



Fresh Blood Orders and Issues  
FUL010e

Report Specification

Version Control

| **Version** | **Revision Date** | **Revision Description** |
| --- | --- | --- |
| 1.0 | 22 Jul 2013 | Incorporate Sandra Cochrane’s feedback. Incorporate Pete and Amit’s feedback, and respond to Sandra’s comments. Incorporate Peter’s feedback. |
| 1.1 | 02 Aug 2013 | Incorporate feedback from Rachel Allden (Dept of Health, Government of South  Australia):   * Section 1.1 – change to JBC Proxies; * Section 2.2 – Amend BR9 so that ordered items are included when the ordered qty > 0 and the stock on hand is > 0; * Section 3.4 – added legend for the ‘tt’ part of the date/time field for Order Date data item; * Global change on date format to dd-Mmm-yyyy; * Section 3.4 – Swapped the maximum stock and stock on hand to reflect the report; * Section 3.4 – For the Issued Items table, added additional description to the “Order No” report item; * Section 3.4 – Amend to “Issued Qty” for the Issued Items Table; * Section 3.4 – For the Issued Items table, amend the description for “receipted date” to “the date and time the issue note was receipted by the Health Provider in BloodNet”. |
| 1.2 | 07 Aug 2013 | Section 2.3 and 3.4 - As requested by Sandra, split all date time data items into separate fields (except Collection Date and Expiry Date, where both data items initially never had a time component). |
| 1.3 | 08 Aug 2013 | Section 3.4 – Issued Items Table - Peter request that expiry time is required and to set the expiry time to 23:59:00 with no time zone.  Section 2.3 – Updated the 3rd worksheet – BloodNet Issues to include an expiry time column. |
| 1.4 | 13 Aug 2013 | Incorporate Sandra’s feedback:   * Section 1.1 – added “or not fulfilled”. * Section 1.2 – added “and approve the report specification” to Business stakeholders; * Section 2.2 – BR2 - swapped “local” and “the” around; * Section 2.2 – BR4a – added footnote to explain how the start and end date works in regards to the order date, issue date and receipted date when these dates cross over months. * Section 2.2 – BR9 – update the rule to explain the special scenario whereby the stock on hand qty > 0, and the order qty = 0 (in the footnote). * Global change to ensure Blood Service is capitalised. |
| 2.0 | 14 Aug 2013 | Peter approves report specification. |
| 2.1 | 22 Aug 2013 | Section 2.3 – Added note after the 3 worksheet report samples, to inform that the limitation of the Excel 2003 will allow only 65,000 rows per worksheet when data is exported. |
| 3.0 | 22 Aug 2013 | Peter approves report specification. |

Document Review and Approval

| **Version** | **Approval Date** | **Name and Position** | **Comments** |
| --- | --- | --- | --- |
| 1.0 | 23 Jul 2013 | Peter O’Halloran Executive Director, Health Provider Engagement | Approved after incorporating Peter’s feedback into Version 1.0. |
| 2.0 | 14 Aug 2013 | Peter O’Halloran Executive Director, Health Provider Engagement | Approved after incorporating Sandra’s feedback into Version 2.0. |
| 3.0 | 22 Aug 2013 | Peter O’Halloran Executive Director, Health Provider Engagement | Approved after adding note to explain the limitation of Excel 2003 is displaying 65,000 rows per worksheet. |

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# Introduction

## Purpose

The purpose of this document is to describe the functional specification for the Data Extract that can be used by states and territories and for projects such as the National Inventory Management Framework project and the Substitution and Payment Rules project.

The purpose of the report is to produce two extracts, “ordered fresh blood products” and “issued fresh blood products”, that the Fresh Blood team will then cross-reference using the BloodNet Order Number. There are times when the ordered items do not match the issued items, as they may have been substituted with another similar item or not fulfilled. Hence, there are substitution rules that need to be considered when conducting the cross-referencing exercise and these can be obtained from the Fresh Blood team.

Below is a matrix which identifies which reporting system and by which audiences, the report can be generated.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Reports Generated By** | **BloodNet Reports** | **Jurisdictional Reporting** | **NBA Internal Reports** | **Report Subscriptions** |
| Facility Administrators | **✓** |  |  |  |
| Facility User | **✓** |  |  |  |
| Jurisdictional Blood Committee Members |  | **✓** |  |  |
| Jurisdictional Blood Committee Proxies |  | **✓** |  |  |
| NBA Staff |  |  | **✓** | **✓** |
| Blood Service Staff |  |  |  | **✓** |
| State/Territory Government Staff |  | **✓** |  |  |

## Document Audience

This document should be used by:

* The Architect - to ensure this report fit into the NBA framework and meets all the essential core design features and elements of NBA systems.
* The Database Administrator – to form the design of the BloodNet reports database.
* The Developers - to form the basis of the development of BloodNet reports.
* The System Tester - to create the system test plan and system test cases.
* The Systems Support Team – to develop an understanding of the BloodNet reports to support users.
* The Business Stakeholders - to confirm that their requirements have been properly understood and approve the report specification.
* The Project Manager - to obtain project requirements/design signoff from the stakeholders and to assist in detailed task estimation and refinement of the project schedule and milestones.

## Related Documents

* Substitution and Payment Rules Report specification (refer to Appendix);
* BloodNet Reporting Requirements;
* Report Register; and
* BloodNet User Manual.

# Report Details

## Description

The Fresh Blood Orders and Issues report is comprised of two specific extracts: Ordered Fresh Blood Products and Issued Fresh Blood Products. The report is primarily designed to be exported into Excel for subsequent manipulation.

## Business Rules

This report is based on the following rules:

1. This report extracts data that is entered into BloodNet.
2. Date and time fields will be displayed for the local time zone of the Health Provider, where applicable.
3. Report can be run against any state, AHP or range of AHPs.
4. Report to be based on a date range using start date and end date parameters[[1]](#footnote-2).
   1. Date range for the Order extract will be determined by the time and date the Order was placed in BloodNet;
   2. Date range for the Issue extract will be the time and date the Issue Note was created by the Blood Service.
5. Issue notes not linked to orders will be included in the results.
6. Orphaned issue notes (ie. issue notes for facilities that are not ordering through BloodNet) are included in the results by default[[2]](#footnote-3).
   1. Orphaned issue notes will be linked to a state/territory based on the first number of the AHP code (please refer to table below). For example, an AHP code of **2**7ZCSL would refer to the state of NSW (because the first number of this code is “2”, and this refers to the state of “NSW”, as per table below.

| **StateID** | **CountryID** | **StateCode** | **StateName** |
| --- | --- | --- | --- |
| **1** | 1 | ACT | Australian Capital Territory |
| **2** | 1 | NSW | New South Wales |
| **3** | 1 | VIC | Victoria |
| **4** | 1 | QLD | Queensland |
| **5** | 1 | SA | South Australia |
| **6** | 1 | WA | Western Australia |
| **7** | 1 | TAS | Tasmania |
| **8** | 1 | NT | Northern Territory |

* 1. Exclude orphaned issue notes that have an overseas AHP code (ie. 9XXXXX).

1. The report includes the following issues statuses:

* Unreceipted;
* Receipted; and
* Partially receipted.  
  The report excludes “Cancelled” issue notes.

1. The report includes the following order statuses:

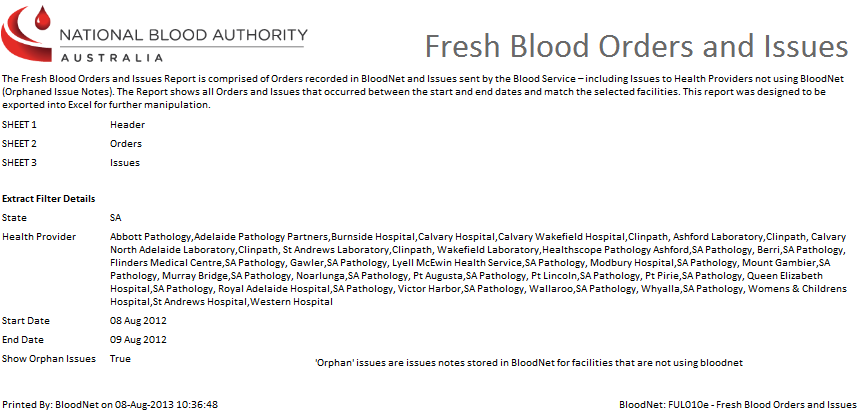
* Cancelled;
* Sent;
* Dispatched; and
* Finalised.  
  The report excludes draft (unsent) orders.

1. All Ordered line items are included in the Ordered Items table[[3]](#footnote-4), except where the OrderedQty =0, and the Stock on Hand Qty = 0.
2. Issued items are excluded from the Issued Items table, if the IssueQty and ReceiptedQty are both equal to 0.

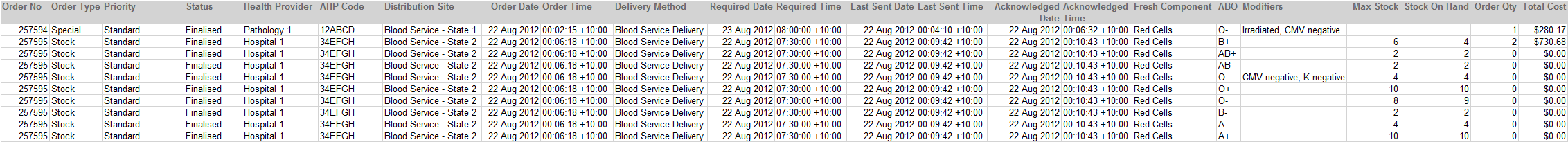
## Report Sample

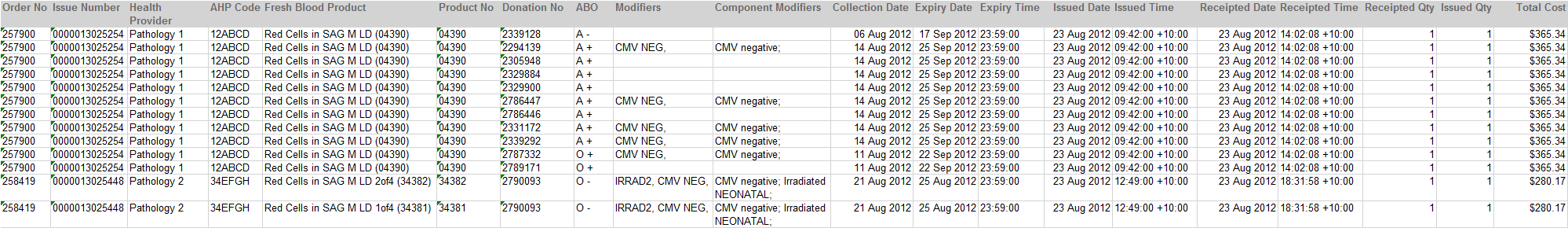
Below is a sample of the Fresh Blood Orders and Issues report once it is exported to Excel. The Excel will be made up of 3 worksheets/tabs as follows:

**1st worksheet - Header –** displays the NBA logo, report title, description and selected parameters.



**2nd worksheet - BloodNet Orders** – displays the Ordered Items table.



**3rd worksheet - BloodNet Issues** – displays the Issued Items table. 

Note that Excel 2003 has a limitation of been able to display 65,000 rows when exporting the data to Excel. This can happen when running a report for a State for 12 months. When this happens, there may be multiple Excel worksheets for BloodNet Orders or BloodNet Issues (where each worksheet can hold a maximum of 65,000 rows). Hence the worksheet order will be: 1st worksheet is the header, the 2nd, 3rd, 4th worksheets may all be related to BloodNet Orders, and the 5th and 6th worksheets may be related to the BloodNet Issues.

# Report Content

## Title

The report title is: Fresh Blood Orders and Issues Report

The Report ID is: FUL010e

This report title and Report ID will be seen consistently on the NBA internal site and also within the extract.

## Description

The following report description will display on the report:

“The Fresh Blood Orders and Issues Report is comprised of Orders recorded in BloodNet and Issues sent by the Blood Service – including Issues to Health Providers not using BloodNet (Orphaned Issue Notes). The Report shows all Orders and Issues that occurred between the start and end dates and match the selected facilities. This report was designed to be exported into Excel for further manipulation.”

## Parameters

The following parameters will be available:

| **Name** | **Mandatory** | **Description** | **Control Type** | **Values/Value List** | **Default Value** |
| --- | --- | --- | --- | --- | --- |
| **State** | Yes | Filter the list of Facilities. | Drop Down | All States | All States |
| **Health Provider** | Yes | Show all facilities filtered by the state selected above. If All States is selected, All AHP’s are displayed. | Multi select drop down | All Facilities | All Facilities will be checked. |
| **Start Date** | Yes | Sets the Starting boundary of the period to report on. | Date Picker | Any Valid Date | None |
| **End Date** | Yes | Sets the ending boundary of the period to report on. | Date Picker | Any Valid Date | None |
| **Show Orphan Issues?** | Yes | Sets whether the report will include or exclude orphan issue notes (issue notes for facilities that are not ordering through BloodNet). | Radio button | True, False | True |

This report will mainly be exported to Excel. The following rules apply on the report outputs (noting that the display is not optimised for a screen):

1. Sheet 1 displays the NBA Logo, report title, description and selected parameters.
2. Sheet 2 displays the Ordered Items table.
3. Sheet 3 displays Issued Items table.
4. Where the selected criteria returns no results, a message is displayed on the relevant page: For Orders:

“No Orders were found using the selected parameters.”

For Issues

“No Issues were found using the selected parameters.”

## Report Field Description

**Ordered Items table** - this data is displayed as a table with the following columns

| **Data Item** | **Description** | **Source Data** |
| --- | --- | --- |
| Order No | This is the BloodNet Order Number - a unique identifier on the Order. | Order.OrderId |
| Order Type | There are two types of order:   * stock order – a standard order to top up a Health Provider’s inventory levels; and * special order - a patient specific order. | reference.OrderType.value |
| Priority | The importance or urgency of an order. There are three order priorities in BloodNet: Standard; Urgent and Life Threatening. | Reference.ItemPriority.Value |
| Status | The status of the order. | Reference.OrderStatus.Value |
| Health Provider | The AHP Name of the Health Provider receiving the components. | Facility.FacilityName |
| AHP Code | This Approved Health Provider (AHP) code identifies the Health Provider receiving or ordering the components. It should be noted that each Health Provider has a unique AHP code and in some instances, one large hospital may have multiple facilities (ie. Pathology facility, Pharmacy facility, Oncology facility), and all these facilities will have its own unique AHP code. | Facility.HealthProviderCode |
| Distribution Site | The name of the Blood Service distribution site that received the order. | Distribution.DistributionSiteName |
| Order Date | This is the date the order was created in BloodNet.  The format is dd-Mmm-yyyy.  For example: 26 Jun 2012 | Order.OrderDatetime; |
| Order Time | The time and time zone the order was created in BloodNet.  The format is hh:mm:ss:tt. The time is in 24hr format, and tt represents the different time zones for the different states and territories.  For example: 26 Jun 2012 00:15:54 +09:30  +08:00 – WA; +09:30 – NT and SA; and +10:00 – ACT, NSW, QLD, TAS and VIC. | Order.OrderDatetime; |
| Delivery Method | This is the method of delivering the order or mode of transport (ie. courier, taxi etc). | DeliveryMethod.Name |
| Required Date | This is the Date the ordered items are required to be delivered to the recipient.  The format is dd-Mmm-yyyy, | Order.RequiredDateTime |
| Required Time | This is the time and time zone the ordered items are required to be delivered to the recipient.  The format is hh:mm:ss:tt. The time is in 24hr format, and tt represents the different time zones for the different states and territories. | Order.RequiredDateTime |
| Last Sent Date | The most recent Date the order was sent to the Blood Service.  The format is dd-Mmm-yyyy . The time is in 24hr format, and tt represents the different time zones for the different states and territories. | Order.SentWhen  Or  Order.ResentWhen |
| Last Sent Time | The most recent time and time zone the order was sent to the Blood Service.  The format is hh:mm:ss:tt. The time is in 24hr format, and tt represents the different time zones for the different states and territories. | Order.SentWhen  Or  Order.ResentWhen |
| Acknowledged Date | The last Date the order was acknowledged by the Blood Service.  The format is dd-Mmm-yyyy | Order.AcknowledgedWhen |
| Acknowledged Time | The last time and time zone the order was acknowledged by the Blood Service.  The format is hh:mm:ss:tt. The time is in 24hr format, and tt represents the different time zones for the different states and territories. | Order.AcknowledgedWhen |
| Fresh Component | Name of the fresh blood product ordered.   * Red Cells * Platelets Pooled * Fresh Frozen Plasma * Cryoprecipitate * Platelets Apheresis * Red Cells Paediatric * Platelets Pooled Paediatric * Platelets Apheresis Paediatric * Fresh Frozen Plasma Paediatric * Cryo-Depleted Plasma * Cryoprecipitate Apheresis | Component.ComponentName |
| ABO | This is the blood group classified by the ABO and RhD. For components that cannot be ordered with an RhD Blood Group this value is missing. Group data is displayed as letters for the ABO group and + or – for the RhD group. | RoutineComponent.ABO + RoutineComponent.Rh |
| Modifiers | Changes or additions to the original component. Examples include Irradiated, Washed , CMV negative. | Modifier.Description |
| Max Stock | This is the set maximum stocking point that a particular AHP aims to hold at any one time, noting that many can often go somewhat higher when required or desired. | FacilityRoutineComponent.MaxStock |
| Stock on Hand | The number of components that an AHP has available for issue (ie. not reserved for use by a specific patient) at a particular time. Also known as Inventory. | OrderRoutineComponent.StockOnHand |
| Order Qty | The number of units ordered by the Health Provider/laboratory. | OrderRoutineComponent.RequiredQuantity |
| Total Cost | The total price of the line item (Unit Price x Qty) | ComponentUnitCost.PublishedPrice \* ConsignmentNoteLine.Qty |

**Issued Items table** - the data is displayed as a table with the following columns

| **Report Item** | **Description** | **Source Data** |
| --- | --- | --- |
| Order No | This is the order number as supplied on the Issue note from Blood Service.  Note: Orphan issue note will not have a valid BloodNet Order Number. | ConsignmentNote.OrderRef |
| Issue Number | The Issue Note identifier provided by the Blood Service. | ConsignmentNote.IssueNumber |
| Health Provider | The AHP Name of the Health Provider receiving the components. | Facility.FacilityName |
| AHP Code | This Approved Health Provider (AHP) code of the Health Provider. | Facility.HealthProviderCode |
| Fresh Blood Product | This is the supplier’s component/product name and the component/product code (ie. Red Cells in SAG M LD, Platelets APH LD 2of2). | ConsignmentNoteLine.ComponentType |
| Product No | This is the supplier’s component/product number (ie. 12612). | SupplierComponent.SuppliersComponentIdentifier |
| Donation No | The individual number allocated to a fresh blood component used to identify and track that single unit of blood. | ConsignmentNoteLine.DonationNumberLot |
| ABO | This is the blood group classified by the ABO system and the Rh type system (ie. ABO and RhD Blood Group). | ConsignmentNoteLine.Group |
| Modifiers | Modifiers of the Fresh Component supplied by the Blood Service.  A series of comma separated modifiers that are provided on the issue note.  This field is included as the modifiers provided by the Blood Service cannot always be matched back to what was ordered (Please see [Appendix](#_Appendix) for mappings) | ConsignmentNoteLine.Modifiers |
| Component Modifiers | Modifiers of the issued Fresh Component as provided by the Blood Service that has been mapped back to modifiers that were ordered, (see [Appendix](#_Appendix) for mappings) | Modifier.Description |
| Collection Date | This is the collection date when the fresh component was collected from the donor. | ConsignmentNoteLine.CollectedDateTime |
| Expiry Date | The expiry date (ie. component shelf-life) on the item. | ConsignmentNoteLine.ExpiredOn |
| Expiry Time | The expiry time on the item is set to 23:59:00 (with no time zone). | N/A |
| Issued Date | The date the issue note was created by the Blood Service Distribution Centre. The format is dd-Mmm-yyyy. | ConsignmentNote.OrderDateTime |
| Issued Time | The time and time zone the issue note was created by the Blood Service Distribution Centre. The format is hh:mm:ss:tt. The time is in 24hr format, and tt represents the different time zones for the different states and territories. | ConsignmentNote.OrderDateTime |
| Receipted Date | The date the issue note was receipted by the Health Provider in BloodNet. The format is dd-Mmm-yyyy. | ConsignmentNoteLine.ReceiptedDateTime |
| Receipted Time | The time and time zone the issue note was receipted by the Health Provider in BloodNet. The format is hh:mm:ss:tt. The time is in 24hr format, and tt represents the different time zones for the different states and territories. | ConsignmentNoteLine.ReceiptedDateTime |
| Receipted Qty | The number of units receipted by the Health Provider. | ConsignmentNoteLine.ReceivedQty |
| Issued Qty | The number of units issued by the Blood Service Distribution Centre (as marked on the issue note). | ConsignmentNoteLine.Qty |
| Total Cost | The total price of the line item (Unit Price x Qty) | ComponentUnitCost.PublishedPrice x ConsignmentNoteLine.Qty |

## Appendix

**Modifier Mapping between Orders and Issues.**

The following table displays the mappings between modifiers that can be ordered in BloodNet and their respective mappings against modifiers provided by the Blood Service. A *NULL* value indicates there is no mapping.

|  |  |
| --- | --- |
| **Ordered Modifiers**  What the Health Provider can order | **Issued Modifier**  What the Blood Service delivers1 |
| Irradiated | IRRAD1 |
| CMV negative | CMV NEG |
| K negative | *NULL* |
| Autologous Blood | AUTO O/R |
| Buffy Coat Removed | BCR |
| Cryopreserved | CRYOPRESER |
| Directed | DIRECTED |
| For Intrauterine Transfusion | IUT |
| Hyperconcentrated | HYPERCONC |
| IgA Deficient | IGA DEF |
| Irradiated for IUT | IRR\_IUT |
| Irradiated NEONATAL | IRRAD2 |
| Low anti-T | *NULL* |
| Suitable for Research | *NULL* |
| Washed | *NULL* |
| HLA matched | *NULL* |
| Single donor | *NULL* |
| As fresh as possible | *NULL* |
| < 5 days | *NULL* |
| < 10 days | *NULL* |
| *NULL* | NOT FOR BABIES |
| *NULL* | PHENO BANK |
| *NULL* | LOW A/B |
| *NULL* | LOW ANTI-T |
| *NULL* | WASH/ADDIT |
| *NULL* | HYPERCONC |
| *NULL* | DEGLYCEROL |

1. This is not an exhaustive list of modifiers provided by the Blood Service.

# Glossary

| Term | Definition |
| --- | --- |
| AHP | Approved Health Provider, normally referred to as a ‘Health Provider’. Also known as facility. |
| BloodNet | Operated by the NBA, BloodNet is Australia’s national online ordering and inventory management system, enabling staff in pathology laboratories to place orders online for blood and blood products, record inventory levels, and to record the final fate of each unit. |
| Blood Service | Australian Red Cross Blood Service. |
| Component | Known as Fresh Components within BloodNet. Also, commonly referred to as Fresh Blood Products within the blood sector.  The most common fresh components are:   * 1. Red Cells   2. Platelets   3. Clinical Fresh Frozen Plasma   4. Cryoprecipitate |
| Extract | The process of retrieving data out of data sources for further data processing or data storage (data migration). |
| Facility | Also known as an Approved Health Provider (AHP) or Health Provider. It should be noted that each Facility has a unique AHP code and that in some instances, one Health Provider may be comprised of multiple facilities using BloodNet (eg Pathology and Pharmacy). |
| Facility user | General users of BloodNet to order, receive and fate blood and blood products. |
| Facility administrator | Users of BloodNet with administrator rights which gives the ability to approve users, change templates and add new items. Once approved facility administrators will also be automatically granted facility user access to the facility indicated.  Facility administrator can be a lab manager, scientist in charge (SIC) or second in change (2IC). |
| Inventory | Refers to the stock kept and maintained by the laboratory, and can be entered into BloodNet as stock on hand. |
| Issue note | An issue note is sent out with the order to the Health Provider both in hard copy format within the box sent from the Blood Service, and within the facilities BloodNet site. The issue note will contain information like the issue number, the date time of the issue, which Blood Service site made the issue, the issued quantity, total issue price and the order number. Issue note can have different statuses such as active, completed (when the issue note is 100% receipted) and cancelled. |
| Max Stock | This is the set maximum stocking point that a particular AHP aims to hold at any one time, noting that many can often go somewhat higher when required or desired. |
| Modified components | Changes or additions to the original component. Examples include Irradiated, Washed or Phenotyped. |
| NBA | National Blood Authority |
| Orphaned issue notes | These are issue notes for facilities that do not use BloodNet (ie. do not order through BloodNet or record information contained within an issue note). |
| Receipting | All blood components and blood products received by the Health Provider from the Blood Service need to be receipted within the BloodNet *Receipting* page. Receipting data in BloodNet confirms that units were received by the Health Provider. |
| Stock on hand | The number of components that an AHP has available for issue (ie not reserved for use by a specific patient) at a particular time.  Also known as Inventory. |

1. If for example, you have an order that was created in BloodNet on 30th April (order date), and the issue note was created by the Blood Service Distribution Centre on the 3rd May (issue date), and the issue note was receipted by the Health Provider in BloodNet on the 1st June (receipted date), and you want to see all these dates (ie. order date, issue date and receipted date), then you need to ensure that your report start and end date will cover these period (ie. from 30th April to 1st June). [↑](#footnote-ref-2)
2. The user will have the ability to exclude orphaned issue note by selecting False for the “Show Orphan Issues?” parameter. Please refer to Section 3.3 for more detail. [↑](#footnote-ref-3)
3. This includes the special case where for an ordered line item, the order qty = 0, and the stock on hand qty > 0. [↑](#footnote-ref-4)