Sweat test

What is a sweat test?
Your doctor has asked us to give your child a sweat test. In this test, we collect a small amount of sweat from the skin and test it to see if your child has a condition called cystic fibrosis. Cystic fibrosis (CF) is a genetic disease that affects the lungs, liver, pancreas, digestive and reproductive systems. Children with CF have repeated lung infections, failure to grow and digestive problems. The sweat test measures the amount of chloride in sweat and kids with CF have very high levels and can lose excessive amounts of salt in their sweat making them prone to severe salt and water loss as well.

How is it done?
No special preparation is needed before the test and your child can eat, drink and have any medications they normally need. There are no needles in this procedure. The test is usually performed on the child’s arm or leg. Two electrodes will be applied to an area of clean skin, one of which contains a disc with pilocarpine gel that helps stimulate sweat production. A very small gentle electrical current is also applied to your child’s skin to help the pilocarpine penetrate through to the tiny sweat glands under the skin. The electrodes are then removed and a sweat collecting disc is attached to the area that was stimulated and sweat is collected over 30 minutes. After sufficient sweat is collected, it is sent to the lab and tested for its salt content. In most cases a high salt content indicates CF. A sweat chloride level of more than 60 millimoles per litre is considered abnormal.

How long does it take?
The sweat test usually takes about one hour. However there are times when two tests are needed so two hours should be allowed for this appointment. To get this result, please contact your doctor, not the laboratory.

Does it hurt? Is it safe?
Sweat testing is a very safe procedure and thousands of children have been tested in many countries without any problems. Usually only tingling or minor discomfort is experienced. Because the child’s skin heats up over a small area during the test, the skin will be red for a little while. Rarely minor skin inflammation occurs. Young babies less than six weeks of age are most sensitive to this. In extremely rare circumstances, the heating of the skin has been known to cause a very small superficial burn.

On rare occasions, we cannot collect enough sweat and the test will need to be repeated.

Remember:
- Sweat testing is a safe procedure.
- Rarely, the test may have to be repeated if not enough sweat is collected.
- Sweat testing should only be performed at a recognised centre for sweat testing.