



At-a-glance

		What we make	What our products treat
What donors give	Whole blood	<p>Red blood cells: Canadian Blood Services strives to increase the proportion of red blood cell units issued from whole blood collected. In 2008/2009 this ratio was 91.0 per cent compared to 91.6 per cent in 2007/2008.</p>	Transfused red blood cells increase the oxygen-carrying capacity of the blood by increasing the circulating red blood cell mass.
		<p>Plasma protein products: These products are produced through a process called fractionation that involves pooling plasma from several donors and processing these pools through a series of biochemical and physical steps. Plasma protein products are made from human (whole blood-derived and apheresis) and synthetic (recombinant) plasma.</p>	Plasma protein products have a variety of functions related to maintaining blood volume and pressure as well as the treatment of hemophilia and immuno-deficiencies.
	<p>Apheresis platelets</p> 	<p>Whole blood & apheresis platelets: Platelets can be collected from whole blood or by apheresis, a process that collects only the desired component during the collection procedure and returns the unused components to the donor.</p> <p>Platelets are one of the components required to make blood clot. They have a shelf-life of five days.</p>	The primary role of transfused platelets is to reduce or stop bleeding and to increase platelet count. Patients with prolonged bleeding associated with some diseases, such as cancer, need large quantities of platelets as part of their treatments.
Apheresis plasma		<p>Plasma for transfusion: Plasma is the protein-rich liquid that helps blood components circulate through the body, supports the immune system, and controls excessive bleeding. Apheresis plasma is also used to make plasma protein products.</p>	<p>Hospital staff can use plasma donations to help patients with:</p> <ul style="list-style-type: none"> • some bleeding disorders, • liver diseases, • shock, • some operations, • cancer and bone marrow therapy.
What we support	Stem cell extraction	<p>About stem cells</p> <p>Stem cells are immature cells that are capable of developing into any of the cells present in the bloodstream: red blood cells, white blood cells, platelets, and other blood components.</p>	<p>Diseases treated</p> <ul style="list-style-type: none"> • specific forms of cancer, • bone marrow deficiency diseases, • aplastic anemia, • immune system disorders, • metabolic disorders.
			
	<p>Serology and testing</p> 	<p>Diagnostic Services' primary activity is ABO*, Rh* and antibody testing of expectant and post-partum mothers as well as baby cord samples. It also provides pre-transfusion and crossmatch testing of blood for patients requiring transfusions, and supports hospitals by identifying antibodies and finding compatible blood for patients from the inventory of fresh products or the National Frozen Rare Blood Product Inventory. Most of this testing is done in central and western Canada.</p>	

* (for definition see page 78)

Key performance indicators

Key facts

Units of whole blood collected:

915,858

Hospital demand for red blood cells is forecast to increase by approximately two per cent per year. To meet that demand, Canadian Blood Services must grow its donor base. In 2008/2009, the active donor base increased by six per cent, the first significant annual increase since 2003/2004 due to donor response to media appeals. Increases in collections have also been supported by increases in donation frequency.

Litres of plasma shipped to fractionator:

163,800

Over the past decade, the average annual increase in the use of Intravenous Immune Globulin (IVIG), the largest component of plasma-derived products, has been nine per cent. In 2008/2009, Canadian Blood Services sent 163,800 litres for fractionation, a 10.0 per cent increase over 2007/2008.

Active apheresis platelet donors:

6,972

Average frequency of platelet donations per donor:

5.69 times per year

Platelet collections increased 9.6 per cent in 2008/2009, a significant increase achieved by the implementation of new apheresis technology in 2007/2008 that makes it possible to collect a larger number of platelets from a single donor during one visit. About 40 per cent of donors qualify for large-volume platelet donations. This apheresis technology will result in annual savings of \$4.0 million in labour and supply costs starting in 2009/2010.

Active apheresis plasma donors:

6,504

Average frequency of plasma donations per donor:

8.49 times per year

Collections increased by 40 per cent from 2000/2001 to 2008/2009. Collections of plasma apheresis increased from 51,770 units in 2007/2008 to 55,244 units in 2008/2009.

Approximately 70 per cent of apheresis plasma is used for transfusion purposes with the remaining 30 per cent being sent for fractionation.

Total number of potential donors in registry:

246,624

The OneMatch Stem Cell and Marrow Network maintains a database of tissue typing results for all prospective Canadian donors in order to quickly locate potential matching donors whenever a patient requires a stem cell transplant. In 2008/2009, we added 19,727 new registrants to our database: 16,177 were under age 40, 30 per cent were male, 25 per cent non-caucasian.

Total number of prenatal samples per year:

182,000

Diagnostic Services conducts thousands of tests every year: 182,000 prenatal samples, 46,300 crossmatch samples and 1,900 antibody investigations in 2008/2009 alone. To more effectively manage demand, Diagnostic Services upgraded its prenatal laboratory information platform and selected a vendor to build an integrated information system. Implementation began in April 2009 with completion anticipated during 2010/2011.