

MASSIVE TRANSFUSION PROTOCOL



**IF YOU ANTICIPATE EMERGENT NEED FOR
LARGE AMOUNTS OF BLOOD IN A SHORT
PERIOD OF TIME**

Call Blood Bank: 662-2121

**Tell them you have a patient who needs a
Massive Transfusion and activate the Massive
Transfusion order in EPIC**



YOU WILL BE ASKED:

**Patient's name or MRN, date of birth, gender,
current location, and name and number of
contact person**

SEND A RUNNER TO THE BLOOD BANK
**THE BLOOD BANK WILL PLACE PRODUCT,
INFUSION, AND LAB ORDERS**



***RE-IDENTIFY
CONTACT PERSON
IF YOU HAND OFF
PATIENT TO
ANOTHER
LOCATION!***

***(e.g. ED to OR, SCU
or other destination)***

***AND
Communicate to
Blood Bank!***

ROUND #1

**4 u uncrossmatched
RBC's (Type O Rh neg)
or crossmatched if
available.**

**Keep the Blood
Bank informed
during the entire
process including
the anticipated
end.**

SUBSEQUENT ROUNDS

1:1 RBC:FFP
**(or as close to that
ratio as possible)**
**4 u crossmatched
RBC's**
4 units plasma



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LABS AND OTHER RECOMMENDATIONS

LABS AFTER EACH ROUND OF BLOOD PRODUCTS

Blue and purple top tubes and slips will come up in green zip-lock bags in each green cooler from Blood Bank for the following studies:

1. Massive Transfusion Coag Panel (INR, PTT, Fibrinogen, Plat Ct),
2. CBC

Label the tubes and send them back to the lab in the green zip-lock bags. When they see the green bag they process the sample STAT.

PLATELETS

1 dose every 10 -12 units RBC in consultation with Blood Bank
(contingent upon platelet inventory and control of hemorrhage)

1. If **INR** >2.0: Give 3 additional units FFP
2. If **fibrinogen** < 150 mg/dL: give 10 units cryoprecipitate
3. **Calcium**: After the first 4 units RBC's give with each 1-2 units:
Calcium gluconate: 10 ml (~5meq)
Calcium chloride: 3 ml (~5 meq)
4. If **pH** <7: give NaHCO₃ 50 meq
5. **Permissive hypotension**
6. **Normosol R**: OK with blood products and is associated with less hyperchloremic acidosis than NS
7. **Recombinant Factor VIIa**:
See details on right
8. Consider use of **cell saver**
9. CMP, Mg, ionized Ca, ABG prn

Each cooler will come with green bags with proper tubes for labs to be drawn after each round of products.



Recombinant factor VIIa may be considered IF the patient has failed traditional transfusion support and continues to have life threatening bleeding AND meets all of the following **REQUIRED** criteria:

1. pH >7.2
2. Platelet count >50 K (preferably 100K)
3. Body Temp >33°C
4. Fibrinogen >100mg/dL

rFVIIa Dose = 20 mcg/kg, may be repeated once after 1 hour. Doses will be rounded by pharmacy to the nearest vial size.
Call Pharmacy STAT line: 662-3333 for factor VIIa.

MAINE MEDICAL CENTER
Institutional Policy Manual

Policy Title: Massive Transfusion Policy

Summary:

It is the policy of Maine Medical Center ((MMC) that a massive transfusion event must be a reliable, reproducible process that results in effective bidirectional communication between the patient care team and the Blood Bank, as well as timely management and administration of appropriate blood components, resulting in safe patient care.

Policy:

There are five primary elements of a successful massive transfusion at MMC. Each is necessary and they include:

- Early recognition of the need for large volumes of blood.
- Early communication, **call the Blood Bank (662-2121)**.
- Establishing a point person on the patient care team who will manage all communication with the Blood Bank.
- Following all MMC Institutional Policies for Patient Identification, Laboratory Testing Requirements, and Administration of Blood Components.
- Use the current Massive Transfusion Guidelines approved by the Transfusion Committee (*see link to guidelines via MMC Intranet site below*)

Procedure:

1. Once the urgent need for large volumes of blood is recognized (or anticipated), activate the “Massive Transfusion” order set in Epic.
2. **Call the Blood Bank (662-2121)**.
3. Be prepared to provide patient information and the name and contact information for the Contact Person from the patient care team. This is the person who will be responsible for all communication with the Blood Bank. If this role is handed off to another, this information must be updated with the Blood Bank.
4. The Blood Bank will place the blood product and infusion orders for all blood components and orders for the Massive Transfusion Coagulation Panel.
5. The patient care team must make arrangements for picking up blood components from the Blood Bank and delivering them to the patient.
6. Active ongoing communication will occur between the clinical team (via the assigned point person) and the Blood Bank.

Reference:

1. Current MMC Massive Transfusion Guidelines: <https://my.mmc.org>, Departments & Initiatives, Transfusion Medicine, Massive Transfusion Protocol

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Committee(s) Approval and Date:

Transfusion Committee: May 14, 2013
Institutional Policy Committee: June 3, 2013

Sponsor Approval: _____
MD Chair, MMC Transfusion Committee **Date**

VP/SVP Approval: _____
Chief Cardiovascular Services **Date**