

# Sunscreen vs Sunblock

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Although it isn't unusual to hear the words sunblock and sunscreen used interchangeably, they're actually two very different types of sun protection.

#### Sunscreen

Sunscreen is a chemical defense, penetrating the skin and absorbing the UV rays before they reach and damage the dermal layers.

Some sunscreens include avobenzone, oxybenzone, and para-aminobenzoic acid (PABA), which are ingredients used to absorb the sun's rays.

#### Sunblock

Sunblock is a physical way to defend against ultraviolet (UV) rays. It sits on top of the skin and acts as a barrier. Typically, sunblock includes zinc oxide or titanium oxide. Sunblocks are often opaque and noticeable when applied to the skin.

Many brands of sun protection offer a blend of sunscreen and sunblock.



#### Should I use sunscreen or sunblock?

Both sunscreen and sunblock provide protection from the sun.

According to the <u>Skin Cancer Foundation</u>, however, skin type should be a consideration when choosing the right product for you.

For people with sensitive skin, sunblocks with zinc oxide and titanium dioxide are better tolerated. These ingredients are also typically found in products for children, who have different sun protection needs.

People with skin conditions, such as rosacea or allergy-prone skin, should avoid products that contain fragrances, preservatives, and oxybenzone or PABA, which are often found in sunscreens.

The <u>Environmental Working Group</u> has also cautioned against use of sun protectants with oxybenzone, as it may cause an allergic reaction.

Before trying a new sunscreen or sunblock, read the label to make sure you'll get the protection you need and avoid ingredients you may be sensitive to.

Many doctors recommend sun protectants that offer:

- <u>SPF</u> 30 or greater
- broad spectrum protection
- water resistance

#### What's SPF?

SPF is an acronym for sun protection factor. It's an indication of how well a product will actually protect you from the sun's ultraviolet B (UVB) rays.

The SPF number tells you the amount of time it takes for the skin to redden upon exposure to the sun with protection as opposed to the amount of time without protection.

If used exactly as directed, a product with SPF 30 will take the sun 30 times longer to burn the skin than skin directly exposed without protection. A product with SPF 50 will take 50 times longer.

According to the <u>Skin Cancer Foundation</u>, a product with SPF 30 allows approximately 3 percent of UVB rays to hit your skin, and a product with SPF 50 allows about 2 percent.

The FDA will no longer allow manufacturers to say their products are waterproof.



Look for products that are water-resistant. This means, the protection will be effective for 40 minutes in the water, then reapplication is necessary. Products that are labeled as very water resistant will typically last for 80 minutes in the water.

Broad spectrum means that the product can protect from both ultraviolet A (UVA) and UVB rays.

## Three reasons to use sun protection

UV radiation from the sun is the most serious threat for skin cancer.

Sunburn is damage to skin cells and blood vessels from the sun's UV radiation. Repeated damage results in weakened skin that easily bruises.

A 2013 study of Caucasian women concluded that UV exposure may be responsible for 80 percent of visible facial aging signs. Signs of visible aging to your skin may include wrinkles educed elasticity, pigmentation, and degradation of texture.

#### Ultraviolet radiation

Sunlight includes visible light, heat, and UV radiation. UV is divided into three types and is classified by wavelength.

#### **UVA**

Accounting for about 95 percent of the UV radiation reaching the Earth's surface, UVA has a relatively long wavelength that can penetrate into the deeper layers of the skin.

Responsible for immediate tanning, it also contributes to skin wrinkling and aging, and the development of skin cancers.

#### **UVB**

Partially blocked by the atmosphere, medium wavelength UVB is unable to penetrate deeper than the superficial layers of skin.

UVB is responsible for delayed sun tanning and burning. It also can enhance skin aging and promote skin cancer development.

#### **UVC**

Short wavelength ultraviolet C (UVC) is totally blocked by the Earth's atmosphere. It isn't a concern with sun exposure. It can, however, be dangerous with exposure to an artificial radiation source.



# How do I protect myself from the harmful effects of the sun?

Here a few steps beyond wearing sunscreen and sunblock you can take to protect yourself:

- Avoid the sun from 10 a.m. to 3 p.m., when the UV rays are the strongest.
- Wear sunglasses that filter UV light.
- Wear protective clothing, such as long pants, long-sleeved shirts, and a wide-brimmed hat.

## **Takeaway**

Many sun protectants have a combination of sunscreen and sunblock, so consider taking the time to review the label before purchasing and applying the product. Look for products that are SPF 30 or greater, have broad spectrum protection, and are water resistance. Avoid any products that contain ingredients your skin may be sensitive to. To prevent burning, reapply sun protectants every two hours, or every 40 to 80 minutes after being in the water or sweating.

Source: https://www.healthline.com/health/sunscreen-vs-sunblock#takeaway

