

INTRAVENOUS HEPARIN PROTOCOL

Check orders to determine which algorithm to use

REGULAR Intensity (Anti-Xa Goal: 0.3 - 0.7 units/mL)

«LOW» Intensity (Anti-Xa Goal: 0.3 - 0.5 units/mL)

ANTI-Xa LEVEL (units/mL)	RE-BOLUS	INFUSION HOLD TIME	CHANGE INFUSION DOSE (units/kg/hr)	NEXT ANTI-Xa LEVEL	ANTI-Xa LEVEL (units/mL)	RE-BOLUS	INFUSION HOLD TIME	CHANGE INFUSION DOSE (units/kg/hr)	NEXT ANTI-Xa LEVEL
< 0.1 Notify provider for 2 consecutive Anti-Xa < 0.3	ONLY if ordered by provider (see prn orders)		Increase by 4 units/kg/hr	6 hours	< 0.1 Notify provider for 2 consecutive Anti-Xa < 0.3	ONLY if ordered by provider (see prn orders)	None	Increase by 3 units/kg/hr	6 hours
0.1 – 0.19 Notify provider for 2 consecutive Anti-Xa < 0.3	ONLY if ordered by provider (see prn orders)		Increase by 3 units/kg/hr	6 hours	0.1 – 0.19 Notify provider for 2 consecutive Anti-Xa < 0.3	ONLY if ordered by provider (see prn orders)	None	Increase by 2 units/kg/hr	6 hours
0.2 – 0.29 Notify provider for 2 consecutive Anti-Xa < 0.3	ONLY if ordered by provider (see prn orders)		Increase by 2 units/kg/hr	6 hours	0.2 – 0.29 Notify provider for 2 consecutive Anti-Xa < 0.3	ONLY if ordered by provider (see prn orders)	None	Increase by 1 units/kg/hr	6 hours
0.3 – 0.7	None	None	NO CHANGE	6 hours (after 2 consecutive Anti-Xa in range, check Anti-Xa qAM)	0.3 - 0.5	None	None	NO CHANGE	6 hours (after 2 consecutive Anti-Xa in range, check Anti-Xa qAM)
0.71 – 0.8	None	None	Decrease by 1 units/kg/hr	6 hours	0.51 – 0.6	None	None	Decrease by 1 units/kg/hr	6 hours
0.81 – 0.9	None	None	Decrease by 2 units/kg/hr	6 hours	0.61 – 0.8	None	30 min	Decrease by 2 units/kg/hr	6 hours
0.91 – 1	None	60 min	Decrease by 3 units/kg/hr	6 hours	0.81 – 1	None	60 min	Decrease by 3 units/kg/hr	6 hours

Management of Anti-Xa level > 1 unit/mL

Anti-Xa Level	CHECK TIMING OF SAMPLE	INSTRUCTIONS				
> 1 units/mL	If < 6 hours since most recent bolus or rate change	Continue infusion at current rate, and repeat Anti-Xa at the appropriate time.				
(potentially contaminated or improperly timed sample)	If ≥ 6 hours since most recent bolus or rate change	 TURN OFF HEPARIN INFUSION. Repeat STAT Anti-Xa immediately using peripheral blood draw. If repeat Anti-Xa ≤ 1 units/mL, resume heparin according to heparin algorithm. If repeat Anti-Xa > 1 units/mL, follow steps below 				
> 1 units/mL (properly timed, non-contaminated sample)	TURN OFF HEPARIN INFUSION, and NOTIFY F Repeat STAT Anti-Xa hourly using peripheral blo Then, resume infusion at DECREASED dose that					

Restarting heparin after it is turned off for procedure or surgery

- Confirm with provider that heparin infusion is to be re-started following procedure or surgery
- Confirm with provider the dose and time at which heparin should be re-started (this should take into account the dose that the patient was receiving prior to procedure or surgery)
- Confirm with provider the heparin algorithm that the patient should be treated with (goal Anti-Xa 0.1-0.3 units/mL vs 0.3-0.5 units/mL vs 0.3-0.7 units/mL)