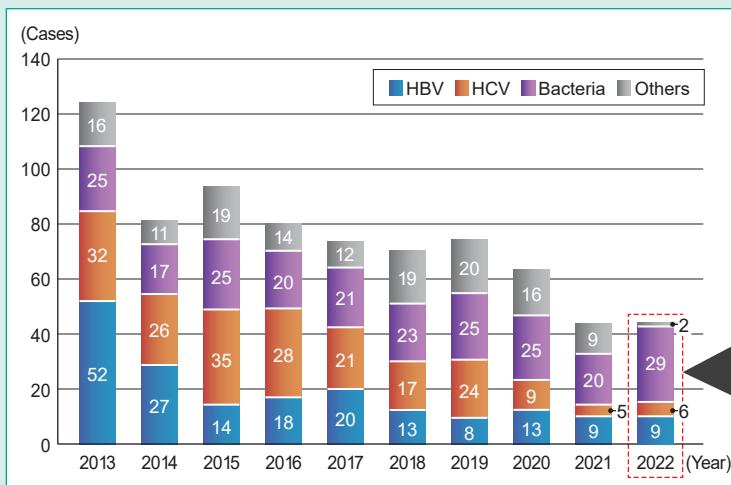


## Infectious Cases That were Likely Related to Transfused Blood Components (2022)

JRCS analyzed and evaluated suspected transfusion-transmitted infections (TTIs) cases voluntarily reported by medical institutions to JRC blood centers as well as cases subjected to post-donation information-based retrospective studies (lookback studies). In 2022, 1 HBV infection case and 4 bacterial infection cases were confirmed through detection of viral nucleic acid and bacteria in repository samples of the implicated or subsequent blood donations.

### Yearly number of cases reported to JRC blood centers as suspected transfusion-transmitted infections, and analysis results of the reported cases by pathogen in 2022



Pathogen	Number of reported cases	Number of confirmed cases
HBV	9	1
HCV	6	0
Bacteria	29	4
HEV	2	0
<b>Total</b>	<b>46</b>	<b>5</b>

### Summary of case reports (cases confirmed to be TTIs based on detection of pathogens in relevant items such as repository samples of donated blood) (2022)

#### Bacteria

● Voluntary reports: Cases reported by medical institutions as suspected transfusion-transmitted bacterial infections

Case No.	Blood component (year and month of blood collection)	Primary disease	Age	Sex	Symptoms	Time to onset (from start of administration)	Results of post-transfusion blood culture		Patient outcome
							Blood component	Patient blood	
1	Ir-PC-LR (2022.11)*	Malignant tumor	70s	M	Headache, nausea, cough, fever	50 min	<i>Morganella morganii</i>	<i>Morganella morganii</i>	Recovered (with sequelae)
2	Ir-PC-LR (2022.11)*	Emergency surgery for angina pectoris	70s	M	Hypotension, multiple organ failure	Following day	<i>Morganella morganii</i>	<i>Morganella morganii</i>	Death
3	Ir-PC-LR (2022.11)	Myelodysplastic syndrome	70s	F	Chills, shivering, fever, vomiting, respiratory distress	1 hr	<i>Staphylococcus aureus</i>	<i>Staphylococcus aureus</i>	Recovered
4	Ir-PC-LR (2022.3)	Myelodysplastic syndrome	50s	F	Chills, shivering, respiratory distress, fever, hypotension	40 min	<i>Escherichia coli</i>	<i>Escherichia coli</i>	Recovered

\*Separated platelet components prepared from a single blood collection

#### HBV

● Post-donation information: A case identified through lookback studies conducted based on reported positive conversion in blood screening test results

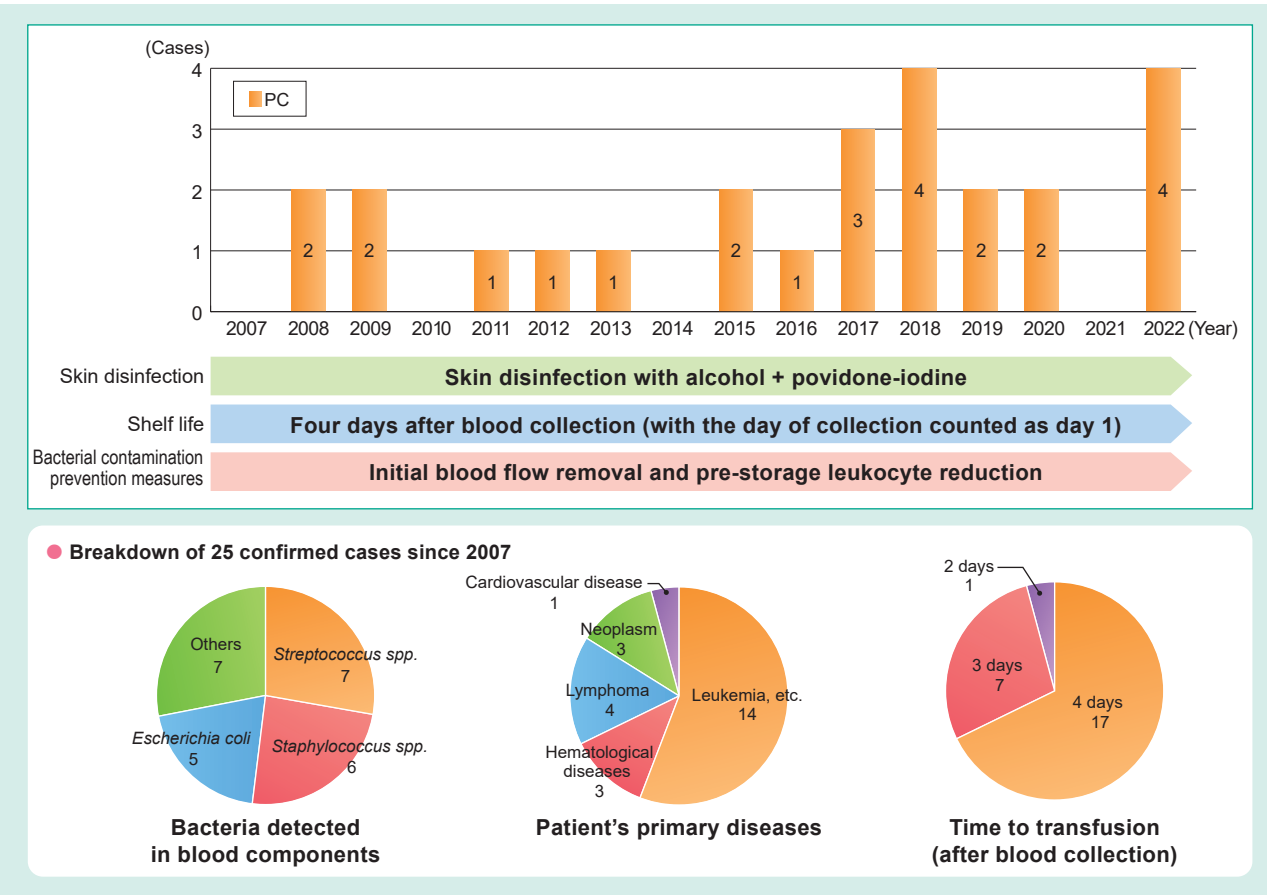
Case No.	Blood component (year and month of blood collection)	Primary disease	Age	Sex	Pre-transfusion test		Post-transfusion test		ALT		Patient outcome
					Test items	Test results	Positive conversion items	Duration after transfusion	Maximum (IU/L)	Duration after transfusion	
1	Ir-PC-LR (2021.7)*	Aplastic anemia	80s	F	HBs-Ag	Neg.	HBV-DNA HBs-Ag	21 wks	◆	◆	Unknown

\*The donated blood above was negative for HBV-NAT, but turned positive at the time of the subsequent donation, 4 weeks later.

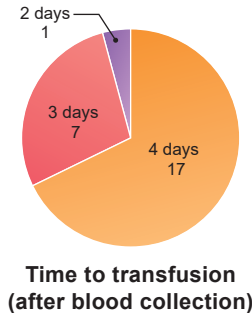
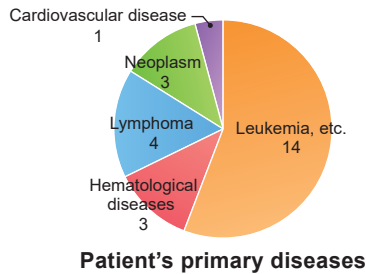
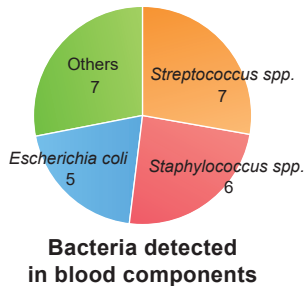
◆No comparative data.

## ■ Transfusion-transmitted bacterial infections (confirmed cases by reported year) and safety measures

Although transfusion-transmitted bacterial infections caused by red blood cell components have not been confirmed since the introduction of initial blood flow removal and pre-storage leukocyte reduction, confirmed platelet component-related infections continue to occur. There were 4 such cases in 2022.



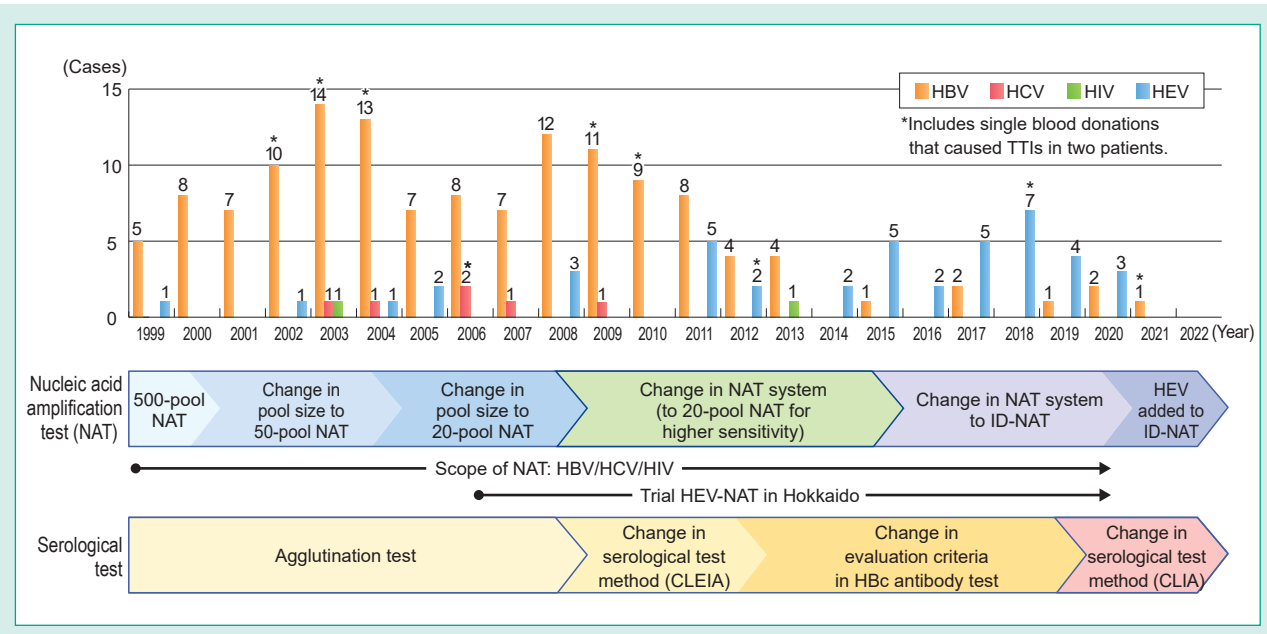
### ● Breakdown of 25 confirmed cases since 2007



## ■ Number of blood donations that caused transfusion-transmitted HBV, HCV, HIV, and HEV infections by year of collection, and changes in safety measures

After the introduction of individual donation NAT (ID-NAT), 8 cases of post-transfusion HBV infection have been confirmed, including 1 case in 2022 (involving blood collected in 2021).

No post-transfusion HEV infections have been confirmed since the introduction of HEV-NAT in August 2020.



### Transfusion Information 2308-180

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