

Checking baby health and initial assessment



The priorities in the first minutes

Immediately after birth, the clinical priority is to determine whether the baby is making an effective newborn cardiopulmonary transition. The team observes whether the baby is breathing or crying, whether muscle tone is appropriate, and whether the heart rate is adequate. These rapid observations guide decisions about routine care, stimulation, airway positioning, respiratory support, or more advanced resuscitation.

A vigorous term baby can usually be dried, kept warm, and placed in skin-to-skin contact after birth while the assessment continues. Drying and replacing wet linens help limit evaporative heat loss. The clinician also looks at skin color and perfusion, work of breathing, spontaneous movement, and responsiveness. Some bluish coloration of the hands and feet can occur early in otherwise well newborns, but central discoloration involving the lips or tongue requires prompt professional evaluation.

Assessment and treatment occur at the same time when a baby needs help. Clinicians do not wait for an Apgar score before initiating indicated resuscitation. The circumstances of birth also matter: gestational age, meconium-stained fluid, maternal medications, infection risk, fetal monitoring

abnormalities, congenital concerns, and complications during labor may change the personnel or equipment needed at the bedside.

Understanding the Apgar score

The Apgar score is a standardized description of a newborn's condition, usually recorded at 1 minute and again at 5 minutes after birth. Five components are assessed: color, heart rate, reflex response to stimulation, muscle tone, and respiration. Each component receives 0, 1, or 2 points, producing a total score from 0 to 10.

The 1-minute score reflects how the baby tolerated birth and the early transition. The 5-minute score helps describe adaptation and response to any support. A higher score at 5 minutes is generally reassuring. A score below 7 may lead to repeat scoring at 5-minute intervals for a limited period, alongside continued clinical assessment and treatment. Interpretation must account for gestational age, congenital conditions, maternal medications, and interventions already in progress.

The score has important limitations. It is not a pass-or-fail test, does not identify the cause of a newborn's difficulty, and should not be used alone to diagnose oxygen deprivation or neurologic injury. It also cannot reliably predict an individual child's future health or development. Parents may hear the total score without hearing its context, so it is reasonable to ask which components reduced the score, how the baby responded, and whether any continued monitoring is recommended.

The systematic newborn physical examination

Once the baby is stable, a clinician performs a structured examination. The timing varies according to the birth setting, the baby's condition, and local practice. Many bedside newborn assessments can be completed near the parent, although adequate lighting, warmth, and access to equipment are necessary.

The examiner observes overall alertness, posture, symmetry, spontaneous movement, skin findings, and signs of respiratory effort. The head is assessed for molding, swelling, fontanelle characteristics, and birth-related injury. The eyes, ears, nose, and mouth are examined, including the palate and ability

to move air through the nose. Facial symmetry and the quality of the cry may provide additional neurologic information.

The chest examination includes respiratory rate and pattern, breath sounds, and chest wall movement. Cardiac assessment includes heart rate and rhythm, heart sounds, peripheral pulses, perfusion, and sometimes blood pressure when clinically indicated. A murmur can be transient during circulatory transition, but its significance depends on associated findings and follow-up examination.

The abdomen, umbilical cord, genitalia, anus, spine, hips, arms, legs, hands, and feet are inspected. Clinicians assess hip stability using specific maneuvers and look for symmetry, range of motion, fractures, limb differences, or spinal findings. Neurologic assessment includes tone, alertness, coordinated movement, and newborn reflexes such as rooting, sucking, grasp, and Moro response. No single finding should be interpreted in isolation; clinicians consider the examination as a whole and may repeat parts of it as the baby adapts.

Measurements, maturity, and temperature

Routine measurements commonly include weight, length, and head circumference. These are plotted against reference ranges for gestational age to identify babies who are small, appropriate, or large for gestational age. A single measurement is not a diagnosis, and accuracy can be affected by technique, fluid shifts, and the timing of measurement.

If gestational age is uncertain or the baby's appearance differs from the expected dating, clinicians may assess physical and neuromuscular signs of maturity. This estimate helps guide expectations for temperature control, feeding coordination, glucose stability, and respiratory adaptation.

Temperature is checked because newborns lose heat readily and have limited ability to generate and conserve it. Skin-to-skin care, drying, warm blankets, a hat when appropriate, and a controlled room or warmer can support newborn thermoregulation. Persistent low or high temperature warrants clinical assessment because environmental exposure, infection, metabolic problems, or other conditions may contribute.

Ongoing observation, feeding, glucose, and oxygenation

An initially reassuring examination does not end observation. During the first hours, staff monitor respiratory pattern, color, activity, temperature, urine and stool passage, and the baby's ability to wake and feed. A newborn feeding assessment considers feeding cues, latch or bottle-feeding coordination, sucking strength, swallowing, breathing during feeds, and signs of fatigue. Feeding support should be individualized and should not delay evaluation when a baby appears unwell.

Blood glucose testing is generally targeted rather than universal. It may be recommended for babies with risk factors such as prematurity, low or high birth weight for gestational age, maternal diabetes, temperature instability, poor feeding, or clinical signs that could be associated with hypoglycemia. Testing schedules and treatment thresholds depend on local protocols and the baby's age and condition.

Pulse oximetry may be used immediately if oxygenation is a concern. Routine pulse oximetry screening for critical congenital heart disease is a separate screening procedure generally performed after the early transition, often around or after 24 hours when feasible. A screening result is not itself a diagnosis; an abnormal result requires repeat measurement or further medical evaluation.

Keeping assessment family-centered

Routine newborn procedures after birth can often be organized to protect warmth, bonding, and early feeding. When the baby is stable, weighing and other nonurgent tasks may be delayed or performed nearby. Parents can ask which assessments are urgent, which can occur during skin-to-skin care, and which can wait until after the first feed.

If temporary newborn separation becomes necessary, the team should explain the clinical concern, where the baby is going, what support is being provided, and when the family can expect an update. A partner or support person may sometimes accompany the baby, depending on the setting and urgency. Families can also request help maintaining lactation if direct feeding is temporarily interrupted.

Clear communication is particularly valuable after an unexpected or complicated birth. It is appropriate to ask for a plain-language summary of the baby's condition, Apgar scores, respiratory support, examination findings, planned screening tests, and follow-up needs. Questions do not interfere with care; they help families understand rapidly changing events and participate in decisions when choices are available.

When closer evaluation or escalation is needed

Findings that may prompt closer observation include persistent breathing difficulty, central cyanosis, abnormal heart rate, poor perfusion, marked sleepiness, weak tone, recurrent temperature instability, difficulty feeding, unusual movements, or physical findings suggesting a congenital condition or birth injury. The response depends on the overall clinical picture rather than one isolated sign.

Additional evaluation may include repeated vital signs, continuous oxygen monitoring, glucose measurement, blood tests, imaging, or consultation with neonatal, cardiac, surgical, or other specialists. Support may involve warming, supplemental oxygen, noninvasive respiratory assistance, intravenous access, or admission to a special care nursery or neonatal intensive care unit. These decisions should be made by qualified clinicians familiar with the baby's history and examination.

Before discharge, parents should receive guidance on feeding, expected urine and stool output, temperature safety, follow-up appointments, and newborn danger signs. Seek urgent medical care for breathing difficulty, blue or gray lips or tongue, unresponsiveness, seizure-like activity, significant feeding inability, or any concern that the baby is rapidly becoming less well. For less acute concerns, contact the baby's clinician promptly rather than relying on home assessment alone.