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Health Education and
Improvement Wales (HEIW)

Newborn and Infant Physical Examination Cymru (NIPEC)



This handbook is for any NIPEC practitioners in Wales including doctors, physician associates, midwives, and nurses

Acknowledgements

This document has been reproduced and adapted for use in Wales with kind permission from NIPE Screening Programme NHS England. [Newborn and infant physical examination \(NIPE\) screening programme handbook - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

Please note that the Nursing and Midwifery Council use the term systematic physical examination of the newborn or SPENI. This is the same as the NIPEC.

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Objective of the Newborn and Physical Infant Examination Cymru (NIPEC) handbook

This handbook informs and supports best clinical practice and should be used in conjunction with the NIPEC Guidelines (Welsh Government 2023) (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec).

1. NIPEC examination

The NHS newborn and infant physical examination (NIPEC) main aims are to:

- ❏ Identify and refer all children born with congenital abnormalities of the eyes, heart, hips and (in males) testes, where these are detectable, within 72 hours of birth
- ❏ To further identify those abnormalities that may become detectable by 6 weeks of age, at the physical infant examination
- ❏ Reduce morbidity and mortality

These ages are recommended based on best practice and current evidence and should facilitate a prompt referral for early clinical assessment.

All references to the NIPEC examination in this document relate to the 4 screening elements above. References to parent(s) also relate to carer(s), if appropriate.

1.1 NIPEC infant examination

It is recommended that the infant examination should be performed at 6 weeks of age for all 4 conditions (as some conditions can develop or become apparent after the newborn screen). This is usually undertaken in a primary care setting. This document includes good practice guidance and recommended referral timescales for the infant examination.

It is recommended that all examination results are recorded on the GP IT system, the national data collection form for the Healthy Child Wales Programme and in the personal child health record (PCHR), the 'red book'.

1.2 NIPEC pathways

For further information please refer to (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec)

2. Information for parents

The parent(s) should have received information in the antenatal period. The benefits of the examination and procedure should be clearly explained to the parents with an opportunity to ask questions. The NIPEC practitioner should record in the professional record that the physical examination has been discussed, verbal consent has been sought and parents have access to information. However, prior to performing the examination, the purpose and procedure followed should be fully explained to the parents and verbal consent obtained.

Information for parents can be found here:

[Every Child Your Pregnancy & Birth \(pagesuite-professional.co.uk\)](#)

[NHS 111 Wales - Pregnancy Guide](#)

Communication with the parent(s) is paramount and an independent interpreter must be used if required, for example where there is hearing loss / impairment or a language barrier.

The examination should be completed in the presence of the parent(s) where possible; in a warm, well-lit, safe, and appropriate environment; note a firm surface is required for the hip examination.

Privacy should be provided particularly when discussing family health issues of a sensitive nature.

The examiner should allow sufficient time for an unhurried examination which includes discussing findings with the parents, referral if necessary and completing the relevant documentation.

Documentation of the NIPEC examination should take place in the child's record.

2.1 NIPEC examination declined

When the NIPEC examination is declined:

- ❏ parent(s) should be fully informed of the NIPEC newborn and infant examinations and why the examination is being offered and undertaken

Parent(s) have the right to decline all or part of the NIPEC newborn or infant examination.

If they decline all or part of the NIPEC newborn examination, this should be documented in the child's record, communicated to the GP and health visitor, and recorded in the PCHR. The parent(s) should be reminded that their baby will remain eligible for the NIPEC newborn examination until 6 weeks of age and will be offered the NIPEC infant examination at 6 weeks of age. Contact details should be provided for the parent(s) from the discharging service in case they change their mind.

If they decline all or part of the NIPEC infant examination, the reason should be documented in the GP IT system and in the PCHR. The examination can be undertaken later. See section 7 Babies who have missed the examination below for clinical information regarding examining older children.

3. NIPEC examination

3.1 NIPEC newborn examination

This examination should ideally take place before 72 hours of age. For babies born in hospital, it is recommended that the examination is completed before transfer home. This will maximise the opportunity for completing the examination within 72 hours of age.

There must be a local follow-up pathway to ensure the examination takes place, ideally within 72 hours of age or as soon after this as possible.

Local arrangements should be in place to meet national timescales when babies are:

- ✦ born at home
- ✦ transferred home before the NIPEC newborn examination is completed

This could be by attending a designated NIPEC clinic or arrangements being made for the examination to take place at home or in the primary care setting. It is the responsibility of the care provider to ensure the NIPEC newborn examination is completed.

Local arrangements should also be in place when babies are transferred from one acute provider to another before the NIPEC newborn examination is completed or when an abnormality is suspected requiring follow-up.

Babies in neonatal units

If a baby is receiving care in a neonatal unit, this is not an automatic reason to delay examination. The NIPEC newborn examination should be undertaken as soon as the baby is well enough and or has reached 34 weeks plus 0 days (34+0) weeks corrected age (see below). Referrals should be made as per NIPEC guidelines where an abnormality is suspected. Referral timescales should not be age adjusted for preterm babies.

‘Too young’ for NIPEC newborn screening

If a baby is born before 34+0 weeks gestation, the examination can be delayed to 34+0 weeks corrected age. The NIPEC newborn examination should be performed as soon as the baby is deemed old enough and is well enough. The examination of babies before 34+0 weeks corrected age is a local clinical decision.

‘Too ill’ for NIPEC the newborn examination

The examination may be delayed if a baby is too ill.

Possible clinical reasons for this delay include:

- ✦ respiratory support (other than low flow oxygen), including the presence of chest drains for the first 72 hours
- ✦ any cardiovascular support, for example, inotropes, prostin
- ✦ ventilated infant until extubated
- ✦ baby on continuous positive airway pressure (CPAP)
- ✦ therapeutic hypothermia
- ✦ intense phototherapy (double or more, need for immunoglobulin or exchange transfusion)
- ✦ chest drain in place (without additional respiratory support)

- ↳ umbilical lines and, or arterial lines in place
- ↳ post-operative, until off analgesia
- ↳ unstable hypoglycaemia until off intravenous dextrose
- ↳ where active reorientation of care to comfort or palliative care is taking place

This is not an exhaustive list and clinical judgement should also be used when assessing suitability for the newborn NIPEC examination.

Examination results – NIPEC newborn examination

All examination and outcome results should be recorded in the child's record and communicated to the GP and Health Visitor.

Abnormality not suspected

Following the NIPEC newborn examination, the parent(s) should be informed of the results. For babies who have transferred into the area or between care providers with an abnormality not suspected result, no further action is required.

The parent(s) should be informed that the NIPEC infant examination will be undertaken in the primary care setting at 6 weeks of age (as some conditions can develop or become apparent later).

Abnormality suspected

The parent(s), GP and Health Visitor should be informed of the results and of any referral process that may be required, including expected appointment timescales.

If a baby was not brought for any follow-up appointment, further appointments should be made in line with the health board did not attend (DNA) or was not brought (WNB) policy.

If the baby is in a treatment pathway for one of the examination elements, the NIPEC infant 6 week examination will still need to be completed for the remaining elements.

Where there is an abnormality suspected result and the NIPEC newborn examination has been undertaken after the target timescale, a specialist appointment should be arranged without delay.

3.2 NIPEC infant 6 week examination

Information about the NIPEC infant examination should be given to the parent(s) during the postnatal period and again before the NIPEC infant examination is offered and undertaken. This examination typically takes place in a primary care setting.

Information is available for parents here:

[Every Child Your Pregnancy & Birth \(pagesuite-professional.co.uk\)](https://pagesuite-professional.co.uk) and included in the PCHR.

There should be timely checks to ensure that:

- ↳ all eligible babies are offered the examination (including those who move into the area)
- ↳ the examination takes place at 6 weeks of age
- ↳ any required referrals are made within the recommended timescales
- ↳ referrals are followed up so that appropriate interventions take place in line with national guidance

If the baby has an abnormality suspected result for any element of the NIPEC newborn examination, the practitioner undertaking the NIPEC infant examination should check the progress along the care pathway to ensure required actions have taken place.

Examination results – NIPEC infant examination

All screening and outcome results should be recorded on the GP IT system, the Healthy Child Wales Programme national data collection form and in the baby's PCHR.

No abnormality suspected

Following the NIPEC infant examination the parent(s) should be informed of the results. For babies who have transferred into the area or between care providers with a screen negative result, no further action is required.

The parent(s) should be advised that the baby will follow the Healthy Child Wales Programme [An overview of the Healthy Child Wales Programme \(gov.wales\)](#)

Abnormality suspected

The parent(s) should be informed of the results and of any referral process that may be required, including expected appointment timescales.

Where there is an abnormality suspected result and the NIPEC infant examination has been undertaken after the target timescale, a specialist appointment should be arranged without delay.

4. Record keeping and audit

Practitioners should obtain verbal consent for the examination from parent(s), a record should be made of the examination result and any referrals following an abnormality suspected result(s). The above information should be recorded in:

- ☒ baby's clinical notes and discharge summary if applicable (NIPEC newborn examination)
- ☒ GP IT system (NIPEC infant examination)
- ☒ recorded in the PCHR (NIPEC infant examination)
- ☒ Healthy Child Wales Programme national data collection form (NIPEC infant examination)

There should be:

- ☒ local arrangements to ensure that the results of the newborn examination are communicated to primary and community care colleagues (GP and health visitor)
- ☒ local arrangements to ensure all babies with abnormality suspected results are referred and seen in line with the NIPEC standards within the guidance
- ☒ feedback of attendance at appointment or specialist review after abnormality suspected referrals to enable recording of outcomes
- ☒ a local process to follow up all non-attendance of appointments after abnormality suspected referral
- ☒ a process to record all examination results and outcomes

Each Health Board within Wales is committed to the philosophy of clinical audit. The NIPEC standards within the guidelines should be subject to continuous audit, with multiprofessional review of the audit results.

5. Babies who move in and out of area

5.1 Babies who move into the area

Babies who move into the area (move into the country or health board area) and have not had a NIPEC examination are the responsibility of the current care provider.

5.2 Transfer of unexamined baby to another care provider

If a baby is transferred to another care provider before the NIPEC newborn examination has been undertaken or completed, the transferring care provider should formally hand over responsibility and communicate this to the receiving care provider verbally.

The responsibility for examining eligible babies remains with the birth unit until responsibility is formally passed and accepted by another provider, whether acute or primary care.

After transfer, the receiving care provider should undertake the NIPEC examination. This may be a maternity, neonatal or paediatric service. Examination results for these babies should be recorded in the child's record and communicated to primary and community care colleagues (GP and Health Visitor).

5.3 Babies with abnormality suspected results who transfer between care providers

The transferring provider is responsible for communication with the receiving provider to ensure completion of any outstanding elements of the examination pathway.

6. Communication pathways following bereavements

There should be local systems to identify deceased babies and inform other relevant screening and clinical services without delay.

7. Babies who have missed the NIPEC examination

The following guidance outlines the appropriate screening tests depending on age for babies found to have missed the NIPEC examination.

7.1 Classification of missed NIPEC newborn examination

If the NIPEC newborn examination is not completed by 72 hours of age, it should be done as soon as possible. The reasons for the delay beyond 72 hours of age should be recorded in the child's record. Babies remain eligible for the NIPEC newborn examination until 6 weeks of age. Reasons for delayed examination should be locally audited and investigated if appropriate.

All babies should have all elements of the NIPEC newborn examination before being fully discharged from the care of any maternity, neonatal or paediatric inpatient services.

A NIPEC newborn examination is classified as 'missed' if it is not completed:

- ❏ before full discharge from maternity, neonatal or paediatric inpatient services (without provision for completion within the community setting)
- ❏ by 6 weeks of age for unexamined babies who remain in maternity or neonatal inpatient care
- ❏ by 6 weeks of age for unexamined babies who have moved into an area

At 6 weeks of age, babies become eligible for the NIPEC infant examination.

7.2 Infants who have missed the NIPEC examination

Up to and including 3 months of age

NIPEC newborn examinations not undertaken by 72 hours of age should be completed as soon as possible after this time by the current care provider (See the NIPEC examination section above for reasons screening can be delayed).

Babies remain eligible for NIPEC newborn examination until 6 weeks of age, but the examination should be completed as close to the 72-hour target as possible. This includes unexamined babies who 'move in' to an area or between care providers.

Eligible babies who move into the area who have not been examined should be offered the NIPEC examination by the responsible service provider. This may be by the maternity, neonatal or paediatric services or in primary care depending on the age and condition of the baby.

If the NIPEC newborn examination is performed at or after 6 weeks of age, it is not necessary to do the NIPEC infant examination.

Older than 3 months of age

If the NIPEC infant examination is overdue (after 6 weeks of age), it should be done as soon as possible.

The examination for unstable hips using the Barlow and Ortolani manoeuvres is no longer accurate at this age. Any asymmetry of leg length or restricted hip abduction should be assessed, and the child's gait observed, if walking.

In line with advice in the PCHR, the parent(s) should be advised to contact their GP or health visitor if they have any concerns regarding their child's wellbeing.

7.3 Completing a missed NIPEC examination

The relevant examination or observation must be undertaken by a NIPEC qualified practitioner.

8. Examination of the eyes

heiw.nhs.wales/files/48482-nipec-eyes-web-pdf

9. Examination of the heart

heiw.nhs.wales/files/48482-nipec-heart-web-pdf

10. Examination of the hips

heiw.nhs.wales/files/48482-nipec-hips-web-pdf

11. Examination of the testes

heiw.nhs.wales/files/48482-nipec-testes-web-pdf

12. NIPEC Standards

heiw.nhs.wales/files/48482-nipec-standards-web-pdf

Any abnormalities or concerns raised regarding parts of the NIPEC examination (outside of the 4 key areas of the examination) should be managed according to the guidelines currently in place within individual Health Boards / hospitals.

13. Training and maintenance of competency

All healthcare professionals have a personal and professional responsibility to maintain their clinical competency. There is also an organisational responsibility to ensure a safe and competent workforce.

Those who undertake NIPEC examinations must work in a framework of professional accountability and code of conduct. Each practitioner is responsible for maintaining their own competence to carry out the examination to the highest standard and to identify gaps in their knowledge and any training needs.

To provide duty of care, an appropriately trained health professional must carry out NIPEC examinations.

13.1 NIPEC newborn examination

This must be completed by a trained practitioner who is competent to undertake all elements of the newborn screening examination and who has undergone relevant training and the All-Wales peer review assessment (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec). This can be a midwife, nurse or health visitor who has successfully completed a university accredited 'examination of the newborn' programme of study or a doctor who has completed a Supervised Learning Event (for example a mini-CEX) of the NIPEC.

Any newly qualified midwife who has undertaken the module as part of their pre-registration midwifery training must have completed both the theoretical and clinical components of the module before they can be deemed competent to undertake the examination.

13.2 NIPEC infant (6 week) examination

Doctors

Doctors can undertake all elements of the 6 week NIPEC examination. However, not all trainee GPs undertake formal paediatric training, so it is important that NIPEC is covered in their GP attachment (ST3 year). Practitioners need to take responsibility for competence and continuing professional development (CPD). Evidence of competency should be through the GP appraisal process within the revalidation cycle or/and through use of the annual learning framework (heiw.nhs.wales/files/nipec-annual-learning-framework-pdf).

It is suggested that any GPs who have not undertaken the 6 week examination for some time or for whom it is a new activity should firstly refresh by working through the NIPEC e-learning module (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec). In addition, quarterly webinars will be delivered, details can be found on the HEIW website (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec).

If the GP or Practice feels it necessary, they may wish to consider the GP working with a colleague who is confident and competent to undertake NIPEC practitioner in the Practice to offer some mentorship or observed practice.

Physician associates

The ability to undertake the NIPEC newborn or infant screening examination will depend on the training and qualification achieved. Physician Associates should complete something similar to a Supervised Learning Event and demonstrate competency through the Peer Review Assessment (heiw.nhs.wales/files/nipec-peer-review-framework-pdf).

Health visitors or nurses

The examination can also be carried out by a health visitor or nurse with suitable competency. To be considered competent, a health visitor or nurse is expected to:

- ❏ successfully complete a university-accredited examination of the newborn course, as elements of this would also be relevant for the infant examination
- ❏ undergo the All-Wales peer review assessment

Currently there are no courses that specifically focus on training for the 6 week NIPEC infant examination. Current national guidance is that health visitors or nurses should undertake an examination of the newborn training, as some elements of the course are transferrable and relevant to undertake the infant screening examination. Evidence of competency and CPD should be through completion of the All-Wales annual learning framework (heiw.nhs.wales/files/nipec-annual-learning-framework-pdf) and peer review assessment (heiw.nhs.wales/files/nipec-peer-review-framework-pdf).

13.3 Maintenance of competency

Each practitioner is responsible for maintaining evidenced based practice and their own competence to carry out the examination to the highest standard and for the identification and resolution of gaps in knowledge, training needs and continuing education (Hall and Elliman 2006; NMC 2018).

The All Wales Peer Review assessment should be completed by anyone to whom NIPEC is a new activity or for those who are new to the health board, it is recommended that this is completed by all practitioners as part of their revalidation cycle or appraisal process. The focus should not be on a minimum number of examinations, but on the

quality of the examination performed. However, if any practitioner has not completed an examination for a period of time it is recommended that they repeat the All Wales Peer Review assessment and the online learning to update their knowledge and skills.

A local/national annual update on NIPEC screening pathways and local referral processes should be provided for all those who undertake the NIPEC examination (including midwives, nurses, doctors and other NIPEC practitioners). This may also include practical and theoretical assessment. Please see details of national webinars on the HEIW website (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec).

It is recommended that the NIPEC e-learning module (heiw.nhs.wales/our-work/the-newborn-and-infant-physical-examination-cymru-nipec) is completed annually.

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