

## HOW IS HEMOPHILIA DETECTED?

Many people who have or have had relatives with hemophilia ask that their baby boys be screened for the disease shortly after birth.

Some of the babies diagnosed with hemophilia do not have other relatives with the disorder. If a newborn shows certain signs of hemophilia, a doctor can test for the disease

### SCREENING TESTS

Screening tests are blood tests that show if the blood is clotting properly. Types of screening tests include:

**Complete blood count (CBC)** - This common test measures the amount of hemoglobin (the red pigment within red blood cells that carries oxygen), the size and number of red blood cells, and the number of different types of blood cells. white blood cells and platelets found in the blood.

**Activated Partial Thromboplastin Time (APTT) test** - This test measures how long it takes for blood to clot. It measures the clotting capacity of factors VIII (8), IX (9), XI (11) and XII (12). If any of these clotting factors are too low, it takes longer than normal for blood to clot. The results of this test will show a longer clotting time in people with hemophilia A or B.

**Prothrombin time (PT) test** - This test also measures the time it takes for blood to clot. It mainly measures the coagulation capacity of factors I (1), II (2), V (5), VII (7) and X (10). If the levels of any of these factors are very low, it takes longer than normal for the blood to clot. The results of this test will be normal in most people with hemophilia A and B.

**Fibrinogen test** - This test also helps doctors evaluate the patient’s ability to form blood clots. It is performed in conjunction with other blood clotting tests or when the patient has abnormal results on the PT test, the APTT test, or both. Fibrinogen is another name used for clotting factor.

### COAGULATION FACTOR TESTS

Clotting factor tests are also called coagulation tests and are required for the diagnosis of blood disorders. This blood test shows the type of hemophilia and how severe it is. Knowing the type and level of severity is important to create the best treatment plan.

| SEVERITY                                   | FACTOR VIII (8) OR IX (9) LEVELS IN THE BLOOD |
|--|---|
| Normal (people who do not have hemophilia) | 50% to 100%                                   |
| Mild hemophilia                            | More than 5% but less than 50%                |
| Moderate hemophilia                        | 1% to 5%                                      |
| Severe hemophilia                          | Less 1%                                       |

\* Source: Centers for Disease Control and Prevention (CDC)