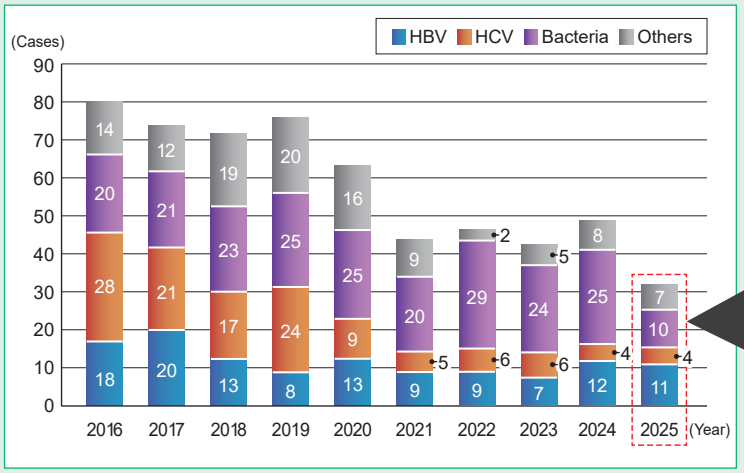
Infectious Cases that were Likely Related to Transfused Blood Products (2025)

The JRCS analyzed and evaluated suspected cases of viral and other transfusion-transmitted infections (TTIs) reported by medical institutions to the JRC blood centers (voluntary reports), as well as cases subjected to post-donation information-based retrospective studies (lookback studies). In 2025, one case of HBV infection was confirmed through the detection of viral nucleic acid in samples from the implicated blood donor, and one case of bacterial infection was confirmed through the detection of bacteria in the implicated blood product.

Annual number of cases reported to JRC blood centers as suspected transfusion-transmitted infections and breakdown of the reported cases by pathogen in 2025



Pathogen	No. of reported cases	No. of confirmed cases
HBV	11	1
HCV	4	0
Bacteria	10	1
HEV	1	0
HAV	1	0
CMV	3	0
VZV	1	0
PVB19	1	0
Total	32	2

Summary of case reports: Cases confirmed to be TTIs based on detection of pathogens in relevant items such as repository samples of donated blood (2025)

HBV

- Post-donation information: A case identified through lookback studies conducted based on reported positive conversion in sub subsequent blood donation screening tests.

Case No.	Transfused blood product (year and month of blood collection)	Primary disease	Age	Sex	Pre-transfusion test		Post-transfusion test		ALT		Patient outcome
					Tested markers	Test results	Positive conversion markers	Time after transfusion	Maximum (IU/L)	Time after transfusion	
1	Ir-RBC-LR* (Dec. 2024)	Aplastic anemia	70s	F	HBs-Ag HBs-Ab HBc-Ab	Neg.	HBV-DNA HBs-Ag HBc-Ab	23 wks	1,018	23 wks	Recovered

*The concerned donation tested negative for HBV-NAT. At a subsequent donation in June 2025, the donor tested positive for anti-HBs and anti-HBc antibodies. Further HBV individual-donation NAT (ID-NAT) testing of the relevant co-component (recovered plasma) yielded positive results in 3 of 10 tests.

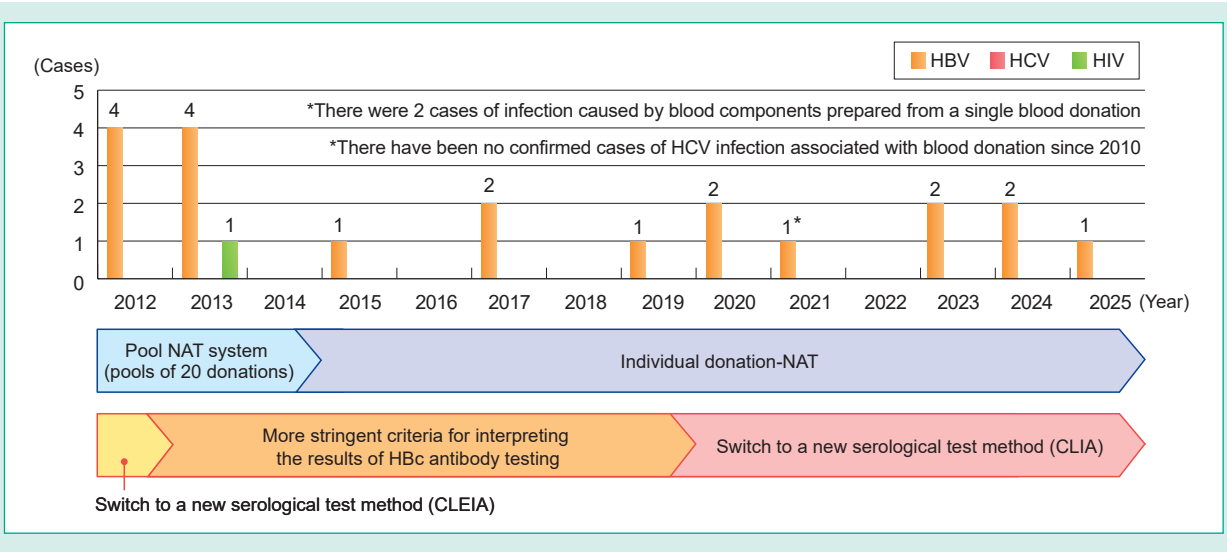
Bacteria

- Voluntary report: A case reported by a medical institution as suspected transfusion-transmitted bacterial infection

Case No.	Transfused blood product (year and month of blood collection)	Primary disease	Age	Sex	Symptoms	Time to onset (after the start of administration)	Results of post-transfusion blood culture		Patient outcome
							Blood component	Patient blood	
1	Ir-PC-LR* (Jun. 2025)	Acute myeloid leukemia	50s	M	Chills, shivering, fever, hypotension, increased heart rate	22 minutes	*Escherichia coli*	*Escherichia coli*	Recovered

*A case of bacterial infection related to a platelet product before the introduction of bacterial screening (July 2025)

Number of transfusion-transmitted HBV, HCV, and HIV infections by year of blood collection



Chronology of safety measures for blood products (2000 - 2025)

2000	February	• Nucleic acid amplification test (NAT) for HBV, HCV, and HIV-1 • Change in the pool size (from 500 to 50)
2001	March	Implementation of a six-month quarantine hold period of plasma for fractionation
2003	June	Full implementation of lookback studies
2004	August	• NAT for HBV, HCV, and HIV-1 • Change in the pool size (from 50 to 20)
	October	Implementation of donor identity verification
		Introduction of pre-storage leukocyte reduction (apheresis-derived platelet products)
2005	April	Implementation of “Guidelines for Lookback Studies of Blood Products”
	June	Implementation of the restriction on blood donations from individuals with a history of travel to Europe (≥1 day)
	July	Initiation of the supply of fresh frozen plasma after a six-month quarantine hold period
2006	March	Introduction of pre-storage leukocyte reduction (apheresis-derived plasma products)
	October	Introduction of initial blood flow diversion (apheresis-derived platelet products)
2007	January	Introduction of pre-storage leukocyte reduction (whole blood-derived products)
	March	Introduction of initial blood flow diversion (whole blood-derived products)
2008	January	Introduction of initial blood flow diversion (apheresis-derived plasma products)
	August	
2010	January	Easing of the restriction on blood donations from individuals with a history of travel to Europe (from ≥1 day to ≥1 month)
2011	April	Addition of medical questionnaire items (from 14 to 23 items)
2012	August	
	October	Introduction of safety measures against Chagas disease (manufacturing restrictions)
2014	August	
2016	April	
	August	
2019	June	
2020	January	Thorough implementation of questionnaires regarding COVID-19
	August	
2025	July	

- Switch to a new test method (CLEIA) for HBs Ag, HBs Ab, HBc Ab, HCV Ab, HIV-1/2 Ab, HTLV-1 Ab, *Treponema pallidum* Ab, and human parvovirus B19 Ag
- • NAT for HBV, HCV, and HIV-1/2
  • Changes in the reagents and equipment
- Changes in the CLEIA test criteria for HBc Ab
- Introduction of individual donation-NAT (ID-NAT) for HBV, HCV, and HIV-1/2
- Revision of product exclusion criteria based on ALT testing (from ALT ≥ 61 IU/L to ALT ≥ 101 IU/L)
- • Changes in safety measures for Chagas disease
  • Introduction of selective testing of blood donors for *T. cruzi* Ab (CLIA)
- Switch to a new test method (CLIA) for HBs Ag, HBs Ab, HBc Ab, HCV Ab, HIV-1/2 Ab, HTLV-1 Ab, *Treponema pallidum* Ab, and human parvovirus B19 Ag
- Introduction of the HEV ID-NAT
- Introduction of bacterial screening of platelet products

The chronology of safety measures since 1952 is published on the Japanese Red Cross Society’s Haemovigilance Information website.

Japanese Red Cross Society’s Haemovigilance Information website (English)

For blood products and transfusion information

Japanese Red Cross Society Haemovigilance Information **Search**

https://www.jrc.or.jp/mr/

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Issued by:

Medical Information Division, Technical Department, Blood Service Headquarters, Japanese Red Cross Society

1-2-1 Shiba-Koen, Minato-ku, Tokyo 105-0011, Japan

*For any inquiries, please contact the Safety Vigilance Division via email (anzenkanri@jrc.or.jp).