

Avoid Common Errors With Penicillin for Congenital Syphilis

You'll see more focus on **safely dispensing penicillin for congenital syphilis**...since rates in the US increased tenfold in a decade.

Congenital syphilis occurs when a pregnant patient has syphilis and it spreads to their baby. It's scary...since this can lead to birth defects, liver problems, and even death in the baby.

Newborns with congenital syphilis will need penicillin treatment.

Help ensure safe and appropriate therapy...since errors with penicillin can lead to neonatal death.

Pay close attention to the type of injectable penicillin ordered for the newborn...since the choice depends on their infection risk.

Expect lower-risk newborns to get one dose of penicillin G benzathine IM. Add "For intramuscular use only" instructions to these labels...to avoid giving it IV. This accident could be fatal.

But higher-risk babies will get 10 days of aqueous IV penicillin G sodium or penicillin G potassium. Anticipate it'll be dosed every 12 hours for the first 7 days of life...then every 8 hours for the last 3 days of treatment. This is because of faster penicillin clearance after Day 7.

Deliver all doses to units on time. Missing more than 1 day of IV penicillin requires starting treatment all over again.

Avoid stocking unit-dose penicillin products in pediatric care areas without staff education...to decrease the risk of giving incorrect doses.

Always draw up patient-specific, weight-based penicillin doses in syringes in the pharmacy when possible. Do not prepare in an IV bag for newborns...because it would be too much volume for their small bodies.

Remember that penicillin is always dosed in "units," not "mg."

Use "million" or "thousand" instead of large numbers...such as "2 million units"...to make doses easier to read. If you must write out large numbers, always insert commas...such as "1,000,000" instead of "1000000."

Keep in mind, penicillin is prone to shortages.

But IM penicillin G benzathine with procaine isn't an alternative to use during a shortage...since it isn't studied for syphilis. And penicillin G procaine is no longer on the market.

Avoid using penicillin brand names (*Bicillin L-A*, *Bicillin C-R*, etc)...they cause confusion. Ensure labels clearly specify the penicillin type...such as "penicillin G benzathine" or "penicillin G sodium"...to limit mix-ups.

Separate and label your inventory of different penicillins...to prevent picking the wrong product. And continue to use barcode scanning programs, if available...to double-check that you're dispensing the right med.

Learn more about how to prevent medication errors in kids with our resource, [Keeping Pediatric Patients Safe](#).

Key References:

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