3	Department of Health Government of Nunavut		NURSING POLICY, PROCEDURE AND PROTOCOLS		
Nunavut			Community Health Nursing		
TITLE:				SECTION:	POLICY NUMBER:
Suspected Adverse Reaction to a Transfusion			ransfusion	Pharmacy	09-016-00
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APPLIES TO:					
Community	Health Nurses				

### POLICY:

The nurse will assess the client during and after each blood transfusion for potential transfusion reactions. Vital signs will be monitored at 5 minutes, 15 minutes, and every 30 minutes until one (1) hour after transfusion. All signs and symptoms of a suspected transfusion reaction must be reported immediately to the physician.

Each suspected transfusion reaction shall be documented and investigated according to the policy and procedures of the *Health Centre Laboratory Manual*.

#### **DEFINITIONS:**

A **transfusion reaction** is a complication of a blood transfusion whereby an immunologic or non-immunologic response occurs. Transfusion reactions can develop within a few minutes of onset of transfusion and up to several hours to several days post transfusion. Types of transfusion reactions include: acute haemolytic, delayed haemolytic, allergic, febrile, bacterial, circulatory overload and transfusion related acute lung injury (TRALI).

**Transfusion related acute lung injury** (TRALI) is a life threatening condition associated with a blood transfusion. TRALI is likely precipitated by the transfer of antibodies from the donor's plasma against the recipient's leukocytes resulting in micro-vascular pulmonary damage. TRALI is characterized by dyspnea, hypoxia, chills, fever, cyanosis, and hypotension. A chest x-ray typically reveals bilateral pulmonary infiltrates without evidence of cardiac involvement or fluid overload. Symptoms can occur within one to six hours of transfusion.

#### PRINCIPLES:

Typical signs and symptoms associated with a transfusion reaction include fever, chills, rigors, shortness of breath, wheezing, bronchospasm, rash, urticaria, pruritus, flank pain, tachycardia, hypotension, restlessness, feelings of doom, oliguria, hematuria, vomiting and diarrhea. Most reactions occur within the first 15 minutes of a transfusion.

The transfusion will be discontinued immediately at the first sign or suspicion of a possible transfusion reaction.



# RELATED POLICIES, GUIDELINES AND LEGISLATION:

Health Centre Laboratory Manual – Transfusion manual
Laboratory Investigation Protocol for Suspected Transfusion Reaction

Review "Blood Transfusions pages 785-801, Potter and Perry (2010) *Clinical Nursing Skills & Techniques 7<sup>th</sup> edition*" for further steps in ensuring safe administration of blood and blood components.

## REFERENCES:

Canadian Society Transfusion Medicine – CSTM Standards for Hospital Transfusion Services, 2004.

Canadian Standards Association – Z902-04- CSA Standards for Blood and Blood Components, 2004.

Murphy, M., Pamphilon, D., H. (2001) *Practical transfusion Medicine*. Oxford: Blackwell Sciences Ltd.

Potter, P., A. & Perry, A., G. (2010). *Clinical Nursing Skills & Techniques* (7<sup>th</sup> Edition). Mosby.

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