

***Risk Per Unit According to
References Listed**

Infectious

HIV	1:1,930,000
Human T-Cell Lymphotropic Virus (HTLV)	Virtually zero risk with leukodepletion
Hepatitis A	Very rare
Hepatitis B	1:130,000
Hepatitis C	(Post Nucleic Testing) 1:500,000
Creutzfeldt-Jacob Disease (variant)	Theoretical risk
Syphilis	Extremely rare
Sepsis	1:10,000 morbidity from platelets: <1:1,000,000 for fatal reaction from red blood cells

Non-Infectious

Acute Hemolytic	1:25,000
Fatal Hemolytic	1:600,000
Delayed Hemolytic	1:2,500 to 1:6,000
Allergic	1:100 to 1:300
Anaphylaxis	1:20,000 to 1:50,000
Circulatory Overload	1%

References

Blood Safety in the New Millenium
American Association of Blood Banks, Bethesda, Maryland, 2001

British Columbia Provincial Blood Coordinating Office. Physician's Guide 2001, Informed Consent for Blood and Blood Products. British Columbia, 1999.

Canadian Blood Services
Circular of Information for the use of Human Blood and Blood Components. Ottawa, 1999.

American Association of Blood Banks
Blood Transfusion, A Physician's Handbook, 6th ed., Bethesda, Maryland, 1999.

**Blood Product
Information
For Physicians**



<u>BLOOD PRODUCTS</u>	<u>COMMON INDICATIONS</u>	<u>COMMON RISKS</u> (Usually not life-threatening)	<u>RARE IMPORTANT RISKS</u> (can be life threatening)
Red Cell Concentrate	<ul style="list-style-type: none"> • Symptomatic anemia • Bleeding • Neonatal exchange transfusion (reconstituted with FFP) 	<ul style="list-style-type: none"> • Volume overload • Allergic (hives) • Febrile reaction 	<ul style="list-style-type: none"> • Infection (acute bacterial or chronic viral)* • Acute or delayed hemolysis • Anaphylaxis due to IgA deficiency • Acute respiratory failure • Graft-vs-host disease
Plasma - FFP or Cryosupernatant FFP – has all clotting factors Cryosupernatant – lower levels of fibrinogen and factor VIII/von Willebrand factor, compared with FFP.	<ul style="list-style-type: none"> • FFP - Usually only for bleeding or invasive procedure • Cryosupernatant - Thrombotic thrombocytopenic purpura (TTP) - Adult hemolytic uremic syndrome (HUS) - Urgent warfarin Reversal 	<ul style="list-style-type: none"> • Volume overload • Allergic (hives) 	<ul style="list-style-type: none"> • Anaphylaxis due to IgA deficiency • Infection (acute bacterial or chronic viral)*
Cryoprecipitate	<ul style="list-style-type: none"> • Hypofibrinogenemia • Rarely von Willebrand Disease or factor VIII deficiency (if concentrates unavailable) 	<ul style="list-style-type: none"> • Allergic (hives) 	<ul style="list-style-type: none"> • Infection (acute bacterial or chronic viral)*
Platelets	<ul style="list-style-type: none"> • Bleeding from thrombocytopenia or platelet function defect 	<ul style="list-style-type: none"> • Febrile reaction • Allergic (hives) 	<ul style="list-style-type: none"> • Infection (acute bacterial or chronic viral)* • Anaphylaxis due to IgA deficiency • Graft-vs-host disease
Albumin	<ul style="list-style-type: none"> • Volume expansion 	<ul style="list-style-type: none"> • Volume overload 	<ul style="list-style-type: none"> • Allergic • Theoretical (infection)*
Intravenous gammaglobulin (Human)	<ul style="list-style-type: none"> • Replacement therapy for immunodeficiency states • Immune thrombocytopenia • Neurologic (e.g. Guillain-Barré) • Invasive group A strep infection with shock • Kawasaki 	<ul style="list-style-type: none"> • Hypertension • Fever/chills/headache • Volume overload 	<ul style="list-style-type: none"> • Thrombosis (MI, CVA) • Theoretical (infection)* • Anaphylaxis due to IgA deficiency
Anti-RH Globulin (Human)	<ul style="list-style-type: none"> • Prevent Rh-immunization in antenatal, postnatal Rh-negative obstetrical patients or Rh-negative patients receiving Rh-positive blood products • Immune thrombocytopenia (only for Rh-positive, non-splenectomized patient) 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Headache/chills/fever • Hemolysis (only in Rh-positive recipient) • Theoretical (infection)*
Manufactured Factor Concentrates	<ul style="list-style-type: none"> • Refer to Hematologist 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Theoretical (infection)* • Procoagulant (MI, stroke)