



# CATRAC Consensus Statement on Use of O-Positive Blood in Massive Transfusion Protocols

**Purpose:** To standardize the use of O (+) blood throughout the region with the goal of utilizing the available blood products to the fullest extent and preserving rare blood types. Furthermore, to create best-practice guidelines for the region in the utilization of blood products.

**Methods:** This consensus statement was developed within the Trauma Systems & Operations Leadership Committee at the CATRAC. Massive transfusion protocol data from within the entire region were collated and used to create the guidelines. Guidance from the local blood banks was included. The final guidelines were agreed upon and approved at the Committee meeting with input from the leadership of the CATRAC trauma programs.

**Guidelines:** These guidelines should be utilized as best practices for the transfusion of blood products when able to do so. These are meant to be applied to adult patients and not necessarily for transfusion in pediatric patients. Transitioning patients to an alternate blood type should be guided by the supply of blood products available at the facility and local blood center. These guidelines should be followed whenever possible. They are as follows:

- O+ red blood cells should be transfused in all male patients of unknown blood type with heavy bleeding trauma or other massive transfusion situations.
- O+ red blood cells should be considered for transfusion in female patients beyond childbearing age of unknown blood type with heavy bleeding trauma or other massive transfusion situations.
- O- red blood cells should be transfused initially in all female patients of child bearing age of unknown blood type. If O- red blood cells are not available or is exhausted, then O+ red blood cells should be used.
- Once the patient's blood type is known, ABO compatible red blood cells should be transfused if available.
- If the ABO compatible blood is not available or exhausted for males:
  - For Rh- males, transfuse ABO compatible Rh+ red blood cells. If ABO compatible Rh+ blood is not available or exhausted, transfuse O+ blood.
  - For Rh+ males, transfuse O+ red blood cells.
- If the ABO compatible blood is not available or exhausted for females:
  - Transfuse O+ red blood cells to females with an Rh+ blood type.
  - Transfuse O- red blood cells to females with an Rh- blood type. If O- red blood cells are not available or exhausted, transfuse O+ red blood cells.