Legionnaires' disease in baby is linked to heated birthing pool

Public Health England and NHS warn of hazard as newborn needs intensive care after birth in pool infected with bacteria

A couple meet their newborn. Health authorities are advising against use of home birthing pools heated up well in advance of a birth. Photograph: Getty Images

Expectant mothers have been warned not to use certain types of heated birthing pools at home after a baby born in one acquired legionnaires' disease.

Public Health England and NHS England issued the warning for pools which have built-in heaters and recirculation pumps and can be filled with water two weeks in advance of the birth.

The alert comes after a case of legionnaires' lung disease was identified in a baby born in a home birth in one of the pools. Water samples confirmed the presence of legionella.
bacteria.

The child is now in intensive care in hospital. It has been the first reported case of legionnaires' disease linked to a birthing pool in England, PHE said.

Experts are working to establish whether or not the bacteria from the tested home pool is the same strain as that which infected the baby.

Prof Nick Phin, head of legionnaires' disease at PHE, said: "This is an extremely unusual situation, which we are taking very seriously."

"We advise that heated birthing pools, filled in advance of labour and where the temperature is then maintained by use of a heater and pump, are not used in the home setting while we investigate further and until definitive advice on disinfection and safety is available."

NHS England issued a patient safety alert to notify the healthcare system, and midwives in particular, of the possible risk associated with the use of the heated birthing pools at home.

The alert recommends that heated birthing pools are not used for labour or birth. A full risk assessment is being carried out in the meantime.

Heated pools from the supplier involved in the incident had been recalled, PHE said. About 10 firms supply the specific pools and each firm keeps between two and 14 pools. The pools are typically delivered about two weeks before delivery date and filled from the domestic hot water supply. The temperature is maintained by a pump and heater until labour and delivery, with the companies recommending various disinfection regimes.

A spokeswoman for PHE declined to give any further information about the sick baby, including when and where the child was born.

The NHS patient safety alert described the child as "severely ill". The company that supplied the pool has not been named.

PHE said that most birthing pools used at home were filled from domestic hot water systems at the time of labour and these did not pose the same risk and were not included in the alert.

Phin said: "PHE and relevant local authorities are investigating the infection control measures required for this type of birthing pool. Local authorities will be working with the small number of companies who supply these heated birthing pools for use at
Legionnaires' disease is extremely rare in children, with only one case in youngsters aged up to nine in England having been identified between 1990 and 2011.

Although there were two cases reported in Italy and Japan several years ago, this is the first reported case of legionnaires' disease linked to a birthing pool in England.

Patients become infected with the bacteria through inhalation of contaminated water droplets. The infection does not spread from person to person.

The disease is a severe form of pneumonia which affects about 350 to 400 people each year in England and Wales. The majority of cases involve older patients.

NHS information about the condition says that most people make a full recovery but "in some cases it can lead to further, life-threatening, problems".

Midwives and all local authorities in the UK are being contacted to see if they use the specific pools provided by any of the companies supplying them. A PHE spokeswoman said that if the pools were out for use by the public, councils and midwives should take steps to retrieve them.