



# QUESTIONS

# Q & A

FOR PARENTS ANSWERS

ACVIP : 2020 - 2021

## HUMAN PAPILLOMA VIRUS VACCINES (HPV VACCINE)

What are the diseases caused by the Human Papilloma Virus (HPV)?

- ❖ Almost all cervical cancers are caused by the Human Papilloma Virus (HPV). HPV viruses are also responsible for vaginal, vulvar, anal, oral, throat and penile cancers.
- ❖ India alone accounts for one-quarter of the worldwide burden of cervical cancers.
- ❖ HPV infections are so common that nearly all sexually active men and women will get at least one type of HPV at some time in their lives. Most HPV infections go away by themselves within two years. Around 5% of them progress to a state of persistent infection, which can cause cancer.
- ❖ Cervical cancer is often detected late due to lack of any significant symptoms in the early stages of the disease.
- ❖ Of the more than 100 HPV types known, 13 types may cause cervical cancer or are associated with other cancers of the anus, penis, vulva, vagina and throat. Out of them, type 16 and 18 are the most common ones.

In countries where the HPV vaccines are used in the national immunization programs, a significant reduction of diseases caused by HPV has been recorded within a few years of use.

**Which are the vaccines available against the HPV and what is the schedule?**

1. Bivalent (HPV2): this vaccine contains HPV types 16 and 18
2. Quadrivalent (HPV4): this vaccine contains HPV types 6, 11, 16 and 18
3. Nonavalent (HPV9): this vaccine contains HPV types 6, 11, 16, 18, 31, 33, 45, 52 and 58. This vaccine is expected to broaden the protection against cervical cancer by ~15%.

In India, the Bivalent vaccine (HPV2) and the Quadrivalent HPV vaccine (HPV 4) is expected to prevent ~ 83% of cervical cancers, whereas the Nonavalent vaccine (HPV 9) is expected to prevent ~ 98% of cervical cancers.

All the 3 vaccines are very effective in preventing cervical cancers caused by the types contained in the vaccine.

**Schedule:**

- ❖ Girls 9 through 14 years: Two doses to be administered at an interval of 6 months, 0–6 months.
- ❖ Girls 15 years and older: Three doses recommended in the schedule 0–1–6 months for Cervarix and 0–2–6 months for Gardasil.
- ❖ In immunocompromised individuals of any age: Three doses recommended in the schedule 0–1–6 months for Cervarix and 0–2–6 months for the Gardasil.
- ❖ HPV9 is licensed in a 3-dose schedule of 0-2-6 months in females 9-26 years of age and males 9-15 years of age. The ideal age for starting the vaccine is 9-10 years.

HPV vaccines can be given at the same time as the Tdap vaccine.

**Why is it essential to start the schedule at 9-10 years and not later?**

1. Young adolescents mount a superior immune response compared to older individuals.
2. Prevention of disease is better if started earlier
3. Only 2 doses are necessary in this age group versus 3 doses beyond 15 years of age.

There is no recommendation for any booster doses.

**Are the HPV vaccines safe?**

- ❖ These vaccines are generally safe. Mild to moderate local side effects are pain, swelling or redness at the vaccine site.

- ✦ Some adolescents may have giddiness or fainting sensation after the shot. It can be minimized by giving the vaccine in a lying down or reclining position. All the patients should be monitored for at least 20 minutes for any immediate side effects. This adverse effect is not HPV vaccine specific, but can happen after any vaccine, in this age group.

#### **Who should receive this vaccine?**

All girls (>9 years) and adolescent girls should receive this vaccine. Catch-up vaccination may be offered to older women. This vaccine is licensed for use till 45 years.

Vaccination of males will offer some protection against other HPV related cancers penis, anus and oropharynx (mouth and throat). In India, only the HPV 9 vaccine is licensed in males.

#### **Who should not receive the HPV vaccine?**

1. History of severe allergic reaction (anaphylaxis) after the first dose of the vaccine or known, severe allergies to any component of the vaccine
2. Pregnancy
3. People who are moderately or severely ill should usually wait until they recover, before getting HPV vaccine.

**For more information, please contact your doctor.**

