What are warts?
These skin growths have been recognized in humans for thousands of years. However, because warts appear suddenly and often disappear with no treatment, particularly in children, their origin and wildly bizarre remedies have been the subject of folklore and controversy for centuries. Not until the late 1940’s did scientists learn warts are caused by a virus called the human papillomavirus (HPV).

More than 100 different strains of HPV cause warts, including the common wart that appears on the fingers; flat warts that appear on places frequently shaved, and plantar warts that appear on the soles of feet. While most warts are a benign, unsightly nuisance, some HPV strains cause genital warts, which are a serious health risk that can lead to cancer.

Where do they come from?
The virus that causes warts is fairly common and is transmitted by contact between people, or from contact with an item such as a towel that someone with warts has used; or in children, sharing of toys that have been used by someone with warts. Patients with a break in the skin, bitten nails, irritated cuticles (hangnails), or a weakened immune system are more vulnerable to the virus. Warts very often develop in clusters and can spread to different areas on the body. What looks like one wart may actually be several.

Unique distinctions of warts
Other skin conditions that can look like warts are corns and callouses, which occur in the same body regions as warts, such as the hands or feet. Other more serious skin problems like squamous cell carcinoma, seborrheic keratosis, and other conditions, also mimic warts. That’s why it’s important that any skin change be examined professionally. A dermatologist can usually identify a wart just by looking, but there are also two distinctive physical characteristics that are unique to warts. The first is the change in normal skin patterns that look “erased,” such as the print ridges on the bottom of the foot in the case of plantar warts. The second is if a healthcare professional scrapes the wart with a scalpel for biopsy or removal, and it results in a single “pinpoint” of bleeding, which is the center of the wart.

How are warts diagnosed at the lab?
Tissue from a biopsy is sent to a pathology lab. There the tissue is prepared on glass slides and reviewed by a pathologist, a clinician who has specialized in the diagnosis of disease. At Inform Diagnostics, all of the pathologists have further specialized in their specific field of practice, such as dermatopathology for dermatology conditions.

The pathologist looks for abnormal cellular changes under a microscope. He or she interprets the findings under the microscope in the context of the clinical information provided by the healthcare provider. Some cases require additional special analysis to evaluate proteins, RNA and/or DNA.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multi-headed microscopes to ensure the most accurate and definitive diagnoses.

The pathologist creates a pathology report with all the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.

Treatment options for warts
Depending on the location and extent of the wart infection, the healthcare professional may use one, or a combination of procedures, to remove warts.
Warts

These include freezing the wart tissue, which causes the affected tissue to die off, and then cutting the wart out with a specially-shaped instrument. Or a chemical can be applied, which causes the tissue under the wart to blister, and then in several days, the healthcare professional can cut away the dead wart tissue. Sometimes first burning off the wart with a heated wire instrument, then scraping away the affected tissue is used. In some situations, a combination of these procedures are needed. If one of these techniques is not an ideal treatment choice or it fails to work, other options include:

- Injection directly in the wart of an anticancer medication
- Laser treatment
- Application of a chemical peel liquid applied at home each day
- Immunotherapy using a chemical that the immune system responds to which causes the wart to disappear

Essential screening for genital warts

A genital warts infection is a sexually-transmitted disease (STD) that is of special concern to health providers because it is very contagious, often has no symptoms, and can lead to a cancerous condition. One study estimates that half of women affected with genital warts had no symptoms and were unaware of their condition. Treatment is much the same for other wart infections, but sometimes surgery may be necessary.