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PATIENT & CAREGIVER EDUCATION

# Understanding Sunscreen

This information explains how to use sunscreen correctly.

The sun gives off ultraviolet light in the form of rays. There are 2 kinds of ultraviolet rays, ultraviolet A (UVA) rays and ultraviolet B (UVB) rays. Both UVB and UVA rays can cause sunburns, lead to skin damage and aging, and cause skin cancer.

If you use it correctly, sunscreen can help protect you from sunburns, skin aging, and skin cancer.

## What does SPF mean?

SPF stands for “sun protection factor.” SPF is a measure of how much a sunscreen will protect you from UVB and some UVA rays.

The SPF number of a sunscreen tells you the amount of time that the product will protect you from sunburn. For example, if you begin to burn 10 minutes after being in the sun with no sunscreen, using a sunscreen with SPF 30 would increase that time to 300 minutes (10 minutes x 30 SPF). However, you need to reapply sunscreen every 2 hours, even if it has a high SPF.

Many sunscreens protect against both UVB and UVA rays. These are labeled as “broad-spectrum sunscreens.” See section titled “How do I protect myself against UVA rays?” for more information.

## What SPF should I use?

Use an SPF of at least 30. In general, the higher the SPF, the more UVB rays are blocked.

However, no sunscreen can completely protect you from the sun, even if you’re only in the sun for a short time. For more information, see the section “If I use

sunscreen, do I need to do anything else to protect my skin?”

## How do I protect myself against UVA rays?

UVA rays contribute to skin aging and skin cancer, so it's important to protect yourself against them. The SPF number of a sunscreen indicates mostly the UVB protection and only some of the UVA protection.

Use sunscreens that have UVA protection. These are sunscreens that are labeled as having “broad-spectrum protection.” They must also have this statement included on the label: “If used as directed with other sun protection measures, this product reduces the risk of skin cancer and early skin aging, as well as helps prevent sunburn.”

Sunscreens with an SPF below 15 or without broad-spectrum protection don't protect against UVA rays. These products carry a label stating that they don't protect against skin cancer.

## Who needs sunscreen?

Everyone, especially if you have a fair skin tone and burn when you're in the sun.

## When should I use sunscreen?

Use sunscreen every day that you're outside, even on cloudy days. About 80% of the sun's rays pass through the clouds.

Apply your sunscreen at least 20 minutes before going outside. Reapply your sunscreen every 2 hours. Also reapply it immediately after swimming, toweling off, or sweating.

## What is the correct way to put on sunscreen?

Apply sunscreen 20 minutes before going outside.

- If you are using a sunscreen lotion or cream, apply 1 ounce (which is about 2 tablespoons or a shot glass size) to your entire body. Use this amount for each application.

1. Spread a thin layer on your skin.
  2. Wait for it to absorb.
  3. Then, apply another thin layer on your skin.
- If you are using a spray-on sunscreen, spray until you have an even sheen (shine) or layer on your skin and gently rub it in. Repeat the process. To apply the sunscreen to your face, first spray it in your hands and then apply it to your face. Do not spray it directly in your face or inhale (breathe in) the sunscreen.
  - To protect your scalp, you can use spray-on sunscreen. For even more protection, wear a hat with UV protection.
  - To protect your lips, use a lip balm with SPF protection.

## What is the difference between sunscreen products?

Gels and sprays feel less greasy than lotions, but they may irritate sensitive skin. A water-resistant sunscreen stays on longer. However, it only will protect you in the water for 40 to 80 minutes, so make sure to reapply it often. Check the label to see how often you need to reapply.

Look for a sunscreen with an SPF of at least 30 and broad-spectrum protection, rather than checking for specific ingredients.

## If I use sunscreen, do I need to do anything else to protect my skin?

If you apply sunscreen correctly, it will help protect you against sunburns and skin cancer, but it doesn't offer full protection. You should also do the following to protect yourself from the sun:

- Wear protective clothing, such as long-sleeved shirts, wide-brimmed hats, and sunglasses.
- Stay out of the sun between 10:00 AM and 2:00 PM when the sun's rays are the strongest.
- Choose a shaded location instead of being out in the sun.

These practices are especially important if you're at risk for sunburn or have a history of skin cancer.

## **Are tanning salons or tanning beds safe?**

No. Tanning beds give off large amounts of UVA rays and smaller amounts of UVB rays. Although tanning beds can lead to a tan with little or no burning, the rays they give off cause skin aging and skin cancer.

## **Are sunless tanning lotions safe?**

Yes, but the "tan" from these lotions doesn't protect you from sunburn. Make sure you apply sunscreen before going outside.

## **If I use sunscreen and stay in the shade, what can I do to get vitamin D?**

Vitamin D is important for bone health. It may also help prevent some cancers. You can get vitamin D from being in the sun, but you can also get it from your diet. For example, milk and wild salmon are good sources of vitamin D. You may also need to take a supplement in order to get enough vitamin D.

We recommend that you apply sunscreen every day and get vitamin D from your diet. Your doctor can tell you how much vitamin D is right for you.

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

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