



The Impact of the COVID-19 Pandemic on the Uptake of School-Based Vaccines, including the Human Papilloma Virus Vaccine

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With the development and increasing availability of the human papilloma virus (HPV) vaccine, experts believe that cervical cancer is on track to be eradicated, particularly in high-income countries, in the next several decades. The eradication of a cancer from a population—defined by the World Health Organization as four or fewer cases of every 100,000 individuals—is truly astounding. Moreover, the HPV vaccine prevents some forms of other cancers that can be caused by HPV infection, including head and neck cancers, anal cancer, penile cancer, and vulvar cancer.

The COVID-19 pandemic has pushed many public health initiatives to the back burner for now. We heard from Drs. Darren Brenner and Robert Hilsden last week about the impact of the pandemic on cancer screening and early detection. It got me wondering about school-based vaccines and how the pandemic could impact a large cohort of children who will miss the vaccine this year. Spring vaccination clinics should be underway in Alberta schools right now. Alberta students in Grade 6 can receive the two-dose HPV vaccine (GARDASIL®9) and are eligible to receive it at no charge until the end of Grade 12. With schools closed for the remainder of the year and parents weary to bring their children to health clinics for fear of exposing them to COVID-19, HPV vaccine uptake will undoubtedly be affected this year.

In the United States, between the weeks of February 16th and April 5th, the vaccinations against measles, mumps, and rubella dropped by 50 percent, while vaccinations against diphtheria and whooping cough fell 42 percent, according to PCC (Physician's Computer Company) data from 1,000 pediatricians across the nation. Most alarming from the perspective of cancer prevention is the decrease in HPV vaccinations, which dropped by 73 percent during that period.

WHO-UNICEF data on HPV vaccination in Canada was last updated this past December and is due for an update in June 2020. The HPV vaccine coverage estimate had been increasing steadily over the past 5 years and was most recently reported at 83% in Canada. Therefore, it will be important to watch the HPV coverage rate as we continue to await more accurate antibody testing for COVID-19 or the development of a vaccine.

An important consideration to keep in mind is the impact of the pandemic on public health in our most vulnerable populations in Canada. We already know that our First Nations people experience greater health disparities than non-indigenous people. Cervical cancer outcomes have long been documented as being far worse for First Nations people, with lower rates of screening, advanced stage of cancer at diagnosis, higher mortality, and longer and more complicated hospital

stays due to cervical cancer.

Our First Nations partners at the Alberta First Nations Information Governance Centre (AFNIGC) have told us that nearly all research has ground to a halt in communities as they deal with the pandemic as a first priority. When the pandemic subsides, other important issues like the opioid crisis will no doubt need to be aggressively resumed. We must also continue to make progress on the cancer front, by working to reduce the barriers to screening and prevention that fuel poorer cancer outcomes. We may need to be even more attentive to the needs of our vulnerable populations.

