

# The Prevalence of Human Papillomavirus (HPV) and Its Impact on Cervical Dysplasia in the Northwest Territories —component I

## Introduction

Human Papilloma Virus (HPV) is a sexually transmitted virus. There are many different types of HPV and some cause cervical diseases or cervical cancer.

## Objectives

This study was to find out the prevalence of HPV infection and cervical dysplasia among women in the Northwest Territories (NWT). The information can be used to develop effective prevention and screening programs in the NWT.

## Methods

Between April 2008 and March 2009, women who attended a routine Pap testing in the NWT were included in the study. The collection of bio-samples was incorporated into the Pap testing program in the NWT.

A sample was collected and shipped to the DynaLife Medical Laboratory in Edmonton. Approximately half of the medium was retained for Pap testing.

The remaining medium was shipped to the National Microbiology Laboratory (NML) in Winnipeg for HPV typing.

Pap test results, HPV types and demographic information were linked for analysis.

## Results

- A total of 5725 samples from women between age 14 and 84 were collected and tested.
- 24.2% of people had HPV infection.
- The most common HPV type detected was HPV-16 (4.1%).
- HPV infection rates were higher in Aboriginal than non-Aboriginal women.
- Among HPV infected women, 76.6% had high risk HPV types that can cause cervical cancer; specifically, 21.6% had HPV 16 or 18 (the types preventable by vaccine).
- About 5% of the Pap test results were abnormal.
- 20.8% women with normal Pap test results had HPV infection; however 92.1% women with abnormal Pap test results had HPV infection

## Conclusions

The HPV prevalence among women in the NWT, especially Aboriginals, is higher than in other Provinces/ Territories in Canada.

Figure 1 HPV infection type distribution

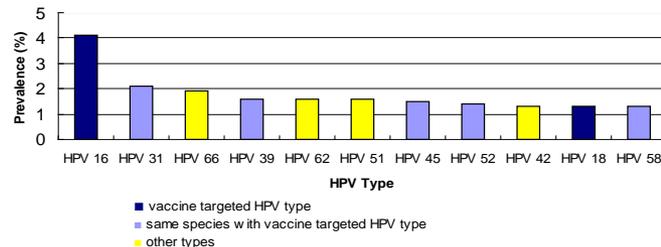
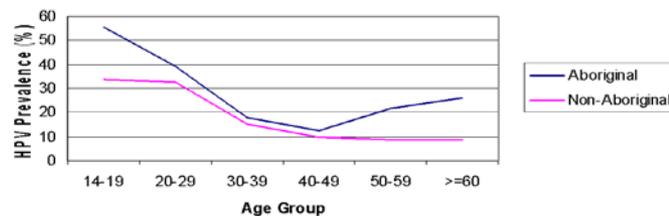


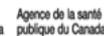
Figure 2 HPV prevalence by age group among Aboriginal and non-Aboriginal women in the NWT, Canada, 2008-2009



## HPV Study Partners:



Public Health Agency of Canada



Agence de la santé publique du Canada



Department of Health and Social Services  
Ministère de la Santé et des Services sociaux

