

Inpatient Clinical: Blood Product Transfusion

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Ordering Blood

Order blood products



Providers should manage their own orders. If you need to enter verbal or telephone orders for blood products, follow the steps in this section.

Order blood transfusions

When ordering blood, you must select both a prepare order for the blood bank. Order Sets and Quick Lists include this order and other transfusion-related labs and medications

1. To find blood Order Sets, enter "blood" as a search term. If you're working with a pediatric patient, enter "ped blood" to narrow your search.
2. In the Transfusion Orders section, select a blood product and then fill out the details for both:
 - A prepare order for the blood bank, and
 - A transfuse order for the nurse
3. Select any other transfusion-related orders and sign the Order Set.



Pediatric blood transfusions are ordered in milliliters or aliquots, not units. For pediatric patients, you must specify the volume of blood to transfuse in both the Prepare order and the Transfuse order.

Order a massive blood transfusion

Massive transfusion protocols are single orders, not Order Sets.

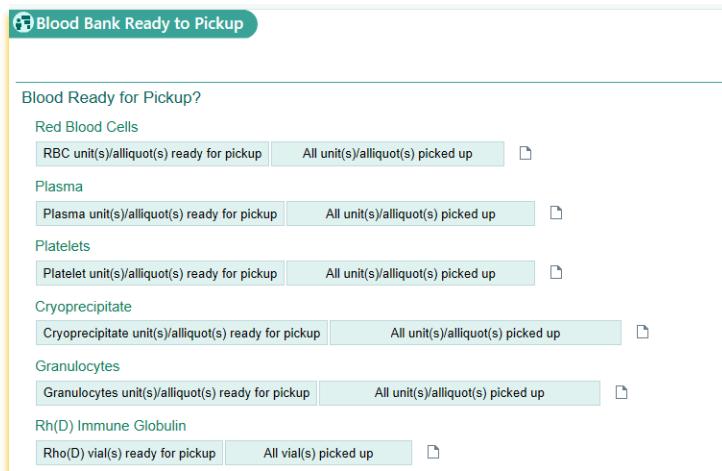
1. In the **Place new orders or Order Sets** field of the sidebar, search for "mtp".
2. Click the Massive Transfusion Protocol order to review the order details.
3. In the comments, add any special instructions for the nurse and sign the order.

Inpatient Blood Administration

Blood Readiness Notification

Blood Bank Technologist Documentation:

1. The Blood Product type that is **ready for pick up** will be documented by the Blood Bank Technician



Inpatient Nurse Notification:

1. A **notification Task** will appear in the Brain and Brain Sidebar notifying RN that the specific blood product is ready for pick up.



- Click on the **Popup Report Viewer** hyperlink in the task to review details or comments from the Blood Bank on this Blood Product.



- Nurses are **not** to complete this task on the Brain. Once **all** blood products are picked up from the Blood Bank, the **blood bank tech** will mark the flowsheet accordingly which will then remove the task from the Brain as well as the Banner from all blood reports.

2. **Blood Ready for Pickup Banner** will display in the Nursing Overview Report as well as all blood administration reports.

- Click the Banner to review any details or comments from Blood Bank related to this product.

3. Based on the documentation by the Blood Bank Tech, Additional **flowsheet rows** will auto populate in the **Blood Administration Flowsheet** indicating which product is ready for pickup

4. Once **All blood products** are picked up, Only the blood bank technician will be able to **mark** the flowsheet accordingly and all banners will be removed, and the brain task will be marked completed

Prepare to transfuse blood

1. In Flowsheets, open the **Blood** flowsheet.

- Usually, this tab appears automatically when a patient has a blood order. If the tab doesn't appear automatically:
- Make sure the order is active. If the order is signed and held, you must release the order before it becomes active.
- Use the search field to find the blood flowsheet.

2. Confirm that blood is available for pick up as noted in Blood Notification Section above.

3. Document vital signs within 30 Minutes Prior to releasing and printing the blood release form and picking up the blood

IMPORTANT TO NOTE: Blood Bank **will not release** the blood without the vital signs displaying in the Request form. Make sure the vitals are listed on the request form before taking the form to the blood bank.

- If you printed pick up slip prior to documenting vitals you will see this message below in red on the requisition slip:

Transfusion duration per unit/ aliquot
(hrs): 1

Blood will not be released if complete recent VS are not in Hyperspace (BP, Temp, Pulse, RR), with the exception of emergency release blood products

No data found.

Not Used by SOM, JCMC, or NBR

Blood Bank Use Only (if applicable)

Unit Number:

Issued To:

- Simply return to flowsheets, add vital sign documentation, and return to transfusion report and reprint the requisition form

4. Complete the Pre-Transfusion Documentation rows

5. When you're ready to release the blood products, click **Transfusion Release Report** above the table of contents.

File Add Rows LDA Avatar Add Col Insert Col Data Validate Hide Device Data Last Filed Reg Doc Graph Go to Date Response

Vitals Basic Assessment I/O Daily Cares/Safety Screenings **Blood** Adult/OB Intervention... C-SSRS (Short Version)

Search (Alt+Comma) Accordion Expanded View All 1m 5m 10m 15m 30m 1h 2h 4h 8h 24h Interval Start: 0700 Reset Now

Transfusion Report

Begin Blood Transfusion

Transfuse RBC: 2 Units (0 of 2 released)

Hide All Show All

Vitals Pre-Transfusion Documentation \$ Blood Admin Completion Oxygen Therapy Respiratory Assessment

ED to Hosp-Admission (Current) from 9/2/2021 in SOM 2W PAV CARDIAC with Sam S...

9/2/21 9/3/21

1324 1330 1410 1600

Vitals

BP	120/72	118/65	108/68
Temp	38.2 (100.8)	38.4 (101.1)	37.6 (99.6)
Temp Source	Oral	Oral	Tympanic
Heart Rate	110 !	120	80
Resp	20	18	15

Pre-Transfusion Documentation

Previous Transfusion?			
Authorization Verified?			
Pre-Meds Given?			

6. In the Transfusion Release Report, click the **Release** link. A blood release form (pick up slip) prints for the first unit of blood and flowsheet rows appear for you to document transfusing that unit.

Transfusion Report

Links 1: Policies & Procedures 2: Intranet Page RWJ Somerset

Consents No documents found

Release 1 instance of the order for each aliquot or unit that has been dispensed

Blood Product Orders (From admission, onward)

Ordered	09/03/21 0634	Prepare RBC: 2 Units	Blood - Once	Start 09/03/21 0634
"And" Linked Group Details				

Completed Blood Product Orders (12h ago, onward)

None

General Blood Transfusion Orders (From admission, onward)

Transfusions to release

Ordered	09/03/21 0634	Transfuse RBC: 2 Units	Transfusion (0 of 2 released)	Start Unscheduled
"And" Linked Group Details				

Transfusion Orders to Complete (From admission, onward)

None

Blood Product Status Tracking

Product	Pending	Issued	Verified	Transfusing
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Release

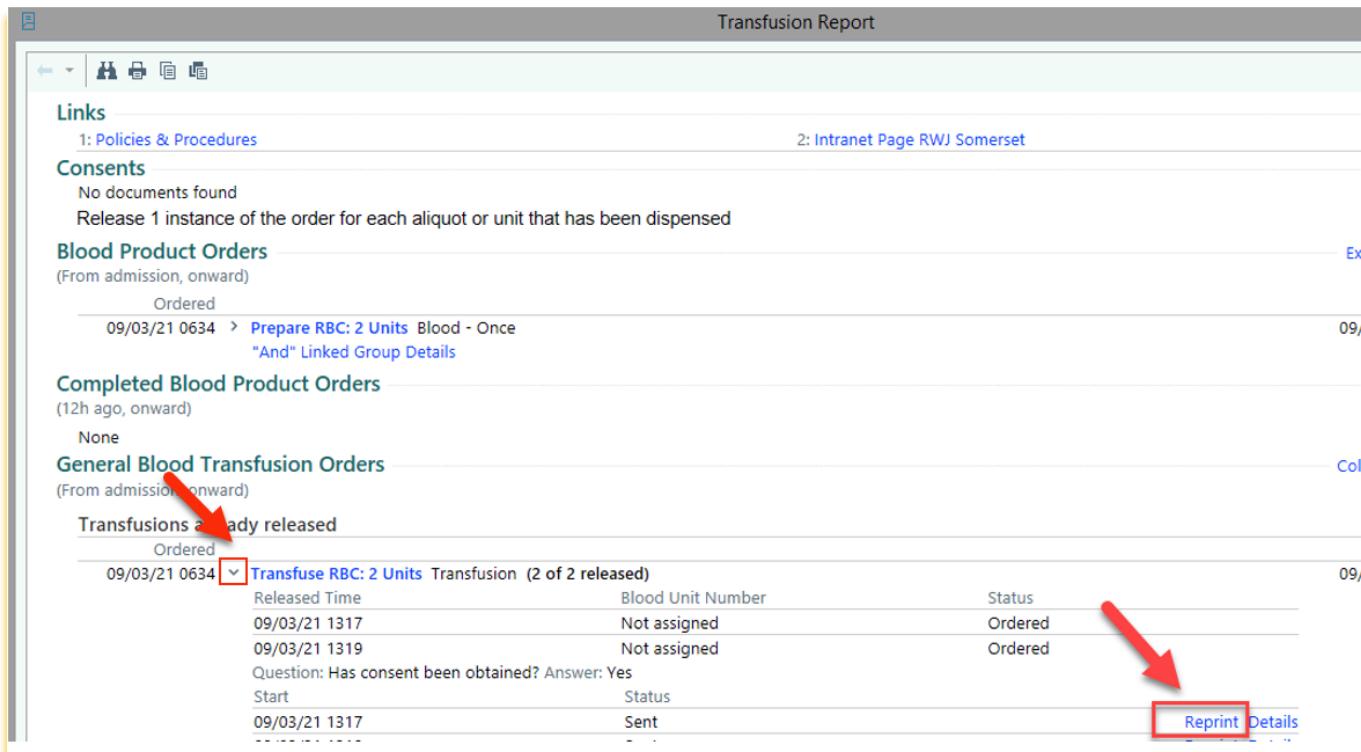
Reprint Blood Pickup Slip

The reprint hyperlink will appear for selection on single unit of blood orders.

If multiple units of blood are order, and the pickup slip did not print or there was a printer error:

1. Open chart to the **Blood Flowsheet template**2. Click the **Transfusion Report Button**

3. Select the arrow next to the **General Blood Transfusion Order** to find the unit with the correct date and time of the unit released

4. Click **Reprint** hyperlink

Transfusion Report

Links: 1: Policies & Procedures 2: Intranet Page RWJ Somerset

Consents: No documents found

Release 1 instance of the order for each aliquot or unit that has been dispensed

Blood Product Orders: (From admission, onward)

Ordered: 09/03/21 0634 > Prepare RBC: 2 Units Blood - Once "And" Linked Group Details

Completed Blood Product Orders: (12h ago, onward)

None

General Blood Transfusion Orders: (From admission, onward)

Transfusions already released: Ordered

Released Time	Blood Unit Number	Status
09/03/21 1317	Not assigned	Ordered
09/03/21 1319	Not assigned	Ordered

Question: Has consent been obtained? Answer: Yes

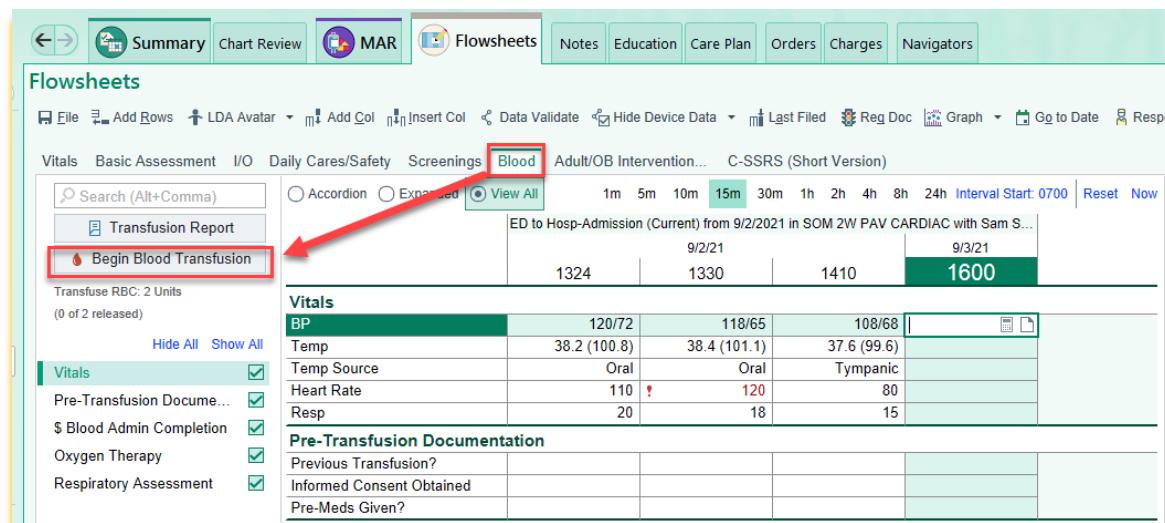
Start	Status
09/03/21 1317	Sent

Reprint Details

Start a blood transfusion

The Blood Product Administration Module is not intended to serve as a substitute for a clinician's professional judgment and decision making, and you should not delay a needed blood transfusion because of documentation or software workflow issues.

1. Open to the Blood Flowsheet template
2. Click **Begin Blood Transfusion** above the table of contents.



The screenshot shows the Flowsheets module in Epic. The 'Blood' tab is selected. On the left, there is a sidebar with checkboxes for 'Vitals', 'Pre-Transfusion Document', '\$ Blood Admin Completion', 'Oxygen Therapy', and 'Respiratory Assessment'. The 'Vitals' checkbox is checked. On the right, there is a table for 'ED to Hosp-Admission (Current)' with columns for Date (9/2/21), Time (1324, 1330, 1410), and a total (1600). Below the table is a 'Vitals' section with a table for BP, Temp, Temp Source, Heart Rate, and Resp. At the bottom is a 'Pre-Transfusion Documentation' section with tables for Previous Transfusion?, Informed Consent Obtained, and Pre-Meds Given?

- If and when the next units of blood are needed, follow steps 1-2 to release them.

Because pediatric patients receive blood in aliquots or mL instead of entire units, the blood bank sometimes dispenses blood from multiple units to meet the requirement. For example, when 60 mL of blood are ordered, 30 mL of the blood might come from one unit, while 30 mL comes from another unit. You must document each unit separately, even though they are all part of the same transfusion.

If dispenses blood in a unit larger than the ordered volume, determine whether to include the following information instead of or in addition to the above information: The blood bank sometimes dispenses a larger volume of blood than what was ordered, such as a 60 mL unit when 30 mL of blood are ordered (more likely for pediatric patients). Consult the ordered volume to determine the volume to document and administer.

- In the Blood Product Administration Module, begin with scanning the patient's wristband when prompted.
- Begin scanning the blood product barcodes:
 - If using a workstation on wheels you will follow the on-screen prompts to scan the barcodes on the blood product in order. After you scan a barcode, the value appears in the corresponding field(s).



Make sure **CAPS LOCK** is **NOT ON** when scanning the blood barcodes



b. If using the Rover handheld device, you can scan all barcodes on the blood product bag at one time

! [Click here](#) to review the **Scanning Blood Products using Rover Device vs Workstation on Wheels**

As of 3/12/24,

When initiating a single blood transfusion, the **VOLUME INFUSED** row will no longer appear in the blood administration window.

! However, when more than 1 unit is ordered and released, the subsequent administration windows will have a **Volume Infused** row. Do NOT document a volume until a blood transfusion is complete. Any volume entered in this field will be added to the total blood transfused (**intake**).

Associated Flowsheet Rows

Time taken: 12/14/2023 1111 Responsible Restore Show Details

If no new assessment is needed, check the box to link flowsheet rows to the previous assessment. Use All Previous Values

Transfuse leukoreduced RBC

Volume Infused (mL)

Vitals

BP

Temp

Heart Rate

Resp

5. Enter the most recent set of vital signs, verify the information on the Administration window and click **Accept**

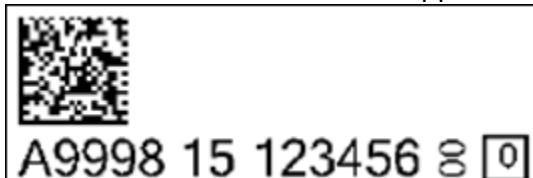
Document administering blood without a barcode scanner

If you can't scan the blood product and determine that the blood product should still be administered:

1. In the Blood Product Administration Module, enter the numbers below each barcode into the appropriate fields. Note that barcodes are case sensitive.
 - If you are using ISBT-128-labeled blood products, enter only the horizontal characters for the unit number. If your organization requires it, also enter the Check Character (the character that appears in a box).



- These same horizontal characters appear on labels with ISBT-128 compound barcodes.



2. Select an override reason (such as Barcode Unreadable) in the **Reason for not scanning** field and click **Accept**.

! If a warning appears informing you that the unit you scanned is linked to another patient:

- If the warning only mentions a unit number, make sure that the blood product is intended for this patient and then click **Dismiss** to bypass the warning. This warning usually means that there are two blood products with the same unit number and that one of them has already been given, but the user who documented the first unit didn't scan the product code.
- If the warning says that both the unit number and product number are linked to another patient, call the blood bank and <follow any other protocols> to make sure that the blood product is correct for the patient.

IMPORTANT TO NOTE:

Downtime procedures can be used when needed if blood product administration workflow scanning process is not successful. **CRITICAL NOTE:** Be mindful of policy for blood timing when picked up to timing to be returned to blood bank prior to expiration to avoid blood wastage.

Complete blood administration documentation

1. When the Dual Sign-Off window opens, ask another nurse to review the administration information and complete dual signoff. After the other nurse signs off, the unit number and rate appear in the Event Log.

2. Document the 15-minute vital signs in flowsheets
 - a. Click **Add Col or Insert Col** for a time column **exactly 15 minutes after starting blood**
 - b. Document vitals

document vitals on time column exactly 15 minutes after starting the transfusion

	7/6/2022	7/7/2022			
	1324	1330	0804	0845	0900
Vitals					
BP	120/72	118/65	110/70	110/70	110/70
Temp	38.2 (100.8)	38.4 (101.1)	37.1 (98.8)	37.1 (98.8)	37.1 (98.8)
Temp Source	Oral	Oral	Oral		Oral
Heart Rate	110 !	120	78	78	78
Resp	20	18	18	18	18

Pre-Transfusion Documentation

Previous Transfusion?					P
Authorization Verified?					
Pre-Meds Given?					

Transfuse leukoreduced RBC - Peripheral IV 7/6/2022 Left For

Status: Transfusing -- Unit: C1234 07 123456 P-E0472V00					
Action					New Bag
Rate					100
Volume (mL)					
Blood Admin Supplies					
Suspected Reaction?					

3. Document other assessments as needed throughout the transfusion.

Stopping a blood transfusion

When the blood is finished transfusing, document stopping the transfusion and complete the flowsheet rows.

- Each unit of blood released and transfused has its own group in the blood flowsheet.
- When the transfusion is finished, document stopping the blood transfusion, confirm total volume of the product and complete the row to reduce clutter in the flowsheet.

IMPORTANT: Vital signs must be reassessed and documented 6 minutes after blood transfusion has stopped.

Transfuse leukoreduced RBC

Unit: W1654 21 001059 S-E0424V00

Action

Rate

Volume (mL)

Blood Admin Supplies

Suspected Reaction?

Transfuse leukoreduced RBC

Unit: W1654 21 001062 1-E0424V00

1. Click **Add Col or Insert Col** to create a column for the time transfusion finished
2. Locate the Rate row, enter "0" to indicate that the transfusion is stopped. This will open the Blood Product Administration window. (Documenting a rate of "0" is the same as documenting an Action of "Stopped").
3. Click on Calculator in the volume row to verify/edit **total volume** intake of the blood product that was infused. Refer to the blood product bag to confirm the bag volume.

Action

Stopped

Date

06/16/2023

Time

1145

Comment

Route

intravenous

Site

Rate

0 mL/hr

Last Rate: 100 mL/hr (06/16/23 1000)

4. Document any required fields on the form.
 - a. Vitals must be assessed and documented when the transfusion is stopped (considered compliant if time column is within 6 minutes of transfusion stop time)
 - Note the new brain task for post transfusion vitals created to assist with compliance (8/23).

IMPORTANT NOTE:

- If the complete blood product has infused- **Refer back to the blood product bag to confirm the total volume marked on bag equals the total volume infused for this product.**
- If the blood product was stopped **prior** to completion due to a suspected reaction, calculate the total amount infused by clicking on the **Volume Calculator** in the volume infused section to review total and file that volume.

Action: Stopped

Associated Flowsheet Rows

Transfuse leukoreduced RBC

Volume (mL): Unit complete

\$ Blood Admin Completion

\$ Administration Complete: Unit complete

Accept & Complete, Accept, Cancel

5. If the transfusion completed without any suspected reactions, Click **Accept & Complete**

\$ Blood Admin Completion

\$ Administration Complete

Unit complete

Number of administrations being documented: 1

Complete the transfusion? Accept & Complete Accept Cancel

6. If there is a suspected reaction, Click **Accept** and return to the flowsheet to document the reaction as appropriate.

\$ Blood Admin Completion

\$ Administration Complete

Unit complete

Number of administrations being documented: 1

Complete the transfusion? Accept & Complete Accept Cancel

7. Complete documentation of the suspected reaction in the cascading rows and follow Blood Transfusion Reaction protocol.

Transfuse leukoreduced RBC

Status: Ordered -- Start: 08/11/21 1624

Blood Admin Supplies

Suspected Reaction? Yes

Suspected Transfusion Reaction

Blood Bank Notified?

Physician Notified?

Reaction Symptoms

Reaction Interventions

\$ Blood Admin Completion

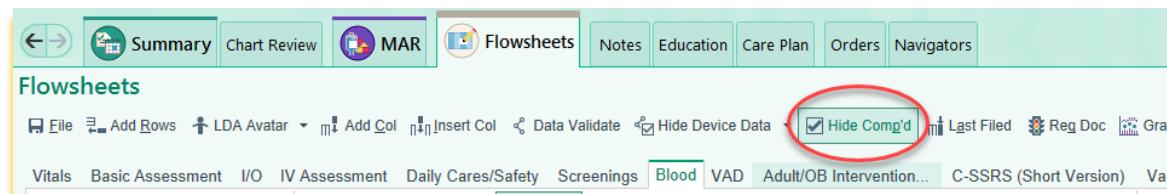
\$ Administration Complete

8. After documenting the suspected reaction, complete the Blood product flowsheet group for that unit by Right-Clicking on the blue hyperlink and select Complete Transfusion.

The screenshot shows the Blood product flowsheet for a patient. The flowsheet header includes fields for 'ED to Hosp-Admission (Current)' and 'Interval Start'. A 'Transfuse leukoreduced RBC - Peripheral IV 10/18/2021 Left Forearm' group is listed with a status of 'Stopped'. A context menu is open over this group, with the 'Complete Transfusion' option highlighted by a red box and arrow.

IMPORTANT TO NOTE:

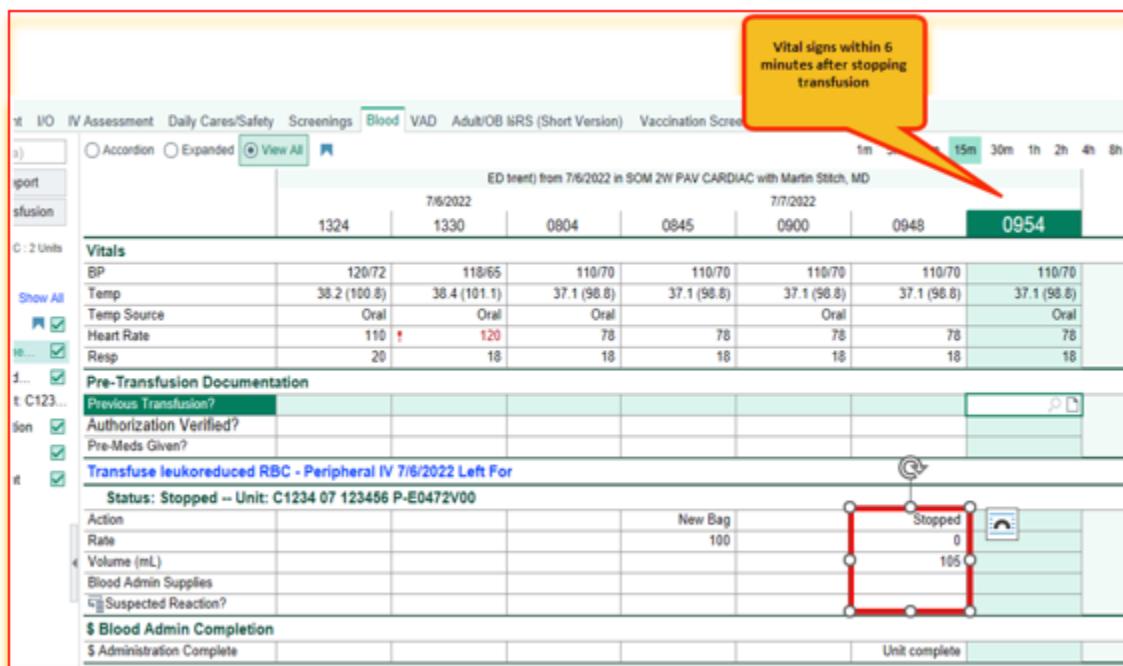
- Once the group is marked completed it will no longer be visible on the flowsheet.
- To view completed flowsheet groups, unselect the Hide Comp'd checkbox in flowsheet toolbar



- To reactivate the completed flowsheet group to edit or add documentation, right click and select **Reactivate the Transfusion group**

The screenshot shows the Flowsheets interface with a completed 'Transfuse leukoreduced RBC' group. The group is listed with a status of 'Completed 06/15/23...'. A context menu is open over this group, with the 'Reactivate Transfusion' option highlighted by a red box and arrow.

9. Check if vital signs documented is within **6 minutes** after the transfusion has been stopped, this is required. Otherwise, add or insert a column and document a set of VS within 6 minutes of the stop time.

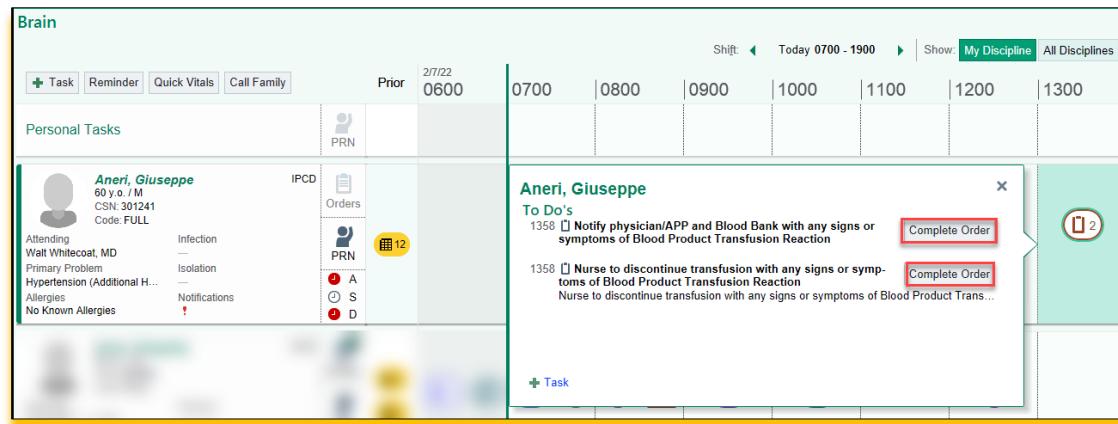


The screenshot shows a blood transfusion order in the Epic system. The order is for 'Transfuse leukoreduced RBC - Peripheral IV 7/6/2022 Left For' with a status of 'Stopped'. A yellow callout box highlights the text 'Vital signs within 6 minutes after stopping transfusion'. The interface includes a sidebar with 'Show All' and 'Blood' tabs, and a timeline at the top right.

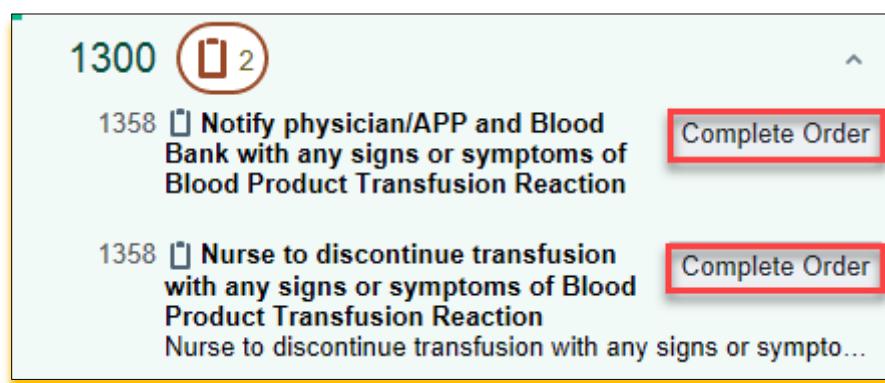
10. If you transfused only some of the ordered blood products and don't need the remaining units, ask the physician to discontinue the original Transfuse order so that the remaining units can no longer be released.

Complete the Blood Transfusion Order Tasks

- When the provider places an order for a blood transfusion, two additional tasks are generated in the Brain / Brain sidebar for the nurse to complete.
 - Blood Transfusion Order To-Do tasks in the Brain (Fig. 1) and Brain sidebar (Fig. 2).

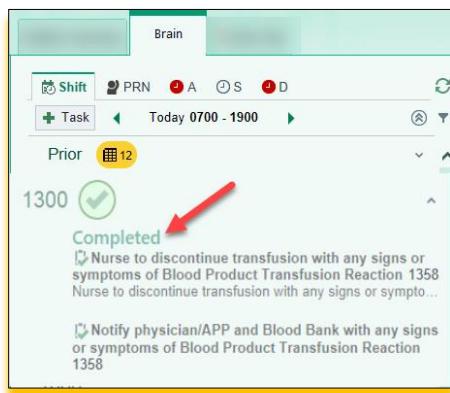


(Fig. 1)



(Fig. 2)

- After all units of blood products within the transfusion order has been completed (transfused), the Nurse clicks the **Complete Order button** indicating that the order has been fulfilled. The tasks will reflect a green checkmark/completed in that time row.
- These orders are only relevant for the blood transfusion and MUST be completed once the transfusion is finished. The orders will then drop off the active orders.



NOTE: Whether the patient had a suspected reaction or not, these To-Do tasks must be completed

Document a massive transfusion

For more [Click Here](#) to review the Mass Blood Transfusion Tipsheet

1. Acknowledge the massive transfusion order.
2. Call the blood bank to request the blood. The blood bank prepares the blood and releases the blood orders as needed.
3. When you receive the blood, administer the blood and complete dual signoff for the administration on paper.
4. When the transfusion is complete, document the massive transfusion in Flowsheets:
 - a. **Insert a column** for the time when the massive transfusion occurred.
 - b. Document the patient's vitals and any pre-transfusion documentation.

c. In the Massive Transfusion Protocol rows, document the **total volume** products transfused.

of blood

Document a reaction to blood transfusion

Document a transfusion reaction

1. Open the **Blood** flowsheet group.
2. Add or insert a column at the time when the reaction was noted.
3. Enter Yes in the **Suspected Reaction?** row.
 - Note the row information related to the Nursing procedure for management of suspected reaction to reference

The screenshot shows the Blood flowsheet group in the Flowsheets application. The 'Suspected Reaction?' row is highlighted with a red box and a red arrow points from it to the 'Row Information' section on the right. The 'Row Information' section contains a list of 10 steps for managing suspected transfusion reactions.

Suspected Reaction?

Row Information

NURSING PROCEDURE FOR MANAGEMENT OF SUSPECTED TRANSFUSION REACTION

- 1) Stop the transfusion immediately.
- 2) Check and record vital signs and symptoms electronically.
- 3) Complete transfusion record if not recording electronically.
- 4) Confirm the identity of the recipient by comparing the transfusion record, the blood/blood product component label and the patient ID band. A clerical discrepancy is a medical emergency.
- 4) Keep the line open by slow, normal saline drip using a new administration set.
- 5) Contact the bedside LP and the transfusion service immediately to report suspected transfusion reaction.
- 6) Order a transfusion reaction investigation.
- 7) Approval must be obtained from the bedside LP and the Transfusion Medicine Physician to restart the transfusion.
- 8) Promptly return to the Transfusion Service the transfusion record (must be completed if unable to document electronically) with the blood/blood product.
- 9) Send a properly labeled sample to transfusion services immediately for all suspected transfusion reactions to red cell products.

LIP - Licensed Independent Practitioner = house staff, house physician, attending physician or advanced practice nurse (APN)

4. Complete the additional rows that cascaded in the Suspected Transfusion Reaction group to finish documenting the reaction.

The screenshot shows the Suspected Transfusion Reaction group. It contains four rows: 'Blood Bank Notified?' (checkbox), 'Physician Notified?' (checkbox), 'Reaction Symptoms' (text input), and 'Reaction Interventions' (text input).

Suspected Transfusion Reaction

<input type="checkbox"/> Blood Bank Notified?				<input type="button" value=""/>
<input type="checkbox"/> Physician Notified?				
Reaction Symptoms				
Reaction Interventions				

Once documented by the nurse, the storyboard will display an alert for a possible transfusion reaction

Makayla Cantabria
Female, 22 y.o., 11/30/1998
MRN: 316000014
Bed: ICPD
Code: FULL (no ACP docs)
Current Programs: None
Patient Contacts:
Nelson, Janet
Mother

COVID-19: Travel Screened 9/3/2021
Isolation: None

This patient may be experiencing a react...

Sam Stethoscope, MD
Attending

ALLERGIES
No Known Allergies

Flowsheets

Blood

Vitals

BP	118/65	108/68	120/66
Temp	38.4 (101.1)	37.6 (99.6)	37 (98.6)
Temp Source	Oral	Tympanic	
Heart Rate	120	80	88

This patient may be experiencing a reaction to a blood product. Consider placing an order for a transfusion reaction workup. **Contact the Physician and Blood Bank immediately to report the transfusion reaction.**

The following actions are recommended:
Order: Transfusion reaction workup and evaluation

Order a transfusion reaction workup

When a patient meets the criteria for a blood transfusion reaction, begin the transfusion reaction investigation by having the provider order a workup as per policy and documenting the reaction.

BPA will populate for all clinicians if the physician has not entered the reaction workup.

Critical (1)

This patient may be experiencing a reaction to a blood product. Consider placing an order for a transfusion reaction workup. **Contact the Physician and Blood Bank immediately to report the transfusion reaction.**

Order **Do Not Order** **Transfusion reaction workup and evaluation**

Accept **Dismiss**

Document blood products refusal

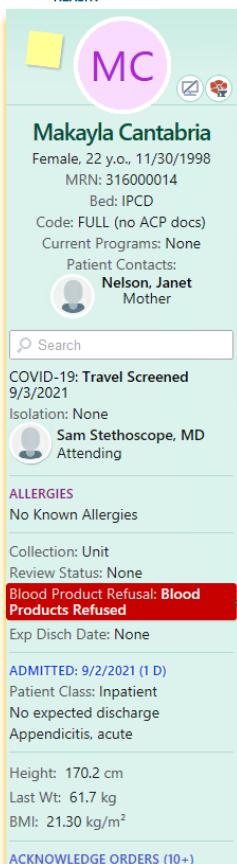
Upon admission the patient assessment is completed for blood transfusion acceptance. Based on that assessment and when the patient's response is "No, I do not want a blood transfusion even if it would save my life", a banner will be applied to the patient record identifying this refusal in the storyboard.

Accept Blood Transfusion

If Needed Would You Accept A Blood Transfusion If It Would Save Your Life?

Yes **No, I do not want a blood transfusion even if it would save my life** **Not sure, I will discuss with my physician** **Not able to assess**

Restore **Close** **Cancel**



Edit Incomplete Blood Documentation

Click [here](#) to review **How to Edit Incomplete Blood Documentation.**

Version #	Purpose of Change	Author	Date of Change
1.0	Initial Creation	dmartin	8.25.21
1.1	Updates	Dcastillo	10.20.21
1.2	Updates	Dcastillo	11.5.21
1.3	Updates	PSmith/Dcastillo	7.7.2022
1.4	Removed info on blood allocation	DCastillo	10.26.2022
1.5	Blood Notification Update	DMartin	2.20.23
1.6	Added important notes for vitals prior to printing requisition	DMartin	5.5.23
1.7	Updated reactive FLO Group	DMartin	6.15.23
1.8	Updated volume completion	DMartin	8.2.2023

1.9	Update rover scan vs WOW	Dmartin	11.15.23
2.0	Clarified volume completion	Dmartin	12.14.23
2.1	Added Correct Incomplete Blood Doc/Updated Authorization Verified	Abandayrel	2.6.24
2.2	Removed Volume row for single blood transfusion admin initiation	Abandayrel	3.11.24