

Sweat Testing at Le Bonheur Children's Hospital

Please arrive 30 minutes prior to your scheduled appointment. At the Patient Registration Center desk on the first floor main lobby of the hospital, you will receive directions to the Special Procedures waiting room. If you need to cancel or reschedule this test, please call the Le Bonheur Outpatient Centralized Scheduling Department at 901-287-6073 or 800-282-0502, at least 24 hours prior to your scheduled appointment. Le Bonheur Children's Hospital's laboratory is accredited by the Cystic Fibrosis Foundation and the College of American Pathologists. Strict guidelines are followed to ensure the accuracy of our results.

What is a sweat test?

The sweat test has been the "gold standard" for diagnosing cystic fibrosis (CF) for more than 40 years. A sweat test is done when a patient has symptoms of cystic fibrosis, a family history of CF or when a newborn has a positive screening test. The amount of chloride in the sweat is measured.

What happens during a sweat test?

During the sweat test, a small amount of sweat is collected, usually from the forearms. There are no needles involved in the procedure. Parents are encouraged to stay with the child. During the first part of the test, a colorless, odorless chemical, pilocarpine, known to cause sweating, is applied to a small area on the arm or leg. An electrode is then attached to the arm or leg, allowing the technologist to apply a weak electrical current to the area to stimulate sweating. The patient may feel a tingling sensation in the area, or feeling of warmth. This part of the procedure lasts approximately five minutes. The second part of the test consists of cleaning the stimulated area and collecting the sweat on a piece of filter paper over a period of thirty minutes. During this time your child will be allowed to move freely so you may want to bring some toys or something to keep the child occupied for the thirty minutes. The entire collection procedure takes approximately one hour so please allow approximately two hours from registration to completion of the test.

What does the sweat test reveal?

Your doctor has asked that this test be performed to rule out Cystic Fibrosis. Cystic Fibrosis is an inherited disorder that affects the lungs, pancreas, intestines and sweat glands. Children and adults with CF have an increased amount of chloride in their sweat. It is possible to get results that are borderline/inconclusive and the test may need to be repeated. The results of the test will be discussed with your family by your physician.

What happens if the sweat test is borderline in value?

Most individuals with borderline results do not have CF. However, it is generally recommended that borderline studies be repeated. If a pattern of persistent borderline values is seen, it is generally recommended that your physician consult the Cystic Fibrosis Care Center medical director to assess whether additional testing is needed.

Is there any preparation for the sweat test?

There are neither restrictions on activity, diet, nor any special preparations before the test. However, one should not apply creams or lotions to the skin for 24 hours prior to the test. All regular medications may be continued and will have no effect on the test results. Please maintain the child's normal fluids.