

Windsor-Essex County Health Unit Board of Health

RECOMMENDATION/RESOLUTION REPORT – HPV Vaccine Coverage in Ontario

September 2023

ISSUE/PURPOSE

Human Papillomavirus (HPV) is a very common virus that can cause many types of cancers. HPV can infect both males and females. Without immunization, approximately 3 out of 4 people will have at least one HPV infection in their lifetime ². The Ontario government covers the cost of the HPV vaccination series for students in Grade 7-12 through the school-based immunization program. The WECHU offers this vaccine to all grade 7 students in Windsor and Essex County schools each year. In Ontario, this vaccine is also available for free to men who have sex with men, individuals who identify as gay or bisexual, and some people who identify as transgender, up to the age of 26. For individuals not meeting these criteria, the vaccine can be purchased privately with a prescription. The HPV-9 vaccine currently used in the province is approximately \$645 for a complete series (\$215/dose)¹. This cost may be covered through some private insurance plans, but would be considered prohibitive for many individuals considering vaccination.

Each year 3,800 new cancer cases in Canada are attributed to HPV; by 2042, this number will increase to 6,600². HPV infection increases the risk of developing six different types of cancer. Cervical cancer is almost exclusively caused by HPV and is the leading cause of most oropharyngeal cancers. It usually takes years after being infected with HPV for oropharyngeal cancer to develop, and not all oropharyngeal cancers are caused by HPV. While population-level Ontario data on the incidence of oropharyngeal cancers caused by HPV has only just begun to be collected, research has shown that the incidence of oropharyngeal cancers caused by HPV has increased in Canada since 2000. ³ ⁴

As a part of an equity-based initiative, all strategies to reduce cervical and other cancers must consider health disparities and minimize existing barriers, such as cost, to be effective. The 2019–2029 Canadian Strategy for Cancer Control and the Action Plan for the Elimination of Cervical Cancer in Canada, 2020-2030 address the health inequities and barriers in accessing preventative care such as HPV vaccination that are experienced by rural and remote communities, people with low income, recent immigrants, First Nations, Inuit and Métis and other populations, such as LGBTQ2S+ individuals.

The HPV vaccine product currently used in Ontario as a part of the publicly funded vaccine program, is authorized for use by the manufacturer in males and females aged 9 to 45 years old. The National Advisory Committee on Immunization (NACI) recommends this vaccine for all individuals between the ages of 9 to 26. According to Health Canada, HPV vaccination is recommended for females aged 9 to 45 and for males aged 9 to 26. For best protection from the vaccine, it should be administered before an individual becomes sexually active.

The current provincially funded vaccination schedule provides limited access to this free of charge important vaccine, and creates a missed opportunity for an important preventative, protective, and evidence based public health strategy.

BACKGROUND

HPV infection does not often show symptoms and can be spread easily by intimate skin to skin contact. In some cases, symptomatic HPV infections may even clear up on their own without treatment over time. Some infections cease to disappear and can lead to cancer. Certain high-risk HPV strains (i.e., types) can cause cervical cancer and are often associated with cancers of the penis, anus, vulva, vagina, mouth, and throat. Certain low-risk strains can cause warts. The virus can be passed from an infected mother to baby before and during birth. Newborns with HPV are at risk of developing respiratory papillomatosis.

The current HPV vaccine used in Ontario can protect against nine strains of HPV infection. Vaccination works best when it is received prior to exposure to HPV and will not protect against existing HPV infections or HPV strains not included in the vaccine. Additional prevention activities for women include receiving regular Pap tests (the current recommendation in Ontario is a Pap test every 3 years⁵), even after receiving HPV vaccine. Since 2007, 99 countries and territories have developed comprehensive human papillomavirus vaccination programs. In 2019, a Canadian study demonstrated strong evidence that HPV vaccination prevents infections, genital and anal warts, and precancerous lesions at a population level. The impacts were seen in both females and males. ⁶

The best way to prevent HPV is getting the HPV vaccine. Not only is immunization the best preventative strategy, it's also cost effective. In a recent study, it was found that the Return on Investment for HPV vaccination was consistently above 1 (range: 1.4–3.58), which means for every dollar spent on HPV vaccination up to 3.58 dollars are saved.⁷

PROPOSED MOTION

Whereas, the NACI recommends HPV vaccination in all individuals ages 9 to 26, inclusively, and

Whereas, the Government of Canada's HPV vaccination rate coverage target of 90% is based on disease reduction targets, program impact, disease characteristics, achievability, and jurisdictional variation in vaccination programs, as well as quality and effectiveness of the vaccine, and

Whereas, HPV vaccination is an evidence informed, cost-effective strategy to reduce related cancer risks, and

Whereas, the HPV vaccine is a critical component of the <u>Action Plan for the Elimination of Cervical Cancer</u> in <u>Canada, 2020-2030</u> which aims to eliminate cervical cancer by 2040, and

Whereas, the WECHU's current HPV vaccination coverage rate for individuals 12-17 years old is 61.47%.

Therefore be it resolved that the Windsor-Essex County Board of Health recommends that the Province of Ontario extend the coverage for HPV vaccine through the publicly funded vaccine schedule to include all individuals up to the age of 26 (at minimum), and to eligible individuals from all high-risk populations (age limit based on product monograph).

Further that the Windsor-Essex County Board of Health recommends local health care providers in Windsor and Essex County engage all clients under the age of 45 and parents/guardians of children in grades 6-12 to discuss: HPV vaccine status, review the benefits of HPV vaccination, and discuss options for those eligible and unvaccinated/undervaccinated.

¹ Habbous S, Chu KP, Lau H, et al. Human papillomavirus in oropharyngeal cancer in Canada: analysis of 5 comprehensive cancer centers using multiple imputation. CMAJ. 2017:189(32);E1030–40.

² <u>Canadian Population Attributable Risk of Cancer ComPARe) study</u>. Get vaccinated against HPV to reduce your cancer risk [internet]. Prevent. cancer.ca [cited 22 October 2020] Available from https://prevent.cancer.ca/wp-content/uploads/2019/05/CMPR 1pgr HPV-EN.pdf

³ Nichols AC, Palma DA, Dhaliwal SS, et al. The epidemic of human papillomavirus and oropharyngeal cancer in a Canadian population. Curr Oncol. 2013;20(4):212–9.

⁴ Habbous S, Chu KP, Lau H, et al. Human papillomavirus in oropharyngeal cancer in Canada: analysis of 5 comprehensive cancer centers using multiple imputation. CMAJ. 2017:189(32);E1030–40.

⁵ https://www.ontario.ca/page/cervical-cancer-testing-and-prevention, Ontario Ministry of Health. October 2021.

⁶ Population-level impact and herd effects following the introduction of human papillomavirus vaccination programmes: updated systematic review and meta-analysis. Mélanie Drolet, PhD, Élodie Bénard, MSc, Norma Pérez, MSc, Prof Marc Brisson, PhD. June 26, 2019.

⁷ Return on Investment (ROI) of Three Vaccination Programmes in Italy: HPV at 12 Years, Herpes Zoster in Adults, and Influenza in the Elderly. Marco Barbieri and Sara Boccalini. April 2023.