

Situation/Background

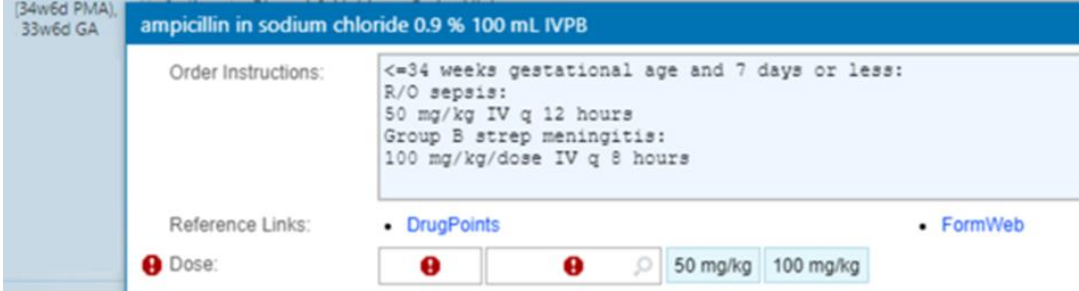
Antimicrobial Dosing References:

- The 2019 Randall Children's Hospital at Legacy Emanuel Suspected Bacterial Sepsis and Meningitis guideline included recommendations for empiric therapy for sepsis and meningitis (non-NICU).
 - This reference guideline is outdated.
 - The non-NICU versus NICU status caused confusion as the regimens in this guideline differed from empiric regimens in NICU order sets and other national recommendations.
- 2024 Sanford Guide, Lexicomp, Redbook, and AAP offer dosing/frequency recommendations for neonates and infants.
- NACS follows a Pediatric Fever Less than 60 days Guideline (in line with AAP) for management of infants 8-60 days with fever.

Neonatal/Pediatric Ampicillin Product Concentration:

- Ampicillin concentration of 100 mg/mL historically was offered to all NICU babies and those fluid restricted.
- Ampicillin 20 mg/mL was offered to all other pediatric patients.
- Ampicillin 100 mg/mL has a short expiration of 1 hour, which has operational limitations (e.g. expiration and drug delivery constraints).

Assessment/Recommendation

WHO	<ul style="list-style-type: none">• Pharmacists, Providers, Nurses
WHEN	<ul style="list-style-type: none">• April 22, 2025
WHAT	<p>Antimicrobial Dosing References:</p> <ul style="list-style-type: none">• The 2019 RCH Suspected Bacterial Sepsis and Meningitis guideline will be RETIRED.• Order sets which contain empiric antibiotic regimens for rule out sepsis (ROS) for a well appearing baby versus ROS with presumed meningitis will be updated to reflect recommendations provided by Sanford Guide, Lexicomp, Redbook, AAP, and Neofax.• Doses and frequencies will not be defaulted in EPIC. Providers should refer to "order instructions" for dosing and frequency guidance based on indication and day of life (DOL).<ul style="list-style-type: none">◦ Order Instructions Example 34w6d PMA: 33w6d GA  <p>Neonatal/Pediatric Ampicillin Product Concentration:</p> <ul style="list-style-type: none">• Standard ampicillin concentration will be as follows:<ul style="list-style-type: none">◦ Ampicillin 100 mg/mL concentration (1 hour expiration) will be reserved for babies < 1000 grams and those with fluid restrictions not meeting goals.◦ Ampicillin 20 mg/mL concentration will be provided to all other neonatal & pediatric patients (48-hour refrigeration expiration).◦ No changes to nurses' process on Children's Transport Team; continue to dilute to 100mg/mL for patients cared for by our KIDS Team.
WHY	<p>Antimicrobial Dosing References and EPIC changes:</p> <ul style="list-style-type: none">• Avoid having multiple documents that may contain differing or outdated recommendations.• Streamline work with Order Set Council. <p>Neonatal/Pediatric Ampicillin Product Concentration:</p> <ul style="list-style-type: none">• Concentration changes align with Standardize for Safety Guidelines.• Use of ampicillin 20 mg/mL concentration will minimize operational limitations.
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