

# SEPTIC SHOCK MEDICATION GUIDE



**ANTIBIOTICS – GIVE ASAP WITHIN ONE HOUR; give gram negative first (except for neonate)  
IN OMNI (ER Main, PICU B, MS6C, MS7C, MS8C)**

**Bedside RN to mix initial doses. Give "push" meds first**

| DRUG                              | INDICATION                                                                                          | DOSE                                                                                                                                                                                                                            | RECONSTITUTE                    | DILUTE in NS or D <sub>5</sub> W                                                                                      | RATE                |
|-----------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>CEFTRIAXONE</b><br>1 gram vial | <b>GRAM NEGATIVE</b>                                                                                | 100 mg/kg/day divided q12hr (max 2000 mg/dose)                                                                                                                                                                                  | 9.6ml SW=<br>100 mg/mL solution | <= 8 Kg add dose to 10 mL in a syringe<br>8-15 Kg - add dose to 20 mL in a syringe<br>>=15 Kg - add dose to 50 mL bag | Over<br>10 min      |
| <b>CEFTAZIDIME</b><br>1 gram vial | <b>GRAM NEGATIVE</b><br>FEVER +<br>NEUTROPENIA /<br>IMMUNOCOMPROMI<br>SE/CHRONIC<br>HOSPITALIZATION | 150 mg/kg/day divided q8hr (max 2000 mg/dose)                                                                                                                                                                                   | 10ml SW=<br>100 mg/mL solution  | N/A                                                                                                                   | Pushover<br>3-5 min |
| <b>GENTAMICIN</b><br>2 mg/mL      | <b>GRAM NEGATIVE</b><br><i>Only for neonate ≤21<br/>days old ≥35 weeks<br/>gestation</i>            | 4 mg/kg q24hr                                                                                                                                                                                                                   | Pharmacy to prepare STAT        |                                                                                                                       | Over<br>30 min      |
| <b>VANCOMYCIN</b><br>500 mg vial  | <b>GRAM POSITIVE</b>                                                                                | ≤44 weeks PMA <sup>†</sup> /about ≤1 month old: 15 mg/kg x1;<br>>44 weeks PMA <sup>†</sup> /about >1 month old: 20 mg/kg x1<br>(max dose 2 g/dose); subsequent dosing per<br>hospital pharmacy vancomycin protocol to avoid AKI | 10 mL SW= 50 mg/mL<br>solution  | 0-7 Kg see below***<br>8-29 Kg - add dose to 100 mL bag<br>>30Kg - add dose to 250 mL bag                             | Over<br>90 min      |
| <b>LINEZOLID</b><br>2 mg/mL       | <b>GRAM POSITIVE</b><br>VANCO ALLERGIC/<br>RENAL<br>INSUFFICIENT                                    | <12 years: 30 mg/kg/day divided q8hr (max 600<br>mg/dose);<br>≥12 yrs: 600 mg q12hr; if ≥12 yrs old but <45 kg: 20<br>mg/kg/day divided q12hr (max 600 mg/dose)                                                                 | Pharmacy to prepare STAT        |                                                                                                                       | Over<br>30 min      |
| <b>AMPICILLIN</b><br>500 mg vial  | <b>GRAM POSITIVE</b><br>NEONATE ≤28 DAYS                                                            | 300 mg/kg/day divided q8hr ≤7 day olds, divided<br>q6hr for >7 day olds                                                                                                                                                         | 1.8 mL SW = 250 mg/mL           | 0-7 kg see below***                                                                                                   | Over 15<br>min      |
| <b>CLINDAMYCIN</b><br>12 mg/mL    | <b>TOXIC SHOCK</b>                                                                                  | 40 mg/kg/day divided q8hr (max 900 mg/dose)                                                                                                                                                                                     | Pharmacy to prepare STAT        |                                                                                                                       | Over 30<br>min      |
| <b>METRONIDAZOLE</b><br>12 mg/mL  | <b>INTRA-ABDOMINAL /<br/>ANAEROBIC</b>                                                              | 30 mg/kg/day divided q8hr<br>(max 500 mg/dose)                                                                                                                                                                                  | Pharmacy to prepare STAT        |                                                                                                                       | Over<br>30 min      |

\*\*\*For patients weighing 1-3 Kg, add medication to 10 mL in a syringe

\*\*\*For patients weighing 4-7 Kg, add medication to 20 mL in a syringe

| Pressors<br>Continuous infusions, titrate to effect |                                                                                                                                                 | Concentration for Administration         | Starting Dose   | Max Dose                                                  |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------|-----------------------------------------------------------|
| Epinephrine<br>Hypotensive and vasoconstricted      | 8 mg/250 (32mcg/mL) premixed bag<br>OR<br>1.6 mg Epinephrine in 48 mL (32 mcg/mL)<br>D <sub>5</sub> W or NS<br><i>Central line is preferred</i> |                                          | 0.05 mcg/Kg/min | 1 mcg/Kg/min                                              |
|                                                     |                                                                                                                                                 |                                          |                 |                                                           |
| Norepinephrine<br>Hypotensive and vasodilated       | 32 mcg/1 mL premixed bag<br>OR<br>1.6 mg norepinephrine in 48mL (32 mcg/ml)<br>D <sub>5</sub> W or NS<br><i>Central line is preferred</i>       |                                          | 0.05 mcg/Kg/min | 1-2 mcg/Kg/min                                            |
| OTHER MEDICATIONS                                   |                                                                                                                                                 |                                          |                 |                                                           |
| Dextrose                                            | D <sub>10</sub> W<br>D <sub>25</sub> W (Dilute D <sub>50</sub> 1:1 with SW)                                                                     | 0.5 g/Kg = 5 mL/Kg<br>0.5 g/Kg = 2 mL/Kg |                 | 25g = 250 ml D <sub>10</sub><br>25g=100mL D <sub>25</sub> |
| Calcium Gluconate<br>100 mg/mL                      | Dilute in NS - max 50 mg/mL<br>Give over 30 min.                                                                                                | 100 mg/Kg                                |                 | 2000 mg                                                   |
| Hydrocortisone                                      | Undiluted, slow IV push                                                                                                                         | 2 mg/Kg                                  |                 | 100 mg<br>Standard adult dose                             |
| Ref: Pediatric and Neonatal Lexi-drugs online       |                                                                                                                                                 |                                          |                 |                                                           |



When premixed bags are not available:

| Drips / Infusions    | Dose Form   | Code Cart | Transport Kit | Tackle Box | Standard Dose  | Dose Range     | Preparation Instructions                                      | Administration                          |
|----------------------|-------------|-----------|---------------|------------|----------------|----------------|---------------------------------------------------------------|-----------------------------------------|
| DOPamine             | 400mg/250mL | 1         |               |            | 10 mcg/kg/min  | 2 - 20 mcg     | * * premixed 250 mL Bag* *                                    | *premixed * concentration = 1.6 mg/mL   |
| EPINEPHrine (1mg/mL) | 1mg/1mL     | 3         |               | 2          | 0.1 mcg/kg/min | 0.05 - 0.2 mcg | 1.6 mg (1.6 mL) to 48 mL of D5W or NS to make a 50 mL syringe | concentration = 32 mcg/mL = 0.032 mg/mL |
| Lidocaine            | 100mg/5mL   | 1         |               | 3          | 20 mcg/kg/min  | 20 - 50 mcg    | 180 mg (9 mL) to 41 mL of D5W or NS to make a 50 mL syringe   | concentration = 3600 mcg/mL = 3.6 mg/mL |
| Norepinephrine       | 4mg/4mL     |           |               | 1          | 0.1 mcg/kg/min | 0.05 - 2 mcg   | 1.6 mg (1.6 mL) to 48 mL of D5W or NS to make a 50 mL syringe | concentration = 32 mcg/mL = 0.032 mg/mL |
| Procainamide         | 1000mg/10mL |           |               | 1          | 20 mcg/kg/min  | 20 - 80 mcg    | 180 mg (1.8 mL) in 50 mL in D5W or NS to make a 50 mL syringe | concentration = 3600 mcg/mL = 3.6 mg/mL |
|                      |             |           |               |            |                |                |                                                               |                                         |

**Endotracheal Administration: After each medication, flush ETT with 5 mL of normal saline and follow with 5 ventilations.**

|                                             | Dose Form      | Code Cart | Transport Kit | Tackle Box | Standard Dose     | Max Single Dose | Preparation Instructions | Administration         |
|---------------------------------------------|----------------|-----------|---------------|------------|-------------------|-----------------|--------------------------|------------------------|
| Atropine                                    | 1mg/10mL       | 2         |               | 2          | 0.04 - 0.06 mg/kg | 0.5 mg          |                          | Undiluted.             |
| EPINEPHrine (1mg/mL)                        | 1mg/1mL        | 3         |               | 2          | 0.1 mg/kg         | 2.5 mg          |                          | Undiluted.             |
| Lidocaine                                   | 100mg/5mL      | 1         |               | 3          | 2 - 3 mg/kg       | 2 - 3.5 mg/kg   |                          | Undiluted.             |
| Naloxone                                    | 0.4mg/1mL      | 5         |               |            | 0.1 mg/kg         | 2 mg            |                          | Undiluted.             |
| Naloxone                                    | 4 mg/10mL      |           |               | 1          | 0.1 mg/kg         | 2 mg            |                          | Undiluted.             |
| <b>Aerosol Medications via a nebulizer:</b> |                |           |               |            |                   |                 |                          |                        |
| Albuterol                                   | 0.5% - 0.5 mL  | 2         |               | 2          | 2.5 - 5 mg        | 5 mg            | Dilute in 3mL of NS      | Deliver via nebulizer. |
| Racemic EPINEPHrine                         | 2.25% - 0.5 mL | 2         |               | 2          | 11.25 mg          | 11.25 mg        | Dilute in 3mL of NS      | Deliver via nebulizer. |

Approved by Emergency Response Committee on 7.8.2025