

Newborn Critical Care (NCCC) Clinical Guidelines

Guideline to Immunizations

Once a patient is medically stable, follow routine childhood immunization schedule except for live vaccines (e.g. rotavirus, MMR, varicella) based on the patient's **chronologic age**. Vaccine doses administered ≤ 4 days before the minimum age or interval are considered valid. Vaccination with live vaccines (rotavirus, MMR, varicella) is postponed until after discharge from the NCCC. The medical team determines medical stability, but it generally includes infants who are considered free of infection, metabolic disease, renal, cardiovascular, or respiratory instability and are demonstrating sustained recovery and steady growth.

ROUTINE IMMUNIZATIONS

Birth to 1 Month	2 Months	4 Months	6 Months	7 Months	12 Months
Hep B #1 (See Special Considerations)	Pediarix DTaP #1 IPV #1 Hep B #2*	Pediarix DTaP #2 IPV #2 Hep B #3**	Pediarix DTaP #3 IPV #3 Hep B #4**	Seasonal influenza #2 (If warranted)	Hib #4 PCV 13 #4 DTaP #4 (As long as 6 months have elapsed since DTaP #3) Hep A #1
	PCV 13 #1 Hib #1	PCV 13 #2 Hib #2	PCV13 #3 Hib #3 Seasonal influenza #1 (If warranted)		

* 2nd Hep B should be at least 4 weeks after 1st dose

** 3rd Hep B (sometimes this is actually the 4th dose) should be at least 16 weeks from 1st dose and no earlier than 24 wks

SPECIAL CONSIDERATIONS FOR HEPATITIS B VACCINE #1

Mother HBsAg **NEGATIVE**

Birthweight < 2 kg

- Delay first dose of hepatitis B vaccine (Hep B) until 1 month of age or hospital discharge, whichever is first. First dose does count in series of 3 doses.

Birthweight \geq 2 kg

- Administer within 24 hours of birth if medical stable or before hospital discharge

Mother HBsAg **POSITIVE**

Birthweight < 2 kg

- Administer Hep B & HBIG (0.5 ml) concurrently within 12 hours of birth at different anatomical sites. Do not count birth dose as part of the vaccine series. Administer next Hep B dose beginning at age 1 month. Infant will also receive Hep B as part of Pediarix at 2, 4, and 6 months. Check anti-HBs and HBsAg 1-2 months after completion of vaccine series.

Birthweight \geq 2 kg

- Administer Hep B & HBIG concurrently within 12 hours of birth at different anatomical sites. Check anti-HBs and HBsAg after completion of vaccine series.

Mother HBsAg UNKNOWN

Birthweight < 2 kg

- Administer Hep B within 12 hours of life. Mother should be tested as soon as possible to determine her status. If mother's HBsAg status cannot be determined within 12 hours of birth or mother is HB positive, give HBIG within 12 hours of birth. Do not count birth dose as part of the vaccine series. Administer next Hep B dose beginning at age 1 month. Infant will also receive Hep B as part of Pediarix at 2, 4, and 6 months.

Birthweight \geq 2 kg

- Administer Hep B within 12 hours of life. Mother should be tested as soon as possible to determine her status. Administer HBIG within 7 days of birth if mother is positive or unknown HBsAg status.

INFLUENZA VACCINE

Inactivated influenza vaccine (IM only, not intra-nasal) should be given annually during flu season (typically mid-October – March). Administer the vaccine after 6 months chronologic age. Administer 2 doses of influenza vaccine, given \geq 4 weeks apart, the first year the patient receives this immunization.

REFUSAL OF VACCINES

If parents refuse a recommended vaccination, document this and the reason for refusal in the medical record.

References:

[American Academy of Pediatrics Red Book Online. CDC Immunization Schedules for 2019.](#)

[American Academy of Pediatrics Red Book policy update: Recommendations for Prevention and Control of Influenza in Children 2019-2020..](#)

[Commercial Vaccines Available in the US](#)