

## **Newborn Bloodspot Screening Programme: *The Sweat Test***

**For parents who have been informed that their child will have a sweat test to determine if the child has cystic fibrosis or not.**

### **What is the sweat test?**

When cystic fibrosis (CF) is suspected, babies have a 'sweat test'. Babies with CF, and indeed all people with CF irrespective of age, have a large amount of salt in their sweat. Measuring the amount of salt in sweat will determine whether or not your baby has CF.

One in ten small babies will not produce enough sweat to perform the test. If this happens the test will have to be repeated on another day.

### **What happens during a sweat test?**

The sweat test measures the amount of chloride (salt) in the sweat. The test is painless and there are no needles involved in this test.

In the first part, a medication that causes the skin to sweat is put on a small area of your baby's arm or leg. An electrode is then put over that spot. A weak electrical current is applied to the area to cause sweating. The person may feel a slight tingling in the area, or a feeling of warmth. This part of the test lasts about five minutes.

The second part of the test consists of collecting the sweat on a piece of filter paper, gauze or in a plastic coil. This takes about 30 minutes. The collected sweat is sent to a laboratory to measure how much chloride is in the sweat.

Chloride values from sweat tests do not change from positive to negative or negative to positive as a person grows older. Sweat test values also do not vary when a person has a cold or other brief illness. Sweat tests are used to diagnose older children and adults for CF as well as babies.

### **What do I need to do to get ready for the sweat test?**

You do not need to do anything special except that you should not apply creams or lotions to your baby's skin 24 hours before the test. All regular medications may be continued as these will have no effect on the test results. Babies should be fed their usual amount and at their usual times.

### **When will I know the results of the sweat test?**

Sweat test results will be available on the day the test is done. In a small number of cases, the amount of sweat collected is not enough for an accurate result. When this happens the test will need to be repeated. This is called a 'quantity not sufficient,' or QNS, test result.

### **Can the test results be uncertain or borderline?**

In a small number of cases, the sweat chloride test results fall into a 'borderline' category. This means that there is an uncertainty as to whether the baby has CF or not. When this happens, the sweat test is usually repeated and other tests may be undertaken.

### **What happens if the sweat test is positive for CF?**

If the sweat test supports the diagnosis of CF, the specialist doctor will discuss with you the treatments available for your baby. You will meet a team of health professionals who take care of children with CF in your area. This team includes the specialist doctor, a specialist nurse, a dietician, a physiotherapist and other health care professionals. The CF team will be able to give you support and provide detailed information about your baby's diagnosis. They will carefully discuss what treatments your baby will need and what you can do to help keep your child well.

### **What if the sweat test is normal?**

If the sweat test is normal, then your baby does not have CF, but carries an alteration in the CF gene. The CF specialist will explain the results to you.

### **How do you feel?**

If you have been told your baby has CF, you may feel a sense of worry, shock or disbelief. These reactions are quite normal and experienced by many parents in a similar situation. You will be able to discuss your concerns with the doctor or the nurse in the CF centre.

### **For Further Information**

Talk to the doctor and the CF nurse in the CF Centre or contact your local GP.

You can also log on to [www.newbornscreening.ie](http://www.newbornscreening.ie)

**or contact:**

Cystic Fibrosis Association of Ireland (CFAI)  
24 Lower Rathmines Rd,  
Dublin 6.  
Tel: 01 4962433/LoCall: 1890 311211  
Email: [info@cfireland.ie](mailto:info@cfireland.ie)  
Web: [www.cfireland.ie](http://www.cfireland.ie)

The CFAI provides an information pack and other supports if your baby is diagnosed with CF.