



# Cooling to protect babies at risk of brain damage

## Parent information

### What babies are at risk of brain damage?

Babies are at risk of brain damage if there has been a significant lack of oxygen and blood supply to the brain around the time of birth. The brain is the most vulnerable organ of the body and can be injured by a lack of oxygen. This injury may be so severe that some babies do not survive. Up to 40% of babies who do survive will develop long-term disabilities including cerebral palsy, mental retardation and epilepsy.

### How might cooling help?

Recent research has found that cooling protects the brain of babies like yours who show signs of a serious lack of oxygen soon after birth. Cooling these babies improves their chances of survival and decreases the possibility of major disability.

### What is cooling?

Cooling is a treatment that lowers the baby's body temperature from the normal 37°C to 33–34°C. It is recommended that cooling start within 6 hours of birth and continues for up to 72 hours.

### What happens to your baby during cooling?

Your baby's temperature is measured continuously during cooling and rewarming by a small probe placed in the baby's bottom.

The temperature is lowered in the beginning by caring for your baby at room temperature. After that, refrigerated gel packs ('cold packs' similar to those used following a sprain or sporting injury)



may be placed under the baby's shoulder or back. Alternatively, your baby may be cooled with the help of a special cooling wrap or blanket.

Your baby will be cooled for 72 hours, then the cooling will be stopped and your baby's temperature will slowly return to normal.

### Are there any side effects of cooling?

There may be side effects from cooling, but these are usually mild. All cooled babies look and feel cold and have a lower heart rate. Recent studies showed slightly increased risk of bleeding and of needing blood pressure support. These studies recommended that the benefit of cooling outweighs the risk of these side effects.

Your baby will be monitored closely for the presence of any side effects and treatment will be adjusted accordingly.

### Further information

If you require any further information about this treatment the consultant/doctor looking after your baby will be available to discuss this with you.

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