

## Antibiotic Overuse in Newborns With Suspected Sepsis



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A recent study conducted by the University of Gothenburg involving over a million newborns in Sweden highlights a concerning trend: despite a notable decrease in the rate of sepsis among this group, the administration of antibiotics remains disproportionately high. The study, published in JAMA, highlights the need for a reevaluation of antibiotic use practices in newborn care.

Despite relatively low antibiotic usage during the initial week of life and maintaining commendably low rates of sepsis-related morbidity and mortality compared to global standards, the study reveals an unjustified persistence in antibiotic administration. Even as the incidence of sepsis in Swedish newborns halved over the study period, antibiotic usage showed no significant decline.

Study researchers emphasise the potential to curtail antibiotic use without compromising patient care. Among the vast dataset encompassing over a million newborns, only 647 cases of early-onset sepsis were documented, resulting in nine fatalities. This translates to 0.63 cases per 1,000 newborns annually, with a notable decline from 0.74 to 0.34 cases per 1,000 newborns annually during the study period.

Sepsis, a potentially fatal condition triggered by the body's response to infection, demands prompt intervention. However, the indiscriminate use of antibiotics poses risks, particularly for newborns and preterm infants whose delicate bacterial balance is easily disrupted. Moreover, overuse contributes to the emergence of antibiotic-resistant strains, exacerbating public health concerns.

The researchers advocate for a nuanced approach, suggesting continuous screening of newborns at risk of infection, even without symptoms. In cases where sepsis is suspected, the duration of antibiotic treatment can be shortened if the suspicion diminishes and blood cultures remain negative.

The study underscores the importance of revisiting antibiotic guidelines for newborns. These guidelines aim to strike a delicate balance between effective sepsis management and minimising unnecessary antibiotic exposure for long-term health benefits. Continuous evaluation and optimisation of these guidelines are imperative in ensuring optimal care for newborns while mitigating the risks associated with antibiotic overuse.

Source: [University of Gothenburg](#)

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