NEW ABO 2 Sample Protocol

Reducing the Risk to Mistransfusion

Resources found at
www.bestbloodmanitoba.ca 04/04/2016

Thank You

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Objectives:

- Identify the reason for a new safety measure
- Assess when some patients may require a second check of their blood type
- Recognize the implications of this safety measure in practice
- Summarize the safety implications for patients
- Identify the resources available for support related to this safety measure

Blood Type = Blood Group

Why the Change?

College of American Pathologists (CAP) Accreditation

"Requires that the facility (CBS and DSM) has a system to reduce the risk of mistransfusion for non-emergent red cell transfusions."

(CAP citation, Jul 2015)

Misidentification Risk

"*Mistransfusion occurs* from misidentification of the intended recipient at the time of collection of the pretransfusion testing sample, during laboratory testing and preparation of units to be issued, and at the time of transfusion." (CAP requirement TRM.30575)

"**Misidentification** at sample collection **occurs approx. once in every 1,000 samples**, and in one in every 12,000 transfusions the recipient receives a unit not intended for or not properly selected for him/her." (CAP requirement TRM.30575)

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Transfusion Medicine Best Practices Recommends either:

1. Electronic patient identification systems (ex. bar coding).
   If electronic patient identification systems are not available/feasible then:

2. *A second sample needs to be drawn for ABO confirmation*
   (BCSH,2013) (Boltin-Maggs et all, 2014)

   a. When no historical blood type has been recorded
   b. The Exception: urgent/ emergent cases

Fundamental process- not 100% foolproof

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The Solution

The initial type and screen is collected as usual

Patients **without** an **ABO blood group on file (who have never been typed and screened before)** will receive **Type O, Rh specific**

*** Emergency protocols are unchanged***
*** Does not affect neonates***

Receiving type O blood is equally safe for (A, B, AB recipients):

O is the universal donor

Current practice (inventory management)

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Will Group O Inventory be Impacted?

(Referenced from Slide presentation from Provincial TPC Meeting presented by Canadian Blood Service on Dec. 14th 2015)

- Currently it is standard practice at Trace Line sites to minimize outdating of group O red cells by transfusing to non-group O patients
- In a 6 month period in 2015, 892 group O red cells (4.9%) were transfused to non-group O patients
- If the group O units that are currently transfused to non-group O patients are redirected for this process, there should be no impact on the group O inventory supply

The Process

If a patient requires greater than 2 units, the blood bank/lab will call the clinical area to request a second Type and Screen specimen collection

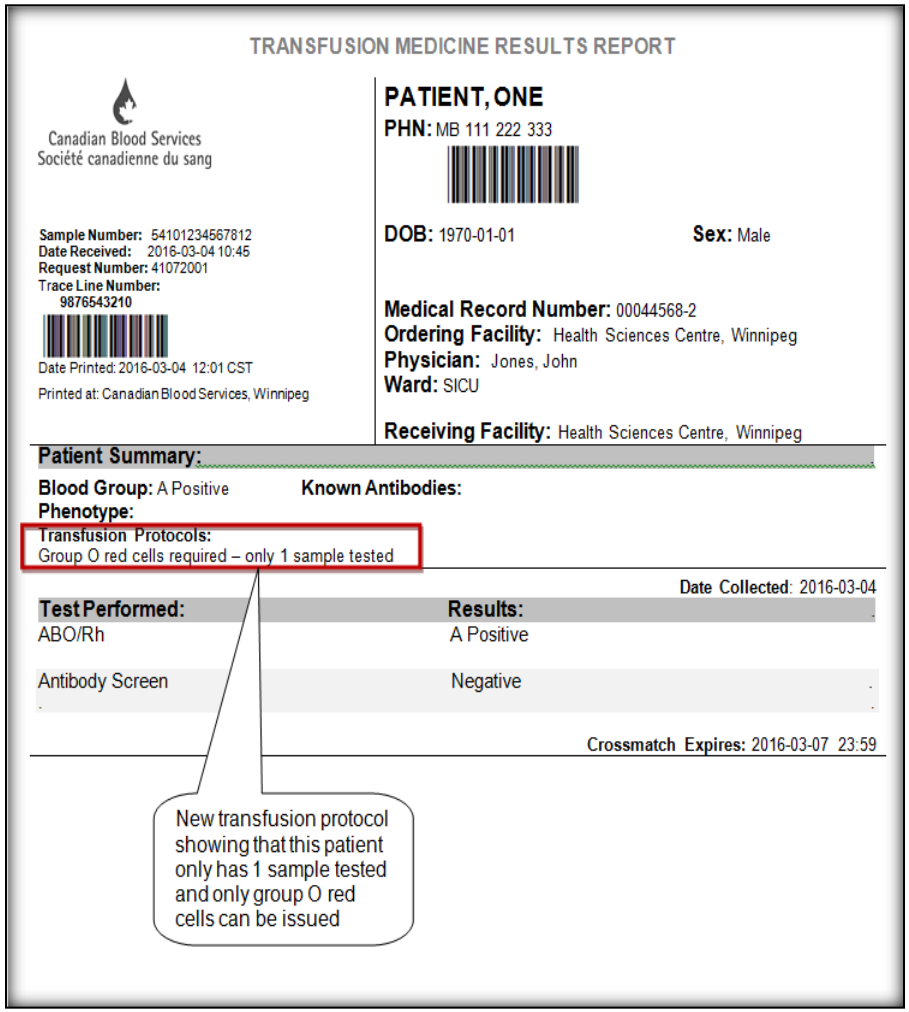
Collection equipment and the requisitions are the SAME.

How will this look on Trace Line?

The Transfusion Medicine Results Report (TMRR) after Screen #1

If there is no ABO in Trace Line the "Transfusion Protocols" will indicate that:

"Group O red cells required- only 1 sample tested"



TRANSFUSION MEDICINE RESULTS REPORT

Canadian Blood Services
Société canadienne du sang

Sample Number: 54101234567812
Date Received: 2016-03-04 10:45
Request Number: 41072001
Trace Line Number: 9876543210

Date Printed: 2016-03-04 12:01 CST
Printed at: Canadian Blood Services, Winnipeg

PATIENT, ONE
PHN: MB 111 222 333

DOB: 1970-01-01 **Sex:** Male

Medical Record Number: 00044568-2
Ordering Facility: Health Sciences Centre, Winnipeg
Physician: Jones, John
Ward: SICU

Receiving Facility: Health Sciences Centre, Winnipeg

Patient Summary:

Blood Group: A Positive **Known Antibodies:**
Phenotype:
Transfusion Protocols:
Group O red cells required – only 1 sample tested

Date Collected: 2016-03-04

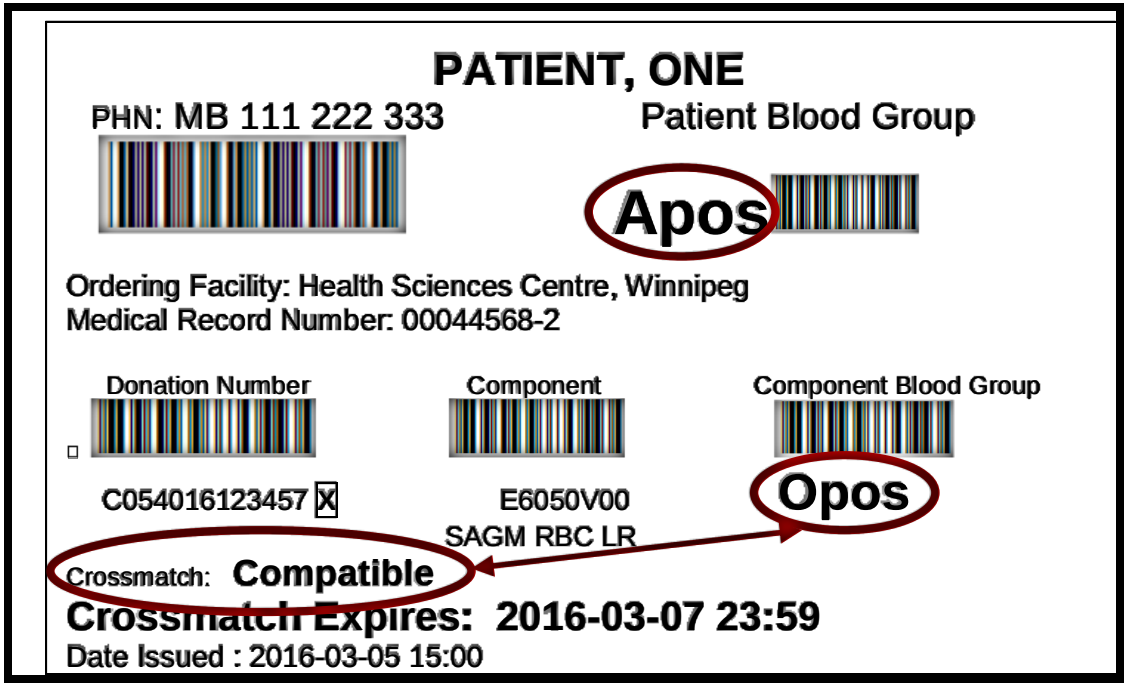
Test Performed:	Results:
ABO/Rh	A Positive
Antibody Screen	Negative

Crossmatch Expires: 2016-03-07 23:59

New transfusion protocol showing that this patient only has 1 sample tested and only group O red cells can be issued

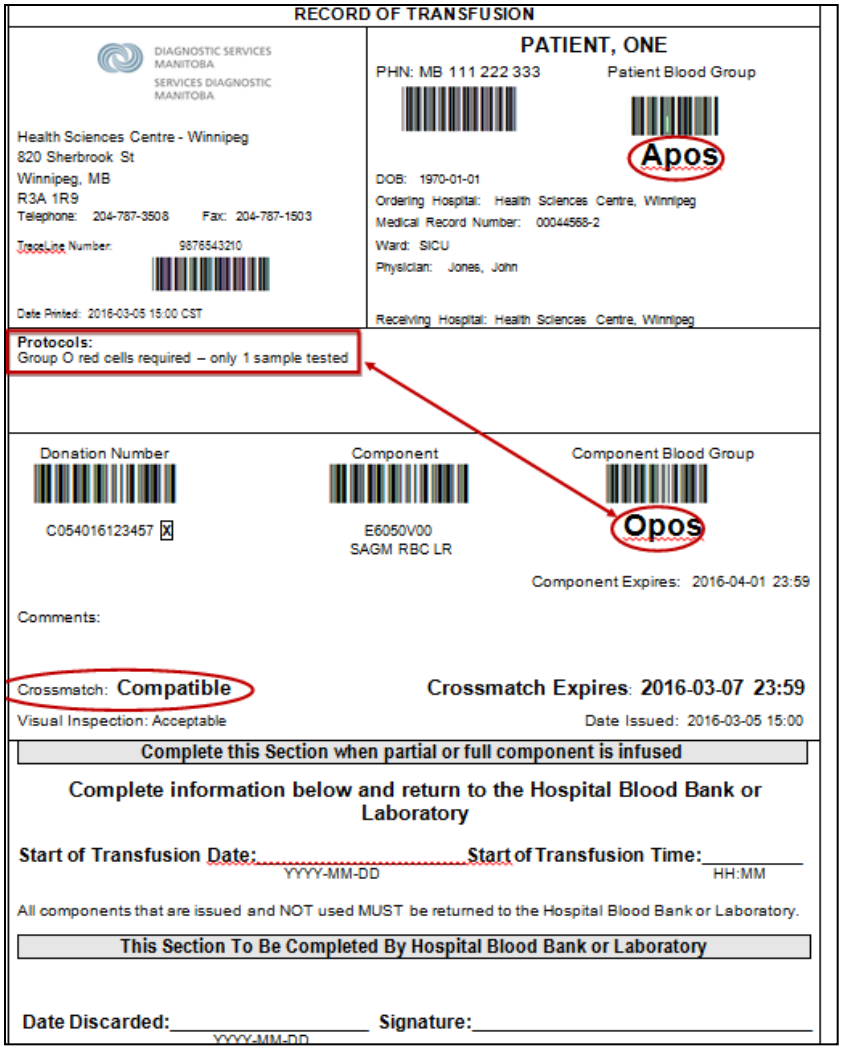
Resources found at www.bestbloodmanitoba.ca 04/04/2016

Issue Tag


PATIENT, ONE
PHN: MB 111 222 333
Patient Blood Group
Apos
Ordering Facility: Health Sciences Centre, Winnipeg
Medical Record Number: 00044568-2
Donation Number
Component
Component Blood Group
C054016123457 X
E6050V00
SAGM RBC LR
Opos
Crossmatch: Compatible
Crossmatch Expires: 2016-03-07 23:59
Date Issued : 2016-03-05 15:00

The Record of Transfusion or ROT

The "Protocols" section will indicate when there is only one sample tested. If patient has a previous ABO blood group in Trace Line this will be blank.



RECORD OF TRANSFUSION

DIAGNOSTIC SERVICES MANITOBA
SERVICES DIAGNOSTIC MANITOBA

Health Sciences Centre - Winnipeg
820 Sherbrook St
Winnipeg, MB
R3A 1R9
Telephone: 204-787-3508 Fax: 204-787-1503

TraceLine Number: 9876543210

Date Printed: 2016-03-05 15:00 CST

PATIENT, ONE
PHN: MB 111 222 333
Patient Blood Group
Apos
DOB: 1970-01-01
Ordering Hospital: Health Sciences Centre, Winnipeg
Medical Record Number: 00044568-2
Ward: SICU
Physician: Jones, John

Receiving Hospital: Health Sciences Centre, Winnipeg

Protocols:
Group O red cells required – only 1 sample tested

Donation Number
C054016123457 X

Component
E6050V00
SAGM RBC LR

Component Blood Group
Opos

Component Expires: 2016-04-01 23:59

Comments:

Crossmatch: Compatible

Crossmatch Expires: 2016-03-07 23:59

Visual Inspection: Acceptable

Date Issued: 2016-03-05 15:00

Complete this Section when partial or full component is infused

Complete information below and return to the Hospital Blood Bank or Laboratory

Start of Transfusion Date:_____ (YYYY-MM-DD) Start of Transfusion Time:_____ (HH:MM)

All components that are issued and NOT used MUST be returned to the Hospital Blood Bank or Laboratory.

This Section To Be Completed By Hospital Blood Bank or Laboratory

Date Discarded:_____ (YYYY-MM-DD) Signature:_____

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Remember….

- **Only** when a patient has **received** 2 units of Red Blood Cells will a second sample be requested.

- And if this happens during that admission then the blood bank/lab will contact the nurse/ward to notify them that a second ABO specimen needs to be drawn.

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After the Second ABO Specimen has been Processed…..

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Once the 2nd ABO sample has been tested and a patient now has 2 ABO samples in Trace Line there will be a Transfusion Medicine Results Report (TMRR) that is issued that indicates:

"Supplementary Report" ABO confirmatory testing complete. Group O red cell protocol removed.

This becomes a part of the patients chart.

TRANSFUSION MEDICINE RESULTS REPORT

Canadian Blood Services
Société canadienne du sang

Sample Number: 54101234567812
Date Received: 2016-03-04 10:45
Request Number: 41072001
Trace Line Number: 9876543210
Date Printed: 2016-03-06 12:45 CST
Printed at: Canadian Blood Services, Winnipeg

PATIENT, ONE
PHN: MB 111 222 333
DOB: 1970-01-01 **Sex:** Male
Medical Record Number: 00044568-2
Ordering Facility: Health Sciences Centre, Winnipeg
Physician: Jones, John
Ward: SICU
Receiving Facility: Health Sciences Centre, Winnipeg

Patient Summary:
Blood Group: A Positive **Known Antibodies:**
Phenotype:
Transfusion Protocols:

"Group O red cells required – only 1 sample tested" protocol has been removed

Date Collected: 2016-03-04

Test Performed:	**Results:**
ABO/Rh	A Positive
Antibody Screen	Negative

Crossmatch Expires: 2016-03-07 23:59

********SUPPLEMENTARY REPORT**********
2016-03-06: ABO confirmatory testing complete. Group O red cell protocol removed.

Supplementary report generated after 2nd confirmatory sample is tested.

Note…

If a patient had an ABO type and screen done and patient was identified as having **no** previous ABO in Trace Line…

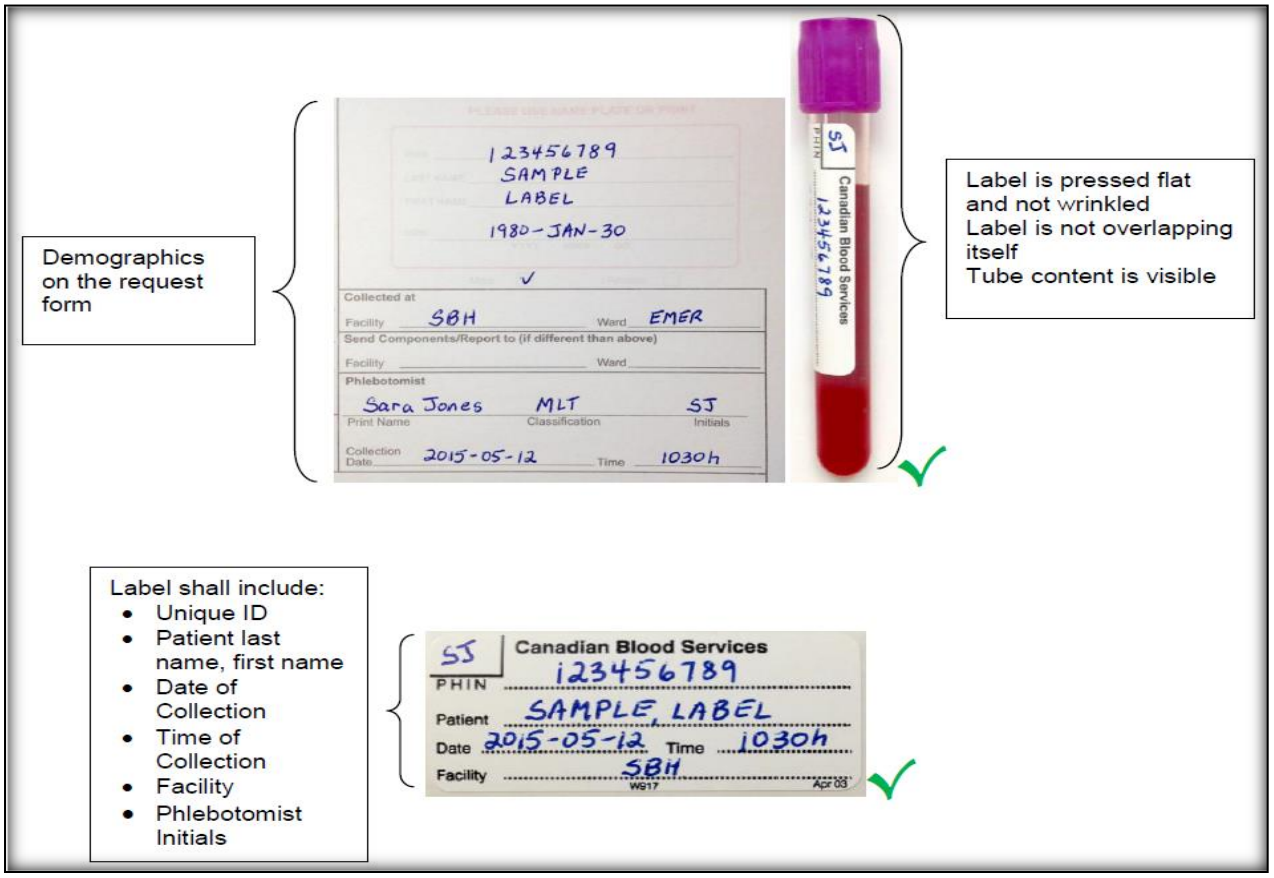
It is possible for the patient to be discharged without having a second ABO sample sent for testing.

The Second sample could be drawn on a subsequent admission.

Blood Collection prior to Transfusion

(Manitoba Transfusion Medicine Study Guide, 2012)

- Requisition is prepared with correct patient identifiers
- Blood Specimens should be labeled in the patient's presence using the patients arm band.
- Label includes name, PHIN(or unique identifier), date and time of collection, phlebotomists initials and facility
- Label must be attached to the specimen tube before leaving patient's bedside
- Perform final check that specimen, requisition and patient's armband are all identical


Demographics on the request form
123456789
SAMPLE
LABEL
1980-JAN-30
Collected at
Facility SBH Ward EMER
Send Components/Report to (if different than above)
Facility Ward
Phlebotomist
Sara Jones MLT SJ
Print Name Classification Initials
Collection Date 2015-05-12 Time 1030h
SJ
Canadian Blood Services
PHIN 123456789
Label is pressed flat and not wrinkled
Label is not overlapping itself
Tube content is visible
Label shall include:
Unique ID
Patient last name, first name
Date of Collection
Time of Collection
Facility
Phlebotomist Initials
SJ
Canadian Blood Services
PHIN 123456789
Patient SAMPLE, LABEL
Date 2015-05-12 Time 1030h
Facility SBH

Patient Education Points

This is an important safety measure

****Errors can be fatal****

Patient may receive Group O blood (even if pt. is A, AB, B)

Receiving Group O blood is just as safe

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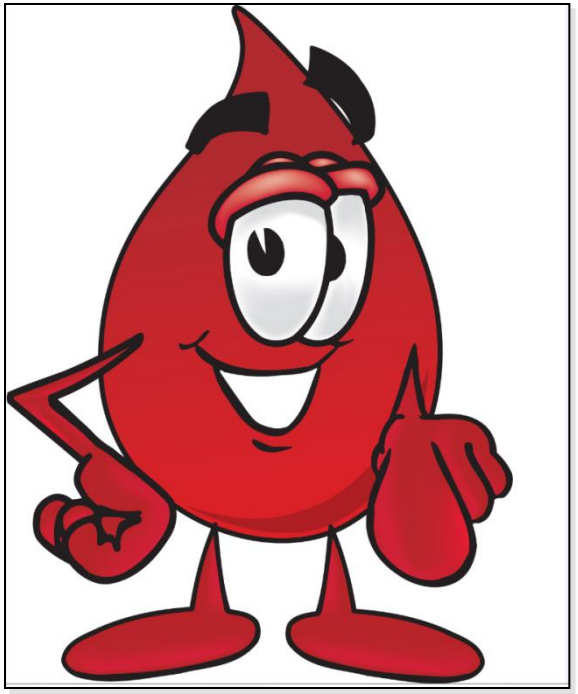

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Effective: April 4th 2016

Resources found at
www.bestbloodmanitoba.ca 04/04/2016

Information Resources

Citation info. Available: http:??dsmanitoba.ca/wp-content/uploads/2014/09/CPC-2016-0114.pdf

www.bestbloodmanitoba.ca

Transfusion Medicine Physician On-Call

WRHA Blood Conservation Service Office: 204-787-1277

References

- BCSH, Milkins, C., et al (2013).Guidelines for Pre-transfusion Compatibility Procedures in Blood Transfusion Laboratories. *Transfusion Medicine*, 23, 3-35.

- Boltin-Maggs, Paula H.B. (2014).Wrong Blood in Tube – Potential for Serious Outcomes: Can it be Prevented?. *British Journal of Haematology 2015, 168, 3-13.*

- Manitoba Transfusion Medicine Best Practice Resource Manual for Nursing Version 2 – Revised June 2011, Retrieved from http://www.gov.mb.ca/health/bloodprograms/manual.html