

# RAPID REVIEW MASSIVE HEMORRHAGE PROTOCOL GUIDELINE



## WHERE DO PATIENTS BLEED

On the floor and 4 places more:

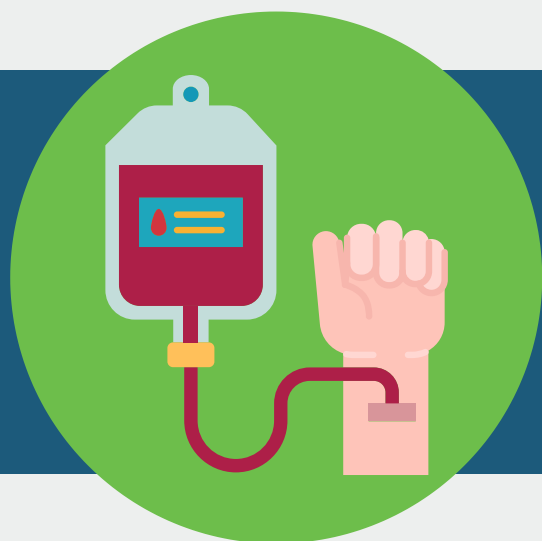
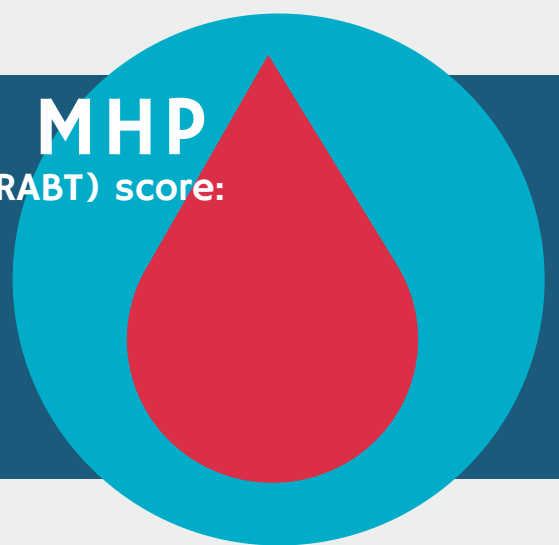
- External bleeding
- Chest
- Abdomen
- Pelvis
- Long Bones

## PREDICTING NEED FOR MHP

Revised Assessment of Bleeding + Transfusion (RABT) score:

- Penetrating injury (1 point)
- Positive FAST (1 point)
- Shock index (HR/SBP)  $>1.0$  (1 point)
- Pelvic fracture (1 point)

Score  $\geq 2$  predicts need for massive transfusion



## THINK 3-ABC

If you have given 3 units of pRBCs, and your patient is still unstable needing blood

A: Activate MHP

B: Balance your products (aim for 1:1:1 or 2:1:1)

C: Consider calcium and concentrates (ie, fibrinogen)

Petrosoniak, A., Swaminathan, A. Massive Hemorrhage Protocol. Emergency Medicine Reviews and Perspectives. Nov 2022. <https://www.emrap.org/episode/emrap202214/massive>

## WHAT IS BALANCED RESUSCITATION

1:1:1 or 2:1:1 units (pRBC: Plasma: Platelet)



## WHAT OTHER TREATMENTS HELP

- TXA: (injury  $<3$  hours ago) 1000 mg/dose IV followed by IV infusion of 125 mg/hour for 8 hrs
- Calcium: calcium chloride 1g IV OR calcium gluconate 3 g IV for every 4 units of RBCs transfused OR if ionized calcium is  $<1.14$  mmol/L
- Fibrinogen Concentrate: If fibrinogen is  $<1.5$ g/L then give fibrinogen concentrate 1-4g IV



Nova Scotia Health Trauma Program

FULL GUIDELINE HERE

