HEALTH BASICS

Neonate

A neonate is a baby during the first 28 completed days after birth.

WHAT IT IS
A baby in the first 28 completed days after birth

WHERE IT COMES UP
Birth records, hospital notes, screening, and newborn appointments

WHY IT MATTERS
Guides age-specific monitoring, screening, feeding support, and urgent care

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Pediatric, family medicine, midwifery, or newborn care services

HOW IT IS CHECKED
Age since birth, plus newborn examination and screening

Overview

A neonate is a baby in the first 28 completed days after birth. This period is also called the neonatal period . "Neonatal" is the adjective used in terms such as neonatal care, neonatal screening, and neonatal intensive care.

Neonate is an age category, not a disease or diagnosis. It does not mean that a baby is unwell. Clinicians use the term because babies in this age group need care that reflects their recent transition from pregnancy to life outside the uterus.

"Newborn" usually means the same thing in healthcare, although people may use that word less precisely in everyday conversation. "Infant" is a broader term, often used throughout the first year of life. "Perinatal" refers to the time shortly before and after birth, so it is not an exact synonym.

A baby born early is both preterm and a neonate during the first 28 days. Prematurity does not extend the neonatal age period, although clinicians may later use corrected age when assessing growth and development. Corrected age accounts for how many weeks early the baby was born.

How it works

Birth requires several rapid physical changes. Before birth, the placenta supplies oxygen and nutrients. After birth, the lungs expand, blood flow changes, and the baby begins breathing air. The digestive system starts handling milk, and the kidneys take over fluid and waste control without support from the placenta.

Temperature control is still developing. Neonates lose heat more easily than older children, especially if they are premature or have a low birth weight. Skin-to-skin contact, suitable clothing, and an appropriate room temperature can help support warmth.

Feeding is also being established. A baby may receive breast milk, infant formula, or both. Clinicians assess feeding together with weight, hydration, urine, stools, alertness, and any medical needs. Some weight loss after birth is expected, but its amount and recovery should be interpreted by the baby's care team.

The liver is still adapting. It processes bilirubin , a yellow pigment made when red blood cells break down. Bilirubin can build up and cause jaundice, which means yellowing of the skin or whites of the eyes. Many newborns develop some jaundice, but the timing and bilirubin level determine whether testing or treatment is needed.

Newborn care commonly includes a physical examination and screening. Depending on the healthcare system and the baby's circumstances, this may include:

Screening does not mean that a condition is present. It identifies babies who may need another test or closer assessment.

- A blood-spot screen for certain inherited or metabolic conditions
- A hearing screen
- A blood oxygen measurement to help detect some heart conditions
- Bilirubin assessment for jaundice
- Weight, temperature, feeding, and general physical checks

Why it matters for your health

The term neonate tells healthcare professionals which age-specific standards to use. Normal heart rate, breathing pattern, feeding behaviour, weight change, laboratory results, and medication decisions are not interpreted in the same way as they are for an older child or adult.

The neonatal period also affects how quickly certain concerns should be assessed. A fever that might be managed differently in an older child needs prompt medical evaluation in a baby

under 28 days. Feeding difficulty, breathing changes, or reduced responsiveness may also need earlier assessment because a neonate may have fewer reserves to manage illness.

Follow-up during this period supports feeding, growth, jaundice monitoring, safe sleep, and recovery after birth. It also provides time to review screening results and discuss how the baby and family are adjusting.

Some neonates need specialist care. A neonatal unit may care for babies who were born early, have a low birth weight, need breathing or feeding support, have an infection, or require monitoring after a complicated birth. Admission to such a unit describes the level of care needed; it does not identify one particular diagnosis.

What can go wrong

Being a neonate is not an illness. However, several conditions and situations are particularly relevant during this age period.

Prematurity means birth before 37 completed weeks of pregnancy. Premature babies may need help with breathing, temperature control, feeding, or protection from infection.

Neonatal jaundice is caused by bilirubin buildup. Mild jaundice is common, but high bilirubin levels can require treatment. Jaundice appearing in the first 24 hours, becoming rapidly deeper, or occurring with poor feeding or unusual sleepiness needs prompt assessment.

Neonatal sepsis is a serious infection involving the blood or other parts of the body. Its early signs can be subtle, such as poor feeding, temperature changes, breathing difficulty, or reduced alertness.

Respiratory distress means that a baby is working too hard to breathe or is not getting enough oxygen. Possible causes include lung immaturity, infection, fluid in the lungs, or a heart condition.

Hypoglycemia means low blood glucose. Some babies are more likely to need glucose testing, including certain premature babies and babies born to a parent with diabetes. Testing is based on clinical circumstances rather than being required for every neonate.

Feeding problems and dehydration can occur when a baby cannot take in or transfer enough milk. Clinicians consider feeding frequency and effectiveness alongside weight, urine, stools, and behaviour.

Congenital conditions are conditions present at birth. They may affect the heart, metabolism, hearing, or other body systems. Some are noticed during pregnancy or the newborn examination; others are found through screening.

What you can do

Before leaving the birth setting, ask which newborn checks have been completed, which results are still pending, and when follow-up is planned. Make sure the care team has reliable contact details for communicating screening results.

Keep a record of feeding, wet diapers, stools, and any temperature readings if the baby's clinician or midwife recommends it. Bring the record to appointments. Ask how weight and jaundice will be followed, especially if feeding is still being established.

For sleep, place the baby on their back on a firm, flat sleep surface without pillows, loose bedding, or soft objects. Ask your maternity or newborn service for advice about a safe sleep space and room-sharing.

Attend planned newborn appointments even when the baby seems well. Routine visits are used to assess feeding and weight, examine the baby, review screening, and answer specific questions.

Seek immediate medical assessment for a rectal temperature of 38°C or higher in a baby under 3 months, including a neonate. Do not wait for a routine appointment. Contact an urgent medical service promptly for poor feeding, repeated vomiting, much less urine, worsening jaundice, unusual difficulty waking, a persistently low temperature, or redness and discharge spreading around the umbilical cord.

Call emergency services for severe breathing difficulty, blue or grey lips or skin, a seizure, choking that does not clear, or if the baby is unresponsive. Routine questions about feeding technique, sleep arrangements, skin peeling, or appointment timing can usually be discussed with the baby's usual newborn, pediatric, family medicine, or midwifery service.

Common questions

Is every newborn a neonate?

Yes, during the first 28 completed days after birth. After that, the baby is still an infant but is no longer in the neonatal period.

Does neonate mean premature?

No. A neonate may have been born preterm, at term, or after the expected due date. The word describes age since birth, not the length of pregnancy.

Is a baby in neonatal intensive care always critically ill?

No. Neonatal intensive or special care units support babies with many different needs. Some

require intensive breathing or circulation support, while others mainly need help with feeding, warmth, glucose monitoring, or growth.

Are newborn screening results diagnoses?

Usually not. A screening result identifies a higher chance of a condition and often needs confirmation with another test. The screening service should explain what the result means and what happens next.

Is there anything that "treats" being a neonate?

No. It is a normal stage of life, not something that needs treatment. Medical care during this period addresses the baby's individual needs and any condition that is found.

Sources

- World Health Organization: Newborn health - overview of the neonatal period and newborn health needs
- World Health Organization: Recommendations on maternal and newborn care for a positive postnatal experience - 2022 guidance on postnatal assessment and support
- Centers for Disease Control and Prevention: About Newborn Screening - explanation of newborn screening and follow-up testing
- National Institute for Health and Care Excellence: Postnatal care, guideline NG194 - postnatal monitoring, feeding support, and signs requiring assessment
- National Institute for Health and Care Excellence: Fever in under 5s, guideline NG143 - age-specific fever assessment, including babies under 3 months
- American Academy of Pediatrics: Sleep-Related Infant Deaths-Updated 2022 Recommendations - evidence-based infant safe-sleep recommendations