# HPV & VACCINATION (HUMAN PAPILLOMA VIRUS)

#### WHAT IS HPV?

HPV is a common name for a virus with many kinds of subtypes. There are more than 100 known subtypes of HPV, whereof subtypes 16 and 18 are the ones responsible for 70% of all cases of cervical cancer and most kinds of cancer in the vulva. In boys and men HPV 16 and 18 are responsible for penile cancer, and in both sexes HPV is responsible for most kinds of anal cancer, as well as being frequently responsible for cancer of the mouth, throat and oropharyngeal cancer.

HPV subtypes 6 and 11 often cause genital warts. More than 10% of all women will at some point get genital warts.



## **VACCINATION**

A vaccine can give about 97% protection against the development of abnormal cells and genital warts, if one is not infected before the vaccine. HPV is the most common sexually transmitted virus, and up to 80% will be infected during their life.

- ❖ There are four approved HPV-vaccines in Denmark: a 2-valent vaccine, two 4valent vaccines, and a 9-valent vaccine. This means they are effective against respectively two, four, or nine HPV subtypes.
- ❖ All the vaccines can be administered from the age of 9 to protect against HPV-related diseases.

- ❖ All four vaccines protect against HPV subtypes 16 and 18, which are responsible for 70% of all cases of cervical cancer and 75% of all cases of anal cancer.
- The four-valent vaccine and the nine-valent vaccine also protect against genital warts
- The nine-valent vaccine protects against almost 90% of all cases of cervical cancer and 85% of all cases of anal cancer.
- ❖ HPV-vaccination of girls has been a part of the child vaccination programme in Denmark since 2009, and since September 2019 for boys.
- ❖ The vaccine is to be administered twice if one is not yet sexually active or if one is under 15. Otherwise it is to be administered three times, once on day 0, once after two months, and again after six months.
- \* There are few side-effects but one can experience local irritation after the injection. On rare occasions one's temperature can rise over the first day after the injection.

# YEARLY IN DENMARK

Around 3-4000 women are diagnosed with cervical cancer

Around 120 women die from the consequences of cervical cancer.

Around 5000 women are treated for the premature stages of cervical cancer.

## WHO SHOULD BE VACCINATED?

All women benefit from the vaccine, and as early as possible.

Sexually active women over 25 will also benefit from the vaccine, which will protect against abnormal cell development in outer genitalia, the vagina, and on the cervix. There is no upper age limit for when one should get the vaccine. This means that you can also be vaccinated even if you are 45 or older. Vaccine studies show that one can prevent new HPV infections in women who have previously had HPV infections. Theoretical calculations have also shown that if a

woman has abnormal cells that need to be treated with cervical conization, she too can benefit from a HPV vaccine. This is due to the fact that women who have had a cervical conization are at higher risk of being infected (again) with HPV.

## **READ MORE AT:**

The Danish Serum Institute: <a href="http://www.ssi.dk/Vaccination/Boernevaccination/Sporgsmal%20og%20svar/Om%20HPV-vaccination.aspx">http://www.ssi.dk/Vaccination/Boernevaccination/Sporgsmal%20og%20svar/Om%20HPV-vaccination.aspx</a>

The Unified Danish eHealth (in Danish):: <a href="https://www.sundhed.dk/borger/patien-thaandbogen/kvindesygdomme/sygdomme/oevrige-sygdomme/endometriose/">https://www.sundhed.dk/borger/patien-thaandbogen/kvindesygdomme/sygdomme/oevrige-sygdomme/endometriose/</a>

# WHO CAN I CALL WITH QUESTIONS?

You are welcome to call Kvindeklinikken during telephone hours on 36 46 71 40.

Revised September 2022. To be revised on an ongoing basis and certainly no later than September 2025, before in case of any significant changes.