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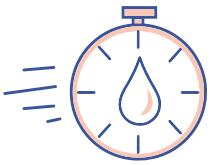

# Evidence on: Prelabor Rupture of Membranes (PROM) at Term

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### Question: What is PROM?

**Answer:** Premature or "prelabor" rupture of membranes (PROM) happens when your water breaks before the start of labor contractions. Term PROM is when the water breaks before labor at ≥37 weeks of pregnancy. Preterm PROM, or PPROM, occurs before 37 weeks of pregnancy. In this handout, we focus on term PROM.

### Question: How common is term PROM?

**Answer:** Researchers have found that about 8-10%, or 1 in 10 pregnant people experience term PROM.[1] Term PROM is more likely if you have cervical checks at the end of pregnancy, and it is a potential side effect of membrane stripping.[2] It can also happen due to the normal process of membranes weakening toward the end of pregnancy. If not induced, most people go into labor on their own soon after their water breaks; around 79% of people go into labor within 12 hours and 95% go into labor within 24 hours. It may take longer in your first pregnancy to go into labor after your water breaks.[3]

### Question: What is the evidence on inducing labor for term PROM versus waiting for labor to start on its own?

**Answer:** The "Term PROM" study by Hannah et al.[4] randomly assigned more than 5,000 people with term PROM to one of four groups: immediate induction of labor with (1) Pitocin or (2) prostaglandin E2 gel, or waiting for labor to start for up to four days followed by induction if needed with (3) Pitocin or (4) prostaglandin E2 gel.

There were no differences in Cesarean rates or newborn infection rates between groups. However, those immediately induced with Pitocin were less likely to develop chorioamnionitis (inflammation of the membranes due to infection), compared to those who waited up to four days before being induced with Pitocin (4% vs. 8.6%). There were no differences in rates of chorioamnionitis between people immediately induced with prostaglandins compared to those who waited for labor for up to four days before inducing with prostaglandins (approximately 6-8%). This study is limited because it took place during a time when pregnant people were not screened and treated for Group B Strep–a major cause of chorioamnionitis.

A Cochrane review[3] combined the Term PROM study with 22 other randomized trials (total of 8,615 participants). The researchers found low-quality evidence that people immediately induced after term PROM were less likely to experience maternal infections, with no increase in the risk of Cesarean. Their babies were less likely to need antibiotics after birth and less likely to be admitted to the NICU, and birth parents and babies in the induction groups also had shorter hospital stays. There were no differences between induction and waiting groups in the risk of newborn infection or perinatal mortality (a combined measure of stillbirth or newborn death).

Regardless of whether someone has an induction or chooses to wait for spontaneous labor, researchers have found that it's important to avoid frequent cervical exams with PROM, because they increase the risk of infection for birthing person and baby.[5]

### Question: What's the bottom line?

**Answer:** Having labor induced with Pitocin for term PROM may lower your chances of experiencing infection but does not influence the Cesarean rate or newborn infections. Professional organizations recommend both induction and waiting as evidence-based approaches to treating people with PROM. Guidelines suggest that people are better candidates for waiting for labor to start on its own if they have an uncomplicated pregnancy, clear amniotic fluid, no signs of fever or infection, no cervical exam at baseline, and negative GBS results.



> **"With term PROM, the decision to induce or wait for labor to start on its own should take into account your unique situation and preferences."**

1. Committee on Practice Bulletins, ACOG. (2020). "ACOG practice bulletin no. 217: Prelabor Rupture of Membranes." Obstetrics and Gynecology 135(3): e80-e96.
2. Hill, M. J., McWilliams, G. D., Garcia-Sur, D., et al. (2008). "The Effect of Membrane Sweeping on Prelabor Rupture of Membranes." Obstet Gynecol 111(6): 1313-1319.
3. Middleton, P., Shepherd, E., Flenady, V., et al. (2017). "Planned early birth versus expectant management (waiting) for prelabour rupture of membranes at term (37 weeks or more)." Cochrane Database of Systematic ReviewsNo.: CD005302.
4. Hannah, M. E., Ohlsson, A., Farine, D., et al. (1996). "Induction of labor compared with expectant management for prelabor rupture of the membranes at term. TERMPROM Study Group." N Engl J Med, 334(16): 1005- 1010.
5. Seaward, P. G., Hannah, M. E., Myhr, T. L., et al. (1997). "International Multicentre Term Prelabor Rupture of Membranes Study: evaluation of predictors of clinical chorioamnionitis and postpartum fever in patients with prelabor rupture of membranes at term." Am J Obstet Gynecol 177(5): 1024-1029.