

UV Index and Sun Safety

What is the UV index?

The ultraviolet (UV) index measures the amount of skin-damaging UV rays reaching the Earth's surface when the sun is highest in the sky, serving as a helpful tool in preventing overexposure to the sun's rays. The UV index changes seasonally and can range from 0 (nighttime) to 15-16. The higher the number, the greater the exposure to skin and eye-damaging UV radiation.

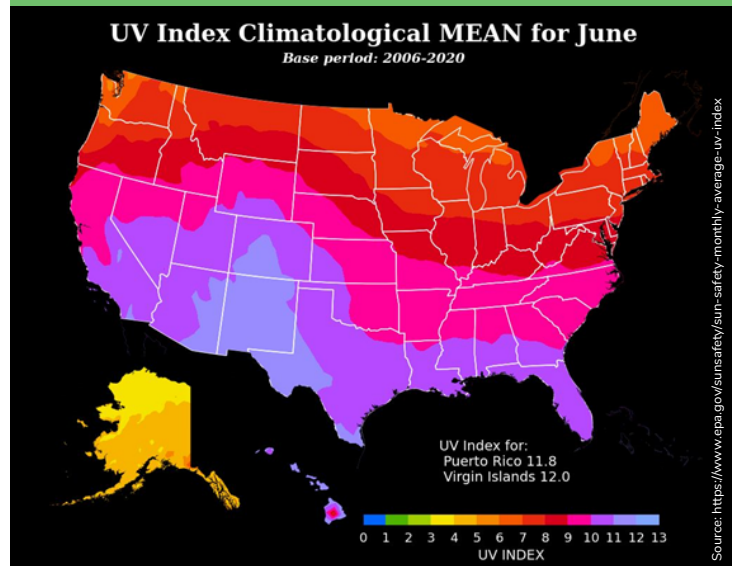


Does exposure to UV radiation vary geographically?

Yes. Southern locations in the U.S. have a higher UV index than northern ones. Elevation plays a factor as well – the higher the elevation, the less atmosphere there is to absorb UV rays before they reach the earth's surface. The U.S. Environmental Protection Agency (EPA) has a helpful [ZIP code tool](#) to look up UV index numbers.

Exposure Category	Index Number	Sun Protection Messages
LOW	<2	You can safely enjoy being outside. Wear sunglasses on bright days. If you burn easily, cover up and use sunscreen SPF 30+ . In winter, reflection off snow can nearly double UV strength.
MODERATE	3–5	Take precautions if you will be outside, such as wearing a hat and sunglasses and using sunscreen SPF 30+ . Reduce your exposure to the sun's most intense UV radiation by seeking shade during midday hours.
HIGH	6–7	Protection against sun damage is needed. Wear a wide-brimmed hat and sunglasses, use sunscreen SPF 30+ and wear a long-sleeved shirt and pants when practical. Reduce your exposure to the sun's most intense UV radiation by seeking shade during midday hours.
VERY HIGH	8–10	Protection against sun damage is needed. If you need to be outside during midday hours between 10 a.m. and 4 p.m., take steps to reduce sun exposure. A shirt, hat and sunscreen are a must, and be sure you seek shade. Beachgoers should know that white sand and other bright surfaces reflect UV and can double UV exposure.
EXTREME	11+	Protection against sun damage is needed. If you need to be outside during midday hours between 10 a.m. and 4 p.m., take steps to reduce sun exposure. A shirt, hat and sunscreen are a must, and be sure you seek shade. Beachgoers should know that white sand and other bright surfaces reflect UV and can double UV exposure.

Source: https://enviro.epa.gov/facts/uv/uv_descriptions.html



What are the dangers of overexposure to UV radiation?

The dangers of UV rays – including premature skin aging and skin cancer – are clear and universally recognized. According to the [American Cancer Society](#), more than five million Americans are diagnosed with skin cancer each year – more than all other types of cancer combined. One in five Americans will develop skin cancer in their lifetime, and 20 Americans die from melanoma – the deadliest form of skin cancer – every day, according to the [American Academy of Dermatology](#).

How can I protect myself from exposure to UV radiation?

The [National Council on Skin Cancer Prevention](#) and the [American Cancer Society](#), among others, recommend:

Make sunscreen part of your daily routine:

- Use a broad-spectrum sunscreen with Sun Protection Factor (SPF) 30 or higher for protection from UVA and UVB radiation even on a cloudy day
- Apply 30 minutes before going outdoors
- Reapply every two hours or more frequently if sweating or if in water

Wear protective clothing:

- A wide-brimmed hat
- Long-sleeved shirt and pants
- UPF clothing
- UV protective sunglasses

Be smart around the sun:

- Stay out of the sun between 10 a.m. and 4 p.m., when the sun's rays are the strongest
- Seek shade when possible from an umbrella, tree or other shade structure
- Use extra caution near water, snow and sand. These surfaces reflect the damaging rays of the sun, which can increase your chance of sunburn.
- Check the [UV index](#) before heading outside and protect your skin accordingly

Do not burn or tan:

- Never tan intentionally
- Do not use tanning beds

Visit your healthcare professional every year for a skin exam.

How do I choose the right sunscreen?

Sunscreen effectiveness depends on a number of factors, including the SPF value, if the product provides broad-spectrum protection, its level of water resistance and whether the product is used as directed. The amount of protection derived from a particular sunscreen also depends on:

- The skin type of the user: All skin colors are susceptible to sunburn and other harmful effects of exposure to UV radiation, although people with pale skin; blond, red or light brown hair; and those who have been treated for skin cancer, must be especially mindful.
- The amount of sunscreen applied and frequency of re-application: The U.S. Food and Drug Administration (FDA) recommends that applying sunscreen 15 minutes before going out in the sun and reapplying every two hours, more frequently if sweating or jumping in and out of the water. Sunscreen should be applied evenly on all body parts exposed to the sun. It takes at least one ounce of sunscreen lotion, about the size of a golf ball, to cover the entire body.
- The water-resistance of the sunscreen product: FDA's regulations require that if a product's front label makes claims of being water resistant, it must designate whether it's protective for 40 or for 80 minutes while swimming or sweating. Additionally, manufacturers cannot make claims that sunscreens are "waterproof" or "sweatproof."

Other Resources on Sun Safety

American Academy of Dermatology – [Sunscreen FAQ](#)

National Council on Skin Cancer Prevention – [Don't Fry Day](#)

Skin Cancer Foundation – [Sun Protection](#)

Prevent Cancer Foundation – [Stay Skin Healthy](#)

CosmeticsInfo – [Sunscreens: How to Read a Label, Expert Tips, etc.](#)

[SUNucate Coalition](#) to allow students to a topical sunscreen product while on school property or at a school-sponsored event