

Incidence of group B strep has decreased among newborns, but has increased among adults

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Group B streptococcus, a major cause of serious infections, declined about 25 percent among infants younger than 7 days from 1999 to 2005, but increased nearly 50 percent among persons 15 to 64 years old, according to a study in the May 7 issue of JAMA.

In the 1970s, group B streptococcus emerged as the leading cause of sepsis and meningitis in the first week of life. Subsequent prevention strategies resulted in substantial declines in disease in infants younger than 7 days (also known as early-onset disease). Guidelines for prevention of this disease near the time of birth were revised in 2002. Disease trends following the release of these guidelines have not yet been well studied.

In addition to illness in the first week of life, group B streptococcus also causes invasive disease in older infants, pregnant women, children and young adults with underlying medical conditions and older adults. "The epidemiology of group B streptococcal disease is dynamic, and continued surveillance to monitor trends across age groups is necessary. For example, an increase in disease incidence among nonpregnant adults has been documented in past decades, but whether that trend has continued is unknown," the authors write. In the United States in 2005, group B streptococcus caused an estimated 21,500 cases of invasive disease and 1,700 deaths, according to information in the article.



Christina R. Phares, Ph.D., of the Centers for Disease Control and Prevention, Atlanta, and colleagues evaluated trends and characteristics over a recent period among cases of laboratory-confirmed invasive group B streptococcal disease identified by population-based surveillance in 10 states participating in the Active Bacterial Core surveillance/Emerging Infections Program Network.

From 1999 through 2005, surveillance identified 14,573 cases of invasive group B streptococcal disease, of which 1,232 were early-onset disease. Disease incidence decreased 27 percent after the 2002 release of revised early onset disease prevention guidelines, from 0.47 per 1,000 live births in 1999-2001 to 0.34 per 1,000 live births in 2003-2005. Incidence remained stable among infants age 7 to 89 days and pregnant women.

Group B strep incidence increased 48 percent for those age 15 to 64 years, while those 65 years or older experienced a 20 percent increase. Among persons age 15 through 64 years, incidence increased from 3.4 per 100,000 population in 1999 to 5.0 per 100,000 in 2005; among those 65 years or older, incidence increased from 21.5 per 100,000 to 26.0 per 100,000. These values translate to a 32 percent increase in the overall incidence of adult disease, which reached 7.9 per 100,000 in 2005. The proportion with known outcome who died was highest in the oldest age groups.

All 4,882 isolates tested were susceptible to the antibiotics penicillin, ampicillin, and vancomycin, but 32 percent and 15 percent were resistant to erythromycin and clindamycin, respectively.

"... maternal group B streptococcus vaccination trials should be a public health priority, followed by expanded vaccine development to target disease among elderly and younger adults with chronic underlying conditions," the authors conclude.



Source: JAMA and Archives Journals

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