

Stomach virus may be linked to diet

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AKLAVIK - A report released last month on the study of the stomach infection known as H. pylori in the community of Aklavik shows 58 per cent of the community is carrying the bacteria - almost twice the Canadian average.

Of 314 breath tests completed in the community, 182 came back positive, while of the 194 biopsy samples taken, 72 per cent tested positive for Helicobacter pylori - a stomach virus linked to ulcers and stomach cancer.

Karen Goodman, associate professor of Gastroenterology at the University of Alberta and head of the project, said studies she completed in South America showed a link to diet among kids, where the virus is most commonly contracted.

"Research I did in South America suggests diet may play a role in preventing the infection," she said. "I observed in children that those who ate more fruits and vegetables were less likely to be infected. It's possible there are lifestyle choices that affect people."

H. pylori has been common to humans for as long as medicine has been around, but it was only in the 1980s that the medical world began to take a serious look at it. Goodman said it is not understood why the bacteria is disappearing in most areas, yet is appearing in high numbers elsewhere.

"The best understanding we have is geographic," she said, adding the demographics are very vague.

"It's difficult to characterize what the Northern communities in Canada might have in common with other populations where the infection is more prevalent.



In a recent report update on the H. pylori virus in Aklavik, researchers found 58 per cent – 182 of 314 test subjects – tested positive for the bacterial virus through a breath test. In a biopsy test, 140 out of 194 subjects tested positive, but the report says the breath test is more accurate. - photo courtesy of Kathy Karbo

We see higher numbers in places where there is more poverty and less modernization."

She said it's not a strong correlation to the bacterial spread, passed on at a young age and through human contact. She said there are theories around sanitation and water quality issues.

"H. pylori has been found in water but it's not clear if it's in a form that can infect people," she said. "We're still trying to figure out if it's possible to persist in the environment in the water, but we're not really sure."

Goodman said once it was determined who had the bacteria in their stomach in the community they were able to go through a testing process late last year to figure out what antibiotic would be best suited for them, something she said was not easy.

"Varied treatments are offered because effectiveness varies from place to place," Goodman said. "It's a combination of medications that need to be taken for a week to 10 days. We used a 10-day treatment and we actually had people to participate in a trial because it's not clear which way of administering the treatment works best."

Treatments were handed out last November through December, and some were offered treatment later if they couldn't start then. Goodman said they are in the process of assessing the effectiveness of the treatment using a breath test to determine the outcome of the treatment.

