How second stage begins ends and baby moves through birth canal

When the second stage officially begins

The second stage of labor begins when the cervix has reached full cervical dilation, usually described as 10 centimeters, and ends when the baby is born. By this point, the first stage of labor has completed its central task: the cervix has dilated and effaced enough to no longer form a barrier between the uterus and the vagina. Clinically, this transition is confirmed by examination when appropriate, but it may also be suspected from behavioral and physiologic signs such as stronger rectal pressure, a spontaneous urge to bear down, vocal changes, shaking, nausea, or a sense that contractions feel different.

Full dilation does not always mean immediate active pushing. Some people feel an overwhelming involuntary urge to push as soon as the cervix is complete. Others, especially with an epidural, may feel pressure but not a strong urge yet. In some settings, the care team may recommend a period of passive descent, sometimes called laboring down, allowing contractions to bring the baby lower before active pushing begins. This decision depends on fetal heart rate patterns, maternal energy, the baby’s position and station, epidural effect, and the overall clinical picture.

What ends the second stage

The second stage ends with the complete birth of the baby. This is different from the third stage, which begins after the baby is born and ends with delivery of the placenta. In practical terms, the end of the second stage includes the birth of the head, shoulders, trunk, and legs. Once the baby is fully delivered, the focus shifts to newborn transition, cord management according to the birth plan and clinical situation, assessment of maternal bleeding and perineal tissues, and placental separation.

The final minutes can be rapid or gradual. As the baby's head crowns, the perineal tissues stretch around the presenting part. The care team may encourage slower, controlled breathing or gentler pushes to reduce sudden stretching, although perineal outcomes depend on many factors, including tissue characteristics, fetal size and position, speed of birth, prior births, and whether instruments are needed. After the head is born, the baby usually rotates slightly so the shoulders can align with the widest dimension of the pelvic outlet. One shoulder then commonly emerges under the pubic bone, followed by the other shoulder and the rest of the body.

The uterus, cervix, and pelvic floor work together

During the second stage, uterine contractions remain the main engine of birth. The upper uterine segment contracts and retracts, generating downward force on the fetus. When the cervix is fully open, that force is directed through the birth canal rather than into further cervical dilation. Maternal bearing-down efforts can add abdominal pressure, increasing the effectiveness of contractions when the timing and fetal position are favorable.

The pelvic floor is not simply a passive tunnel. It provides resistance and shape, helping guide the baby's head into rotation and extension. As the presenting part descends, pressure on the pelvic floor and rectum can create the urge to push. This reflex is mediated by stretch and pressure signals, which is why some people describe pushing as involuntary or instinctive rather than a purely voluntary action. Epidural analgesia can reduce pain and modify these sensations, but many people still perceive pressure, stretching, or tightening.

The maternal pelvis has different dimensions at the inlet, midpelvis, and

outlet. The baby’s head must adapt to these changing spaces. This is why the baby usually does not come straight down without turning. Instead, descent is paired with flexion and rotation so the smallest practical diameter of the head can pass through the most favorable pelvic dimensions.

How the baby enters the birth canal

The baby typically enters the pelvic inlet head first, although fetal presentation can vary. In a common vertex presentation, the top or back portion of the head leads. The baby’s chin flexes toward the chest, which helps present a smaller head diameter. Clinicians describe fetal progress using terms such as presentation, position, and station. Presentation refers to the fetal part that comes first. Position describes the relationship of the baby’s head to the maternal pelvis, such as occiput anterior when the back of the baby’s head is toward the front of the pelvis. Fetal station in labor describes how low the presenting part is in relation to the ischial spines, a bony landmark in the midpelvis.

As contractions continue, the baby descends. Descent can happen before full dilation, during passive descent, and during active pushing. Progress is not always perfectly linear. The baby may move down during a contraction and slightly back between contractions, especially before the head remains visible at the vaginal opening. This movement can be normal as long as the overall trend, fetal heart rate, and maternal condition are reassuring.

The soft tissues and bones of the fetal skull also adapt. The skull bones can overlap slightly at the sutures, a physiologic process called molding. Mild swelling of the scalp can occur from pressure. These changes often help the baby navigate the pelvis and usually resolve after birth, but clinicians assess them in context because excessive molding or swelling may suggest prolonged pressure or difficult descent.

Cardinal movements through the pelvis

The classic description of how a baby moves through the birth canal is called the cardinal movements of labor. These movements are not separate steps that everyone can feel; they overlap and occur dynamically as contractions, maternal effort, pelvic shape, and fetal tone interact.

Engagement: the widest part of the presenting head enters the pelvic inlet.
Descent: the baby moves downward through the pelvis under the force of contractions and, when present, pushing.
Flexion: the baby's chin tucks toward the chest, allowing a smaller head diameter to lead.
Internal rotation: the head turns to align with the shape of the midpelvis and outlet, often rotating toward an occiput anterior position.
Extension: as the head reaches the vulva, it extends under the pubic arch so the forehead, face, and chin can be born.
Restitution and external rotation: after the head emerges, it turns to realign with the shoulders.
Expulsion: the shoulders and body are born.

These movements explain why position changes may help some labors. Upright, side-lying, hands-and-knees, supported squat, or semi-recumbent positions can change pelvic angles, maternal comfort, and the direction of pushing effort. No single position is best for everyone. The safest and most useful position depends on comfort, monitoring needs, epidural strength, fetal status, clinician access, and whether complications arise.

Pushing: spontaneous, coached, and delayed

Pushing during the second stage can be spontaneous or coached. Spontaneous pushing means the birthing person follows the body's urge, often with several shorter pushes during a contraction and breathing between efforts. Coached pushing usually involves instructions about when and how long to push, often timed with contractions. Both approaches can be appropriate. The best fit depends on maternal preference, fatigue, epidural use, fetal monitoring, and whether birth needs to be expedited for clinical reasons.

Some people are encouraged to wait before active pushing if the cervix is fully dilated but the baby is still high and fetal monitoring is reassuring. This delayed approach may allow more descent from contractions alone, especially with epidural analgesia. In other cases, active pushing begins promptly, particularly when there is a strong urge, the baby is low, or the clinical team wants to assess progress.

Effective pushing is not only about effort. It also depends on fetal position, adequacy of contractions, pelvic anatomy, soft tissue resistance, maternal energy, and pain control. Supportive coaching often focuses on relaxing the pelvic floor between contractions, changing positions when safe, maintaining hydration as allowed, emptying the bladder if needed, and preserving energy. If progress slows, clinicians may reassess the baby's station and position, contraction pattern, maternal temperature, bladder fullness, and fetal heart rate.

How long the second stage may last

The second stage varies widely. It is often shorter for people who have given birth vaginally before and longer for first births or for those using epidural analgesia. Clinical references describe broad ranges rather than a single normal time. A longer second stage does not automatically mean something is wrong, especially if the baby continues to descend and the fetal heart rate and maternal condition remain reassuring.

Healthcare teams interpret duration alongside progress. Important questions include: Is the baby moving lower? Is the head rotating? Are contractions strong enough and frequent enough? Is the mother exhausted, febrile, bleeding heavily, or developing concerning vital signs? Is the fetal heart rate reassuring or showing signs that birth should be expedited? This broader assessment is why two labors with the same elapsed time may be managed differently.

If there is inadequate descent, concerning fetal status, or significant maternal exhaustion, the team may discuss options such as position changes, adjustment of oxytocin if already indicated and prescribed by the clinician, assisted vaginal birth with vacuum or forceps when criteria are met, or cesarean birth if vaginal birth is not safe or not progressing. These decisions require individualized assessment and informed consent whenever circumstances allow.

What the birthing person may feel

Sensations in the second stage can be intense and variable. Without dense regional anesthesia, many people feel rectal pressure, stretching, burning as

the head crowns, and a powerful urge to bear down. With an epidural, pain may be reduced, but pressure and stretching can still be present. Some people feel focused and relieved to push; others feel frightened, overwhelmed, or exhausted. All of these responses can be normal.

Support matters. Clear explanations, consent before examinations when possible, respectful coaching, and reassurance can help the birthing person stay oriented. A support person may assist with position changes, cool cloths, verbal encouragement, breathing reminders, or advocacy. The care team monitors both maternal and fetal wellbeing, including contraction pattern, fetal heart rate, descent, and signs such as bleeding, fever, blood pressure changes, or excessive pain outside the expected pattern.

It is reasonable to ask questions in real time: "Where is the baby’s station?", "Is the baby rotating?", "Do we need to change position?", "Is the fetal heart rate reassuring?", or "What are our options if progress slows?" These questions can make clinical decisions more transparent during a demanding moment.