical therapist will help exercise joints and muscles safely. Occupational therapy may also be needed. An occupational therapist teaches skills to help with daily activities.
- **Surgery:** may need surgery such as arthroplasty to repair damage caused by bleeding into joints.