

Group B streptococcus incidence rises significantly among newborns

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The findings suggest that this disturbing trend could be due the emergence of more virulent group B streptococcal strains and call for a renewed evaluation of preventive strategies to reduce neonatal disease.

Passed from mother to child during birth, group B streptococcus is the most common cause of infection in newborns. Guidelines for the prevention of disease have been widely adopted in high-income countries. But despite these efforts, the bacterium remains a leading cause of blood stream infections and meningitis worldwide, typically affecting babies younger than 7 days (early-onset) or infants up to 3 months of age (late-onset).

In many European countries, including the Netherlands, antibiotic treatment to prevent neonatal group B streptococcal disease is only offered to [pregnant women](#) with known risk factors for perinatal disease.

Using nationwide surveillance data from 1987 to 2011, a team of Dutch researchers examined group B streptococcus disease trends before and after the introduction of these guidelines in the Netherlands in 1999. The analysis revealed that the incidence of early-onset disease increased from 0.11 to 0.19 cases per 1000 livebirths between 1987 and 2011, and the incidence of late-onset disease increased from 0.03 to 0.13 livebirths.

Importantly, the authors note that the continuing increase in disease incidence after the adoption of the guidelines was mainly a result of a rise in the number of cases caused by clonal complex 17 strains of group

B streptococcus.

According to lead author Dr Arie van der Ende from the Reference Laboratory for Bacterial Meningitis, Amsterdam, Netherlands, "Our findings should lead to a reassessment of current practices. Only offering [antibiotic treatment](#) during labour to pregnant women at risk is probably too limited to prevent all group B streptococcal infections in newborn infants. Moving to universal screening of pregnant women by vaginal and rectal swabs for group B streptococcus and offering antibiotic prophylaxis to group B streptococcus positive pregnant women must be considered."*

Writing in a linked Comment, Dr Shannon Manning from Michigan State University in the USA says, "The findings of Bekker and colleagues confirm that group B streptococcus disease in babies remains a global public health concern and show the importance of continuous surveillance in different geographic locations. Future studies should further define the mechanisms used by clonal complex 17 strains to survive in the presence of antibiotics to develop strategies to efficiently eradicate the most virulent strains of group B [streptococcus](#) from the maternal genitourinary tract."

Provided by Lancet

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