

Warts and verrucas

Peer reviewed by **Dr Philippa Vincent, MRCGP**

Last updated by **Dr Doug McKechnie, MRCGP**

Last updated 11 Oct 2024

✓ Meets Patient's **editorial guidelines**

Est. **9 min** reading time

Warts are usually harmless but may be unsightly. Warts on the feet are called verrucas (or verrucae) and are sometimes painful. Warts and verrucas usually clear in time without treatment. If required, they can often be cleared more quickly with treatment. Most commonly, treatment involves applying salicylic acid or freezing with liquid nitrogen or a cold spray.

At a glance

- Warts are small, rough lumps on the skin caused by a virus called human papillomavirus.
- Verrucas are warts that appear on the soles of the feet.
- Most warts are harmless and often disappear on their own within two years.
- You can spread warts to others through close skin-to-skin contact.
- To prevent spreading, avoid sharing towels and cover warts with a waterproof plaster for swimming.
- Common treatments include salicylic acid and freezing (cryotherapy).
- Seek medical advice for warts if they are painful, unsightly, or persistent.

This summary has been automatically generated from the article content to help readers quickly understand the key points.



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

What are warts and verrucas?

Warts are small rough lumps on the skin. Verrucas are warts on the feet. They are caused by a virus (**human papillomavirus**) which causes a reaction in the skin. Warts can occur anywhere on the body but occur most commonly on hands and feet.

They range in size from 1 mm to over 1 cm. Sometimes only one or two warts develop. Sometimes several occur in the same area of skin. The shape and size of warts vary and they are sometimes classed by how they look.

Verruca



© Marionette, CC BY-SA 3.0, via Wikimedia Commons



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

Hand wart



Types of warts and verrucas

Examples are:

- Common warts.
- Plane (flat) warts.
- Filiform (finger-like) warts.
- Mosaic warts – when several warts join together.
- Verrucas are warts on the soles of the feet. They are the same as warts on any other part of the body. However, they may look flatter, as they tend to get trodden in.

Note: anal and genital warts are different. [See the separate leaflet called Genital warts for more detail.](#)

How common are warts and verrucas?

Most people develop one or more warts at some time in their lives, usually before the age of 20. About 1 in 10 people in the UK have warts at any one time. Almost as many as 1 in 3 children or young people may have warts.

Are warts and verrucas harmful?

They are not usually harmful. Sometimes verrucas are painful if they press on a sensitive part of the foot. Some people find their warts unsightly. Warts at the end of fingers may interfere with fine tasks.

Are warts and verrucas contagious?

Yes – however, the risk of passing them on to others is low. When something is called 'contagious', it means it can be passed on by touching. You need close skin-to-skin contact to pass the virus on directly. You are more at risk of being infected if your skin is damaged, or if it is wet and macerated, and in contact with roughened surfaces.



You can also spread the wart virus to other areas of your body. For example, warts may spread round the nails, lips and surrounding skin if you bite warts on your fingers, or nearby nails, or if you suck fingers with warts on.

If you have a poor immune system you may develop lots of warts which are difficult to clear. (For example, if you have AIDS, if you are on chemotherapy, etc.)

How to stop warts and verrucas spreading

To reduce the chance of passing on warts to others:

- Don't share towels.
- When swimming, cover any wart or verruca with a waterproof plaster.
- If you have a verruca, wear flip-flops in communal shower rooms and don't share shoes or socks.

To reduce the chance of warts spreading to other areas of your body:

- Don't scratch warts or pick them.
- Don't bite nails or suck fingers that have warts.
- If you have a verruca, change your socks or tights daily.

What is the treatment for warts and verrucas?

Warts are generally harmless, and usually disappear on their own, although this can take some time. About two-thirds of warts go away without treatment within two years.

So, treatment for warts and verrucas isn't always necessary, although some people choose to get treatment if they are unsightly, or causing pain, discomfort, or other problems.

The most commonly used treatments are:

- Salicylic acid.
- Freezing treatment.



Each of these is now discussed further.

Salicylic acid

There are various lotions, paints and special plasters that contain **salicylic acid**. This acid burns off the top layer of the wart. You can buy salicylic acid at pharmacies, or your doctor may prescribe one. If these don't work, a podiatrist can offer treatment with stronger acid.

Salicylic acid usually comes as a paint or a gel. Read the instructions in the packet on how to use the brand you buy or are prescribed, or ask your pharmacist for advice. Usually:

- You need to apply it each day for up to three months. Persevere – if you give up too soon, it will not work.
- Before applying the salicylic acid, rub off the dead tissue from the top of the wart, with an emery file (or similar).
- It is best if you soak the wart in water for 5–10 minutes before applying salicylic acid.
- You should not apply salicylic acid to the face because of the risk of skin irritation which may cause scarring.
- If you have diabetes or poor circulation, you should use salicylic acid only on the advice of a doctor.

If you put the acid on correctly each day you have a reasonable chance of clearing the warts within three months.

Tips for success include:

- Try not to get the acid on the skin next to the wart, as it may become irritated. You can protect the nearby skin by putting some Vaseline® on the normal skin beforehand, or by putting on a plaster with a hole in it which just exposes the wart for treatment.
- If the surrounding skin does become sore, stop the treatment for a few days until it settles. Then re-start treatment. There is also a small risk that you may get a skin allergy to the treatment. If this occurs, the surrounding skin becomes red and itchy.



- It may take two weeks or more before you notice any improvement. It can take up to three months of daily applications for warts to go completely.
- Acid lotions and paints are flammable. Keep them away from open fires and flames.

Freezing treatment (cryotherapy)

Freezing warts may also be effective. Many GPs and practice nurses are skilled at this. You can also get private treatment with cryotherapy from podiatrists. **Liquid nitrogen is commonly used.**

The nitrogen is sprayed on or applied to the wart. Liquid nitrogen is very cold and the freezing and thawing destroys the wart tissue. To clear the wart fully it can need up to 4–6 treatment sessions, sometimes more. Each treatment session is a couple of weeks or so apart.

Freezing treatment can be painful. Sometimes a small blister develops for a day or so on the nearby skin after treatment. Also, there is a slight risk of scarring the nearby skin or nail or damaging underlying tissues such as tendons or nerves. It is not suitable for younger children or for people with poor circulation.

There are freezing treatments available over the counter, which you can apply yourself. However, these cannot provide such a cold freeze as liquid nitrogen. They are probably less effective, although again the results of studies are not totally clear.

Combined treatment

Another option is treatment with salicylic acid plus cryotherapy. In between the freezing sessions, you apply salicylic acid daily to your wart. You should not use the salicylic acid until any blistering, scabs or soreness from the cryotherapy have settled.

Other treatment options

Verruca needling

Most treatments for verrucas work by destroying the verruca itself with acid or freezing treatment. Verruca needling works by stimulating your own body's immune response to fight off the virus. It involves puncturing the verruca with a small needle to cause bleeding.



Verruca needling is done under local anaesthetic so the procedure doesn't hurt. Most people don't experience much pain afterwards. It is important to avoid anti-inflammatory painkillers for at least 48 hours following treatment, as there is a small chance they can reduce your immune system's ability to fight off the virus.

Verruca needling can be very effective for stubborn verrucas, curing 7 in 10 long-standing verrucas after a single treatment. It is not available on the NHS but can be accessed as a private (paid for) treatment from podiatrists.

Swift microwave therapy

This is a new treatment developed in the UK which uses precise doses of microwave energy delivered directly through a probe. This allows the energy to be targeted very precisely, heating and destroying the verruca. It only takes a few seconds and does not need local anaesthetic.

It causes minimal tissue inflammation and has a high success rate. In studies, Swift successfully cleared more than 3 out of 4 long-lasting, stubborn warts which hadn't responded to previous treatment. You may only need one treatment, but up to 70% of verrucas respond in 1–3 treatments.

This service is not available on the NHS. It is offered as a private (paid for) service by some podiatrists.

Specialist treatments

There are some other treatments used by specialists if other treatments have failed. Treatment is not usually available on the NHS to treat warts and verrucas unless there are complications or they are very severe. It is available as a private (paid for) service from many podiatrists.

Some of the treatments used on warts and verrucas which don't go away are:

- Surgery to cut out the wart or verruca.
- Light therapy (photodynamic therapy).
- Laser therapy.
- Creams to try to kill the virus (virucidal creams).
- Creams which stop the skin cells multiplying.



- Certain creams which are normally used for skin cancers.

Tape

Duct tape may help warts to disappear sooner, although there is only limited research on it, and we don't know for certain if it works or not. However, it's a safe and easy treatment, and may be worth trying, especially in children.

To try this method:

- Cover the wart with duct tape for six days. If the tape falls off during this time, put a fresh piece of tape on.
- After six days, remove the tape and soak the wart in warm water for five minutes. After drying, gently rub the wart with emery board or pumice stone to get rid of dead tissue from the top of the wart.
- Leave the wart uncovered overnight, and put duct tape on again the next day.
- This can be continued for up to two months.

There have been no concerns about harm using this method. Some experts advise that you should not use duct tape on the face, as in some people it can irritate the skin.

Can you swim with warts and verrucas?

A child with warts or verrucas should go swimming as normal. Swimming is a vital skill, which can save your life. Warts can be covered with waterproof plasters. A verruca can also be covered with a waterproof plaster.

Some people prefer to wear a special sock which you can buy from pharmacies. However, this makes it very obvious that you have a verruca, may be embarrassing and has not been proved to make a difference. British swimming organisations do not advise wearing the waterproof sock. The plaster should be enough. It is also a good idea to wear flip-flops when using communal showers, as this may reduce the chance of catching or passing on virus particles from verrucas.



Frequently asked questions

Do verrucas bleed?

Yes, verruca needling, a treatment for stubborn verrucas, works by puncturing the verruca with a small needle to cause bleeding. This method stimulates your body's immune response to fight off the virus.

Can verrucas appear on fingers?

Warts can occur anywhere on the body, though they are most common on hands and feet. Verrucas specifically refer to warts located on the feet, implying that warts on fingers would typically be referred to as common warts rather than verrucas.

How does salicylic acid kill verrucas?

Salicylic acid works by burning off the top layer of the wart. It comes in various lotions, paints, and special plasters that need to be applied daily, usually for up to three months, to effectively clear the wart.

Why do verrucas itch?

The article does not specifically mention itching as a common symptom of verrucas. However, warts can sometimes be painful if they press on a sensitive part of the foot, and the surrounding skin might become irritated if treatments like salicylic acid are not applied carefully.

What is the difference between a verruca and a wart?

Verrucas are a type of wart that specifically occurs on the soles of the feet. They are essentially the same as warts on any other part of the body, but they may appear flatter due to pressure from walking.



How can I identify a verruca?

Verrucas are warts on the soles of the feet. They are generally small rough lumps and may appear flatter than other warts because they are often trodden in. They are caused by the human papillomavirus.

Are specific treatments for stubborn verrucas available?

Yes, for verrucas that haven't responded to standard treatments like salicylic acid or freezing, advanced options like verruca needling and Swift microwave therapy are available. Verruca needling stimulates the body's immune response, while Swift microwave therapy uses microwave energy to destroy the verruca tissue. These are typically offered as private treatments by podiatrists.

These questions and answers have been generated from the information in this article.

Further reading and references



- **Kwok CS, Gibbs S, Bennett C, et al** [\[\]](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=22972052) (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=22972052); Topical treatments for cutaneous warts. Cochrane Database Syst Rev. 2012 Sep 12;9:CD001781. doi: 10.1002/14651858.CD001781.pub3.
- **British Association of Dermatologists Guidelines for the management of cutaneous warts** [\[\]](https://onlinelibrary.wiley.com/doi/full/10.1111/bjd.13310) (<https://onlinelibrary.wiley.com/doi/full/10.1111/bjd.13310>); British Journal of Dermatology (2014)
- **Lynch MD, Cliffe J, Morris-Jones R** [\[\]](http://www.bmj.com/content/348/bmj.g3339?ss=0) (<http://www.bmj.com/content/348/bmj.g3339?ss=0>); Management of cutaneous viral warts. BMJ. 2014 May 27;348:g3339. doi: 10.1136/bmj.g3339.
- **Viral warts** [\[\]](http://www.dermnetnz.org/viral/viral-warts.html) (<http://www.dermnetnz.org/viral/viral-warts.html>); DermNet NZ
- **Bruggink SC, Eekhof JA, Egberts PF, et al** [\[\]](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3767712/) (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3767712/>); Natural course of cutaneous warts among primary schoolchildren: a prospective cohort study. Ann Fam Med. 2013 Sep-Oct;11(5):437-41. doi: 10.1370/afm.1508.



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

- **Understanding Verrucas** [\(https://www.britishswimming.org/members-resources/athletes-and-parents/understanding-verrucae/\)](https://www.britishswimming.org/members-resources/athletes-and-parents/understanding-verrucae/); British Swimming
- **Longhurst B, Bristow I** [\(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4470114/\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4470114/); The Treatment of Verrucae Pedis Using Falknor's Needling Method: A Review of 46 Cases. J Clin Med. 2013 Apr 2;2(2):13–21. doi: 10.3390/jcm2020013.
- **Bristow, I., Lim, W.C., Lee, A. et al.** [\(https://link.springer.com/article/10.1684/ejd.2017.3086\)](https://link.springer.com/article/10.1684/ejd.2017.3086); Microwave therapy for cutaneous human papilloma virus infection. Eur J Dermatol (2017) 27: 511. <https://doi.org/10.1684/ejd.2017.3086>
- **Warts and verrucae** [\(https://cks.nice.org.uk/topics/warts-verrucae/\)](https://cks.nice.org.uk/topics/warts-verrucae/); NICE CKS, October 2024 (UK access only)

About the author [View full bio](#)

Dr Doug McKechnie, MRCGP

Medical Writer

MA, MBBS, MSc, DRCOG, MRCP(UK), MRCGP(2021), FHEA

Dr Doug McKechnie is an NHS GP working in London. He works full-time clinically and is also the Deputy Lead for the Clinical and Professional Practice module at University College London Medical School.

About the reviewer [View full bio](#)

Dr Philippa Vincent, MRCGP

General Practitioner, Medical Author

MB BS, Bsc, MRCGP (2000), DCH, DFSRH, DRCOG

Dr Philippa Vincent is an NHS GP working in North London.



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

Article history

The information on this page is written and peer reviewed by qualified clinicians.

Article also available in **English**, **German**, **Spanish**, **French**, **Italian** (<https://it.patient.info/skin-conditions/warts-and-verruccas-leaflet>), **Portuguese** (<https://pt.patient.info/skin-conditions/warts-and-verruccas-leaflet>), **Hindi** (<https://hi.patient.info/skin-conditions/warts-and-verruccas-leaflet>), **Hebrew** (<https://he.patient.info/skin-conditions/warts-and-verruccas-leaflet>), **Arabic** (<https://ar.patient.info/skin-conditions/warts-and-verruccas-leaflet>), and **Swedish** (<https://sv.patient.info/skin-conditions/warts-and-verruccas-leaflet>).

- Next review due: 10 Oct 2027

- 11 Oct 2024 | Latest version

Last updated by

Dr Doug McKechnie, MRCGP

Peer reviewed by

Dr Philippa Vincent, MRCGP

Related discussions

[View more discussions \(https://community.patient.info/c/29\)](https://community.patient.info/c/29)

More in infections

Aspiration pneumonia

Boil in the ear canal

Bornholm disease

Chickenpox in children

Febrile seizure

Fungal scalp infection

Helicobacter pylori

Japanese encephalitis vaccine



Scan this QR code to view this article online or visit <https://patient.info>

Our clinical information meets the standards set by the NHS in their Standard for Creating Health Content guidance.

Kidney infection

Meningococcal vaccine for meningitis

Middle ear infection (otitis media)

Molluscum contagiosum

Mycoplasma genitalium

Primary cold sore infection

School exclusion for infections

Trichomoniasis

Tuberculosis

Typhoid and paratyphoid fever

Yeast infection

Yellow fever vaccine

[View more in infections](#)

