

QUICK FACTS : *What you should know about HPV*

- ❑ 75-80% of sexually active adults will have encountered the HPV virus at some point in their lives.
- ❑ Risk for HPV acquisition correlates with sexual activity, and NOT age.¹
- ❑ Natural antibodies from a previous HPV infection may not adequately protect from future HPV infections^{2,3}
- ❑ Antibodies following vaccination remain significantly higher than antibodies from natural infections⁴.
- ❑ Individuals with previous exposure to HPV, or previous history of HPV-related diseases and cancers still benefit from HPV vaccination ^{2,3, 5, 6, 7}.
- ❑ In females, older age is associated with persistence and progression of HPV infection⁹.
- ❑ Studies in females with cervical high grade-lesions and cancerous lesions show that HPV attribution to the 5 additional types in the HPV9 vaccine increases with age^{10,11}.
- ❑ It is not too late to vaccinate older individuals. The vaccine has shown immunogenicity and efficacy in mid-adult men and women, respectively ^{2, 12}. Moreover, vaccine recommendations provide no upper age limit for eligibility¹³.
- ❑ In 2012, 3760 Canadians were diagnosed with an HPV-associated cancer. About 1/3 of HPV-associated cancers were diagnosed in males¹⁴.
- ❑ In 2012, about 1200 Canadians died from a HPV-associated cancer.
- ❑ In 2012, the most common types of HPV-associated cancer in both males and females were oropharyngeal (1335 cases) and cervical cancer (1300 cases), followed by anal cancer (475 cancers) in Canada²⁴.
- ❑ The incidence rate of HPV-associated oropharyngeal cancer is 4.5-fold higher in males than females (2012)²⁴.

HPV vaccination programs for females do not protect all males from HPV-related infection and diseases.

¹ Winer RL et al. Sex Transm Dis 2012; 39(11):848-856.

² Castellagué X, et al. Br J Cancer 2011; 105(1):28-37.

³ Olsson SE, et al. Hum Vaccine 2009; 5:10, 696-704

⁴ Guo T et al. Cancer 2016;122:2313-23

⁵ Kang WD et al. Gynecologic Oncology 2013, 130:264-268.

⁶ Joura EA, et al. BMJ 2012, 344:e1401

⁷ Ghelardi A, et al. Abstract presented at Eurogin 2016.

⁹ Moscicki AB, et al. Vaccine 2006; 24 (Suppl 3):S42-S51

¹⁰ Hariri A, et al. Cancer Epidemiol Biomarkers Prev 2015

¹¹ Hammer, et al. International Journal of Cancer 2015.

¹² Giuliano 2015, 33(42):5640-5646

¹³ National Advisory Committee on Immunization (NACI). Updated recommendations on Human Papillomavirus (HPV) vaccines: 9-valent HPV vaccine and clarification of minimum intervals between doses in the HPV immunization schedule. An advisory Committee Statement (ACS). July 2016. Public Health Agency of Canada

¹⁴ Canadian Cancer Statistics 2016. Canadian Cancer Society, Public Health Agency of Canada.