

Quick Facts About Induction of Labor

What is the safest point in pregnancy for the baby to be born?

Just as infants reach developmental milestones, like rolling over or crawling, at different times, every baby is ready to be born at a slightly different time. *The most reliable sign that the baby is ready to be born safely is labor beginning on its own at full-term.*

Full-term has traditionally been defined as any time between 37 and 42 weeks of gestation. However, more and more research shows that babies born before 39 weeks face a higher risk of several health problems than babies born from 39 weeks on. For this reason, labor induction or planned cesarean surgery should never be used before 39 weeks unless there is a clear medical reason. For optimal outcomes, you may also wish to avoid elective delivery (induction or c-section without a clear medical reason) at 40 or 41 weeks and to make informed decisions about this practice after 41 weeks.

How may induction of labor affect my health, my baby's health, or my birth experience?

- In women having their first baby or if the cervix (the lower part of the uterus) is not soft and ready to open, elective induction before 41 weeks increases the chance of having a c-section. C-sections have their own risks, including infection, a longer recovery time, and problems in future pregnancies. (For more information, see childbirthconnection.org/cesarean). Using medications or procedures to “ripen” the cervix does not decrease the chance of a c-section.
- Women in induced labor are more likely to request an epidural for pain relief than women whose labor begins on its own. Epidurals introduce their own set of risks, including increased chance of vaginal birth with vacuum extractor or forceps and fever in labor, which is often treated with antibiotics and may result in avoidable tests and treatments for the baby and separation of mother and baby after birth.
- Induction of labor nearly always involves having at least one intravenous (IV) line, continuous electronic fetal monitoring, and medications after birth to reduce the risk of hemorrhage (excessive bleeding). The IV and fetal monitoring lines make it harder to move around in labor, which can increase pain. Many hospitals have policies that restrict what women can eat and drink when undergoing induction of labor.

When is it beneficial to induce labor?

There are three situations that occur at the end of pregnancy when, according to the best available research, women or newborns are likely to benefit from induction. These are:

- prelabor rupture of membranes (broken water) after 37 weeks: Inducing labor may reduce the risk of infection or admission to the neonatal intensive care unit.
- pregnancy that has lasted more than 41 weeks: although stillbirth is rare, the risk increases after 41 weeks. Induction may decrease the risk of stillbirth.
- Mild high blood pressure at full term: induction of labor reduces the chance that the woman will develop severe high blood pressure or its complications.

What common “reasons” for induction are not supported by rigorous research?

For some common conditions, available research suggests induction is ineffective, harmful, or both. Despite the research, many caregivers continue to recommend induction of labor for these reasons. They include:

- Suspected macrosomia (too big baby): inducing labor when the caregiver believes the baby is large does not improve neonatal outcomes and appears to increase the chance that the woman will have a c-section.
- Intrauterine growth restriction (too small baby) before 37 weeks: induction in this situation increases the chance of a c-section and may increase the chance the child will have developmental disabilities.

For other conditions, the effectiveness of induction has not been proven. More research is needed to understand whether induction would be of value for these conditions:

- Preterm prelabor rupture of the membranes (PPROM)
- Twin pregnancy
- Gestational diabetes requiring insulin
- Intrauterine growth restriction (too small baby) at full term.
- Oligohydramnios (too little amniotic fluid)

How can I lower my chance of being induced unnecessarily?

- Find a doctor or midwife with a low induction rate. Some caregivers have much lower induction rates than others. Although there are many exceptions, family physicians tend to have lower rates than obstetricians, and midwives generally have the lowest rates of all.
- Choose a birth setting with a low induction rate. Some hospitals have far lower rates of induction than others, and some hospitals are actively engaged in quality improvement efforts to reduce their induction rates. In general, rates of intervention are much lower for out-of-hospital birth centers and at home births, compared with hospitals.
- Educate yourself about the different reasons women are induced, and the evidence (or, in many cases, the lack of evidence) supporting these reasons. Consider declining labor induction for reasons that lack good research support (informed refusal).
- Do your best to make sure your estimated due date (EDD) is accurate. An EDD is often calculated from the first day of the last menstrual period, a method that assumes the woman’s menstrual cycle is 28 days long. If your menstrual cycles are longer or shorter than 28 days, or if they are irregular in length, tell your caregiver this. Your caregiver may recommend an ultrasound early in pregnancy to help determine or confirm your EDD.

Where can I learn more?

This information is adapted from Childbirth Connection’s web-based resource on induction of labor at childbirthconnection.org/induction. Other resources for women and their families are at childbirthconnection.org/women

The main sources for the information in this fact sheet are:

King V, Pilliod R, Little A. Rapid review: Elective induction of labor. Portland: Center for Evidence-based Policy; 2010 Accessed January 5, 2011 at <http://www.ohsu.edu/xd/research/centers-institutes/evidence-based-policy-center/med/index.cfm>.

Mozurkewich E, Chilimigras J, Koepke E, Keeton K, King VJ. Indications for induction of labour: A best-evidence review. BJOG. 2009;116(5):626-636.

For additional sources, see childbirthconnection.org/induction