Since the group B streptococcus (GBS; *Streptococcus agalactiae*) attained notoriety in the 1970s as the leading cause of neonatal sepsis in the United States, significant strides have been made in prevention. Risk factors for disease were identified and efficacy of intrapartum antibiotic prophylaxis (IAP) demonstrated. Guidelines published in 1996 presented clinicians with two prevention options.1 Option A called for prenatal vaginal and rectal GBS screening cultures at 35–37 weeks with IAP for pregnant women have vaginal or rectal colonization with GBS.2-4 Exposure of newborns at parturition can lead to sepsis — usually bacteremia, pneumonia, or meningitis, with cellulitis or septic arthritis less commonly seen. Infant disease is classified as early-onset (within the first 7 days of life) or late-onset (>7 days to 3 months of age). Risk factors for early-onset disease include a colonized or infected mother, premature or prolonged ROM, premature labor onset, intrapartum fever, GBS bacteriuria, a previous newborn with GBS disease, black race, or maternal age <20 years.5,6 Penicillin G is the treatment of choice.

Although not reportable in Oregon, invasive GBS disease has been surveilled in the Portland area since July 1995 as part of the Emerging Infections Program collaboration among the CDC and health departments in 8 other states.7 Oregon’s surveillance area is Clackamas, Multnomah, and Washington counties (2001 population 1,467,300; 42% of Oregonians). Isolation of GBS from a normally sterile site (blood, cerebrospinal, pleural, peritoneal, pericardial or joint fluid, or other specimens collected during sterile procedures) defines invasive infection. Area microbiologists identify and forward isolates to the Oregon State Public Health Lab. Health information is reviewed for demographic and clinical details.

From July 1995 through 2001, 75 cases of early-onset GBS disease were reported—an incidence of 0.6/1000 live births. Fifty-four cases (72%) had primary bacteremia, 16 (21%) bactereemic pneumonia and 7 (11%) meningitis. (Several had more than one syndrome.) Twenty-eight (38%) of 72 cases with gestational age available were born at ≥37 weeks. One case died.*

NEW PREVENTION DATA

Most of this disease occurred in the context of the 1996 prevention recommendations, and the multi-state surveillance afforded an opportunity to observe disease rates under both the screening and risk-factor prevention options. CDC and 8 states conducting active surveillance for invasive GBS identified a stratified, random sample of live births in 1998 and 1999—including 312 early-onset GBS cases—and reviewed the maternal records.8

Hands-down, the screening approach emerged as the better option. The risk of early-onset disease in infants of antenatally screened women was about half (relative risk in multivariable analysis...
crobiotic agent in penicillin-allergic women; and management of newborns after IAP.9

Over the past decade, increasing use of IAP has resulted in decline of >70% in early-onset GBS disease — from 1.8 to 0.5 cases per 1,000 live births.10-12 A similar trend has been observed in the Oregon surveillance area. Because Oregon had the lowest rate of GBS screening of the 8 states in the study, we expect that adoption of the revised guideline will lead to further reductions in this disease without significant increases in IAP.

REFERENCES

INFLUENZA INVADES OREGON

One culture-confirmed case of influenza type A has been reported by the Oregon State Public Health Laboratory (OSPHL). The teen resident of Yamhill County relinquished a specimen of putative epidemic catarrh during the second week in November, and subsequent culture of influenza virus caused a ripple of excitement among the virologists in attendance. As of the 9th week of the season, OSPHL has reported results on 18 cultures compared with 51 last season. Also, specimens received to RO influenza are currently lagging behind with 26 compared with 72. It is anticipated that barring a viral shift, this season will be at or below average. In spite of this, immunizations are still important for those at risk of complications as well as those who interact with immuno-compromised patients, friends or loved ones during the holiday season and beyond. In addition to the influenza virus, OSPHL and Providence Portland Medical Center Infectious Disease Laboratory have isolated adenovirus (1), parainfluenza virus (5), rhinovirus (1), and RSV (1).

Nationally, 47 isolates tested by the Centers for Disease Control and Prevention were identified as type A (43%) and B (57%) strains. Current strains are antigenically similar to the vaccine components.