Saskatchewan Clinical Guidelines

For

Elective Community Transfusion

Version date: September 21, 2015

Transfusion Medicine Working Group

Prepared by:

Elective Community Transfusion Subcommittee

Table of Contents

Guideline Appendices

BACKGROUND

The guideline was commissioned by the Saskatchewan Senior Medical Officers Committee and the Transfusion Medicine Working Group (TMWG) as a resource for Saskatchewan Regional Health Authorities (RHA) to support safe client centered care.

Health Canada regulates transfusion practice in Canada under the Food and Drug Act with the *Blood Regulations.* Health Canada commissioned the Canadian Standards Association (CSA) to develop a document, CSA Z902 *Blood and Blood Components* to assist facilities to become compliant with the *Blood Regulations*. This guideline supports implementation of the CSA *Blood and Blood Component* Standards in the setting of elective community transfusion.

The Saskatchewan Clinical Guideline for Elective Community Transfusion was developed by a multidisciplinary subcommittee including a registered nurse representing the Saskatchewan Registered Nurses' Association, a registered nurse representing rural facilities, medical laboratory technologists representing the TMWG, an Emergency Medical Services (EMS) rural representative and a Transfusion Medicine Consultant.

This guideline outlines the minimal safety standards under which an Elective Community Transfusion Program can be delivered in compliance with the Health Canada *Blood Regulations*. Each RHA must meet but can exceed the requirements within this guideline.

In order to ensure that this guideline continues to evolve as a provincial resource the document will be reviewed every 2 years for accuracy. Revision requests can be written on Appendix #1 – Guideline Change request Form from the Saskatchewan Transfusion Resource Manual and forwarded to the TMWG. Suggested revisions will be reviewed on an ongoing basis with critical changes implemented immediately.

DISCLAIMER

The Saskatchewan Clinical Guidelines for Elective Community Transfusion has been prepared by the Transfusion Medicine Working Group - Elective Community Transfusion Subcommittee for sole use by Saskatchewan Regional Health Authority employees and officials.

Elective Community Transfusion Subcommittee

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Organizations and Regulatory bodies:

- Canadian Blood Services
- Nova Scotia Provincial Blood Coordinating Program
- Saskatchewan Registered Nurses' Association

GLOSSARY OF TERMS

TERM	DEFINITION
Blood Component	A therapeutic component of blood intended for transfusion (e.g. red cells, granulocytes, platelets, plasma) that can be prepared using the equipment and techniques available in a blood centre, as per CSA Z902. Notes: • Such equipment and techniques can include centrifugation, filtration or freezing. • Platelet components prepared in small pools are considered a blood component.
Community Transfusion	A transfusion that takes place outside of a hospital, as defined by *The Facility Designation Regulations.* This may include, but is not limited to, transfusion in a health centre or special care home.
Responsible Adult	An individual who is at least 18 years of age, mentally aware and physically able to assist the client to access emergency health care services should an emergency arise during or following the transfusion. This individual must agree to physically assess the client during the entire period the transfusion is given, and for the first 6 hours following the transfusion.
Plasma Protein Products (as defined by this document)	Any therapeutic product, derived from human blood or plasma, and produced by a manufacturing process that pools multiple units (usually more than 12), as per CSA Z902. This excludes Hyperimmune Globulin products, such as Anti-D IG (WinRho SDF), Anti-HBIG, Hepatitis A immune globulin and rabies and tetanus immune globulins. Note: • Examples of blood products are human serum albumin, immunoglobulin preparations and some coagulation products.

Program/Service Provider	Please refer to RHA Roles and Responsibilities within this document.
Responsible Practitioner	A physician or Registered Nurse (Nurse Practitioner) within their scope of practice, qualified to practice in the Province of Saskatchewan who requests the transfusion and refers the client into the RHA Elective Community Transfusion Program.
Transfusion Service	An entity that performs pre-transfusion serological testing or is involved in the provision of blood, blood components or blood products and their transfusion or administration as per CSA Z902.
Transfusionist	For the purposes of Elective Community Transfusion; Professional Designations for Transfusionist: In accordance with the CSA Z902 standards for “home transfusion” it is within the scope of practice for a physician, Registered Nurse, Nurse Practitioner (RN (NP)) or Registered Nurse (RN) with acute care experience to transfuse blood components and plasma protein products.

Introduction

Transfusion in the context of this document includes the administration of blood components and plasma protein products by a transfusionist in a community setting, as previously defined.

Scope and Related Policies

CSA has developed standards for "home transfusion" that will be applied in the elective community transfusion setting. [CSA17.1-17.7]

Transfusion in the community is potentially more hazardous because of the increased amount of time required to respond to a suspected transfusion adverse event and the potential need to transport a client to an acute care facility Emergency Department. The transfusionist also has limited resources to manage adverse events. Therefore, community transfusion should only be considered for those recipients for whom the expected benefits are sufficient to warrant the increased risk. Community transfusion may be administered by a transfusion service with community care registered nurses or other qualified professionals providing the service delivery.

Each RHA is responsible to ensure the initial and ongoing competency of the transfusionists providing elective community transfusion service. Formal training shall be provided for transfusionists performing community transfusion. The transfusionist shall be at least a practising registered nurse with demonstrated competence in administering blood transfusions and in recognizing and managing transfusion adverse events. The transfusionist should have acute care experience**.** The process and frequency of the ongoing competency assessment will likely be different than for practitioners administering routine transfusions but, given the increased risk, should be completed and documented at least annually. Ongoing competency assessment may be undertaken in partnership between the RHA and the relevant professional association (i.e., SRNA).

Criteria for Elective Community Transfusion

A. Admission Guidelines

1. Informed consent:
   a. Written informed consent must be obtained by the responsible practitioner (MD, RN (NP)). The discussion must include the additional risk associated with elective community transfusion. Consent must be given by the client or a substitute decision maker and documented per established RHA procedure.

2. Clinical Status of Client:
    a. **There is at least one previous history of transfusion in hospital, without a serious adverse reaction**.
    b. A history of adverse transfusion reactions that are of a controllable nature (i.e. fever controlled with medication) may be considered for elective community transfusion.
    c. If the client has clinically significant alloantibodies to red cells, the antibody specificities should be clearly identified and there should be no unresolved serologic findings.
    d. Clients should be cooperative and able to communicate during the transfusion unless otherwise determined appropriate by the physician.
    e. Should be medically stable (i.e. stable cardiorespiratory status). Clients with acute coronary syndrome and unstable congestive heart failure are not suitable candidates.
    f. Should be receiving treatment that necessitates routine transfusion (i.e. chemotherapy, end of life care).
    g. Adequate venous access.
3. Elective Community Transfusion Environment
    a. Evaluated and deemed safe for transfusion as per established RHA procedure.
    b. Functional telephone available.
    c. Adequate space, lighting, cleanliness.
    d. Adequate hand cleaning available.
    e. Access to onsite emergency response within 30 minutes as per the recommendations of Saskatchewan Emergency Medical Services Review 2009.
4. Transfusionist
    a. Formal training such as certification in transfusions created within the RHAs shall be provided for transfusionists performing elective community transfusion. CSA 17.1.5
    b. The transfusionist shall be at least a practising registered nurse with demonstrated competence in administering blood transfusions and in recognizing and managing adverse events. CSA 17.1.5
    c. The transfusionist should have acute care experience. CSA 17.1.5
    d. Another responsible adult shall be available to assist the transfusionist for the entire period of the transfusion. The transfusionist shall remain with the recipient for 30 minutes after transfusion. The responsible adult will remain with the recipient for 6 hours after the transfusion.

B. Exclusion Criteria

1. Absence of written informed consent specific for community transfusion of blood and blood products.
2. Unstable cardiac failure.
3. Rapid transfusion for emergency purposes.
4. Previous serious, adverse transfusion reactions (i.e. anaphylaxis and respiratory distress).
5. Acute GI bleeding.
6. Granulocyte transfusions.
7. A history of clinically significant antibodies with unresolved serologic findings.
8. No responsible adult available to assist the transfusionist and remain 6 hours post-transfusion.
9. Crossmatch sample is outdated (greater than 96 hours) and a new sample is required to be drawn from the client and the transfusion rescheduled.
10. Transfusions outside of daytime working hours. Transfusion shall only be administered during daytime hours for client safety (Reference: SHOT Annual Reports, 1996–2008 Transfus Med. 2009 August; 19(4): 156–158).

C. Appropriate Diagnosis

Elective community transfusion should only be considered for clients in a non-emergent situation (i.e. client can wait 48 hours for transfusion).

Appropriate diagnosis may include but is not limited to:

1. Symptomatic anemia due to malignancy, AIDS or chronic disease.
2. Thrombocytopenia in non-bleeding clients with a platelet count of <10 $x10^9$/L, or where there is a risk of spontaneous hemorrhage despite a platelet count of >10 x 10^9/L.
3. Treatment with intravenous immune globulin (IVIG) based on appropriate indication.

RHA Roles & Responsibilities

1. Select a Program/Service designate to oversee, coordinate and monitor delivery of transfusions in the community. Elective community transfusions are a collaborative endeavour of multiple departments essential to provide and support safe client care. Regular reports from the Program/Service designate should be received to the appropriate RHA VP and/or Director of Quality and Safety.
2. Approve responsibilities of staff involved in the program/service.
3. Authorize RHA policies and procedures. Ensure the program adheres to all blood standard and regulation requirements.
4. Act to discontinue the program/service when there is clear evidence that compliance with a regulatory blood standard(s) is deficient or when a training or competency requirement is not met. The program/service may resume once remedial action has been taken.

Client Referral Process

A. Practitioner (MD, RN (NP)) Responsibilities

The physician/RN (NP) referring the client for elective community transfusion is responsible for the following actions:

1. Follow the exclusion criteria and ensure that the location for the transfusion is within 30 minutes emergency response time.
2. Obtain the client/substitute decision maker's written informed consent for receiving blood/blood products or plasma protein protects in an elective community transfusion environment (see Appendix I – Example of Informed Consent Form for Elective Community Transfusion).
3. Discussion and documentation of client's wishes for life – sustaining treatment in the event of a severe transfusion reaction is strongly recommended (e.g. My Voice for Life-Sustaining Treatment Order).
4. Ensure the client/substitute decision maker is aware that a responsible adult is required to be available during and 6 hours after the completion of the transfusion.
5. Refer the client to the Program/Service designate to oversee, coordinate and monitor delivery of transfusions in the community as per the formal process established by the local RHA (see Appendix II: Example of Saskatchewan Elective Community Transfusion Referral Checklist).

6. Will commit to be available within 5 minutes by telephone on the day of the transfusion or will ensure an alternate Responsible Practitioner is available. This information will be part of the written orders and communicated to the transfusionist.
7. Will arrange for a pre-transfusion sample to be collected within 48 hours prior to the transfusion. The sample will be acceptable for a maximum of 96 hours from the time of collection if the client has been transfused within the last three months or is pregnant.
8. Is aware that the Transfusionist assigned to administer the transfusion, will contact the Responsible Practitioner to confirm the planned date and time for the transfusion.
9. Complete written orders to include:
    a. Blood component amount, rate and date transfusion is required. No more than 2 units of red cells will be delivered per transfusion day.
    b. Special requirements (i.e., CMV negative and/or irradiated and/or split units).
    c. Pre-medications (as required).
    d. Adverse reaction medication orders (please see Appendix III – Example of Order Set).
    e. Pre- and post-transfusion laboratory tests (as required).

B. Program/Service Provider Responsibilities

The program/service provider will be determined by the RHA. The responsibilities of the program/service provider are listed below.

1. Contact the Responsible Practitioner:
    a. To discuss and evaluate the clinical need of the request. The client must be medically appropriate and the expected benefits warrant the increased risk.
    b. To ensure the client has a responsible adult that will remain with the recipient for 6 hours following the completion of the transfusion.
    c. To ensure the Responsible Practitioner has agreed to be available by phone for the planned day of transfusion or made arrangements for an alternate Responsible Practitioner to be available.
    d. To ensure that arrangements for the client to have the pre-transfusion sample collected within the appropriate time frame have been completed.
    e. To ensure that the written informed consent has been obtained and a copy of the consent form is included in the client's medical chart.

2. Contact the Transfusion Service:
    a. Inform Transfusion Service personnel of the elective community transfusion request.
    b. Communicate the expected date of transfusion and confirm the availability of the blood component(s) requested.
    c. Ensure “elective community transfusion” has been documented on the client’s requisition.
    d. Ensure the pre-transfusion sample is collected and transported to the Transfusion Service as per established RHA procedures. Collect all elective community transfusion samples using a transfusion specific identification band system for transfusion client samples (e.g. transfusion specific identification number (TSIN)).
    e. Pre-transfusion samples may be collected at an outpatient clinic, in long term care (LTC) facilities or in the home environment when homecare services have been arranged.
3. Check that the orders are complete and include the following information:
    a. The component to be transfused, including special requirements (i.e., CMV negative and/or irradiated and/or split units).
    b. The number of units.
    c. The date of the transfusion.
    d. Pre- and post-transfusion laboratory tests to be performed.
    e. Any pre-medication, if required.
    f. Adverse reaction medication orders.
    g. Rate of transfusion.
    h. Discontinue IV 30 minutes after infusion, if appropriate.
4. Nurse records must include contact information for the responsible adult who has agreed to be present for the transfusion and to remain with the recipient 6 hours post-transfusion.
5. Confirm with the responsible adult that he or she will remain available for the date of transfusion and will remain with the recipient 6 hours post-transfusion.
6. The blood or blood products will be transported by an approved courier or by trained staff/family members. The blood or blood products will be transported in validated boxes that have been validated for both transport and storage.
7. Ensure the required supplies have been ordered for the day of transfusion, as well as the required documents, i.e., client’s completed transfusion report, copy of informed consent for blood. Refer to Appendix IV – Adverse Event Medication Kit and Appendix IX – Nursing Supplies Example.

8. Ensure the empty blood bags, tubing, sharps, blood transport container and completed transfusion/compatibility tag(s) are returned to the Transfusion Service.

C. Responsible Adult Responsibilities

1. The responsible adult is required to be available to assist the Transfusionist (Nurse), as required, during the transfusion of the recipient. The responsible adult must remain with the recipient for 6 hours post-transfusion.
2. On the day of the transfusion, the responsible adult will assist the Transfusionist with the clerical check. The clerical check must be completed in the presence of the recipient. Verify that the information on all blood products matches the information found on the client's identification band which includes the first and last name and unique identification number (e.g. (TSIN)). Obtain verbal confirmation from the recipient if possible. The date of birth (DOB) may be required as a third identifier as determined by the RHA policy and procedure. The clerical check also includes the Donor Unit Number, ABO and Rh type of Client and Donor unit.
   NOTE: Should a discrepancy be found, the transfusion must not proceed until the Transfusionist contacts the Transfusion Service to resolve the discrepancy and it is deemed safe to continue.
3. The responsible adult is required to stay with the recipient during the transfusion and 6 hours post-transfusion. The responsible adult will be instructed on the signs and symptoms of an adverse reaction and what to do if an adverse reaction occurs. The Responsible Practitioner's contact name and number is provided to the responsible adult in the event of an adverse reaction.

Pre-Transfusion

A. Sample Collection Procedure

1. Identify the client and ensure that the transfusion specific identification band is physically attached to the client. Follow established RHA procedures for client identification including a verbal confirmation of the client's identification prior to blood being collected.
2. Compare the information on the client's identification band with the transfusion requisition form. The client's information must be identical on

both. If there is a discrepancy, it must be corrected before the sample is collected. When using the client identification band system, ensure the unique transfusion specific identification number is placed on the transfusion requisition form, client's identification band and the client's blood samples.

3. If possible, ask the client to spell or verbalize his or her name and date of birth. Do not say "are you…?"
4. When possible ask the client if he/she was transfused in the last 3 months (and/or pregnant if applicable). Document this information on the requisition.
5. Collect blood samples and label immediately after they have been collected.
6. The samples must be labeled with a computer-generated or hand-written label and must contain the following information:
   - Client's last and first names(s)
   - Client's HSN or unique identifier (TSIN)
   - Date and time of collection
   - Identification of the person collecting the sample. Example: nurse, doctor, phlebotomist. The identification can be their name, initials or computer identification.
   - Client's date of birth is required by some Transfusion Services.
7. The nurse, doctor or phlebotomist collecting the blood sample must date and sign the requisition form and also document on the requisition the location where the transfusion is to be given and the date of the transfusion.
8. Return the requisition and blood samples to the testing Transfusion Service. Samples must be shipped per established RHA procedure.
9. The pre-transfusion sample is required 48 hours prior to the anticipated date of transfusion, unless otherwise indicated by the Transfusion Service. The sample is acceptable for a maximum of 96 hours. A new sample is required after 96 hours.

B. Transfusion Service Procedure

1. Review the request for blood product(s) from the Elective Community Transfusion Program. The request shall contain sufficient information to allow for unequivocal identification of the recipient. CSA-Z902 requires the following information to be included in the request:
   a. The first and last names of the recipient;
   b. The identification number of the recipient;

c. The recipient's location;
d. The blood product and;
e. The required dose of the product.

2. Proceed with pre-transfusion testing as per established RHA procedure. In order to qualify for the elective community transfusion program, all serological abnormalities should be clearly identified and there should be no unresolved serological findings. Notify the responsible practitioner and service provider if the transfusion does not qualify for the Elective Community Transfusion Program.
3. Package and issue the requested products for transport and storage as per the Health Canada *Blood Regulations* and established RHA procedure. Refer to Appendix VII – Example of Products Issue Voucher.
4. Notify the Program/Service Provider that the products are ready for transport.
5. Ensure that Appendix VIII – Log Sheet for Transport Cooler Pick Up from Transfusion Service is signed by the courier or family that is transporting the blood product. This form remains in the Transfusion Service and is completed by the laboratory staff when the Transport cooler is returned to the Transfusion Service following the completion of the elective community transfusion.

Transfusion

Transfusion of Blood Component(s) Procedure
(Performed by a Trained Competent Transfusionist as Previously Defined)

1. Confirm consent from the client receiving the blood or blood product(s).
   NOTE: If the client refuses the blood or blood products(s) at time of elective community transfusion, the Transfusion Service may accept the blood or blood product(s) back into inventory if the security seal has not been broken, the temperature is acceptable as per the validation of the storage container, and the unit(s) is returned in a timely manner to the Transfusion Service.
2. Together with the responsible adult, verify the identity of the client and the Responsible Practitioner's written request for blood or blood product(s). Ensure there is no discrepancy. The request shall include:
   - Client's first and last name(s)
   - Saskatchewan Health Services number (HSN) or unique identifier (TSIN)
   - Client's location
   - Pre-transfusion testing of required blood or blood product
   - Volume and dosage of specific blood or blood product required
   - Date and time of request
   - Date and time of intended transfusion, if available
   - Special transfusion requirements (e.g. Anti-CMV negative, modifications to the blood or blood product such as irradiation, washing or splitting).
   - Clinical indication
3. Provide and document in the client's medical chart, any teaching and/or information given to the client/substitute decision maker and responsible adult regarding the transfusion and signs and symptoms of adverse transfusion reactions.
4. In the physical presence of the client, the Transfusionist and responsible adult must compare and verify the client's identification on the client's transfusion report, transfusion/compatibility tag(s) and the blood or blood product(s) label to ensure the information is identical. Document verification of the client's identification band, transfusion reports, blood/blood product(s) temperature and results of visual inspection. The following must be checked:
   a. Client's Transfusion Report
      i) Client's name, date of birth (optional, refer to RHA policy), unique identifier number (HSN, TSIN), ABO/Rh type – dependent on blood product request – antibody screen identification results.

ii) Blood/blood product's donation number, ABO/Rh type and expiry date. Note: Blood /blood product's donation number may not be listed on the Transfusion report.

b. Blood components(s) unit tag
   i) Client's name, date of birth (optional refer to RHA policy), unique identifier number (HSN, TSIN) and ABO/Rh type.
   ii) Blood/blood product's donation number, ABO/Rh type and expiry date.
   iii) Recipient's compatibility status for red cells.
   iv) Date and time of issue.

c. Blood /blood product(s)
   i) Blood /blood product(s) donation number and ABO/Rh type.
   ii) Expiry date of the blood/blood product(s).
      a) Visual check for leakage, discoloration or abnormalities such as clots or hemolysis. Refer to Appendix V - Canadian Blood Services Visual Assessment Guide / or see attached link: http://www.transfusionmedicine.ca/sites/transfusionmedicine/files/PDF/VAG_en.pdf
      b) Temperature -The sealed container used for blood/blood product(s) must be validated for both shipping and storage by the Transfusion Service issuing the blood products. Refer to Appendix VI for an example of a type of shipping/storage container used for blood/blood products.
         - One blood or blood product per sealed validated container (i.e., 2 packed cells will require 2 validated containers). Remember open only one box at a time as required.
         - The container must remain sealed until the Transfusionist is ready to proceed with the transfusion. If the tamper-proof seal is not intact, do not transfuse blood or blood products(s). Return container and blood/blood products to the issuing Transfusion Service.
         - Complete and sign the Products Issue Voucher inside the validated container. Return the storage container, empty blood bag(s) and copy of Products Issue Voucher to the Transfusion Service. Refer to Appendix VII.

CAUTION: If any discrepancy exists, contact the Transfusion Service immediately. Do NOT transfuse the blood or blood products(s).

5. Assemble supplies required for blood administration and management of an adverse transfusion reaction.

6. Ensure the client is in a comfortable position, take and record baseline vitals prior to premedication orders. Complete respiratory assessment. The client's vital signs (TPR & BP) must be recorded (and SpO2 if available):
    - Pre-transfusion, within 30 minutes of start of initiating the transfusion
7. Pre-medicate the client as prescribed (if applicable), usually 30 minutes prior to transfusion.
8. Set up and start infusion of the blood component(s). Run the blood component slowly for the first 15 minutes after the blood product has reached the client. Monitor vital signs, IV site, general condition, signs/symptoms of adverse reaction. If there is no adverse reaction, increase the flow rate to desired rate and monitor vitals. The client's vital signs must be recorded every one hour until completion or as per established RHA policy.
9. Blood component(s) must be given within 4 hours of removal from the blood transport container.
10. Document vital signs on the Transfusion Record Sheet (see Appendix X).
11. When the blood component(s) infusion is completed, keep the vein open with normal saline for 30 minutes. Continue observing the client and take a final set of vital signs 30 minutes post-transfusion. Record the vitals on the Transfusion Record Sheet. Watch for delayed adverse transfusion reactions and complete all documentation.
12. If no adverse reaction to the transfusion is noted remove IV cannula, as applicable, 30 minutes after completion of transfusion.

SHOULD A SERIOUS ADVERSE REACTION OCCUR

- **Stop the transfusion and infuse Normal Saline.**
- **Do not remove the IV cannula.**
- **Assess the client's vital signs and the presence of serious symptoms as per Appendix XI – Example of Transfusion Reaction Algorithm. Report all transfusion reactions to Responsible Practitioner and Transfusion Services by completing the Saskatchewan Hospitals Transfusion Adverse Event Report Form.**
- **Mild reactions such as mild fever and mild allergic responsive to medication, may not require a 911 call. Continue to monitor for signs and symptoms and consult with attending physician.**
- **In the presence of serious symptoms, call 911*, identify yourself as a RN or healthcare professional and prepare the client for transport to the hospital and complete orders received from Responsible Practitioner. This may include collection of blood samples for reaction investigations.**
- **Ensure you return all the transfusion supplies, inclusive of the remaining blood not transfused and any client blood samples, to the Transfusion Service as per the instructions below.**

13. Collect all transfusion supplies in a biohazard bag, including the infusion tubing, and return to the laboratory for proper disposal. Complete the transfusion/compatibility tag as per established RHA procedure. Return transport container and any required documentation to the Transfusion Service including Saskatchewan Hospitals Transfusion Adverse Event form (if applicable).
14. All needles and sharps are to be disposed of in an approved sharps container.
15. Provide the client and responsible adult with post-transfusion instructions including what to do in the event of an adverse transfusion reaction. Document that instructions have been given.
16. Give client the Notification of Transfusion documentation. Keep a copy for the client's medical chart.

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APPENDIX I – EXAMPLE OF CONSENT FORM FOR ELECTIVE COMMUNITY TRANSFUSION

CONSENT FOR ADMINISTRATION OF
BLOOD/BLOOD COMPONENTS
AND/OR PLASMA PROTEIN PRODUCTS
IN AN ELECTIVE COMMUNITY TRANSFUSION
ENVIROMENT

Addressograph

CLIENT/SUBSTITUTE DECISION MAKER

I, _____consent to the administration of blood products to_____
(Print name of self or substitute decision maker) **(Myself or name of client)**

I have been advised of the nature, consequences, benefits, and material risks associated with the administration of blood products and have been advised of any reasonable alternatives that may be available for my (or the client's) condition. It has been explained to me that the transfusion will be performed as an elective community transfusion. This is potentially more hazardous because of the greater time to emergency response. I have been informed of the consequences of refusing the administration of blood products. I have had the opportunity to seek clarification and have had my questions answered.

I give consent to receive blood products during the course of my treatment.

Signed: _____ Date: _____
(SIGNATURE OF CLIENT OR SUBSTITUTE DECISION MAKER) **(DD/MM/YYYY)**

Telephone Permission Date: _____ Relationship to Client: _____

Date: _____ Witness: _____
(RN, LPN)

PHYSICIAN/NURSE PRACTITIONER (NP)

The risks of administration of blood/blood components and/or plasma protein products (blood products) have been explained to the client or substitute decision maker. The risk of the transfusion in a community environment has been explained. The nature, consequences, benefits, material risks, and the reasonable alternatives, including the consequence(s) of refusing the administration of blood products has been discussed with the client or substitute decision maker.

❑ INFORMATION PAMPHLET GIVEN TO CLIENT

_____ _____
PRINT NAME OF PHYSICIAN/NP **SIGNATURE OF PHYSICIAN/NP**

APPENDIX II – SASKATCHEWAN ELECTIVE COMMUNITY TRANSFUSION REFERRAL CHECKLIST

SECTION TO BE COMPLETED BY PRACTITIONER (MD, RN (NP)):			
CLIENT NAME:			
HEALTH SERVICE NUMBER:			
DATE OF BIRTH:	Is this client infectious?	☐ Yes	☐ No
Program/Service Coordinator Name:			
Responsible Adult Name:			
Civic address in which client will receive transfusion:			
Date and time physician is available:			
Client/parent/guardian informed and agreeable:		☐ Yes	☐ No
Client lives within 30 minutes of an Emergency Care Centre/Hospital		☐ Yes	☐ No
Transfusion Order:			
Blood Component:	Number of units:		
Special Requirements	CMV negative	☐ Yes	☐ No
	Irradiated	☐ Yes	☐ No
	Split unit	☐ Yes	☐ No
Date of last transfusion:			
Date of last pregnancy:			
Name of antibodies, if known:			
Reaction to previous transfusion		☐ Yes	☐ No
If yes, describe:			
Known allergies:			
SECTION TO BE COMPLETED BY PROGRAM/SERVICE PROVIDER:			
Client specific order for anaphylaxis		☐ Yes	☐ No
Pre-medication required		☐ Yes	☐ No
If yes, describe:			
Remove saline lock 30 minutes after transfusion		☐ Yes	☐ No
Any required blood work, before or after transfusion		☐ Yes	☐ No
If yes, describe:			

Facility endorsement if guideline referral checklist is used as a health region form

Approved by: _____ _____
(Senior Management) (Senior Management)

Facility effective date: _____
(Date of implementation)

APPENDIX III – EXAMPLE OF ORDER SET

Regina Qu'Appelle HEALTH REGION

PRACTITIONER PRE-PRINTED ORDERS

Administration of Blood Products at WRC

To complete the order form, fill in required blanks and/or check the appropriate boxes.
Bulleted items will be initiated automatically.
To delete orders, draw one line through the item and initial.

Allergies: No ☐ Yes ☐ (list allergies below)

Patient Weight
Est.____kg Actual _____kg

Posted Initial	ORDERS AND SIGNATURE	Page 1 of 1

Investigations or Tests

- Group and Cross Match for _____ units of _____

☐ Transfuse 2 units of packed red cells, when arrangements in place
☐ complete in one day ☐ one unit per day x two days
☐ Transfuse 1 unit of packed red cells in divided bags, one bag per day x two days
☐ Other blood product (specify)_____
☐ CBC post transfusion in am (weekdays) Date_____

Medication:

Pre-transfusion (as recommended by Transfusions Department)
☐ Acetaminophen 650mg PO or PR
☐ DiphenhydrAMINE 25 mg IV
☐ DiphenhydrAMINE 50 mg IV
☐ Hydrocortisone 100 mg IV
☐ MethylPREDNISolone 125 mg IV
☐ Other: _____

For patients with compromised cardiac status
☐ Furosemide 20 mg IV once between units

For transfusion reactions:
☐ Fever (fever greater than one degree above baseline), Acetaminophen 650mg po q4h pm
☐ Rash or hives ☐ DiphenhydrAMINE 25 mg IV
☐ DiphenhydrAMINE 50 mg IV
☐ Hydrocortisone 100 mg IV
☐ MethylPREDNISolone 125 mg IV
Notify physician and Transfusion Department (RGH 4463) as per WRC blood administration guidelines

For anaphylactic reaction:
EPINEPHrine inj 1 mg/mL (1:1000) IM prn
May repeat q 10-20 min pm x 2 doses

	Dosage (mL)	Weight (kg)
☐	0.5 mL	45 and greater
☐	0.4 mL	35 – 44.9
☐	0.3 mL	25 – 34.9
☐	0.2 mL	15 – 24.9

Give EPINEPHrine, activate EMS
Notify physician and transfusion department as per WRC blood administration guidelines

Treatments
☐ Saline lock IV post-transfusion x 24 hours

Date & Time **Practitioner/Prescriber Signature:**

Practitioner/Prescriber Name: (printed)

Version: May/2013 Form No.: PP-462
Approved by: Department of Family Medicine
Revision Date: May 2016

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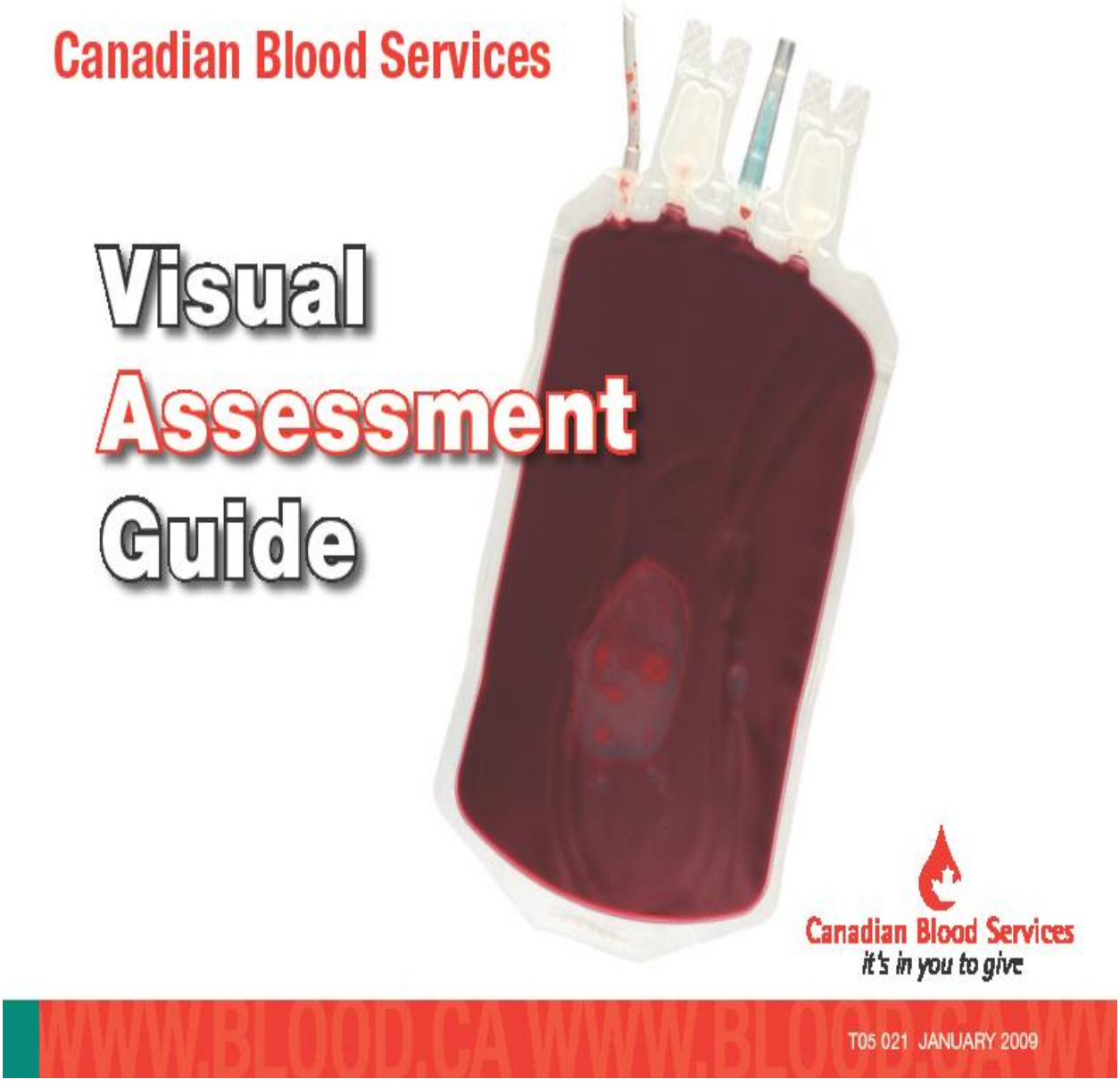
APPENDIX IV – ADVERSE EVENT MEDICATION KIT

APPENDIX V – CANADIAN BLOOD SERVICES VISUAL ASSESSMENT GUIDE

http://www.transfusionmedicine.ca/sites/transfusionmedicine/files/PDF/VAG_en.pdf



APPENDIX VI – SHIPPING/STORAGE CONTAINER

TABLE A

HEALTH REGION	TYPE OF CONTAINER VALIDATED	SHIPPING	STORAGE
RQHR	CREDO	YES	YES

TABLE B

TYPE OF CONTAINER	MANUFACTURE	APPROXIMATE COST
 CREDO	MINNESOTA THERMO SCIENCE	EACH BOX $275 WITH AN EXTRA COST OF $75 FOR OUTER FABRIC SHELL WHICH CAN BE EMBROIDERED WITH HEALTH REGION LOGO

APPENDIX VII – PRODUCTS ISSUE VOUCHER

SASKATCHEWAN BLOOD/BLOOD PRODUCTS/PLASMA PROTEIN PRODUCTS ISSUE VOUCHER FOR ELECTIVE COMMUNITY TRANSFUSION

Please complete this form and retain a copy in the client's chart. Return the original with the empty blood bag(s) or empty Plasma Protein containers with back copy of the Blood /product tag in the transport container by the arranged courier to the issuing Transfusion service.

Name of Transfusion Service: _____

Blood/Blood Components

Unit Number	Blood Group	Product type	Transfused Time/Date	Discarded Time/Date

Plasma Protein Products

Plasma Protein Product	Lot number	Quantity/dose	Transfused Time/Date	Discarded Time/Date

PLEASE VERIFY AND SIGN:

- Tamperproof tie on the shipping container is intact.
- Blood component/blood product for transfusion passes visual inspection.
- Transfusion report on client's chart and notification of administration of blood and or blood products form is in the container for the client.

Product received at _____ _____

Place of Transfusion **Date/Time**

By _____

Transfusionist Signature

APPENDIX VIII – LOG SHEET FOR TRANSPORT COOLER PICK UP FROM TRANSFUSION SERVICE

Date	Time	Courier/Family Pick up	Return Date/Time	Transfused	
				Yes	No

APPENDIX IX – NURSING SUPPLIES EXAMPLE

Transport Containers/ Storage Containers	• Fishing tackle boxes and shoulder bags
Monitoring Equipment	• Blood Pressure (BP) cuff • Stethoscope • Thermometer • Watch with second hand
IV	• Pump • N/S drip – 500 N/S x 2 • Tubing for N/S • Tubing for blood product with filter
IV Starting Equipment	• Cathlons, variety of sizes • Alcohol swabs • Extension tubing • N/S flush • Tourniquet • Gloves and eye protection
Medications	• Tylenol – po • Benadryl – po/IV • Lasix – IV
Miscellaneous Supplies	• Syringes • Blue pads • Biohazard containers and bags • Sharps container
Oxygen	• Access to oxygen in facility • Tubing • Mask
Lab Supplies	• CNS container • Phlebotomy supplies – tourniquet, blood tubes, labels and requisitions

APPENDIX X – EXAMPLE OF TRANSFUSION RECORD SHEET

Policy & Procedure: Blood, Blood Components & Fractionation Products—Administration of

Regina Qu'Appelle HEALTH REGION

TRANSFUSION RECORD
BLOOD AND BLOOD COMPONENTS

DO NOT ADMINISTER IF THERE ARE ANY ERRORS OR DISCREPANCIES

Addressograph

DONOR LABEL (affix below when unit started)	
	Date: _____ Double Check at Patient Bedside: ☐ Consent Obtained ☐ Patient Name ☐ PHN ☐ Product Type Received ☐ Product Number ☐ ABO and Rh Type of Patient ☐ ABO and Rh Type of Product ☐ Expiry Date of Product Signature: _____ Signature: _____ Comments: _____
Time Commenced: _____ BP: _____ T: _____ P: _____ R: _____ SaO2: _____	
15 Minutes After Initiation—Time: _____ BP: _____ T: _____ P: _____ R: _____ SaO2: _____	
Every Hour Until Complete: _____ BP: _____ T: _____ P: _____ R: _____ SaO2: _____ BP: _____ T: _____ P: _____ R: _____ SaO2: _____ BP: _____ T: _____ P: _____ R: _____ SaO2: _____	
Time Assimilated: _____ BP: _____ T: _____ P: _____ R: _____ SaO2: _____	
If IVIG do prior to each rate increase	

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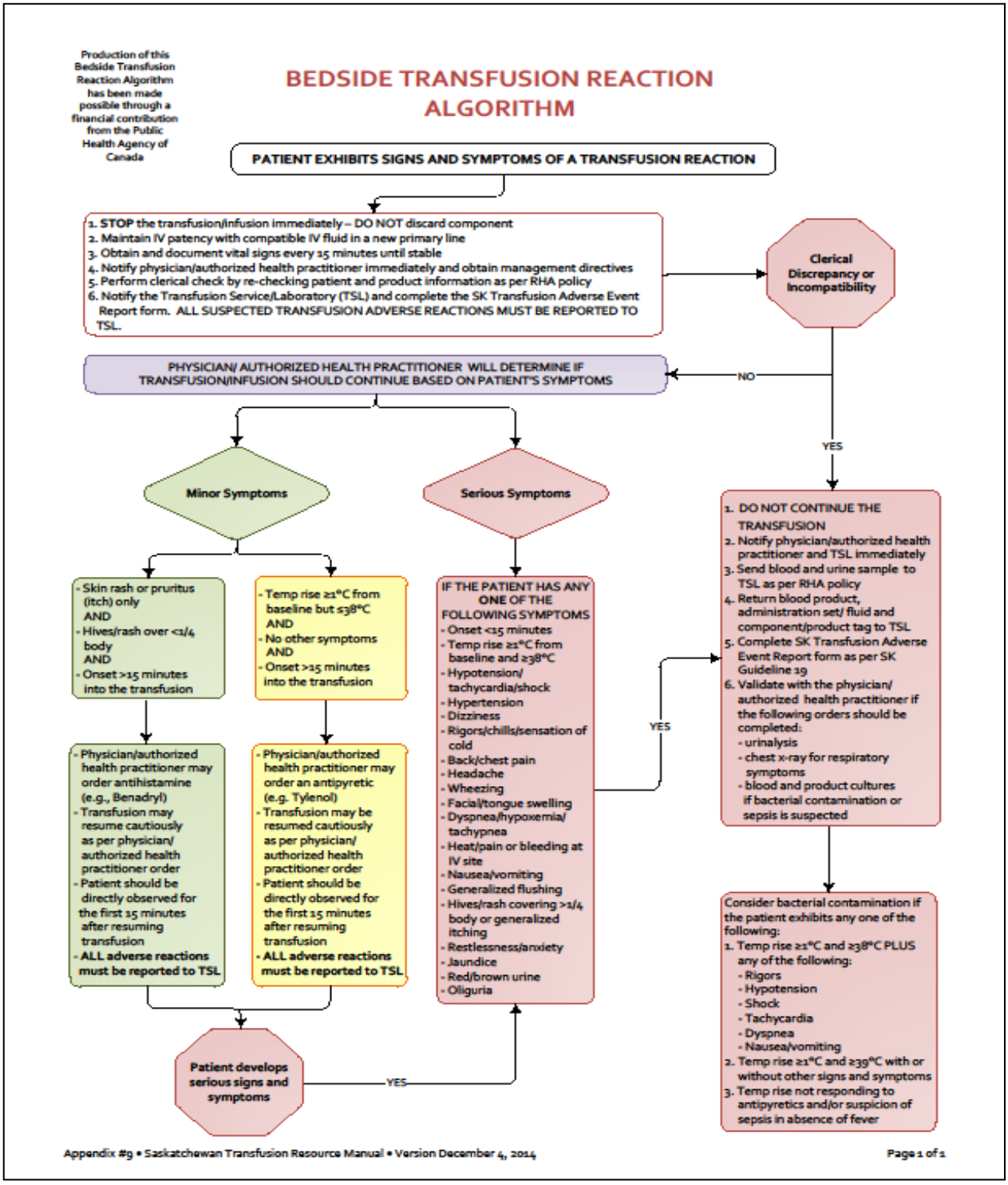
APPENDIX XI – EXAMPLE OF BEDSIDE TRANSFUSION REACTION ALGORITHM



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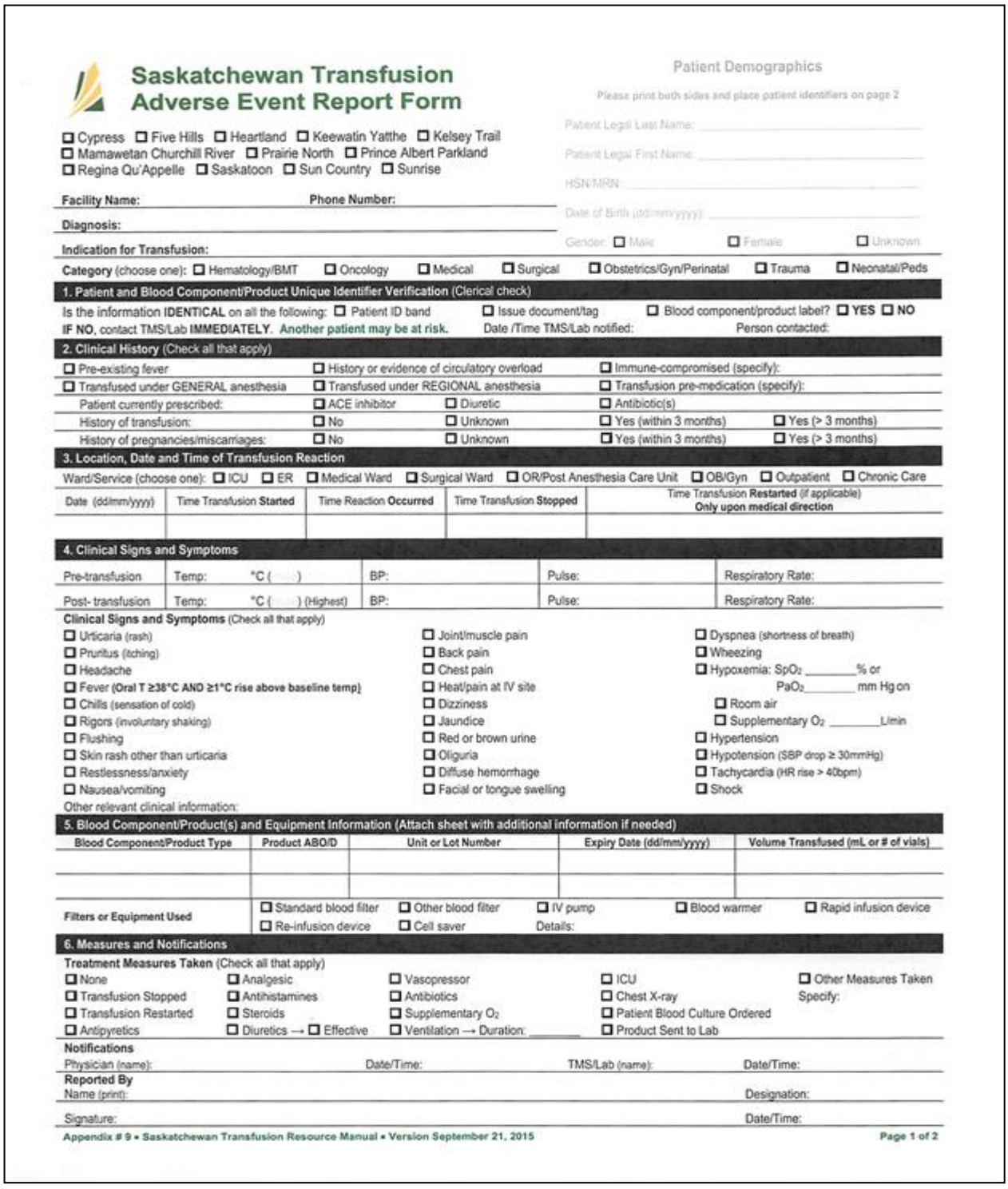
APPENDIX XII – SASKATCHEWAN HOSPITALS TRANSFUSION ADVERSE EVENT FORM



Saskatchewan Transfusion Adverse Event Report Form

Patient Demographics

Please print both sides and place patient identifiers on page 2

☐ Cypress ☐ Five Hills ☐ Heartland ☐ Keewatin Yatthe ☐ Kelsey Trail
☐ Mamawetan Churchill River ☐ Prairie North ☐ Prince Albert Parkland
☐ Regina Qu'Appelle ☐ Saskatoon ☐ Sun Country ☐ Sunrise

Patient Legal Last Name:

Patient Legal First Name:

HSN/MRN:

Facility Name: Phone Number:

Date of Birth (dd/mm/yyyy):

Diagnosis:

Gender: ☐ Male ☐ Female ☐ Unknown

Indication for Transfusion:

Category (choose one): ☐ Hematology/BMT ☐ Oncology ☐ Medical ☐ Surgical ☐ Obstetrics/Gyn/Perinatal ☐ Trauma ☐ Neonatal/Peds

1. Patient and Blood Component/Product Unique Identifier Verification (Clerical check)

Is the information **IDENTICAL** on all the following: ☐ Patient ID band ☐ Issue document/tag ☐ Blood component/product label? ☐ **YES** ☐ **NO**
IF NO, contact TMS/Lab **IMMEDIATELY**. **Another patient may be at risk.** Date /Time TMS/Lab notified: Person contacted:

2. Clinical History (Check all that apply)

☐ Pre-existing fever	☐ History or evidence of circulatory overload		☐ Immune-compromised (specify):	
☐ Transfused under GENERAL anesthesia	☐ Transfused under REGIONAL anesthesia		☐ Transfusion pre-medication (specify):	
Patient currently prescribed:	☐ ACE inhibitor	☐ Diuretic	☐ Antibiotic(s)	
History of transfusion:	☐ No	☐ Unknown	☐ Yes (within 3 months)	☐ Yes (> 3 months)
History of pregnancies/miscarriages:	☐ No	☐ Unknown	☐ Yes (within 3 months)	☐ Yes (> 3 months)

3. Location, Date and Time of Transfusion Reaction

Ward/Service (choose one): ☐ ICU ☐ ER ☐ Medical Ward ☐ Surgical Ward ☐ OR/Post Anesthesia Care Unit ☐ OB/Gyn ☐ Outpatient ☐ Chronic Care

Date (dd/mm/yyyy)	Time Transfusion **Started**	Time Reaction **Occurred**	Time Transfusion **Stopped**	Time Transfusion **Restarted** (if applicable) **Only upon medical direction**

4. Clinical Signs and Symptoms

Pre-transfusion	Temp: °C ( )	BP:	Pulse:	Respiratory Rate:
Post- transfusion	Temp: °C ( ) (Highest)	BP:	Pulse:	Respiratory Rate:

Clinical Signs and Symptoms (Check all that apply)

☐ Urticaria (rash)	☐ Joint/muscle pain	☐ Dyspnea (shortness of breath)
☐ Pruritus (itching)	☐ Back pain	☐ Wheezing
☐ Headache	☐ Chest pain	☐ Hypoxemia: SpO_2 _____% or PaO_2_____ mm Hg on
☐ Fever **(Oral T ≥38°C AND ≥1°C rise above baseline temp)**	☐ Heat/pain at IV site	☐ Room air
☐ Chills (sensation of cold)	☐ Dizziness	☐ Supplementary O_2 _____L/min
☐ Rigors (involuntary shaking)	☐ Jaundice	☐ Hypertension
☐ Flushing	☐ Red or brown urine	☐ Hypotension (SBP drop ≥ 30mmHg)
☐ Skin rash other than urticaria	☐ Oliguria	☐ Tachycardia (HR rise > 40bpm)
☐ Restlessness/anxiety	☐ Diffuse hemorrhage	☐ Shock
☐ Nausea/vomiting	☐ Facial or tongue swelling	

Other relevant clinical information:

5. Blood Component/Product(s) and Equipment Information (Attach sheet with additional information if needed)

Blood Component/Product Type	Product ABO/D	Unit or Lot Number	Expiry Date (dd/mm/yyyy)	Volume Transfused (mL or # of vials)

Filters or Equipment Used: ☐ Standard blood filter ☐ Other blood filter ☐ IV pump ☐ Blood warmer ☐ Rapid infusion device ☐ Re-infusion device ☐ Cell saver Details:

6. Measures and Notifications

Treatment Measures Taken (Check all that apply)

☐ None	☐ Analgesic	☐ Vasopressor	☐ ICU	☐ Other Measures Taken
☐ Transfusion Stopped	☐ Antihistamines	☐ Antibiotics	☐ Chest X-ray	Specify:
☐ Transfusion Restarted	☐ Steroids	☐ Supplementary O_2	☐ Patient Blood Culture Ordered	
☐ Antipyretics	☐ Diuretics → ☐ Effective	☐ Ventilation → Duration: _____	☐ Product Sent to Lab	

Notifications

Physician (name): Date/Time: TMS/Lab (name): Date/Time:

Reported By

Name (print): Designation:

Signature: Date/Time:

Appendix # 9 • Saskatchewan Transfusion Resource Manual • Version September 21, 2015 Page 1 of 2

Saskatchewan Transfusion Adverse Event Report Form

Patient Demographics

Please print both sides and place patient identifiers on page 2

Patient Legal Last Name: _____

Patient Legal First Name: _____

HSN/MRN: _____

Date of Birth (dd/mm/yyyy): _____

Gender: ☐ Male ☐ Female ☐ Unknown

STTISS Number: _____

CNPHI Number: _____

Lab Order Number: _____

Transfusion Medicine Service / Laboratory Use Only

7. Results of Investigation and Pathologist Conclusion

7a. History of Previous Transfusion Reactions

☐ None ☐ Unknown ☐ Yes (within 3 months) ☐ Yes (> 3 months) Type of previous reaction:

7b. Relevant Lab Results and Additional Clinical Information

Examination	Pre-transfusion Result	Post-transfusion Result	Examination	Pre-transfusion Result		Post-transfusion Result	
ABO/Rh typing			Urinalysis				
DAT			Blood cultures:	Date sent:		Date sent:	
Clerical checks			☐ patient	# positive:	# negative:	# positive:	# negative:
Hemolysis check			☐ product				
Jaundice							

Blood Supplier or Manufacturer Notified ☐ No ☐ Yes → Supplier/Manufacturer Contact: Date/Time:

7c. Medical Director Conclusion

☐ Incident: ☐ Patient identification ☐ Product related ☐ Equipment related ☐ Other(specify):_____

☐ No transfusion reaction ☐ FNH ☐ Minor allergic ☐ Severe allergic/anaphylactic/anaphylactoid ☐ Anaphylactic shock

☐ IVIG headache ☐ Aseptic meningitis (IVIG related)

☐ Incompatible transfusion ☐ Intentional ☐ Unintentional ☐ ABO System Anti-_____ ☐ Other System Anti-_____

☐ Acute hemolytic reaction ☐ Delayed hemolytic reaction Cause: _____

☐ Delayed serological transfusion reaction Specify new alloantibody(ies) within 28 days of transfusion: Anti-_____

☐ TACO ☐ TAD ☐ PTP ☐ TA-GVHD ☐ Hypotensive reaction

☐ Blood-borne infection: ☐ Bacterial ☐ Viral ☐ Other (specify): _____

☐ Recipient Specify organism: _____

☐ Donor/product infected ☐ Yes ☐ No If yes, specify organism: _____

☐ TRALI ☐ Possible TRALI → Risk factors: _____

☐ CBS TRALI criteria met (1+2+3+4): ☐ CBS TRALI form sent Date: _____

1 ☐ Hypoxemia (defined as any of) ☐ SpO_2 < 90% on Room Air **or** ☐ PaO_2 < 60 mm Hg on Room Air **or** ☐ PaO_2/FIO_2 < 300

2 ☐ Transfusion within 6 hours of TRALI 3 ☐ New Chest X-Ray findings of bilateral infiltrates 4 ☐ No evidence of circulatory overload

☐ Unknown ☐ Other (specify):

7d. Relationship, Severity and Outcome

a. Relationship of reaction to transfusion	☐ Definite	☐ Probable	☐ Possible	☐ Doubtful	☐ Ruled out	☐ Not determined
b. Severity (Grade)	☐ 1 (non-severe)	☐ 2 (severe)	☐ 3 (life-threatening)		☐ 4 (death)	☐ Not determined
c. Outcome	☐ Minor or no sequelae	☐ Major or long-term sequelae			☐ Death	☐ Not determined
Relationship to death	☐ Definite	☐ Probable	☐ Possible	☐ Doubtful	☐ Ruled out	☐ Not determined
d. Status of investigation	☐ In progress ☐ Concluded	☐ Cannot be concluded → Reason (specify):				

8. Pathologist Comments and Recommendations

☐ **This report relates to a transfusion administered at a facility other than the reporting facility.**

Name of Transfusing Facility: **Reportable to CNPHI:** ☐ Yes ☐ No

Transfusion Service Medical Director or Pathologist (or Designate)

Signature: Name (print): Date:

Fax SK Adverse Event Report Form to SHR 306-655-0987 or RQHR 306-766-4382

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