Canadian Blood Services
Société canadienne du sang

Blood Component and Product Disposition System

User Guide

Guide Version 3.0.1.1

See revision history on page 2

Revision History

Version	Effective Date	Detail
3.0.1.1	2016-09-30	1. Revision history added. 2. Appendix A; definitions and examples of Redistributed and Transferred revised for clarity in all blood component categories.

Table of Contents

1.0 Introduction

The *Blood Component and Product Disposition System* is a web-based application developed and hosted by Canadian Blood Services for hospitals to provide disposition data for blood components and plasma protein products (including solvent/detergent treated plasma). The system also provides an opportunity for hospitals to input data on blood component inventory; important information used in contingency planning.

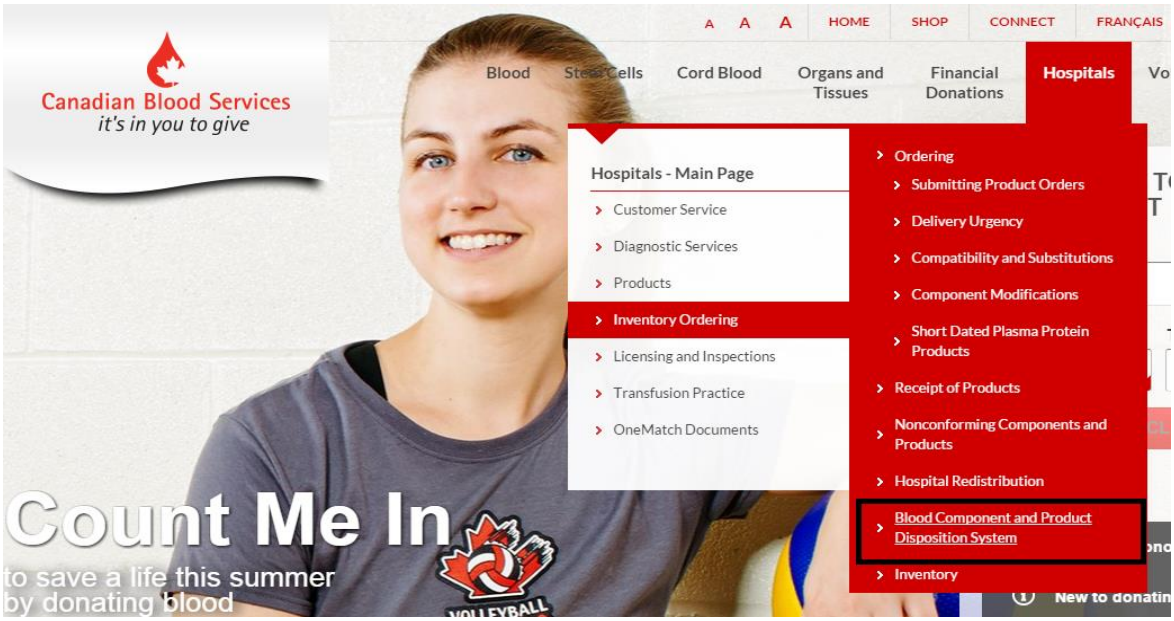
2.0 Data Submission Frequency

Disposition – Hospitals are requested to submit disposition data (for the previous month) for all blood components and plasma protein products by the 10th working day of each month. If no data to report hospitals are required to submit reports for all blood components, plasma protein products and SD plasma populated with zeros.

Inventory – Hospitals are encouraged to provide inventory data on a daily basis (7 days/week) via the available inventory web-page. Should inventory challenges be experienced, hospitals may be requested to provide inventory data on a more frequent basis (multiple times/day) and within a specific timeframe.

3.0 System Access

Users can access the *Blood Component and Product Disposition System* via www.blood.ca in the Hospital section.



Users may have access to one or more hospitals per their access requirement as communicated to the Canadian Blood Services Account Management Team (Hospital Liaison Specialist). Users may have either full access (enter data and view) or view only capability.

3.1 **Internet requirement** – an internet connection with a web browser; Internet Explorer 7 of higher (equivalent Safari, Firefox, Chrome)

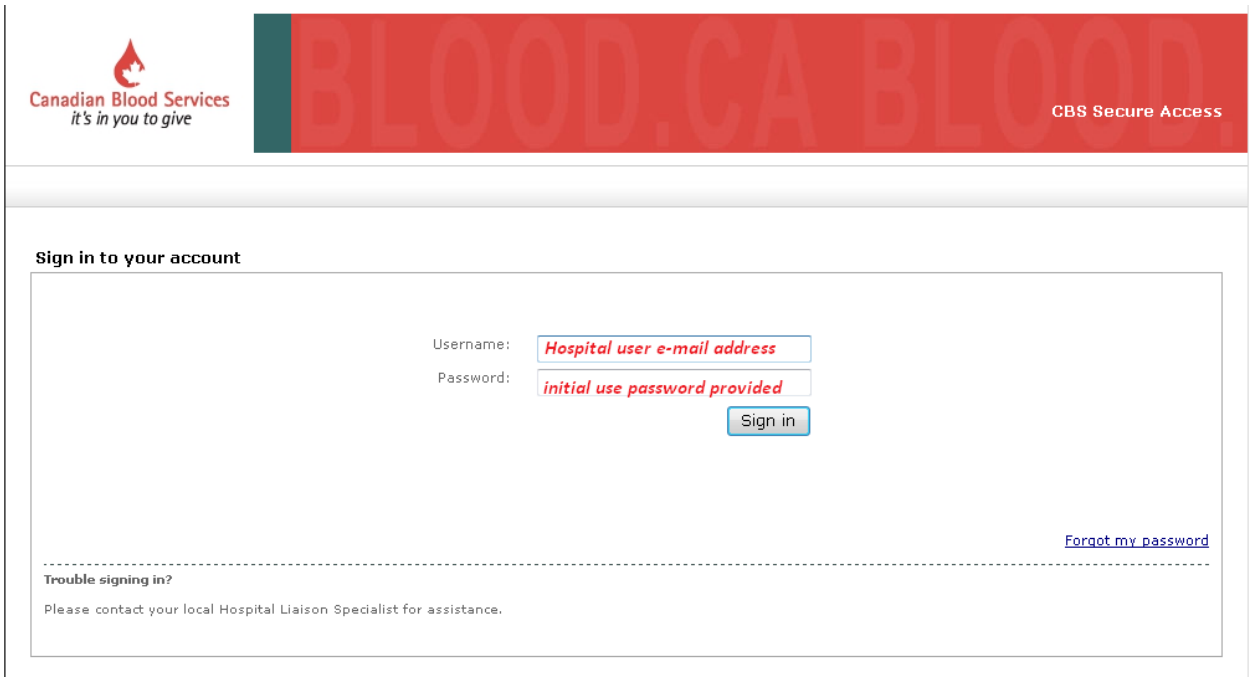
3.2 **Login** – a default password is provided to users for initial access. The user is prompted to change their password on initial login.

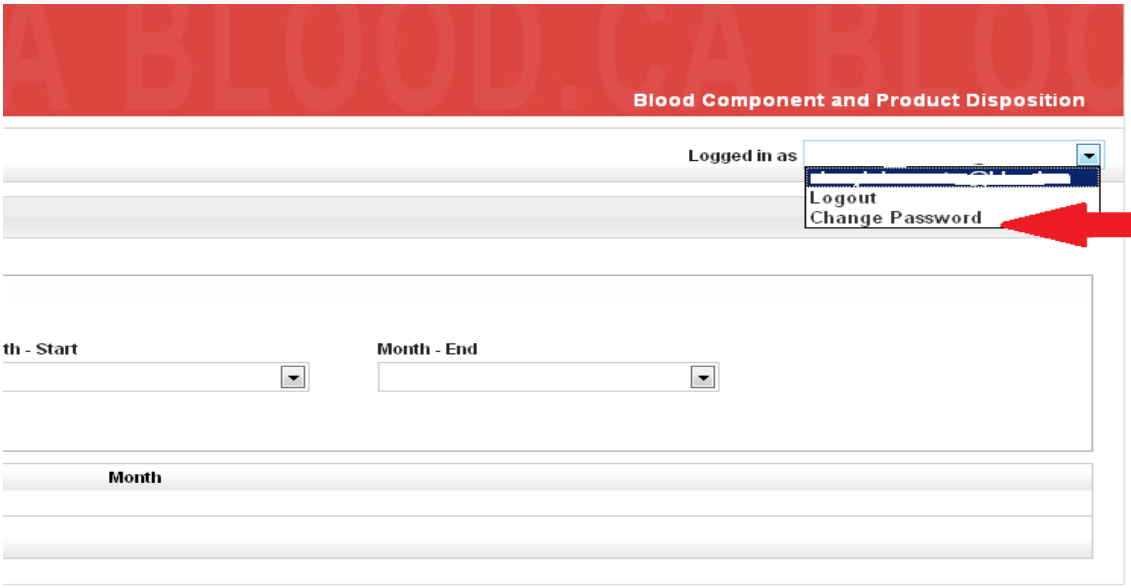
Username: hospital assigned e-mail address (all lower case) **
Password: default provided for initial login then user creates unique password*. Passwords do not expire, however users are encouraged to change their password 2-3 times/year.

* Criteria - minimum 8 characters, no spaces and contain the following:

- A capital letter
- A lowercase letter
- A number

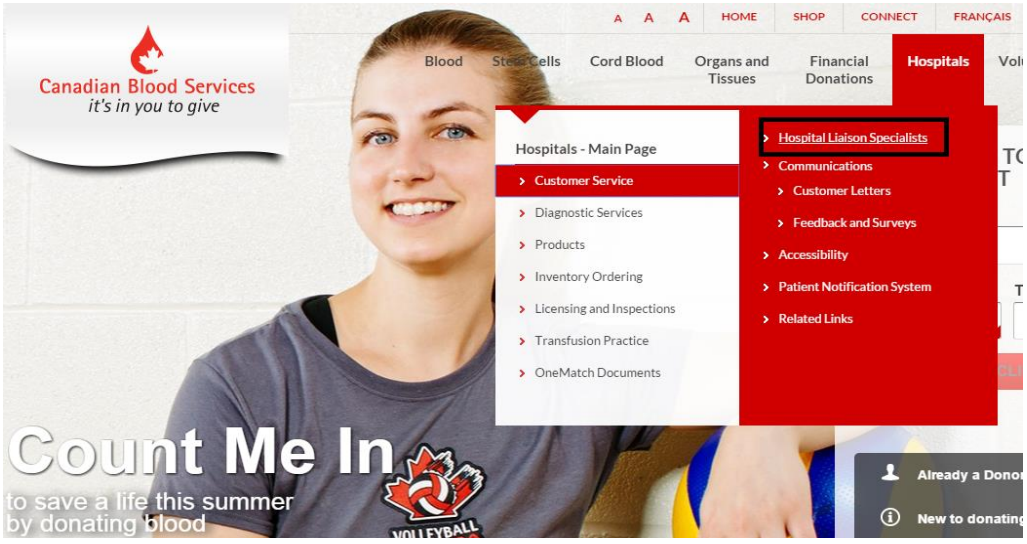
**** Notify a Hospital Liaison Specialist if there is a change to a user hospital assigned e-mail address**





3.3 **Logout** – **u**sers are asked to logout of the system after use. This is in accordance with internet web-system best practice.

3.4 **Assistance and support** – direct all inquiries to a Hospital Liaison Specialist. Hospital Liaison Specialist Contact information can be found in www.blood.ca in the Hospital section.



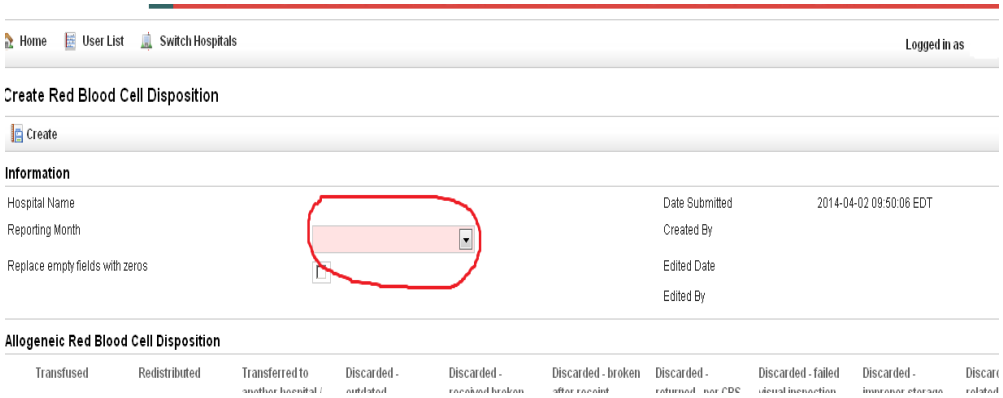
3.5 **Session timeout** – for security reasons, **each web-page** in the system will timeout after 60 minutes. Data entered into fields that is not saved by the user (click 'Create'

to save data) will be lost after 60 minutes. To complete a previously started and saved report, click the report, then 'Edit' and enter the remaining data. Users are required to log out and log back in as needed.

4.0 System Features

Further details on how to use system features are provided in Section 5.0 - Process for Specific Functions.

4.1 Required fields – these fields are shaded pink and must be completed for successful data submission. Required fields may vary on each web-page.

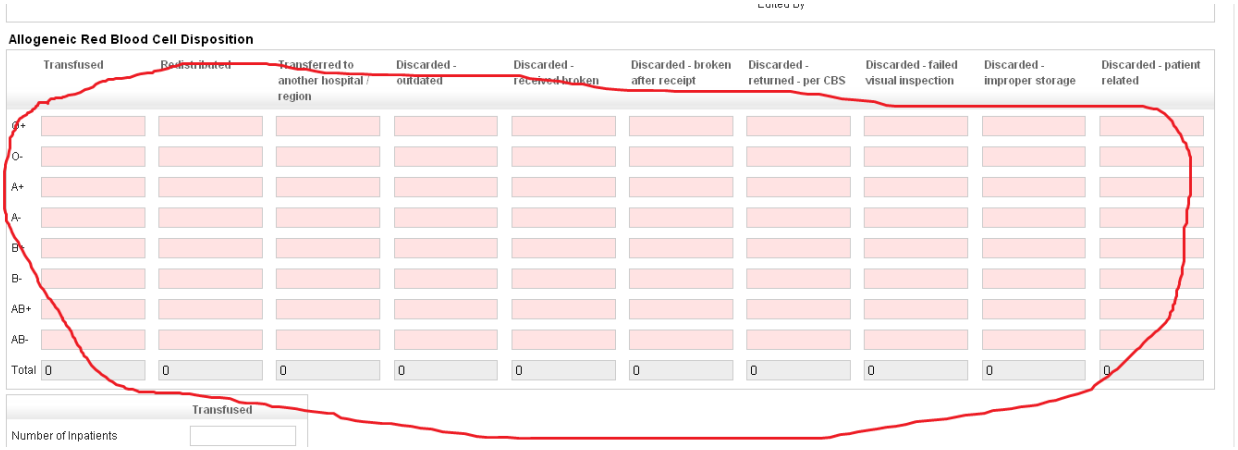


4.2 ABO versus totals – each Hospital's disposition reporting ability is on file at Canadian Blood Services. Hospitals are encouraged to report all dispositions of blood components by ABO. To change a hospital reporting preference, contact a Hospital Liaison Specialist.

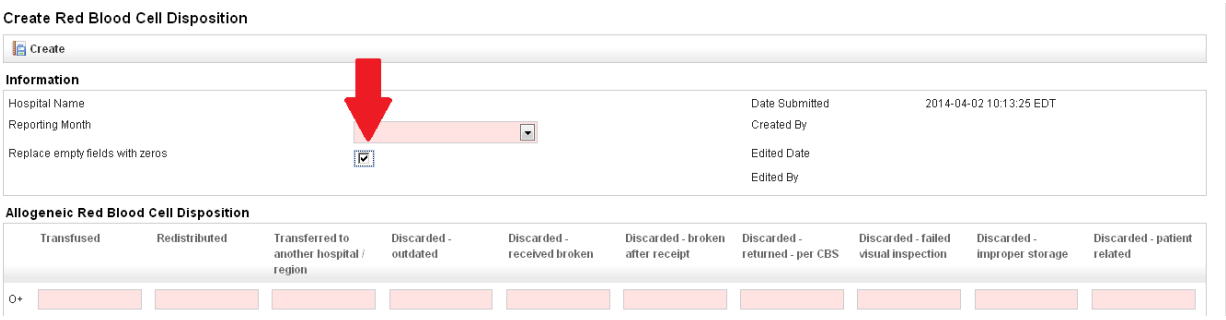
4.2.1 NOTE: System capabilities dictate that a hospital may switch from reporting by totals to ABO/Rh but not from ABO/Rh to totals.

Totals only (outdate discards still required by ABO):

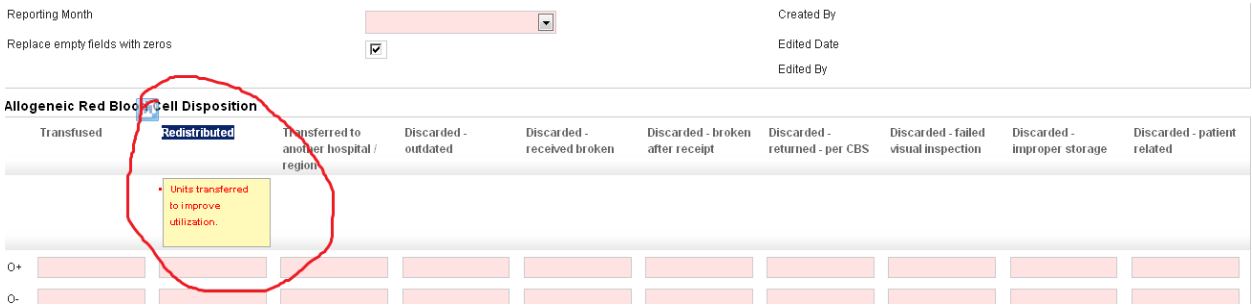
Reporting by ABO:



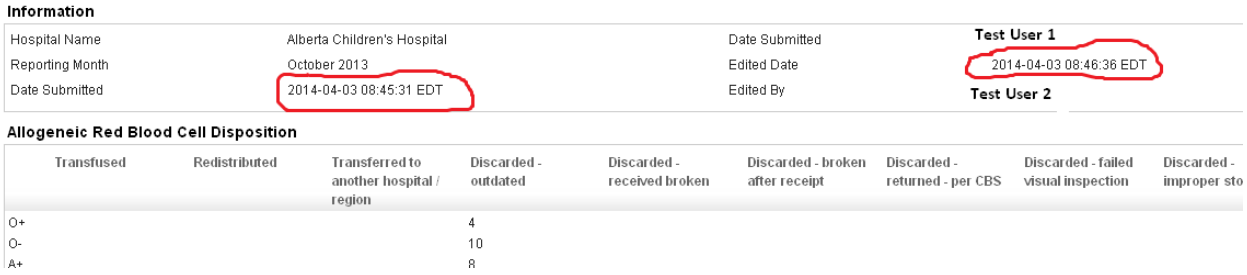
4.3 **Replace empty fields with zeros** – checking this box will ensure that all remaining required data fields on the web-page are completed with zeros prior to submission.



4.4 **Data entry guidance** **–** hovering over a column heading will reveal a truncated definition outlining the type of data to include in that column**.** Full definitions and examples for the data entry fields are available in Appendix A of this document



4.5 **Edit previously submitted data (disposition only)** - data previously submitted can be edited by the same or another authorized hospital user. The web-page tracks and identifies users that submit/edit data. Hospital based users can edit submitted data up to 12 months after original submission. To submit edited data after the 12 month period, contact a Hospital Liaison Specialist.



Information

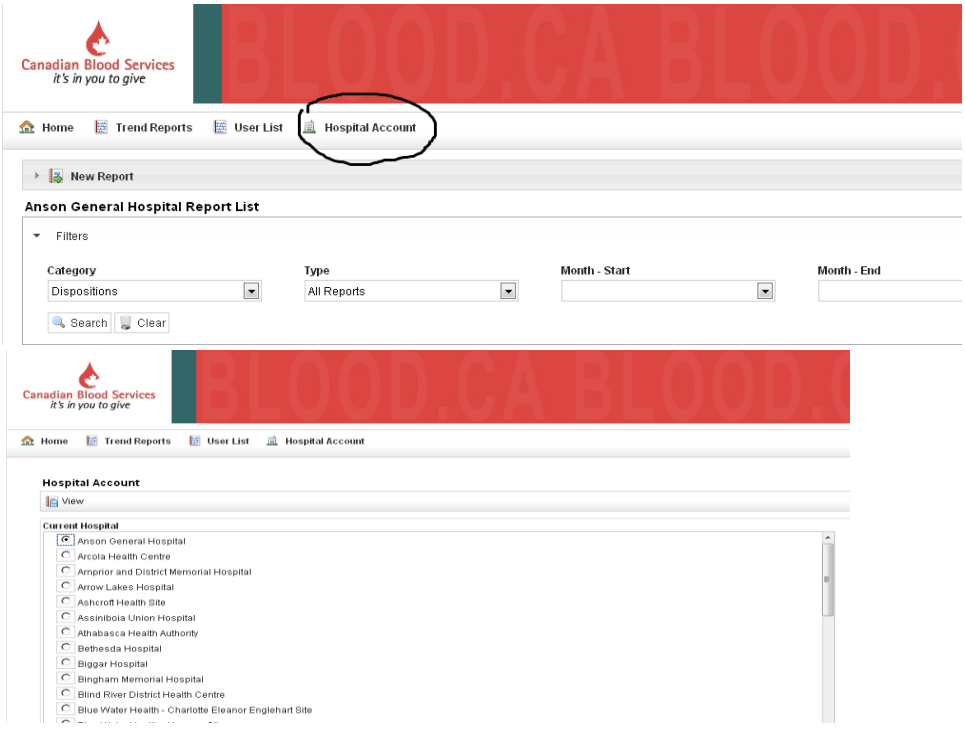
Hospital Name	Alberta Children's Hospital	Date Submitted	Test User 1
Reporting Month	October 2013	Edited Date	2014-04-03 08:46:36 EDT
Date Submitted	2014-04-03 08:45:31 EDT	Edited By	Test User 2

Allogeneic Red Blood Cell Disposition

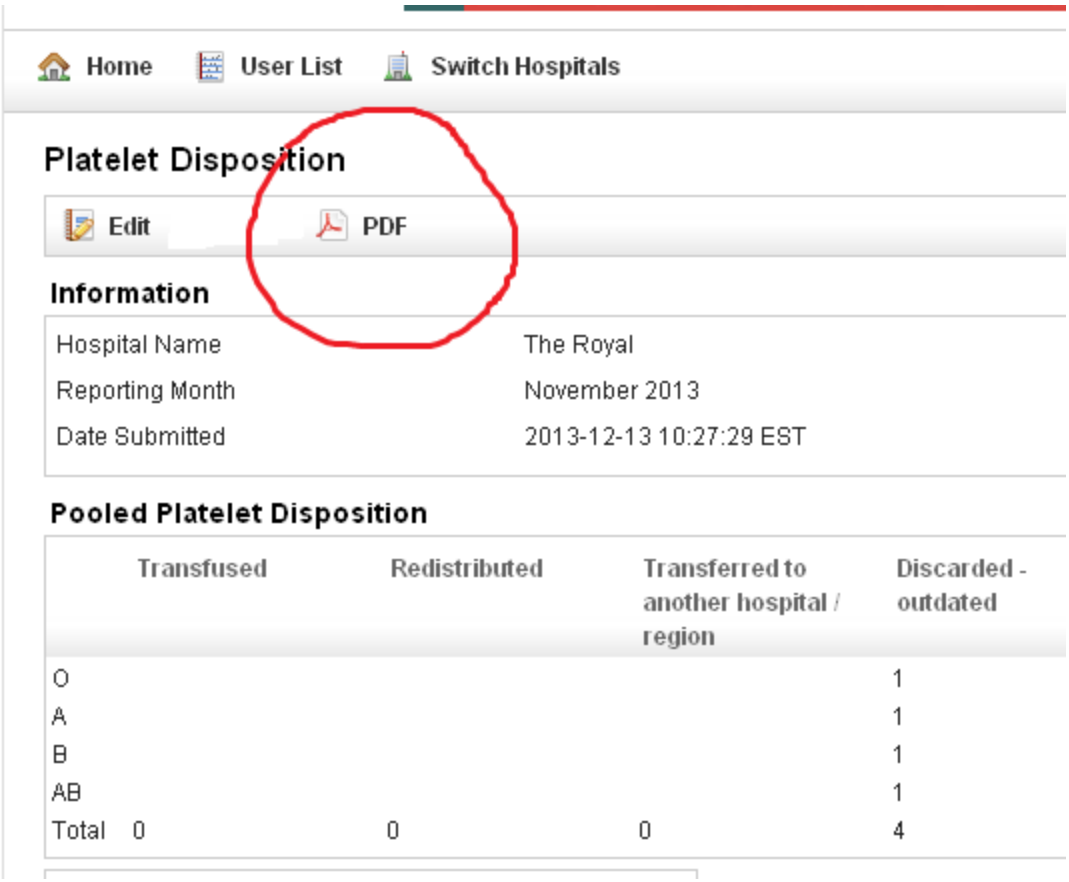
	Transfused	Redistributed	Transferred to another hospital / region	Discarded - outdated	Discarded - received broken	Discarded - broken after receipt	Discarded - returned - per CBS	Discarded - failed visual inspection	Discarded - improper sto
O+				4					
O-				10					
A+				8					

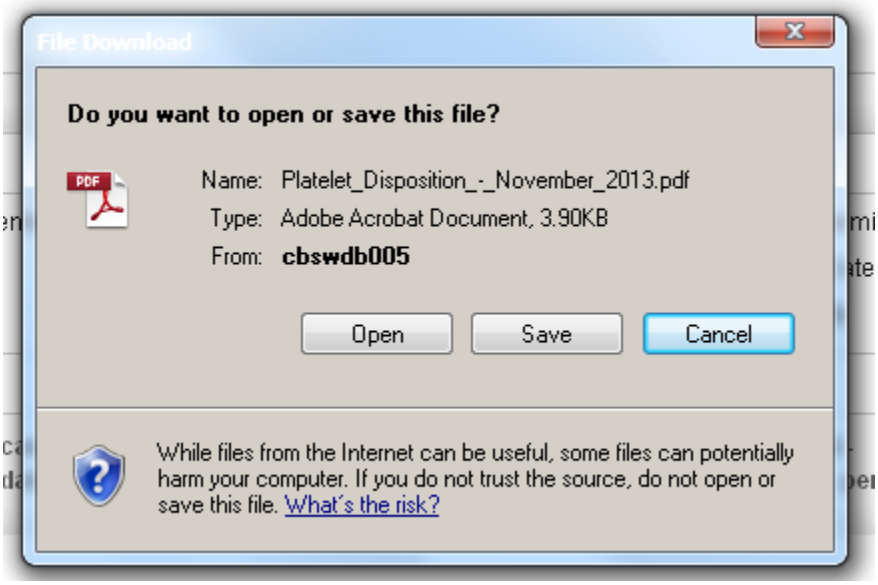
4.6 **Report deletion** – to delete entire submissions, contact a Hospital Liaison Specialist.

4.7 **Switch hospitals** – users can switch between hospital accounts (per access requirement) during a single login session. Users do not have to log out of the system and log back in to access another hospital account.



4.8 **Save and print** – users can save and/or print .pdf versions of submitted data (disposition or inventory) outside the web-system e.g.: hospital computer.

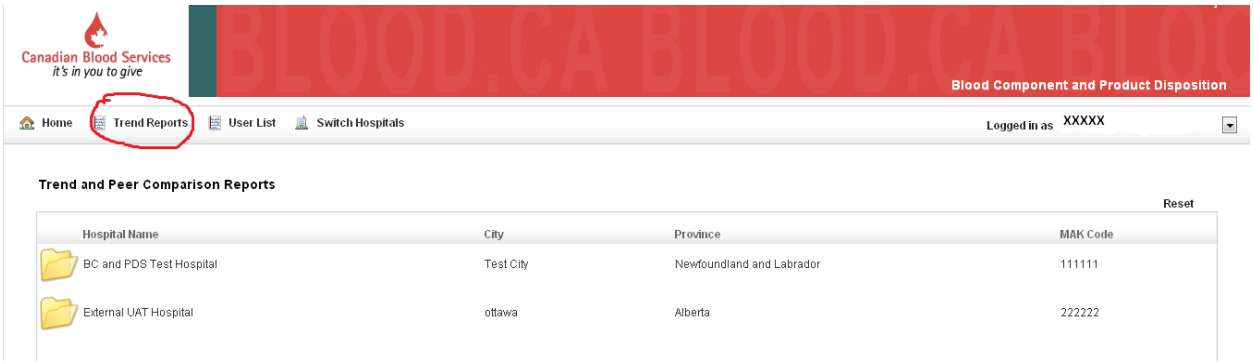




4.9 **Reconciliation** – this area is provided for inventory management purposes for hospitals.

4.10 Forgot my password – users can manage their own password reminder/reset if required (login screen)

4.11 Trend Reports – introduced in version 2.0 of the system, this area provides online access to hospital specific excel based *Hospital Trend and Peer Comparison Reports*. Report sets are generated twice each month (2nd and 4th Monday) and posted within a hospital's folder system, sorted by month and chronologically with the most recently generated report set at the top of the list. Up to 24 months of report sets will be available to users at all times.



5.0 Process for Specific Functions:

5.1 Switch hospital

5.1.1 A user's home page defaults to the last hospital accessed to which the user is associated.

5.1.2 If the default hospital is not the hospital for which data entry or report searching is required, the user must switch to the other hospital account.

5.1.3 Click on 'Hospital Account' at top of the screen

5.1.4 A new window displays the list of hospitals to which the user may access

5.1.5 Select the desired hospital

5.1.6 Click on 'View'

5.1.7 The selected hospital's home page appears. The user can now create or search for reports.

5.2 Submit disposition data

5.2.1 Ensure hospital name is accurate for report creation

5.2.2 If not, switch hospitals

5.2.3 Click on ‘New Report’ button

5.2.4 Choose blood component/product report to create from drop-down menu

5.2.5 Choose reporting month from drop down menu

5.2.5.1 NOTE: to submit data for a month that does not appear in the drop down menu contact a Hospital Liaison Specialist

5.2.6 Click box ‘Replace empty fields with zeros’ at this point or prior to submitting report

5.2.6.1 NOTE: zeros only auto-populate when ‘Create’ button is clicked

5.2.7 To navigate the web-page use the ‘TAB’ button on your keyboard or your mouse by clicking on the field in which data will be entered

5.2.7.1 NOTE: hitting ‘Enter’ on your keyboard will direct the web-system to ‘Create’ the report. If ‘Enter’ is used before required data fields are populated, error messages will appear in red at the top of the screen indicated which fields require data entry.

5.2.8 Enter number of units in each available data field as appropriate.

5.2.9 Fields shaded pink require data entry prior to report creation

5.2.10 For hospitals (per hospital profile) submitting disposition data via ABO, all ABO specific data entry fields are required and shaded pink.

5.2.11 For hospitals (per hospital profile) submitting disposition data via Totals Only, only the discarded – outdated data entry fields require data via ABO. These and the totals fields are required and shaded pink.

5.2.12 Click ‘Create’ at the top or bottom of the screen to create and submit the completed report.

5.2.12.1 NOTE: Once clicked, the ‘Create’ button disappears. It is replaced with an onscreen message *‘Submission processing, please wait’*. It is important to let the system finish processing before continuing to navigate within the web-system.

5.2.13 Once a report is created it can be edited, deleted (CBS only), generated as .pdf format and saved and/or printed.

5.3 Submit inventory data

5.3.1 Ensure hospital name is accurate for report creation

5.3.2 If not, switch hospitals

5.3.3 Click on 'New Report' button

5.3.4 Choose 'Inventory Levels' from drop-down menu

5.3.5 Check applicable checkboxes for the blood components/products being reported

5.3.6 For each blood component/product selected, a table appears on the screen

5.3.7 To navigate the web-page use the 'TAB' button on your keyboard or your mouse by clicking in the field in which data will be entered

5.3.7.1 NOTE: hitting 'Enter' on your keyboard will direct the web-system to 'Create' the report. If 'Enter' is used before required data fields are populated, error messages will appear in red at the top of the screen indicated which fields require data entry.

5.3.8 Enter number of units in each available data field as appropriate.

5.3.9 Fields shaded pink require data entry prior to report creation

5.3.10 Click 'Create' at the top or bottom of the screen to create and submit the completed report

5.3.11 Once a report is created it can be generated in .pdf format and saved and/or printed.

5.3.11.1 NOTE: Created and submitted inventory reports cannot be edited or deleted

5.3.12 If a submitted inventory report does not contain accurate, current data a new report must be created and submitted

5.3.13 Only the inventory data from the most recent submission is used for compiled inventory reports

5.4 Search for submitted disposition or inventory data

5.4.1 Ensure hospital name is accurate for report searching

5.4.2 If not, switch hospitals

5.4.3 Expand the 'Category' drop down box

5.4.4 Choose either 'Dispositions' or 'Inventory Levels'

5.4.5 Disposition data:

5.4.5.1 Expand the 'Type' drop down menu to select the type of report(s) desired

5.4.5.2 Click on 'Search' or further filter search requirements by selecting a report date

5.4.6 Inventory levels:

5.4.6.1 Click on 'Search' or further filter search requirements by selecting dates

5.4.7 Search results will appear as a list

5.4.8 The number of reports that appear on the page can be increased or decreased by expanding the 'Rows' drop down box

5.4.9 Reports can be further organized alphabetically by clicking on 'Type' or 'Month' headings

5.4.10 Click on the desired report to open and view

5.4.11 Once a submitted data report is opened it can be edited, deleted (CBS only), generated in .pdf format and saved and/or printed as required. Submitted inventory data cannot be edited.

5.5 Edit submitted disposition data

5.5.1 Ensure hospital name is accurate for report searching

5.5.2 If not, switch hospitals

5.5.3 Search and open desired report

5.5.4 Click the 'Edit' button

5.5.5 Edit

5.5.5.1 Select data entry fields requiring edits and make revision

5.5.5.2 Click 'Update' at the top or bottom of the screen to create and submit the edited report

5.5.6 The updated report can be further edited, deleted (CBS only), generated in .pdf format and saved and/or printed as required.

5.6 Open, Save, Print submitted disposition or inventory data in .pdf

5.6.1 Created and submitted disposition and inventory data can be saved on a user's computer external to the web system

5.6.2 Click on the 'pdf' button

5.6.3 Open

5.6.3.1 Click 'Open' and the report will appear as a 8 x11 landscape .pdf report in Adobe Reader

5.6.3.2 The .pdf report can then be saved and/or printed

5.6.4 Save

5.6.4.1 Click 'Save'

5.6.4.2 Choose location to save report

5.6.4.2.1 NOTE: the report name is pre-assigned, however the user can revise it as required.

5.6.4.2.2 The report is in Adobe Acrobat format

5.6.5 Click 'Cancel' to not open or save the report and return to the report screen.

5.7 View, Save, Print – Hospital Trend and Peer Comparison Reports

5.7.1 Click on 'Trend Reports'

5.7.2 Ensure hospital(s) listed are correct per user access

5.7.3 Click on hospital folder

5.7.4 Click on the 'Month' folder to access report sets by month, or click on the 'All' folder to display a listing of all reports in chronological order (most recent at top of list.

5.7.5 Click on the desired report in the report list to open it. (Note: this may take up to 20 seconds to execute)

5.7.5.1 NOTE: When excel opens, users may be required to click 'enable editing' at the top of the screen within excel to view all data within the graphs. Not all users will receive this prompt as each user experience is directed by their computer's version of Microsoft Office and/or internet browser used.

5.7.6 The user can save excel based files directly to their computer or open the file to view and then subsequently save or print as required.

APPENDIX A – Data Entry Field Definitions

DISPOSITION - Red Blood Cells (allogeneic, CBS collected autologous and CBS collected directed RBC units)

Component descriptions per CBS Circular of Information: https://www.blood.ca/en/hospitals/circular-information

Disposition	Include	Example	Do Not Include	Comments
Transfused	- units that were entirely transfused - any unit that was only partially transfused to a patient - units implicated in transfusion reactions that were only partially transfused	#1: 75 ml from a 300 ml RBC unit was transfused to a pediatric patient; the remaining 225 ml expired before it could be transfused. #2: an elderly patient is transfused with only part of a unit due to a cardiac condition. #3: a RBC unit is aliquoted into smaller amounts for transfusion. Aliquots from the same original unit count as only 1 unit transfused.	- any un-transfused units	- if part of the unit is transfused and part is discarded, do not report the part of the unit that was discarded.
Redistributed	- units redistributed to reduce outdates/improve utilization	#1: Hospital A had 10 units of group B Rh positive with 10 days left before expiration that they do not expect to transfuse, and Hospital B agreed to accept these units. The units were shipped from Hospital A to Hospital B.	- units transferred	
Transferred to other hospital/region	- units transferred to other hospital/regions with patients - units received by hospital/hospital region/hospital zone with a centralized inventory intake process, that are then sent to other affiliated hospital sites - units shipped to other hospital /region to satisfy other hospital's request for a particular blood component	#1: Hospital A admitted a patient involved in a car accident, they are stabilized and then transferred to Hospital B that has a trauma program, and 2 units of RBC are sent with the patient in the ambulance. #2 Hospital A transferred a critically ill neonate to Hospital B, which has a level III neonatal intensive care unit. An aliquot of RBCs was shipped with the ill neonate from Hospital A to Hospital B. #3: Hospital A routinely receives blood components from Canadian Blood Services, and subsequently ships blood components to Hospital B and Hospital C*. This activity may be part of a centralized inventory management system, or part of an effort to streamline regional hospital transfusion service operations. * These hospitals may or may not be part of the same hospital corporation/health region/zone. #4: Hospital A ran out of group O Rh negative RBCs for a patient with an ongoing need, and they contacted Hospital B who had lots in inventory. Transport time from Hospital B to Hospital A was quicker than a delivery from the local Canadian Blood Services. The required units are shipped from Hospital B to Hospital A.	- units redistributed	
Discarded - outdated	- un-entered (intact) RBC units that have exceeded their CBS-assigned outdate (including RBC, RBC Washed (by CBS), RBC deglycerolized, - un-entered (intact) CBS or hospital-irradiated RBC units) that have exceeded their assigned		- units that were entered during hospital manipulation (washing, aliquoting) and then exceeded their hospital assigned outdate	

	outdate			
Discarded – received broken	- units that were discovered broken upon receipt from CBS		- units discovered broken after having been received into and stored in hospital inventory	

DISPOSITION - Red Blood Cells (allogeneic, CBS collected autologous and CBS collected directed RBC units)

Disposition	Include	Example	Do Not Include	Comments
Discarded – broken post receipt	- units that broke during storage (unit un-entered). - units that leaked during entry/spiking for transfusion. - units that leaked due to faulty welds during use of a sterile connection device		- units that were discovered broken upon receipt from CBS	
Discarded or Returned – per CBS	- units discarded at hospital or returned to CBS at the request of CBS	#1: CBS issues a blood component recall / withdrawal directing return or discard of RBC units #2: RBC unit tests positive DAT at hospital, returned to CBS for further investigation		
Discarded – failed visual inspection	- as per CBS visual Assessment Guide: http://www.transfusionmedicine.ca/	#1: discolouration #2: particulate matter		
Discarded – improper storage	- units discarded due to hospital storage or processing deviations.	#1: RBC exceeds time limit out of fridge. Example: Units returned to laboratory > 30 mins. and/or failed to meet temperature requirements for return to inventory #2: storage equipment failure		
Discarded – patient related	- patient did not require component - units used for other purposes	#1: patient did not require transfusion #2: patient did not show for transfusion #3: patient deceased #4: patient transferred #5: in-date units(not outdated) used for other purposes in the laboratory		

O Rh neg units transfused to non O Rh neg patients: include all O Rh neg units transfused to patients who do not have an O Rh neg blood group.

RECONCILIATION - Red Blood Cells (allogeneic, CBS collected autologous and CBS collected directed RBC units)

Reconciliation	Include	Comments
Opening Inventory	- The Opening Inventory Count is usually the Closing Inventory Count from the previous month. Perform the count as close to the start of the month as possible. When counting inventory, include units not labeled for patients as well as units that are labeled for patient use but not yet issued to the ward (e.g. crossmatched RBCs).	
Received from CBS	- All units received from CBS during the prior calendar month.	
Received from other hospital	- Units received to improve utilization (redistribution) - Units received from other hospitals/hospital regions with patients (e.g. critically ill or trauma patients) - Units received from other hospitals/hospital regions to satisfy another hospital's request for a particular group component (AB FP/FFP, O Rh Neg RBCs).	
Received from other source	- All units received sources other than CBS (e.g. components from HemaQuebec, rare phenotype RBC units received from the American Red Cross).	
Total received	Total Inventory will be automatically calculated by adding opening inventory, received from CBS, received from other hospitals and received from other source together	
Total dispersed	Total dispersed will be automatically calculated by adding transfused, redistributed and all discard reasons together	
Calculated closing inventory	Calculated Closing Inventory will be automatically calculated by subtracting Total Received minus Total Dispersed.	

PATIENTS TRANSFUSED - Red Blood Cells (allogeneic, CBS collected autologous and CBS collected directed RBC units)

Number and Type of Patient Transfused	Include	Comments
Inpatient	- patient had multiple transfusions during a single hospital admission, count as '1 inpatient transfused'. - patient is admitted, transfused, and discharged, and then readmitted and transfused, count as '1 inpatient transfused'.	- if patient receives transfusions as both an inpatient and outpatient in the same month, default as '1 inpatient transfused'
Outpatient	- patient is transfused more than once during the same month as an outpatient, count as ' 1 outpatient transfused'	

Unknown	- unable to determine if patient transfused as inpatient or outpatient	

DISPOSITION - Platelets **(Pooled and Apheresis)**

Component descriptions per CBS Circular of Information: https://www.blood.ca/en/hospitals/circular-information

Disposition	Include	Example	Do Not Include	Comments
Transfused	- doses that were entirely transfused - any doses that was only partially transfused to a patient - doses implicated in transfusion reactions that were only partially transfused	#1: 50 ml from a platelet dose is transfused to a neonate, and the remaining component expired before it could be transfused. #2: An elderly patient is transfused with only part of a dose due to a cardiac condition. #3: a platelet dose is aliquoted into smaller amounts for transfusion. Aliquots from the same original unit count as only 1 unit transfused.	-any un-transfused dosess	
Redistributed	- doses redistributed to reduce outdates/improve utilization	#1: Hospital A had 2 doses of platelets with 24 hours left before expiration that they do not expect to transfuse, and Hospital B agreed to accept these units. The doses were shipped from Hospital A to Hospital B.	- transferred doses	
Transferred to other hospital/region	- doses transferred to other hospital/regions with patients - doses received by hospital/hospital region/hospital zone with a centralized inventory intake process, that are then sent to other affiliated hospital sites - doses shipped to other hospital /region to satisfy other hospital's request for a particular blood component	#1: Hospital A admitted a patient involved in a car accident, they are stabilized and then transferred to Hospital B that has a trauma program, and 1 dose of PLTs is sent with the patient in the ambulance. #2 Hospital A transferred a critically ill neonate to Hospital B, which has a level III neonatal intensive care unit. One dose of PLTs was shipped with the ill neonate from Hospital A to Hospital B. #3: Hospital A routinely receives blood components from Canadian Blood Services, and subsequently ships blood components to Hospital B and Hospital C*. This activity may be part of a centralized inventory management system, or part of an effort to streamline regional hospital transfusion service operations. * These hospitals may or may not be part of the same hospital corporation/health region/zone. #4: Hospital A ran out of group AB plasma for a patient with an ongoing need, and they contacted Hospital B who had lots in inventory. Transport time from Hospital B to Hospital A was quicker than a delivery from the local Canadian Blood Services. The required units are shipped from Hospital B to Hospital A.	- redistributed doses	

Discarded - outdated	- un-entered (intact) platelet doses that have exceeded their CBS-assigned outdate -un-entered (intact) CBS or hospital-irradiated platelet units).		-doses that were entered during hospital manipulation (aliquoting) and then exceeded their hospital assigned outdate	
Discarded – received broken	- doses that were discovered broken upon receipt from CBS		-doses discovered broken after having been received into and stored in hospital inventory	

DISPOSITION – Platelets (Pooled and Apheresis)

Disposition	Include	Example	Do Not Include	Comments
Discarded – broken post receipt	- doses that broke during storage (unit un-entered). - doses that leaked during entry/spiking for transfusion. - doses that leaked due to faulty welds during use of a sterile connection device		- doses that were discovered broken upon receipt from CBS	
Discarded or Returned – per CBS	- doses discarded at hospital or returned to CBS at the request of CBS	#1: CBS issues a blood component recall / withdrawal directing return or discard of platelet doses		
Discarded – failed visual inspection	- as per CBS visual Assessment Guide: http://www.transfusionmedicine.ca/	#1: discolouration #2: particulate matter		
Discarded – improper storage	- doses discarded due to hospital storage or processing deviations.	#1: platelet storage area exceeds 24 degrees Celsius		
Discarded – patient related	- patient did not require component -doses used for other purposes	#1: patient did not require transfusion #2: patient did not show for transfusion #3: patient deceased #4: patient transferred #5: in-date doses(not outdated) used for other purposes in the laboratory		

RECONCILIATION – Platelets (Pooled and Apheresis)

Reconciliation	Include	Comments
Opening Inventory	- the Opening Inventory Count is usually the Closing Inventory Count from the previous month. Perform the count as close to the start of the month as possible. When counting inventory, include units not labeled for patients as well as units that are labeled for patient use but not yet issued to the ward	
Received from CBS	- all doses received from CBS during the prior calendar month.	
Received from other hospital	- doses received to improve utilization (redistribution) - units received from other hospitals/hospital regions with patients (e.g. critically ill or trauma patients) - doses received from other hospitals/hospital regions to satisfy another hospital's request for a particular group component	
Received from other source	- all doses received sources other than CBS (e.g. components from Héma-Quebec, rare units received from the American Red Cross).	
Total received	Total Inventory will be automatically calculated by adding opening inventory, received from CBS, received from other hospitals and received from other source together	
Total dispersed	Total dispersed will be automatically calculated by adding transfused, redistributed and all discard reasons together	
Calculated closing inventory	Calculated Closing Inventory will be automatically calculated by subtracting Total Received minus Total Dispersed.	

PATIENTS TRANSFUSED – Platelets (Pooled and Apheresis)

Number and Type of Patient Transfused	Include	Comments
Inpatient	- patient had multiple transfusions during a single hospital admission, count as '1 inpatient transfused'. - patient is admitted, transfused, and discharged, and then readmitted and transfused, count as '1 inpatient transfused'.	- if patient receives transfusions as both an inpatient and outpatient in the same month, default as '1 inpatient transfused'
Outpatient	- patient is transfused more than once during the same month as an outpatient, count as ' 1 outpatient transfused'	
Unknown	- Unable to determine if patient transfused as inpatient or outpatient	

DISPOSITION – Frozen Plasma (Frozen Plasma, FFP apheresis 500ml, FFP apheresis 250ml, autologous and directed FFP/FP), Cryoprecipitate and Cryosupernatant Plasma

Component descriptions per CBS Circular of Information: https://www.blood.ca/en/hospitals/circular-information

Disposition	Include	Example	Do Not Include	Comments
Transfused	- units that were entirely transfused - any unit that was only partially transfused to a patient - units implicated in transfusion reactions that were only partially transfused	#1: partial apheresis unit transfused to a pediatric patient #2: a unit is aliquoted into smaller amounts for transfusion. Aliquots from the same original unit count as only 1 unit transfused.	-any un-transfused units	- if part of the unit is transfused and part is discarded, do not report the part of the unit that was discarded.
Redistributed	- units redistributed to reduce outdates/improve utilization	#1: Hospital A had 10 units of group B CSP with 1 month left before expiration that they do not expect to transfuse, and Hospital B agreed to accept these units. The units were shipped from Hospital A to Hospital B.	- units transferred	
Transferred to other hospital/region	- units transferred to other hospital/regions with patients - units received by hospital/hospital region/hospital zone with a centralized inventory intake process, that are then sent to other affiliated hospital sites - units shipped to other hospital /region to satisfy other hospital's request for a particular blood component	#1: Hospital A admitted a patient involved in a car accident, they are stabilized and then transferred to Hospital B that has a trauma program, and 2 units of AB FP are sent with the patient in the ambulance. #2 Hospital A transferred a critically ill neonate to Hospital B, which has a level III neonatal intensive care unit. A unit of plasma was shipped with the ill neonate from Hospital A to Hospital B. #3: Hospital A routinely receives blood components from Canadian Blood Services, and subsequently ships blood components to Hospital B and Hospital C*. This activity may be part of a centralized inventory management system, or part of an effort to streamline regional hospital transfusion service operations. * These hospitals may or may not be part of the same hospital corporation/health region/zone. #4: Hospital A ran out of group AB plasma for a patient with an ongoing need, and they contacted Hospital B who had lots in inventory. Transport time from Hospital B to Hospital A was quicker than a delivery from the local Canadian Blood Services. The required units are shipped from Hospital B to Hospital A.	- units redistributed to reduce outdates / improve utilization	
Discarded - outdated	- un-entered (intact) units that have exceeded their CBS-assigned outdate		-units that were entered during hospital manipulation (aliquoting) and then exceeded their hospital assigned outdate	

			-units that were thawed and then exceeded their hospital assigned outdate	
Discarded – received broken	- units that were discovered broken upon receipt from CBS		-units discovered broken after having been received into and stored in hospital inventory	

DISPOSITION – Frozen Plasma (Frozen Plasma, FFP apheresis 500ml, FFP apheresis 250ml, autologous and directed FFP/FP), Cryoprecipitate and Cryosupernatant Plasma

Disposition	Include	Example	Do Not Include	Comments
Discarded – broken post receipt	- units that broke during storage (unit un-entered). - units that leaked during entry/spiking for transfusion. - units that leaked due to faulty welds during use of a sterile connection device		- units that were discovered broken upon receipt from CBS	
Discarded or Returned – per CBS	- units discarded at hospital or returned to CBS at the request of CBS	#1: CBS issues a blood component recall / withdrawal directing return or discard of units		
Discarded – failed visual inspection	- as per CBS visual Assessment Guide: http://www.transfusionmedicine.ca/	#1: discolouration #2: particulate matter		
Discarded – improper storage	- units discarded due to hospital storage or processing deviations.	#1: hospital storage freezer temperature deviation.		
Discarded – patient related	- patient did not require component -units used for other purposes	#1: patient did not require transfusion #2: patient did not show for transfusion #3: patient deceased #4: patient transferred #5: in-date units(not outdated) used for other purposes in the laboratory		
Discarded –	- units thawed and not transfused			

thawed not transfused	prior to hospital assigned thawed expiry	#1: group AB FFP apheresis thawed, stored in fridge and not transfused as anticipated (general use, not patient specific)		

RECONCILIATION – Frozen Plasma (Frozen Plasma, FFP apheresis 500ml, FFP apheresis 250ml, autologous and directed FFP/FP), Cryoprecipitate and Cryosupernatant Plasma

Reconciliation	Include	Comments
Opening Inventory	- the Opening Inventory Count is usually the Closing Inventory Count from the previous month. Perform the count as close to the start of the month as possible. When counting inventory, include units not labeled for patients as well as units that are labeled for patient use but not yet issued to the ward (e.g. crossmatched RBCs).	
Received from CBS	- all units received from CBS during the prior calendar month.	
Received from other hospital	- units received to improve utilization (redistribution) units received from other hospitals/hospital regions with patients (e.g. critically ill or trauma patients) - units received from other hospitals/hospital regions to satisfy another hospital's request for a particular group component (AB FP/FFP).	
Received from other source	- all units received sources other than CBS (e.g. components from Héma-Quebec,	
Total received	Total Inventory will be automatically calculated by adding opening inventory, received from CBS, received from other hospitals and received from other source together	
Total dispersed	Total dispersed will be automatically calculated by adding transfused, redistributed and all discard reasons together	
Calculated closing inventory	Calculated Closing Inventory will be automatically calculated by subtracting Total Received minus Total Dispersed.	

PATIENTS TRANSFUSED – Frozen Plasma (Frozen Plasma, FFP apheresis 500ml, FFP apheresis 250ml, autologous and directed FFP/FP), Cryoprecipitate and Cryosupernatant Plasma

Number and Type of Patient Transfused	Include	Comment
Inpatient	- patient had multiple transfusions during a single hospital admission, count as '1 inpatient transfused'. - patient is admitted, transfused, and discharged, and then readmitted and transfused, count as '1 inpatient transfused'.	- if patient receives transfusions as both an inpatient and outpatient in the same month, default as '1 inpatient transfused'
Outpatient	- patient is transfused more than once during the same month as an outpatient, count as ' 1	

	outpatient transfused'	
Unknown	- unable to determine if patient transfused as inpatient or outpatient	

DISPOSITION – Plasma Protein Products

Disposition	Include	Example	Do Not Include	Comments
Transfused	- vials of product that were entirely transfused. - any vial of product that was only partially administered to a patient.		-any vials not infused	- if part of a vial is infused and part is discarded, do not report the part of the vial that was discarded.
Redistributed	- vials redistributed to reduce outdates/improve utilization		- transferred	
Transferred to other facility	- vials transferred to other facility and stored prior to infusion i.e.: homecare/public health - vials transferred to other hospital/regions with patients - vials received by hospital/hospital region/hospital zone with a centralized inventory intake process, that are then sent to other affiliated hospital sites - vials shipped to other hospital /region to satisfy other hospital's request for a particular plasma protein product	#1: vials of product issued for homecare (storage at home prior to infusion) #2: vials of product issued to public health or treatment clinics	- redistributed	
Discarded - outdated	- vials of product that exceeded manufacturer expiry date.			
Discarded – received broken	- vials of product that were deemed broken on receipt from CBS			
Discarded – broken post receipt	- vials of broken product deemed broken during hospital storage, redistribution, reconstitution and administration at hospital			
Discarded or Returned – per CBS	- vials discarded at hospital or returned to CBS at the request of CBS/manufacturer	#1: the product manufacturer issues a recall of a lot number of IVIG. CBS communicates the recall to the hospital and requests all remaining vials (with implicated lot #) in inventory be returned to CBS.		
Discarded –	- vials that were visually deemed not acceptable for			

failed visual inspection	transfusion on receipt from CBS, during storage, reconstitution or administration at the hospital			
Discarded – improper storage	- vials that were not transported in appropriate storage conditions (via CBS, or hospital redistribution). Vials discarded due to storage deviations at hospital.			
Discarded – patient related	- product was reconstituted and was not administered prior to expiry. - patient did not require product e.g. patient did not require transfusion, patient did not show for transfusion, patient deceased, patient transferred			

PATIENTS TRANSFUSED – Plasma Protein Products

Number and Type of Patient Transfused	Include	Comment
Inpatient	- patient had multiple transfusions during a single hospital admission, count as '1 inpatient transfused'. - patient is admitted, transfused, and discharged, and then readmitted and transfused, count as '1 inpatient transfused'.	- if patient receives transfusions as both an inpatient and outpatient in the same month, default as '1 inpatient transfused'
Outpatient	- patient is transfused more than once during the same month as an outpatient, count as ' 1 outpatient transfused'	
Unknown	- unable to determine if patient transfused as inpatient or outpatient	

DISPOSITION – Solvent / Detergent Treated Plasma

Disposition	Include	Comments
Transfused (approved patients)	- units that were transfused to patients approved by a CBS Medical Director	- if part of the unit is transfused and part is discarded, do not report the part of the unit that was discarded.
Redistributed	- units shipped to another hospital / region to reduce outdates	
Returned to CBS	- units shipped back to CBS from receiving hospital	
Discarded - unused	- frozen units that surpass expiry date (outdated) and units thawed that were not transfused (exceeded thawed storage time)	
Discarded – received broken	- units deemed to be broken on receipt at hospital	

Discarded - broken	- units deemed to be broken in storage or during thawing at hospital	
Used -Other	- units that were transfused to patients NOT approved by a CBS Medical Director	

RECONCILIATION – Solvent / Detergent Treated Plasma

Reconciliation	Include	Comments
Opening Inventory	- the opening inventory is the same as the closing inventory from the previous month	
Received from CBS	- total number of units received from CBS during the month	
Received from other hospital	- total number of units received from other hospitals / regions during the month	
Total received	- total inventory will be automatically calculated by adding - opening inventory, received from CBS, and received from other hospital / region together	
Total dispersed	- automatically calculated by adding - transfused (approved patients), discarded unused, discarded received broken, discarded broken, used for other purpose, redistributed and returned to CBS - together	
Calculated closing inventory	- automatically calculated by subtracting total received from total dispersed	
Physical Inventory Count	- count the number of units in physical inventory as close to the start of the month as possible. Investigate any differences between the calculated closing inventory and the physical inventory count	

PATIENTS TRANSFUSED – Solvent/Detergent Treated Plasma

Number and Type of Patient Transfused	Include	Comments
Inpatient	- patient had multiple transfusions during a single hospital admission, count as '1 inpatient transfused'. - patient is admitted, transfused, and discharged, and then readmitted and transfused, count as '1 inpatient transfused'.	- if patient receives transfusions as both an inpatient and outpatient in the same month, default as '1 inpatient transfused'
Outpatient	- patient is transfused more than once during the same month as an outpatient, count as ' 1 outpatient transfused'	
Unknown	- unable to determine if patient transfused as inpatient or outpatient	

APPENDIX B – Counting Blood Components

DISPOSITION

Red Blood Cells

- all RBC including washed and deglycerolized (by hospital or CBS)
- aliquots prepared by the hospital from same main unit, report as 1 unit

Plasma

FFP/FP, Divided (pediatric): Count each aliquot bag/unit separately

ACD FFP Apheresis (250 ml): count as 1 unit, *include in the FP Disposition section of the report.*

FFP Apheresis (500 ml): count as *1unit (no conversion factor required by hospitals).*

Cryoprecipitate – if pooled at the hospital prior to issue, report each unit in the pool separately.

Example: 10 units cryoprecipitate pooled and transfused to one patient; this counts as 10 units transfused when reporting disposition.

INVENTORY

A physical count of all units available in inventory not yet transfused or issued to patients.

Red Blood Cells	Platelets	Plasma	Cryoprecipitate	SD Plasma
Include allogeneic, directed and autologous	Include pooled and apheresis	Include all plasma units	Include all cryoprecipitate units	Include all SD plasma units
Include x-matched units	Count each as 1 unit	250 ml = 1 unit	Count each as 1 unit	Count each as 1 unit
Count each as 1 unit		500 ml = 1 unit		