

PERIODICITY CHART

# Primary Care for Preterm Infants & Children

	Post-discharge visit	1 mo	2 mo	4 mo	6 mo	9 mo	12 mo	15 mo	18 mo	2 yr	2½ yr	3 yr	4 yr	5 yr
<b>Nutrition:</b> Monitor growth carefully using corrected age on appropriate growth charts. Always support breastfeeding. Supplement with post-discharge formula when indicated to achieve a normal rate of growth. Do not overfeed.														
Growth Charts	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC	GC
Post-discharge formulas	PF	PF	PF	PF	PF	PF	PF							
Iron supplement	IS	IS	IS	IS	IS	IS	IS							
Vitamin D	D	D	D	D	D	D	D							
<b>Immunizations:</b> Follow standard recommendations by chronological age except for special recommendations for Hepatitis B Vaccine and Rotavirus Vaccine. Do not miss the opportunity to protect vulnerable children from Respiratory Syncytial Virus infections.														
Rotavirus vaccine			R	R	R									
Hepatitis B vaccine	H	H	H	H	H	H								
RSV vaccine	RSV	RSV	RSV	RSV	RSV	RSV	RSV	RSV	RSV					
<b>Screening:</b> Preterm infants and children need more frequent hearing and ophthalmologic screenings and careful monitoring of neurodevelopmental and psychosocial issues.														
Developmental surveillance		DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Developmental screening						DSc			DSc		DSc			
Autism screening									ASD	ASD				
Hearing screening	HS	HS	HS	HS	HS2	HS2	HS2	HS2	HS2	HS2	HS2	HS2	HS2	HS2
Ophthalmologic screening	OS	OS	OS	OS	OS	OS	OS	OS	OS	OS	OS	OS	OS	OS
Psychosocial screening	PS	PS	PS	PS	PS	PS	PS	PS	PS	PS	PS	PS	PS	PS

## Nutrition

- **GC: Monitoring growth/Growth charts** - Use WHO growth chart until 2 years. Use corrected age until at least 2 years. Use CDC growth chart for children 2-20 years.
- **PF: Post-discharge formula** - Length of use of post-discharge formula (usually EnfaCare® or NeoSure®) is controversial without standard recommendations but should not replace breastfeeding in an adequately growing infant. These are some informal suggestions if using a post-discharge formula: BW >1800 grams – may not be necessary; BW 1501-1800 grams – up to 3 months; BW 1001-1500 grams - up to 6 months; BW 751-1000 grams - up to 9 months; BW <750 grams - up to 12 months. Caloric density and frequency of formula will depend on growth history in the NICU and other medical issues. Always support breastfeeding. Maintain growth trajectory. Do not overfeed.
- **D: Vitamin D** - Almost all infants need Vitamin D supplementation. 400 IU per day recommended < 1 year old. Formulas in US contain at least 400 IU per liter. Supplement all breastfeeding infants and all infants taking less than 1 liter of formula per day.
- **IS: Iron supplementation** - Almost all preterm infants should receive iron supplementation. Supplement with 2-3 mg/kg/day for 6 to 12 months (until dietary intake is sufficient); 4-6 mg/kg/day if anemic. Almost all preterm infants are iron deficient unless they received blood transfusions.

## Immunizations

- **H: Hepatitis B vaccine** - Hepatitis B vaccine is the only routine childhood vaccine that has been shown to produce insufficient immunogenicity in preterm and low birth weight infants. A dose received by an infant <2000 grams AND <1 month of age does not count towards the primary series. There are special considerations for infants <2000 grams.
  - **Birth person is HBsAg-negative:** 1 dose within 24 hours of birth for all medically stable infants ≥2,000 grams. Infants <2,000 grams: administer 1 dose at chronological age 1 month or hospital discharge. A dose received by an infant <2,000 grams AND <1 month of age does not count towards the primary series.
  - **Birth person is HBsAg-positive:**
    - Administer Hepatitis B vaccine and 0.5 mL of Hepatitis B immune globulin (HBIG) within 12 hours of birth, regardless of birth weight. For infants <2,000 grams, administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
    - Test for HBsAg and anti-HBs at age 9-12 months. If Hepatitis B vaccine series is delayed, test 1–2 months after final dose.
  - **Birth person's HBsAg status is unknown:**
    - Administer Hepatitis B vaccine within 12 hours of birth, regardless of birth weight.
    - For infants <2,000 grams, administer 0.5 mL of HBIG in addition to Hepatitis B vaccine within 12 hours of birth. Administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
    - Determine HBsAg status as soon as possible. If HBsAg is positive, administer HBIG to infants ≥2,000 grams as soon as possible, but no later than 7 days of age.
- **R: Rotavirus vaccine** - Infants usually do not receive rotavirus vaccine in the NICU. The first dose of rotavirus must be administered by age 14 weeks 6 days. Consider administering at the first outpatient visit for infants age 6 weeks to 14 weeks 6 days. All doses must be completed before the age of 8 months.

**For complete recommendations:** <https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html>

- **RSV: RSV immunization**
  - **Give nirsevimab for the following patients:**
    - Infants < 8 months during RSV season if not given at birth hospitalization or if birthing person received RSV vaccine at least 14 days before birth
    - Infants 8-19 months at start of RSV season with chronic lung disease of prematurity, immunocompromised, cystic fibrosis with severe lung disease or weight-for-length < 10%ile, and American Indian and Alaska Native children
  - **For complete recommendations:** [cdc.gov/rsv](https://www.cdc.gov/rsv) and [aap.org/en/patient-care/respiratory-syncytial-virus-rsv-prevention/](https://www.aap.org/en/patient-care/respiratory-syncytial-virus-rsv-prevention/)
  - **If nirsevimab is unavailable, consider palivizumab for the following patients:**
    - Infants < 12 months at start of RSV season if < 29 weeks GA at birth or < 32 weeks GA and O2 requirement for at least 28 days. Also consider for children with hemodynamically significant heart disease or with pulmonary abnormality or neuromuscular disease that impairs the ability to clear secretions
    - Children < 24 months at the start of RSV season with chronic lung disease on medical therapy (oxygen, chronic corticosteroid, or diuretic therapy) within 6 months of start of RSV season
  - **For complete recommendations:** <https://pediatrics.aappublications.org/content/134/2/415.full>

## Screening

- **DS: Developmental surveillance** - Perform at every well child check (WCC) health maintenance visit and at other visits as indicated by risk status and concerns.
- **DSc: Developmental screening** - Perform with an evidence-based tool at 9, 18, and 30 month WCC visits.
- **ASD: Autism Screening:** Use autism spectrum disorder screening tool at 18 months and 2 years.
- **HS: Hearing screening** - ABR screening (such as ALGO) is performed prior to discharge. If initial screen was not passed, repeat outpatient screening is indicated as quickly as possible and by one month of age. Identify any hearing deficit using ABR by 3 months of age. Begin intervention by 6 months of age.
- **HS2: Hearing screening after newborn period** - If newborn hearing screen normal, repeat hearing screen for children hospitalized in NICU > 5 days by 9 months of age. Screen earlier for high-risk conditions such as history of CMV infection, meningitis, and ECMO. Refer at any time for concerns or language delays. In addition, follow Bright Futures guidelines.
- **OS: Ophthalmologic screening** - Monitor for ROP until mature retinae for GA<30 weeks or <1500 g or selected infants 1500-2000 g or GA >30weeks. For all, follow up at 4-6 months after ophthalmological care discharge and yearly.
- **PS: Psychosocial screening** - Perform at every WCC and at other visits as feasible and indicated by risk status.

**DISCLAIMER:** The recommendations in this publication do not indicate an exclusive course of treatment or serve as a standard of medical care.