



**Pretransfusion  
Testing –  
Specimen  
Collection**

**TRAINING GUIDE**

**TM T-08**

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## **OVERVIEW**

This training manual includes information about collection of pretransfusion testing specimens for patients attending collection facilities external to Calgary Laboratory Services. It is intended to be used by staff requiring direction about the collection of pretransfusion testing specimens to be tested at a CLS facility for patients who will be (potentially) transfused at an acute care site in Calgary.

## **LEARNING OBJECTIVES**

At completion of training, the trainee will be able to:

- Demonstrate appropriate patient identification practices
- Demonstrate understanding and application of the Regional Transfusion Service Identification System (RTSIS)
- Collect the correct specimen type and volume
- Document specimen collection in compliance with current CLS policies and procedures.

## **SCOPE**

This training guide applies to all persons collecting pretransfusion testing specimens to be tested at Calgary Laboratory Services.

## **DEFINITIONS**

**RTSIS** Regional Transfusion Service Identification System – the Blood Bank Identification (BBID) system used by Calgary Laboratory Services. It can be either the second page of form TM2199 or CAL0997.

**LIS** Laboratory Information System – a computer system used in laboratory operations: specifically, the system that generates accession labels.

## ROLES AND RESPONSIBILITIES

Personnel collecting pretransfusion testing specimens to be tested by CLS Transfusion Medicine are expected to comply with the instructions provided in this document. Additional information can be found on the CLS Website. See [CLS Guide to Laboratory Services](#).


## PROCEDURE INSTRUCTIONS

- 1. Patient presents** with a *CLS Pretransfusion Testing Requisition REQ9004TM* and RTSIS form (red) **or** the two part, blue form, *Pretransfusion Testing Requisition–PAC TM2199* (see below). The patient must have both items to proceed with the collection.

**REQ9004TM and RTSIS:**

Shaded areas are Required Information		PRETRANSFUSION TESTING REQUISITION	
<b>CLINIC / UNIT</b> CLINIC: <input type="checkbox"/> A&R <input type="checkbox"/> B&H <input type="checkbox"/> BNC <input type="checkbox"/> BNC <input type="checkbox"/> B&C <input type="checkbox"/> OTHER: _____		<b>APR addressograph report or patient label for ALL pages, or clearly print patient's full name, last name, full first name, regional health number, Regional Health Record Number, date of birth, and gender.</b>	
<b>CLINIC / UNIT</b> CLINIC: _____ Unit: _____ Last Name/Full First Name: _____ S: (Sig) Client #: _____ Allow Staff/Visitor #: _____		<b>APR addressograph report or patient label for ALL pages, or clearly print patient's full name, last name, full first name, regional health number, Regional Health Record Number, date of birth, and gender.</b>	
<b>ACCESSION NUMBER (Laboratory use only)</b> COLLECTION SITE: <input type="checkbox"/> BNC <input type="checkbox"/> B&C <input type="checkbox"/> BNC <input type="checkbox"/> B&C <input type="checkbox"/> OTHER (specify): _____		<b>APR addressograph report or patient label for ALL pages, or clearly print patient's full name, last name, full first name, regional health number, Regional Health Record Number, date of birth, and gender.</b>	
<b>TEST:</b> <input type="checkbox"/> TS (Type 4 Screen)		<b>CLINICAL INFORMATION:</b> REQUESTED BY: _____	
<b>TRANSFUSION INFORMATION</b>			
TRANSFUSION LOCATION: (including site): _____ To order blood components/products see REQ9006TM for urban sites, REQ9010TM for rural sites and REQ9002TM for pediatric patients. For dispense of components or products, order through SCM or use a Dispense of Blood Components/Products form (TM1753).			
<b>The Regional Transfusion Service Identification System must be used with this requisition.</b>			
<b>FOR LAB USE - DOWNTIME ONLY</b>			
Time received	5 point check (P&B)	No. tubes REC'd	RTSIS Number
Transfusion requirements Comments: _____		Historical Current Comp entry by: _____	Antibodies Medical Cancer
<b>DOWNTIME RESULT RECORDING</b>			
TYPE/TYPE R		ANTIBODY SCREEN	
A	B	CC1	CC2
Testing completed Date: _____ Time: _____ Temp: _____ Tech: _____		INTERP Comp entry by: _____	
<b>CROSSMATCH</b>			
Donor unit number	IS	IAT	CC
Donor unit number	IS	IAT	CC
Completed date/time: _____		Plashed to: _____ By: _____ @	
<b>DOWNTIME RECOVERY</b>			
TYPER cancel	SP1 - name	Transfused: <input type="checkbox"/> Yes <input type="checkbox"/> No	Special needs

REQ9004TM 20181005 Rev 3.02 Lab Information Centre 403-770-3600 www.casparlabservices.com


**Regional Transfusion Service Identification System**  
 CAL599 20180331  
 See back of form for detailed instructions.

**Part 1: Collection Record: Identify patient and complete.**

1. Place patient label here

Patient identified by self?  Yes  No  
 If NO, signature of 2<sup>nd</sup> person identifying patient is required: \_\_\_\_\_  
 Signature (Must be different than collector)  
 Specimen collected by: \_\_\_\_\_  
 Signature  
 Date & Time: 5. YYYYMMDD HH:MM

Patient identified by self?  Yes  No  
 If NO, signature of 2<sup>nd</sup> person identifying patient is required: \_\_\_\_\_  
 Signature (Must be different than collector)  
 Specimen collected by: \_\_\_\_\_  
 Signature  
 Date & Time: 5. YYYYMMDD HH:MM

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**Part 2: Tube Labels: Draw specimen and label.**  
 6. Patient label here and place on tube  
 7. Put band on patient  
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 PKE 0971

**Part 3: Band Insert: Date, place in yellow band and attach to patient.**  
 Date: \_\_\_\_\_  
 PKE 0971

OR

**TM2199 (two part form):**

<p>TM2199 20150717</p> <p>Shaded area www required information</p> <p>CLINIC / UNIT:</p> <p>ORDERING PHYSICIAN (Apply CLS Dr. Office Stamp Here):</p> <p>Surname / Full First Name:</p> <p>3 Digit Clinic #:</p> <p>Alpha Suffix Provider #:</p> <p>ACCESSION NUMBER (Laboratory use only):</p> <p>Apply Large Label</p>	<p>PAC Clinic Site</p> <p><input type="checkbox"/> ACH</p> <p><input type="checkbox"/> FMC</p> <p><input type="checkbox"/> RGH</p> <p><input type="checkbox"/> PLC</p> <p><input type="checkbox"/> SHC</p> <p><input type="checkbox"/> Other:</p>	<p><b>PRETRANSFUSION TESTING REQUISITION PAC</b></p>
	<p>PROFIT:</p> <p><b>ROUTINE</b></p> <p>ISBT</p> <p>Type &amp; Screen (TS)</p>	<p>Affix addressograph imprint or patient label to all pages, or clearly print patient's full name (last name, first name), date of birth, gender, Personal Health Number and Medical Record Number on all pages.</p> <p>Collect specimens after:</p> <p>CLINICAL INFORMATION REQUESTED BY:</p>
<p><b>TRANSFUSION INFORMATION</b></p> <p>TREATMENT/PROCEDURE LOCATION: <input type="checkbox"/> ACH <input type="checkbox"/> FMC <input type="checkbox"/> RGH <input type="checkbox"/> PLC <input type="checkbox"/> SHC <input type="checkbox"/> Other: _____</p> <p><b>PRODUCT REQUIRED</b>      <b>NO. OF UNITS</b>      <b>SPECIAL ATTRIBUTES</b></p> <p><input type="checkbox"/> Red cell concentrate      <input type="checkbox"/> CMV Neg      <input type="checkbox"/> IRR      <input type="checkbox"/> Washed      <input type="checkbox"/> Other (specify):</p> <p>For all other components/products see REQ006TM</p> <p><b>THE REGIONAL TRANSFUSION SERVICE IDENTIFICATION SYSTEM (RTSIS) ATTACHED TO THIS FORM MUST BE USED FOR SPECIMEN COLLECTION</b></p> <p><b>Regional Transfusion Service Identification System (RTSIS-PAC)</b></p>		

<p>AVN 4003</p> <p>Tube label</p>	<p><b>Collection Record</b></p> <p>Place patient label here</p>								
<p>AVN 4003</p> <p>Tube label</p>	<p>Patient Identified By Self? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>IF NO, signature of 2<sup>nd</sup> person identifying patient is required:</p> <p>Signature: _____ Title: _____</p> <p>Specimen Collected By: _____ Signature: _____ Date &amp; Time: _____</p> <p><b>Pre-Op Assessment Clinic:</b></p> <p>Has the patient been transfused within the last three months? <input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>Has the patient been pregnant in the last three months? <input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>OR Date: _____</p> <p>Signature: _____</p> <p>AVN 4003</p> <p>if either answer is yes, collection must be done within 4 days of the OR date.</p> <table border="1"> <tr> <td>AVN 4003</td> <td>AVN 4003</td> <td>AVN 4003</td> <td>AVN 4003</td> </tr> <tr> <td>AVN 4003</td> <td>AVN 4003</td> <td>AVN 4003</td> <td>AVN 4003</td> </tr> </table>	AVN 4003	AVN 4003	AVN 4003	AVN 4003	AVN 4003	AVN 4003	AVN 4003	AVN 4003
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<p>TM2199 20150717</p> <p>See back for detailed instructions on how to complete this form.</p> <p><b>Put band on patient.</b></p>	<p>AVN 4003 PAC Collection Date: YYYYMMDD Consult Transfusion Medicine for expiry date</p>								

Photocopied RTSIS forms may **not** be used; the patient must have an original form in order to proceed with the collection.

The patient must also present with two pieces of original government-issued identification. The preferred identification is a Provincial Health Card (PHN).



Other acceptable forms of ID include: valid driver's license or passport, birth certificate or Canadian Permanent Resident card, etc.

- 2. Compare the name and provincial health care number on the provincial health care card with the requisition to ensure they match.**



- a. Discrepancies must be resolved **before** the specimen is collected. Refer the patient back to the preoperative clinic or physician's office that supplied the requisition.
3. Enter the test in the LIS to **obtain labels**.
  4. **Check/complete the preoperative assessment section (on blue form only)** for completeness. If incomplete, ask the patient the questions and record the information. The pregnancy question only needs to be asked of women 45 years of age or younger.


**Pre-Op Assessment Clinic:**

Has the patient been transfused within the last three months?  No  Yes

Has the patient been pregnant in the last three months?  No  Yes

OR Date: \_\_\_\_\_

Signature: \_\_\_\_\_

 AVN 4003

If either answer is yes, collection must be done within 4 days of the OR date.



If the answer to either question is “yes”, testing is only valid for 96 hours (4 days). Continue to the next step only if the patient's surgery is scheduled within 4 days. If surgery is scheduled more than 4 days following the current date, advise the patient to return for testing within 4 days of their scheduled surgery date. If the OR date is unknown, write “Unknown”, **do not leave blank**.

5. **Complete the tube labels and “Collection Record” section on the RTSIS form.** Apply an LIS label to each of the “tube label” and the “collection record” sections of the RTSIS form. If LIS labels are not available, transcribe the information from the requisition. Write the date and time of collection on the tube labels if this does not appear on the LIS labels.



When hand writing information on tubes and/or the RTSIS form, **print** clearly and carefully. Discrepancies created by transcription errors or illegible labels will result in specimen rejection.

6. **Identify the patient :**

- a. Ask the patient to spell their **full name**. Compare to the information on the RTSIS form.
- b. Ask the patient their **date of birth**. Compare to the information on the requisition.



- i. If there are discrepancies, do not collect the specimen. Refer the patient back to the preoperative clinic or physician's office that supplied the requisition.

- c. **Check the box "Patient Identified by: him/herself"** on the RTSIS form.



If the patient is unable to identify themselves (younger than 14 years of age, language barrier, mental incapacity etc.) a friend or family member may identify them. The person who identifies the patient **must** sign the RTSIS form on the signature line next to "Patient Identified by: ". Write the relationship of the identifier next to the signature (son, friend, mother etc.)

- 7. Draw specimen. Two 6 mL draw EDTA (lavender) tubes** are required for adults. See the CLS Guide to Laboratory Services for specimen requirements for pediatric patients.
- 8. Place the tube labels from the RTSIS form on the tubes**, orienting the RTSIS number next to the tube stopper.
- 9. Date the wristband insert.** Write the current date and time on the wristband insert at the bottom of the RTSIS TM2199 or along the side of CAL0997 form.
- 10. Remove the band** insert from the RTSIS form, insert into the yellow band and **attach to the patient's wrist** (or ankle). Ensure that the band is not too tight as some patients may experience swelling.



Specimens received with corresponding RTSIS forms on which the band insert is still attached will be rejected

- 11. Sign and date the section "Specimen Drawn By:"** on the "Collection Record" section of the RTSIS form.
  - a. CLS Transfusion Medicine will attempt to obtain missing signatures. If they cannot be obtained, the specimen will require recollection.

- 12. Forward the requisition, specimens and completed RTSIS form** to Calgary Laboratory Services for testing.



## NOTES



Errors in the collection procedure or discrepancies between the specimen label and accompanying documentation will usually require recollection. This is because collection or labeling errors can result in the death of the patient if they receive an incompatible blood transfusion as a result of a collection error.



The RTSIS is the BBID number used by Calgary Laboratory Services. Like all other BBID systems, it reduces the risk of incompatible transfusion by linking the patient to the specimen to the donor unit back to the patient. In order for it to be effective, it is crucial that the system be **applied at the time of specimen collection**.



If the patient requires transfusion, a confirmatory ABO/Rh may also be required and an additional sample may be drawn prior to transfusion..

## REFERENCE INFORMATION

CLS Guide to Laboratory Services

<http://www.calgarylabservices.com/lab-services-guide/transfusion-medicine/pretransfusion-testing/specimen-collection.aspx>