

## Red Cell Screening Procedure

**Applicability** This procedure applies to all North Zone Laboratory personnel.  
**Purpose** This procedure provides instruction for how to process a request for red cells for adult stable, non-bleeding In-Patients or ED patients. Outpatients; surgical; pre-op and pediatric patients will not have orders screened.

**Policy Recommendations for Red Blood Cell Transfusion:**

**Non- Bleeding Stable Adult In-Patient or ED Patient- Refer to screening procedure below**

Hemoglobin (g/L)	Unit of RBCs	Recommendation
< 60	1-2	<ul style="list-style-type: none"> <li>• Transfusion highly recommended               <ul style="list-style-type: none"> <li>○ Young patients may tolerate greater degrees of anemia</li> <li>○ Patients with chronic iron deficiency can often be treated with IV iron alone</li> </ul> </li> </ul>
< 70	1	• Likely appropriate
71-80	1	• Likely appropriate in patients with cardiovascular disease
81– 90	1	• Appropriate only if there are signs and symptoms of anemia/ impaired oxygen delivery
>90	None	• Likely inappropriate; consult transfusion medicine physician and document indication in chart

**NOTE:** In non-bleeding patients, if transfusion is recommended, transfuse one unit and re-check patient's Hgb and symptoms prior to giving a second or subsequent unit of red blood cells.

There **should not** be a significant delay in the ordering and/or issuing of red cells on the basis that the product might not be indicated in a particular clinical situation.  
Process the request as ordered.

**Processing and Screening of orders for Red Cells**

**Procedure**

Step	Action	Detail
1.	Request for red cells is received.  Process the request for testing and assigning red cells units  <b>REMINDER:</b> If the patient has a history of antibodies or positive DAT crossmatch 2 units to be available	<i>Transfusion Related Testing Process Testing Sites</i>  <i>Transfusion Related Testing Process Non Testing Sites Aspen Meditech Ring</i>  <i>Transfusion Related Testing Process Non Testing Site Peace Meditech Ring</i>

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2.	Determine if red blood cell (RBC) screening is indicated based on the location of the patient care unit (PCU).																																																
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3.	Print/view an <b>Internal Inquiry</b> for the patient with the red cell order. Review the responses to the queries from Order Entry:			Answers to order entry queries appear on the patient inquiry report from Meditech																																													
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5.	Obtain and complete a 2 25 <i>Form C- Non-Bleeding Adult In-Patient or ER Patient Screening Tool Form</i>			<p>If Hgb is not within 24h, request that the patient's physician order a Hgb.</p> <p>A post transfusion Hgb is required prior to issuing subsequent units.          Refer to <i>Issuing Units North Zone Procedure</i></p>									
6.	<table border="1"> <thead> <tr> <th>If current Hgb is...</th> <th>And...</th> <th>Then...</th> </tr> </thead> <tbody> <tr> <td>less than or equal to 70g/L</td> <td></td> <td>           Inform nursing that one unit of red cells can be issued             Notify the nursing that Hgb and the symptoms must be re-checked before additional units can be issued.             Instruct nursing to notify Blood Bank if patient status changes.         </td> </tr> <tr> <td>71-80</td> <td>Patient has pre-existing cardiovascular disease or is experiencing symptoms</td> <td>Follow procedure in Hgb less than or equal to 70 g/L.</td> </tr> </tbody> </table>	If current Hgb is...	And...	Then...	less than or equal to 70g/L		Inform nursing that one unit of red cells can be issued  Notify the nursing that Hgb and the symptoms must be re-checked before additional units can be issued.  Instruct nursing to notify Blood Bank if patient status changes.	71-80	Patient has pre-existing cardiovascular disease or is experiencing symptoms	Follow procedure in Hgb less than or equal to 70 g/L.			<p>Current Hgb for 1<sup>st</sup> unit must be within 24 hours. For subsequent units, current Hgb is post-transfusion Hgb.</p>
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		Patient does not have existing cardiovascular disease and is not symptomatic	Inform nursing staff: “The red cell request for transfusion is outside recommendations. Ordering physician should be contacted to arrange consultation with Dr. _____ (Pathologist/TM physician). They can be reached at ‘phone number’.”  Instruct nursing to notify Blood Bank if patient status changes.	
	<b>If current Hgb is...</b>	<b>And...</b>	<b>Then...</b>	
	81-90	Patient is experiencing symptoms	Follow procedure for Hgb less than or equal to 70 g/L.	
		Patient is NOT experiencing symptoms	Inform nursing staff: “The red cell request for transfusion is outside recommendations. Ordering physician should be contacted to arrange consultation with Dr. _____ (Pathologist/TM physician). They can be reached at ‘phone number’.”  Instruct nursing to notify Blood Bank if patient status changes.	

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	is greater than 90g/L		<p>Inform nursing staff:          “The red cell request for transfusion is outside recommendations. Ordering physician should be contacted to arrange consultation with Dr. _____ (Pathologist/TM physician). They can be reached at ‘phone number’.”</p> <p>Instruct nursing to notify Blood Bank if patient status changes.</p>	
7.	<b>If....</b>	<b>Then....</b>		
	At a testing site once units are assigned	Put the screening tool with each unit assigned to the patient. For the 1 <sup>st</sup> unit, attach completed form to unit. For the 2 <sup>nd</sup> and subsequent units check off 2 <sup>nd</sup> unit/or more, and attach incomplete form to unit(s).		
	At a non-testing site prior to having assigned units on site	Put the screening tool with the patient inquiry, until the crossmatched units are assigned.		
	At a non-testing site once units are received and/or assigned	Put the screening tool with each unit assigned to the patient. For the 1 <sup>st</sup> unit, attach completed form to unit. For the 2 <sup>nd</sup> and subsequent units check off 2 <sup>nd</sup> unit/or more, and attach uncompleted form to unit(s).		
8.	Attach TM physician order label to the tag.			Label instructs Lab to order a post-transfusion Hgb.
9.	After units are issued attach the screening tool to the Blood Bank Pick up slip.			Refer to <i>Issuing Units North Zone</i>

**References** CSTM Standards for Hospital Transfusion Services, version 4, April 2017; Revision April 2018  
START Study -ORBCON

**Related Documents** Issuing Units North Zone NTMPSS00006MUL  
2 25 Form C- Non-Bleeding Adult In-Patient or ER patient Screening Tool RTMBPF00225C  
Blood Bank Pickup Slip

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Red Cell Screening Process NTMPSX00024  
TM Physician Order for Hgb-label  
Transfusion Related Testing Process non testing sites Aspen Meditech Ring  
NTMPTX00020MUL  
Transfusion Related Testing Process non testing sites Peace Meditech Ring  
NTMPTX00014MUL  
Transfusion Related Testing Process testing sites NTMPTX00018MUL

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