

Available Components

Further Information Is Available By Contacting The Medical Director of the Transfusion Medicine Service: Zbigniew M. Szczepiorkowski, M.D. or the Blood Bank Medical Director, Nancy M. Dunbar M.D.

The following blood components are routinely stocked by the Blood Bank:

For additional details please refer to the Circular of Information for the use of Human Blood and Blood Components which is published jointly by the following organizations: the American Association of Blood Banks, America's Blood Centers, and the American Red Cross. Copies of this pamphlet may be obtained by calling Blood Bank (5-7207).

Red Blood Cells:

- These units are either derived from donation of whole blood or apheresis.
- The hematocrit is usually between 55-65 %.

Plasma:

- Dose is weight based; Adult doses are typically 3-5 units

Platelets:

- Platelets collected by apheresis are the standard form of platelet utilized at this center. They contain the equivalent of at least 6 units of platelet concentrates derived from whole blood donations.
- The platelets are suspended in approximately 300 mL (i.e., one "unit") of plasma.
- An adult patient would be expected to experience a platelet count increment of approximately 20-40,000 from a single transfusion.
- Patients refractory to platelet transfusions are investigated by the Transfusion Medicine Service further to ensure provision of compatible platelets.

Cryoprecipitate:

- Dose is weight based; Adult doses are typically 3-5 pools

Rho(D) Immune Globulin

- Both standard (300 microgram) and micro (50 microgram) doses are available.
- Rho(D) Immune Globulin formulated for IV use is also available
- Evaluation of candidacy and responsibility for ordering this product remains that of the attending Health Care Practitioner.

Granulocytes:

- Not routinely available, allow 3-5 days
- Consultation with Transfusion Medicine Physician is required.

Component Modifications

Leukocyte-reduction:

- Prior to storage, cellular components (RBCs, platelets) are filtered to remove white blood cells (<5 E+6).
- Reduction of Leukocytes reduces risk of febrile reactions, HLA alloimmunization, and CMV infection.
- Leukocyte reduction should not be used to prevent graft vs. host disease (GVHD).
- **ALL CELLULAR COMPONENTS ARE PRE-STORAGE LEUKOCYTE REDUCED AT DHMC.**
- A "regular" 170 micron filter (blood administration set) should still be used at transfusion for all blood components, including leukoreduced red cells and platelets.

CMV risk reduced:

- Leukocyte reduction is the method used for reducing the risk of CMV infection transmission in susceptible patients at DHMC.

Irradiation:

- Gamma irradiation of cellular components is used to prevent donor lymphocyte proliferation following transfusion in certain immunosuppressed patients and the development of post-transfusion graft versus host disease.
- **ALL CELLULAR COMPONENTS ARE IRRADIATED AT DHMC.**