



Government of Newfoundland and Labrador

Department of Health and Community Services  
Provincial Blood Coordinating Program

<b>PROVINCIAL BLOOD COORDINATING PROGRAM DEFINITIONS</b>	<b>NLBCP-063</b>
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## Overview

This document is a reference list of blood components, blood products, associated terms and their definitions. These terms are used throughout the Newfoundland and Labrador Provincial Blood Coordinating Program documents.

ABO compatible	Donor blood components that are non-identical ABO group to the recipient ABO group but do not have corresponding antibodies.
ABO group specific	Donor blood components of the same ABO and Rh group as the recipient.
Administration	Act of infusion of blood components and/or blood products.
Adverse Reaction	An undesirable and unintended response to the administration of blood components and/or blood products that is considered to be definitely, probably, or possibly related to the administration of blood components and/or blood products.
Allogeneic	Blood collected from an individual and placed in the general blood supply for the purpose of transfusion to another person.
Antibody	A protein produced after stimulation by an antigen that acts specifically against the antigen in an immune response.
Antibody Screen	Use of at least two selected reagent red cells to detect unexpected clinically significant alloantibodies in plasma or serum.
Antigen	Any substance foreign to the body that evokes an immune response.
Apheresis	The process of withdrawing blood from a donor, separating specific blood components from the blood, and returning the remaining blood components to the donor which can be performed manually or by automated methods.
Autologous	A term referring to practices in which blood is collected from an individual for the purpose of transfusion back to the same individual at a later time.
Blood Component	Whole blood, or a therapeutic component of blood intended for transfusion (e.g., red cells, granulocytes, platelets, plasma, etc.)

	that can be prepared using the equipment and techniques available in a blood centre.
Blood Product	A therapeutic product derived from human blood or plasma and produced by a manufacturing process.
Buffy Coat	The fraction of a quantity of anticoagulated blood that contains most of the white blood cells and platelets after centrifugation.
Compatibility Label/Tag	A tag or label attached to a blood component or blood product that has been designated for a specific recipient, specifying information that identifies the blood component or blood product for that recipient.
Compatibility Testing	Process to determine compatibility between a recipient and blood component which may include but is not limited to recipient and donor ABO/Rh typing, recipient antibody screening and crossmatching.
Crossmatch	<p>Procedure to detect incompatibilities between recipient and donor.</p> <p><b>Electronic Crossmatch</b> – computerized procedure that is used in place of a serologic crossmatch to detect ABO incompatibility.</p> <p><b>Serologic Crossmatch</b> – in vitro test performed between donor red cells and recipient’s serum or plasma to determine compatibility.</p>
Cryoprecipitate	A blood component derived from plasma that contains Factor VIII, Factor XIII, von Willebrand Factor and fibrinogen.
Cryosupernatant Plasma	Plasma from which the cryoprecipitate has been removed.
Cytomegalovirus	Cytomegalovirus (CMV) is a white blood cell-associated herpes virus that is seroprevalent in 40 percent of blood donors in Canada. Transmission occurs via blood or body fluids or from an infected mother to fetus. CMV does not cause any notable symptoms for the majority of general population, or for most patients. However, CMV can cause life-threatening pneumonia in identified at-risk patients. In order for a blood component to be considered CMV safe it ensures a filtering process called leukoreduction.

Direct Antiglobulin Test	A simple test used to determine if red cells have been coated in vivo with immunoglobulin, complement, or both.
Elution	A technique that dissociates antibodies from sensitized red cells.
Fresh Frozen Plasma	Plasma separated from the blood of an individual donor or collected by apheresis and placed at less than or equal to -18 degrees Celsius within 8 hours of collection from the donor.
Frozen plasma	Plasma separated from the blood of an individual donor or collected by apheresis and placed at less than or equal to -18 degrees Celsius within 24 hours of collection from the donor.
Hemoglobin S	Abnormal hemoglobin that occurs in the red blood cells in sickle-cell anemia and sickle-cell trait.
In Vitro	Outside the living body.
In Vivo	In living body of plant or animal.
Intravenous Immunoglobulin (IVIG)	Sterile solution or lyophilized concentrates of human immunoglobulin (antibodies found in blood to fight off infectious agents) that have been processed to remove polymers of immunoglobulin.
Irradiated	A term referring to cellular blood components that have been exposed to gamma rays.
Lot Number	The unique number assigned by the manufacturer when preparing a fractionated blood product. The number is located on both the box and the vial.
Macroscopically	Large enough to be observed by the naked eye.
Microscopically	Observed with the use of a microscope.
Neonate	Infants less than four months of age.
Phlebotomist	A health worker trained in drawing venous blood for testing or donation.
Plasma	Pale yellow fluid portion of whole blood that consists of water and its dissolved constituents including proteins (as albumin, fibrinogen, and globulins), electrolytes (as sodium and chloride),

	sugars (as glucose), lipids (as cholesterol and triglycerides), metabolic waste products (as urea), amino acids, hormones, and vitamins. These constituents help fight infection and aid clotting.
Physician Delegate	A qualified and suitably licensed health care professional who is authorized to perform specific medical acts under the general supervision of a physician.
Plasma Protein Products	Blood derivatives manufactured from pooled screened donor plasma.
Platelets	Blood component prepared from whole blood or by apheresis, consisting of platelets suspended in plasma or an approved storage solution Platelets provide the basis for clotting, which helps control bleeding.
Pooled Component	A mixture of two or more blood components of the same type (e.g., pooled platelets) collected from different donors.
Pre-Transfusion Testing	Testing performed in the Transfusion Medicine Laboratory prior to transfusion including ABO/Rh grouping, crossmatching and antibody screening.
Prothrombin Complex Concentrates (PCC)	Prothrombin complex concentrates (PCC) are human plasma-derived blood clotting factors II, VII, IX and X, as well as protein C and S. PCC products are used in the treatment of active bleeding and prophylaxis of bleeding prior to invasive procedure in order to reverse the effects of vitamin K antagonists.
Quarantine	Segregation of an unsuitable blood component or blood product to prevent its release.
Red Blood Cells (RBCs)	Blood component containing concentrated red blood cells. Red cells carry oxygen to tissues and remove carbon dioxide through the lungs.
Red Cells (frozen)	RBCs that have been frozen using a cryoprotectant agent, then processed for transfusion.
Red Cells (washed)	RBCs that have been washed with a compatible solution to removed almost all of the plasma.

Rh (D) compatible	Donor blood components that are non-identical Rh(D) group to the recipients Rh(D) group and do not have corresponding anti-D.
Rh Typing	Serological procedure used to detect the presence or absence of the D antigen on the red cell membrane.
Rouleaux	An in vitro phenomenon produced by abnormal serum protein concentrations that often look like a stack of coins when viewed microscopically.
Sickle Cell Disease	Sickle cell disease (SCD) is caused by inherited mutations involving the beta globin gene that result in the formation of an abnormal hemoglobin (hemoglobin S). Red blood cells, which contain a predominance of hemoglobin S, undergo shape change when low oxygen concentrations cause polymerization of the sickle hemoglobin. The damaged red blood cells become rigid and inflexible, occluding blood vessels and inducing tissue ischemia, pain, and organ damage. This process is accompanied by an inflammatory response and shortened red blood cell survival. These alterations may result in a wide variety of clinical manifestations.
Special Transfusion Requirements	Requirements for blood products/components that are necessary for a particular clinical indication or treatment process.
Subcutaneous Immune Globulin (SCIG)	Subcutaneous immune globulin (SCIG) is a plasma protein product produced from human blood.
Transfusion	Transfer of blood or blood component from one person (donor) to another person (recipient). The process of transfusing blood into a vein.  All activities related to the processes of administration of blood components and blood products.
Transfusionist	Individual who administers a blood transfusion.
Transfusion Medical Laboratory	Also known as the Blood Bank (where all products/components and stored to ensure proper storage standards to promote quality, safety, and efficacy of all products/components.

Type and Screen	A term used to reference the determination of ABO and Rhesus (Rh) groups and screens for clinically significant red blood cell alloantibodies.
Vital Signs	Temperature, pulse, respiration, and blood pressure and pulse oximetry if available.
Whole Blood	Unaltered, anticoagulated blood collected from a donor.

## References

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