# Genital Warts Public Education

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### **ABSTRACT**

Genital warts are a common sexually transmitted infection caused by the human papillomavirus (HPV). This article provides an overview of genital warts, covering their causes, strains, risk factors, prevalence, signs and symptoms, spread, diagnosis, pathophysiology, treatment, and preventive measures. Written in simple terms, this article is designed to be an accessible resource for the public, helping them navigate the complexities of this widespread condition.

**Keywords:** Causes of genital warts; Diagnosis of genital warts; How common are genital warts; Introduction to genital warts; Pathophysiology of genital warts; Preventive measures of genital warts; Risk factors for genital warts;

Signs and symptoms of genital warts; Spread of genital warts; Strains of genital warts; Treatment of genital warts

# INTRODUCTION TO GENITAL WARTS

Genital warts are a type of sexually transmitted infection caused by certain strains of the human papillomavirus (HPV). These warts appear as small growths or bumps on the genital and anal areas and can vary in size and shape. They are usually flesh-colored and may be flat or raised, singular or clustered. Genital warts can cause discomfort, itching, and emotional distress due to their appearance and the stigma associated with sexually transmitted infections (1-3).

### CAUSES OF GENITAL WARTS

Genital warts are caused by the human papillomavirus (HPV), a highly contagious virus transmitted through sexual contact. There are over 100 different types of HPV, but only certain strains are responsible for genital warts. The virus is spread through skin-to-skin contact during vaginal, anal, or oral sex with an infected person. Once the virus enters the body, it infects the epithelial cells of the skin and mucous membranes, leading to the growth of warts. The infection can be transmitted even if no warts are visible, as the virus can be present on the skin.

## THE STRAINS OF GENITAL WARTS

Genital warts are primarily caused by HPV types 6 and 11, which are responsible for approximately 90% of cases. These strains are considered low-risk because they are not typically associated with cancer. However, other high-risk HPV types, such as 16 and 18, can cause cervical and other genital cancers but do not usually cause warts. The distinction between low-risk and high-risk HPV types is important for understanding the potential health implications of the infection. Although genital warts caused by HPV types 6 and 11 are not life-threatening, they can be persistent and recurrent, requiring ongoing management.

# RISK FACTORS FOR GENITAL WARTS

Several factors can increase the risk of contracting genital warts. Having multiple sexual partners increases the likelihood of exposure to HPV. Inconsistent or incorrect use of condoms can also elevate the risk, as HPV can infect areas not covered by a condom. A weakened immune system, whether due to illness, medications, or conditions like HIV/AIDS, makes individuals more susceptible to infection. Age is another factor, with younger individuals, particularly those in their teens and twenties, being at higher risk due to more frequent changes in sexual partners. Smoking has also been linked to an increased risk of HPV infection and genital warts.

## HOW COMMON ARE GENITAL WARTS?

Genital warts are one of the most common sexually transmitted infections worldwide. According to the Centers for Disease Control and Prevention (CDC), approximately 1 in 100 sexually active adults in the United States has genital warts at any given time. HPV infection is very common, with most sexually active people contracting it at some point in their lives. However, not all HPV infections lead to genital warts, as the body's immune system can often clear the virus naturally. Despite the high prevalence of HPV, the visibility of genital warts and their associated symptoms make them a significant public health concern.

## SIGNS AND SYMPTOMS OF GENITAL WARTS

The signs and symptoms of genital warts can vary widely among individuals. Warts can appear as small, flesh-colored or grey growths in the genital and anal areas. They may be flat or raised, singular or clustered, and can sometimes form a cauliflower-like shape. These warts can cause itching, discomfort, and bleeding, particularly during sexual intercourse. In some cases, genital warts can be so small that they are not visible to the naked eye, while in other cases, they can grow quite large and be easily noticeable. The incubation period for HPV can range from weeks to months, meaning that symptoms may not appear immediately after infection. Although genital warts are not usually painful, their presence can cause significant

emotional distress and affect sexual health and relationships.

### SPREAD OF GENITAL WARTS

Genital warts spread primarily through sexual contact with an infected person. This can occur through vaginal, anal, or oral sex. The virus is most contagious when warts are present, but it can also be transmitted in the absence of visible symptoms, a phenomenon known as asymptomatic shedding. Skin-to-skin contact with the infected area is sufficient for transmission, and the virus can enter the body through tiny breaks in the skin or mucous membranes. The risk of transmission is higher during sexual activity and can be reduced but not eliminated by using condoms. HPV can also be spread from mother to baby during childbirth, although this is less common. Preventing the spread of genital warts involves practicing safe sex, getting regular screenings, and communicating openly with sexual partners.

## DIAGNOSIS OF GENITAL WARTS

Diagnosing genital warts typically involves a clinical evaluation by a healthcare provider. The provider will assess symptoms and medical history and perform a physical examination of the genital and anal areas. In some cases, a biopsy may be performed to confirm the diagnosis, especially if the warts are unusual in appearance or do not respond to standard treatments. HPV testing can also be done to detect the presence of the virus, particularly in

women, where it is often part of routine cervical cancer screening. Early diagnosis is important for managing symptoms and preventing the spread of the virus. If you suspect you have genital warts, it is essential to consult a healthcare provider for appropriate testing and guidance.

### PATHOPHYSIOLOGY OF GENITAL WARTS

The pathophysiology of genital warts involves the human papillomavirus infecting the epithelial cells of the skin and mucous membranes. Once the virus enters the body through tiny breaks in the skin, it infects the basal cells of the epithelium. The virus then induces the proliferation of these cells, leading to the formation of warts. HPV disrupts the normal cell cycle, causing infected cells to remain in a state of proliferation and fail to undergo programmed cell death. This results in the growth of warts on the skin's surface. The immune system responds to the infection, but HPV has mechanisms to evade immune detection, allowing the virus to persist and cause recurrent warts. The body's ability to control the infection can vary, leading to differences in the severity and frequency of outbreaks among individuals.

# TREATMENT OF GENITAL WARTS

The treatment of genital warts focuses on removing the warts and alleviating symptoms. Several treatment options are available, and the choice of treatment depends on the

size, location, and number of warts. Topical treatments, such as imiquimod (Aldara), podophyllotoxin (Condylox), and sinecatechins (Veregen), can be applied directly to the warts to induce an immune response or cause the warts to shrink. Cryotherapy, which involves freezing the warts with liquid nitrogen, is another common treatment. Electrocautery, laser therapy, and surgical excision are options for removing larger or persistent warts. It is follow the healthcare important to provider's recommendations and complete the full course of treatment to achieve the best results. While these treatments can remove visible warts, they do not cure the underlying HPV infection, and warts can recur. Maintaining a healthy lifestyle, and regular follow-up with a healthcare provider can help reduce the frequency of outbreaks and manage the condition effectively.

## PREVENTIVE MEASURES OF GENITAL WARTS

Preventing genital warts involves a combination of safe sex practices, vaccination, and lifestyle modifications. Using condoms consistently and correctly during sexual activity can reduce the risk of transmission, although they do not eliminate it entirely, as HPV can infect areas not covered by a condom. The HPV vaccine, such as Gardasil, is highly effective in preventing infections with the HPV types most commonly associated with genital warts and certain cancers. Vaccination is recommended for both males and females, ideally before becoming sexually active. Regular screenings and open communication with sexual partners about STI status and risks are essential for preventing the spread of genital warts. Practicing good personal hygiene, such as washing hands frequently and avoiding touching

the warts, can prevent spreading the virus to other parts of the body or to other people. Maintaining a healthy immune system through a balanced diet, regular exercise, adequate sleep, and stress management can also help reduce the risk of infection and recurrence of warts. Educating yourself and others about genital warts and HPV can help promote preventive measures.

### CONCLUSION

Genital warts are a common and highly contagious sexually transmitted infection that affects millions of people worldwide. Understanding the causes, symptoms, spread, and treatment of genital warts is essential for managing the condition and preventing its transmission. While there is no cure for HPV, antiviral medications and good hygiene practices can help alleviate symptoms and reduce the frequency of outbreaks. Increasing awareness and understanding of genital warts can help reduce the stigma associated with the condition and promote better management and prevention strategies.

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