

How baby moves during pushing



The second stage: more than pushing downward

The second stage of labor begins when the cervix is fully dilated and ends with birth. This is the phase many people call the pushing stage, but the baby's movement is more complex than a straight-line passage. The fetal head must fit through a curved, muscular, bony canal whose dimensions change from the inlet to the outlet. Because the pelvis is not a simple tube, the baby usually needs to flex, descend, rotate, extend, and then reconstitute, meaning the head realigns with the shoulders after it is born.

In a typical head-first birth, the widest parts of the baby's head and shoulders seek the most favorable diameters of the pelvis. Uterine contractions generate force from above, while maternal pushing increases intra-abdominal pressure. The pelvic floor and surrounding soft tissues provide resistance that helps guide the head into a more favorable alignment. This is why progress can look like a series of small positional adjustments rather than one smooth slide.

Descent and fetal station during pushing

Descent means the baby's presenting part, usually the head, moves lower through the pelvis. Clinicians often describe this using fetal station during pushing.

Station estimates where the presenting part is in relation to the ischial spines, bony landmarks in the mid-pelvis. A negative station means the head is still above the spines, zero station means it is approximately level with them, and positive stations mean the head has moved below them toward birth.

Station is useful, but it is only one part of the picture. A baby at a low station may still need time to rotate or flex before crowning. A baby at a higher station may descend steadily with contractions, especially if the head is well flexed and aligned. Assessments can vary somewhat between examiners, and the clinical meaning depends on the whole situation: contraction strength, maternal effort, fetal heart rate pattern, epidural use, parity, pelvic anatomy, and the baby's position.

It is also normal for descent to appear intermittent. During a contraction and push, the head may advance; between contractions, it may recede slightly as tissues recoil. This visible or felt movement does not necessarily mean pushing is ineffective. Over time, the overall trend matters more than what happens after a single contraction.

Flexion: tucking the chin to fit

Flexion is one of the key cardinal movements of labor. As the baby's head meets resistance from the cervix, pelvic walls, and pelvic floor, the chin usually tucks toward the chest. This presents a smaller, more favorable diameter of the skull to the pelvis. In practical terms, good flexion can help the baby fit through spaces that would be harder to navigate if the head were extended.

Flexion is not something the birthing person consciously controls. It results from the relationship between contraction forces, the baby's posture, and the resistance of maternal tissues. Some positions, such as upright, side-lying, hands-and-knees, or supported squatting, may change pelvic angles or soft-tissue tension, but the best position depends on comfort, anesthesia, fetal monitoring needs, and clinical guidance.

If the head is less flexed, labor may feel harder or progress may be slower because a larger diameter of the head may be trying to pass. The care team may describe this as deflexion, asynclitism, or a particular fetal head position. These terms are not diagnoses by themselves; they are observations that help

guide supportive measures and clinical decision-making.

Internal rotation: turning to match the pelvis

Internal rotation is the baby's turn within the pelvis, most often bringing the back of the head toward the front of the maternal pelvis under the pubic bone. This rotation helps the head align with the pelvic outlet, where the most favorable diameter differs from the upper pelvis. The baby may enter the pelvis facing sideways or at an angle, then rotate as descent continues.

The pelvic floor plays an important guiding role. As the descending head meets the sloped, elastic tissues of the pelvic floor, the head is directed forward and rotates. Biomechanically, the baby is responding to forces from contractions and pushing, the shape of the bony pelvis, and soft-tissue pressure. This is why the baby's head may seem to turn gradually over several contractions.

Sometimes the baby rotates to an occiput anterior position, often considered mechanically favorable. Sometimes the baby remains occiput posterior or transverse for longer. Many babies still rotate and are born vaginally, but persistent malposition can contribute to a longer second stage of labor or more intense back or pelvic pressure. Your clinicians may suggest position changes, rest, laboring down, or other individualized strategies depending on maternal and fetal status.

Crowning, extension, and the birth of the head

As the baby reaches the pelvic outlet, the head begins to distend the perineum. Crowning refers to the point when the widest part of the head is visible at the vaginal opening and does not fully recede between contractions. At this stage, the movement changes: after flexion and rotation have helped the head descend, extension allows the head to pass under the pubic arch and emerge.

Extension means the baby's head tips backward as it is born. This is a normal mechanical response to the curve of the lower birth canal. The occiput, or back of the head, usually slips under the pubic bone first, then the forehead, face, and chin follow over the perineum. The sensation can be intense, stretching, burning, or pressurized. Some clinicians guide slower, gentler pushing or

breathing at crowning to help the tissues stretch, but instructions vary by clinical situation.

After the head is born, it often turns slightly. This is called restitution, and it reflects the head realigning with the shoulders, which are still inside the pelvis. Then external rotation follows as the shoulders rotate into a favorable diameter for birth.

How the shoulders and body follow

Once the head is born and rotates, the shoulders usually move through the pelvis. The front shoulder typically passes beneath the pubic bone, followed by the back shoulder over the perineum. After the shoulders are born, the rest of the body often follows quickly because the torso and legs are generally smaller and more flexible than the head and shoulder diameter.

This shoulder movement is also shaped by uterine contractions, maternal effort, and pelvic anatomy. Clinicians watch carefully during this transition because shoulder birth should progress in a coordinated way. If the shoulders do not deliver as expected, the team may use specific maneuvers. Those decisions are clinical and time-sensitive, and they depend on direct assessment, not on what pushing feels like alone.

For many births, this final sequence feels surprisingly fast after a long period of pushing. For others, the head may crown slowly, deliver gradually, and then the shoulders require one or more contractions. Both patterns can be normal when maternal and fetal signs remain reassuring.

Why movement may pause or feel uneven

Many people expect pushing to produce obvious downward movement with every effort. In reality, the baby may advance, rotate, mold, and rest in a repeating pattern. The fetal skull bones can overlap slightly, a process called molding, which helps the head adapt to the pelvis. Caput, or soft swelling of the scalp, may also develop from pressure. These changes can make examination findings more nuanced, which is one reason clinicians interpret them alongside the full labor pattern.

An epidural can reduce the urge to push or change sensation, and some people benefit from laboring down after full dilation so contractions help passive descent before active pushing. Others feel a strong involuntary urge and push spontaneously. Neither pattern is universally best; the safest approach depends on maternal comfort, fetal status, hospital policy, and professional assessment.

A pause does not automatically mean something is wrong. However, prolonged pushing, lack of descent, concerning fetal heart rate patterns, heavy bleeding, fever, severe pain that feels unusual, or maternal exhaustion deserve prompt evaluation. Your care team's role is to distinguish normal variation from situations that need intervention.

What caregivers are assessing

During pushing, clinicians and midwives assess both progress and wellbeing. They may evaluate contraction frequency and strength, fetal heart rate, maternal vital signs, bladder fullness, fetal station, head position, molding, caput, and how effectively pushing coordinates with contractions. They may also consider whether changing position, adjusting epidural dosing, emptying the bladder, resting, or using coached pushing could help.

The decision to continue, pause, assist, or change approach is individualized. A medically literate way to think about pushing is that the baby's movement must be both mechanically progressive and physiologically tolerated. Descent alone is not the only goal; the baby and birthing person also need to remain clinically stable.

If you are pushing, it is reasonable to ask what the team is seeing: station, rotation, whether the baby is moving with contractions, and whether the fetal heart rate is reassuring. Clear information can make the process feel less mysterious, especially when movement is slow but still appropriate.