

# Organ Transplantation and Hematopoietic Stem Cell Transplantation

## Overview

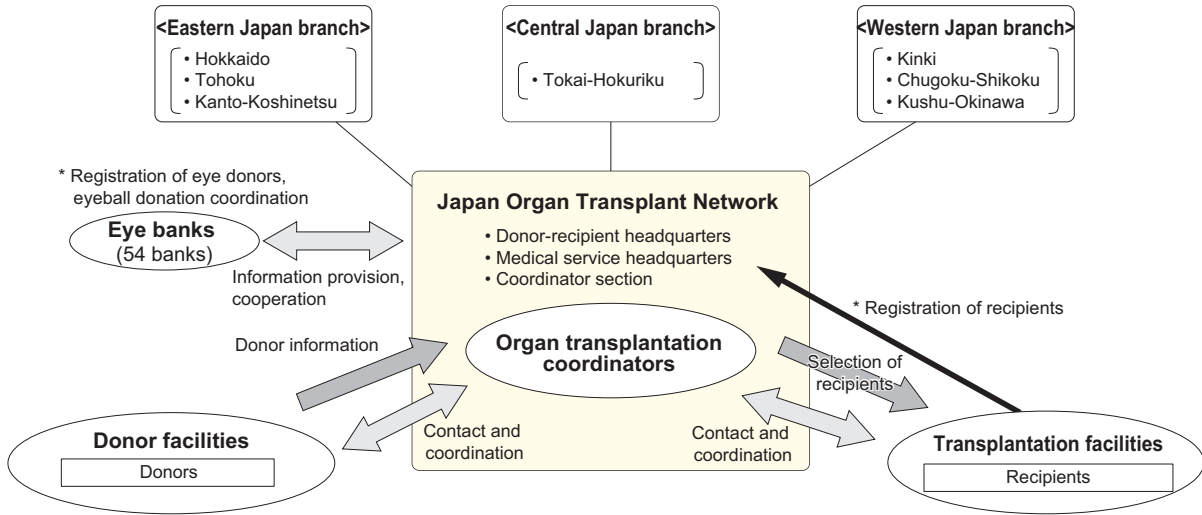
### Organ Transplantation System

#### [Organ Transplantation System]

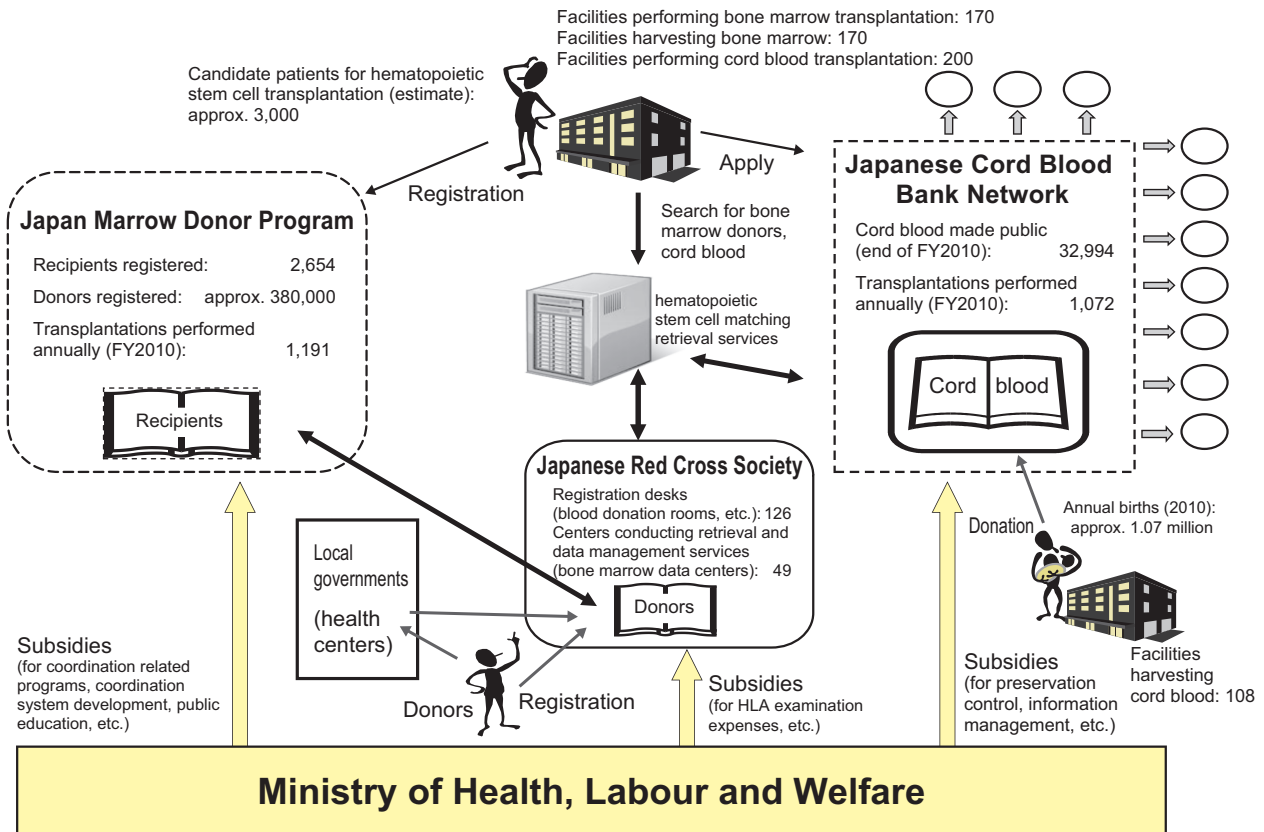
The traditional kidney transplantation system was reviewed and a new centralized nationwide kidney transplantation network established in FY1995. Enforcement of the "Act on Organ Transplantation" in October 1997 enabled multiple organ transplantations and the pertinent network.

At present fair and appropriate mediation of organ donations has been conducted mainly by the Japan Organ Transplant Network through recipients being selected using universal standards. With regard to the transplantation of eyeballs (corneas, etc.), mediation work, including enlightenment and promotion activities, is being carried out by eye banks at 54 locations nationwide.

**Diagram of Organ Transplantation Network System**



### Hematopoietic Stem Cell Transplantation System



## Detailed Data 1 Accumulated Number of Organ Transplantations

	Number of donors		Number of transplantations performed		Patients on waiting lists
		Under brain death		Under brain death	
Heart	97	97	97	97	172
Lung	78	78	96	96	153
Liver	99	99	106	106	334
Kidney	94	92	94	92	185
Pancreas	1,233	116	2,271	228	12,201
Small intestine	9	9	9	9	5
Eyeball (cornea)	12,981	47	21,078	92	2,554

Source: Japan Organ Transplant Network, Japan Eye Bank Association

(Note) 1. The number of donors and the number of transplantations performed indicate the cumulative total from October 16, 1997 (the day of the enforcement of the Act on Organ Transplantation) to March 31, 2011. The number of patients on waiting lists is as of March 31, 2011.

2. There have been 141 cases of brain death tests conducted nationwide under the Act on Organ Transplantation since the enforcement of the law until June 30, 2011. In the eighth case, the donor was determined legally brain dead, but the organ was not removed for medical reasons. The case is therefore not included in the number of donors.
3. The number of donors of pancreases and kidneys, the number of transplantations performed, and the number of patients on waiting lists include cases of simultaneous pancreas and kidney transplantations.
4. The number of donors of hearts and lungs, the number of transplantations performed, and the number of patients on waiting lists include cases of simultaneous heart and lung transplantations.

## Detailed Data 2 Changes in Numbers of Hematopoietic Stem Cell Transplantations Performed

	Donors		Number of transplantations		
	Number of registered bone marrow donors	Number of cord blood made public	Bone marrow	Peripheral blood stem cell	Cord blood
FY 1991	3,176	-	-	-	-
FY 1992	19,829	-	8	-	-
FY 1993	46,224	-	112	-	-
FY 1994	62,482	-	231	-	-
FY 1995	71,174	-	358	-	-
FY 1996	81,922	-	363	-	1
FY 1997	94,822	-	405	-	19
FY 1998	114,354	-	482	-	77
FY 1999	127,556	-	588	-	114
FY 2000	135,873	4,343	716	-	169
FY 2001	152,339	8,384	749	-	220
FY 2002	168,413	13,431	739	-	297
FY 2003	186,153	18,424	737	-	702
FY 2004	204,710	21,335	851	-	678
FY 2005	242,858	24,309	908	-	658
FY 2006	276,847	26,816	963	-	754
FY 2007	306,397	29,197	1,027	-	778
FY 2008	335,052	31,149	1,118	-	875
FY 2009	357,378	32,793	1,232	-	907
FY 2010	380,457	32,994	1,191	1	1,072
FY 2011	383,337	33,133	196	0	179
Total	-	-	12,974	1	7,500

\* The figures for cord blood stem from FY 1996 to FY 1998 indicate the number of transplantations coordinated by cord blood banks before the establishment of the Japanese Cord Blood Bank Network.

\* The figures for FY 2011 indicate the numbers as of the end of May.

\* Cord blood information possessed by the Miyagi Cord Blood Bank is temporarily unavailable to the public due to the impact of the Great East Japan Earthquake

\* Transplantation of peripheral blood stem cells has gradually taken place since October 2010

\* Relaxation of the requirements for donor registrations:

From March 1, 2005: The minimum age for registration was lowered from 20 to 18 (minimum age for organ donations of 20), the condition of "family approval" in the registration deleted, and applicants are allowed to skip the video viewing when registering if they have read the booklet "Chance" and understood the details of bone marrow donations

From September 2005: The maximum age for registration was raised from 50 to 54 (maximum age for organ donation of 55)