

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 when labor begins on its own at full term.

When is "full term"?

- ▶ In the past, full term was defined as any time between pregnancy weeks 37 and 42. 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 section should never be used before 39 weeks unless there is a clear medical reason to intervene early. For optimal outcomes, you may also wish to avoid elective delivery (induction or cesarean without a clear medical reason) at 40 or 41 weeks and to make informed decisions about this practice after 41 weeks. "Full term" is now used for pregnancy weeks 39 and 40.

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 may increase the chance of having a cesarean birth. Cesareans have their own risks, including infection, a longer recovery time, and problems in future pregnancies. (For more information, see <http://www.childbirthconnection.org/cesarean>). Using medications or procedures to "ripen" the cervix may not decrease the chance of a cesarean.
- ▶ 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. Fever 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 and reduce labor progress. Policies of many hospitals restrict what women can eat and drink when undergoing labor induction.

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 (NICU)
- ▶ pregnancy that has lasted more than 41 weeks: although stillbirth is rare, the risk increases after 41 weeks; induction after 41 weeks 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 (baby may be large): inducing labor when the caregiver believes the baby may be large does not improve newborn outcomes and may increase the chance that the woman will have a cesarean birth.
- ▶ 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.
- ▶ preterm prelabor rupture of membranes (PPROM): inducing labor when membranes have broken between pregnancy weeks 34 and 37 is not better than waiting for labor to begin with respect to cesarean birth or infection or breathing problems in babies.

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:

- ▶ 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 care providers have much lower induction rates than others. Although there are many exceptions, family physicians tend to have lower rates than obstetricians, and midwives often 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. Some hospitals have quality improvement programs to reduce their induction rates, including programs to avoid scheduling births before the 39th week of pregnancy whenever possible. 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, which assumes the woman's menstrual cycle is 28 days long. If your cycles are longer or shorter than 28 days, or if they are irregular in length, tell your caregiver this. An ultrasound early in pregnancy can help determine or confirm your EDD. See our [Which Due Date Should I Use?](#) worksheet.

Where can I learn more?

This information is adapted from Childbirth Connection's web-based resource on induction of labor at <http://www.childbirthconnection.org/induction>. Other resources for women and their families are at <http://www.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 June 4, 2012 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 <http://www.childbirthconnection.org/induction>.