

Costs for all testing:

All tests are free if requirements are met (I.e.. Test is ordered by a physician and/or testing is indicated.) If indication is not present, the test is not covered by provincial healthcare plans and must be paid out of pocket or through other methods.

Common Indications for testing:

- 1. Symptoms of CF
- 2. Family history of CF
- 3. Partner of someone with a history of CF and wanting to start a family

To inquire about getting a sweat test or genetic testing done, please contact the CF clinic nearest to you: Our Programs (cysticfibrosis.ca)

Sweat test:

The sweat test is for diagnosing cystic fibrosis. The test detects the abnormal function of the cystic fibrosis protein by measuring the amount of chloride (salt) present in the sweat. Sweat tests are generally ordered after newborn screening. If a protein in the baby's heel prick blood serum called trypsinogen suggests they may have cystic fibrosis, a sweat chloride test is performed next to confirm or rule out cystic fibrosis.

A sweat test may also be ordered for someone if they are showing signs that they may have cystic fibrosis. Specifically for individuals who were born before newborn screening became routine in Canada or if they came from another country where newborn screening for cystic fibrosis is not common.

Generally, a sweat test is not done on someone who suspects they may be a carrier (possessing a CF gene mutation that is passed down but doesn't have cystic fibrosis), since a carrier of a CF mutation would have sweat chloride results in the normal range, genetic testing would be the most appropriate diagnosis method. This information is gathered from the CF Canada website, Newly Diagnosed About cystic fibrosis

Province	Procedure
Newfoundland and Labrador	 Request must be made by the CF team or a physician. Test is collected locally and processed at Janeway Children's Hospital
Ontario	 Hospital Referral from a physician Sweat tests can be performed at the CF clinics in Ottawa, Kingston, Toronto, Hamilton, Kitchener, London and Sudbury
Alberta	 Referral made by a physician Patients captured in NBS are booked and community physicians can book tests directly Sweat tests can be performed at Alberta Children's Hospital, University of Alberta Hospital, Stollery Children's Hospital.
Manitoba	 Referral for testing is required by a physician Sweat tests can be performed at the respiratory clinic at the Children's Hospital of Winnipeg (children and adults)

Quebec	- Referral for testing is required by a physician
440000	 Hospitals with CF clinics offer sweat tests, but the official
	referral centres include:
	- Centre Hospitalier Universitaire de Québec – Université de
	Laval (Ville de Québec)
	- Centre Hospitalier Universitaire de Sherbrooke
	- Centre Hospitalier Universitaire de Sainte-Justine (CHU Sainte-
	Justine)
	- Centre Universitaire de Santé de McGill (CUSM)
Nova Scotia	 Referral for testing is required by a physician
	- Sweat tests can be done at IWK Health Centre
New Brunswick	 Referral required by a physician
	- Sweat tests are done as outpatient tests and performed at
	your closest hospital
Saskatchewan	 Referral required by a physician
	 Sweat tests are performed once a week at the labs in Regina
	General Hospital and Jim Patterson Children's Hospital
British Columbia	 Indication for testing is required and must be ordered by a
	physician
	- Victoria (Royal Jubilee, Victoria General): Requisition is sent to
	either Nanaimo General Hospital or Victoria General Hospital.
	- Vancouver: Sweat tests are done at BC Children's Hospital
	- BC Children's Hospital has a list of hospitals that do sweat tests
	for outreach clinics
Yukon	- Indication for testing is required and must be ordered by a
	physician
	- Victoria (Royal Jubilee, Victoria General): Requisition is sent to
	either Nanaimo General Hospital or Victoria General Hospital.
	- Vancouver: Sweat tests are done at BC Children's Hospital
	- BC Children's Hospital has a list of hospitals that do sweat tests
	for outreach clinics
Northwest	- Referral made by a physician
Territories	 Patients captured in NBS are booked and community
	physicians can book tests directly
	 physicians can book tests directly Sweat tests can be performed at Alberta Children's Hospital,

Genetic testing:

Genetic testing can be used to confirm a CF diagnosis. A CF diagnosis includes a positive sweat test result and two identified CFTR mutations. Genetic testing includes testing for a panel of common CF mutations. Inconclusive tests can occur when an individual has a rare mutation, in which case further testing would be required. If you have a family history of CF and know the specific mutations, it is best to communicate that when seeking a test.

You can also get a genetic test done to confirm carrier status and for family planning purposes. It is important to note that carriers do not have CF and will have a sweat test measurement in the normal range.

This information is gathered from the CF Canada website, Newly Diagnosed About cystic fibrosis

LifeLabs: private testing in Ontario, Saskatchewan and BC

Common Indications to obtain genetic testing (one of):

- 1. Symptoms of CF
- 1. Family history of CF
- 2. Partner of someone with a family history of CF and wanting to start a family

Province	Procedure
Newfoundland and Labrador	 If testing is indicated, the patient is referred to genetics for further testing. Tests are done at Janeway Hospital
Ontario	 Indications for testing are required. Requisition to SickKids for testing. genome-diagnostics-billing-requisition.pdf (sickkids.ca)
Alberta	 Stollery: Patients are referred to the Genetic Counselling Clinic through Alberta Health Services. This is free and there must be an indication for testing. Alberta Children's Hospital: referral is required to receive genetic testing University of Alberta Hospital: referral required to receive genetic testing. Test is done at the lab at the University of Alberta Eligibility: Cystic Fibrosis Testing: Information for Ordering Providers (albertahealthservices.ca)
Manitoba	 Referral for testing is required by a respirologist or geneticist Must have an indication for testing, symptoms, family history etc. Tests are done at any local lab and processed at Winnipeg Health Sciences Centre.
Quebec	 Referral for testing is required by a physician Blood samples are obtained locally and sent to the McGill University Health Centre (MUHC) / Centre Université de Santé McGill (CUSM) for processing Individuals must have an indication for testing (symptoms, family history etc.)

	- If no indication is present, they can request by their family doctor to
	public health care.
	 * Quebec patients at Ottawa General have their sample sent to
	McGill University Hospital
Nova Scotia	 There must be an indication for testing, typically done on individuals
	with CF and their parents
	 Carrier testing is not completed on minors
New Brunswick	 Referral provided by physician
	 Tests are sent to be processed at IWK Health Centre
Saskatchewan	 Free if you have an indication for testing
	- Requisition must be made by a specialist or referred to a specialist by
	your family doctor.
	 Tests can be done at any lab and sent to Edmonton for processing.
British Columbia	- Must have an indication for testing (Symptoms, family history etc.)
	- Covered if requirements are met
	- A lab requisition is sent to the patient's local hospital where the test
	is done and then sent to BC Children's hospital for testing
Yukon	- Must have an indication for testing (Symptoms, family history etc.)
	 Covered if requirements are met
	 A lab requisition is sent to the patient's local hospital where the test
	is done and then sent to BC Children's hospital for testing
Northwest Territory	- Stollery: Patients are referred to the Genetic Counselling Clinic
	through Alberta Health Services. This is free and there must be an
	indication for testing.
	- Alberta Children's Hospital: referral is required to receive genetic
	testing
	 University of Alberta Hospital: referral required to receive genetic
	testing. Test is done at the lab at the University of Alberta
	 Eligibility: <u>Cystic Fibrosis Testing</u>: Information for Ordering Providers
	(albertahealthservices.ca)