THE PREVALENCE OF HUMAN PAPILLOMAVIRUS AND ITS IMPACT ON CERVICAL DYSPLASIA IN NORTHERN CANADA

Y.A. Li, P. Brassard, T. Wong, A. Severini, A. Corriveau, S. Chatwood, G. Johnson, I. Sobol, B. Hanley, Y. Mao

Centre for Chronic Disease Prevention and Control, Public Health Agency of Canada, McGill University, GNWT Health and Social Services, Institute for Circumpolar Health Research

Cervical cancer rates are higher among aboriginal populations than among the general population in Canada. Human Papillomavirus (HPV) are highly associated with cervical cancer.

The objective of this project is to determine the prevalence, distribution, and risk factors of type-specific HPV infections among women in northern Canada. Women living in the Northwest Territories (NT), Nunavut, and Yukon, at cervical cancer screening ages, and with no cancer history are included in the study. Cervical sample collection is incorporated into the routine sample collection for Pap testing. A questionnaire will collect socio-economic, demographic, and behaviour information of participants. HPV types are detected by using Luminex assay at the National Microbiology Laboratory of Canada. Pap test results, HPV types, and questionnaire data will be linked for analyses.

The prevalence and distribution of HPV type-specific infections and cervical dysplasia will be calculated with 95% confidence intervals. Multivariate regression will be used to explore the associations between type-specific HPV infections and cervical dysplasia as well as the associations between risk factors and type-specific HPV infections.

So far more than 7,000 samples from the NT and Nunavut have been tested for HPV types. The crude HPV positive rates are 26.9% and 33.9% of the NT and Nunavut, respectively. There are over 70% of the HPV positive samples from both regions are positive with high-risk types. The prevalence analyses will be completed in April 2009. More results will be available at the conference.

Contact: Y.Anita Li, Anita_li@phac-aspc.gc.ca