**Group B Streptococcal Infections**

### Epidemiology

**Source:** GI tract of humans

**Transmission**
- Perinatally, from mother to infant
- Person-to-person

<table>
<thead>
<tr>
<th>Incubation</th>
<th>Clinical case definition</th>
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<tbody>
<tr>
<td>&lt;7 days</td>
<td>Infants: bacteremia, pneumonia, meningitis, fever, difficulty feeding, irritability, lethargy, difficulty breathing, bluish color to skin</td>
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<tr>
<td>Unknown</td>
<td>Early onset: (infants &lt;7 days old) Respiratory distress, apnea, shock, sepsis, pneumonia</td>
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<td>Late onset: (infants &gt;7 days old) meningitis or osteomyelitis</td>
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<td>~25%</td>
<td>Pregnant women: UTI, chorioamnionitis, endometritis, wound infection</td>
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<td>Non-pregnant adults: Skin or soft tissue infection, bacteremia, genitourinary infection, pneumonia</td>
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0.3 cases per 1000 live births; 7-25 cases per 100,000 adults

**Complications:**
- deafness, developmental disabilities, cerebral palsy, miscarriages, stillbirths, preterm deliveries

**Death:** 4-6% babies; 8% adults

**Outbreaks** can occur in nurseries at hospitals.

### Diagnosis

*Streptococcus agalactiae* is a gram-positive aerobic diplococci that causes perinatal bacterial infections. There are 9 serotypes.

**Lab Diagnosis**

- Isolation of group B Streptococcus by culture from a normally sterile site (blood, CSF, pleural fluid)

**Confirmed:** Case that is laboratory-confirmed

### Treatment, Prophylaxis

**Prophylaxis for Pregnant Women**

- **Intrapartum antibiotic prophylaxis** (IAP) should be used on women who have previously delivered an infant with GBS disease, who are colonized with GBS, or those at risk. (antibiotics given before labor will not be effective)

- **Identify Carriers:** pregnant women should be screened for anogenital GBS colonization between 35 and 37 weeks. Selective enrichment broth should be used for culture.

- **Risk factors:** If a woman is not cultured before labor, use intrapartum antibiotics if: preterm labor (<37 weeks), preterm premature rupture of membranes (<37 weeks), prolonged rupture of membranes (>18 hrs), previous child affected by GBS, or maternal fever during labor.

  - **Penicillin** (5 million units every 6 hrs) or **ampicillin** (2 grams IV initially, followed by 1 gram every 4-6 hrs)

  - **Penicillin-allergic women** should be given **cefa-zolin** (2 g IV initial dose then 1 g IV every 8 hrs until delivery) for low risk anaphylaxis; or for high risk anaphylaxis: **Clindamycin** (900 mg IV every 8 hrs until delivery) or **erythromycin** (500 mg IV every 6 hrs)

**Screening all women 35-37 weeks into the pregnancy and intrapartum antibiotic prophylaxis are the most effective ways of preventing Strep Group B infections in newborns.**

**Breastfeeding is still encouraged and will not harm the baby.**

http://www.infectiousdisease.dhh.louisiana.gov

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