Fresh Frozen Plasma (FFP) is prepared from a whole blood or apheresis collection and frozen at −18°C (VUMC shelf-life is 12 months while frozen).

On average, units contain 200 to 250 mL. FFP contains thousands of plasma proteins including all coagulation factors. FFP contains high levels of the labile coagulation Factors V and VIII.

FFP should be infused immediately after thawing. If the product is not used, it can be stored at 1 to 6°C for up to 24 hours. If stored longer than 24 hours, the component must be relabeled (Thawed Plasma) or wasted.

FFP serves as a source of plasma proteins for patients who are deficient in or have defective plasma proteins.

**Indications**

FFP is indicated in the following conditions:

1. Management of preoperative or bleeding patients who require replacement of multiple plasma coagulation factors (eg, liver disease, DIC).

2. Patients undergoing massive transfusion who have clinically significant coagulation deficiencies. VUMC adult MTP issues 6 RBC, 4 FFP, and 1 apheresis platelet per MTP cycle. The VUMC Pediatric MTP issues 3 RBC, 2 FFP, and 1 apheresis platelet per MTP cycle.

3. Patients taking warfarin who are bleeding or need to undergo an invasive procedure before vitamin K could reverse the warfarin effect. Please see CHEST guidelines for appropriate use of FFP for warfarin reversal. CHEST 2008; 133:160S–198S or Blood 2011;117: 6091-6099.

4. For transfusion or plasma exchange in patients with thrombotic thrombocytopenic purpura (TTP).

5. Management of patients with selected coagulation factor deficiencies, congenital or acquired, for which no specific coagulation concentrates are available.

6. Management of patients with rare specific plasma protein deficiencies, such as C1 inhibitor, when recombinant products are unavailable.