American Association of Birth Centers

America's Birth Center Resource



3123 Gottschall Road - Perkiomenville, PA 18074 - Tel: 215-234-8068 - Fax: 215-234-8829 - aabc@birthcenters.org - www.birthcenters.org

Position Statement: Immersion in Water during Labor and Birth

The American Association of Birth Centers (AABC) member birth centers have read with concern the recently released ACOG/AAP Committee Opinion, "Immersion in Water during Labor and Delivery". AABC agrees that published randomized controlled trials provide evidence demonstrating the benefits of immersion in water during the first stage of labor; however, the committee opinion does not reflect currently available best evidence for the use of water during second stage and for birth. Consequently, the document has the potential to introduce inappropriate fear about the safety of water birth for families, providers, facility administrators, insurers, and others who want to make informed decisions regarding immersion in water for labor and birth.

The AABC has collected and analyzed data on the use of water for labor and water birth from our online data registry, the AABC Uniform Data Set (UDS) (now Perinatal Data Registry).

Data for these analyses were collected from a sample of 15,574 obstetrically low-risk women eligible for birth center birth at the onset of labor from January 1, 2007 to December 31, 2010. There were 3998 water births in the sample; 57.6% were in birthing tubs, 34.6% were in Jacuzzis and 7.8% were in standard bathtubs, though outcomes did not differ across tub types.

These data demonstrate that water birth, with careful selection criteria and experienced providers, does not negatively affect mothers or newborns.

- Rates of postpartum and neonatal transfer from the birth center, and neonatal procedures were low for the sample in general, and were slightly lower for births in water when compared to non-water births. This has been reported elsewhere. ¹
- This suggests that if labor is not progressing smoothly, women were unlikely to give birth in water and speaks to the importance of anticipatory and skilled water birth providers.
- Rates of newborn transfer to a hospital were lower following water birth (1.5%) than non-water birth (2.8%)
- Rates of adverse newborn outcomes (5 minute APGAR < 7, respiratory issues, presence of infection and NICU admission) were each below 1.0% in the water birth sample. The total rate of any respiratory issues was 1.6% in the babies born in water and 2.0% in those not born in water.</p>

- There were no incidences of pneumonia, sepsis or other respiratory infection following water birth and there were no reports of ruptured umbilical cords or newborns breathing water into their lungs associated with birth underwater.
- Midwives practicing in birth centers are trained, anticipatory water birth providers, so data generated by midwifery care provides the most accurate view of the safety of water birth.

The claim that water birth is dangerous for mothers and babies is not based on prospective population data with skilled birth attendants, but on negative outcome case reports^{2–8} or individual case outcomes reported in a large surveillance study from another country ⁹. These reports have been used to support the position that water birth is unsafe for newborns and have received significant press. ^{10,11} However, many case reports include one or more water birth practices that violate published safe water birth criteria ^{12–14} (low-risk mothers, appropriate tub temperatures, planned with experienced practitioners), including inappropriately high tub temperatures for the mother and/or fetus ², a long delay in bringing the newborn to the surface ⁴, bacterial infection following an birth in an unclean tub ^{3,6,15}, accidental water birth ⁵, and unplanned water birth after an unplanned pregnancy. ⁸ Nonetheless, these case reports have been used to promote the use of water for labor only, and to discourage birth in water, citing fear of respiratory issues and infection. ^{10,11,16} This is an inappropriate use of these data.

Instead, in the absence of well-designed RCT's, prospective data collected with anticipatory, skilled providers under safe water birth practices should be used in the informed consent process associated with water birth. These data do not show any difference in newborn outcomes between water birth and non-water birth. ^{12,14,17–19} In fact, as seen in the present data, there are no reports of serious newborn outcomes, newborn morbidity or mortality and any NICU admissions were typically resolved and discharged in 24 hours, but no more than 7 days. There are reports of umbilical cord rupture, but not at a rate higher than seen with non-water birth. ¹⁹

Childbearing families and others desiring accurate information about water birth deserve the very best available evidence that we can give them. To this end, AABC advocates

- 1) Using the highest level of evidence available and providing this evidence to childbearing families to inform decision-making about water birth
- 2) Including in the informed consent any gaps in available evidence regarding the safety of water birth.
- 3) Continuing to collect data on outcomes on immersion in water during second stage and for birth as used by anticipatory and skilled water birth providers.

REFERENCES

- 1. Geissbühler, V. & Eberhard, J. [Experience with water births: a prospective longitudinal study of 9 years with almost 4,000 water births]. *Gynakol. Geburtshilfliche. Rundsch.* 43, 12–8 (2003).
- 2. Rosevear, S. K., Fox, R., Marlow, N. & Stirrat, G. M. Birthing pools and the fetus. Lancet 342, 1048–9 (1993).
- 3. Rawal, J., Shah, A., Stirk, F. & Mehtar, S. Water birth and infection in babies. BMJ 309, 511 (1994).

- 4. Rosser, J. Is water birth safe? The facts behind the controversy. MIDIRS Midwifery Dig. 4–6 (1994).
- 5. Nguyen, S., Kuschel, C., Teele, R. & Spooner, C. Water birth--a near-drowning experience. Pediatrics 110, 411–3 (2002).
- 6. Soileau, S. L. *et al.* Case report: severe disseminated adenovirus infection in a neonate following water birth delivery. *J. Med. Virol.* 85, 667–9 (2013).
- 7. Kassim, Z., Sellars, M. & Greenough, A. Underwater birth and neonatal respiratory distress. BMJ 330, 1071–2 (2005).
- 8. Dressler, J. *et al.* Neonatal freshwater drowning after birth in the bathroom. *Am. J. Forensic Med. Pathol.* 32, 119–23 (2011).
- 9. Gilbert, R. E. & Tookey, P. A. Perinatal mortality and morbidity among babies delivered in water: surveillance study and postal survey. *BMJ* 319, 483–7 (1999).
- 10. Batton, D. G. et al. Underwater births. Pediatrics 115, 1413–1414 (2005).
- 11. American College of Obstetricians and gynecologists. Committee Opinon No. 594: Immersion in water during labor and delivery. *Obstet. Gynecol.* 123, 912–915 (2014).
- 12. Cluett, E. R. & Burns, E. Immersion in water in labour and birth. *Cochrane Database Syst Rev* CD000111 (2009). doi:10.1002/14651858.CD000111.pub3
- 13. Demirel, G., Celik, I. H., Erdeve, O. & Dilmen, U. Neonatal respiratory consequences from water birth in a tertiary centre. *J. Paediatr. Child Health* 49, E105–6 (2013).
- 14. Geissbühler, V. & Eberhard, J. Waterbirths: a comparative study. A prospective study on more than 2,000 waterbirths. *Fetal Diagn. Ther.* 15, 291–300 (2000).
- 15. Nagai, T. *et al.* Neonatal sudden death due to Legionella pneumonia associated with water birth in a domestic spa bath. *J. Clin. Microbiol.* 41, 2227–9 (2003).
- 16. Pinette, M. G., Wax, J. & Wilson, E. The risks of underwater birth. Am. J. Obstet. Gynecol. 190, 1211–5 (2004).
- 17. Zanetti-Dällenbach, R., Lapaire, O., Maertens, A., Holzgreve, W. & Hösli, I. Water birth, more than a trendy alternative: a prospective, observational study. *Arch. Gynecol. Obstet.* 274, 355–365 (2006).
- 18. Woodward, J. & Kelly, S. M. A pilot study for a randomised controlled trial of waterbirth versus land birth. *BJOG* 111, 537–45 (2004).
- 19. Henderson, J. *et al.* Labouring women who used a birthing pool in obsteric units in Italy: prospective observational study. *BMC Pregnancy Childbirth* 14, 17 (2014).

Approved by AABC Board of Directors: 4.1.2014