



RCM Clinical Briefing: Waterbirth – COVID-19

Topic

This briefing explores the current evidence about the safety of waterbirth for women without symptoms of COVID-19 during the current pandemic

Potential impact of COVID-19 in this topic area

The RCM and RCOG joint guidance on care for women with COVID-19 identifies that:

‘The use of birthing pools in hospital should be avoided in suspected or confirmed cases, given the potential risk of infection via faeces’ ([section 4.5.2, p28](#)). Only one study has cultured COVID-19 from a stool specimen and there is no report of faecal-oral transmission to date (WHO 2020).

The RCM/RCOG pregnancy guidance does not provide specific guidance on the provision of waterbirth for women **without** suspected COVID-19.

An RCM survey undertaken with Heads of Midwifery across the UK in late March 2020, identified that 74% were continuing to provide waterbirth as normal for asymptomatic women, but that some (26%) maternity services had made the difficult decision to temporarily stop all waterbirths (RCM, 2020). This has been based on a local decision to approach the care of all women as if they are positive for COVID-19 and so the use of water is discontinued in line with the RCM/RCOG guidance that women with suspected or confirmed COVID-19 should not take place in water.

NHS England guidance on reorganisation of services during the pandemic states that birthing pools should be made available in hospital settings to ensure women can receive the same style of midwifery-led care despite the centralisation (NHSE, 2020).

Non-pharmacological methods of pain relief, including the use of water, may become more important to women, if the availability of regional anaesthesia is limited during the pandemic.

Currently in the UK there is no fast track test available to identify the COVID-19 status of all women on admission in labour or for the midwives who are working clinically. This means that asymptomatic women may present to services unaware that they are carrying the virus, with a risk of transmission between staff, women, and neonates as a result. Conversely, there is potential for a midwife without symptoms to transmit the virus to a woman while caring for her.

The briefing below aims to provide maternity service leads and midwives with the current available information in relation to this topic, so informed clinical decisions and local guidelines can be developed.

Current key guidance for this topic – clinical care and advice for women

Safety of waterbirth

The current evidence base for the safety of water birth, in pre-pandemic times, is well established:

A systematic review of 15 randomised controlled trials including 3663 women, found no increased risk of infection for neonates following waterbirth (Cluett et al, 2018).

The RCM Blue top guidance, no 1 ([November 2018](#)) identifies the use of water for low risk healthy women in labour is not associated with any adverse risks for women and their babies

A significant number of retrospective and prospective observational studies have identified maternal benefits of labouring and giving birth in water, including shorter labours, less pain relief, fewer episiotomies and lower blood loss; with no increased risks of neonatal infection (Otigbah et al, 2000; Geissbuehler et al, 2004; Zanetti-Dallenbach et al, 2006; Cheyney et al, 2016; Taylor et al, 2016; Vanderlaan et al, 2018).

Neonatal infection following waterbirth

A meta- analysis of 11 observational studies on newborn infection rates in pool versus land birth, found no difference in neonatal infection rates between water and land birth in ten studies (Taylor et al, 2016), while one study of 3617 found more infection in neonates born on land (Geissbuehler et al, 2004). One study found that infants born in water were less likely to be colonised with GBS than those born on land (Zanetti-Dallenbach, 2007).

Advice and guidance on infection control and cleaning procedures for birth pools, at home and in hospitals, have been developed and revised over several decades, in light of any emerging concerns and case studies and should be rigorous enough to prevent risks of cross contamination between use ([Public Health England, 2014](#)).

The US Center for Disease Control states, “There is no evidence that COVID-19 can be spread to humans through the use of pools and hot tubs. Proper operation, maintenance, and disinfection...of pools and hot tubs should remove or inactivate the virus that causes COVID-19” (“Municipal Water and COVID-19.” Center for Disease Control and Prevention, Centers for Disease Control and Prevention, [10 Mar 2020](#), (accessed 22 April 2020)

Good hygiene with proper cleaning, as is always the case with the use of birthing pools, will increase the safety of water immersion. For inflatable birthing pool is also essential to use a new disposable liner for each use.

Safety of midwives caring for women in labour in the pool

Public health England has produced guidance on the use of PPE (Personal Protective Equipment) for health professionals providing care with possible or suspected COVID-19 during labour and birth, which has been adopted across the UK and can be viewed here: [In hospitals](#) and [for homebirth](#):

The recommended PPE includes single use disposable gloves, a plastic apron, a gown, a fluid resistant surgical mask and eye/face protection. It is recommended that this PPE would be used for a water or land labour and birth.

Concerns have been raised by some health professionals that the gloves used during a waterbirth are not fully waterproof and that the warm, moist atmosphere of a pool room may increase the risk of transmission through droplets. Much remains unknown about the virus and transmission to healthcare professionals.

The evidence about type of birth in COVID-19 positive women has so far come from China, where all births were by Caesarean section and there were no labours or births in water.

COVID-19 infection has been identified in faeces of symptomatic patients; intestinal infection was more likely to be found in the later rather than earlier stages of the infection (Zhang et al, 2020).

The RCM recommends the following:

- Practice should be guided by all emerging evidence through the pandemic.
- The current evidence does not suggest that there should be a blanket cessation on the use of water in labour or waterbirth for all women.
- Midwives should be familiar with the up to date UK wide infection prevention and control guidance, and have access to the appropriate [PPE](#) at all times when providing care
- Midwives already make professional judgements about their own safety and the safety of the women they care for and they should continue to use the same decision-making process flexibly. 'The Health & Safety at Work Act' (H&SAWA) 1974, puts a legal duty on employers to conduct risk assessments based on both the environment in which a worker operates and the tasks they undertake. They also have a duty to tell workers about the risks and the preventative measures they are taking. Whatever the circumstances, though, the employer has a responsibility to assess the risks and mitigate them.
- Individualised risk assessment about the appropriateness of providing labour or birth care in the pool room should be undertaken for each woman by the midwifery team providing care, based on the woman's individual presentation and the pool environment within the labour setting. For example, if a pool room is very small and does not allow for social distancing by the midwife from the woman during labour, or if there is no facility to ensure adequate ventilation of the room, the midwife may make a clinical judgement in relation to the safety of proceeding.
- If the pool becomes contaminated with faecal matter during the labour or birth, the midwife should assess the risk of contamination presented. If the faecal matter cannot be removed using normal methods such as a sieve, it may be necessary for the midwife to ask the woman to leave the pool (Jinyang et al 2020).
- Follow local guidance on pool birth where appropriate, e.g. advise the woman before she enters the pool the circumstances in which she will be asked to leave the pool and ensure that she understands. During the pandemic this will include the normal reasons for asking the woman to leave the pool (such as signs of fetal distress) and the presence of faeces in the pool.
- Fast track testing should be implemented as soon as possible for all women in early labour, to identify those who have the virus but are currently asymptomatic, to guide care practices.

The following common sense approaches are being used in a number of maternity units across the UK to reduce the risk of transmission of the virus from asymptomatic women to midwives, from midwives to women and from women to their babies, during labour and birth in pools:

- Screen all women in early labour for symptoms of COVID-19 and for contact with someone with symptoms; ask about symptoms including high temperature and new and persistent cough; take the woman's temperature, respiration rate and pulse on admission.
- Where women describe symptoms or contact in the last days or have a current pyrexia or cough, or have current diarrhoea, they should be advised that the recommendation is that they do not use water during the labour and birth, due to the potential small risk of infection to their baby and their care team.
- Normal risk assessment of women for labour and birth in the pool should be undertaken.
- Ensure that the pool room is well ventilated throughout to reduce air humidity. This may include having the door open, with curtains or a screen across the door and having the air conditioning set to dehumidification.
- The midwife should wear PPE and adhere to appropriate social distancing for as much of the care as possible – unless needing to provide hands on care.
- Long gauntlet gloves should be worn by the midwife when providing hands on care in the water.

- The midwife wearing PPE is likely to become very warm in a pool room and should have access to fluids to drink and regular breaks (NHS Employers, 2020).
- The woman may be asked to stand up in order to have the fetal heart rate auscultated during the first stage of labour, using a handheld monitoring device, or, alternatively, the woman may be handed the transducer to hold to her abdomen.
- It may be beneficial to have a second member of the team in the room to write notes to enable the midwife to maintain infection control measures, particularly during the second stage of labour.
- Reduce procedures that involve the midwife placing her hands and arms into the pool – for example, the use of mirrors and digital examination.
- It may be useful to advise a woman and her partner in early labour on how to lift their baby to the water's surface after birth, with the midwife's verbal instruction. The midwife is close at hand to physically assist should any difficulties arise at the time of birth.
- The woman will be asked to leave the pool after the birth so that third stage can take place on land, enabling the midwife to assist with the birthing of the placenta if necessary, maintaining infection control measures

Current Evidence base

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NHS Employers guidance on fatigue: <https://www.nhsemployers.org/covid19/health-safety-and-wellbeing/fatigue>

NHS England, Clinical guide for the temporary reorganisation of intrapartum maternity care during the coronavirus pandemic. <https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/04/C0241-specialty-guide-intrapartum-maternity-care-9-april-2020.pdf>

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Public Health England, 2020; In hospital

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879107/T1_poster_Recommended_PPE_for_healthcare_workers_by_secondary_care_clinical_context.pdf

And for homebirth:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878750/T2_poster_Recommended_PPE_for_primary_outpatient_community_and_social_care_by_setting.pdf

RCM and RCOG joint guidance on Coronavirus infection in pregnancy, version 8; section 4.5.2, p28,

<https://www.rcm.org.uk/media/3892/2020-04-17-coronavirus-covid-19-infection-in-pregnancy.pdf>

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