



Communicating microbiology results to research participants: The Aklavik *H. pylori* Project

Division of Gastroenterology Research Day

June 14th, 2011

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Outline

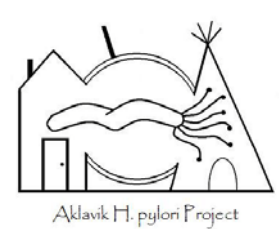
- Background
 - CANHelp Working Group
 - The Aklavik *H. pylori* Project
- Benefits of community-wide endoscopy
- Challenges of communicating results
- Ongoing communication
- Coming up

Background

- Canadian North *Helicobacter pylori* Working Group
- Established in 2006 in response to:
 - Community concerns about health risks from *H. pylori* infection
 - Health authorities seeking information to improve management of *H. pylori* infection
 - Members of government wanting evidence to inform public health policy related to *H. pylori* infection

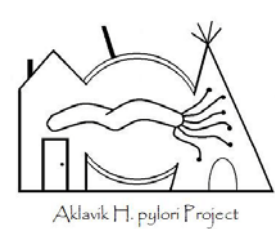
Background

- Purpose – to bring together researchers from the UofA, northern community leaders, northern health officials, and members of government and find solutions
- Goals:
 - Address community concerns about *H. pylori* infection
 - Help health care providers find better ways to manage *H. pylori* infection
 - Reduce health risks from *H. pylori* infection



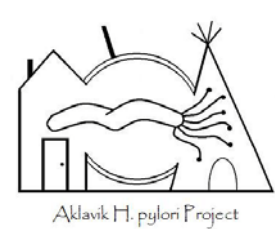
Background

- The CANHelp Working Group's pilot project – the Aklavik *H. pylori* Project
- Aklavik chosen because:
 - Community expressed concern regarding health risks from *H. pylori* infection and wanted research to help find answers
 - Enthusiasm for the research from local health authorities



Background

- Project components (established with guidance from the community Health Planning Committee):
 - Community surveys
 - *H. pylori* testing by urea breath test
 - Endoscopy
 - Treatment
 - Policy development
 - Knowledge exchange

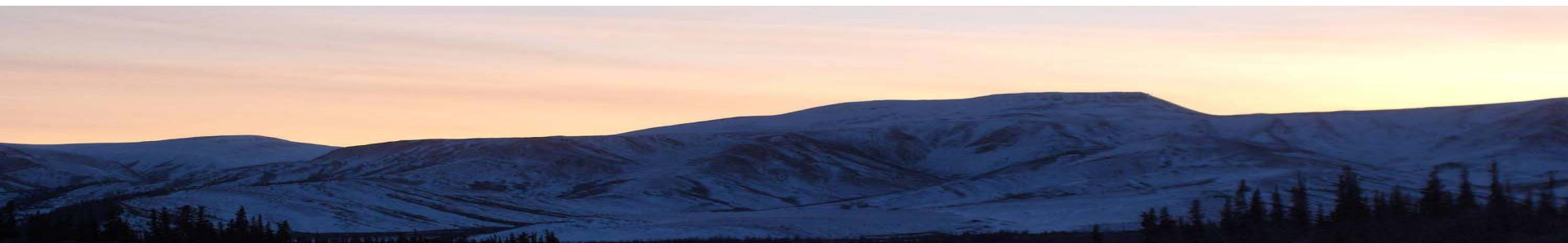


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 - Treatment
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Benefits of endoscopy

- Why would healthy community members agree to participate in community-wide endoscopy?



Benefits of endoscopy

- Why would healthy community members agree to participate in community-wide endoscopy?
 - To have a specialist see if their stomach looks healthy
 - To have biopsies taken to:
 - Have a pathologist see if their stomach tissue looks healthy
 - Contribute to the community's research goals of
 - Investigating the burden of disease in the community attributable to *H. pylori* infection
 - Describing characteristics of the local *H. pylori* strains



Challenges of communicating

- Informing conceptualizations of microbiology
 - Using plain language:
 - Bacteria – tiny living organisms found everywhere; it would take 1 million to cover the head of a pin; some bacteria make us sick, others make us healthy, most do neither
 - DNA – a substance in our bodies passed down from our parents that determines characteristics we are born with
 - Antibiotic resistance – not easily killed by antibiotic drugs
 - Antibiotic susceptibility – easily killed by antibiotic drugs
 - Virulence factor – a code in the DNA of some bacteria that enables them to cause disease

Challenges of communicating

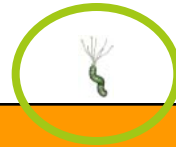
■ Perception of size



Width of human hair

Challenges of communicating

■ Perception of size



Width of human hair

Challenges of communicating

- How is *H. pylori* spread?
 - Likely person-to-person
 - Most often during childhood
 - Likely from an *H. pylori*-infected person who is sick with vomiting or diarrhea

Challenges of communicating

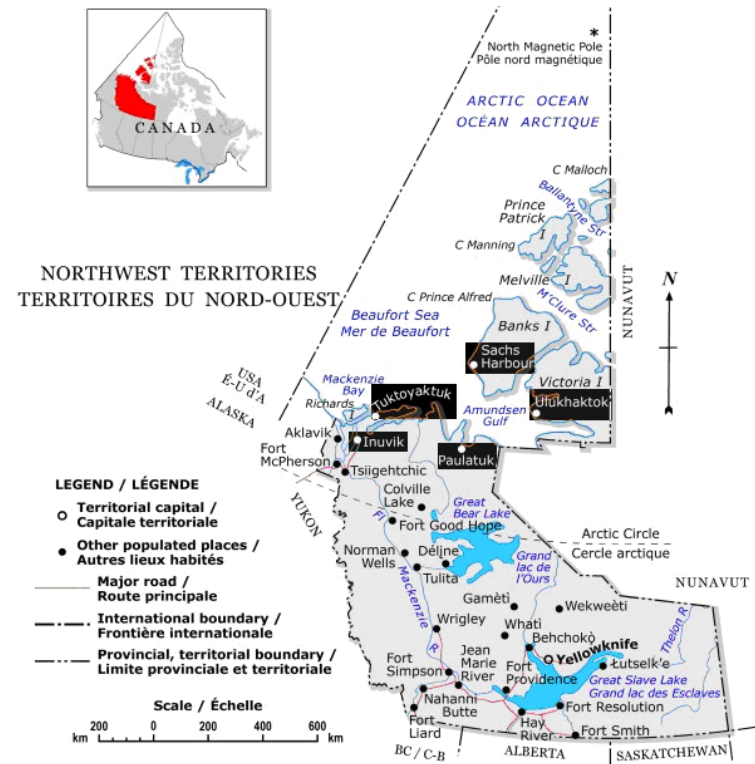
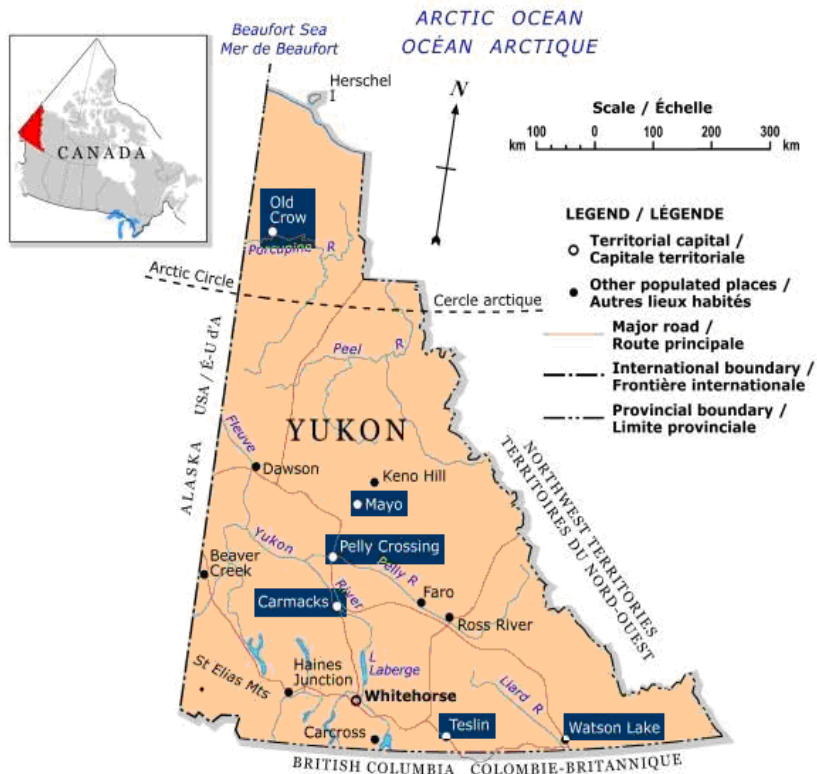
- What happens to people infected with *H. pylori*?
 - Most do not get sick; they only get mild gastritis (irritation of the stomach lining) without any symptoms
 - Some people with *H. pylori* get chronic stomach upset, but there are many other things that can cause this
 - About 10% of people with long lasting *H. pylori* get:
 - Peptic ulcers (sores in stomach lining)
 - Less than 1% of people with long lasting *H. pylori* get:
 - Stomach cancer
 - Most who get a serious disease from *H. pylori* do so after being infected for many, many years

Ongoing

- Working with local Health Committee
 - Feedback on how to disseminate information to broader community is key

- Miasma vs. germ theory of disease

Coming up



Acknowledgements

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Thank you! Any questions?