

Major haemorrhage in adults

≥ 40% loss of total blood volume

4 litres in 24 hours 2 litres in 3 hours > 150ml/min

Get senior help

Contact senior member of clinical team.
Contact senior ward nurses Contact portering services

Contact Transfusion

Contact Transfusion Laboratory

Important phone numbers

MAJOR HAEMORRHAGE
phone 2222 state location

Ask Transfusion to
'Initiate major haemorrhage protocol'

Assess ABC

IV access

Check patient identification

2 large cannula

Send blood samples, cross-match, FBC, coagulation, biochemistry

Consider arterial blood gas measurement

Resuscitate

IV warm fluids – crystalloid or colloid
Give oxygen

Blood loss >40% blood volume
• 1500–2000mls loss

MH may manifest as
• Pulse > 110, RR > 30
• Hypotensive in trauma
systolic BP < 90 mmHg
• Urine < 20ml/h

Give blood

Blood loss >40% blood volume is immediately life-threatening
Give 4 units via fluid warmer. Aim for Hb > 80g/l
Give Group O if immediate need and/or blood group unknown

Before transfusion
• Check patient ID
• Use wristbands

When laboratory results available

IF	GIVE
Falling Hb	Red cells
APPT and/or PT ratio > 1.5	FFP 15–20ml/kg
Fibrinogen < 1.5g/l and obstetrics < 2g/l	Cryoprecipitate (2 pools)
Platelet count < 50 x 10 ⁹ /l	Platelets 1 adult dose order at 100 x 10 ⁹ /l

Prevent coagulopathy

Anticipate need for platelets and FFP after 4 units blood replacement and continuing bleeding

Give Primary Major Haemorrhage (MH) Pack

Order Secondary Major Haemorrhage (MH) Pack

Correct hypothermia

Correct hypocalcaemia (keep ionised Ca > 1.13mmol/L)

Send FBC and coagulation samples after every 3–5 units of blood given

Give tranexamic acid for trauma patients and consider its use in non traumatic bleeding

Contact Haematologist

Alternate RBC and FFP
Primary MH pack
• RBC 5 units
• FFP 4 units
• For trauma:
• 1 pool of platelets
• RBC:FFP ratio 1:1

Secondary MH pack

- RBC 5 units
- FFP 4 units
- Platelets
- Cryoprecipitate

If bleeding continues repeat secondary pack

Reassess and document

Get help to stop bleeding

Contact surgeons, gastroenterologists, obstetricians as appropriate