

IMMUNISATIONS

ROUTINE IMMUNISATIONS FOR ALL BABIES

- Plan to achieve immunity to diphtheria, tetanus, pertussis, (DTaP), polio, *Haemophilus* (Hib), meningococcus B, pneumococcus, rotavirus and hepatitis B within 4 months of birth (see also **BCG immunisation** and **Hepatitis B and C** guidelines)
- See Department of [Health Immunisation against Infectious Diseases 'Green Book'](#) for national policy and for current schedule see <https://www.gov.uk/government/collections/immunisation>

Do not delay immunisation in preterm babies because of prematurity or low body weight

CONTRAINDICATIONS

- Cardiorespiratory events (apnoeas, bradycardia and desaturations) are not contraindications to immunisation, but continue to monitor for a further 72 hr following immunisation
- See **Precautions with rotavirus vaccine**

PROCEDURE

Consent

- Inform parents of process, benefits and risks
- For further information refer parents to www.nhs.uk/conditions/vaccinations
- Offer parents opportunity to ask questions
- Informed consent (can be written or oral) must be obtained and recorded in notes at time of each immunisation
- Inform local Child Health Information System (CHIS)

Prescription

Use immunisation listed in 'Green Book' – see **Routine immunisations for all babies**

- Keep strictly to schedule to avoid delay
- Order vaccines in advance
- Prescribe on front of medication chart

Administration

- DTaP/IPV/Hib/HepB (Infanrix Hexa[®]) is a 6-in-1 preparation
- Administer by IM injection into thigh; give ≥ 2.5 cm away from other vaccination sites
- Dose for all primary immunisations (DTaP/IPV/Hib/HepB), meningococcal B, pneumococcal) is 0.5 mL
- Give meningococcal B (Bexsero[®]) and pneumococcal (Prevenar 13[®]) vaccine into separate injection sites in other thigh
- Rotavirus vaccine must **not** be injected and preferably **not** given via an NGT
- assess ability to tolerate oral administration

DOCUMENTATION

- After immunisation, document the following in case notes as well as in Personal Child Health Record (Red Book):
- consent gained from parents
- vaccine given and reasons for any omissions
- site of injection(s) in case of reactions
- batch number of product(s)
- expiry date of product(s)
- legible signature and GMC number of doctor or NMC number of advanced neonatal nurse practitioner administering immunisations
- adverse reactions

- Sign prescription chart
- Complete immunisation form in **BadgerNet** system. Document all information on discharge summary and medical case notes, including recommendations for future immunisations and need for any special vaccinations etc., e.g. influenza, palivizumab, etc.
- Notify CHIS

MONITORING

- Babies born <28 weeks may have an impaired immune response. Check functional antibodies 1 month after booster at aged 1 yr, if needed
- Babies <28 weeks' gestation at birth, who are in hospital – respiratory monitoring for 48–72 hr when given first routine immunisations
- If baby has apnoea, bradycardias or desaturations after first routine immunisations, second immunisation should ideally be given in hospital with respiratory monitoring for 48–72 hr

ADVERSE REACTIONS

- Local:
 - extensive area of redness or swelling
- General:
 - fever >39.5°C within 48 hr
 - anaphylaxis
 - bronchospasm
 - laryngeal oedema
 - generalised collapse
 - episodes of severe apnoea
 - diarrhoea
 - irritability
 - vomiting
 - flatulence
 - loss of appetite
 - regurgitation
- Report any other serious reactions via Yellow Card (see <https://yellowcard.mhra.gov.uk/>)

Specific notes for rotavirus vaccination

- Do not give Rotarix® to babies aged <6 weeks
 - minimum age for first dose of Rotarix® is 6⁺⁰ weeks
 - maximum age for first dose is 14⁺⁶ weeks
- Do not give first dose of Rotarix® to babies aged ≥15⁺⁰ weeks. Babies who have received their first dose of vaccine aged <15⁺⁰ weeks should receive their second dose of Rotarix® after a minimum interval of 4 weeks and by aged 23⁺⁶ weeks
- Do not give Rotarix® vaccine to babies aged ≥24⁺⁰ weeks

Precautions with rotavirus vaccination

- Postpone administration of rotavirus vaccine in babies suffering from:
 - acute severe febrile illness
 - acute diarrhoea or vomiting
 - first dose must be given aged <15 weeks
- Do not administer Rotarix® to babies with:
 - confirmed anaphylactic reaction to a previous dose of rotavirus vaccine
 - confirmed anaphylactic reaction to any components of the vaccine
 - history of intussusception
 - aged ≥24⁺⁰ weeks
 - severe combined immunodeficiency disorder (SCID)
 - maternal immunosuppressive biological therapy in pregnancy
 - malformation of the gastrointestinal tract that could predispose them to intussusception

- rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrose-isomaltase insufficiency

ADDITIONAL IMMUNISATIONS

Influenza (in autumn and winter only)

Indications

- Chronic lung disease (on, or recently had, oxygen)
- Congenital heart disease, renal, liver or neurological disease
- Immunodeficiency

Recommendations

- Recommend vaccination to close family members of these babies
- Give babies aged >6 months–2 yr, 2 doses 4–6 weeks apart, IM injection
- **Note:** intranasal flu vaccine is now routinely recommended for children aged ≥ 2 yr

Nirsevimab / Palivizumab

See **Palivizumab and Nirsevimab** guidelines

BCG

See **BCG immunisation** guideline

Hepatitis B

See **Hepatitis B and C** guideline for babies born to mothers with these infections

HIV

- See **Human immunodeficiency (HIV)** guideline
- Babies who are HIV infected, or HIV exposed (born to HIV positive mother) and status not yet known:
 - routine immunisations including rotavirus vaccine not contraindicated
 - if BCG indicated, see **BCG immunisation** guideline. If baby deemed to be low risk or very low risk of HIV transmission, do not delay BCG immunisation

Routine immunisation schedule aged ≤ 16 weeks

See <https://www.gov.uk/government/publications/the-complete-routine-immunisation-schedule>