LABOUR AND BIRTH IN WATER

More and more women are considering, before and during childbirth, the opportunity to do some of their labour and sometimes to give birth in water. This option is interesting for the many benefits it offers. Indeed, the benefits of labouring and giving birth in water are multiple.

On the one hand, immersion in water during labour is recognized as an appropriate and effective option to promote relaxation and facilitate pain management. As a result, it gives rise to a greater release of endorphins (the body's natural painkillers), thus facilitating the secretion of oxytocin (hormone of the uterine contractions) and a decrease of the adrenaline levels (stress hormone). Immersion in water promotes relaxation, which leads to relaxation of the muscles, a more fluid breathing and therefore a decrease in the perception of pain. The flotation effect facilitates changes of position and ensures a great

freedom of movement. It also reduces the feeling of heaviness. This helps to reduce the weight on the vena cava, thus promoting a better return of blood to the heart and thus, better irrigation and oxygenation of the uterine muscle.

Immersion also has the effect of creating a safe and soothing environment for the woman in labor. Some women report feeling less naked and thus, more comfortable before the eyes of others in this moment of great strength, but also of vulnerability. Note that the spouse can also immerse himself in the water to better support her weight (less strength is required) and massage his companion. He can also stay there to welcome the newborn.

Main benefits related to labor and delivery in water

- Facilitates relaxation (maternal energy saving)
- Provides relief from pain and muscle tension
- Decreases perception of contraction intensity
- Decrease the use of analgesics and anesthetics



- Decreases the use of oxytocic drugs (to increase contractions)
- Creates a weightlessness effect
- Facilitates position changes and allows great freedom of movement
- Reduces blood pressure (dependent on reduced stress)
- Creates a safe environment (feeling protected by and under water)
- Gives an impression of control over one's environment and the choice of positions ... which favors abandonment and letting go
- Can decrease the number and severity of perineal tears (warm water softens tissues)
- Provides great satisfaction to women the majority says they want access to the bath again for a subsequent birth experience.

What is Water Birth?

Water birth is when you have your baby in a deep pool of water. Water birth is different than laboring in water. Many people spend some time in a bath or shower to help with their labour pains but don't give birth there. During a water birth, the baby is born under water and guided up to the surface by you and/or your partner or midwife.

If you are experiencing a healthy, low risk, term (37 weeks or more) pregnancy you might want to consider a water birth. Everyone's experience of birth is different, but people typically find that giving birth in water:

- increases relaxation
- decreases pain
- increases the ability to move around and change positions
- provides an increased sense of control
- increases satisfaction with the birth experience

If you are considering a water birth you and your midwife will discuss some important factors to help you make a decision including:

- your health status
- your baby's health status
- your personal wishes for birth
- if water birth is an option where you plan to have your baby
- the possible out-of-pocket cost to rent/buy a birth pool for a home water birth

Water birth is not recommended when:

- you go into labour preterm (three weeks or more before your due date)
- you are having more than one baby (e.g., twins or triplets)
- you are planning a home birth and don't have access to safe, clean water
- you have an active infection such as herpes
- you want certain interventions (e.g., epidural) that require monitoring outside of the tub

Where Can I Have a Water Birth?

If you have a midwife, you can have a water birth at home, or in a birth centre. Your midwife will help you decide which option is best for you.



Water Birth - Home

If you decide to have a water birth at home, you will require:

- a pool that can be filled with water deep enough to cover your belly but not your neck
- a reliable supply of hot water to keep the pool water at a safe and comfortable temperature
- space around the pool so your midwife can reach you and your baby from different angles
- a floor able to support the weight of a full pool of water

Home bathtubs are generally not recommended for water birth. You can rent or buy a portable pool made especially for water birth. These should always come with a special single-use disposable liner to help protect you and your baby from any germs that might be on the pool surface. Your midwife can provide you with information about:

- what to look for in a pool,
- where to buy or rent a pool, and
- how to minimize the risk of infection and plan for a safe water birth at home.

Water Birth - Birth Centre

All birth centres have large tubs that can be used for pain management and/or water births. Birth centre staff clean the tubs according to routine infection prevention and control protocols after every use; they make sure that the tub is clean and ready for you to use when you arrive.

Water Birth Safety

How will my midwife check on my baby's and my health when I'm in the water?

Regardless of where your water birth takes place (home, hospital or birth centre), your midwife will closely monitor you and your baby to make sure there are no complications developing. The monitoring you receive in the water is the same as you would receive out of the water. For example, midwives use a water-resistant tool called a Doppler to check the baby's heart rate. Check out our birthplace options pages to find out more about what happens during labour and birth with a midwife.

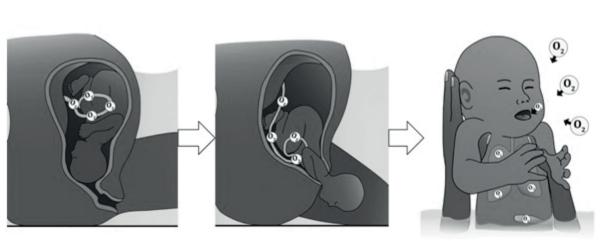
Midwives have the skills to identify and correct many complications early. Your midwife may ask you to get out of the birth pool/tub if you and/or your baby need to be monitored more closely. This could happen if:

- you have a fever
- your baby's heart rate is too high or too low
- you need to change positions to help birth your baby or your placenta
- you have heavy bleeding

Your midwife will prepare a space close to the pool/ tub suitable for labour and birth. If they have concerns about you and/or your baby, you can quickly get out of the water and move to this space so they can assess you more closely. This space is also there if decide you want to get out of the pool/tub at any time.

Find out more about the education and training midwives receive to help you have a safe birth.

What if my baby breathes in the water?



This is a common question about water birth! It is very rare that a baby breathes underwater. There are a few documented cases of this happening; nearly all of these babies recovered completely.

Newborn babies have what is called the diving reflex. The diving reflex blocks off your baby's airways when they are underwater. This prevents them from breathing water into their lungs or drowning. In the short time your baby is underwater, they are still getting oxygen from the placenta through their umbilical cord (just like when they were still inside you!). When your baby is lifted out of the water and feels the air on their face and the change in temperature, they know it is time to take their first breaths.

Pain Relief

What are my pain relief options if I choose to have a water birth?

For many people in labour, being in a pool of deep, warm water provides adequate pain relief. Other comfort measures include:

- relaxation and breathing techniques
- position changes
- massage
- sterile water injections for back pain

The Research

What does the research say about water birth safety? Water birth is nothing new; it has been practiced around the world throughout history. There is a growing body of research that supports its' safety. The most recent study was conducted in Alberta, comparing the outcomes of water births with non-water bir-

ths between 2014 and 2017. All of the research to date tells us that there appears to be no increased risk to you or your baby if you have a water birth[i].

Birthing parent outcomes

In general, people who have water births tend to:

- have less or the same amount of tearing
- have less or the same amount of blood loss
- have similar rates of infection
- use less pain medication
- feel more relaxed
- have shorter labours
- have greater satisfaction with their birth experience.

Neonatal outcomes

When you plan a water birth with a midwife there appears to be no greater health risk to your baby than with non-waterbirth. Research shows that neonatal birth outcomes for babies born in water are similar to those of babies born out of water, including:

- Apgar scores <7 at 5 minutes
- need for resuscitation
- need to go to the Neonatal Intensive Care Unit (NICU)
- infection
- neonatal death

There have been case reports that suggest water birth can cause infection and illness in babies. In fact, this is very rare. There are a few documented cases of newborns contracting an infection after a water birth, but these babies generally got sick because proper infection prevention methods were not used. To avoid this rare possibility, you should:

- have and maintain a safe source of clean water throughout your labour and birth
- use a pool that is easy to clean and disinfect
- set up and disinfect your birth pool properly
- avoid water birth if you have an active infection such as Herpes

Sources:

To learn more about the research on water birth, check out Evidence Based Birth.

https://www.ontariomidwives.ca/water-birth

[i] Research adapted from:

- Cluett ER, Burns E, Cuthbert A. Immersion in water during labour and birth. Cochrane Database of Systematic Reviews 2018, Issue 5. Art. No.: CD000111. DOI: 10.1002/14651858.CD000111.pub4.
- Bovbjerg ML, Cheyney M, Everson C. Maternal and newborn outcomes following waterbirth: The Midwives Alliance of North America statistics project, 2004-2009 cohort. J Midwifery Women's Health . 61 (2016), 11-20.
- Jacoby S, Becker G, Crawford S, Wilson RD. Water birth maternal and neonatal outcomes among midwifery clients in Alberta, Canada from 2014-2017: a retrospective study. JOGC [journal on internet] 2018 Dec 14 [cited 2019 May 01]. Available from https://www.jogc. com/article/S1701-2163(18)31036-3/fulltext.
- Nutter E, Meyer S, Shaw0Battista J, Marowitz A. Waterbirth: an integrative analysis of peer-reviewed literature. J Midwifery Women's Health. 59 (2014), 286-319.
- Taylor H, Kleine I, Bewley S, Loucaides E, Sutcliffe A. Neonatal outcomes of waterbirth: a systematic review and meta-analysis. Arch Dis Child Fetal Neonatal Ed. 0 (2016), F1-F9.
- Vanderlaan J, Hall PJ, Lewitt M. Neonatal outcomes with water birth: A systematic review and meta-analysis. Midwifery 30 (2018), 27-38.