Transfusion of Blood Components and Blood Products Policy FAQs

Frequently Asked Questions Summary

Resources for Transfusion of Blood Components and Products are available on the Transfusion Medicine Webpage at www.ahs.ca/labtransfusion

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General

1. *Does the revised policy support Licensed Practical Nurses (LPNs) to perform all activities related to the administration of blood components and blood products?*

   LPN professional regulations were amended in February 2020 to include authorization for LPNs to "administer blood and blood products". This means that LPNs can perform all the activities associated with administration of blood components and blood products including spiking the bag, setting the rate on the infusion pump, changing the rate on the infusion pump, monitoring the patient, performing all in-scope activities related to transfusion reaction, and discontinuing the transfusion.

   Alberta Health Services (AHS) strongly recommends LPN's take the College of Licensed Nurses of Alberta (CLPNA) module entitled "Administering Blood or Blood Products" for those who graduated prior to 2022. LPNs do not require additional authorization from the CLPNA. LPNs are required to take the required AHS education module as are all other health care providers and must be competent to perform all the activities associated with blood component and blood product transfusion and only perform those activities if they are appropriate and supported in their clinical setting.

2. *How can I find out which health care professionals can order and/or administer blood component and blood product transfusion?*

   All AHS health care providers are responsible to understand what blood component and blood product activities they are permitted to perform as part of their role at AHS. This includes following all specific profession regulations and college standards/conditions as applicable.

   A list of which health care professionals can order and/or administer blood products and blood components was not developed because professional regulations change over time, which could lead to the resource providing inaccurate information. If you are unsure if you are authorized or permitted to perform a specific activity ask your manager, educator or practice lead, or contact the Professional Practice Consultation Service at practice.consultation@ahs.ca before performing the activity.

Education and Competency

3. *Why am I required to take the provincial AHS MyLearningLink (MLL) education module and training every 2 years?*

   Canadian and Provincial accreditation standards require all health care providers who perform or may perform activities related to blood component and blood product administration to complete mandatory education and training at regular intervals. The requirement of the education in AHS policy is aligned with the Canadian and Provincial Accreditation standards and the College of Physicians and Surgeons of Alberta (CPSA). AHS is also required to track all employee's successful completion of education and training.

   If this is a requirement, will I be paid to do the education?

   Discuss this with your manager.

4. *What competency assessment is needed?*

   The accreditation standard related to health care providers & professionals involved with blood components and blood products requires all organizations including AHS to have formal competency assessment.

   When blood products and blood components are administered, it is required that all health care providers/professionals complete the provincial education module *"Transfusion Medicine Education"* on My Learning Link (MLL) every two years along with a competency assessment. An example of competency assessment is the completion of the Transfusion Skills and Reaction Management skills checklists in the Lippincott Procedures. See the AHS Insite Transfusion Medicine Education page for more information on Lippincott Procedures skills checklists.

   In addition to the required education, it is expected that health care professionals self-identify additional learning needs and be responsible to maintain their competency in blood administration.

5. *How do I know if I have taken the provincial education module in the last 2 years?*

   Sign in to My Learning Link (MLL) on Insite and look under the 'completed' tab for the *"Transfusion Medicine Education"* module.

6. *How do I know I am administering a blood component or blood product?*

   Refer to the Blood Components & Products Information/Monographs | Alberta Health Services or the product insert.

7. *In my role I rarely perform activities related to blood component and blood product transfusion. Is there additional training beyond the MyLearningLink (MLL) education module that I need to take?*

   No, but you are required to self-identify any learning needs you may have and undertake appropriate education and training so that you are able to safely perform transfusion activities. Seek out help through your manager or clinical educator/practice lead. There are many resources available for you to gain additional knowledge. Refer to resources available on www.ahs.ca/labtransfusion

8. *What is the education requirement if I only:*
    - *transport blood components or blood products?, or*
    - *pick up or issue blood?, or*
    - *administer blood products by SC or IM injection only?*

    All health care providers can determine whether the education requirement applies to them by using the Transfusion Medicine Education Requirements Decision Tool on the AHS Insite webpage. Search on AHS Insite for 'Transfusion Medicine Education' under Health Professions Strategy & Practice (HPSP). The decision tool for blood components or products includes the following roles:
    - Do you order?
    - Do you collect type & screens?
    - Do you pick up or issue?
    - Do you transport? (see question #8)
    - Do you do bedside checks?
    - Do you administer?

9. *Where can I find the Annual Blood Drop education?*

    The annual blood drop education is integrated into the MLL *Transfusion Medicine Education* module. The module will provide you with the appropriate education based on the role you have involving blood products and blood components. You will still need to obtain a blood drop sticker from your manager, educator, or practice lead once you have completed the module.

Informed Consent

10. *What is the informed consent process for patients receiving blood or blood product?*

    The informed consent process follows the AHS Consent Policy Suite.

11. *What should we do if the patient needs a blood transfusion in the middle of the night but there is no MRHP on site to provide the order or obtain consent?*

    If a health care professional suspects the need for blood transfusion the MRHP should be notified. If urgent/emergent a verbal order by phone or in person from the MRHP on call would be required and documented. The health care professional accepting the verbal order shall repeat the blood transfusion order back to prescriber when accepting a telephone order.

    If the patient has capacity, a telephone conversation between the patient and the MRHP should occur to obtain informed consent for the blood or blood products.

    As soon as possible on returning to the hospital, the MRHP should sign the order and the telephone consent section on the first page of the form.

    Refer to the AHS Consent Policy Suite and FAQ for more information on:
    - Where is consent documented / what form should I use?
    - Witness requirements?
    - Who can obtain informed consent?
    - How much detail needs to be on the consent form?
    - How long is a consent form valid? Do I need a new form for each transfusion?
    - Emergency Consent Process?
    - What do I do if the patient refuses transfusion?
    - What if the parents of a minor child refuse transfusion?
    - Who determines if a minor child is a mature minor and able to make decisions about transfusion independently?

12. *If the most responsible health practitioner (MRHP) has discussed the risks and benefits of transfusion with the patient, and signed the consent form, can a nurse complete the form and witness the consent at the time of administering the blood?*

    If discussion between the patient and the MRHP about a transfusion has occurred, and, at the time of administration of the blood product the nurse can confirm that the patient is aware of the transfusion and has consented, then the nurse can “witness” the patient signature on the consent form and begin product administration prior to obtaining the MRHP signature. However, the nurse should ask if the patient has any further questions. If the patient has further questions, documented consent would NOT be obtained and the MRHP would be notified that the patient has further questions. Otherwise, MRHP signature shall be on the consent form.

Collection of the Pre-transfusion Specimen(s)

13. *What is the difference between a type and screen order and a blood component order?*

    A Type and Screen is laboratory testing which includes a blood type and an antibody screen to determine what type of blood components are compatible with patient.

    An order for the blood component is required for the transfusion medicine laboratory to provide the component to the patient.

14. *Why is a transfusion service identification number (TSIN) required?*

    The TSIN is a unique number assigned to the patient for the purpose of blood administration. The TSIN is uniquely traceable to the pre-transfusion specimen collected at a given date and time to ensure blood component compatibility and ensures the vein-to-vein traceability of the specimen collected from the patient through to the blood component matched to them.

15. *I forgot to include the identification of the witness on my type and screen specimen and called the lab immediately to report the omission. The lab refused to accept the verbal report and asked me to recollect the sample. Why are the requirements for pre-transfusion specimen so rigid?*

    It is essential that health care providers follow specific directions for unequivocal patient identification and appropriate labelling of pre-transfusion samples. Unequivocal meaning unmistakable or indisputable. Any error, no matter how small it may seem, could lead to your patient receiving incompatible blood components or blood products. Receiving incompatible blood components or blood products could lead to potentially fatal hemolytic transfusion reactions. Because of the risk of serious harm or death, there is "zero-tolerance" for any deficiency in specimen collection and labelling.

    Unmatched blood is available by MRHP request if type and screen cannot be re-collected and situation is urgent/emergent.

16. *My patient's TSIN band fell off and was found in the bed. I am certain this is the patient's band. Can I reapply it?*

    No, anytime a band is not physically attached to the patient (directly or by linking it to another directly attached band) a new type and screen specimen is required.

17. *The type and screen order prompts the requester to answer, "is this a future scheduled pre-operative patient testing order?" To which patients does this question apply?*

    It can be applicable to any pre-surgical patient regardless of whether or not this order was placed during a visit to a Pre-Admission Clinic.

18. *Can I check the box that says "Rover PPID" on the TSIN card when identifying my patient?*

    The Rover PPID box can be checked when identification has been done using a Rover device and labels are printed at bedside using a portable or dedicated room printer, not brought from outside the room. More information is available at Specimen Collection & Testing \| Alberta Health Services

Equipment, Supplies, and Medications

19. *Where can I find information on blood shipment temperature monitors?*

    Contact your local Transfusion Medicine laboratory.

Pre-Transfusion Verification of the Patient and Blood Component or Blood Product

20. *What is the difference between two (2) person verbal check and an independent double check?*

    An independent double check (IDC) is used for high alert medications and a two-person verbal check is used for blood transfusion verification.

    A two-person verbal check is a cooperative process where 2 (two) health care professionals, or a health care professional and health care provider, while in the physical presence of the patient and if possible, with the participation of the patient or alternate decision-maker, read aloud and verify the patient identification against all information associating a blood component or blood product, to ensure the right blood component or blood product is given to the right patient.

21. *Can I verify multiple units of the same blood components at the same time?*

    No, each blood component unit must be verified using a two-person verbal check immediately prior to administration. Verifying all units when they arrive is not sufficient. This is also best practice for blood products.

    For IVIG only, where a dose consists of multiple vials, the entire dose may be checked using the two-person double check upon arrival. If all vials are kept securely with the patient, then a single person may perform a re-check of each individual vial immediately prior to administration.

22. *My patient's type and screen has an expiry date greater than 96 hours, but they were not seen in a Pre-Admission Clinic. Why is this?*

    If the patient is an inpatient neonate, their type and screen is valid for 4 months post-gestation if they have never been discharged from the hospital.

    For all other patients, who have not been pregnant or transfused in the last 90 days, the type and screen expiry of up to 30 days may be applicable to any pre-surgical patient who meets the criteria for extension regardless of whether or not the type and screen order was placed during a Pre-Admission Clinic visit.

Administration

23. *Intravenous access can be difficult. What is the risk associated with transfusing by use of an intravenous catheter smaller than 20 gauge?*

    When transfusing blood, we are trying to minimize the risk of hemolysis of red blood cells. If a small gauge catheter must be used, infusion rate may need to be reduced in order to decrease the risk of hemolysis.

24. *I was taught to always use normal saline as the intravenous solution compatible in transfusing blood. Are there cases where another solution is used?*

    To avoid errors, read Transfusion Medicine Monograph for the blood component or product prior to administration for compatible solutions when required. Refer to AHS webpage at: Transfusion Medicine | Alberta Health Services

25. *If there is an intravenous line running with another solution or medication, for example, D5W or KCl, can the line be flushed with normal saline and then used for the blood?*

    Refer to the Transfusion Medicine Monograph for the specific blood component or product for compatibility. Ideally the infusion set and line should be changed after medications are run and before blood components or products are infused. Consider using 'y' type connector (different lumen) to avoid incompatible solutions coming in contact and flush pre and post.

26. *What do I do with the blood tag that comes with the blood product or blood component?*

    The transfusion tags include the **patient information** and by policy these must **remain on the bag/vial/syringe until the transfusion is complete and there are no adverse reactions**.
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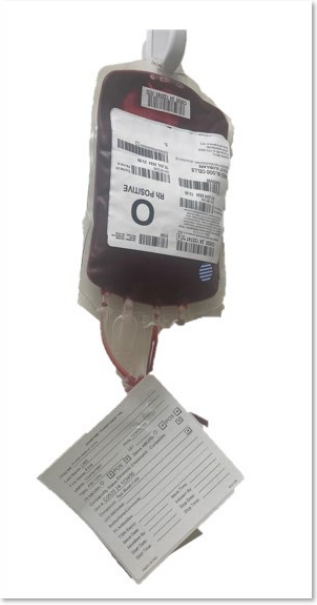
    Blood Components (e.g. RBC, Platelet, Plasma): **keep the transfusion tag attached** to the bag itself until the full transfusion is complete
    Blood Products (e.g. Albumin, IVIG, etc.): transfer the transfusion tag from the exterior box to the vial/bag/syringe for the transfusion

    When the **transfusion is complete** you can remove the tag from the component/product and **affix it to the transfusion tag mounting record and scanned into Connect Care.**



27. *Why does one health care professional need to be immediately available for the first 15 minutes?*

    A Health care professional is required to be with the patient doing only non-dedicated tasks and in the patient's view to be able to immediately attend to the patient. The first 15 minutes is when a serious transfusion reaction is most likely to happen.

28. *If the patient's transfusion has started, can the patient be transferred or sent for tests (e.g., x-ray or MRI)?*

    The patient should remain in treatment area for at least the first 15 minutes of the transfusion. The patient is to be assessed as per requirements in the policy. Refer to the Transfusion Medicine Monographs for monitoring requirements for the specific blood component or product.

    Clinical judgement is required to continue the transfusion out of the initial treatment area or transferred to another unit/facility. *If* it is essential to the well-being of the patient that they leave the initial treatment area concurrently with the transfusion, the care and monitoring must be assumed by another health care professional. A clinical handover is required when it is necessary to move the patient.

29. *My patient is less than 25kg and reducing the infusion rate for the first 15 minutes (as per policy – see Table 1 below) will result in the patient not receiving any blood product in those 15 minutes and/or bypasses the patient safety pre-programing in the infusion pump. What can I do?*

    Connect the primed blood product or component line as close to patient as possible and follow local line configuration practices. This allows the blood product or component to reach the patient sooner and allow for earlier detection of transfusion reactions. Due to line configuration and internal tubing volumes, the blood product or component may not even reach the patient in first 15 minutes.

    A reduced infusion rate is used in the first 15 minutes to increase the ability to identify a transfusion reaction before irreversible harm occurs. The policy states to slow the infusion rate *'if possible*.' In the neonatal population if the safety features of the drug pump require bypassing, it would be reasonable to not decrease the infusion rate in the first 15 minutes. Bypassing the safety features of the drug pump library could increase the risk of error.

    Monitor the patient throughout the blood product and blood component administration for transfusion reactions as per policy.

Table 1

Patient Weight	Infusion Rate: For the First 15 Minutes	Infusion Rate: After the First 15 Minutes
Greater than 25 kilograms (kg)	50 millilitres per hour (mL/h), if possible	For all patient weights: Continue transfusion at the prescribed rate as per the authorized prescriber's order, as long as it does not exceed four (4) hours from the time of blood component removal from the approved storage device / location. Refer to the Transfusion Medicine monographs for specific details (found on the AHS Transfusion Medicine external webpage).
Less than or equal to 25 kilograms(kg)	1 millilitre per kilogram per hour (mL/kg/h) or slower for the first 15 minutes, if possible	

Transfusion Reactions

30. *Where do I find the Acute Transfusion Reaction Chart?*

    The Acute Transfusion Reaction Chart can be found on the external AHS webpage at: Transfusion Medicine | Alberta Health Services on the Transfusion Reaction webpage.

31. *If a transfusion is stopped due to a transfusion reaction, is it appropriate to restart the transfusion?*

    Refer to Acute Transfusion Reaction Chart to determine when the transfusion may be restarted and consult with MRHP.

32. *Can a nurse order a transfusion reaction investigation laboratory test following a suspected transfusion reaction?*

    A nurse cannot order the reaction investigation laboratory test unless it is per scope of practice such as a Nurse Practitioner or Nurse with prescribing authorization and competency to do so.

    A nurse can enact a transfusion reaction investigation that an MRHP has already ordered. For example, in Connect Care, the order set for the blood transfusion includes the transfusion reaction investigation as needed.

Documentation

33. *Do I need to send transfusion documentation back to the lab?*

    The format and document used to record transfusion information varies between zones. Some sites require this transfusion information to be sent back to the Transfusion Service/laboratory. Become familiar with the practice in your site.

    If there has been a transfusion reaction, document the signs and symptoms and notify the transfusion service/laboratory and MRHP immediately.

34. *Should I report a clinical adverse event when there is a transfusion reaction?*

    Yes, transfusion reactions must be reported to the Transfusion Service/Laboratory as soon as possible and documented in Connect Care.
    RLS reporting is required only if there is a deviation from policy that contributed to the adverse transfusion event. Health care providers are encouraged to report these deviations and any other clinical adverse events in the Reporting and Learning System for Patient Safety on AHS Insite.

35. *The policy states that a patient must be notified that they have received the transfusion. Is there a standard process that guides how this is done?*

    Yes, provide the After Visit Summary (written notification) containing the transfusion information to the patient. Document any refusals.

Policy Implementation

36. *Our care setting does not currently permit transfusions due to concerns about staffing and competency. Are we now expected to provide this service?*

    No. Blood component or product administration does not occur in every patient care setting. The intent of the development of the policy was to establish standardized provincial requirements and processes for areas that are currently delivering the care.

37. *Who is responsible for implementing the provincial Transfusion of Blood Components and Products policy?*

    Many resources have been developed provincially to aid in the implementation of the newly revised and amalgamated policy. Local Operational leadership will be responsible for implementing the policy with the support of Clinical Nurse Educators or designates and APL Transfusion Safety Officers.

38. *Where can I find more information about transfusion of blood products and blood components?*

    For more information and resources, please visit the external AHS webpage at: Transfusion Medicine | Alberta Health Services.

    The policy will be found on the AHS policy webpage on Insite.

39. *Who do I contact if I have any additional questions?*

    For policy related questions, contact the AHS Policy Department policy@ahs.ca.

    For professional practice questions, contact the AHS Professional Practice Consultation Service practice.consultation@ahs.ca.

    For transfusion questions, contact the APL Transfusion Safety Team at: transfusion.safetyteam@aplabs.ca.