## Questions submitted during January 16, 2019 Webinar: HPV and Males

## With Answers provided by Marc Steben MD

1. Some reports from CDC mentions that HPV in men are reservoirs for 8 months in men who have sex with women and then HPV is completely cleared up in men. What do we know about these facts in Canada?

The most important HPV-specific issue in men is that MSW have a low seroconversion to HPV and MSM have no seroconversion. HPV is a very stable virus and it would be surprising that the HPV "behavior" would be different in an American population compared to a Canadian population. And 8 months would be a mean duration.

2. Should a 23-year-old male (unvaccinated) diagnosed with one lesion on his penis at a regular checkup be vaccinated with the 9-valent HPV vaccine to prevent new infections and possibly recurrence? His female partner is fully vaccinated.

Genital warts appear with multiple warts, rarely a single wart. We have no studies to prove that vaccination with the 9-valent HPV vaccine will decrease the recurrence but we have data that shows, in older MSM with anal warts, they have fewer recurrences at 4 years of follow-up when immunized with the 4-valent HPV vaccine; so, they have a decreased rate compared to unimmunized controls.

3. How will this be possible if the existence of HPV infection in females and transmission may continue?

In many people HPV does not produce long term protective immunity once it is cleared. This explains why reinfection rate is so important in chronic recurrent disease and that HPV vaccination stops the transmission and the recurrence of HPV specific lesions. This female patient could have a low-risk or high-risk HPV not in the 4v or 9v HPV vaccine.

4. Why weren't males included in the HPV public program from the very beginning as were the females? Is this why male protection lags behind?

The proof of efficacy came later as women were prioritized because of the link to cervical cancer, which was so strong and clear.

5. What is being done to get the government to make the vaccine free?

In Canada, the HPV vaccine has been provided free in the school-based program for more than 2 years now on a gender-neutral basis. All provincial and territorial health authorities have increased coverage since the launch of the school-based program. Canada is doing great in terms of populations who have access to the free HPV vaccine programs. The problem is that there is lower than optimal coverage in the overall population.

6. Males only get the vaccine till age 26. Will this age increase?

The National Advisory Committee on Immunization (NACI) has withdrawn the limit of age for both females and males. If you need protection against HPV whatever your age, you can get the HPV vaccine.

7. If you had cervical cancer can you get another type of cancer in the future?

Surveillance of first HPV-related cancers has shown that the risk of getting a second HPV-related cancer is very high. It is true not only for anogenital cancers but also for oropharyngeal cancers.

8. If you had cervical cancer treated with hysterectomy what is your risk for developing cancer in another area of the body?

The risk is higher than in a control population. Not only anogenital but also oropharyngeal cancers. Rarely you are only infected at one site during sexual intercourse through direct or indirect sexual contact.

9. I meet a lot of resistance when discussing the vaccine (besides the cost barrier) when a person already has HPV - genital warts. I do counsel on the coverage for other strains but any other suggestions to encourage vaccination?

But the main benefit is preventing recurrence of genital warts! See my JID editorial about Genital Warts recurrence: <u>A Very Common Intimate Concern: "Will My Genital Warts Ever</u> <u>Stop Recurring?"</u>

It is free to download from the JID site: <u>https://doi.org/10.1093/infdis/jiy610</u>.

10. Do males have the same antibody response to the vaccine compared to females?

Males aged 9 to 15 years have higher titers of antibody.

11. Should males who have sex with men who have received the complete series of the 4valent HPV vaccine be recommended to receive a complete series of the 9-valent HPV vaccine?

NACI does not recommend a public health program. 9-valent HPV vaccine is based on individual capacity to pay for a new series of HPV vaccine.

12. To reduce the burden of HPV in men, would you recommend focusing attention on vaccination in adolescent or high-risk groups?

I do not think that we are opposing both target populations; we need to optimize both the school-based program for cervical cancer elimination as well as to optimize high risk population. Canada has the financial capacity!

13. Should we vaccinate even earlier?

There might be a case for immunizing children who have been sexually molested but the feasibility and social acceptance of vaccinating before age 9 would be low and the need even lower.

14. In the current environment/body of literature, are there efforts being made in trying to develop an effective screening test for men?

The problem is not about the effective screening but what would be different in our prevention program if we had such a test... and the answer is "not much", since we do not know what we would be doing with a male patient with an high risk HPV test...there is no protocol to follow.

15. For how long does the 9-valent HPV vaccine provide protection?

We do not have long term surveillance program yet. For the 4-valent HPV vaccine we have good data up to 12 years of protection in four Scandinavian countries.