

Testing of Donor Blood

We appreciate your interest in learning about the blood supply. Florida Georgia Blood Alliance tests all donations as directed by the Food and Drug Administration of the United States, and the American Association of Blood Banks in order to supply the safest possible blood to the community.

In order to assure this safety, we perform a battery of tests on each unit of donated blood:

ABO Group	Hepatitis B core antibody	HTLV-I/II antibodies
Rh Type	Hepatitis B surface antigen	Nucleic acid amplification – “NAT”
RBC Antibody Screen	Hepatitis C antibody	for HIV, HCV, West Nile Virus*
MHA-TP (Syphilis)	HIV-1/2 antibody	

ABO and Rh antigens are proteins on the red cell surface that are the major cause of incompatibility in transfusion, and must be matched for each patient. The **RBC antibody screen** is used to assure that donated blood (particularly plasma, the liquid part of blood) will not react against the person receiving blood in a way which leads to destruction of their own red cells.

The MHA-TP detects donors exposed to syphilis, both recently and in the past.

Hepatitis B core antibody, Hepatitis B surface antigen, ALT (a liver enzyme), and **Hepatitis C antibody** are marked for donors that may carry viruses that cause Hepatitis (a liver disease). In addition, all blood is screened for exposure to **HIV 1 and 2** (the cause of AIDS), and **HTLV I and II**, other viruses known to be transmitted by blood in rare instances.

Some units of blood tested are for antibodies to cytomegalovirus (**CMV**), another infection that is common, but of little consequence to healthy people. Most donors show evidence of having been infected with CMV. Blood that is negative for CMV antibodies is made available, at the request of doctors, for patients who have not previously been infected, but are at great risk of serious problems if exposed to the virus (for example, cancer or transplant patients).

Additional units are screened for the presence of **Hemoglobin S**, an indicator of sickle cell trait. Hemoglobin S is not harmful to the donor or most blood recipients. Certain patients, including newborn infants and patients with Sickle Cell Disease, should not receive Hemoglobin S positive blood because it may complicate the monitoring of their condition.

Hopefully this information will be helpful to you. If you have further questions, please do not hesitate to ask.

M. Bertholf, M. D.
January 2005