

Sweat Chloride Testing

Children's - St. Paul

Outpatient Lab
Garden View Medical Building, 3rd floor
347 North Smith Avenue
St. Paul, MN 55102
Monday-Friday, 9 a.m. to 1 p.m.
Phone: (651) 220-6565
Fax: (651) 268-2136

Children's - Minneapolis

Main lab
lower level of hospital
2525 Chicago Avenue South
Minneapolis, MN 5404
Monday-Friday, 10 a.m. to 1 p.m.
Phone: (612) 813-6280
Fax: (612) 813-6951

Your child's physician has requested a sweat chloride test at either Children's - Minneapolis or the Children's - St. Paul outpatient lab. Please bring your doctor's orders when you come for the test, or ask your doctor to fax the order to Children's. This will help prevent delays or missed orders.

Patient registration

At Children's - Minneapolis, registration is on 2nd floor near the main entrance. The lab is located in the lower level of the hospital. Please call the lab, (612) 813-6280, to schedule an appointment.

At Children's - St. Paul, registration and lab are located on the 3rd floor of the Garden View Medical Building. Tests are done Monday - Friday, from 9 a.m. to 1 p.m. It is helpful to call the lab and arrange a time.

Please note that sweat testing is not performed on weekends or holidays.

You may receive a phone call from Admitting before the test asking for pre-registration information.

Once at Children's, you must first go to registration (also called "admitting"). There you will be asked to verify information about your child, including:

- your child's name
- the name of your child's physician and ordering physician, if they are different
- the name of your insurance company and policy number (please bring your insurance card with you)

Parking

Ramp parking is available on both campuses. Rates are posted at the ramp entrances.

Sweat testing: an overview

(information from <http://www.cff.org/>)

The sweat test has been the “gold standard” for diagnosing cystic fibrosis (CF) for more than 50 years. It is a simple, diagnostic procedure to determine the amount of chloride (salt) in the sweat. When it is performed by trained technicians, and evaluated by an experienced, reliable laboratory, the sweat test is still the best test to diagnose CF. It is painless, relatively inexpensive, and gives definitive answers.

What happens during the test?

In the first part of the test, a colorless, odorless chemical gel disk known to cause sweating is applied to two small areas on the arm or leg. An electrode is then attached to stimulate a weak electrical current to the area. Your child may feel a tingling sensation in the area, or a feeling of warmth. This part of the procedure lasts about five minutes.

The second part of the test consists of cleaning the stimulated area and collecting the sweat in a plastic coil “watch.” Thirty minutes later, the collected sweat is sent to the laboratory for analysis. The entire procedure takes about one hour.

Is there risk associated with the sweat test?

Though not often, minor skin burns or a reaction to the chemical gel disk may occur. Most children will show redness under the electrodes after the stimulation. Occasionally a bump or blister may form and should disappear in 2-3 hours. Very rarely (1 in 50,000) a serious burn will occur.

What does the sweat test reveal?

Your child’s doctor has asked that this test be done to rule out the presence of CF. Children and young adults with CF have an increased amount of chloride (salt) in their sweat. In individuals who have CF, the sweat chloride test will be abnormal shortly after birth. Once a test result is positive, it is always positive. Sweat test values do not change from positive to negative as a person grows older. Test values also do not vary when individuals have colds or other temporary illnesses.

Is there any preparation for the test?

There are no restrictions on activity or diet or special preparations before the test. However, you should not apply creams or lotions to the skin 24 hours before the test. All regular medications may be continued and will have no effect on the test results. (Children’s recommends that your child be well hydrated and free of acute illness.)

When are test results made available?

The result of the sweat test is usually available after 3 p.m. on the day the test is performed. You may discuss the results with your child’s primary care provider. If you are meeting with a genetic counselor the day of your visit, they will discuss the results with you. Please do not call Children’s Lab directly for results. In a small number of cases, the amount of sweat gathered is not enough to give an accurate result (for instance, with some infants), and the test may need to be repeated. (The results are available through your doctor. Please do not call Children’s lab.)

Is the sweat test reliable?

Yes. In a small number of cases, the test results fall into “borderline” range between normal and abnormal. In these situations, repeat sweat tests, as well as other diagnostic procedures, may be needed. These will only be done after consultation with a physician.

Genetic counseling

If your child’s sweat test is performed as a follow-up to a Minnesota Department of Health Newborn Screening test, you may meet with a genetics professional following your sweat test.