

# Investigating gastric cancer risk in northern Canada



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& CANHelp Working Group  
(Canadian North *Helicobacter pylori*)

Circumpolar *H. pylori* Workshop  
Copenhagen Sept 21, 2011



# CIHR-Funded Proposal 2011-2016

*“Addressing community concerns about health risks from H. pylori infection”*

## **Project 1: Health Impacts of *H. pylori* Infection in Northern Communities**

### **Project 1a: Organizing Research in New Communities**

- Component 1: Consultation and planning
- Component 2: Recruitment and informed consent

### **Project 1b: Distribution/Determinants of *H. pylori* Infection**

- Component 3: Screening
- Component 4: Community survey

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*“Addressing community concerns about health risks from *H. pylori* infection”*

## **Project 1: Health Impacts of *H. pylori* Infection in Northern Communities**

### **Project 1c: Characterizing Risks from *H. pylori* Infection**

- Component 5: Community survey
- Component 6: Endoscopy
- Component 7: Pathology
- Component 8: Microbiology

### **Project 1d: Effectiveness of *H. pylori* Therapy and Factors associated with Success**

- Component 9: Treatment

# CIHR-Funded Proposal 2011-2016

*“Addressing community concerns about health risks from *H. pylori* infection”*

## **Project 2: Formulating Population Health Policy Pertaining to *H. pylori* infection**

- Component 10: Policy analysis
- Component 11: Policy recommendation

## **Project 3: Strategies for Exchanging Knowledge between Scientists and Community Members**

- Component 12: Knowledge exchange

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## **Project 1c: Characterizing Risks from *H. pylori* Infection**

Aims to characterize:

- Clinical and pathologic manifestations of infection
- Local bacterial strains
  - Pathogenicity, antibiotic susceptibility

# CIHR-Funded Proposal

## 2011-2016

*“Addressing community concerns about health risks from *H. pylori* infection”*

### **Project 1c: Characterizing Risks from *H. pylori* Infection**

Component 5 (Survey):

- Ascertain clinical history and symptoms

Component 6 (Endoscopy):

- Examine stomach for visible lesions
- Collect biopsies

Component 7 (Pathology):

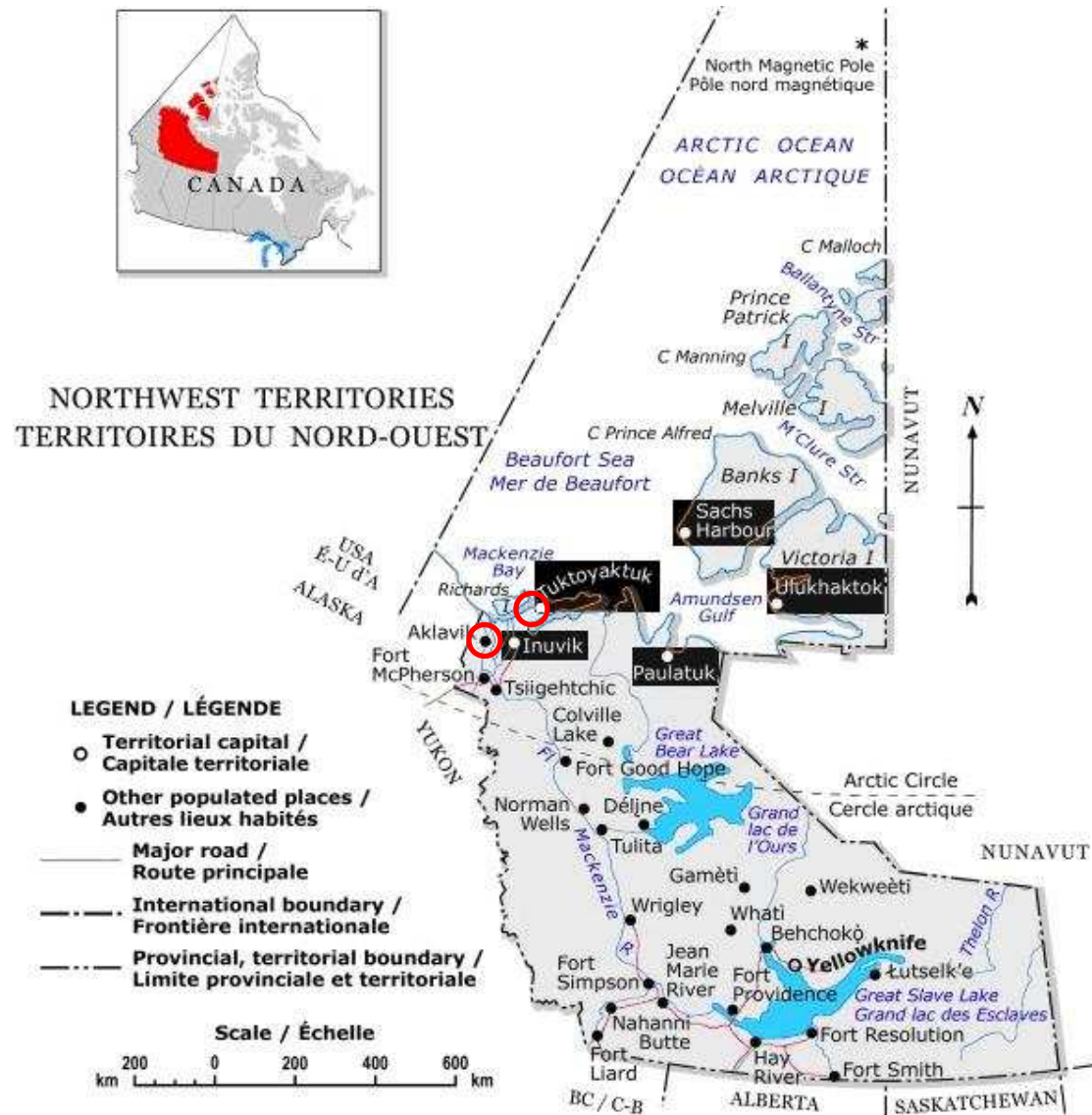
- Assess presence and density of *H. pylori* infection, presence/grade of inflammation, atrophy, gastric neoplasia

Component 8 (Microbiology):

- Identify *H. pylori* genotypes and antibiotic susceptibility

# Expanding Research to...

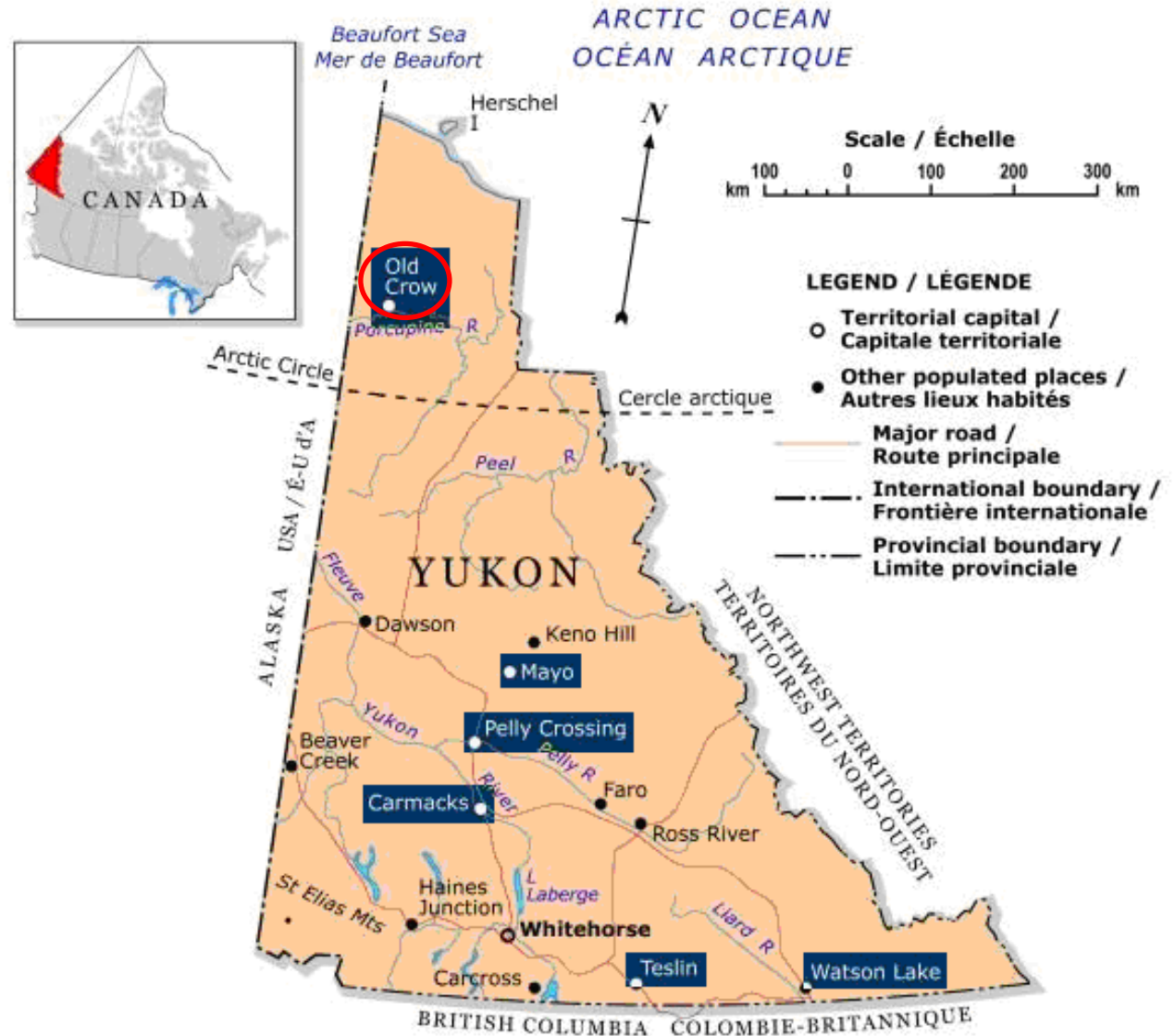
- 5 NWT Inuvialuit communities



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Sa Majesté la Reine du chef du Canada, Ressources naturelles Canada.

# Expanding Research to...

- 6 Yukon First Nations





## Dias nummer 8

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**kjg1**

Put circle around Old Crow.

kgoodman; 13-09-2011

# Addressing Community Concerns: Individual privacy versus public wellbeing

**The Situation:** Addressing community concerns

**The Problem:** Barriers to effective communication

**The Consequence:** How does this impact the north?

**The Solution:** Suggested future actions

## Addressing Community Concerns: Individual privacy versus public wellbeing

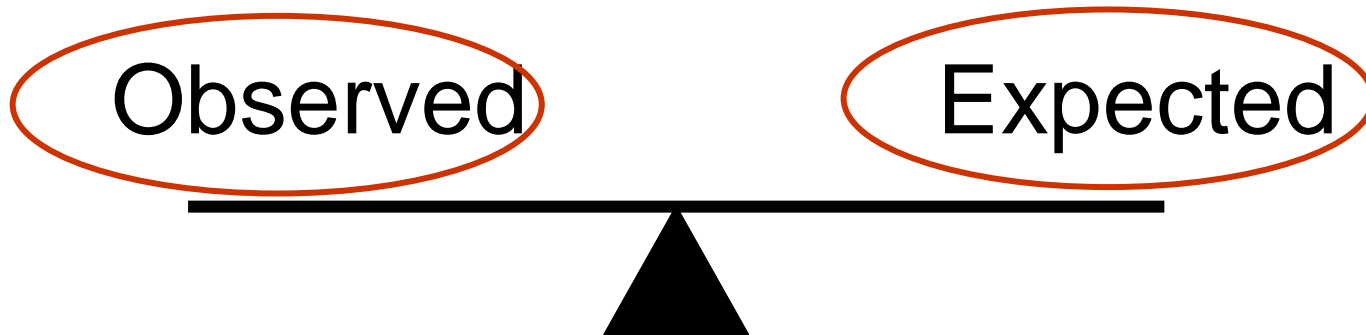
### **The Situation:** Addressing community concerns

- Community members express concerns about health events or problems
  - These may include perceived higher rates of cancer
- Concerns are reported to health officials, community champions, researchers, etc.
- Recognized investigative process is undertaken to answer questions and address concerns

# Addressing Community Concerns: Individual privacy versus public wellbeing

**The Situation:** Addressing community concerns

- Attempt to determine *if* there is a problem
- Analyses compare experience of community to experience of a reference population



# Addressing Community Concerns: Individual privacy versus public wellbeing

## **The Problem:** Barriers to effective communication

- Communities may be seeking help from a different perspective
- They may *know* there is a problem and want solutions
  - Disconnect between community members and investigators

## Addressing Community Concerns: Individual privacy versus public wellbeing

### **The Problem:** Barriers to effective communication

- Furthermore, trust can be jeopardized by the inability of investigators to share information
  - Small number of cancer cases in small community = *potentially identifiable*
  - Typically, <5 are suppressed

Cancer Site	Time Period	Obs	Exp	AB as Reference		
				ISIR	95% CI	
Bones, Joints & Articular Cartilage of Limbs	1. 1989-1998	~	~1	3.65	0.99	9.34
Bones, Joints & Articular Cartilage of Limbs	2. 1999-2008	~	~1	0.78	0.02	4.35
Bones, Joints & Articular Cartilage of Limbs	3. 1989-1993	0	~1	0.00	0.00	6.51
Bones, Joints & Articular Cartilage of Limbs	4. 1994-1998	~	~1	7.55	2.06	19.33
Bones, Joints & Articular Cartilage of Limbs	5. 1999-2003	0	~1	0.00	0.00	7.47
Bones, Joints & Articular Cartilage of Limbs	6. 2004-2008	~	~1	1.27	0.03	7.08

## Addressing Community Concerns: Individual privacy versus public wellbeing

**The Consequence:** How does this impact the north?

- Small communities = small number of outcomes

# Addressing Community Concerns: Individual privacy versus public wellbeing

**The Consequence:** How does this impact the north?

- Aklavik, NWT (population ~600)
  - Varying numbers of stomach cancer cases among Aklavik's residents have appeared in media reports
  - The *CANHelp* Working Group was established to address community concerns about health risks from *H. pylori* infection
  - Specifically addressing perceived increase in stomach cancer incidence has been a challenge





# Addressing Community Concerns: Individual privacy versus public wellbeing

## **The Solution:** Suggested future actions

- **Build trust:** Open and bi-directional communication between investigators and community representatives
- **Build relationships:** Investigators, community members, and media representatives
- **Re-evaluate data disclosure policies:** Consider public wellbeing over individual privacy