



*Evidence that Empowers!*

By Rebecca Dekker, PhD, RN

### Question: How common is pregnancy at age 35 and older?

**Answer:** Over the past four decades, there has been a dramatic increase in the number of people giving birth at age 35 and older. Now, around 20% of total births and 10% of first births in high-income countries are to people aged 35 and older.

*Advanced maternal age* (AMA) is usually defined as being 35 or older at the time of giving birth. It's important to understand, however, that age-related concerns rise gradually, not all at once at age 35.

### Question: What are the chances of getting pregnant at 35 or older?

**Answer:** As a person ages, fertility—the chance you will get pregnant or can get your partner pregnant—is reduced. For egg carriers, this decline begins slowly in the early thirties and speeds up in the late thirties and forties. Sperm carriers also experience declining fertility with age. According to the American Society for Reproductive Medicine, the “best reproductive years” are in your twenties. By the age of 30, a healthy, fertile egg carrier has a 20% chance of getting pregnant each month of trying to conceive. By age 40, someone has about a 5% chance of getting pregnant each month.

One consequence of delayed childbearing is an increase in the use of *assisted reproductive technology* (ART), which involves the handling of eggs, sperm, or embryos for the purpose of establishing a pregnancy. Pregnancies with the use of ART tend to be among white, wealthy, heterosexual couples. Meanwhile, Black, Indigenous, and People of Color (BIPOC); those with limited financial means; and LGBTQ+ individuals face more barriers trying to build families with ART.

### Question: What are the risks of being pregnant at an older age?

**Answer:** Certain genetic conditions are more common in pregnancies of older people. For example, the rate of having a baby with Down syndrome increases with the pregnant person's age.

The rate of spontaneous miscarriage (pregnancy loss before 20 weeks) is elevated among teens, low among people 20-34, and then increases again, especially for people in their forties.

There is a higher risk of stillbirth in people who are 35 or older, but that risk has gotten lower over the past

few decades, and it is also lower among people who are healthy and/or have given birth before. A large 2020 study from the Netherlands excluded people with pregnancies complicated by congenital anomalies, hypertensive disorders, or diabetes. After 37 weeks of pregnancy, people aged 18 to 34 had a stillbirth rate of 1.7 per 1,000, people between 35 and 39 had a stillbirth rate of 2.2 per 1,000, and people 40 and older had a stillbirth rate of 3.0 per 1,000.

A large 2017 study from Washington State found that the rate of maternal death or severe complications (such as hemorrhage with transfusion, sepsis, complications of anesthesia, and ICU admission) increased with maternal age. The rate was around 14 per 1,000 at 25-34; 18 per 1,000 at 35-39; 23 per 1,000 at 40-44; and 36 per 1,000 at 45 and older.

Cesarean rates climb steadily with age. U.S. Cesarean rates are 30.0% (age 25 to 29), 33.9% (age 30 to 34), 40.1% (age 35 to 39), and 48.0% (age 40 to 54). The increase in Cesarean rates with older age is consistent in the research, and the pattern is the same whether labor is induced or spontaneous. It is not clear what percentage of Cesareans among people 35 and older occur because of an *actual health risk* or the *perception of risk*.

Research suggests planned elective Cesarean significantly increases the risk of severe complications in healthy pregnant people aged 35 and older compared to planned vaginal birth.

### Question: What is the evidence for electively inducing labor in people who are 35 or older?

**Answer:** The only randomized trial on induction at 39 weeks versus expectant management in pregnant people 35 or older found that the two options had similar results in terms of Cesarean rates. There were zero stillbirths in this study and it was too small to measure that risk. A large meta-analysis that included the “35/39 Trial” also found that induction at 39 weeks had no effect on Cesarean rates.

A large retrospective study from England found that induction at 40 weeks was linked to a lower risk of in-hospital perinatal death (0.08% versus 0.26%) compared to expectant management among people giving birth for the first time at age 35 and older. The absolute risk of perinatal death was still low; it would take around 562 inductions at 40 weeks to prevent 1 perinatal death.





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

**Answer:** For people who are trying to decide if they should delay pregnancy or not, they may want to consider the decline in fertility and increase in miscarriage rates with age, as well as the increased risk of problems during pregnancy and childbirth. However, the good news is that the majority of people 35 and older who make it to term will have a healthy baby.

There is still very little evidence on how fetal testing impacts induction and Cesarean rates. Intervention rates for this group may be further lowered by using a midwifery-led model of care, as a large English study showed excellent outcomes and fewer interventions for people who were 35 and older and planned a birth with the midwifery-led model of care.

### Disclaimer & Copyright:

This information does not substitute for a care provider-patient relationship and should not be relied on as personal medical advice. Any information should not be acted upon without professional input from one's own healthcare provider. © 2021. All rights reserved. Evidence Based Birth<sup>®</sup> is a registered trademark. Permission is granted to reproduce this handout in print with complete credit given to the author. Handouts may be distributed freely in print but not sold. This PDF may not be posted online.

“**Delaying pregnancy is more common today and the trend is going up.**”

1. Kortekaas, J. C., Kazemier, B. M., Keulen, J. K. J., et al. (2020). Risk of adverse pregnancy outcomes of late- and postterm pregnancies in advanced maternal age: A national cohort study. *Acta Obstet Gynecol Scand.* 2020 Aug;99(8):1022-1030.
2. Lisonkova, S., Potts, J., Muraca, G. M., et al. (2017). Maternal age and severe maternal morbidity: A population-based retrospective cohort study. *PLoS Med* 14(5): e1002307.
3. Fonseca, M. J., Santos, F., Afreixo, V., et al. (2020). Does induction of labor at term increase the risk of cesarean section in advanced maternal age? A systematic review and meta-analysis. *Eur J Obstet Gynecol Reprod Biol.* 2020 Oct;253:213-219
4. Walker, K. F., G. J. Bugg, M. Macpherson, C. McCormick, N. Grace, C. Wildsmith, L. Bradshaw, G. C. S. Smith and J. G. Thornton (2016a). "Randomized trial of labor induction in women 35 years of age or older." *N Engl J Med* 374(9): 813- 822.
5. Knight, H. E., Cromwell, D. A., Gurol-Urganci, I., et al. (2017). Perinatal mortality associated with induction of labour versus expectant management in nulliparous women aged 35 years or over: An English national cohort study. *PLoS Med* 14(11): e1002425.