

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
Nutrition: Monitor growth carefully using adjusted age on appropriate growth charts. Always support breastfeeding. Supplement with post-discharge formulas when indicated. Do not overfeed.														
Monitoring growth/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							
Vitamin D	D	D	D	D	D	D	D							
Iron supplementation	IS	IS	IS	IS	IS	IS	IS							
Immunizations: Follow standard recommendations by chronological age except for special recommendations for Hepatitis B Vaccine and Rotavirus Vaccine.														
Hepatitis B vaccine	H	H	H	H	H	H								
Rotavirus vaccine			R	R	R									
Palivizumab		P	P	P	P	P	P	P	P					
Screening: Preterm infants and children need more frequent hearing and ophthalmologic screenings and careful monitoring for 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 formulas (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 of formula will depend on weight gain in the NICU and other medical issues. Always support breastfeeding. 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.

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- **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.
 - **Mother is HBsAg-negative:** 1 dose within 24 hours of birth for all medically stable infants $\geq 2,000$ grams. Infants <2000 grams: administer 1 dose at chronological age 1 month or hospital discharge. A dose received by an infant <2000 grams AND <1 month of age does not count towards the primary series.
 - **Mother 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 <2000 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.
 - **Mother's HBsAg status is unknown:**
 - Administer Hepatitis B vaccine within 12 hours of birth, regardless of birth weight.
 - For infants <2000 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 mother's HBsAg status as soon as possible. If mother is HBsAg-positive, administer 0.5 mL of HBIG to infants ≥ 2000 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>

- **P: Palivizumab (Synagis®)** - Do not miss the opportunity to protect vulnerable children from Respiratory Syncytial Virus infections. Consider for infants < 12 months at start of RSV season if less than 29 weeks GA at birth or less than 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. Consider for 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 the 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 feasible.
- **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 30 months of age. Screen earlier for high-risk conditions such as history of CMV infection, meningitis, ECMO, and hyperbilirubinemia requiring exchange transfusion. 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.

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