NIPE

Newborn & Infant Physical Examination

A Guide for GP Trainees

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What is the NIPE?

- A national NHS screening programme for all newborn babies in the UK
- Screens for congenital anomalies of 4 key areas: Eyes, Heart, Hips, and Testes
- Performed within 72 hours of birth — by hospital doctors or midwives
- Repeated at 6–8 weeks of age — usually by the GP in primary care
- Babies in the neonatal unit wait until stable (not ventilated or on CPAP)
- Pre-term babies: NIPE can be performed, but hips are only checked from 34+0 weeks

The GP's Role in NIPE

6–8 Week Check

Perform the NIPE infant screening examination at 6–8 weeks.
Some conditions only become apparent after the newborn screen.

Reviewing Referrals

Check progress of any screen-positive results from the newborn NIPE.
Ensure required actions have taken place before the 6-week check.

Documentation

Record all results in the GP IT system and the child's 'red book' (PCHR).
Communicate results to CHIS and the health visitor.

The 6–8 Week Check: What to Examine

- Introduce yourself, check baby's details, obtain verbal consent
- History: complications in pregnancy/delivery, relevant family history (heart, hip, eye, testes problems in first-degree relatives)
- Feeding, bowel habits, urine output
- Observe: colour, breathing, tone, posture, movements, dysmorphic features
- Head — fontanelles, sutures, head circumference (x3)
- Eyes — red reflex, check for cataracts or squint
- Ears — anatomy, position (low-set?), pre-auricular tags or pits
- Face – dysmorphic features, forceps marks?
- Neck – Erbs or Klumpke
- Mouth/palate — feel the hard and soft palate with a gloved finger
- Chest/heart — auscultate when baby is quiet; check respiratory rate
- Abdomen — palpate for organomegaly, cord, Femorals!!!
- Hips — Barlow and Ortolani tests; symmetry of creases
- Genitalia — undescended testes; check for labial fusion in girls
- Back – Spine, anus
- Skin — document birthmarks on body map
- Hands and feet
- Social smiling, visual fixing and following at 6 weeks
- Reflexes
- Weight and head circumference — plot on growth chart

Special Reflexes

Suckle reflex

If you touch the roof of the baby's mouth e.g. with a gloved finger they will naturally suck.

Moro reflex

The baby's back is supported with one hand and they are dropped into the other hand. The natural response is for the legs and hands to extend symmetrically before the arms are brought inwards..

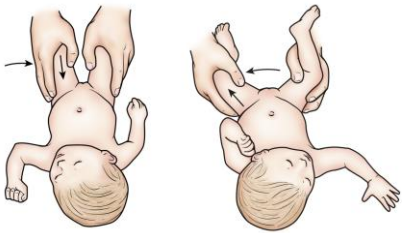
Stepping reflex

Hold the baby with their feet on a flat surface and they will place their feet in front of each other as if they are stepping

Hips: DDH Screening

Barlow's Test

Identifies a dislocatable hip
Baby supine, hip flexed to 90°
Adduct the hip whilst applying posterior pressure to the knee
Positive: hip dislocates posteriorly



Ortolani's Test

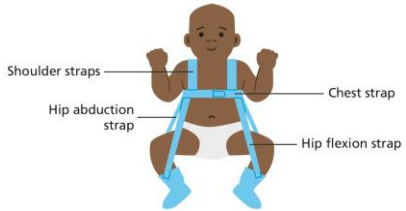
Identifies a dislocated hip that can be reduced
Abduct the hip whilst lifting the greater trochanter anteriorly
Positive: a 'clunk' as the hip reduces back into joint

Risk Factors for DDH

Breech presentation >36 weeks
Family history of DDH
Oligohydramnios
Large for gestational age
Multiple pregnancy
prematurity

Management

Screen positive → hip USS within 2 weeks
Risk factors only → hip USS by 6 weeks
Isolated 'clicky hips' (no instability) → not screen positive; record as 'other' finding
Treatment (Pavlik harness) started within 6–8 weeks is often successful



Eyes & Heart: Key Points for GPs

Eyes

- Red reflex test: check both eyes for bright equal reflexes
- Absent, white, or asymmetric reflex → urgent ophthalmology referral
- Congenital cataracts: ~2–3 per 10,000; early treatment prevents amblyopia
- Risk factors: family Hx of early childhood eye disease, trisomy 21, rubella
- Also assess: squint, nystagmus, proptosis, abnormal eye movements
- At 6 weeks: check visual fixing and following

Heart

- CHD affects ~1 in 100 UK births — most common notified malformation
- A murmur may first be detected at the 6-week check (e.g. VSD)
- Check for: cyanosis, tachypnoea (RR >55), poor feeding, ventricular heave
- Weak or absent femoral pulses → suspect coarctation of the aorta
- Normal examination does NOT exclude CHD — some present in later childhood
- Refer urgently if any features of CHD; seek paediatric review

Testes & Other Common Findings

Undescended Testes

Unilateral: common — referred to GP; review at 6–8 week check, then again at 4–5 months. Refer to surgeon if absent — must be seen by 6 months.

Bilateral impalpable: urgent senior paediatric review within 24 hours of newborn examination.

Talipes (Club Foot)

Common, often positional (caused by in-utero position).

Positional talipes: foot can be straightened easily — reassure, simple physio exercises.

True talipes: rigid foot, will not straighten — refer to orthopaedics/physio.

Tongue-Tie (Ankyloglossia)

Assess using TABBY tool, especially if breastfeeding difficulties.

Mild cases may resolve spontaneously.

Refer for division if causing significant feeding problems.

Jaundice

Visual inspection alone is unreliable — if suspected, check bilirubin level.

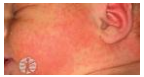
Physiological jaundice peaks at day 3–5, resolves by 2 weeks.

Jaundice at >2 weeks (or >3 weeks if premature): check conjugated bilirubin to exclude biliary atresia.

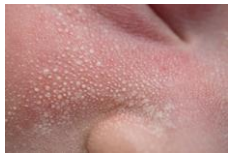
Common Skin Findings & When to Refer

Benign Rashes

Erythema toxicum neonatorum
Blotchy red rash with pale centres; appears day 2-3. Very common, self-resolves within 2 weeks. No treatment needed.



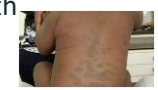
Milia
Tiny white keratin cysts on nose/cheeks. Resolve by 4-6 weeks. No treatment needed.



No referral needed -- reassure parents.

Birthmarks

Slate grey naevus
Blue-grey pigmentation, usually lumbosacral. Common in darker skin tones. Fades by school age. Document on body map to avoid confusion with bruising.

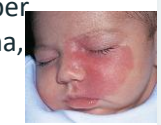


Salmon patch (stork mark)
Flat pink marks on nape/eyelids. Fade in 1-2 years. Persistent nuchal lesions are normal -- no referral needed.

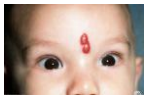
Document on body map; no referral unless atypical.

Refer: Vascular Lesions

Port wine stain (naevus flammeus)
Dark red/purple, does not fade. Refer to dermatology. If on face (V1/V2 distribution), refer urgently -- risk of Sturge-Weber syndrome (glaucoma, seizures).



Infantile haemangioma
Absent at birth; grows rapidly weeks 2-4. Refer if periorbital (amblyopia risk), near airway, large/segmental, or ulcerating.



Refer to dermatology/paediatrics.

Refer: Pigmented & Other

Congenital melanocytic naevus (CMN)
Large CMN (>20cm) carry melanoma risk -- refer to dermatology. Small CMN: document and advise sun protection.

Skin tags & accessory digits
Pre-auricular skin tags: refer to audiology to exclude associated hearing loss. Accessory digits: refer to plastics/orthopaedics.

Refer as above; document all findings.

Referral Pathways & Timescales

Finding	Action	Timescale
Abnormal red reflex / possible cataract	Urgent ophthalmology referral	Same day / next day
Suspected CHD / murmur with features	Paediatric cardiology	Urgent (same day if unwell)
Hip screen positive (clinical examination)	Hip ultrasound	Within 2 weeks
Hip risk factors only (no clinical finding)	Hip ultrasound	By 6 weeks
Bilateral undescended testes	Senior paediatric review	Within 24 hours
Unilateral undescended testis (6-wk check)	GP follow-up; refer if absent	Review 4–5 months; refer by 6 months
Cleft lip or palate	ENT specialist	Soon — feeding support needed
True talipes	Orthopaedics / physiotherapy	Early — treatment within weeks

Documentation & Communication

GP IT System

Record all NIPE infant screening results (6-week check) on your GP IT system. This is the primary record for the infant examination.

Red Book (PCHR)

Document findings in the Personal Child Health Record. Parents keep this — it travels with the child across services.

Body Map

Document all birthmarks and bruises on the body map. Copies go to the GP, Health Visitor, and medical notes.

Document on CHIS

Electronic health records for children

BCG Eligibility

NIPE is an opportunity to identify babies eligible for BCG vaccination. Refer at this time if the baby meets risk criteria and parents consent.

Newborn Hearing Screen

This is SEPARATE to the NIPE examination and managed by a different programme. Check it has been completed.

Key Takeaways for GP Trainees

1

You do the 6–8 week check

This is the second NIPE examination and often the first time you will see the baby in primary care.

2

Eyes, Heart, Hips, Testes

Four key screening areas. Know the findings that require urgent vs routine referral.

3

Check the newborn NIPE results first

Always review any screen-positive results from the hospital before proceeding with your examination.

4

Document everything

GP IT system, red book, and communicate to CHIS and the health visitor. No documentation = not done.

5

A normal exam doesn't rule out CHD

Some cardiac defects only manifest with clinical signs in later infancy or childhood.

6

When in doubt, refer early

Missed DDH, cataracts, or undescended testes can have lifelong consequences if treated late.

References

Newborn and infant physical examination (NIPE) screening: programme overview – GOV.UK (www.gov.uk)
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