

## TOPIC: HPV AND GENITAL WARTS



# HPV & Genital Warts

### Viral

TYPE:  
Non-enveloped, ds\_\_\_\_\_ virus.

### CAUSE

Human Papillomaviruses (HPV).

- ▶ > \_\_\_\_\_ HPV subtypes: > \_\_\_\_\_ are sexually transmitted.
- ▶ \_\_\_\_\_ common STI in United States.
- ▶ Different types may:
  - Be asymptomatic.
  - Cause \_\_\_\_\_.
  - Cause cancers (cervical, genital, anal, oropharyngeal).

### SPREAD

Sexually transmitted.

- ◆ Incubation period ~3-4 months.
- ◆ Many/most individuals \_\_\_\_\_ of infection.

### SYMPTOMS

- ◆ Papillomas (\_\_\_\_\_) on genitalia or surrounding skin & anus.
  - ▶ **Warts:** harmless epithelial growths.
  - ▶ **Condylomata Acuminata:** large, cauliflower-like growths of warts.
- ◆ Most HPV cases resolve on their own within \_\_\_\_ years.
- ◆ HPV is the #1 cause of cervical \_\_\_\_\_ (~13 types may cause cancer).
  - ▶ \_\_\_\_\_ cause oropharyngeal, penile, anal, vaginal and vulvar cancers.

### DIAGNOSIS

Warts diagnosed by \_\_\_\_\_ inspection.  
HPV detected through cervical cancer screening via a Pap smear.

### TREATMENT

Medications may help get rid of \_\_\_\_\_, but do not clear infection.  
\_\_\_\_\_ important for those diagnosed with cancer-causing types.

### IMMUNITY

- ◆ HPV \_\_\_\_\_ recommended for adolescents.
  - ▶ Targets \_\_\_\_\_ common HPV types; prevents most warts and \_\_\_\_\_.
  - ▶ Produces a \_\_\_\_\_ immune response than being infected with HPV.

## EXAMPLE

Below, several common STIs are listed. To the right is a list of symptoms or characteristics of those STIs. Match the STI with the correct characteristics. Characteristics may be associated with more than one STI.

|                          |  |
|--------------------------|--|
| 1) Chlamydia: _____      | A. Spreads through pustules or lesions on the genitals.                |
| 2) Syphilis: _____       | B. Causes pustules/lesions on the genitals that are regularly painful. |
| 3) Genital herpes: _____ | C. May cause warts on the penis, labia, or perineum.                   |
| 4) Gonorrhea: _____      | D. Infection usually occurs at the cervix in females.                  |
| 5) HPV: _____            | E. Many cases are asymptomatic in males.                               |
|                          | F. Many cases are asymptomatic in females.                             |
|                          | G. May significantly increase risk of cervical cancer.                 |
|                          | H. May be treated with antibiotics.                                    |

The spread of which of these STIs would be most effectively prevented by consistent, correct condom use?

\_\_\_\_\_

## PRACTICE

Which of the following statements regarding HPV infection is true?

- a) Genital warts are a strong indication that a person is infected with an HPV type that may lead to cervical cancer.
- b) HPV is relatively rare but considered serious because those infected are likely to develop cervical cancer.
- c) Most HPV infections are asymptomatic, but infection may greatly increase the risk of cervical or oropharyngeal cancers.
- d) The HPV vaccine is effective at preventing infection by most of the forty-plus HPV types that are sexually transmitted.

## PRACTICE

HPV infection is associated with cervical cancer. The following statements describe reasons why the HPV vaccine is recommended to boys as well as girls. Which of the statements is INCORRECT?

- a) The HPV vaccine helps to prevent serious cancers in men, including oropharyngeal, anal, and penile cancers.
- b) The HPV vaccine prevents the most common causes of genital warts in both males and females.
- c) The HPV vaccine is typically given as a combination vaccine that offers protection to both HPV and Hep-B.
- d) Men who are vaccinated cannot spread the most common forms of HPV, protecting their eventual partners from infection.

**CITATIONS:**

1. CDC/Dr. Caldwell. <https://phil.cdc.gov/Details.aspx?pid=21366>
2. CDC/Dorothy Reese, 1965, <https://phil.cdc.gov/Details.aspx?pid=20873>
3. CDC, 1961. <https://phil.cdc.gov/Details.aspx?pid=29916>
4. Pearson Asset Library. SneSivan / Shutterstock.