

Massive Transfusion Flowchart

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Retires Policy Dated: N/A

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Updated Date: N/A

Start

- Trauma patient with major hemorrhage.
- Activate **Massive Transfusion Protocol (MTP)**.

Immediate Actions

Start **Belmont Rapid Infuser**.

Give

- 1 unit **pRBCs** →
- 1 unit **FFP** →
- Alternate **1 RBC ↔ 1 FFP** continuously.

Start **TXA**:

- 1 g IV over 10 minutes →
- Then 1 g IV over 8 hours.

After Every 6 Units of pRBCs

- Give **1 gram Calcium Gluconate IV**

Platelet Administration

After ~6 units of blood/plasma combined:

- Administer **1 apheresis unit platelets via gravity.**

Cryoprecipitate Administration

If fibrinogen <150 mg/dL or TEG/ROTEM shows deficiency:

- Administer **10 pooled units of cryo via gravity.**

If Platelet Dysfunction Suspected

(e.g., Aspirin, Plavix, uremia)

- Administer **DDAVP 0.3 µg/kg IV** over 15–30 minutes.

If INR >1.5 or Patient on Warfarin

Administer **PCC**

- INR 2–4 → 25 units/kg
- INR 4–6 → 35 units/kg
- INR >6 → 50 units/kg

Also give **Vitamin K 5–10 mg IV**

Ongoing Monitoring

- Repeat labs (CBC, INR, fibrinogen, Ca²⁺, ABG) **every 30–60 minutes.**
- Continue normothermia and pH correction.

STOP massive transfusion protocol once hemorrhage is controlled and coagulopathy corrected.

Quick Survival Impact Reminders:

Intervention	Survival Benefit
1:1:1 Ratio	9% 24-hr mortality reduction
TXA within 1 hr	1.5% absolute mortality reduction
PCC for INR correction	Faster hemostasis by ~15–20%

Version Control Record

Version	Date	Author/Reviewer	Description of Changes
1	8/21/2024	Paul Wisniewski, D.O.	Initial review and update to reflect latest evidence/practice

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