

## Warts

Warts are skin infections caused by viruses in the human papillomavirus (HPV) family. Of note, the HPV strains that cause skin warts are NOT the strains that cause cancer. Warts occur most commonly on the hands and feet, but they can appear almost anywhere on the body. They are contagious and more common in children than adults. Warts occur in 5 to 70% of children.

### How long do warts last?

Most warts will go away in 2 to 3 years. About 25% will resolve in about 6 months without treatment. If left alone, eventually, the body will build up resistance and cause the wart to disappear.

### Should warts be treated?

Other than being a nuisance, warts are usually harmless and can be ignored if they do not bother the person. However, sometimes they can cause pain, especially if they occur on weight bearing parts of the sole of the foot.

### How are warts treated?

There are several methods of treating warts. Keep in mind, no single treatment is 100% effective as some warts are very resistant. These methods include:

- doing nothing (as most warts eventually disappear)
- applying over-the-counter medications (salicylic acid) to the wart
- freezing the wart with liquid nitrogen
- applying a stronger chemical (cantharidin) to the wart

For a simple wart, over-the-counter treatment with salicylic acid and duct tape may work and is not painful. However, it does require repeated daily treatment for several weeks:

- 1) Apply 17% salicylic acid (such as Occlusal HP or Compound W) to the wart. It comes in liquid, gel, and pad/bandage preparations. For warts on the bottom of the foot (also known as plantar warts), stronger concentrations of 40% salicylic acid may work better.
- 2) If using liquid or gel preparations, allow to dry for 2 to 3 minutes (develops a white film) and cover the wart with a piece of duct tape.
- 3) Remove the tape or bandage in the morning and gently remove dead tissue with an emery board or pumice stone.
- 4) Repeat nightly until wart resolves.
- 5) If the wart becomes red and irritated, hold treatment for a few days before resuming.

Another method is to apply liquid nitrogen to freeze the wart. This treatment is applied by your doctor and can be somewhat uncomfortable. A blister may form in 1 to 2 days. After the blister ruptures, clean the area daily and apply topical antibacterial ointment (such as bacitracin) and a bandage. Several treatments every 2-4 weeks may be needed.

Another approach available through your doctor is to apply cantharidin (beetle juice) to the wart. This is a stronger chemical than the over-the-counter preparations. It is painless when applied, but becomes uncomfortable with some blistering after a few hours. Similarly, several treatments may be needed.