Saskatchewan Health Authority

Sask Blood

Major Evaluated *Risks* Of Blood Transfusion

Infectious Complications	Frequency of Risk
Human Immunodeficiency Virus (HIV)	1 in 21,000,000
Hepatitis C Virus (HCV)	1 in 13,000,000
Human T-cell Lymphotropic Virus (HTLV)	1 in 7,600,000
Hepatitis B Virus (HBV)	1 in 7,500,000
Chagas Disease	1 in 4,000,000
West Nile Virus (WNV)	< 1 in 1,000,000
Bacterial sepsis per unit of RBC	1 in 250,000 (symptomatic) 1 in 500,000 (death)
Bacterial sepsis per pool of platelets	1 in 10,000 (symptomatic) 1 in 200,000 (death)

Non-Infectious Complications	Frequency of Risk
ABO-incompatible transfusion	1 in 40,000 per transfusion episode
Anaphylaxis	1 in 40,000
Lung injury	1 in 10,000
Delayed hemolytic transfusion reaction	1 in 7,000
Fever from red cell transfusion	1 in 300
Heart failure	1 in 100
Hives (itchy skin rash)	1 in 100
Red blood cell antibodies that can complicate future pregnancies or transfusion	1 in 13

Reference:
Callum, JL, et al. *Bloody Easy 4*. Toronto: Ontario Regional Blood Coordinating Network; 2016 p. 44

Revised June 2019

Provided by: The Saskatchewan Transfusion Medicine Working Group