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<th>EMERGENCY ISSUE OF BLOOD COMPONENTS</th>
<th>NLBCP-031</th>
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<td>January 8, 2017</td>
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<tr>
<td><strong>Version</strong></td>
<td><strong>Review Due Date</strong></td>
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<td>2.0</td>
<td>January 8, 2019</td>
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Overview

Clinical situations may arise in which transfusion of blood components must be initiated before pre-transfusion testing is complete. This policy describes the pre-transfusion process, selection and issuing of blood components when circumstances do not allow for testing to be complete prior to the issue of blood components.

Policy

All RHAs shall develop and implement a policy for the release of blood components prior to the completion of pre-transfusion testing that complies with Provincial Blood Coordinating Program policy.

1. Prior to the release of uncross-matched blood components, the ABO group of the red cells shall be confirmed.

2. In an emergency or a life threatening situation blood components for which pre-transfusion testing has not been completed shall be released from the Transfusion Medicine Laboratory with documented approval of the prescribing physician.

3. When there is insufficient time to complete the ABO and Rh group of the recipient or a sample cannot be obtained, group O red cells shall be issued. If plasma is required, group AB plasma shall be issued.

4. Group O Rh negative red cells shall be issued for:
   4.1. Women of childbearing potential; and
   4.2. Children.

5. ABO group-specific or ABO group-compatible red blood cells may be issued prior to completion of other tests for compatibility if the recipient’s ABO group has been determined by the transfusing facility without reliance of previous records.

6. Records shall include a signed declaration by the requesting physician confirming that the clinical situation was sufficiently urgent to justify releasing blood components before completion of pre-transfusion testing.

7. The label attached to the emergency issued component shall indicate that testing is incomplete. This information shall be documented in the recipient’s medical record.

8. Should an emergency issued red cell unit subsequently prove incompatible, the attending physician shall be informed.
Guidelines

1. Rh(D) positive recipients may receive Rh(D) positive and Rh(D) negative blood components.
2. Blood Component Substitutions in Adults
3. Hospital inventory, best inventory practises and patient safety shall be considered when making evidence-based, emergency issue decisions.

Procedure

1. Request a recipient blood sample, if one has not been provided, before issuing blood component(s).
2. Perform a blood bank history check to determine if the recipient has any previous red cell antibodies identified, requires special products or any other special transfusion requirements are necessary. If Health Care Number or MCP is unknown, issue O Negative red cells and AB plasma.
3. When time permits, perform ABO/Rh group on recipient’s sample and issue group specific or group compatible blood components.
4. If unable to perform ABO/Rh group prior to release of blood components, issue group O red cells and group AB plasma. Issue Rh(D) negative red cells to children and women of child bearing age.
5. Remove a segment from red cell unit(s) for further compatibility testing.
6. Attach an ‘Uncrossmatched Blood’ label to the red cell unit(s).
7. Complete Emergency Issue form listing the donor unit(s) issued before pre-transfusion testing is complete.
8. Emergency issue unit(s).
9. Finish pre-transfusion testing.
10. Inform the attending physician immediately if emergency issued red cell unit(s) subsequently, upon completion of testing, prove to be incompatible.
Quality Control

1. Emergency issued blood components are **only** released with documented approval by prescribing physician.
2. Attach an 'Uncrossmatched Blood' label to the red cell unit(s).

Key Words

Emergency, issue, blood
Supplemental Materials

Process Flow

1. Is the Health care Number/MCP known?  
   - Yes: Issue O Neg RBC and AB Plasma  
   - No: Is a type & screen specimen available?

2. Is a type & screen specimen available?  
   - Yes: Perform ABO group testing  
     - Check patients blood bank history for previous red cell antibodies  
     - Emergency issue ABO compatible components. Issue RBCs antigen negative for any previously detected anti-bodies.  
     - Complete type & screen and crossmatch ASAP  
   - No: Request type & screen to be drawn before transfusion

3. Request type & screen to be drawn before transfusion  
   - Yes: Is patient a child or woman of child bearing potential?  
     - Yes: Issue O Neg RBCs antigen negative for any previous antibodies (if known) and AB plasma  
     - No: Issue O Pos RBCs antigen negative for any previous antibodies and AB plasma  
   - No: Check patients blood bank history for previous red cell antibodies

Effective Date: 2017-01-08
References
