# Plain language summary

## The SABRE trial of hypertonic saline in acute bronchiolitis

Acute bronchiolitis is a common, distressing illness affecting children. A virus infects the lungs, and then the airways become blocked, leading to difficulties with breathing. It is the most common reason why children are admitted to hospital, with 1–3% of all children admitted to hospital during their first winter, creating enormous strains on NHS services. The majority of those admitted with the condition are under six months of age and the associated stress for parents is considerable. After forty years of research the best treatment we have is supportive care and oxygen.

Recent research suggests that salt water, sprayed as a mist so that the children can breathe it in ('nebulised 3% hypertonic saline') might help children with acute bronchiolitis. Scientists think that the salt water changes the mucus which blocks the airways so that it can be cleared more easily. Three small research studies all suggested that a child's time in hospital could be reduced by a quarter by using this treatment. If this was true, it would be good for children, their families and the children's wards trying to cope with the large numbers admitted with bronchiolitis every year.

To decide whether this treatment should be used throughout the NHS, we need to run a randomised controlled trial of hypertonic saline in a large number of children. The trial will tell us if adding saline to usual care reduces distress in both children and parents, as well as whether it reduces the length of time they stay in hospital. We will then know if the treatment is the best thing for children with bronchiolitis and whether it provides the NHS with good value for money.

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