

**DR Z,**

**My son has these funny looking warts on his hand. What I want to know is where did he get them, and what can I do about them?**

Warts are a common, pesky, skin dilemma among the general population. Warts also known as verruca vulgaris, are often confused with moles and other skin lesions. A wart is a growth that can occur anywhere on the skin, but they frequently occur on the hands, feet, and elbows. These growths are benign (noncancerous) overgrowths of the skin cells caused by the Human Papillomavirus (HPV) and under most circumstances are not harmful to one's health. One point to mention is that HPV causes genital warts as well, which can be transmitted by unprotected sexual contact. However, we will save this topic for another time.

The three main types of warts are common warts, plantar warts, and flat warts.

Common warts are typically flesh to pink colored 1-10 mm bump with a rough texture, occurring anywhere on the body. These occur in about 20% of school aged children.

Plantar warts are flesh colored and rough/grainy as well but occur on "plantar" surface of the feet. These warts will frequently coalesce together creating larger areas of warts. Plantar warts are more common in older children and adults.

Flat warts can occur in anyone and are smaller than most warts with a pink color and flat smooth texture. They will appear in large groups of 20 to even 100. They tend to be more common in areas of shaving in adults or on the faces of children.

Unfortunately, warts tend to spread. They can spread from person to person contact or they can spread from one area of the body to another. For example, if one picks at the wart, the virus can live underneath the nail allowing the opportunity for the virus to enter another skin site. Shaving with razors is another source that spreads the virus. The virus gets into the razor and the razor creates micro cuts in the skin, so essentially it is like digging a hole and planting a seed. Keep in mind that not everyone will get warts even though they have been exposed to the virus. Individual's immune system reactions to warts are variable.

Warts can disappear on their own; without any treatment. However, people frequently want them treated due to their tendency to become tender, irritated and bleed with trauma, or for cosmetic reasons. This is possible because the body's immune system will fight the virus but it can take months or even years for this to happen. There are several treatment options.

Cryotherapy (liquid nitrogen) is typically first line. Cryotherapy is generally pain free and basically freezes the wart, creating a blister that sloughs off the wart tissue. This may need to be done monthly before the wart is entirely gone. Another technique is

performed by using electro-cautery to burn off the wart. This is done with a special instrument, but usually requires having the wart numbed up with a local anesthetic first. Electro-cautery may also require several treatments to adequately treat a wart. There is Imiquimod cream and a topical retinoid that can be prescribed. However, this is often not the most effective or preferred method of treating a wart.

Keep in mind that there is not treatment for the virus, only for the warts. Prevention includes the following: do not pick warts, do not bite fingernails, do not shave warts, and wash hands after touching warts. One should seek medical care if the wart has color changes, bleeds, becomes painful or ulcerates. For more details on warts or skin lesions please follow up with your local medical home.