

**Human Papillomavirus (HPV) Vaccine
FMWC Recommends Publically Funded Program for Boys**

Position: HPV Prevention Vaccine for Males

The Federation of Medical Women of Canada (FMWC) applauds Health Canada for approving the HPV quadrivalent vaccine for boys and men. The HPV is the most common sexually transmitted infection in Canada. Men play an important role in the transmission of HPV to their sexual partners and in addition men themselves develop a significant amount of anogenital HPV-related cancers and genital warts. For these reasons, the **FMWC encourages all provinces and territories to include males in the school-based prophylactic HPV vaccination programs as an essential step in the prevention of HPV infection and its related diseases.**

Rationale for Male Inclusion:

Transmission:

In men, as in women, sexually transmitted human papillomavirus (HPV) infections are very common. It is estimated that 75% of sexually active Canadians will have at least one HPV infection during their lifetime.¹ Men play an important role in transmission of HPV to their sexual partners. Several prospective studies have shown a high level of HPV concordance between sexual partners who recently became infected, indicating transmission of HPV between the couple (both male to female, and female to male). These data consistently support the sexually transmitted nature of HPV and the role of men in infecting women.²

Disease Burden in Males:

Men, suffer a wide spectrum of HPV related disease. Although the majority of infections are asymptomatic and self-limiting, acquisition of specific types of HPV can result in clinically significant diseases in males. Most notable among the high-risk types of HPV in males is types 16 and 18 which are strongly linked with 90% of anal cancers, 40%-50% of penile cancers, and around 12% of oropharyngeal cancers.³ The annual incidence of cancers that are related to HPV is 7.0 per 100 000 in men; this is half of the rate of cancers in women (14.0 per 100 000 per year), but approaches the rate of cervical cancer in women (8.9 per 100 000 per year). The major contributor to cancers in men is oropharynx and oral cavity cancers, accounting for 5.2 cases per 100 000 per year.⁴

The most common HPV-related disease in males is genital warts. Genital warts are overwhelmingly caused by HPV type 6 and 11, causing over 90% of the cases.⁵ The lifetime risk for acquisition of genital warts has been estimated to exceed 10%. In Canada in 2006, there were an estimated 41,450 new cases of genital warts in both men and women, with 48,600 ongoing

¹ Health Canada, *It's Your Health HPV* Web site.

(Accessed at http://www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/hpv-vph_e.html).

² Burchell, A., *HPV Infections Among Couples in New Sexual Relationships* Epidemiology 2010;21:31-37

³ Garland, S., et al., *Prevention strategies against human papillomavirus in males* 2010 Gynecologic Oncology 117

⁴ Watson, M., et al, *Using Population-based Cancer Registry Data to Assess the Burden of Human Papillomavirus-associated Cancers in the United States: CANCER Supplement* November 15, 2008 /

⁵ Healthy Ontario © MediResource Inc., 2009. HPV Infection Overview □ Online November 2009 □ Available at: http://www.healthyontario.com/ConditionDetails.aspx?disease_id=345 □ Accessed on November 23, 2009.

cases at any one time.⁶ These lesions manifest as unsightly genital lesions, occasionally with pain. In addition to the physical burden, genital warts impose a significant psychosocial burden with severe impact on anxiety, self-image, sexual activity and partner issues.⁷

Call for Action:

On February 23, 2010, Health Canada approved the quadrivalent vaccine for boys and men nine through 26 years of age for the prevention of infection caused by HPV types 6, 11, 16, and 18 and genital warts caused by HPV types 6 and 11. In a randomized, placebo-controlled study (n=4065), vaccine efficacy against any HPV 6-, 11-, 16-, or 18-related external genital lesion was 90.4%, and against genital warts it was 89.4%.³

The approval of the quadrivalent vaccine in males provides a tremendous opportunity in the prevention against HPV related 6, 11, 16 & 18 infection and diseases. HPV vaccination of boys alongside girls would help to facilitate the eradication of these strains of HPV and protect boys from infection, reduce transmission, increase herd immunity, and effectively prevent these HPV associated diseases. Limiting HPV vaccination to girls will not lead to eradication.⁸

The FMWC strongly applauds the governments for implementing school-based HPV vaccination program for young girls as a ground-breaking step in women's health.

Although good use of the programme will reduce cervical cancer incidence in a couple of decades and is reducing the incidence of genital warts in women presently⁹, the FMWC strongly encourages policy makers to update the current program to include boys in the school-based prophylactic HPV vaccination programs.

The goal to eradicate sexually transmitted HPV infection should be jointly undertaken by both women and men.⁸ Vaccinating males is a more equitable public health policy and recognizes that both genders contribute to the transmission of HPV and develop clinical manifestations as a result.

⁶Twenty Year Trends (1985-2004) in the Incidence and Prevalence of Anogenital Warts in Manitoba. 2008 Report to Cancer Care Manitoba.

⁷ Droulet, M., et al., *Understanding the psychosocial burden of genital warts in Canada: a 6-month prospective study* Poster 2010 IPV. Montreal, PQ.

⁸ Karin B Michels, Harald zur Hausen *HPV for all*. 2009 Lancet: 374; 268-270.

⁹ Donovan, B., et al., *A national outcome for quadrivalent HPV vaccination: declining rates of genital warts in Australia*. Abstract IPV 2010.