

Massive Transfusion in Trauma: Process and Outcomes
CE Author: Judy Mikhail MSN, MBA, RN
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CE Questions

1. According to hemorrhage models, there is a ____% of blood loss before the first unit is given.
 - A. 50%
 - B. 60%
 - C. 70%
 - D. 80%

2. Identifying blood type compatibility is difficult to obtain on patient's when they have received the following number of uncrossmatched units of O negative blood before the blood specimen is drawn.
 - A. 2 units
 - B. 4 units
 - C. 6 units
 - D. 8 units

3. Massive transfusion protocol activation should be based only on:
 - A. Lab values
 - B. Actual blood loss
 - C. Class IV shock or Class III with anticipated continued loss
 - D. Noted hemorrhage by EMS report

4. With the proper temperature maintained the following blood components can be issues after an out of the blood bank time of 3-8 hours.
 - A. Packed rbc & platelets
 - B. Packed rbc & Fresh Frozen Plasma (FFP)
 - C. FFP & Platelets
 - D. Packed rbc only

5. Complications of massive transfusion included all of the following Except:
 - A. Acidosis
 - B. Excessive fibrinolysis
 - C. Hypercalcemia
 - D. Hypothermia

6. When considering FFP infusion one should factor in:
 - A. There is no emergency with FFP infusion in massive transfusion

- B. The suggested formula for FFP:PRBC ratio 8:10
 - C. The suggested formula of FFP:PRBC ratio 2:3
 - D. Platelet replacement should always occur before FFP is given
7. Common performance improvement issues for massive transfusion may include:
- A. Lack of rapid infuser / warmer
 - B. Excessive lab turn around times
 - C. Delay in massive transfusion activation
 - D. All of the above
8. Cryoprecipitate should be administered when
- A. Fibrinogen < 80-100 mg/dl
 - B. PT > 1.5
 - C. INR > 1.8
 - D. Platelet count < 50,000
9. Goals for successful massive transfusion protocol are:
- A. Timely access to adequate supply of blood components
 - B. Standardization of blood ordering process
 - C. Unnecessary wastage
 - D. All of the above
10. Massive Transfusion protocol should include a transfusion temperature of ____:
- A. 40 degrees Celsius
 - B. 38 degrees Celsius
 - C. 42 degrees Celsius
 - D. 46 degrees Celsius