Community knowledge of *Helicobacter pylori* infection in northern Canada

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**Background**
- *H. pylori* infection and related diseases occur with increased frequency in Arctic Aboriginal populations.
- Public awareness has created concerns about stomach cancer risks from this infection.
- The Aklavik *H. pylori* Project links community leaders, health authorities and scientists in an effort to address these concerns. Overall, the project aims to describe socio-environmental patterns of *H. pylori* infection and the associated burden of disease to generate evidence for local health care policy development and address community concerns regarding health risks.
- This report describes participants’ knowledge of and concerns about *H. pylori*.

**Methods**

From 2007-2010, 344 residents of Aklavik, Northwest Territories (population≈590, ~90% Aboriginal) responded to a survey asking if they had heard of *H. pylori* infection, and if so, if they knew what problems it caused or how people got it. Respondents were also asked if they thought *H. pylori* was a community concern, and if so, why. This analysis includes respondents who were >12 years of age, all of whom responded for themselves.

**Results**

Of 299 eligible respondents: 56% (50-62) indicated they had heard of *H. pylori*; however, the related illnesses of cancer, stomach problems, and ulcers were each mentioned by <20%; 77% (71-81) agreed that *H. pylori* was a community concern; reasons for concern were cancer (15% (11-19)), many people having it (14% (11-19)), and that it causes illness (10% (7-14)); reported modes of transmission were water-related (17% (13-22)), personal contact/hygiene (7% (5-11)) and germs/infectious agent (4% (2-6)).

Of those who reported a family history of *H. pylori* infection or stomach cancer (n=123/299), more had heard of *H. pylori* (72% (63-79) vs 45% (37-52)), believed it is transmitted via water (25% (18-34) vs 11% (7-17)), or believed it is a community concern (85% (77-90) vs 71% (64-78)).

**Conclusion**

- General awareness and concerns about *H. pylori* infection were common, but few respondents articulated specific knowledge or reasons for concern; many had not heard of it, and few could describe illnesses caused by the bacterium, or how people got it.
- Understanding what communities know about *H. pylori* infection and why they are concerned about it will help inform knowledge exchange strategies that address community concerns.

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