

## What happens to baby right after birth



### **The first seconds: breathing, crying, and circulation**

Right after birth, the care team's first priority is whether the baby is making a safe transition to life outside the uterus. Most babies begin to breathe and often cry within seconds. Crying is not required for every healthy newborn, but it is a reassuring sign because it helps open the lungs and clear fluid from the airways.

Before birth, oxygen comes through the placenta. After birth, the baby's lungs expand, pulmonary blood flow rises, and fetal circulation begins to change. The umbilical vessels and ductus venosus close functionally over time, and the pressure relationships in the heart shift as breathing becomes established. Clinicians are looking for effective respirations, a strong heart rate, improving tone, and responsiveness.

Many newborns are initially bluish or purple, especially in the first minute, because oxygenation and peripheral circulation are still adapting. The trunk and face usually become pinker over several minutes. It is also common for the hands and feet to remain bluish, a finding called acrocyanosis, during the first day. Persistent central cyanosis, poor respiratory effort, or a low heart rate needs prompt professional evaluation.

## **Skin-to-skin contact and keeping the baby warm**

If the baby is vigorous and the parent is medically stable, the baby is usually dried and placed on the parent's bare chest for skin-to-skin contact after birth. A warm blanket and often a hat are used because newborns lose heat quickly through evaporation, conduction, convection, and radiation. Maintaining temperature is not just about comfort; cold stress can increase oxygen consumption and contribute to low blood glucose.

Skin-to-skin contact supports thermal regulation, steadier breathing and heart rate, bonding, and early breastfeeding or chestfeeding. Many babies show feeding readiness behaviors in the first hour: opening the mouth, turning the head, licking, rooting, or moving toward the breast or chest. This early period is sometimes called the "golden hour," although timing may vary after complicated births or cesarean section.

Bedside newborn assessments can often occur while the baby remains on the parent's chest. The midwife, nurse, pediatric clinician, or neonatal team may listen to the heart and lungs, observe color and tone, check temperature, and make sure the baby is safely positioned with an unobstructed airway. If either parent or baby needs urgent care, skin-to-skin may be delayed or provided with another support person when appropriate.

## **Apgar scoring: a rapid clinical snapshot**

The Apgar score is commonly assigned at one minute and five minutes after birth. It is a structured way to document the baby's condition and response to transition or resuscitation. The score includes five categories: heart rate, respiratory effort, muscle tone, reflex irritability, and color. Each category is scored 0, 1, or 2, for a maximum total of 10.

Apgar scoring is not a diagnostic test and does not predict a child's future development by itself. A baby may have a lower score at one minute because they are still transitioning, especially after a difficult labor, preterm birth, maternal medications, or cesarean birth. What matters clinically is the whole picture: heart rate, breathing effort, oxygenation, tone, gestational age, and improvement over time. Many babies have a reassuring score by five minutes.

If the score remains low, clinicians may continue assessments at later intervals and provide interventions such as stimulation, airway positioning, suction only when indicated, supplemental oxygen, positive-pressure ventilation, or more advanced neonatal resuscitation. Parents may hear numbers being called out in the room; these are often part of routine communication among staff rather than a sign that something is wrong.

### **Umbilical cord clamping, cutting, and identification**

In many births, umbilical cord clamping is delayed for about one to five minutes when the baby is stable. Delayed clamping allows additional placental blood to transfer to the newborn, which can improve iron stores and circulatory transition. The exact timing depends on local policy, gestational age, bleeding concerns, the baby's condition, and the parent's health.

After clamping, the cord is cut. A small plastic clamp remains on the stump, which dries and falls off later. The cord stump is observed for bleeding, infection signs, and secure clamping. Parents are usually shown how to keep it clean and dry according to local guidance.

Identification is also handled early. The baby typically receives identification bands that match the birthing parent's band, and staff may confirm details aloud. Footprints or electronic security tags may be used depending on the facility. These steps can feel procedural, but they are part of newborn safety and help prevent misidentification.

While baby-focused care is happening, the birthing parent is also entering the third stage of labor, which includes placenta delivery after birth and monitoring for bleeding. This can occur while the baby remains skin-to-skin if both are stable.

### **Routine newborn procedures in the first hours**

Routine newborn procedures vary by country, hospital, birth center, and the baby's clinical status, but several are common. Vitamin K is strongly recommended in many settings because newborns have low vitamin K stores and need it for normal blood clotting. The injection helps prevent vitamin K

deficiency bleeding, a rare but potentially severe condition that can include internal bleeding.

Eye prophylaxis may be used to reduce the risk of serious eye infection from organisms such as gonorrhea or chlamydia, depending on local regulations and maternal screening practices. Some regions routinely administer antibiotic eye ointment or drops; others use risk-based approaches. Parents can ask what is standard in their location and why.

Measurements are often taken after the first period of skin-to-skin unless the baby needs immediate assessment. These may include weight, length, and head circumference. A full newborn examination checks the heart, lungs, abdomen, hips, palate, spine, genitalia, anus, skin, reflexes, and overall neurologic tone. Temperature, respiratory rate, and heart rate are monitored repeatedly.

Other early care may include the first hepatitis B vaccine where recommended, blood glucose checks for babies with risk factors, bilirubin risk assessment, pulse oximetry screening for critical congenital heart disease, hearing screening, and metabolic newborn screening. Some of these happen before discharge rather than immediately after delivery. Families who want to plan ahead can discuss Newborn procedures and rooming-in preferences before labor.

### **Feeding cues and the first breastfeed or bottle**

Many babies become alert during the first hour and then enter a sleepier recovery phase. Early feeding is encouraged when the baby shows cues and the parent is ready. For breastfeeding or chestfeeding, skin-to-skin contact helps the newborn smell, root, latch, and coordinate sucking and swallowing. Colostrum, the first milk, is produced in small volumes but is concentrated in immunologic and nutritional components.

If the family plans formula feeding, the care team can help with safe preparation, paced feeding, and appropriate volumes. If the baby is late preterm, small for gestational age, large for gestational age, exposed to certain medications, or born to a parent with diabetes, clinicians may monitor blood glucose and feeding effectiveness more closely.

Feeding does not always look perfect right away. Sleepiness, mucus, spitting

up, nasal congestion, or latch difficulty can occur. A lactation consultant, midwife, nurse, or pediatric clinician can help evaluate positioning, transfer, and whether supplementation is medically indicated. Parents should not hesitate to ask for hands-on help early; feeding support is part of routine newborn care, not a sign of failure.

### **When a baby needs extra help**

Sometimes the baby is not immediately vigorous or develops concerning signs after initially seeming well. The team may move the baby to a radiant warmer for closer assessment while keeping parents informed as much as possible. Common reasons include poor breathing effort, persistent central cyanosis, low heart rate, very low tone, prematurity, meconium exposure with respiratory symptoms, suspected infection, or significant temperature instability.

Initial stabilization may involve drying, tactile stimulation, airway positioning, clearing secretions if they are obstructing breathing, oxygen monitoring, and assisted ventilation if needed. Neonatal resuscitation follows established protocols focused on effective ventilation and heart rate response. Most babies who need brief support improve quickly, but some require admission to a neonatal unit for respiratory support, antibiotics, glucose management, or ongoing monitoring.

After cesarean section, some babies have more retained lung fluid and may breathe faster for a period, although many transition normally. If the parent is awake and stable, skin-to-skin in the operating room or recovery area may still be possible, depending on staffing, monitoring, and surgical considerations.

If separation is necessary, parents can ask for updates, photos if allowed, help with hand expression of colostrum, and when they can see or hold the baby. Emotional distress after an unexpected separation is common and valid; asking for explanations and support is appropriate.

### **What parents can ask and plan for**

Before birth, it can help to discuss which newborn care steps are routine, which are optional, and which are legally required in your area. A birth plan

can include preferences for immediate skin-to-skin, delayed cord clamping, who cuts the cord, feeding plans, vitamin K, eye prophylaxis, vaccines, and whether measurements can wait until after the first feed.

Plans should remain flexible because newborn condition and maternal safety guide decisions. If a baby needs resuscitation, timely medical care takes priority. Still, many preferences can be honored once the baby is stable. Parents can ask the team to explain what is happening in real time, to perform procedures at the bedside when feasible, and to reunite parent and baby as soon as safely possible.

The first hours can be tender, intense, and sometimes different from what families imagined. A medically appropriate pause for assessment does not erase bonding, and delayed first holding can still be followed by meaningful connection. The goal is both safety and support: helping the baby adapt physiologically while helping the family begin life together with as much closeness, respect, and clarity as possible.