Standard in brief

Follow-up & continuing care

Immunisation of preterm infants

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Statement of the standard

Preterm infants are immunised according to their chronological age, regardless of gestational age and weight at birth. In very preterm infants, immunisations are started and monitored in hospital, once the target age for the first immunisation (usually 8-12 weeks) is reached.

Benefits

Short-term benefits

- Improved awareness among parents and healt care professionals for vaccine-preventable diseases and the immunological competence of preterm infants
- Increased information of parents about immunisations during hospital stay to avoid missed opportunities
- Increased vaccine coverage in this risk group which leads to reduced general burden of infectious diseases
- Intensified safety monitoring and avoidance of unnecessary sepsis evaluations in the post-vaccination period

Long-term benefits

- Alleviated parent and provider vaccine safety concerns and improved confidence in vaccinating high-risk infants after hospital discharge
- Increased rate of complete, schedule-based immunisation in preterm infants
- Reduced healthcare costs and costs for the family (i.e. hospital readmissions)
- Reduced risk of transmitting vaccine-preventable infectious diseases in childcare and school settings
- Increased sensitivity for preterm birth related complications including problems of parent-infant interaction due to schedule-based immunisation appointments

For parents and family

- Parents are informed by healthcare professionals about immunisations given during hospitalisation.
- Parents are informed by healthcare professionals about immunisations given at discharge from neonatal care. Also including information on the importance of completion of immunisation according to the immunisation schedule and avoiding delays so infants are reliably protected when attending early day care.
- Family members, household and other close contacts of the preterm infant are immunised according to national recommendations, considering the risk of transmission of vaccine-preventable diseases, e.g. pertussis or influenza (preventive concept of "cocooning").
- Discharge planning includes information about non-specific hygienic measures and avoidance of unnecessary exposures, and an individualised immunisation schedule adapted to the infants' medical conditions and risk factors.

For neonatal unit, hospital, and follow-up team

- A unit guideline on immunisation during and after hospitalisation (neonatal care) is available and regularly updated.
- Training on current national immunisation guidelines, including safety and efficacy data of vaccines related to preterm infants is ensured.
- For immunisations during neonatal care preterm infants are clinically stable and not expecting surgery within the next 3 days for inactivated vaccines and 14 days for live virus vaccines.
- First immunisation of preterm infants <28 weeks of age in hospital is ensured, i.e. during primary stay or readmission, and monitored for 24-72 hours post immunisation as per local guideline in order to detect apnoea and/or bradycardia events. In addition, critical indication of sepsis evaluations post-vaccination is ensured.

For health service

- A national guideline on recommended preterm immunisations is available and regularly updated.

For healthcare professionals

- A unit guideline on immunisation during and after hospitalisation (neonatal care/follow-up care) is adhered to by all healthcare professionals, e.g. verification of immunisation status at every follow-up visit.
- Training on current national immunisation guidelines, including safety and efficacy data of vaccines related to preterm infants, is attended by all responsible healthcare professionals. Training of communication skills as of provider vaccine communication in paediatric populations is critical to alleviate scepticism.
- Immunisation is initiated according to the chronological age of preterm babies, regardless of gestational age and weight at birth. In very preterm infants, immunisations are started in hospital, once the target age of 8-12 weeks for the first immunisation is reached.
- Primary immunisation includes vaccination against Diphtheria, Pertussis, Tetanus, Polio, Haemophilus type B and Hepatitis B according to national immunisation schedule. This is initiated in early infancy (e.g. at 2, 3, 4 months of age) followed by a booster immunisation e.g. at 11-24 months of age.
- Immunisation against Streptococcus pneumoniae (pneumococci) and Neisseria meningitides (meningococci) is initiated as per national or unit guideline. Rotavirus vaccination can be given at age 6 weeks if ward infrastructure allows prevention of nosocomial transmission (immunised individuals may shed the virus, single room). Otherwise, rotavirus vaccination can be administered at discharge from neonatal care. Infants with signs or family history of immunodeficiency should not be vaccinated with live vaccines (BCG, rotavirus).
- Passive immune-prophylaxis against RSV are considered before hospital discharge of extremely preterm infants with additional risk factors during season. At six months of chronological age, preterm infants should be evaluated if they qualify for influenza immunisation, e.g. infants with chronic lung or heart disease.
- Training on application of vaccines in preterm infants, including injection and pain management procedures is attended by all responsible healthcare professionals.
- Training on necessary safety monitoring precautions during and after immunisation during hospitalisation is attended by all responsible healthcare professionals.
- Healthcare professionals document all provided immunisations in a standardised WHO standard compatible immunisation card.
- A written proposal for an individualised immunisation schedule (included in the discharge summary) is communicated with the primary care physician and provided by healthcare professionals at the hospital.

european standards of care for newborn health

Here you can access the full standard:
https://newborn-health-standards.org/standards/standards-english/follow-up-continuing-care/immunisation-of-preterm-infants/

EFCNI european foundation for the care of newborn infants