

Business Summary

事業概要



日本赤十字社
Japanese Red Cross Society

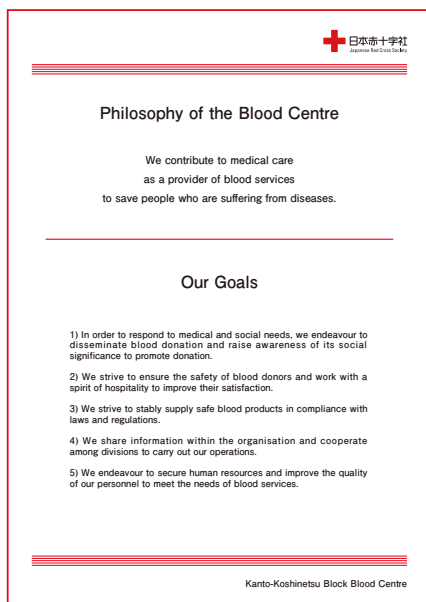
Kanto-Koshinetsu Block Blood Centre

TABLE OF CONTENTS

General Situation of Kanto-Koshinetsu Block Blood Centre	2
Philosophy	2
Overview	2
History	2
Wide Area Management System for Blood Services	3
7 Block Blood Centres Nationwide	4
Regional Blood Centres in the Kanto-Koshinetsu Region (10 centres)	4
Production Sites in the Kanto-Koshinetsu Region (3 Production sites)	5
Official Account of Kanto-Koshinetsu Block Blood Centre	6
Management System of Kanto-Koshinetsu Block Blood Centre	7
The Flow of Donated Blood	7
Hubs for Distribution of Blood Products for Transfusion to Medical Institutions (Blood product distribution destination)	8
Background of Blood Products before Distribution to Medical Institutions	10
Laboratory Division[Quality Division]	11
Preparation Division	13
Organisational Structure of Kanto-Koshinetsu Block Blood Centre	15
Quality Assurance System of the Blood Centre	16
Haematopoietic Stem Cell Transplantation —Kanto-Koshinetsu Cord Blood Bank—	17

General Situation of Kanto-Koshinetsu Block Blood Centre

Philosophy



Japanese Red Cross Kanto-Koshinetsu Block Blood Centre handles donated blood from approximately 1.8 million people annually from Tokyo and 9 prefectures in the Kanto-Koshinetsu region (Ibaraki, Tochigi, Gunma, Saitama, Chiba, Tokyo, Kanagawa, Niigata, Yamanashi, and Nagano).

The Centre has its Administrative Management Division, Preparation Division, Quality Division, and Cord Blood Bank in the Japanese Red Cross Society Tatsumi Building in Koto-ku, Tokyo. In addition, we also have the Kanagawa Production Site in Atsugi City, Kanagawa Prefecture and the Saitama Production Site in Higashi-Matsuyama City, Saitama Prefecture.

Overview

Name	Japanese Red Cross Kanto-Koshinetsu Block Blood Centre
Address	2-1-67 Tatsumi, Koto-ku, Tokyo
Number of employees	Japanese Red Cross Kanto-Koshinetsu Block Blood Centre (including Kanagawa and Saitama production sites) Approximately 480
Building structure	Underground seismic isolation structure/6 floors above ground Floor structure: •6F: Maintenance facilities (equipment/devices management floor) •5F: Administrative Division, Preparation Division, Quality Division (Laboratory Department), Cord Blood Bank and offices of the Central Blood Institute •4F: Central Blood Institute, Quality Division (Laboratory Department) •3F: Quality Division (Laboratory Department) •2F: Preparation Division (blood products for transfusion, drug substance [source plasma]) /Kanto-Koshinetsu Cord Blood Bank •1F: Administrative Division, Operations Division, Quality Division (Quality Assurance Department) •B1F: Seismic isolation structure (seismic isolation for the building foundation/earthquake-proofing facilities to ensure operation continuity), waste liquid treatment equipment

History

- June 2006 Start of the operations at the Japanese Red Cross Society Tatsumi Building
- April 2012 Started the Wide Area Management System
Started operations as Japanese Red Cross Kanto-Koshinetsu Block Blood Centre (Koto-ku, Tokyo),
Kanto-Koshinetsu Block Blood Centre Kanagawa Production Site (Atsugi City, Kanagawa Prefecture),
and Kanto -Koshinetsu Block Blood Centre Saitama Production Site (Higashi-Matsuyama City, Saitama Prefecture)

Wide Area Management System for Blood Services

Japanese Red Cross Society Blood Service Headquarters

Block Blood Centres (7 blocks)

Hokkaido

Tohoku

**Kanto-
Koshinetsu**

Tokai-
Hokuriku

Kinki

Chugoku-
Shikoku

Kyushu

*For the website of Kanto-Koshinetsu Block Blood Centre, see page 6.

Blood Centres (10 centres)

Ibaraki

Tochigi

Gunma

Saitama

Chiba

Tokyo

Kanagawa

Niigata

Yamanashi

Nagano

The websites of the Blood Centres are available here.



Ibaraki



Tochigi



Gunma



Saitama



Chiba



Tokyo



Kanagawa



Niigata



Yamanashi



Nagano

Donation rooms in Tokyo and each prefecture

A list of donation rooms in
Kanto-Koshinetsu Block is available here.

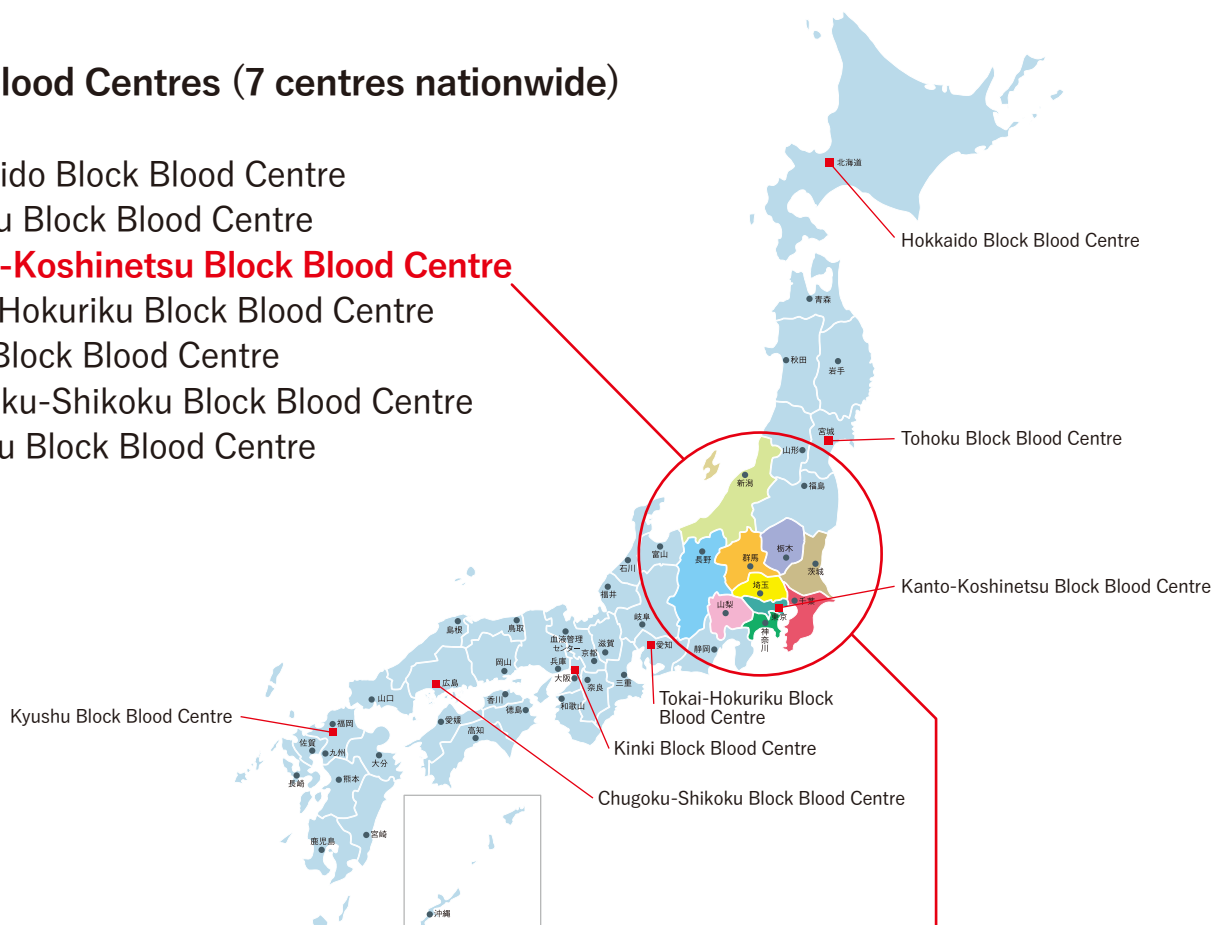


Wide Area Management System for Blood Services

7 Block Blood Centres Nationwide

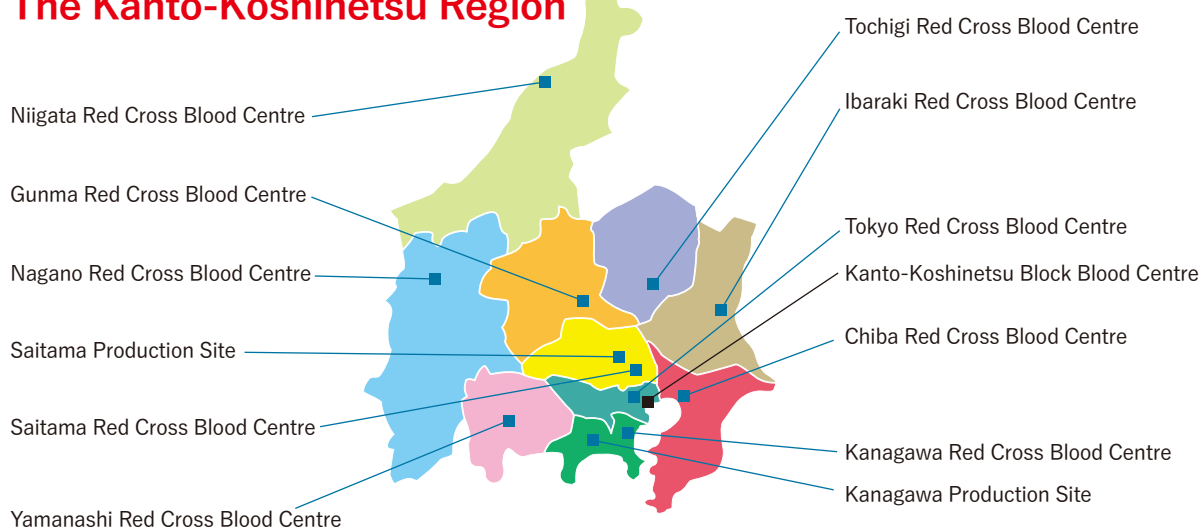
Block Blood Centres (7 centres nationwide)

- Hokkaido Block Blood Centre
- Tohoku Block Blood Centre
- **Kanto-Koshinetsu Block Blood Centre**
- Tokai-Hokuriku Block Blood Centre
- Kinki Block Blood Centre
- Chugoku-Shikoku Block Blood Centre
- Kyushu Block Blood Centre



Regional Blood Centres in the Kanto-Koshinetsu Region (10 centres)

The Kanto-Koshinetsu Region



Wide Area Management System for Blood Services

Production Sites in the Kanto-Koshinetsu Region (3 production sites)

Kanto-Koshinetsu Block Blood Centre Saitama Production Site

Address: 493-1 Shingo, Higashi-Matsuyama-shi,
Saitama 355-0071



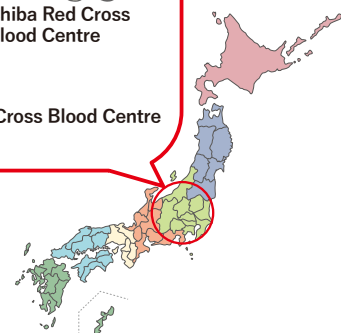
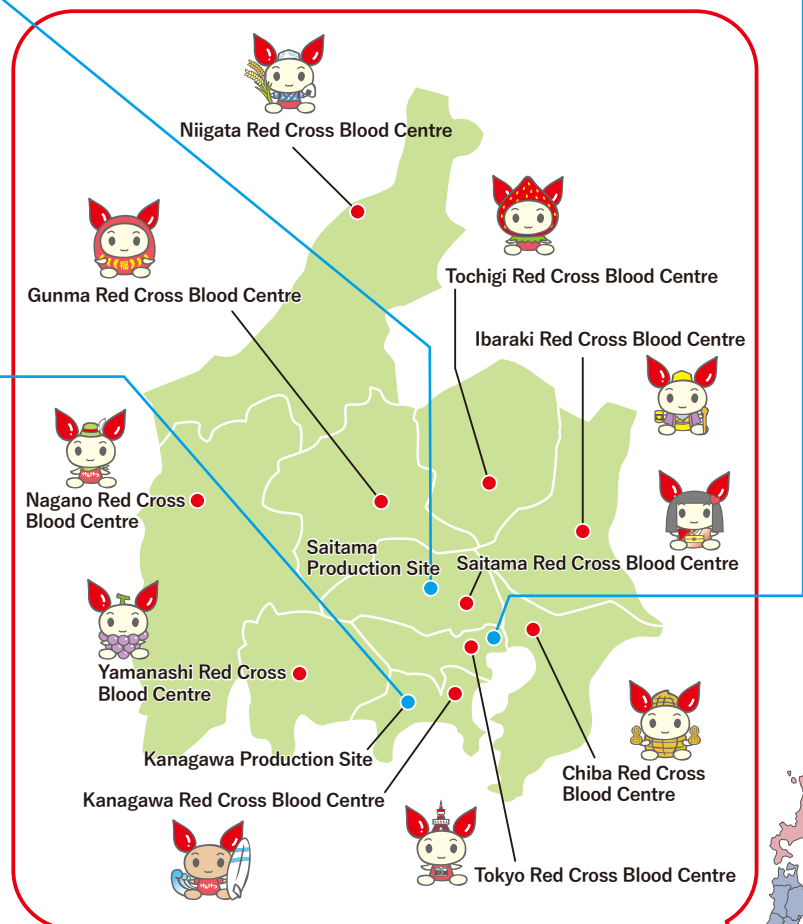
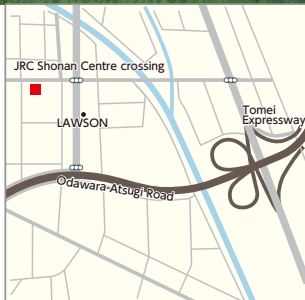
Kanto-Koshinetsu Block Blood Centre

Address: 2-1-67 Tatsumi, Koto-ku,
Tokyo 135-8639



Kanto-Koshinetsu Block Blood Centre Kanagawa Production Site

Address: 1837 Aiko, Atsugi-shi,
Kanagawa 243-0035



Official Account of Kanto-Koshinetsu Block Blood Centre

On the website of the Japanese Red Cross Society Kanto-Koshinetsu Block Blood Centre, you can view information regarding our facilities, a list of donation rooms, and the operating schedule of our bloodmobiles. It also provides information on our cord blood bank.



Website



Official X



Official Instagram



Official YouTube



Official websites of the Japanese Red Cross Society



献血キャラクター

けんけつちゃん

Character of blood donation
"Kenketsu-chan"



"Love Blood" as the Blood Donation
Web Member Service



Japanese Red Cross Society



About blood donation



Blood Services with numerical values
(data on Blood donation status,
Production status, Distribution status,
etc.)



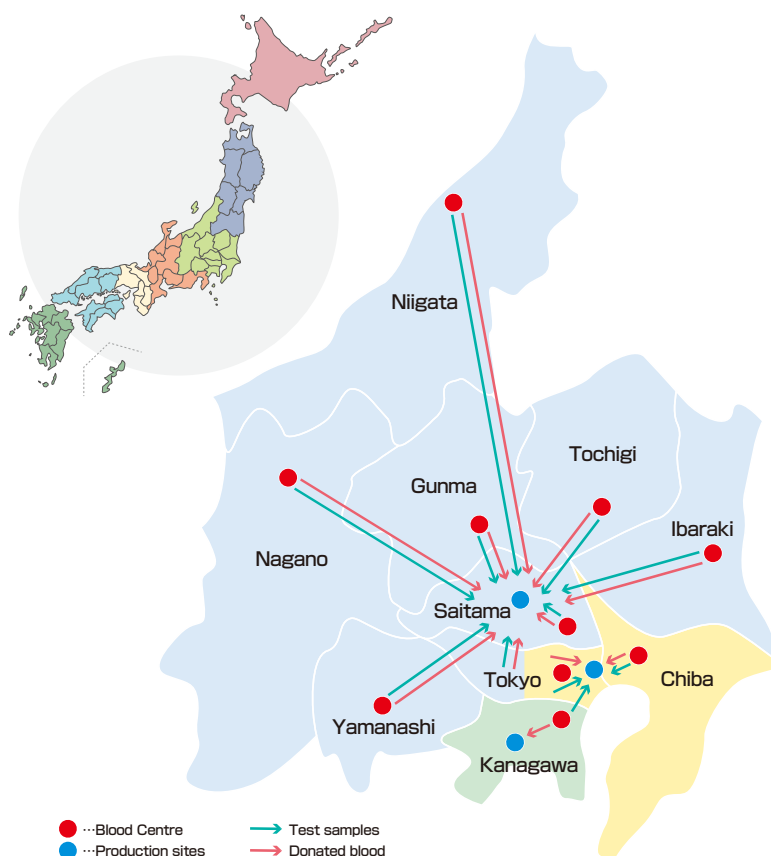
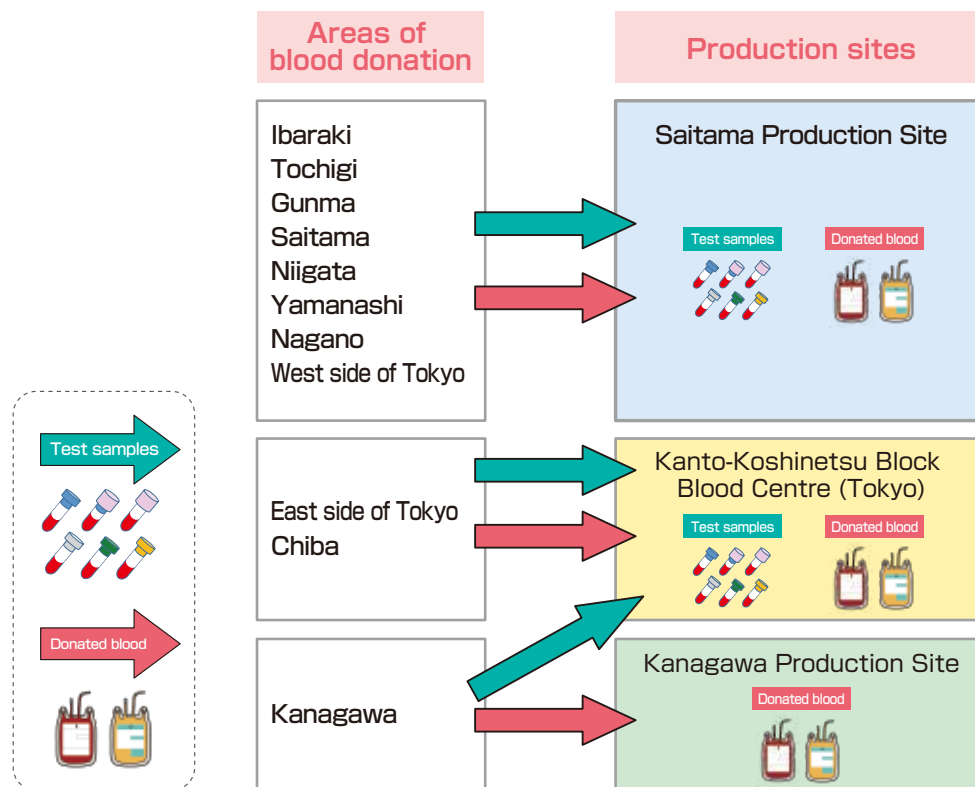
Blood Services with graphs



Information service for haematopoietic
stem cell transplantation
(portal site for the bone marrow bank
/cord blood bank)

Management System of Kanto-Koshinetsu Block Blood Centre

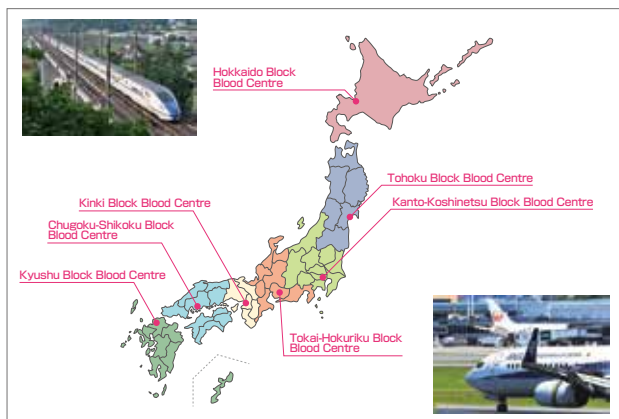
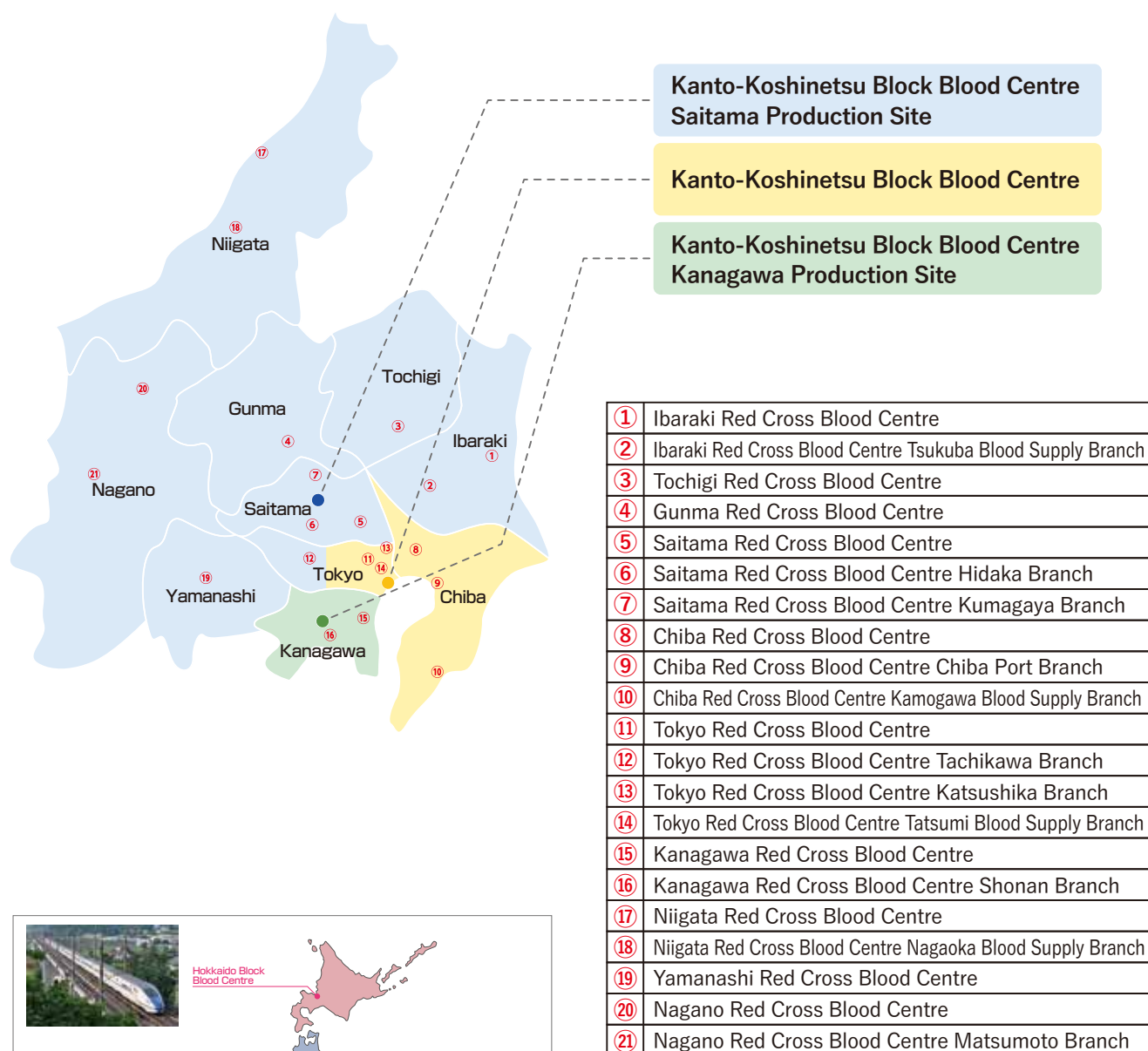
The Flow of Donated Blood



Management System of Kanto-Koshinetsu Block Blood Centre

Hubs for Distribution of Blood Products for Transfusion to Medical Institutions (Blood product distribution destination)

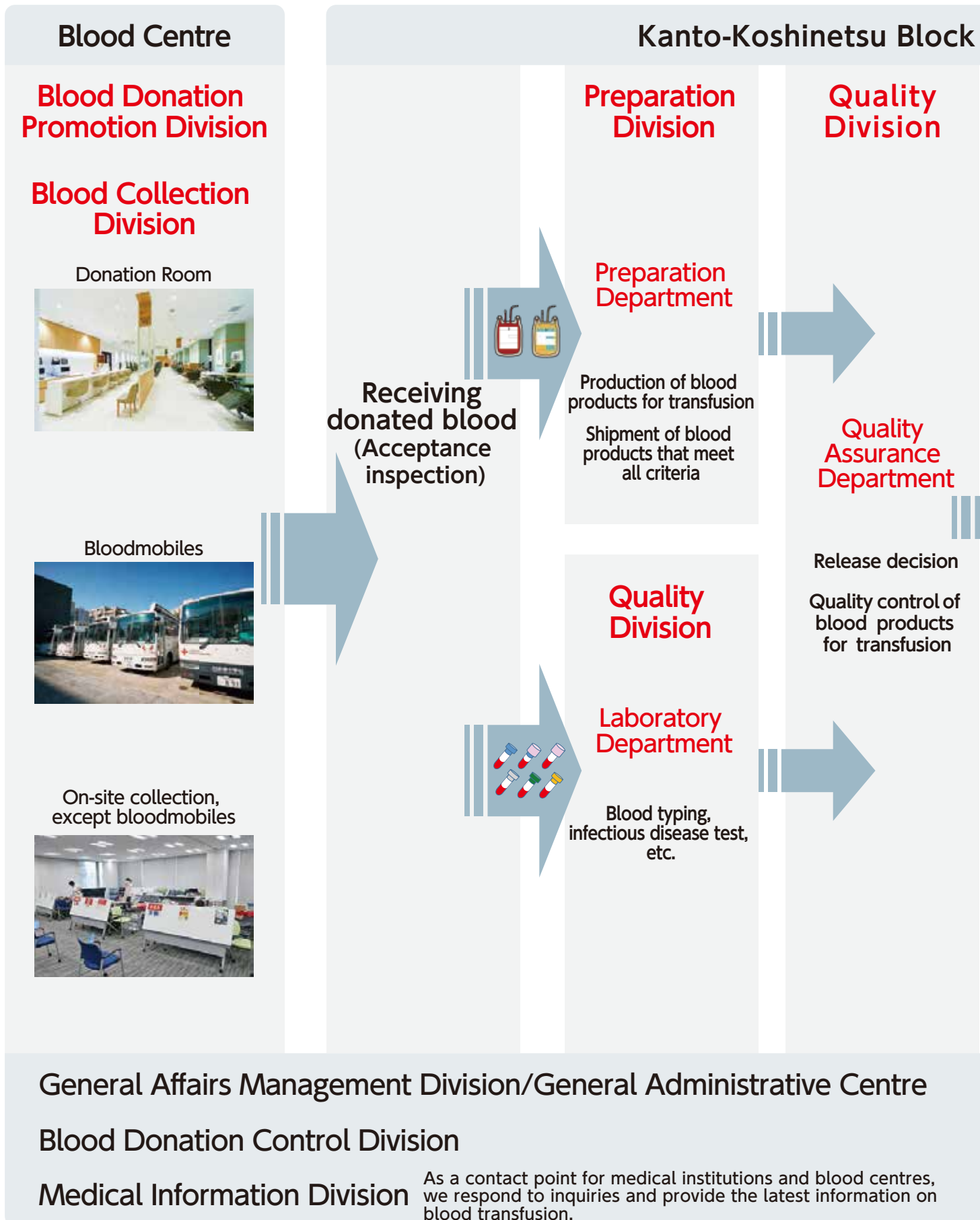
Blood products for transfusion prepared at each production site of the Kanto-Koshinetsu Block Blood Centre are distributed to a total of 21 blood supply facilities, to be delivered to various medical institutions.

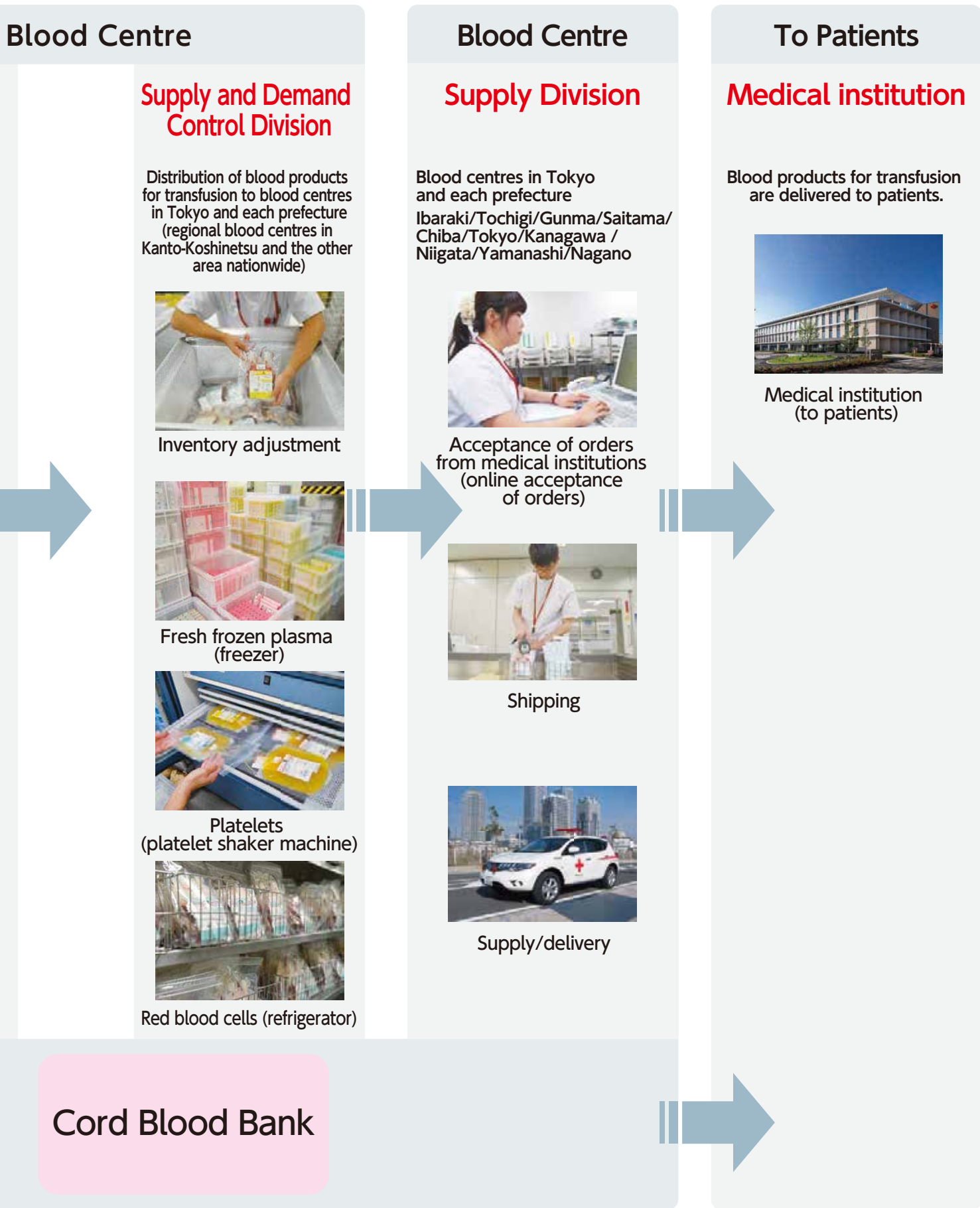


Japanese Red Cross Society makes nationwide adjustments and strives to ensure a stable supply, in order to adjust inventory imbalances in blood products for transfusion in each region.

Management System of Kanto-Koshinetsu Block Blood Centre

Background of Blood Products before Distribution to Medical Institutions





Management System of Kanto-Koshinetsu Block Blood Centre

Laboratory Division [Quality Division]

Tests (blood typing/infectious disease tests) are conducted to ensure the safety of blood used for blood transfusion, for all donated blood. In addition, in order to express our gratitude to those who donated blood, biochemical tests and haematological tests are performed and the donors who have requested notification of their test results are notified of the results. We also conduct tests for patients with rare blood types.

Receiving samples for testing				
Blood groups		→	Blood typing	We perform ABO and Rh blood typing. →
Infectious diseases and biochemistry		→	Infectious disease tests	Donated blood is tested for viruses and other pathogens. →
		→	Biochemical tests	In order to support the healthcare of donors, liver function, cholesterol level, etc. are tested and we inform donors of the test results. →
Complete blood count (CBC)		→	Complete blood count (CBC) test	Blood cell count, haemoglobin concentration, and haematocrit are tested. This is an important test for determining the presence or absence of anaemia, infections, and blood disease. →
Storage		→	Storage (for look-back study)	All donated blood samples have been stored (expiration date of the product + 10 years) since blood collection in September 1996 (Heisei 8). →
NAT		→	Nucleic acid amplification testing (NAT)	If a virus exists in donated blood, the virus is tested with a method that amplifies part of nucleic acids (DNA or RNA) that makes up gene codes of the virus roughly 100 millionfold to detect the virus. →
HLA		→	HLA-related test	The white blood cell type, referred to as the HLA type, is tested. We also perform cross-matching tests to supply HLA-compatible platelet products. →
Bacterial screening		→	Bacterial screening test	This is a test to check for the presence or absence of bacteria in blood products by culture. It is performed only for donated blood for "platelet products" which require storage at temperatures susceptible to bacterial growth (20°C to 24°C). →

ABO grouping test

ABO blood types are classified into four types: A, O, B, and AB, according to substances on the surface of red blood cells.

RhD grouping test

Rh negative is found in roughly 1 in 200 Japanese people.

Irregular antibody screening

In addition to the ABO blood types, red blood cells have various types of blood groups, and antibodies against them are called irregular antibodies. Irregular antibodies may be produced as a result of blood transfusion, pregnancy, etc.



Infectious disease tests

(Test items): Antibody test for syphilis/Hepatitis B virus-related test/Hepatitis C virus antibody test/HIV antibody test/HTLV-1 antibody test/Human parvovirus B19 antigen test

Biochemical tests

(Test items): ALT (GPT)/ γ -GTP/Total protein/Albumin/Albumin-globulin ratio/Cholesterol/Glycoalbumin



Complete blood count (CBC) test

(Test items): Red blood cell count/Haemoglobin concentration/Haematocrit value/Mean corpuscular volume/Mean corpuscular haemoglobin/Mean corpuscular haemoglobin concentration/White blood cell count/Platelet count



Storage for the look-back study

In the event of the occurrence of post-donation information or reports from medical institutions on adverse reactions/infections after blood transfusion, the blood samples are stored frozen and unopened so that retesting can be performed.



NAT: Nucleic acid amplification testing

This is a test to check for the presence or absence of a viral genome by extracting fragments of the nucleic acid segments of the genome, amplifying them by more than 100 million-fold, and then detecting the amplified nucleic acids. NAT is performed on all donated blood.



HLA-related test

HLA is an abbreviation for Human Leucocyte Antigen. Like red blood cells, white blood cells have blood types, which are called HLA types. HLAs are present in most cells in the body, including white blood cells and platelets, and play a central role in immune response. Therefore, they are also involved in blood transfusion compatibility.



Bacterial screening test

This is a test to enhance the safety of blood products by confirming that no bacteria are detected.



Management System of Kanto-Koshinetsu Block Blood Centre

Preparation Division

Production of blood products from whole blood donations.

Whole blood donation involves donating all blood components.
Red blood cell/plasma products are manufactured from whole blood donations.

Receiving donated blood

Blood collected at donation sites are delivered and received.



Reduction of leucocytes

Leukocytes are removed using a leukocyte reduction filter attached to the blood collection bag.



Centrifugation and separation of blood components

Whole blood is separated into red blood cells and plasma using centrifugation based on differences in specific gravity. The blood components separated by an automatic centrifuge and separator integration are transferred into two bags. In order to preserve red blood cells, A MAP solution is added to the bag of red blood cells.



Red blood cells



Visual inspection

The product is visually inspected for abnormalities in appearance and volume.

Plasma



From apheresis donation (platelets/plasma) to production of blood products

What is platelet and plasma apheresis donation?

Apheresis donation includes plateletpheresis and plasmapheresis. An apheresis device is used to collect specific blood components such as platelets and plasma while red blood cells, which take longer to recover, are returned to the donor.

Donation Room



Apheresis equipment

Flow of plasmapheresis donation



Visual inspection

The condition is checked.

Flow of plateletpheresis donation



Temporary storage

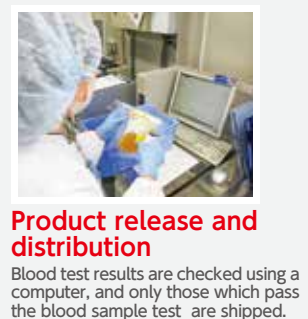
For bacterial screening tests, blood will be stored for at least 40 hours after collection.



Visual inspection

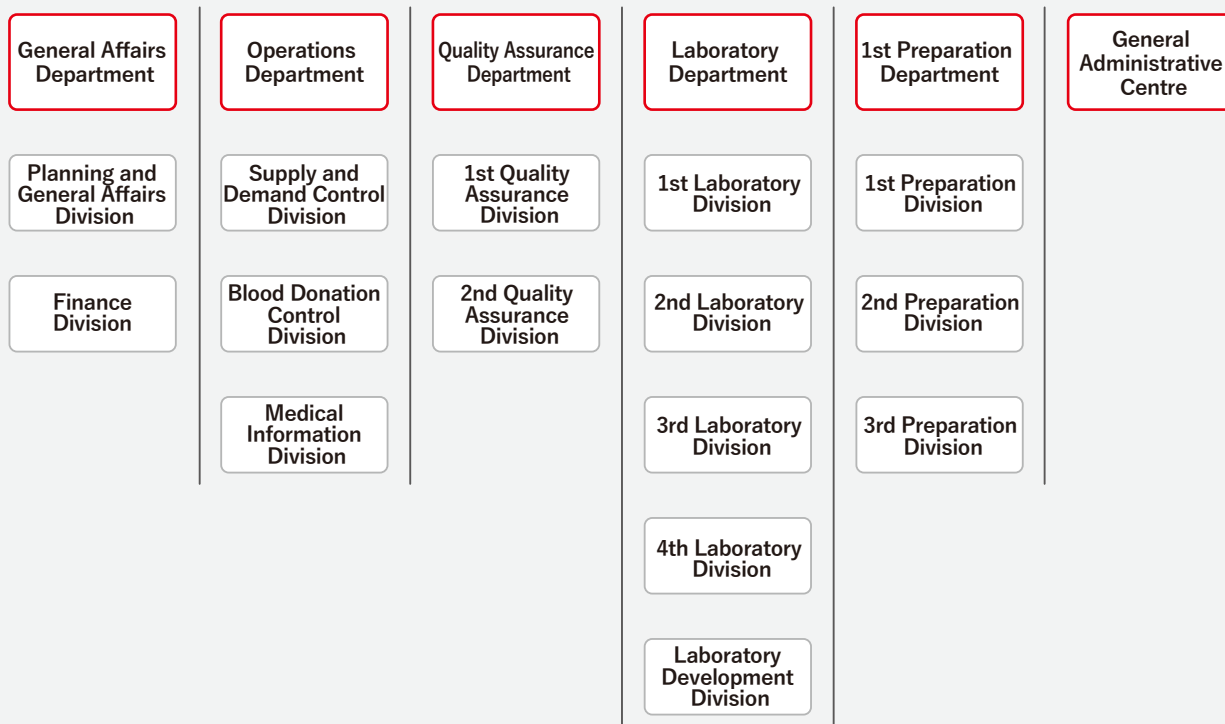
Colour, aggregates, and platelet morphology are checked.

No blood components
are wasted.

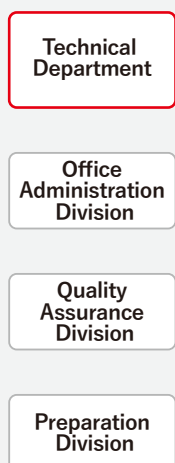


Organisation of Kanto-Koshinetsu Block Blood Centre

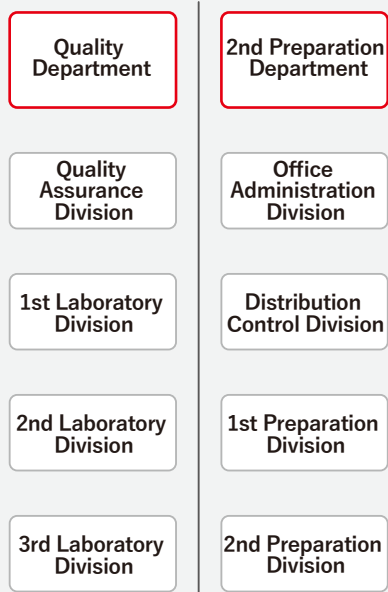
Kanto-Koshinetsu Block Blood Centre



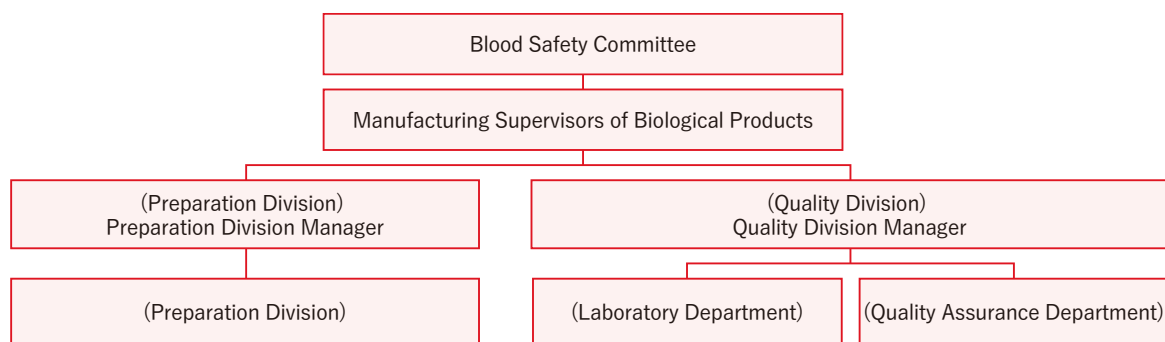
Kanagawa Production Site



Saitama Production Site



Quality Assurance System of the Blood Centre



Quality assurance of “blood products for transfusion as pharmaceuticals”

Blood transfusion is an integral part of advanced medical care, and the quality of blood products for transfusion has a significant impact on medical care. Therefore, blood products for transfusion must comply with strict quality standards as “pharmaceuticals,” from the viewpoint of efficacy and safety in transfusion.

In accordance with the “Ministerial Ordinance on Standards for Manufacturing Control and Quality Control for Drugs and Quasi-drugs (GMP Ordinance),” “Minimum Requirements for Biological Products,” and “Standards for Biological Raw Materials” provided in the “Act on Securing Quality, Efficacy and Safety of Pharmaceuticals, Medical Devices, Regenerative and Cellular Therapy Products, Gene Therapy Products, and Cosmetics (Pharmaceuticals and Medical Devices Act),” the Quality Assurance Division conducts the following operations to ensure and maintain the quality of “blood products for transfusion as pharmaceuticals.”

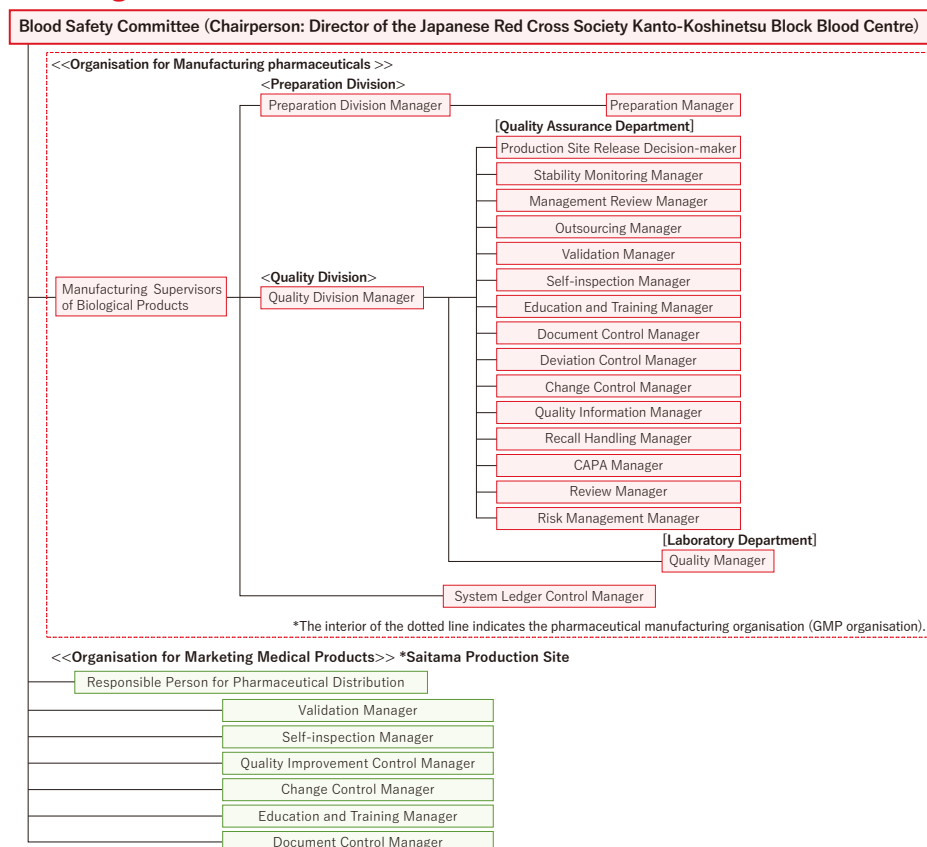
Operation of the Pharmaceutical Quality System (PQS)

In order to operate the Pharmaceutical Quality System (PQS), we strive to provide high-quality products by establishing a quality manual (quality policy and quality objectives) and quality assurance system for the blood services of the Japanese Red Cross Society.

Quality assurance based on Good Manufacturing Practice (GMP)

We have established the GMP system under the Blood Safety Committee, which conducts investigations, deliberations, resolutions, and approvals on matters necessary for the quality assurance of blood products for transfusion, to ensure, maintain, and improve the quality of blood products for transfusion. In order to comply with the “Ministerial Ordinance on Standards for Manufacturing Control and Quality Control for Drugs and Quasi-drugs (GMP Ordinance),” which specifies requirements for manufacturing drugs of excellent quality, we specify operating procedures, confirm that they are appropriately conducted, and assure the quality of blood products for transfusions.

GMP Organisation Chart



Haematopoietic Stem Cell Transplantation

—Kanto-Koshinetsu Cord Blood Bank—

Cord blood is a gift from a baby to a patient.

What is cord blood?

Cord blood is collected after delivery from the umbilical cord and placenta, which are no longer needed. Therefore, the collection causes no pain to either the baby or the mother and has no effect on the course of childbirth.

What is a public cord blood bank?

Public cord blood banks, with the approval of the Minister of Health, Labour and Welfare, process and store cord blood to make it suitable for transplantation, and supply it to hospitals that perform transplantation.

Cord blood for public banks is collected only in strictly regulated obstetric facilities, whereas private banks are generally for-profit and collect cord blood at a wide range of facilities.



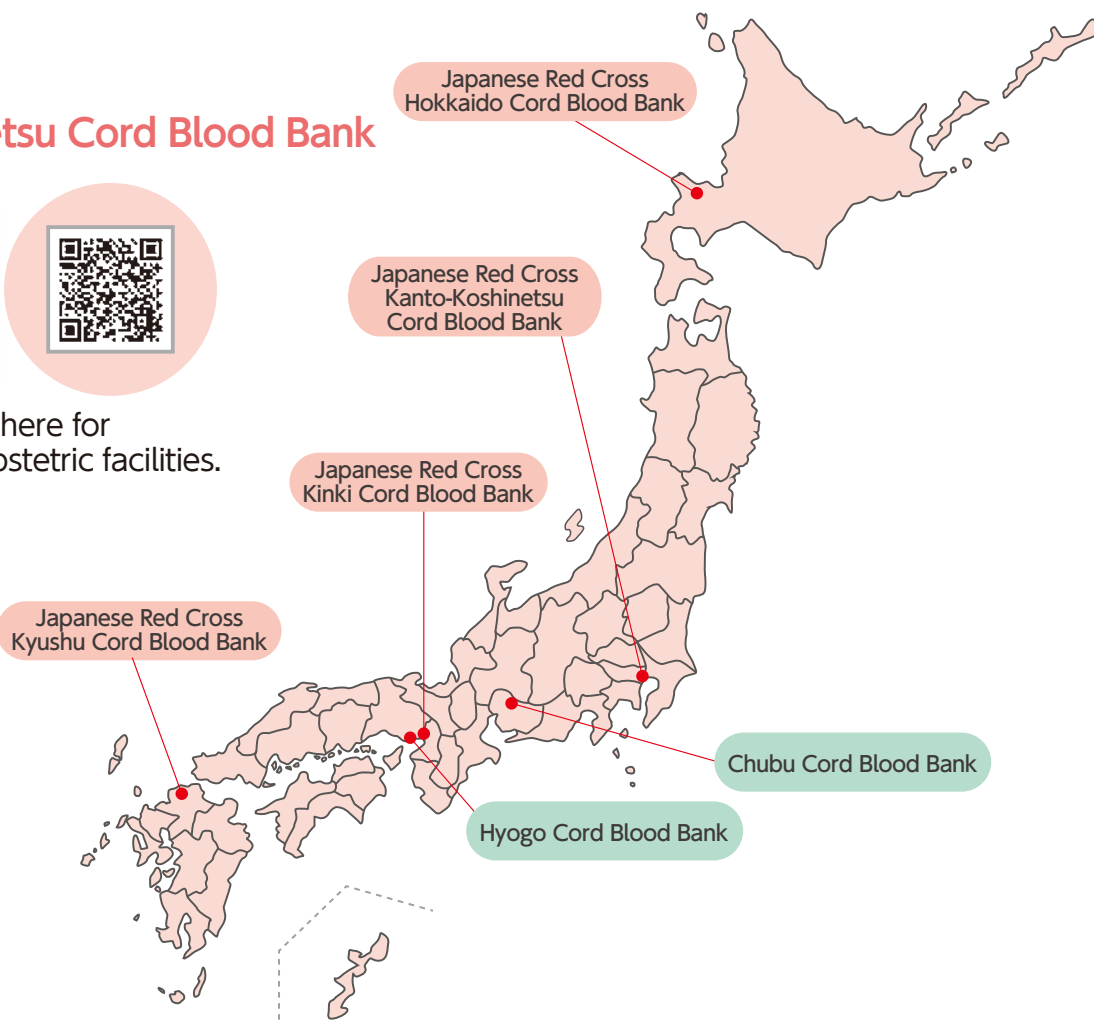
Public Cord Blood Bank Nationwide

(As of December 2025)

Kanto-Koshinetsu Cord Blood Bank



Please see here for
affiliated obstetric facilities.



Haematopoietic Stem Cell Services

—Kanto-Koshinetsu Cord Blood Bank—

We process, store, and test cord blood donated by mothers at delivery for use in transplantation, and supply it to hospitals.

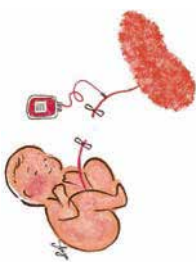
Cord blood transplantation is the administration of cord blood to patients with diseases such as leukaemia or aplastic anaemia that impair normal blood cell production. As with bone marrow transplantation, it is expected to restore the body's ability to produce blood cells. In cord blood transplantation, appropriate cord blood units should be selected based on the patient's body weight and HLA compatibility. Therefore, it is necessary to store a large number of cord blood units.



1

Acceptance

Cord blood transported from collection medical institutions and the accompanying documents (maternal consent forms) are verified, and an identification number is assigned.



2

Tests

Nucleated cell count and haematopoietic cell count are measured, and a sterility test is performed. Infectious disease tests, HLA typing, and blood typing are also performed.



3

Processing

Cord blood processing is performed under sterile conditions. Because c haematopoietic ells are found within nucleated cells (leukocytes), red blood cells and a portion of the plasma are removed, followed by the addition of a cryoprotective agent.



4

Preservation

The processed cord blood is transferred to a cryopreservation bag, placed in an aluminium case, and then frozen. It is then stored in a liquid nitrogen tank at -196°C. The storage period is 10 years from the date of collection.



5

Transportation to a transplant facility

Using a specialized shipping container known as a dry shipper, cord blood unit is kept frozen at ultra-low temperatures during transport to transplant facilities.



