

A Call to Fund School Based HPV Vaccinations for Boys in the Northern Territories of Canada

Human Papillomavirus (HPV) is the most common sexually transmitted infection, and can lead to the formation of genital warts or cancers of the cervix, vulva, vagina, penis, anus or oral cavity.¹ Both men and women are affected by HPV, and the reported HPV prevalence in men is higher than that of women, as a result of the “poorer natural immune response” men have to infection with HPV.² There exist several HPV vaccines that have been demonstrated by multiple clinical trials to be safe and effective for both men and women,³ and the National Advisory Committee on Immunization in Canada has recommended that females and males aged nine to twenty six be vaccinated.⁴ Studies have concluded that vaccinating the male population significantly decrease the levels of genital warts and cancer in the general population.⁵ While most of the Canadian provinces now offer school based HPV vaccinations for girls and boys, the Yukon, the Northwest Territories and Nunavut only offer school based HPV vaccinations for girls. In order to rectify this inequality, the Canadian Federal Government must assist in funding the implementation of school based HPV vaccinations for boys in the Northern territories.

The fact that the Northern territories only offer publically funded HPV immunizations to girls is problematic for several reasons. Firstly, it increases the chances that boys contract HPV and develop some form of cancer. There are arguments that vaccinating girls is sufficient for providing enough of a herd immunity so that boys are not in danger of becoming infected with HPV. This however, does not take into account men who have sex with men, a group that

already faces significant difficulties in society. ⁶ In addition, data from the Northern territories has indicated that girls in the Yukon, the Northwest Territories and Nunavut have the lowest HPV vaccine uptake rates of the entire country, and don't meet estimated requirements to provide adequate herd immunity.⁷ This means that heterosexual males are also at risk of contracting HPV, as many of their potential sexual partners will not have received the vaccine and thus may transmit the virus to them. The refusal to offer immunizations to boys also places an unfair burden on girls, and charges them with the responsibility of obtaining protection, when both sexes are equally responsible for HPV transmission. ⁸

The refusal to provide boys with school based HPV vaccinations also exacerbates the current health disparity between Indigenous and non-Indigenous communities. The Truth and Reconciliation Commission of Canada called on the Canadian Federal Government to “close the gaps in health outcomes between Aboriginal and non-Aboriginal communities” and monitor the availability of necessary health services.⁹ As a large proportion of the northern population is Indigenous¹⁰ the federal government should help fund the implementation and maintenance of HPV vaccination programs for boys in the Northern territories in order to ensure that there exist no disparities in HPV protection for boys in non-Indigenous communities of the Southern provinces and boys in Indigenous communities in the Northern territories.

Early HPV prevention is also particularly important in rural communities, where citizens have less access to tertiary cancer care. As Yukon, the Northwest Territories and Nunavut have widely dispersed populations with little access to tertiary health services, ensuring effective treatment for cancer is highly difficult. ¹¹

Thus, the implementation of school based HPV vaccinations for boys is an effective way of lowering the cancer rates of the Northern territories, and in turn, minimizing the gap between rural and urban access to health care.

The current policy in the Northern territories is to provide school based HPV vaccinations for girls in grades four to six but not to boys. Boys can of course obtain the HPV vaccination privately for a fee of around 540\$.¹² The rationale behind this current policy is that immunization of girls will provide enough of a herd immunity to protect the entire population from HPV, and is more cost effective than vaccinating both boys and girls.¹³ However, evidence has shown that vaccinating boys for HPV is cost effective when female vaccination rates are low.¹⁴ As Yukon, the Northern Territories and Nunavut have the lowest rates of female HPV vaccination in the country¹⁵, immunizing boys is not only important in order to raise the herd immunity to safe levels to protect the general population, but is also cost effective. Currently, each province and territory funds the school based vaccination programs themselves.¹⁶ However, as the GDP of the Northern territories are the lowest in the country,¹⁷ funding HPV vaccinations for boys could place a significant strain on the Northern territories. It is thus recommended that the Federal Government assist in providing financial support for the implementation of a school based HPV vaccination program for boys in the Northern territories.

In order to ensure that boys in Northern Canada have equal access to protection from HPV and its complications, the Federal Government must help the Northern territories fund school based HPV vaccines for boys in the Yukon, the Northwest Territories, and Nunavut. In order to do this, a series of actionable steps are proposed.

1. Determine the total cost of implementing a school based HPV vaccination program for boys in the Yukon, the Northwest Territories and Nunavut. This can be done by examining the costs of such programs implemented in other provinces, as well as the costs of the current female HPV vaccination program in the Northern territories, and adjusting cost estimates accordingly. Health economists and administrators from provinces where the program has been successfully executed as well as from each of the Northern territories should be consulted to provide accurate estimates.

2. Determine the proportion of program costs that each territory would be able to support. This should be done by consulting health economists and administrators in the Yukon, the Northwest Territories and Nunavut. Once a figure has been reached, the remaining amount of money from the total estimated cost is the sum that the Federal Government should provide.

3. Provide the necessary funding to each territory. Money should be used not only for establishing and maintaining the program, but also for continuous data collection and monitoring in order to evaluate if the program is proceeding successfully, and if any modifications need to be made.

Endnotes

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15. Shapiro, Gilla K., Juliet Guichon, and Margaret Kelaher. "Canadian school-based HPV vaccine programs and policy considerations." *Vaccine* 35, no. 42 (2017): 5701. doi:10.1016/j.vaccine.2017.07.079.

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