

Infants Born Prematurely

Recommended vaccines for infants born prematurely ^A	
All routine vaccines	Immunize according to routine schedule.
Influenza vaccine	Yearly immunization of children 6-59 months of age. Immunization of household contacts/caregivers is especially important if infant is under 6 months of age.
Pneumococcal conjugate vaccine	Infants born at 32 weeks gestation or less are at risk of impaired lung function and should be assessed for the need for a 4-dose schedule of pneumococcal conjugate vaccine. Consider pneumococcal polysaccharide vaccine at 2 years of age if there is evidence of ongoing lung impairment.

Premature infants whose clinical condition is satisfactory should be immunized with age-appropriate doses of vaccine at the same chronological age and according to the same schedule as full term infants, regardless of birth weight. Antibody response to immunization is generally a function of chronological age rather than maturity and vaccine efficacy is high in premature infants.

As most of the transfer of maternal IgG antibody occurs during the third trimester of pregnancy, infants born prematurely have lower maternal antibody titers and shorter duration of maternal antibody protection.

The severity of vaccine preventable illnesses may be greater in preterm and low birth weight infants. Preterm birth is associated with increased risk of complications and death from pertussis in infancy. All infants and children under 5 years of age are considered to be at increased risk of complications from influenza. This includes infants born prematurely and is especially significant for those infants with chronic complications of preterm birth.

Preterm and low birth weight infants tolerate immunizations well. Rates of adverse events are similar to those of full-term infants.

Premature and very low birth weight infants (i.e., 1500 g) still hospitalized at time of immunization may experience a transient increase or recurrence of apnea and bradycardia following immunization. This resolves within 48 hours and does not alter the overall clinical progress of the child. It is recommended that hospitalized premature infants have continuous cardiac and respiratory monitoring for 48 hours after their first immunization.

Respiratory Syncytial Virus (RSV) monoclonal antibody (Synagis®-palivizumab) is indicated for certain premature infants. Synagis® is not publicly funded. Advise clients to contact their physician regarding eligibility and administration of Synagis®. Refer to the [Canadian Immunization Guide, Part 5: Passive Immunizing Agents](#) for more information.

^A For specific vaccine schedule information, refer to [Part 4 - Biological Products](#).