

Group B Streptococcal Disease, Neonatal

Reporting Obligations

Group B Streptococcal disease, neonatal is designated as a disease of public health significance and is reportable under the *Ontario Health Protection and Promotion Act*. Report all suspect and confirmed cases **within one business day** to the health unit.

REPORTING FORM

Epidemiology

Aetiologic Agent:

Group B *streptococci* (GBS) (*S. agalactiae*) are gram-positive cocci which are the most common cause of sepsis and meningitis in "at risk" newborns.

Clinical Presentation:

Two distinct forms of illness can occur:

1. Early onset disease (1 – 7 days after birth) presents with sepsis, respiratory disease, apnea, shock, pneumonia, and meningitis.
2. Late onset disease (≥ 7 days to several months after birth) presents with sepsis and meningitis, however, **note that only illness up to 28 days after birth is reportable.**

Modes of transmission:

Early onset transmission occurs via the infected birth canal as well as in utero. Late onset transmission can also be through person-to-person contact.

Incubation Period:

For early onset disease, the incubation period is from 1-7 days, presenting most frequently within the first 24 hours of life. The incubation period for late onset GBS disease in infants is unknown, as it can occur from ≥ 7 days to several months, but typically within 3-4 weeks.

Period of Communicability:

Group B *streptococci* are transmissible to infants during labour if the mother is colonized; however, a negative vaginal culture at the time of labour does not guarantee absence of colonization.

Risk Factors/Susceptibility

- Risk is greater among premature babies; delivery at less than 37 weeks
- Intrapartum temperature greater than 38 degrees Celsius
- Rupture of membranes for 18 hours or longer
- Having had a previous newborn with group B streptococcus infection

Diagnosis & Laboratory Testing

Laboratory confirmation of Group B Streptococcus (***Streptococcus agalactiae***) from a normally sterile site (e.g., cerebrospinal fluid), with clinically compatible signs and symptoms of invasive disease in a newborn up to 28 days after birth.

Clinically compatible signs and symptoms are characterized by the following: early onset disease (1-7 days), characterized by sepsis, pneumonia, and less frequently meningitis, osteomyelitis or septic arthritis or late onset disease (7 days to 1 month), characterized by sepsis and meningitis.

TESTING INFORMATION & REQUISITION

Treatment & Case Management

Treatment is under the direction of the attending health care provider.

Public Health will follow up as needed.

Patient Information

PATIENT FACT SHEET

References

1. [Ministry of Health, Infectious Diseases Protocol - Ontario Public Health Standards, 2022.](#)

Additional Resources

1. [SOGC. "Clinical Practice Guideline, Management of Group B Streptococcal Bacteriuria in Pregnancy, May 2012."](#)
2. [CDC. "Group B Strep \(GBS\) Prevention in Newborns, Preventing Early-Onset GBS."](#)
3. [PHO. "Group B Streptococcal Disease Neonatal", Dec 2022.](#)