Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Understanding Sunscreen

This information explains how to use sunscreen correctly.

The sun gives off ultraviolet (UV) light. There are 2 kinds of UV rays, ultraviolet A (UVA) rays, and ultraviolet B (UVB) rays. Both types of 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). You still need to reapply sunscreen every 2 hours, though, even if it has a high SPF.

Many sunscreens protect against both UVB and UVA rays. These are labeled as “broad-spectrum sunscreens.” Read the section “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.

No sunscreen can completely protect you from the sun, even if you’re only in

the sun for a short time. For more information, read 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 cause skin aging and skin cancer, so it’s important to protect yourself against them.

Use sunscreens that have UVA protection. These are sunscreens that are labeled “broad-spectrum,” and include 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 have a label that says they don’t protect against skin cancer.

Who needs sunscreen?

Everyone should use sunscreen, 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, so you can still burn even when it’s cloudy.

Put sunscreen on at least 30 minutes before going outside. Reapply your sunscreen every 2 hours. It’s also important to reapply it after swimming, toweling off, or sweating.

What’s the correct way to put on sunscreen?

Put sunscreen on 30 minutes before going outside.

- If you’re using a sunscreen lotion or cream, cover your entire body including

your face.

- To put it on correctly, follow these steps:
  1. Spread a thin layer of it on your skin and rub it in.
  2. Wait a few minutes for it to absorb.
  3. Then, apply another thin layer on your skin.
- To protect your scalp, apply sunscreen to your scalp, but most importantly, wear a hat with UV protection.
- To protect your lips, use a lip balm with SPF protection.

What's the difference between sunscreen products?

There are 2 types of sunscreen. These are mineral (physical) and chemical sunscreens. Some sunscreens have both mineral and chemical ingredients.

- Mineral sunscreens work by creating a barrier on top of the skin to protect it from UV rays. Mineral sunscreens contain Zinc or Titanium Dioxide. Mineral sunscreens are a better choice for people with sensitive skin. Mineral sunscreens have a thicker consistency and may not absorb easily into the skin.
- Chemical sunscreens work by absorbing UV rays. Chemical sunscreens can contain many active ingredients, but some common ones are octinoxate, oxybenzone, and avobenzone. Chemical sunscreens are usually easier to spread on your skin and include water-resistant options.

Sunscreens are available in many forms, including creams, lotions, sprays, and gels. Choosing the best sunscreen for you depends on many factors such as:

- What form of sunscreen you prefer
- Where you're applying the sunscreen
- Your skin type
- What kinds of activities you will be doing while wearing sunscreen

You should use sunscreen with an SPF 30 or higher. You should reapply sunscreen every 2 hours while you're out in the sun, or more often if you're sweating or swimming.

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 won't fully protect you. 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 a.m. and 4:00 p.m. This is when the sun's rays are the strongest.
- Choose a shaded location instead of being out in the sun.

These practices are even more 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. Even though tanning beds can give you 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 won't protect you from sunburn. Make sure you put on broad-spectrum 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 put on 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 questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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