Information for Patients, Residents and Clients

The Newfoundland and Labrador Provincial Blood Coordinating Program

The Provincial Blood Coordinating Program was established by the Government of Newfoundland and Labrador to ensure that blood components and blood products are used in a safe, efficient manner for health care recipients throughout the province.

Why is blood so important?

An average individual requires between five to seven litres of blood to function.

When a transfusion is necessary, a person should only receive the blood component required.

These components include red blood cells, platelets and plasma.

Red blood cells carry oxygen, remove carbon dioxide and are used to treat conditions such as anemia, leukemia, bone marrow failure, and blood loss due to trauma or hemorrhage.

Platelets assist with blood clotting when individuals are unable to produce enough functioning platelets themselves or are at risk of bleeding.

Plasma is made mostly of water. Plasma carries nutrients, hormones, proteins, fats, and antibodies through the body. Plasma is used to aid clotting or restore clotting function and is often used before surgeries or procedures where bleeding may occur. Plasma is also used to manufacture certain blood products, or to improve the immune system.

What are the benefits of transfusion?

Transfusions save lives. Transfusions help to restore blood components to normal levels until the body can replace them.

Blood is used in many surgeries or procedures such as coronary artery bypass surgery, brain surgery, liver transplants, trauma, and cancer treatment. In certain cases, several transfusions may be required throughout the course of treatment.

What are the alternatives to blood transfusion?

You have a right to ask your healthcare provider about alternatives to blood transfusion. Although there are several options available, not all are appropriate for every individual.

Transfusion alternatives may include:
- Drugs to enhance blood production;
- Volume expanders;
- Drugs to treat bleeding and manage anemia; and
- Surgical techniques to minimize blood loss.

Patient Safety • Surveillance • Quality • Utilization

What are the risks of transfusion?

The risk of contracting infectious diseases through a transfusion is very low. Blood components are stringently tested. The possibility of an adverse reaction varies with each person and with each component/product.

Some of the risks include:

Event	Patient Risk (per red cell unit)
HIV (AIDS)	1 in 21.4 million
Hepatitis C	1 in 12.6 million
Human T Cell Lymphotropic Virus	1 in 619 million
Bacterial contamination	1 in 50,000
Hepatitis B	1 in 7.5 million

Mild reactions to blood components and blood products occur in approximately 1 in 100 transfusions. A fever may develop in 1 in 500 red blood cell transfusions and as frequently as 1 in 20 platelet transfusions.

If you experience any of the following, contact your health care provider:

- Rash
- Back or Chest Pain
- Chills
- Diarrhea
- Shortness of Breath
- Itching
- Stomach Pain
- Fever
- Tremors
- Faintness
- Hives
- Light Headedness
- Vomiting
- Nausea
- Headache

What is "informed consent?"

Before receiving a blood transfusion, you must provide informed consent.

If a transfusion is required, your health care provider must discuss the type of blood components or blood products to be transfused, along with the benefits, risks, and alternatives. You have an opportunity to ask questions in order to make an informed decision. It is then your right to refuse or consent.

In emergencies if you are unable to speak for yourself, a Substitute Decision Maker (SDM) may provide consent or refusal on your behalf. If there is an emergency and no SDM has been assigned, a health care provider may decide to transfuse without consent.

Following a transfusion, you will receive notification in writing from the appropriate regional health authority. This information should be kept in a personal health file for future reference.

For more information on the Provincial Blood Coordinating Program, visit www.gov.nl.ca/health/bloodservices or email healthinfo@gov.nl.ca.

Newfoundland
Labrador