



Laboratory Service Manual

Lab Dept: Transfusion Services

Test Name: FFP/FP (THAWED PLASMA) TRANSFUSION

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

Logistics

Test Indications: Refer to [Guidelines for the Transfusion of Blood Components](#).

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:

Minneapolis: 612-813-6824

Saint Paul: 651-220-6558

Test Availability: Daily, 24 hours

Turnaround Time: 30 - 40 minutes

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



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Rate of Infusion:	1 – 2 mL/minute
Administration:	-- 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.
Crossmatch:	Thawed Plasma must be ABO compatible. Rh need not be considered. Crossmatch is not required.
Irradiation:	Not required
Order Instructions:	Indicate volumes in mL's or number of units needed; time and date needed; and indication for transfusion.
Expiration:	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.

Specimen

Specimen Type:	Refer to ABO/Rh if patient testing is required.
Patient Preparation:	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.
Sample Rejection:	Request may be questioned if coagulation studies are normal.

Interpretive

Limitations:	The use of Thawed plasma can cause hypervolemia in a normovolemic patient. Cryoprecipitate is a better source of fibrinogen.
Methodology:	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.



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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](#) (2002) AABB and American Red Cross, America's Blood Centers