

# Water Birth

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## ABSTRACT

A variety of birthing options is available today. Depending on the preference and the health of mother and baby, a mother may choose to deliver in the hospital, at a birthing center or at home. Beyond location, more and more women are choosing water births as the way their babies enter the world. A doctor, nurse-midwife, or midwife helps the mother through it. Midwives, birthing centers, and a growing number of obstetricians believe that reducing the stress of labor and delivery will reduce fetal complications.

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## INTRODUCTION

Water birth is the process of giving birth in water using a deep bath or birthing pool. It can take place in a hospital, a birthing center, or at home. Being in water during labor can help with reducing pain and provide a more relaxing and comfortable environment for the new mother. The water can help to support mother's weight, making it easier to move around and feel more in control during labor.

The theory behind water birth is that since the baby has already been in the amniotic fluid sac for 9 months, birthing in a similar environment is gentler for the baby and less stressful for the mother.<sup>[1]</sup>

More than 31,000 underwater births have been reported in studies worldwide, and approximately 6% of women in the United States experience the pain relieving benefit of water immersion hydrotherapy during labor and/or birth.<sup>[2]</sup>

## HISTORY OF WATER BIRTH

Water birth has a long history spanning more than 200 years in written record. The earliest record of a water birth in the Western world was in France in 1803 when a woman, after 48 h of labor, was encouraged to enter a bath by her physician.<sup>[3]</sup>

Water birth continued to gain popularity around the world and in the United States throughout the end of the 20<sup>th</sup> century into the 21<sup>st</sup> century. In 1992, the British House of Commons (1992) Health Committee issued a report on maternity services that recommended all hospitals provide women with "the option of a birth pool where this is practicable."<sup>[4]</sup>

## WHAT IS A BIRTH POOL?

A birth pool is a specially designed vessel containing water for women to immerse themselves in for pain relief during labor. Birth pools work on the same principle as a bathtub, but are distinct from them<sup>[5]</sup> due to buoyancy and freedom of movement, factors deemed to be important in labor.<sup>[6]</sup> A birth pool can either be permanently installed or portable. Getting into a pool of water for labor is often called water birth because some women choose to remain in the water for birth as well.

## BENEFITS OF WATER BIRTH

Water births have become more popular over the last several decades. The American College of Obstetricians and Gynecologists

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(ACOG) recognizes certain benefits, but they do not recommend laboring in water beyond the first stage of labor, leading up to when the cervix is fully dilated. They also do not recommend delivering in water.

## For Mothers

According to ACOG, the use of a birthing pool during the first stage of labor might:

- Help ease pain
- Shorten the duration of labor
- Decrease the need for epidurals or other spinal pain relief<sup>[7]</sup>
- Warm water in birthing pool reduces the release of catecholamines in the body, increases uterine perfusion, enhances uterine rhythmic contractions, accelerates cervical dilation, and shortens the duration of labor<sup>[8,9]</sup>
- Increase the flexibility of the birth canal and perineum, facilitate the extension of the perineum and the birth canal, and reduce the pain of uterine contractions<sup>[8,10,11]</sup>
- The effect of buoyancy lessens a mother's body weight, allowing free movement and new positioning
- Immersion in water often helps lower high blood pressure caused by anxiety
- As the laboring woman relaxes physically, she is able to relax mentally with a greater ability to focus on the birth process.
- Since the water provides a more sense of privacy, it can also reduce anxieties and fears.

## For Baby

According to the American Pregnancy Association, the following are the benefits of water birth for baby:

- It provides an environment similar to the amniotic sac
- It eases the stress of birth, thus increasing reassurance and sense of security.

## RISKS OF WATER BIRTH FOR BABY

Over the past 30 years, as water birth has grown in popularity, there has been very little research regarding the risks of water birth. Some studies in Europe have shown similar perinatal mortality rates between water births and conventional births.<sup>[12]</sup>

1. According to an article written by the *Royal College of Obstetricians and Gynecologists*, there might be a theoretical risk of water embolism, which occurs when water enters the mother's bloodstream<sup>[13]</sup>
2. Although the *British Medical Journal* is 95% confident in the safety of water births, they see a possible risk of water aspiration
3. If the baby is experiencing stress in the birth canal or if the umbilical cord becomes kinked or twisted, the baby might gasp for air with the possibility of inhaling water<sup>1</sup>.

## CONTRAINDICATIONS OF WATER BIRTH

Water birthing may not be recommended if the mother has any of the following complications or symptoms:

- Maternal blood or skin infection
- Fever of 100.4°F (38°C) or higher
- Excessive vaginal bleeding
- Difficulty tracing fetal heartbeat or need for continuous tracing
- History of shoulder dystocia
- Sedation
- Carrying multiples
- Breech presentation of baby.

## HOW TO PREPARE FOR A WATER BIRTH?

1. First check with your health-care provider. They may already be equipped for a water birth with a special tub or might know of a location in your area that is equipped for this
2. If you plan to give birth at a hospital, make sure their policies permit water birth. Increasing numbers of hospitals are welcoming parents who desire water birth
3. You can rent a birthing tub online for about \$350. Be sure to ask if the cost includes shipping both ways and what extras they offer to make your birth experience more enjoyable. Check with your insurance company to see if they will reimburse the cost of the rental
4. Contact a local birth center to see if they offer a water birth option.

## Evidence-based Practice

The use of hydrotherapy during labor and birth should be guided by evidence-based guidelines. To date, data on hydrotherapy guidelines are limited, but researchers have suggested regulation of water temperature to 36–37.5°C to prevent maternal and fetal hyperthermia and minimize the risk of premature respiration at the time of underwater birth.<sup>[14]</sup>

During immersion hydrotherapy, maternity care providers should monitor maternal temperature and vital signs and fetal well-being per individualized risk assessment. The infant's face should be brought to the surface immediately after underwater birth without stimulation on route or subsequent reimmersion to avoid the unlikely event of water inhalation.<sup>[15-18]</sup>

Attention to umbilical cord length to reduce tension during the process of bringing the infant to the surface, followed by immediate inspection of the umbilical cord and attachment site post-birth, is recommended.<sup>[19]</sup>

Thermoregulation can usually be maintained by keeping the infant's body submerged with the face above water. Other standards of care for mothers and their newborns are still the same regardless of the method used. Obstetric emergency drills should also be utilized in the facilities that provide hydrotherapy.

## CONCLUSION

Labor and birth in water can be safely offered to women with uncomplicated pregnancies and should be made available by qualified maternity care providers. Labor and birth in water may be particularly useful for women who prefer physiological childbirth and wish to avoid use of pharmacological pain relief methods.

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