

How to reduce risk of complications



Start with individualized risk assessment

The most useful prevention plan begins with a calm review of birth complication risk factors rather than a generic checklist. Important domains include prior cesarean or uterine surgery, postpartum hemorrhage, hypertensive disorders, diabetes, thromboembolic history, placenta previa or accreta spectrum concerns, fetal growth restriction, multiple gestation, fetal malpresentation, severe anemia, obesity, infection risk, medication exposures, and anesthesia history. A person with a prior uncomplicated vaginal birth may need a different level of planning than someone with placenta previa delivery planning, suspected macrosomia, or shoulder dystocia during birth in a previous pregnancy.

Risk assessment should also include social and systems factors. Distance from an operating room, blood bank access, language barriers, transportation, previous trauma, and limited support can affect how quickly complications are recognized and treated. These factors are not moral judgments; they are operational details that help clinicians match the birth plan to the safest available setting.

A good risk conversation should produce practical outputs: where to give birth, who should be present, what monitoring is appropriate, what would trigger

transfer or operative delivery, and what information should be visible in the chart. If the plan feels vague, asking for the specific reason behind each recommendation can make the discussion safer and more collaborative.

Optimize chronic conditions before labor

Medical optimization before birth can reduce the likelihood that a manageable condition becomes a crisis during labor. For people with diabetes, this usually includes close glucose monitoring, medication review, nutrition planning, eye and kidney surveillance when indicated, dental and foot care when relevant, and coordination between obstetric and diabetes clinicians. Stable glycemic control may reduce infection risk and supports safer surgical healing if cesarean birth becomes necessary, but medication changes should never be made without a clinician who understands pregnancy-specific risks.

Blood pressure deserves similar attention. Hypertension and preeclampsia can increase the risk of stroke, seizure, placental abruption, fetal growth restriction, medically indicated preterm birth, and postpartum complications. Monitoring, laboratory evaluation, fetal surveillance, and timing-of-birth decisions should be individualized. A home blood pressure cuff can be helpful for some patients, but thresholds for calling or presenting to care should be set by the obstetric team.

Smoking cessation is one of the clearest modifiable steps before surgery and birth. Evidence from surgical populations shows that stopping smoking reduces postoperative complications, and longer cessation periods appear to produce greater benefit. In pregnancy, cessation support should be nonjudgmental and medically supervised, especially when nicotine replacement, behavioral therapy, or other aids are being considered. Alcohol, nonprescribed substances, severe anemia, untreated infection, and poorly controlled asthma or cardiac disease also deserve early review because they can influence anesthesia, bleeding risk, oxygenation, and neonatal adaptation.

Choose a birth setting that matches risk

The safest setting is not always the most intensive one, but it should match the expected level of risk and the realistic need for escalation. Low-risk pregnancies may be appropriate for midwifery-led settings when local protocols,

transfer pathways, and emergency response are strong. Higher-risk pregnancies may need a hospital with continuous fetal monitoring, anesthesia availability, neonatal resuscitation after birth, blood bank access, interventional radiology, intensive care, or maternal-fetal medicine support.

Before labor, ask what resources are immediately available and what requires transfer. Useful questions include who can perform an emergency cesarean, how quickly anesthesia can be available, whether blood products are on site, how newborn resuscitation is handled, and what happens if there are fetal heart rate abnormalities or severe bleeding. These questions are not confrontational; they clarify the care environment.

Transfer planning is especially important for people hoping to minimize intervention. A strong physiologic birth plan should include a clear escalation pathway, not just preferences for avoiding procedures. Knowing when the plan changes can reduce delay, fear, and conflict if prolonged labor complications, infection, fetal malposition, or hemorrhage arise.

Reducing unnecessary interventions

Reducing unnecessary interventions does not mean refusing medical care. It means making sure each intervention has a clear indication, a plausible benefit, and a shared understanding of tradeoffs. In labor, interventions such as induction, oxytocin augmentation, artificial rupture of membranes, continuous fetal monitoring, epidural analgesia, operative vaginal birth, and cesarean delivery can be appropriate and lifesaving. They can also create downstream effects, so the indication matters.

Shared decision-making in labor works best when it is brief, specific, and documented. A practical framework is to ask: What problem are we trying to solve? What are the benefits? What are the risks of doing it now? What are the risks of waiting? Are there alternatives? How urgent is the decision? This kind of communication is especially useful when fetal tracing changes, labor stalls, maternal fever develops, or operative delivery is being discussed.

At the same time, delaying necessary care can increase harm. For example, persistent nonreassuring fetal status, suspected uterine rupture, umbilical cord prolapse, severe preeclampsia, placental abruption, or uncontrolled

hemorrhage may require rapid action. Risk reduction is not simply fewer procedures; it is the right care at the right time.

Prevent infection, hemorrhage, and surgical complications

Infection prevention begins with screening and timely treatment when indicated, hand hygiene, sterile technique for procedures, appropriate antibiotic prophylaxis for cesarean birth when recommended, and careful follow-up after delivery. Patients can support safety by reporting fever, worsening abdominal pain, foul-smelling discharge, urinary symptoms, breast redness with systemic illness, or cesarean wound infection symptoms such as spreading redness, drainage, increasing pain, or wound separation.

Hemorrhage prevention is partly risk recognition and partly preparation. Clinicians may review anemia, placenta location, prior hemorrhage, uterine overdistension, coagulation disorders, and medication exposures. A birth team may prepare uterotonic medications, IV access, quantified blood loss protocols, transfusion plans, and escalation pathways. Patients and support people should understand postpartum hemorrhage warning signs, including soaking pads rapidly, passing large clots, dizziness, fainting, palpitations, shortness of breath, or feeling suddenly very weak.

For planned or unplanned cesarean birth, complication reduction includes attention to preoperative instructions, medication reconciliation, thrombosis risk assessment, glycemic control when relevant, smoking cessation, and postoperative mobilization as advised. Surgical plans should also cover pain control, wound care, bladder and bowel function, and when to call urgently. No checklist prevents every surgical complication, but preparation can reduce delays and improve recognition.

Use patient-safety habits deliberately

Patient-safety habits are especially valuable in birth because care can move quickly across triage, labor rooms, operating rooms, recovery, postpartum units, and newborn care. Bring a current list of medications, supplements, allergies, adverse drug reactions, diagnoses, prior surgeries, blood type or antibody concerns if known, and key prenatal results. If records are split across systems, keeping a concise personal summary can prevent missing

information at a critical moment.

Ask questions whenever an instruction is unclear, particularly around induction, fasting, medications before surgery, insulin or anticoagulant management, and discharge precautions. A support person can help listen, take notes, and speak up if the laboring person is exhausted, sedated, in pain, or overwhelmed. For major decisions that are not urgent, a second opinion can be reasonable, especially for complex placenta findings, repeat cesarean planning, high-risk anesthesia concerns, or major deviations from the expected birth plan.

Communication should include consent and preferences, but also clinical red flags. Tell the team promptly about chest pain, severe headache, visual symptoms, right upper quadrant pain, shortness of breath, decreased fetal movement before birth, heavy bleeding, fever, or a sense that something is seriously wrong. Subjective concern is not a diagnosis, but it can be an important safety signal.

Plan postpartum surveillance

Complication prevention does not end when the baby is delivered. Many serious maternal complications occur after birth, including hemorrhage, infection, hypertensive emergencies, thromboembolism, cardiomyopathy, wound complications, urinary retention, severe mood symptoms, and medication-related problems. Discharge teaching should be specific, written when possible, and matched to the person's actual risks.

Postpartum follow-up should include blood pressure checks when indicated, wound review after cesarean or perineal repair concerns, diabetes follow-up, contraception counseling, lactation support if desired, mood screening, and clear instructions about emergency evaluation. People with hypertensive disorders, significant hemorrhage, infection, preterm birth, cesarean birth, gestational diabetes, or complex neonatal needs may require earlier or more frequent contact than a single routine visit.

Families can reduce risk by arranging transportation, childcare, medication access, and a plan for who to call after hours. If a symptom feels urgent, it is safer to contact the care team or emergency services than to wait for a scheduled visit. Postpartum recovery is a medically active period, not just a

return home.