**Purpose**To provide guidelines for providing crossmatch compatible blood for transfusion.

**Policy**

The Harborview Transfusion Service will follow accepted regulations and standards for providing crossmatch compatible blood for patients.

**Types of Crossmatch and Requirements:**

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| **Sample requirements for all crossmatches:**   * Current acceptable sample * Two determinations of ABO/Rh from separate collections, at least one of which is on the current sample. * Antibody Screen | | | |
| **Computer Crossmatch** | | **Antiglobulin Crossmatch (AHG)** | **Immediate Spin Crossmatch** |
| Additional Requirements: (All criteria must be met to qualify)   * No history of clinically significant antibodies (Abs). * Current Ab screen negative for clinically significant Abs. (See below) * Retrospective crossmatches for transfused trauma units. | | Required for all patients who have:   * Evidence of clinically significant antibodies * A history of clinically significant antibodies, even if currently not detectable in serum. (See below) * When ordered by the Medical Director | * Performed in place of Computer crossmatch during Computer downtime. * Performed for retrospective crossmatches. * Required for patients who have current or previously identified insignificant antibodies. (See below) |
| **Most Common Clinically Significant Antibodies** | | **Crossmatch Method Used** | **Typed Antigen Negative Units** |
| Rh Blood Group:  D\*, C, c, E, e, f (give c neg &/or e neg)  G (Give D neg and C neg)  Cw (pregnant women only)  Kell Blood Group:  K, k, Kpa, Kpb, Jsa, Jsb, Kx  Kidd Blood Group:  Jka, Jkb  Duffy Blood Group:  Fya, Fyb  MNS Blood Group:  M (if reactive at 37C), S, s, U (Give S, s neg)  Other: | | * AHG compatible | * Yes * If antisera is not available, order antigen negative units from supplier. |
| **More Uncommon Clinically Significant Antibodies** | | **Crossmatch Method Used** | **Typed Antigen Negative Units** |
| **High Incidence**   * Colton a * P, PP1PK (previously Tja) * H (Bombay and Para Bombay) | **Low Incidence**   * Dia * Colton b * Lua * Wra * V, VS * Allo-A1\*\* | * AHG compatible | * Assume antisera is not available. * If antibody is low incidence provide AHG compatible units. * If antibody is high incidence, order antigen negative units from PSBC. |

\* If anti-D is passively acquired, AHG crossmatch no longer required after becomes undetectable in patient’s serum.

\*\* Although naturally occurring anti-A1 is usually not clinically significant; allo-anti-A1 is often clinically significant.

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| **Clinically Insignificant Antibodies** | **Crossmatch Method Used** | **Typed Antigen Negative Units** |
| **NOTE:** This list is not all-inclusive for insignificant antibodies. Consult with TS Mgr or Medical Director for any that may not be listed.  Bga and Bgb  Lea and Leb  P1 and P if not reacting at 37C  I and i  A1 (give O or A2/A2B units)\*\*  M if not reacting at 37C  N if not reacting at 37C  LW  Dib  Chido/Rogers (Ch/Rg)  Scianna  Gerbich  Knops  Cromer  Indian  Ok  Raph  JMH  Gil | * Immediate Spin | * Not necessary |

\*\* Although naturally occurring anti-A1 is usually not clinically significant; allo-anti-A1 is often clinically significant.