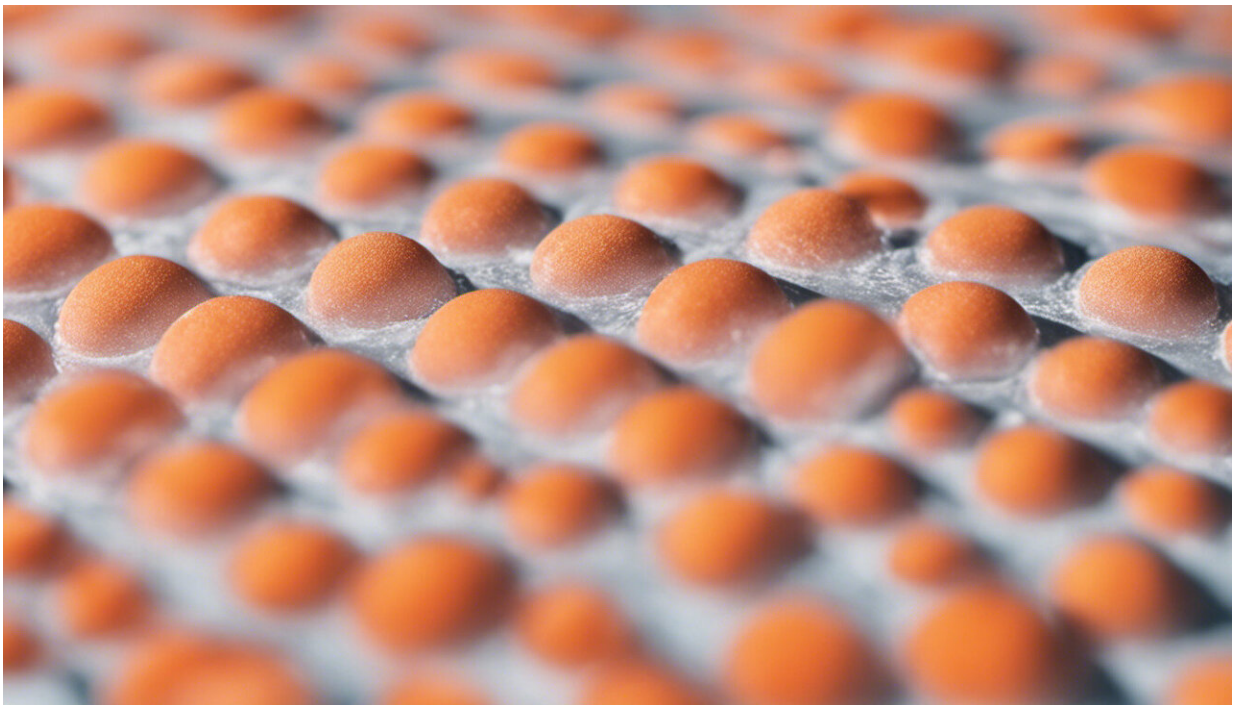


Drugs and the sun: Your daily medications could put you at greater risk of sunburn

December 23 2021, by Nial Wheate, Elise Schubert, Lisa Kouladjian O'donnell



Credit: AI-generated image ([disclaimer](#))

With summer holidays underway, it's time to think about the sun and your skin. Australia has the [highest rate of skin cancer](#) in the world, so we need to be doing more to protect ourselves from the damaging effects of ultraviolet radiation.

Unfortunately, some medicines can increase your risk of sunburn, because they either enhance UV absorption in your skin or cause you to have a light-activated [reaction](#).

It's important not to skim over the information provided with your [medication](#), to speak to your pharmacist for on-the-spot advice and to take extra precautions if required.

What happens to your skin

There are two main ways that medications can increase your risk of sunburn; a [phototoxic reaction](#) and a [photoallergic reaction](#).

A phototoxic reaction is the most common way for a medication to cause an increase in sun sensitivity. This is where the [drug](#) molecule is able to absorb UV light, and then releases it back into the skin. Once the [oral medication](#) has been absorbed into the [blood stream](#), or after the topical medication is applied to the skin, a phototoxic reaction can occur anytime within minutes or hours of sun exposure. Typically, only the skin that is exposed to the sun will react.

The second, less common mechanism, is via a photoallergic reaction. This can occur with certain medications that are applied directly to the skin, or that are taken by mouth and then circulated to the skin.

After exposure to the sun, a drug can undergo structural changes. Once these structural changes happen, small proteins in our body can bind to the drug, resulting in our immune system recognizing it as a foreign substance. Then antibodies are produced to fight it.

The resulting reaction in many cases resembles eczema or a red rash. This type of reaction can take anywhere between one to three days to occur, and will only occur on the parts of the body that are exposed to

the sun.

Importantly, both phototoxic and photoallergic reactions are damage to the skin from UV exposure that can increase the risk of later developing skin cancer.

There are also some types of medicines that can cause heat sensitivity and increase your risk of dehydration. This can occur if a [medicine](#) has effects that increase urination, prevent sweating, or reduce blood flow to the skin. Examples of these medications include diuretics, some types of antihistamines and stimulant medications for ADHD.

Which medicines can affect your skin?

There are many medicines that can affect your skin and make you more sensitive to the sun, so it's important to know which ones to look out for.

The first are the antibiotics. Tetracycline-based drugs are particularly known to cause sensitivity. An example is the drug [doxycycline](#) which is used to treat infections, acne, and as a malaria prophylactic (or prevention) for those who are going to a tropical location (lots of sun).

Other antibiotics known to cause sun sensitivity are [fluoroquinolones](#), like ciprofloxacin, and [sulfamethoxazole](#), which treat a broad range of illnesses such as urinary tract infections, pneumonia or gastroenteritis.

The antifungals griseofulvin and voriconazole are known to cause sun sensitivity. You may be taking these medicines for skin or [nail fungal infections](#).

For people who suffer from skin conditions such as acne, psoriasis, or eczema, the oral retinoid medications including acitretin and isotretinoin and the topical cream pimecrolimus will leave you sensitive to the sun.

Non-steroidal anti-inflammatory drugs, like diclofenac, can leave you sun sensitive, especially if applied on the skin, so you need to be sure you adequately protect those areas. The same applies for some opioid-based pain patches, [like fentanyl](#). When you remove the patch, the skin underneath will be sensitive to the sun.

[Amiodarone](#) is a drug used to treat irregular heart beats and [azathioprine](#) is an immuno suppressing drug used for people who have inflammatory immune conditions or organ transplants. Both are known to cause sun sensitivity.

Finally, a large number of drugs used in [cancer chemotherapy will sensitize your skin](#). These include: 5-fluorouracil, 5-aminolevulinic acid, vemurafenib, imatinib, mercaptopurine, and methotrexate.

It is important to note that not all people who use one of these medicines will have a sun sensitivity reaction—but extra precautions should be taken.

Protect your skin

If you are taking a medicine that can make you more sensitive to the sun then always ensure you are [sunsmart](#).

Remember the five S advice from the [Cancer Council](#):

- slip on suitable clothing
- slop on sunscreen that is rated SPF30 or higher to exposed [skin](#), especially on your face and arms
- slap on a hat
- seek shade when you can
- slide on sunglasses.

And if you are concerned a medicine you are taking may be putting you at more risk of sunburn, [speak to your pharmacist](#). They can confirm if your medicine does increase your risk of sunburn and discuss options. This could include having your doctor issue a prescription for a different drug.

Never just stop taking a medicine because you are concerned about the risk of sun damage or any other side effects; always discuss it first with your health care provider.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Drugs and the sun: Your daily medications could put you at greater risk of sunburn (2021, December 23) retrieved 25 June 2024 from <https://medicalxpress.com/news/2021-12-drugs-sun-daily-medications-greater.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.