SEPSIS (P44)

Sepsis is a potentially lethal medical condition that is characterized by a whole-body inflammatory state called Systemic Inflammatory Response Syndrome (SIRS). The immune system develops this inflammatory response to microbes in the blood, urine, lungs, skin, or other tissues. The syndrome can include fever, tachycardia, tachypnea, and hypotension.

Sepsis is more common in the elderly, newborns, diabetics, and persons with a compromised immune system. Other risk factors include cancer, renal disease, alcohol/drug abuse, malnutrition, hypothermia, recent surgery or invasive procedure.

Patient should be presumed to be septic if the patient meets two or more of the following criteria with no other identifiable cause:

1. Poor perfusion (capillary refill delayed 2+ seconds)
2. Tachycardia out of proportion to fever or unexplained tachycardia
3. Tachypnea out of proportion to fever
4. Hypotension = decompensated shock
5. ET CO2 < 25 can indicate sepsis
6. Suspected infection

	F	E	O	P	D
ASSESSMENT	X	X	X	X	
PULSE OXIMETRY: apply and monitor		X	X	X	
OXYGEN: if pulse oximetry < 94% or signs respiratory distress or hypoperfusion.	X	X	X	X	
ECG MONITOR: lead placement may be delegated. Treat as indicated.				X	
SEPSIS ALERT: if sepsis criteria met		X	X	X	
VASCULAR ACCESS: IV/IO, rate as indicated				X	
FLUID BOLUS: NS 20 mL/kg rapid bolus. Repeat once for hypotension. Reassess lungs after every bolus.				X	
ACETAMINOPHEN: 15 mg/kg IV/PO. Max single dose 1000 mg. Withhold if given in the last 4 hours.				X	
PUSH DOSE EPINEPHRINE: • Draw up patient 0.01 mg/kg code dose 1:10,000 (0.1 mg/mL) epi • In same syringe, draw the necessary quantity of NS to total 10 mL • Label the syringe with “epi” and the calculated concentration in mcg/mL • Give 1 mL (1mcg/kg) every 1-2 minutes (1 mcg/kg) and titrate to age appropriate SBP				X	
GLUCOSE MEASUREMENT		X	X	X	
ORAL GLUCOSE: consider if conscious with an intact gag reflex and if blood sugar < 70 mg/dL.		X	X	X	
D10: 2 – 4 mL/kg IV/IO if blood sugar < 70 mg/dL for age > 28 days old or 2 mL/kg IV/IO if blood sugar < 40 mg/dL age ≤ 28 days old. Recheck blood glucose 10 minutes post infusion and repeat as needed.				X	

Pediatric Normal Vital Signs

Age	HR	RR	BP	Temp (C)	Temp (F)
Premie	120-170	40-70	55-75/35-45	36-38	96.8-100.4
0-3 months	100-160	35-60	65-85/45-55	36-38	96.8-100.4
3-6 months	90-120	30-45	70-90/50-65	36-38	96.8-100.4
6-12 months	80-120	25-40	80-100/55-65	36-38	96.8-100.4
1-3 years	70-110	20-30	90-105/55-70	36-38	96.8-100.4
3-6 years	65-110	20-25	90-110/60-75	36-38	96.8-100.4
6-12 years	65-100	14-22	90-120/60-75	36-38	96.8-100.4
12+	55-100	12-20	100-135/65-85	36-38	96.8-100.4