

Shining a light on photosensitivity in lupus

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Lupus is a chronic inflammatory disease that affects many parts of the body, including the skin. Individuals affected by lupus may be familiar with the effect of sunlight on their condition. For about 50 percent of people living with lupus, sun exposure can lead to new or worsening rashes and flares of systemic disease. Let's take a look at what is really going on when your skin meets those rays of sunshine.

What is photosensitivity?

Photosensitivity (or sun sensitivity) is an abnormal reaction to light. The sun's output can be broken down into three primary components: Visible light, which we can see, infrared radiation, which provides warmth, and UV radiation, which is invisible and can worsen lupus, among other harmful effects. UV light has more energy than visible light and can cause damage to the proteins in the skin.

For individuals suffering from lupus, this damage can trigger the inflammatory processes of the disease. The inflammation is not always immediately visible—it can sometimes take up to three weeks for a new rash to develop after unprotected exposure to UV radiation. Keep in mind that photosensitivity is not just a response to sunlight; your skin also absorbs light from artificial sources such as fluorescent light bulbs and tanning beds, which means that these can also cause a flare in the disease.

What happens to your skin when you are exposed to UV light?

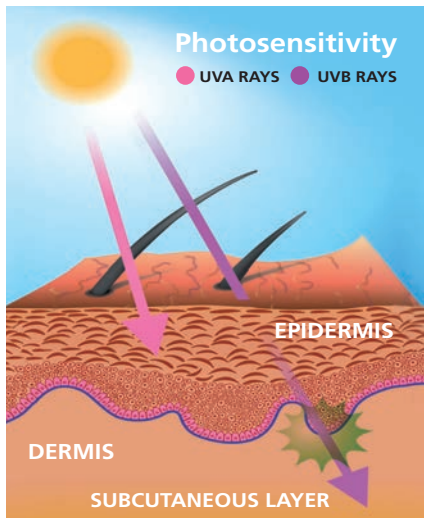
Individuals with lupus can respond differently to sun exposure than people without lupus. In fact, there are many different types of lupus and the response to sunlight can vary in both type and severity.

Cutaneous lupus erythematosus (CLE) is the form of lupus that affects the skin. In acute CLE, sun exposure can lead to a malar rash—a characteristic butterfly-shaped rash that appears across the bridge of the nose and symmetrically over the cheeks, sparing the nasolabial folds. This rash can be tender to the touch. Eruptions can appear on the arms, upper chest, backs of the hands and other sun-exposed areas, and typically clear within a few days to weeks without scarring.

Quick TIPS

- Slip on a shirt or other sun safe clothing
- Slop on the sunscreen
- Slap on a hat – with a nice broad brim
- Slide on the “shades”
- Pass on the sun during the intense sun hours of the day.

Source: Lupus Canada



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In the most common category of cutaneous lupus, chronic CLE, disc-shaped lesions develop on the face. This type of lupus is most often seen in people with heavily pigmented skin. Discoid lupus, a form of CLE, has a characteristic appearance of thick, scaly lesions with plugged hair follicles that can last for several months. This form of lupus can lead to scarring and hair loss in the affected areas. It can also be associated with lightening (hypopigmentation) of the skin.

Subacute CLE is the most photosensitive type of lupus. Sun exposure leads to red, circular, non-itchy rashes on exposed areas of the chest, back and arms. They can often appear scaly (resembling psoriasis) or in the shape a ring (resembling a fungal infection). These rashes heal in

weeks to a few months and typically do not scar.

The malar rash is often seen in flares of systemic lupus erythematosus or SLE (the type of lupus that affects internal organs such as the kidneys, lungs and joints), and can also be triggered by sun exposure. In addition, sun exposure can trigger or worsen systemic disease features, such as fever, fatigue and joint inflammation.

How can you protect yourself from UV light?

Sun-protection measures should be used by all people with lupus to reduce both the skin and systemic effects of UV light. Here are some sun-safety measures to help reduce the effects of photosensitivity.

- Avoid peak hours of the sun (11am–4pm) if possible. Try to enjoy outdoor activities in the evening. If you do have to be outside during peak hours, seek shade wherever possible.
- Wear sun-protective clothing such as a densely woven, long-sleeved shirt, full-length pants, a wide-brimmed hat and sunglasses. You can also buy special clothing that has additional sun protection built-in.

- Wear a broad-spectrum sunscreen with at least SPF 30 every day, regardless of whether it is sunny outside. Apply a liberal coat over all exposed areas of your body, including often-missed areas such as the back, sides of the neck and ears. If you are outside for a long time, reapply your sunscreen every two hours and after swimming or excessive sweating.
- Beware of artificial light sources as these can also emit harmful UV light. Avoid exposure to fluorescent tubing light and tanning beds.
- Some medications, such as certain antibiotics, can increase your skin's sensitivity to the sun. Ask your doctor or pharmacist about photosensitivity when starting any new medications. CS

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