

# Do not continue antibiotic therapy for suspected neonatal sepsis >36-48 hours without clear suspicion of bacterial infection

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The gold standard for diagnosing neonatal sepsis is blood culture.

## What is known about neonatal antibiotics:

- Empiric antibiotics are continued until the confirmation of negative blood culture.
- Since neonatal sepsis evaluation and antibiotics are often initiated for subtle indications, prompt identification of negative blood culture and subsequent discontinuation of antibiotic treatment in infants with short-lasting symptoms is imperative.
- Recent guidelines recommend limiting antibiotic administration to 36 hours if the blood culture remains negative and the infant is asymptomatic.
- In addition to increasing rates of antimicrobial resistance, early-life antibiotic exposure disrupts the developing microbiome, which may contribute to numerous diseases later in life, including diabetes, obesity, inflammatory bowel disease, asthma and allergy.
- Neonatal antibiotic treatments are associated with mother-newborn separation, longer duration of hospital stay, and reduced breastfeeding rates.

## How to talk with patients and parents about using antibiotics in newborns:

- Avoiding unnecessary antibiotics is safe and has advantages for your baby:
  - More time spent close to the parents.
  - Better development of bacterial flora.
  - Absence of catheter means more freedom of movement and allows for better motor exploration.
- Unless we are certain there is a bacterial infection, the risks of using an IV access outweigh the potential benefit. Risks include skin damage due to catheter-related complications or bacterial resistance.

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## This EAP recommendation is in accordance with Choosing Wisely recommendations of:

- Norway: [www.legeforeningen.no/kloke-valg/til-helsepersonell/legeforeningens-anbefalinger/norsk-barnelegeforening/1.antibiotika-til-nyfodte-bor-avsluttes-etter-36-48-timer-dersom-ingen-vekst-i-blodkultur-og-fredelig-klinikk/](http://www.legeforeningen.no/kloke-valg/til-helsepersonell/legeforeningens-anbefalinger/norsk-barnelegeforening/1.antibiotika-til-nyfodte-bor-avsluttes-etter-36-48-timer-dersom-ingen-vekst-i-blodkultur-og-fredelig-klinikk/)
- USA: <https://downloads.aap.org/AAP/PDF/Choosing%20Wisely/CWNeonatalPerinatal.pdf>
- USA: <https://www.aafp.org/pubs/afp/collections/choosing-wisely/277.html>
- Germany: [https://register.awmf.org/assets/guidelines/024-008I\\_S2k\\_Bakterielle\\_Infektionen\\_Neugeborene\\_2021-03.pdf](https://register.awmf.org/assets/guidelines/024-008I_S2k_Bakterielle_Infektionen_Neugeborene_2021-03.pdf)

## References:

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