

Postpartum Haemorrhage 4-Stage Approach

This tool facilitates a multidisciplinary team approach to recognising, responding to and managing postpartum haemorrhage.



Stage 0

All women on admission - All modes of delivery, including LSCS

Most recent Hb = _____ PLT = _____

Booking weight (kg) _____

Antenatal 'Increased risk' if any of the following is present:	Select if applicable
Anaemia or bleeding disorder (Hb <9.0, PLT <80)	
BMI <18 or >35 or booking weight <55kg	
Five or more previous vaginal births	
Previous uterine surgery	
Previous atonic postpartum haemorrhage ≥1000ml	
Pre-eclampsia	
Multiple pregnancy/estimated fetal weight >4.5kg	
Uterine fibroids	
Abnormal placental implantation (i.e. praevia) Consider cell salvage/MDT involvement	
Polyhydramnios	
Known abruption or antepartum haemorrhage	

Maintain a continuous assessment of the following risk factors throughout labour and delivery

Perinatal 'Increased risk' if any of the following is present:	
Suspicion of chorioamnionitis/sepsis	
Pharmacologically augmented labour	
Prolonged first stage established labour	
Prolonged second stage of labour	
Instrumental delivery/perineal trauma/emergency caesarean	
Retained placenta	

Act Document blood loss for all deliveries	Time complete
Measure blood loss NB Pool births require estimation	

Check group and save, electronic release or x-match according to blood transfusion service

Treat If woman is at increased risk:	Time plan documented
Plan active third stage in accordance with risk and unit protocol if increased risk factors are present, additional uterotonics should be considered	
Consider early IV access Circle which applies (Yes / No / NA)	_____ : _____ (time inserted)

Time of birth: _____ : _____ Time third stage complete: _____ : _____ Total measured blood loss: _____ ml

Completed by: _____ Date: _____ Time: _____ : _____ Location: _____

Stage 1

≥500–999ml blood loss without clinical shock (or ≤15% blood loss)

SVD and instrumental deliveries only

Mobilise help <i>Document time of arrival</i>		
Name	Status/Grade	Time
	Midwife in charge	
Request further assistance		
Scribe identified:		

Think of possible causes <i>Circle all that apply</i>			
Atony	Vaginal tears	Retained placenta	Coagulopathy

Act <i>Document time started or administered</i>	Time
Keep mother warm and reassure	
Measure and record blood loss (<i>record on action log</i>)	
Monitor on MEWS (<i>record every 15 minutes</i>)	
IV access (<i>at least 16 gauge</i>)	
Consider ranitidine	

Treat <i>Document time started. For atony, document any uterotonics on action log</i>	Time
Uterine massage	Inspect genital tract – suture any tears
Empty bladder (_____ml)	Placenta: check delivered and complete
Consider bimanual compression	

Total measured blood loss: _____ ml

Completed by: _____ **Date:** _____ **Time:** ____:____ **Location:** _____

Once bleeding has stopped, ensure that post-event checklist is complete

Stage 2

≥1000–1499ml blood loss OR clinical concern OR <30% blood loss

Progress to here from Stage 1 if SVD/instrumental delivery. Restart here after Stage 0 if LSCS.

Mobilise help <i>Document time of arrival</i>					
Name	Status/Grade	Time	Name	Status/Grade	Time
<i>Stage 1 already present</i>					
	<i>Midwife in charge</i>				
	<i>Obstetrician</i>				
	<i>Anaesthetist</i>				
<i>Scribe identified:</i>					

Think of possible causes <i>Circle all that apply</i>						
Atony	Vaginal/cervical tears	Tissue	Praevia	Trauma at CS	Coagulopathy	Other

Act	Time care started		Time care started
Airway, breathing, circulation		Commence 15L/min oxygen	
Place flat		Consider second IV access and fluid bolus <i>caution with PET</i>	
Keep warm and reassure		Give up to 2 Litres warmed crystalloid via rapid infuser	
Monitor on MEWS at least every 10 minutes		Transfuse blood as soon as possible if clinically required	
		Time noted >1000ml	
Take bloods Lab tests: <i>FBC Coagulation Lactate U&E x-match (_____units)</i> Point-of-care tests: <i>Haemacue Gases (circle all that apply, document results on action log)</i>			

Treat <i>Document time commenced; NA if not required</i>			
Empty bladder (consider Foley)		Give uterotonics/tranexamic acid	
Ensure placenta complete		Bimanual compression	
Inspect genital tract		EUA uterus/consider balloon tamponade	
Repair genital tract		Consider other surgical interventions	

Total measured blood loss: _____ ml

Ensure post-event checklist is complete

Completed by: _____ **Date:** _____ **Time:** ____:____ **Location:** _____

Once bleeding stopped ensure: PPH post-event checklist completed. Document management plan in notes.

Stage 3

>1500ml blood loss OR ≥30% blood loss and/or ongoing clinical concern

(e.g. abruption or concealed bleeding) **OR** abnormal vital signs: RR >30; HR ≥120, BP ≤90/40mmHg; SaO₂ <95%; UO <30ml/hour; (**'Rule of 30'**)

Mobilise help Document when in attendance or Stage 1 or 2 if already present					
Name	Status/Grade	Time	Name	Status/Grade	Time
Stage 1 or 2 already present					
	Midwife in charge				
	Obstetrician				
	Anaesthetist				
	Theatre staff				
Scribe identified:					
Consider transfer to theatre		Arrived:	Inform anaesthetic or obstetric consultant		
Consider activating major obstetric haemorrhage protocol			Consider interventional radiology		

Act	Document time commenced; NA if not required	Time
		Consider cell salvage
Review measured blood loss and ongoing measurement <i>Document on action log</i>		Order blood and coagulation products as per MOH protocol
Monitor patient <i>5-minute observations by anaesthetist</i>		Repeat blood tests as per MOH protocol <i>Do you need to discuss the case with a haematologist?</i>
Consider IV antibiotics for every 1500ml		Time noted 1500ml

Treat as per major obstetric haemorrhage protocol; document time each treatment initiated		
Review ongoing resuscitation		Give/repeat tranexamic acid
Review uterotonics <i>Document on action log</i>		Document all fluids given on action log
First-line surgical measures	<i>Document time commenced</i>	Consider advanced surgical techniques
EUA		Interventional radiology
Manual removal of placenta		Stepwise uterine devascularisation
Cervical tear repair		Hysterectomy
Intrauterine balloon tamponade		Other:
B-Lynch suture		
Resuturing caesarean/uterine incision		

Transfer to HDU/ICU care once bleeding has stopped. **Total measured blood loss:** _____ ml

Ensure post-event checklist is complete and management plan is written in notes

Completed by: _____ **Date:** _____ **Time:** ____:____ **Location:** _____

Action Log

Uterotonics/tranexamic acid <i>Document time given</i>					
Drug	Dose	Time	Additional Drug	Dose	Time
Oxytocin	5 units IV		Tranexamic acid	1g IV	
Ergometrine (<i>caution with PET</i>)	500µg IV or IM		Tranexamic acid	1g IV	
Oxytocin infusion	40IU over 4 hours IV				
Oxytocin	10IU IM (if no IV access)				
Syntometrine (<i>caution with PET</i>)	1ml IM (if no IV access)				
Misoprostol	800 or 1000µg PR/SL				
Carboprost (Hemabate) 250µg IM up to 8 doses (caution in asthma) <i>Document time of each dose</i>			Notes:		
1	5				
2	6				
3	7				
4	8				

Crystalloid and other fluids given <i>NB Boards can document single units or cumulative total</i>					
Type	Amount infused	Warmed	Time started	Time complete	Cumulative total
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			
		Y / N			

Action Log

All blood and blood products given O negative, group specific, x-match, FFP, cryoprecipitate, platelets, fibrinogen				Measured blood loss (MBL)		
Type	Volume (ml)	Time started	Time complete	Time MBL measured	MBL (ml)	Cumulative total
Total blood product administered						

Cell salvage – use and volume gained <i>Circle all that apply</i>		
Used from start of surgery	Commenced during surgery	No / NA / insufficient staffing
Volume reinfused:		

Blood test results					
Time	Hb (state lab or HemoCue)	Lactate	Gases	Fibrinogen	Other

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