

ACTINIC PRURIGO

What are the aims of this leaflet?

This leaflet has been written to help you understand more about actinic prurigo. It tells you what it is, what causes it, what can be done about it, and where you can find out more about it.

What is actinic prurigo?

The term 'actinic prurigo' is the term used for a rare (less than 1 in 1,000) type of skin sensitivity induced by sunlight (photosensitivity); 'actinic' is Greek for 'sunlight', 'pruritus' is the medical term for itching, and 'prurigo' is a related word which describes the changes that appear in the skin after it has itched and been scratched for a long time. In actinic prurigo the skin becomes firm, raised and itchy on the areas of the skin surface which are exposed to the sun.

What causes actinic prurigo?

Actinic prurigo occurs in affected individuals following exposure to sun light. The reason why this reaction between skin and sunlight occurs remains unclear. Current research suggests that actinic prurigo may be an allergic reaction to proteins altered by sunlight in people who have inherited certain genes. The condition sometimes runs in families.

Other facts about actinic prurigo:

- Women are twice as likely as men to develop actinic prurigo
- It usually starts in childhood and young adults.

Actinic prurigo can affect anyone. It is most common in Native Americans; it rarely affects those indigenous to Europe and Asia

Is actinic prurigo hereditary?

Yes, in some people. Actinic prurigo is associated with a gene called HLA DR4. One type of this gene is called DRB1*0407 subtype which is present in 60-70% of actinic prurigo patients.

What are the symptoms of actinic prurigo?

The main symptoms of actinic prurigo are severe itching and painful inflammation of sun-exposed skin. Lips can become dry and sore (chelitis) and eyes red (conjunctivitis).

What does actinic prurigo look like?

Actinic prurigo causes a rash which appears as red inflamed lumps, with thickened patches that have scratch marks. These scratch marks are always present in actinic prurigo and considered as a sign of itching. The rash usually appears hours or days following sun exposure (although the patient may not initially associate the link between sun-exposure and the onset of the rash).

This rash may appear on the sun-exposed areas of the face (e.g. the cheeks, nose, forehead, chin and earlobes), the neck and chest, as well as the upper sides of the arms and hands. Covered sites such as the buttocks may also become involved. It may resemble a type of eczema which is more severe on sun-exposed sites. Other affected areas include the lips which are involved in 60-70% of people (and may be the only affected site), and the eyelids and lining of the outer side of the eye which are affected in 45% of patients.

Symptoms are usually worse in spring and summer months; this is due to the sun usually being stronger during such times. In some patients, signs and symptoms persist throughout the year, particularly in climates where the difference between the summer and winter months is not great and it is mostly sunny all year round.

How is actinic prurigo diagnosed?

A dermatologist can diagnose actinic prurigo by assessing the visual symptoms and the patient's recent sun exposure. Additional investigations to confirm the diagnosis include special blood tests of the immune system and urine tests (to exclude other rare diseases which cause sensitivity to the sun such as lupus and [porphyria](#)) and phototesting (to see how the skin reacts to

ultraviolet and visible light). You may be referred to a specialised photodermatology department in another hospital for the phototests and other investigations.

Can actinic prurigo be cured?

There is no cure for actinic prurigo. Some cases do spontaneously get better; however, the majority of cases persist for several years, during which time the rash comes and goes.

How can actinic prurigo be treated?

Photoprotection

Taking measures to avoid sunlight exposure is important to prevent the occurrence of actinic prurigo. This may require major adjustments to a person's lifestyle. Such steps to help prevent eruptions include the following.

Top sun safety tips

Sun protection is recommended for all people. It is advisable to protect the skin from further sun damage.

- Protect your skin with clothing. Ensure that you wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Make use of shade between 11 am and 3 pm when it's sunny.
- It is important to avoid sunburn, which is a sign of damage to your skin and increases your risk of developing a skin cancer in the future. However, even a tan is a sign of skin damage and should be avoided.
- Use a 'high protection' sunscreen of at least SPF 30 which also has high UVA protection. Apply sunscreen generously 15 to 30 minutes before going out in the sun and make sure you reapply frequently when in the sun.
- Keep babies and young children out of direct sunlight.
- The British Association of Dermatologists recommends that you tell your doctor about any changes to a mole or patch of skin. If your GP is concerned about your skin, you should be referred to see a Consultant Dermatologist at no cost to yourself through the NHS. You can check your doctor's qualifications by searching for them on the GMC register – a Consultant Dermatologist will be listed as being on the Specialist Register for Dermatology.
- No sunscreen can offer you 100% protection. They should be used to provide additional protection from the sun, not as an alternative to clothing and shade.

- Routine sun protection is rarely necessary in the UK for people of colour, particularly those with black or dark brown skin tones. However, there are important exceptions to this; for example, sun protection is important if you have a skin condition, such as photosensitivity, vitiligo or lupus, or if you have a high risk of skin cancer, especially if you are taking immunosuppressive treatments (including organ transplant recipients) or if you are genetically pre-disposed to skin cancer. Outside of the UK in places with more extreme climates, you may need to follow our standard sun protection advice.
- It may be worth taking vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce your vitamin D levels.
- Using photoprotective window films: Some people may need to apply special photoprotective window films to the windows of their car and home in order to block out UVA and UVB light. These protective films may stop working and need replacing after about five years. Some car manufacturers offer UV protective glass as standard or as an optional extra, however most car windows do not block UV light. Your dermatologist or a patient support group may be able to advise you about suppliers of UV protective film.
- The British Photodermatology Group has released a consensus statement on [UV protective films](#).

Vitamin D advice

The evidence relating to the health effects of serum vitamin D levels, exposure to sunlight and vitamin D intake, is inconclusive. People who are avoiding (or need to avoid) sun exposure may be at risk of vitamin D deficiency and should consider having their serum vitamin D levels checked. If the levels are low, they may consider:

- taking vitamin D supplements of 10-25 micrograms per day
- increasing intake of food rich in vitamin D such as oily fish, eggs, meat, fortified margarine and cereals.

Creams and ointments

Moisturising creams and steroid creams usually benefit affected areas. Potent and very potent [topical corticosteroids](#) can lead to reduced redness and irritation and are often helpful in relieving the itch and discomfort.

CAUTION:

This leaflet mentions 'emollients' (moisturisers). Emollients, creams, lotions and ointments contain oils. When emollient products get in contact with dressings, clothing, bed linen or hair, there is a danger that they could catch fire more easily. There is still a risk if the emollient products have dried. People using skincare or haircare products should be very careful near naked flames or lit cigarettes. Wash clothing daily and bedlinen frequently, if they are in contact with emollients. This may not remove the risk completely, even at high temperatures. Caution is still needed. More information may be obtained at <https://www.gov.uk/guidance/safe-use-of-emollient-skin-creams-to-treat-dry-skin-conditions>.

Desensitising light therapy (e.g. narrowband UVB, or PUVA (a combination of a drug called psoralen (P) and long wave ultraviolet radiation (UVA))

This is used only when the condition is not responding to other treatments. For some people this can desensitize the skin to sunlight so that the reaction becomes less when exposed to sun.

Oral medications in the form of tablets

Occasionally, people with severe actinic prurigo require tablets to control their skin disease. Options for tablet-based therapy are listed below:

- Steroid (prednisolone) tablets for short courses.
- Thalidomide. Once improvement occurs the drug should be gradually reduced, then stopped. It can be started again in cases of relapse. Because thalidomide may cause birth deformities, it must be used cautiously, particularly in women of childbearing years.
- Antimalarials such as [hydroxychloroquine](#).
- Other immune system suppressing tablets such as [azathioprine](#) or [ciclosporin](#).

Please note that some of these medications are potent and can have side effects. Patients need to be carefully monitored when prescribed these drugs.

Where can I get more information?

Web links to detailed leaflets:

<http://www.dermnetnz.org/reactions/actinic-prurigo.html>

<http://www.pcds.org.uk/clinical-guidance/actinic-prurigo>

Advice on sun protection and vitamin D:

<http://www.skinhealthinfo.org.uk/wp-content/uploads/2022/06/Sunscreen-Fact-Sheet.pdf>

<https://www.skinhealthinfo.org.uk/sun-awareness/sun-advice-for-skin-of-colour/>

<https://www.skinhealthinfo.org.uk/sun-awareness/sun-protection-advice-for-children-and-babies/>

<https://www.skinhealthinfo.org.uk/sun-awareness/vitamin-d-information/>

www.nhs.uk/Conditions/vitamins-minerals/Pages/Vitamin-D.aspx

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

**BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET
PRODUCED JULY 2013
UPDATED JANUARY 2017, JULY 2020
REVIEW DATE JULY 2023**