



American Red Cross

# WHAT HAPPENS TO EVERY BLOOD DONATION?

## AT THE AMERICAN RED CROSS



Healthy volunteer blood donors are recruited. (Generally must be at least 17 years old and 110 pounds.)



Volunteer blood donor gives the gift of life.



A comprehensive health history is conducted by screening each potential blood donor. Up to 50 questions are asked during this procedure.



**Red Blood Cells**  
Benefit patients with chronic anemia or acute blood loss



**Platelets**  
Benefit patients undergoing cancer therapy, recovering from organ and bone marrow transplants or with leukemia or aplastic anemia



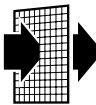
**Plasma**  
Benefit patients with severe liver disease, clotting deficiencies or serious burns

**Blood is processed and separated into its component parts.**

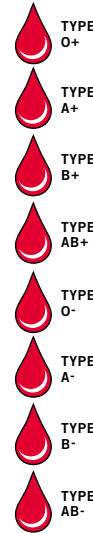


Every unit of blood goes through up to twelve tests to ensure patient safety.

1. HIV 1/2 - Test for antibodies to HIV-1 and HIV-2.
2. HBc - Test for antibody produced during and after infection with HBV.
3. HCV - Test for antibody for HCV.
4. HTLV-I/II - Test for antibodies to HTLV-I and HTLV-II.
5. HBsAg (Hepatitis B Surface Antigen) - Screens for HBV.
6. HIV-1 p24 (HIV-1 p24 Antigen) - Test for HIV antigen.
7. ABO/Rh - Test for blood type.
8. TP (Syphilis) - Test for the agent that causes syphilis.
9. ALT - Test that measures a liver enzyme found in blood serum. Elevated ALT levels may reflect liver inflammation, which may be caused by a hepatitis virus.
10. Antibody - Test to determine the presence of atypical antibodies that may cause post-transfusion reactions.
11. CMV - Test for cytomegalovirus - performed on physician request.
12. NAT (Nucleic Acid Testing) - NAT is a new technology that can detect the genetic material of Hepatitis C and HIV potentially faster and more accurately than the current tests, which react to antibodies of those viruses. All of the blood collected by the American Red Cross for transfusion is now subjected to NAT under an Investigational New Drug application submitted to the FDA.



Seventy percent of American Red Cross blood products are filtered to remove leukocytes. Leukocytes (white blood cells) help fight off foreign substances in the bloodstream, such as bacteria, viruses and abnormal cells, thereby enabling the body to avoid sickness and disease.

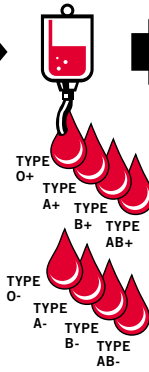


Blood components are labeled according to blood type and securely stored at appropriate temperatures.



Blood components are delivered to hospitals nationwide as needed.

## AT THE HOSPITAL



Blood components are cross-matched with patients' blood.



Needed blood goes to patients.