FACILITY NAME	NBCUS ID

Form Approved OMB No. 0990-0313 Exp. Date: xx/xx/xxxx



2021 National Blood Collection and Utilization Survey

The Office of the Assistant Secretary for Health and the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS), are conducting the 2021 National Blood Collection and Utilization Survey (NBCUS). The NBCUS is a biennial, cross-sectional survey of all US blood collection centers and more than 2,800 hospitals that transfuse blood and blood components. This survey is used to characterize blood and blood component collection and transfusion practices. The information is used to understand blood demand and project future blood needs in the United States.

The 2021 NBCUS covers the period of collection and utilization from January 1, 2020 to December 31, 2021. Questions were added specifically to gain information on the impact of COVID-19 on the blood supply and utilization in 2020. Please assist us by completing the online survey by <u>June 11, 2022</u>. The link to complete the survey is included in an email sent to your facility and is unique to your facility. Please do not share the link with personnel outside your institution. Once you click the link (or copy and paste into a browser window) you will be directed to the 2021 NBCUS Portal Page. On the Portal Page, you will find instructions for completing the survey and a brief description of each section. If you are not the appropriate person to complete any portion of the survey or if you do not have all of the requested information, please forward the link to the person in your institution who can best provide the information.

Your responses will remain anonymous in the final dataset. While results of this survey will be released in aggregate form and data may be made available in the form of a de-identified dataset, no specific institutional identifiable information will be included.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0990-0313. The time required to complete this information collection is estimated to average 4 hours/ 0 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to U.S. Department of Health & Human Services, OS/OCIO/PRA, 200 Independence Ave., S.W., Suite 336-E, Washington D.C. 20201, Attention: PRA Reports Clearance Officer.

FACILITY NAME	MBCO2 ID
	the primary person responsible for completing this section. Once you your responses will be sent to the email address entered below.
Prefix	
First Name ¹	
Last Name ¹	
Title/Position ^{1*}	
Work Phone number	
Work Email ^{1*}	

¹Denotes fields that were pre-populated in the online survey based on previous correspondence.

FACILITY NAME	NBCUS ID
B1a. Does your institution collect blood from donors? (E	ven if you collect autologous units only, select "Yes.")
o Yes	
O No (if 'No', skip to section C)	
B1b. If your facility is reporting data based on multiple fa	acilities, please list the name of each facility below:
Facility Names	
B2a. During 2021, how many whole blood collection pro institution in each of the following categories? Do not corequired field)	ocedures were successfully completed by your ount low-volume or incomplete procedures. (*indicates a
Allogeneic whole blood*	
	Number of collection procedures
Autologous whole blood*	
	Number of collection procedures
Directed whole blood*	
	Number of collection procedures
Total whole blood*	
	Number of collection procedures
B2b. During 2021, how many apheresis collections proc completed by your institution in each of the following caprocedures. (*indicates a required field)	
Apheresis red blood cells only*	
	Number of collection procedures
Apheresis platelets only*	
	Number of collection procedures
Apheresis plasma only*	
	Number of collection procedures
Apheresis red blood cells AND platelets*	
	Number of collection procedures
Apheresis red blood cells AND plasma*	

FACILITY NAME	NBCUS ID
	Number of collection procedures
Apheresis platelets AND plasma*	
	Number of collection procedures
Apheresis red blood cells AND platelets AND plasma*	Number of collection procedures
Total apheresis collection procedures (including all types of apheresis collections)*	Number of collection procedures
For example, an apheresis collection that resulted in platelet and plasma units sh collection, not counted under both.	nould be counted as a single platelet collection OR a single plasma
B2c. During 2021, from the whole blood collection procedution for distribution as whole blood were prepared by your inst	
Allogeneic whole blood	
	Number of units prepared
Autologous whole blood	
	Number of units prepared
Directed whole blood	
	Number of units prepared
Total whole blood	
	Number of units prepared
B2d. During 2021, from the whole blood collection procedu were prepared (i.e., separated from a unit of whole blood) (* indicates a required field)?	· · · · · · · · · · · · · · · · · · ·
Allogeneic whole blood-derived red blood cell	
units*	Number of units prepared
Autologous whole blood-derived red blood cell units*	Number of units prepared
Directed whole blood-derived red blood cell	
units*	Number of units prepared
Total whole blood-derived red blood cell units*	
	Number of units prepared

B2e. During 2021, from the **apheresis** collection procedures recorded in **B2b**, how many **red blood cell units** were collected by your institution in each of the following categories? (*indicates a required field)

FACILITY NAME	NBCUS ID
Allogeneic apheresis red blood cell units*	
	Number of units collected
Autologous apheresis red blood cell units*	Number of units collected
Directed apheresis red blood cell units*	Number of units conected
Directed apricies is rea blood cell units	Number of units collected
Total apheresis red blood cell units*	
	Number of units collected
B2f. During 2021, from the whole blood collection procedu	res recorded in R22, how many individual platelet
units were prepared (i.e., separated from a unit of whole bl	
Individual whole blood-derived platelet units ¹	
	Number of units prepared
¹ For example, if your institution pooled 5 individual platelet units per pool and ma	anufactured 1000 pools of platelets, 5000 individual whole blood-derived
platelet units should be recorded.	
B2g. During 2021, from the apheresis collection procedures	recorded in R2h, how many platelet units were
collected by your institution in each of the following catego	
Allogeneic apheresis platelet units	
	Number of units collected
Single	Number of units collected
Double ¹	
	Number of units collected
Triple ¹	Number of units collected
Directed appearage platelet units	Number of units collected
Directed apheresis platelet units	Number of units collected
Total apheresis platelet units*	
	Number of units collected

B2h. During 2021, what was the average number of individual platelet units included per pre-storage pool of whole blood-derived platelets?

¹Count double collections as two units and triple collections as three units.

FACILITY NAME	NBCUS ID
	Free text, numeric values only
	Tree text, numeric values only
B2i. During 2021, from the apheresis collection procedur collected by your institution?	es recorded in B2b , how many plasma units were
Total apheresis plasma units	
Total apriciesis plasma umts	Number of units collected
B2j. During 2021, from the whole blood collection proced	
successfully prepared (i.e., separated from a unit of whol	e blood) by your institution?
Total whole blood-derived plasma units	
·	Number of units prepared
B2k. During 2021, how many units of group AB plasma w	vere collected by your institution? (Count apheresis plus
whole blood-derived units)	
Group AB plasma	Number of units collected
B2l. During 2021, how many units of COVID-19 convales	cent plasma were collected by your institution? (Count
apheresis plus whole blood-derived units)	
COVID-19 convalescent plasma ¹	
	Number of units collected
¹ Convalescent plasma collected from individuals who have recovered from CO	VID-19.
B2m. During 2021, from the whole blood collection proce	
cryoprecipitated AHF units ¹ were successfully prepared by	by your institution? (* indicates a required field)
Individual cryoprecipitated AHF units*	
	Number of units prepared
¹ For example, if your institution pooled 5 individual cryoprecipitated AHF units units should be recorded. If your institution pooled 10 individual cryoprecipita cryoprecipitated AHF units should be recorded.	
B2n. During 2021, what was the average number of cryop	precipitated AHF units per whole blood-derived
cryoprecipitated AHF pool?	
	Free text, numeric values only

FACILITY NAME		NBCUS ID
B2o. During 202	1, how many granulocytes were collected b	y your institution?
Granul	ocyte units	
		Number of units collected
	, for each product, what was the total numb arded for: (*indicates a required field)	er of allogeneic units (non-directed and directed
Reactive	e infectious disease testing results	
	Whole blood donation ^{1*}	
	Whole blood dendtion	Number of units discarded
	Automotic wed bleed cells*	
	Apheresis red blood cells*	Number of units discarded
	Apheresis plasma*	Number of units discarded
		Number of units discarded
	Apheresis platelets*	
		Number of units discarded
All othe	r reasons (e.g., low volume, broken bag, etc.) not including outdated components
	Whole blood donation ¹ *	
	Whole blood donation	Number of units discarded
	Apheresis red blood cells*	Number of units discarded
		Number of units discarded
	Apheresis plasma*	
		Number of units discarded
	Apheresis platelets*	
		Number of units discarded
collection or both the	plasma and the red blood cells prepared from a single whole	record it as one unit. For example, if either an entire whole blood blood collection are discarded, it is counted as one unit discarded. If the ame donation is successfully distributed), it is also counted as one unit
=	red (* indicates required field)?	cluding successful and unsuccessful donations, and
	Male	

FACILITY NAME	NBCUS ID	
	Number presenting to donate	
Female	Number presenting to donate	
Prefer other self-description ¹		
Freier other sen-description	Number presenting to donate	
Total*		
	Number presenting to donate	
¹ "Prefer other self-description" includes anyone who does not identify as ma donate.	le or female and should be included as part of the total donors	presenting
	" · · · · · · · · · · · · · · · · · · ·	
B4b. Please list categories which may be classified under	r "prefer other self-description":	
Sex or Gender Identities		
B5. During 2021, how many donors were deferred for the	ne following reasons¹:	
Low hemoglobin or low hematocrit		
Low Hemoglobili of low Hematocht		
Male		
	Number of donors deferred	
		\neg
Female	Number of devices defensed	
	Number of donors deferred	
Prefer other self-description ²		
	Number of donors deferred	
Total		
	Number of donors deferred	
Medication use		
Medication use		
Total		
Total	Number of depart deferred	
	Number of donors deferred	
Pulse		

FACILITY NAME	NBCUS ID
Total	Number of donors deferred
Blood pressure	
Total	Number of donors deferred
High-risk behavior (restricted to MSM)	
Total	Number of donors deferred
High-risk behaviors (all other behaviors)	
Total	Number of donors deferred
Travel and/or residence	
Total	Number of donors deferred
Tattoo/piercing/scarring	
Total	Number of donors deferred
Other non-medical reasons	
Total	Number of donors deferred
Total presenting donors deferred for any reason Male	
	Number of donors deferred
Female	Number of donors deferred
Prefer other self-description ²	Number of donors deferred
Total	
	Number of donors deferred

 $^{^{\}mbox{\tiny 1}}\mbox{If donor was deferred for multiple reasons, count all.}$

²"Prefer other self-description" includes anyone who does not identify as male or female and should be included as part of the total donors presenting to donate.

FACILITY NAME	NBCUS ID
B6. During 2021, how many of the following types of donor	s did your institution successfully collect blood
products from and how many donations did they make?	
First-time allogeneic donors	
	Number of donors
Donations from first time allogeneic donors	
	Number of donations
Repeat allogeneic donors (count a single repeat	<u> </u>
donor only once)	Number of donors
Donations from repeat allogeneic donors	
	Number of donations
Directed donors	
Bill decided definers	Number of donors
Autologous donors	
Autologous dollors	Number of donors
B7. During 2021, how many allogeneic whole blood and ap	heresis red blood cell donations combined were
successfully collected from the following donor age groups?	
Danara agad 15 years	
Donors aged 15 years	Number of donations
Donors aged 16 years	Number of donations
	Number of donations
Donors aged 17 years	Number of donations
	Number of donations
Donors aged 18 years	
	Number of donations
Donors aged 19-24 years	
	Number of donations
Donors aged 25-44 years	
	Number of donations
Donors aged 45-64 years	
*	Number of donations
Donors aged 65-74 years	
·	Number of donations
Donors aged ≥75 years	
	Number of donations

¹Combine whole blood donations and apheresis red blood cell donations.

FACILITY NAME	NBCUS ID
B8. During 2021, how many donations of allogeneic w collected from donors who identify as ¹ :	whole blood and red blood cell units were successful
Hispanic or Latino	Number of donations
Black or African American	Number of donations
Asian	Number of donations
Native Hawaiian or Pacific Islander	Number of donations
American Indian or Alaska Native	Number of donations
¹ More than one category can be selected for a single donor.	
B9. How many severe donor-related adverse events ¹	were experienced by donors during 2021?
Whole blood collections	
All donors	Number of severe reactions
Aged ≤18 years	Number of severe reactions
Aged ≥19 years old	Number of severe reactions
Apheresis collections	
All donors	Number of severe reactions
Aged ≤18 years	Number of severe reactions
Aged ≥19 years	Number of severe reactions

¹ AABB Donor Hemovigilance Working Group grade 2 or higher (e.g., adverse event with duration > 2 weeks; resulted in limitation in activities of daily living; or required transport to emergency department, sutures, or antibiotics). See https://www.aabb.org/docs/default-source/default-document-library/resources/severity-grading-tool-for-donor-adverse-events.pdf?sfvrsn=ff563263_4.

FACILITY NAME	NBCUS ID
B10a. During 2021, how many units of whole blo distributed, and outdated by your institution? (*	ood intended for transfusion as whole blood were imported, indicates required fields)
Imported whole blood intended for tran	sfusion as whole blood
Allogeneic	Number of units imported
Autologous	Number of units imported
Directed	Number of units imported
Total*	Number of units imported
Distributed whole blood intended for tra	ansfusion as whole blood ¹ (collected and imported)
Allogeneic	Number of units distributed
Autologous	Number of units distributed
Directed	Number of units distributed
Total*	Number of units distributed
Outdated whole blood intended for tran	sfusion as whole blood (collected and imported)
Allogeneic	Number of units outdated
Autologous	Number of units outdated
Directed	Number of units outdated
Total*	Number of units outdated

 $^{^{1}}$ Units distributed more than once (e.g., because they have been returned) should be counted only once.

FACILITY NAME	NBCUS ID
B10b. During 2021, how many units of who outdated by your institution? (*indicates a	le blood-derived red blood cells were imported, distributed, and required field)
Imported whole blood-derived red	blood cells
Allogeneic	Number of units imported
Allogeneic group	O+ Number of units imported
Allogeneic group	O- Number of units imported
Autologous	Number of units imported
Directed	Number of units imported
Total*	Number of units imported
Distributed whole blood-derived re	d blood cells ¹ (collected and imported)
Allogeneic	Number of units distributed
Allogeneic group	O+ Number of units distributed
Allogeneic group	O- Number of units distributed
Autologous	Number of units distributed
Directed	Number of units distributed
Total*	Number of units distributed
Outdated whole blood-derived red	blood cells (collected and imported)
Allogeneic	Number of units outdated
Allogeneic group	
Allogeneic group	

FACILITY NAME	NBCUS ID
	Number of units outdated
Autologous	Number of units outdated
Directed	
Total*	Number of units outdated
	Number of units outdated
¹ Units distributed more than once (e.g., because they have been return	ed) should be counted only once.
B10c. During 2021, how many units of apheresis rec your institution? (* indicates required fields)	d blood cells were imported, distributed, and outdated by
Imported apheresis red blood cells	
Allogeneic	Number of units imported
Allogeneic group O+	Number of units imported
Allogeneic group O-	Number of units imported
Autologous	Number of units imported
Directed	Number of units imported
Total*	
Distributed apheresis red blood cells ¹ (collec	Number of units imported cted and imported)
Allogeneic	
	Number of units distributed
Allogeneic group O+	Number of units distributed
Allogeneic group O-	Number of units distributed
Autologous	Number of units distributed
Directed	Number of units distributed
Total*	Number of units distributed

FACILITY NAME	NBCUS ID	
	Number of units distributed	-
Outdated apheresis red blood cells (collected	and imported)	
		٦
Allogeneic	Number of units outdated]
Allogeneic group O+	Number of units outdated]
	Number of units outdated	
Allogeneic group O-		
	Number of units outdated	
Autologous		7
G	Number of units outdated	┙
Directed		7
Directed	Number of units outdated	⅃
Total*		7
rotar	Number of units outdated	╛
institution? (*indicates a required field) Imported apheresis platelets		
Allogeneic		
	Number of units imported	
Directed]
	Number of units imported	_
Total*		
	Number of units imported	_
Distributed apheresis platelets (including imp	orted units) ¹ (collected and imported)	
Allogeneic		7
	Number of units distributed	
Single collection		7
	Number of units distributed	
Double collection ¹		7
Bodsic collection	Number of units distributed	⅃
Triple collection ¹		7

FACILITY NAME		NBCUS ID
	5	Number of units distributed
	Directed	Number of units distributed
		Number of units distributed
	Total*	Number of units distributed
		Number of units distributed
Outdate	ed apheresis platelets (collected a	nd imported)
	Allogeneic	
	Allogerieic	Number of units outdated
	Directed	
	Directed	Number of units outdated
	T-4-1*	
	Total*	Number of units outdated
	on? (*indicates a required field)	
Importe	d whole blood-derived platelets	
	Individual*	
		Number of units imported
	Platelet pools ¹	
		Number of pools imported
Distribu	ted whole blood-derived platelets	s ² (collected and imported)
	Individual*	
		Number of units distributed
	Platelet pools ¹	
	Number of pools distributed	
Outdate	ed whole blood-derived platelets ((collected and imported)
	Individual*	
		Number of units outdated
	Platelet pools ¹	
	•	Number of pools outdated

¹Number of platelet pools prepared from whole blood collections. Do not include the same platelet units in both the individual unit and platelet pool counts. For this question, individual units of whole blood-derived platelets and platelet pools are mutually exclusive.

²Units distributed more than once (e.g., because they have been returned) should be counted only once.

FACILITY NAME	NBCUS ID
B10f. During 2021, how many units of apheresis plasma institution? (*indicates a required field)	were imported, distributed, and outdated by your
montation (marcates a required neta)	
Imported apheresis plasma	
Total*	
Total	Number of units imported
Distributed apheresis plasma ¹ (collected and imp	
FFP^2	
	Number of units distributed
PF24 ³	
1121	Number of units distributed
PF24RT24 ⁴	
	Number of units distributed
Liquid	
	Number of units distributed
Jumbo FFP (>400 mL)⁵	
	Number of units distributed
COVID-19 convalescent plasma ⁶	
	Number of units distributed
Total*	Number of units distributed

Outdated apheresis plasma (collected and imported)

Total*

Number of units outdated

¹Units distributed more than once (e.g., because they have been returned) should be counted only once.

²Fresh frozen plasma (FFP): plasma frozen at -18C or colder within 8 hours of collection.

³Plasma frozen within 24 hours of phlebotomy (PF24): plasma separated from the blood of an individual donor and placed at -18C or colder within 24 hours of collection from the donor.

⁴Plasma frozen within 24 hours of phlebotomy and held at room temperature up to 24 hours after phlebotomy (PF24RT24): plasma held at room temperature for up to 24 hours after collection and then frozen at -18C or colder.

⁵Plasma, Jumbo: FFP having a volume greater than 400 mL.

⁶Convalescent plasma collected from individuals who have recovered from COVID-19, including units collected under the EUA, units collected and distributed for clinical trials and units disseminated under emergency Investigational New Drug (eIND) application.

Imported v	vhole blood-derived plasma	
Т	otal*	Number of units imported
Distributed	whole blood-derived plasma¹ (collected	
	FP^2	
•	11	Number of units distributed
г	F24 ³	
P	F24	Number of units distributed
_		
C	ryoprecipitate reduced	Number of units distributed
		Number of units distributed
L	iquid	Number of units distributed
		Number of units distributed
P	F24RT24	
		Number of units distributed
C	OVID-19 convalescent plasma	
		Number of units distributed
_		
I	otal*	Number of units distributed
		Number of units distributed
Outdated v	vhole blood-derived plasma (collected a	nd imported)
Т	otal*	
	otal	Number of units outdated
esh frozen plasma (FFP)		
		ere distributed and outdated by your institution?

FACILITY NAME	NBCUS ID
Units outdated	Number of units
¹ Units distributed more than once (e.g., because they have been returned) shou	uld be counted only once.
B10i. During 2021, how many units of cryoprecipitated Al institution? (*indicates a required field)	HF were imported, distributed, and outdated by your
Imported cryoprecipitated AHF ¹	
Individual units*	Number of units imported
Cryoprecipitated AHF pools ¹	Number of pools imported
Distributed cryoprecipitated AHF ² (collected and i	imported)
Individual units*	Number of units distributed
Cryoprecipitated AHF pools ¹	Number of pools distributed
Outdated cryoprecipitated AHF (collected and imp	ported)
Individual units*	Number of units outdated
Cryoprecipitated AHF pools ¹	Number of pools outdated
¹ Number of cryoprecipitated AHF pools prepared from whole blood collections. unit and cryoprecipitated AHF pool counts. For this question, individual units of exclusive.	7 1 1
² Units distributed more than once (e.g., because they have been returned) sho	uld be counted only once.
B10j. During 2021, how many units of granulocytes were institution? (*indicates a required field)	imported, distributed, and outdated by your
Imported granulocyte units*	Number of units imported
Distributed granulocyte units ^{1*} (collected and imported)	Number of units distributed
Outdated granulocyte units* (collected and imported)	Number of units outdated

 $^{^{\}scriptsize 1}$ Units distributed more than once (e.g., because they have been returned) should be counted only once.

FACILITY NAME	NBCUS ID	
B11a. During 2021, did your institution prepare apheresis platelets using platelet additive solution? O Yes O No (if 'No', skip to B12)		
B11b. During 2021, how many apheresis platelet units v	vere prepared using platelet additive solution?	
B12. During 2021, for each of the following categories, had modify to achieve pre-storage leukoreduction ?	Free text, numeric values only now many units did your institution collect, prepare, or	
Whole blood units		
	Number of units leukoreduced	
Whole blood-derived RBC units	Number of units leukoreduced	
Apheresis RBC units		
	Number of units leukoreduced	
Whole blood-derived platelet units	Number of units leukoreduced	
B13. Does your facility use hematopoietic growth factor mobilization for granulocyte collections? O Yes O No O Not applicable because granulocytes are not collected B14a. Does your institution type red blood cell antigens using a molecular assay (e.g., genotyping)? O Yes O No (if No, skip to B15) B14b. How many red blood cell donors were typed using a molecular assay (e.g., genotyping)? Number of donors		
B15a. During 2021, which of the following bacterial risk (select all that apply; if none are selected, skip to B16) Primary culture performed no sooner than 24 h Large volume, delayed sampling no sooner than Large volume, delayed sampling no sooner than Pathogen reduction technology	ours 1 36 hours	

May

FACILITY NAME		NBCUS ID
	21, how many apheresis platelet units wo trol strategies for platelets?	ere distributed that were subjected to the following
	Primary culture performed no sooner than 24 hours	Number of units distributed
	Large volume, delayed sampling no sooner than 36 hours	Number of units distributed
	Large volume, delayed sampling no sooner than 48 hours	Number of units distributed
	Pathogen reduction technology	Number of units distributed
B16. During 2021	L, how many blood drives were cancelled	imber of blood drives
B17. During 2021	, did your facility experience a shortage	of any blood products?
0 Yes 0 No		
Note: The follow blood supply in 2		gain information on the impact of COVID-19 on the
Supplemental Se	ction B: Impact of COVID-19 Pandemic o	n Blood Collection and Distribution in 2020
	month in 2020, how many whole blood Do not count low-volume or incomplete	collection procedures were successfully completed by procedures.
January		Number of collection procedures
Februar	У	Number of collection procedures
March		Number of collection procedures
April		Number of collection procedures

FACILITY NAME	NBCUS ID
	Number of collection procedures
June	Number of collection procedures
July	Number of collection procedures
August	Number of collection procedures
September	
October	Number of collection procedures
November	Number of collection procedures
	Number of collection procedures
December	Number of collection procedures
SB2. During each month in 2020, how many units of	apheresis platelets were distributed by your institution?
January	Number of units distributed
February	Number of units distributed
March	
April	Number of units distributed
	Number of units distributed
May	Number of units distributed
June	Number of units distributed
July	Number of units distributed
August	
September	Number of units distributed
	Number of units distributed

FACILITY NAME	NBCUS ID
October	
	Number of units distributed
November	
	Number of units distributed
December	
2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Number of units distributed
SB3. During 2020, did your institution collect convales	cent plasma from donors?
0 Yes	
O No (if 'No', end of section supplemental section	on B)
SB4. During all months of 2020, how many COVID-19 of	convalescent plasma collection units were collected by
your institution? Do not count low-volume or incompl	ete procedures. (*indicates a required field)
COVID-19 convalescent plasma ¹	
	Number of units
	20110 40
¹ Convalescent plasma collected from individuals who have recovered from	1 COVID-19

FACILITY NAME	NBCUS ID
Section C. Blood Transfusion	
Please provide the contact information for	the primary person responsible for completing this section.
Prefix	
First Name	
Last Name	
Title/Position	
Work Phone number	
Work Email	

C1. Is your institution directly involved in the transfusion of blood to patients? (NOTE: If your institution is a centralized transfusion service, your participating facilities may have been sent a link to complete the survey. If so, please answer "No" to this question and contact CDC at nbcus@cdc.gov.)

- o Yes
- o No (if 'No', end of section)

FACILITY NAME	NBCUS ID
C2a. During 2021, did your facility transfuse whole bloo red blood cells, plasma, and/or platelets)?* (indicates a	•
o Yes	
O No (if 'No', skip to C3a)	
C2b. During 2021, for allogeneic whole blood (i.e. that hand/or platelets), how many units did your institution to many units were outdated? (* indicates required fields)	ansfuse, how many recipients were transfused, and how
Allogeneic whole blood	
Total units transfused*	Number of units transfused
Total number of recipients	Number of recipients
Total outdated units*	Number of units outdated
C3a. During 2021, for allogeneic red blood cells, how m recipients were transfused, and how many units were o	
Allogeneic red blood cells (include all blood groups)	
Total units transfused*	Number of units transfused
Total number of recipients	Number of recipients
Total outdated units*	Number of units outdated
C3b. During 2021, for group O+ and O- allogenic red blo and how many units were outdated?	ood cells, how many units did your institution transfuse
Allogeneic Group O+ red blood cells	
Total units transfused	Number of units transfused
Total outdated units	Number of units outdated

FACILITY NAME	NBCUS ID
Allogeneic Group O- red blood cells	
Total units transfused	
	Number of units transfused
Total outdated units	Number of units outdated
	Number of units outdated
C4. During 2021, for directed and autologous allogenic your institution transfuse, how many recipients were trindicates a required field)	
Directed whole blood units ¹	
Number of units transfused to intended	
recipient*	Number of units transfused
Number of recipients	Number of recipients
Outdated units*	Number of recipients
Outdated diffes	Number of units outdated
Directed red blood cell units ¹	
Number of units transfused to intended	
recipient*	Number of units transfused
Number of recipients	Number of recipients
Outdated units*	Number of recipients
Outdated drifts	Number of units outdated
Autologous whole blood units	
Number of units transfused to intended	
recipient*	Number of units transfused
Number of recipients	
*	Number of recipients
Outdated units*	Number of units outdated
Autologous red blood cell units	
Number of with two of the late of the	
Number of units transfused to intended recipient*	Number of units transfused

FACILITY NAME	NBCUS ID
Number of recipients	Number of recipients
Outdated units*	
	Number of units outdated
¹ Directed units are those which have been donated by a family member or frier from a specific donor.	nd of the patient as a result of a patient request to be transfused with blood
C5a. During 2021, how many units of each of the following many units were outdated while on your shelf including united fields)	
Transfusions	
Whole blood-derived platelets (pre-storage pooled and individual platelet concentrates expressed as pooled equivalents) ^{1*}	Number of units transfused
Apheresis platelet units ^{2*}	Number of units transfused
Directed platelets to intended recipients ³	Number of units transfused
Outdates	
Whole blood-derived platelets (pre-storage pooled and individual platelet concentrates expressed as pooled equivalents) ^{4*}	Number of units outdated
Apheresis platelet units (full unit) ⁵ *	Number of units outdated
Directed platelets to intended recipients ³	Number of units outdated

¹Number of whole blood-derived platelet pools transfused. If any individual units of whole blood-derived platelets were transfused, convert these to a pooled equivalent. For example, if 200 platelet pools and 100 individual whole blood-derived platelet units were transfused and 5 individual platelet units are included per pool, then 220 units (200 + [100/5]) should be recorded.

²The number of apheresis platelet units transfused. In contrast to units of whole blood-derived platelets, no conversion calculation is needed.

³Directed units are those which have been donated by a family member or friend of the patient as a result of a patient request to be transfused with blood from a specific donor.

⁴Number of whole blood-derived platelet pools outdated. If any individual units of whole blood-derived platelets were outdated, convert these to a pooled equivalent. For example, if 200 platelet pools and 100 individual whole blood-derived platelet units were outdated and 5 individual platelet units are included per pool, then 220 units (200 + [100/5]) should be recorded.

⁵The number of apheresis platelet units outdated. In contrast to units of whole blood-derived platelets, no conversion calculation is needed.

FACILITY NAME	NBCUS ID	
C5b. During 2021, how many units of plasma did your inst while on your shelf including units transfused to pediatric Transfusions	-	tdated
Total Plasma*	Number of units transfused	
Outdates		
Total Plasma*	Number of units outdated	
C5c. Among plasma units included in the response to questollowing components did your institution transfuse and hincluding units transfused to pediatric patients?		
Transfusions		
Thawed plasma ¹ (i.e., used within 1-5 days of thaw)	Number of units transfused	
Liquid plasma (i.e., never frozen)	Number of units transfused	
Group AB plasma	Number of units transfused	
COVID-19 convalescent plasma	Number of units transfused	
Outdates		
Thawed plasma ¹ (i.e., used within 1-5 days of thaw)	Number of units outdated	
Liquid plasma (i.e., never frozen)	Number of units outdated	
Group AB plasma	Number of units outdated	
COVID-19 convalescent plasma	Number of units outdated	

C5d. During 2021, how many units of each of the following components did your institution **transfuse** and how many units were **outdated** while on your shelf including units transfused to pediatric patients? (* indicates required fields)

Transfusions

¹Thawed plasma: FFP, PF24, or PF24RT24 that has been thawed and held at 1 to 6 C for 1 to up to 5 days after thawing.

FACILITY NAME	NBCUS ID
Cryoprecipitated AHF individual units transfused*1	Number of units transfused
Cryoprecipitated AHF transfused pool size*	Size of pool
Granulocytes units transfused*	Number of units transfused
Outdates	
Cryoprecipitated AHF individual units outdated*1	Number of units outdated
Granulocytes units outdated*	Number of units outdated
¹ Number of individual cryoprecipitated AHF units transfused. Please convert p cryoprecipitated AHF were transfused and 5 individual units were included per	
C6a. During 2021, did your facility transfuse blood to pe d	liatric or neonatal patients? (Select all that apply)
☐ Yes, pediatric (>4 months old)	
☐ Yes, neonatal (<=4 months old)	
☐ No (skip to C9a)	
C6b. Indicate the total number of units transfused to peo	diatric and neonatal patients during 2021.
Pediatric Transfusions	
Number of units in whole or in part transfused for pe	ediatric (>4 months old) patients¹
Whole blood	Number of units transfused
Red blood cells	Number of units transfused
Plasma	Number of units transfused
Apheresis platelets	Number of units transfused
Whole blood-derived platelets	Number of units transfused
Cryoprecipitated AHF	Number of units transfused

FACILITY NAME	NBCUS ID
Total number of pediatric (>4 months old) recip	pients that received the following blood componer
Whole blood	
Whole blood	Number of recipients
Red blood cells	
	Number of recipients
Plasma	
	Number of recipients
Apheresis platelets	
	Number of recipients
Whole blood-derived platelets	Number of recipients
	Number of recipients
Cryoprecipitated AHF	Number of recipients
Neonatal Transfusions	
Number of units in whole or in part transfused	for neonatal (≤4months old) patients¹
Whole blood	
	Number of units transfused
Red blood cells	
	Number of units transfused
Plasma	
	Number of units transfused
Apheresis platelets	Number of units transfused
	- Number of units transfused
Whole blood-derived platelets	Number of units transfused
Cryoprecipitated AHF	
cryoprecipitated Arii	Number of units transfused
Total number of neonatal (≤4months old) recip	ients that received the following blood componen
Whole blood	
writine blood	Number of recipients
Red blood cells	
Ked blood tells	Number of recipients
Plasma	

Number of recipients

FACILITY NAME	NBCUS ID
Apheresis platelets	Number of recipients
	Number of recipients
Whole blood-derived platelets	Number of recipients
	Number of recipients
Cryoprecipitated AHF	Number of recipients
¹ This should be a subset of data reported in the previous two questions. Pedia	
the standard red blood cell unit volume is 500mL and the volume of pediatric apediatric aliquot transfusions as 15 units.	
C6c. For neonatal patients, which of the following do you	use for aliquots? (check all that apply)
☐ Aliquots using syringes from full-size unit☐ Pedipacks	
C6d. For neonatal patients, does your facility attempt to transfusion?	use aliquots from the same full-size unit for every
0 Yes	
o No	
C7a. Which of the following methods does your facility us	se to irradiate components? (check all that apply)
☐ Cesium	
☐ X-Ray	
\square Unknown, irradiation performed by another	facility
C7b. Indicate how many irradiated (by any method) units transfused in 2021. For pediatrics, use the number of aducomponents that are irradiated and leukoreduced, include	ult equivalent units used in whole or part. 1 For
Whole blood units	
	Number of units irradiated
Red blood cell units	
	Number of units irradiated
Apheresis platelet units	
	Number of units irradiated
Whole blood-derived platelet units	
·	Number of units irradiated

¹Pediatric aliquots should be recorded in standard unit equivalents. For example, if the standard red blood cell unit volume is 500mL and the volume of pediatric aliquots are 50mL (10 pediatric aliquots per standard unit), then record 150 pediatric aliquot transfusions as 15 units. If only part of a standard unit is used and the rest is discarded, please record it as 1 standard unit.

2021 HHS National Blood Collection and Utilization Survey (NBCUS)	
FACILITY NAME NBG	CUS ID
C7c. Indicate how many leukoreduced units for each of the following during 2021. For pediatrics, use the number of adult equivalent unit that are irradiated and leukoreduced, include these in the count for	s used in whole or part. ¹ For components
Before Storage	
Whole blood units	Number of units leukoreduced
Red blood cell units	Number of units leukoreduced
Whole blood-derived platelet units	Number of units leukoreduced
After Storage (including at the bedside)	
Whole blood units	
	Number of units leukoreduced
Red blood cell units	Number of units leukoreduced
Whole blood-derived platelet units	Number of units leukoreduced
¹ Pediatric aliquots should be recorded in standard unit equivalents. For example, if the standard pediatric aliquots are 50mL (10 pediatric aliquots per standard unit), then record 150 pediatric unit is used and the rest is discarded, please record it as 1 standard unit.	rd red blood cell unit volume is 500mL and the volume of
C8a. During 2021, among transfused red blood cells , how many unit	s were

1-35 day(s) old	
	Number of RBC units transfused
36-42 days old	
	Number of RBC units transfused
C8b. During 2021, among transfused whole blo	od-derived platelets, how many units were
1-3 day(s) old	
	Number of WBD PLT units transfused
4-5 days old	
	Number of WBD PLT units transfused

C8c. During 2021, among transfused apheresis platelets, how many units were...

FACILITY NAME	NBCUS ID
1-3 day(s) old	
	Number of apheresis PLT units transfused
4-5 days old	Number of apheresis PLT units transfused
6-7 days old	Number of apheresis PLT units transfused
C9. If your facility pools whole blood-derived platelets, of individual platelet units were included in a post-storage	
manyadar platelet dilits were included in a post storage	pooled whole blood derived platelet dose.
	Number of individual units in a pool
	Number of individual diffes in a poor
	o Not applicable
C10a. Indicate the number of red blood cell units that v settings during 2021. (This can be determined by location	vere transfused in the following inpatient and outpatient on or by physician use.)
All surgery (including transplant)	
	Number of RBC units transfused
Inpatient medicine (including hematology/oncology)	Number of RBC units transfused
Emergency Department	
	Number of RBC units transfused
Obstetrics/Gynecology	Number of RBC units transfused
Pediatrics, including critical care	
r salatives, morealing evideal sales	Number of RBC units transfused
Neonates, including critical care	New Love of DDC with two of cond
Adult suitisel sous	Number of RBC units transfused
Adult critical care	Number of RBC units transfused
Outpatient and non-acute inpatient settings ¹	
	Number of RBC units transfused

C10b. Indicate the number of **platelet** units that were transfused in the following inpatient and outpatient settings during 2021. (This can be determined by location or by physician use.) If whole blood-derived platelets were transfused, please convert them to pooled equivalent units.¹

¹E.g., outpatient dialysis, rehabilitation, hospice, long term care, etc.

FACILITY NAME	NBCUS ID
All surgery (including transplant)	
	Number of PLT units transfused
Inpatient medicine (including	
hematology/oncology)	Number of PLT units transfused
Emergency Department	
	Number of PLT units transfused
Obstetrics/Gynecology	
	Number of PLT units transfused
Pediatrics, including critical care	
	Number of PLT units transfused
Neonates, including critical care	
, ,	Number of PLT units transfused
Adult critical care	
	Number of PLT units transfused
Outpatient and non-acute inpatient settings ²	
2 3. patient and non acate inpatient settings	Number of DLT units transfused

C11. During 2021, did your institution routinely order plasma transfusions to non-pediatric patients based on:

- 0 Weight based dosing (e.g., 20mL/kg)
- O A standard number of units regardless of patient weight (e.g., 4 or 6 units)
- O Dosage varies based on level of coagulation factor deficiency, INR, or degree of bleeding
- O Number of units ordered is not consistent with any of the above

C12a. During 2021, did your institution routinely order **prophylactic platelet** transfusions to non-pediatric patients based on:

- O A standard number of units regardless of patient weight (e.g., 4 or 6 units)
- O Dosage varies based on level of thrombocytopenia or degree of bleeding
- O Number of units ordered is not consistent with either of the above

C12b. During 2021, did your institution routinely order **therapeutic platelet** transfusions to non-pediatric patients based on:

- O A standard number of units regardless of patient weight (e.g., 4 or 6 units)
- O Dosage varies based on level of thrombocytopenia or degree of bleeding
- O Number of units ordered is not consistent with either of the above

¹ If any individual units of whole blood-derived platelets were transfused, convert these to a pooled equivalent. For example, if 200 platelet pools and 100 individual whole blood-derived platelet units were transfused and 5 individual platelet units are included per pool, then 220 units (200 + [100/5]) should be recorded.

²E.g., outpatient dialysis, rehabilitation, hospice, long term care, etc.

blood components for religious, cultural, or personal reasons?

o Yes

FACILITY NAME	NBCUS ID
C13. During 2021, what was the average whole dollar amount ye components? (Include discounts in your calculations. If you do not applicable". CPT/HCPCS codes are in parenthesis.)	
Red cells, leukoreduced (P9016)	\$
	Dollar amount paid per unit
	☐ Not applicable
Apheresis platelets, leukoreduced (P9035)	
, , , , , , , , , , , , , , , , , , , ,	Dollar amount paid per unit
2 11 1 1 1 1 1 1 1 1 (2272)	☐ Not applicable
Pathogen-reduced apheresis platelets (9073)	\$
	Dollar amount paid per unit
	☐ Not applicable
Plasma, single donor, frozen within 8 hours of phlebotor	ny (P9017) \$ Dollar amount paid per unit
	Bollar amount pard per drift
	☐ Not applicable
Plasma, frozen between 8 and 24 hours of phlebotomy (P9059) Sollar amount paid per unit
	_
Construction that and AUT (DOMA)	☐ Not applicable
Cryoprecipitated AHF (P9012)	\$
	Dollar amount paid per unit
C14 During 2021 did your institution have a policy to transfuse	☐ Not applicable
C14. During 2021, did your institution have a policy to transfuse	only leukoreaucea components:
o Yes	
o No	
C15. During 2021, did your institution have a policy to only trans	fuse irradiated components?
o Yes	
o No	
C16. During 2021, did your institution have an established progra	am to manage patients who refuse any or all

FACILITY NAME	WRCO2 ID
o No	
C17a. During 2021, did your institution have a transfusion O Yes O No	safety officer (TSO)?
(if no, skip to C18) C17b. If yes, how many full-time equivalent TSOs? (Considequivalent)	er two part-time employees as a single full-time Number of TSOs
C17c. Is the TSO employed by your institution or by the blo Institution employee Blood center employee	ood center?
C18. During 2021 at your institution, how many whole blo	od/red blood cell crossmatch procedures were
Performed by any method	Number of crossmatch procedures
Electronic crossmatch	Number of crossmatch procedures
Manual serologic crossmatch	Number of crossmatch procedures
Automatic serologic crossmatch	Number of crossmatch procedures
C19a. Has your institution implemented typing of red bloogenotyping)? O Yes O No (if No, skip to C20)	d cell antigens using a molecular assay (e.g.,
C19b. How many red blood cell units from donors who we transfused by your institution in 2021?	ere genotyped (e.g., using a molecular assay) were
C20. How many samples (patient specimens submitted for during 2021?	Number of units testing) did your institution receive at the blood bank
	Number of samples

FACILITY NAME NBCUST	υ
C21. Does your institution have an electronic system for tracking transfus O Yes O No	ion-related adverse events?
C22a. Did your institution collect data on sample collection errors (e.g., wood on Yes O No (if no, skip to C23)	rong blood in tube) during 2021?
C22b. How many transfusion sample collection errors were reported duri	
C23. How many transfusion-related adverse reactions were reported to t (Count only the number of reactions that required any diagnostic or there	
Total reactions	Number of reactions
Complete below to indicate how many of each type of reaction occurred:	
Life-threatening (required major medical intervention following transfusion)	Number of reactions
Transfusion-related acute lung injury (TRALI)	Number of reactions
Transfusion-associated circulatory overload (TACO)	Number of reactions
Acute hemolytic transfusion reaction (ABO)	Number of reactions
Acute hemolytic transfusion reaction (other antibodies)	Number of reactions
Delayed hemolytic transfusion reaction	Number of reactions
Delayed serologic transfusion reaction	Number of reactions
Febrile, non-hemolytic transfusion reaction	Number of reactions
Hypotensive transfusion reaction	

FACILI	TY NAME			NBCUS IE		-
Post-	transfusion	nurnura			Number of reac	tions
PUSI-	ti alisiusioii	purpura			Number of reac	tions
Trans	fusion-asso	ciated dyspnea			Number of reac	tions
Trans	sfusion-asso	ciated graft-vs-ho	st disease		Trainiber of reac	CIONS
					Number of reac	tions
Trans	sfusion trans	mitted bacterial i	nfection		Number of reac	tions
Trans	fusion trans	mitted parasitic in	nfection			
					Number of read	tions
Trans	fusion trans	mitted viral infect	tion		Number of reac	tions
					Number of reac	LIOIIS
Mild	to moderate	e allergic reaction			Number of read	tions
					Number of reac	LIOIIS
Sever	e allergic re	action			Number of reac	tions
¹ Evample	as includa vasanı	receive blood procesure o	support, intubation, or tra	anafar to the ICLI	Number of reac	elons.
Ехапіріє	es iliciude vasopi	essors, blood pressure s	support, intubation, or the	ansier to the ico		
C24. D	uring 2021.	which of the follo	wing bacterial risk	control strategies w	vere used for plate	lets by the blood
	_		used at your facili	_	rere accurrer place	
	Primary cu	ılture performed ı	no sooner than 24	hours		
	Large volu	me, delayed samp	oling no sooner th	an 36 hours without	secondary	
			oling no sooner th	an 48 hours		
		reduction technol	ogy			
	Unknown					
C25a. I	Does your ir	stitution perform	any kind of pre-tr	ansfusion bacterial t	testing on platelets	s? This does not
include	e testing per	formed by the blo	ood collection faci	lity.		
0	Yes					
0	No (if no, s	skip to C26)				
C25b.	Indicate wha	at methods are us	ed by your institu	tion to test for bacte	erial contaminatior	1.
		Secondary	Secondary	Rapid test ¹	Not tested	Not applicable

FACILITY NAME		NBCUS ID			
	culture performed no sooner than Day 3	culture performed no sooner than Day 4			
Apheresis platelets					
WBD platelets, single					
WBD platelets, pooled					
C25c. How many o	red rapid tests includ confirmed positives e performed no soo	and false positives		the following met	thods during 2021?
Number	tested		Number tested		
Number	of confirmed positi	ves	Number of conf	irmed positive	
Number	of false positives		Number of false	positives	
Number	of indeterminate re	esults	Number of inter	mediate results	
Not appl	icable				
Secondary culture	e performed no soo	oner than Day 4			
Number	tested		Number tested		
Number	of confirmed positi	ves	Number of conf	irmed positive	
Number	of false positives		Number of false	positives	
Number	of indeterminate re	esults	Number of inter	rmediate results	
Not appl	icable				

FACILITY NAME	NBCUS ID
Number tested	Number tested
Number of confirmed positives	
	Number of confirmed positive
Number of false positives	Number of false positives
Number of indeterminate results	
	Number of intermediate results
Not applicable	
C26a. During 2021, did your institution transfuse platelets O Yes	treated with pathogen reduction technology (PRT)?
O No (if no, skip to end of section C)	
C26b. During 2021, how many PRT-treated apheresis plate	elet units were transfused?
	Number of units
Note: The following questions were added specifically to gutilization in 2020 .	gain information on the impact of COVID-19 on blood
Supplemental Section C: Impact of COVID-19 Pandemic or	Plood Transfusion in 2020
SC1. During each month in 2020, how many units of allog	
	eneic reu blood cens did your mstitution transiuse:
January	Number of units transfused
February	
	Number of units transfused
March	Number of units transfused
April	
	Number of units transfused
May	Number of units transfused

ITY NAME	NBCUS ID
June	
Julie	Number of units transfused
July	Number of units transfused
August	Number of units transfused
C	Number of units transfused
September	Number of units transfused
October	
	Number of units transfused
November	Number of units transfused
December	
	Number of units transfused
waita a a da wa a dhair 2000 da a wa a a a	
	y units of apheresis platelets did your institution tran
January	Number of units transfused
February	Number of units transfused
March	Number of units transfused
March	Number of units transfused
April	Number of units transfused
May	Trainibel of allies trainstaged
	Number of units transfused
June	Number of units transfused
July	
·	Number of units transfused
August	Number of units transfused
September	
	Number of units transfused
October	

FACILITY NAME	NBCUS ID
	Number of units transfused
November	
December	Number of units transfused
December	Number of units transfused

¹Exclude whole blood derived platelets from the number of units transfused.



Survey Glossary

Apheresis collection procedure: One apheresis collection procedure is one apheresis donation from which multiple units of a single blood products or multiple products can be produced.

Autologous: Self-directed donations.

FACILITY NAME	NBCUS ID	

Deferrals: The number of donors deferred for specific reasons:

- a) Donors deferred for low hemoglobin do not meet the current FDA blood hemoglobin level requirements for blood donation.
- b) Deferrals for other medical reasons may include the use of medications on the medication deferral list, growth hormone from human pituitary glands, insulin from cows (bovine, or beef, insulin), Hepatitis B Immune Globulin (HBIG), unlicensed vaccines, or presenting with physical conditions or symptoms that do not qualify a person to be a blood donor.
- c) High-risk behavior deferrals include deferrals intended to reduce the risk of transmission of infectious diseases including HIV and hepatitis viruses. Examples of questions intended to identify these risks are sexual contact (e.g., men who have sex with men (MSM)) and non-medical injection drug use questions.
- d) Travel deferrals are deferrals for travel to a specific region of the world.

Directed: Directed units are those which have been donated by a family member or friend of the patient as a result of a patient request to be transfused with blood from a specific donor.

Distributed: Units that have fulfilled all processing requirements and have been made available for transfer to customers.

Donation: The collection of a unit of blood or blood component from a volunteer donor.

Dose/Dosage: A quantity administered at one time, such as a specified volume of platelet concentrates.

First-time allogeneic donor: A donor who is donating for the first time at your center.

High-risk behaviors: Behaviors associated with an increased risk of bloodborne viral infection (e.g. nonmedical intravenous drug use, incarceration, high-risk sexual contact

Imported: Units not collected by your institution, but obtained by your institution from another institution for distribution to a transfusion facility.

Modify: Procedures applied by a blood center, hospital blood bank, or transfusion service that may affect the quality or quantity of the final product (e.g., irradiation, leuko-filtration, or production of aliquots of lesser volume).

MSM: Men who have sex with men.

Outdated: Units that expire on your shelf.

Plasma:

- a) Plasma, frozen within 24 hours of phlebotomy (PF24): plasma separated from the blood of an individual donor and placed at -18 C or colder within 24 hours of collection from the donor.
- b) Fresh frozen plasma (FFP): Plasma frozen at -18 degrees C within 8 hours of collection.
- c) Plasma, Jumbo: FFP having a volume greater than 400 mL.

FACILITY NAME NBCI	JS ID
--------------------	-------

- d) Plasma frozen within 24 hours of phlebotomy and held at room temperature up to 24 hours after phlebotomy (PF24RT24): Plasma held at room temperature for up to 24 hours after collection and then frozen at -18 C or colder.
- e) **Thawed plasma:** FFP, PF24, or PF24RT24 that has been thawed and held at 1 to 6 C from 1 to up to 5 days after thawing.

Recipient: A unique individual patient receiving a transfusion one or more times in a calendar year.

Repeat allogeneic donor: A donor who has previously donated a blood component.

Severe Donor-Related Adverse Events: Adverse events occurring in donors attributed to the donation process that include, for example, major allergic reaction, arterial puncture, loss of consciousness of a minute or more, loss of consciousness with injury, nerve irritation, etc.¹

Transfusion Related Adverse Reactions: An undesirable response or effect in a patient temporally associated with the administration of blood or blood components. For a list of adverse reaction types and case definitions, visit http://www.cdc.gov/nhsn/PDFs/Biovigilance/BV-HV-protocol-current.pdf.

Transfusion Service: A facility that performs, or is responsible for the performance of, the storage, selection, and issuance of blood and blood components to intended recipients.

Whole blood collection procedure: One whole blood collection procedure is one donation of whole blood from which red blood cells, plasma, platelets, and cryoprecipitate can be prepared.

¹AABB Donor Hemovigilance Working Group grade 2 or higher (e.g., adverse event with duration > 2 weeks; resulted in limitation in activities of daily living; or required transport to emergency department, sutures, or antibiotics). See https://www.aabb.org/docs/default-source/default-document-library/resources/severity-grading-tool-for-donor-adverse-events.pdf?sfvrsn=ff563263_4.