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**Lab Dept:** Transfusion Services

**Test Name:** FFP/FP (THAWED PLASMA) TRANSFUSION

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***General Information***

**Lab Order Codes:** TFFP

**Synonyms:** Fresh Frozen Plasma; FFP; Frozen Plasma; FP; Fresh Frozen; Thawed Plasma; TPL

**CPT Codes:** P9017 – FFP  
P9059 - FP

**Test Includes:** Plasma from a unit of whole blood is separated from the red blood cells within 8 hours of collection (FFP), or 24 hours of collection (FP), and frozen rapidly. Volume approximately 200 - 300 mL

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***Logistics***

**Test Indications:** Refer to [Guidelines for Transfusion](#)

Useful for the treatment of coagulation factor deficiencies for which specific factor concentrates are not available, and for massive acute blood loss with massive red cell transfusion.

**Lab Testing Sections:** Transfusion Service

**Phone Numbers:** MIN Lab: 612-813-6824

STP Lab: 651-220-6558

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 30 - 40 minutes

**Standard Dose/Volume:**

<b>Patient Weight:</b>	<b>Std Dosage:</b>
<20 kg	10 – 20 mL/kg
20 – 40 kg	1 adult unit
>40 kg	2 adult units

**Rate of Infusion:** 1 – 2 mL/minute

<b>Administration:</b>	-- AVI pump with 150 – 260 micron blood component administration set. -- Volume ≤60 mL may be issued by the Transfusion Service in prefiltered syringes. Use a syringe pump.
<b>Crossmatch:</b>	Thawed Plasma must be ABO compatible. Rh need not be considered. Type and Screen or Crossmatch is not required.
<b>Irradiation:</b>	Not required
<b>Order Instructions:</b>	Indicate volumes in mL's or number of units needed; time and date needed; and indication for transfusion.
<b>Expiration:</b>	5 days after thawing if maintained in a closed system, or within 24 hours if entering the system. Aliquoted Thawed Plasma transfusions must begin within 4 hours of preparation.

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### ***Specimen***

<b>Specimen Type:</b>	Refer to <a href="#">ABO/Rh</a> if patient testing is required.
<b>Patient Preparation:</b>	The patient must have a Medical Records band for checking against the component Unit Tag and the Transfusion Request Order Form prior to administration.  Use coagulation studies as a guide to the transfusion of Thawed plasma.
<b>Sample Rejection:</b>	Request may be questioned if coagulation studies are normal.

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### ***Interpretive***

<b>Limitations:</b>	The use of Thawed plasma can cause hypervolemia in a normovolemic patient. Cryoprecipitate is a better source of fibrinogen.
<b>Methodology:</b>	Frozen at -18°C or lower, FFP/FP has a shelf life of 1 year. Thawed at 37°C with agitation in a waterbath, using a plastic overwrap. Thawing requires 15-30 minutes depending on the number of units being thawed. FFP/FP is relabeled as Thawed Plasma. Once thawed, store in Blood Bank refrigerator and transfuse within 5 days if maintained in a closed system, or within 24 hours if the system is entered.

**Contraindications:**

**Do not** use Thawed Plasma prophylactically to prevent dilutional coagulopathy in large transfusions.

**Do not** use Thawed Plasma as a plasma expander; consider crystalloids or albumin as an alternative.

Specific therapies for defined coagulopathies, such as cryoprecipitate or specific factor replacement in hemophilia A or von Willebrand's disease should be given instead of Thawed Plasma when appropriate.

The use of Thawed Plasma will be audited if the INR is  $<1.4$  or the activated partial thromboplastin time is  $<51$  seconds unless there is abnormal bleeding. Additional Information Hazards:

**Risks include:**

- Risk of disease transmission (Hepatitis B, C and HIV)
- Plasma volume overload.
- Antibody to A antigen (anti-A) and/or B antigen (anti-B).
- Anaphylaxis in IgA deficient recipients. Although Thawed Plasma is essentially a cell-free product, it does contain plasma proteins (antigens). Recipients may have fever and mild to severe allergic reactions.

**References:**

[Circular of Information of the Use of Human Blood and Blood Components](#) (current edition) AABB and American Red Cross, America's Blood Centers