Blood Bank Scope of Practice

The FDA registered and CAP accredited blood bank at Phoenix Children’s Hospital is located on the third floor of the Main Building. The blood bank provides testing and products in the inpatient and outpatient settings. The PCH blood bank transfuses on average 1,000 blood products to 200 patients every month.

The following tests and products are available 24 hours per day with the exception of Isohemagglutinin titer which are performed daily on Dayshift and on call basis for Heart Transplants.

Testing:
- ABO Group and Rh
- Antibody Screen
- Antibody Identification
- Compatibility testing
- Rh phenotype
- Extended antigen phenotype
- Antigen negative red cell products
- HgS negative red cell products
- Direct Antiglobulin Tests
  - Polyspecific
  - Anti-IgG
  - Anti-C3b,-C3d
- Red cell eluates
- Isohemagglutinin screen
- Isohemagglutinin titer
- TEG and TEG with Heparinase
- Rapid TEG and Rapid TEG with Heparinase
- Platelet Mapping

Products:
- Red Blood Cells, Leukocytes Reduced
- Red Blood Cells, Leukocytes Reduced, Irradiated
- Red Blood Cells, Leukocytes Reduced, Irradiated, CMV Negative
- Platelets Pheresis, Leukocytes Reduced
- Platelets Pheresis, Leukocytes Reduced, Irradiated
- Platelets Pheresis, Leukocytes Reduced, Irradiated, CMV negative
- Plasma, thawed and pooled
- Fresh Frozen Plasma thawed
- Cryoprecipitate, thawed and pooled
- Reconstituted whole blood
- Washed Red Blood Cells, Leukocytes Reduced
- Customized aliquots of the above products in syringe or bag

Minimum staffing:
- Weekday 0500-1100 is two certified Medical Laboratory Scientist (MLS)
- Weekday 1100-1700 is two certified MLS and one Lab Assistant (LA)
- Weekday 1700-2330 one certified MLS and one LA
- Weekday 2330-0500 one certified MLS
Weekend 2030-0800 on certified MLS
Weekend 0800-2030 one certified MLS and one LA

Blood Bank Staff are supported by the following equipment:

1. Irradiation is performed using one RadSource Irradiator and one Raycell Irradiators
2. RBC washing is performed using Terumo-GambroBCT COBE 2991 Cell Washer
3. Customized aliquots are made using two Terumo Sterile Connecting Devices and the Trucise Data Management system.
4. Antibody screen and identification are performed using Immucor Solid Phase adherence technology by automated Echo analyzer and manual methods.
5. ABO/Rh are performed using hemagglutination methods by automated Echo analyzer and manual methods.
6. Rapid Plasma thawing is performed using Helmer rapid thawing bath.
7. Blood Products in the main blood bank are stored in four validated 1-6°C refrigerators, 1 room temperature platelet incubator and a -30°C Plasma/Cryoprecipitate freezer.
8. A remote refrigerator is located in Emergency room to support Level 1 traumas,
9. A remote refrigerator and platelet incubator is located at East and South West Valley to support the hemonc clinics.
10. TEG, Rapid TEG and platelet mapping are performed on two Haemonetics TEG 5000 analyzers.

The following services are provided through our community blood center, United Blood Services:
- Platelet Refractory Panel
- Platelet antibody screen
- Platelet crossmatch
- HLA matched platelets
- CMV Negative blood products
- Rare Antigen Matched RBCs
- Washed Platelets
- Granulocytes
- Cold Agglutinin Titer, Thermal Amplitude, Donath-Landsteiner testing
- Molecular Phenotyping
- Extended Antibody Resolutions