

# Bacteria tests in Arctic hamlet may unlock stomach cancer mystery

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CBC News

Hundreds of adults living in the small Arctic hamlet of Aklavik, N.W.T., joined a research study this week by getting tested for a stomach bacterium that may be behind the community's high incidence of stomach cancer.

Nearly half of the adult population in Aklavik, a hamlet of about 600 people, eagerly lined up at the community health centre throughout the week to volunteer for the tests.

Inside, a team of 25 doctors, nurses and researchers subjected volunteers to breath tests and extracted their stomach tissue with an endoscope.

"I was thinking, 'Gee, I don't know how to handle it, I don't know what's going to happen.' But then I've seen people going in and they made me brave," volunteer Annie Buckle told CBC News.

"I feel good now that I went through with it."

The samples gathered in Aklavik will be shipped to an Edmonton laboratory to be tested for the *Helicobacter pylori* (H. pylori) bacterium, a common stomach bacterium that can create ulcers and has been linked to stomach cancer.

Buckle said her own mother, Catherine Semple, died recently of stomach cancer. It makes her one of many residents in the hamlet whose family members have been affected.

The exact rate of stomach cancer occurrences in Aklavik is not known, but one family said it lost five members to the disease. Overall, stomach cancer rates are about twice as high in the Northwest Territories as they are in the rest of Canada.

The research team, made up of scientists and doctors from Edmonton and Yellowknife, came to Aklavik at the community's request.

Researchers and health officials hope that if H. pylori cases are reduced in Aklavik, then stomach cancer rates may also drop in the hamlet.

"I've been a doctor for over 30 years. I mean, this is one of the most exciting things that I've done in my career," said Dr. John Morse, a doctor with the Stanton Territorial Hospital in Yellowknife.

"They've brought in this type of technology, this number of people, and investigated a community in such great depth."

About two-thirds of the world's population are infected with the H. pylori bacteria, but most people do not notice symptoms from it, according to the Centers for Disease Control.

Those who do can have chronic ulcers and indigestion. Those infected with H. pylori have a higher chance of developing stomach cancer, according to the CDC.

Researchers say they will be offering antibiotic treatments to Aklavik residents who have tested positive for H. pylori. The research project is expected to run through 2010.