UV Safety Newsletter

Don’t Get Burned! How to Protect Your Body From Sun Damage

Sunburn doesn’t just cause pain and redness. It can also have immediate dangers and long-term effects. Learn the risks and find out how to protect yourself.

Between the beach, the pool and the weekend cookouts, you may be having too much fun to worry about sunburn – until that telltale stinging and redness set in. Sunburn isn’t just painful – it’s also bad for your health.

**The dangers of sunburn**
The sun’s rays contain two types of ultraviolet light. Ultraviolet A (UV-A) causes tanning, aging skin and wrinkles. Ultraviolet B (UV-B) causes sunburn. Both can cause skin cancer. You can burn on sunny days, cloudy days and cold days. The white sand on the beach and the white snow of winter both reflect the sun’s rays. You can burn whether you’re skiing on water or snow.

Signs of sunburn are redness, pain, swelling and blistering. Get medical attention right away if you have a severe burn that covers your body, or if you have chills, vomiting, an upset stomach or confusion.

**Long-term effects**
Every time you tan or burn, DNA damage builds up in the deeper levels of your skin. Having five or more burns over a lifetime – even in childhood – doubles your chances of getting skin cancer.

Other side effects of tanning and burning include premature wrinkles and age (pigment) spots. Over time the sun can age your skin, making it tough and leathery.

Remember that your eyes can burn, too. Too much sun can burn your corneas and lead to various eye diseases, including cataracts and age-related macular degeneration. It can even cause blindness.

**The truth about sunscreen**
Wearing sunscreen doesn’t always keep you from burning. No sunscreen can completely protect you from UV (ultraviolet) rays.
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A sunscreen labeled “waterproof” or “water resistant” will not protect you all day. When you swim or sweat, reapply your sunscreen. Waterproof sunscreens last about 80 minutes in the water. Those labeled “water resistant” last about 40 minutes.

The UV index
Your local news may broadcast daily heat index reports. The higher the index, the less time it will take to burn. Here is your risk for overexposure to the damaging UV rays. The number indicates the daily UV index, followed by the degree of risk. The higher the index on a given day, the greater the need to protect yourself.
- 0-2: low
- 3-4: moderate
- 5-6: high
- 7-10: very high
- 11+: extreme

Preventing sunburn
Follow these prevention tips:
- Use only water-resistant or waterproof sunscreen. It should protect against both UVA and UVB rays and have an SPF of at least 15. Reapply every two hours and after swimming or sweating.
- Wear protective clothing when possible. Always include a hat and sunglasses.
- Limit sun exposure between 10 a.m. and 4 p.m. This is when UV rays are strongest. If your shadow is shorter than you are, get out of the sun.
- Keep children in the shade and in protective clothing. If shade or protective clothing are not available, apply a minimal amount of sunscreen with at least an SPF of 15 to small areas like the cheeks and backs of the hands. If a child under age 1 gets sunburn, apply cool compresses and call your pediatrician right away. Also call if an older child has a sunburn with fever, blistering, severe pain or lethargy.
- Be aware that water, snow and sand all reflect UV rays and increase your chances for sunburn.

Treatment
Cool wet compresses, lotions and baths may help relieve sunburn pain. For serious burns, call your doctor. Medication may prevent infection and help with the swelling and pain.

Sunglasses: A Must for Children and Adults

Over-exposure to UV rays is bad for eyes of any age, but it can be especially harmful for the very young. Learn ways to protect the eye health of all of your loved ones.

Sunglasses aren’t just a fashion accessory or something that adults need to wear on sunny days. Wearing sunglasses, from birth through old age, can help save your eyesight.

The lens in a child’s eye is clear from birth through about age 10. It can’t filter out as much sunlight as an adult lens. That means sun exposure can cause more damage before age 10 than after, when the lens begins to get cloudy.

Early exposure, long-term damage
Some studies suggest that 80 percent of sun damage occurs by age 18. Long-term exposure to the sun’s UV rays is a big factor in vision loss. Studies indicate that too much sunlight may lead to:
- Cataracts and age-related macular degeneration, which rob adults of eyesight
- Skin cancer around the eyelids
- Pterygia (benign growths on the eye’s surface that can block vision)
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There are three types of UV radiation: UV-A, UV-B and UV-C.

- UV-A can damage the macula, the part of the retina that controls central vision.
- UV-B affects the front part of the eye – the cornea and lens – and can cause even more damage than UV-A.
- UV-C is absorbed by the ozone layer and is not dangerous.

Over-exposure to UV-B rays for short periods can lead to corneal sunburn. This can cause pain, a feeling of grit in the eyes and even short-term vision loss. You can get this kind of exposure at the beach or on a ski slope without proper eye protection. For children, this can cause long-term vision problems.

Bright sun and glare also cause immediate problems. Bright sunlight interferes with your vision and ability to see clearly. It causes you to squint and makes your eyes water.

Since proper eye protection helps prevent future vision loss, make sure:

- Your kids wear sunglasses, and they understand why.
- They keep wearing sunglasses into adulthood.
- You wear sunglasses, too. If you set a good example, your children will be more likely to get into the habit of wearing sunglasses as well.

When to wear sunglasses
Sunglasses are not just for sunny summer days, when UV rays are at least three times higher than in winter. Reflections from snow, water, sand or pavement can intensify UV rays to extremely high levels.

Don’t be fooled by a cloudy day. The sun’s rays pass right through the haze and thin clouds. When outside, wear sunglasses. Be sure to wear them in the early afternoon when UV radiation is strongest.

The American Academy of Ophthalmology (AAO) says you should wear sunglasses when you take part in winter sports. You should also wear them at high altitudes, where UV light is more intense. Keep your sunglasses on when you take medications that can increase your sensitivity to sunlight.

Are sunglasses enough?

- Have your child wear a hat along with sunglasses – and do the same yourself. When you wear a hat and sunglasses outside, your child will more likely follow your lead.
- Give your child a wide-brimmed hat to wear. It will block about half of UV rays and provide extra protection. Even a baseball cap can limit UV rays that hit the eyes from above or around glasses.
- Teach your children to never look directly into or stare at the sun. Looking at the sun for too long, even during an eclipse, can cause permanent blindness.
- Try to keep children out of the sun between 10 a.m. and 4 p.m. This is when the sun’s rays are strongest.
- Keep children younger than six months old out of direct sunlight. Baby strollers with a canopy or umbrella can help shield them from direct sunlight.

The AAO suggests that children should have a complete eye exam before the age of five.

Making Sense of Sunscreen

Learn more about UV rays and how to choose a good sunscreen and use it properly.

Suncreens promise protection from the sun's UV rays, which can cause sunburn and skin cancer. But how effective are they?

Studies prove that sunscreen lowers the incidence of skin cancer. But sunscreen doesn’t give complete protection, and using it doesn’t mean you can sit in the sun for long periods without damage.
To protect yourself, it helps to know more about UV rays and sunscreens.

**Sun facts**
Sunlight contains two types of ultraviolet rays that can reach the earth and cause skin damage: ultraviolet A (UVA) and ultraviolet B (UVB).
- **UVA rays** account for the bulk of our sun exposure, so they cause most aging of the skin. They are also linked to some skin cancers.
- **UVB rays** directly damage the DNA of the skin cells. They cause most sunburns and most skin cancers.

There are no “safe” UV rays. Both types can cause skin cancer, including melanoma, the most deadly form of skin cancer.

**Selecting the right sunscreen**
The goal of a sunscreen is to protect the skin from UV rays. When sorting through your choices at the drugstore, focus on the SPF (sun protection factor) number on the labels. Experts recommend using sunscreen with an SPF of 15 or higher.

SPF is an indicator of how well the sunscreen protects against UVB rays. For example, with an SPF 15 sunscreen, you get about one minute of UVB rays for each 15 minutes you spend in the sun. An hour in the sun wearing SPF 15 sunscreen gives you about the same UVB exposure as four minutes without sunscreen.

A good sunscreen should protect against both types of UV rays. Make sure the label says “broad-spectrum” or that it provides both UVA and UVB protection. To provide broad-spectrum protection, most sunscreens will include some of the following:
- **Chemical ingredients**: These absorb both UVA and UVB radiation. These may include avobenzone or benzophenones. Some, especially benzophenones, can cause skin reactions.
- **Physical ingredients**: These can physically block and reflect away both types of UV radiation. Zinc oxide and titanium dioxide are two of the more common physical compounds found in sunscreens. These are less likely to cause allergic skin reactions than some chemical ingredients.

It’s important to remember that no sunscreen provides complete protection. Even if you don’t burn, too much time in the sun can still damage and age the skin and increase your risk of skin cancer.

Many moisturizers and other cosmetic products have an SPF. These products may be fine if you only spend a few minutes in the sun each day. But if you work or play outdoors, you need a stronger, water-resistant sunscreen.

**How to use sunscreen**
To fend off the sun’s damaging rays:
- **Use a sunscreen with a SPF of at least 15.** Apply it at least 30 minutes before sun exposure to give it time to bind to your skin.
- **Apply sunscreen generously.** You should use about one ounce (a palmful) each time you apply it. Coat all skin not covered by clothing. Don’t miss easy-to-forget areas, such as tops of the feet and the ears.
- **Reapply sunscreen every two hours** when outdoors and after swimming, sweating heavily and toweling off.
- **Use sunscreen every day.** UV rays reach the earth even on cloudy days, and UVA rays can pass through glass.
- **Don’t rely on sunscreen alone to protect your skin.** Cover up when outside. Wear a brimmed hat, UV-protection sunglasses and a long-sleeved shirt, pants or skirt.

Children need extra attention because they often spend a lot of time in the sun and their delicate skin can burn easily.

- **Don’t use sunscreen on children younger than 6 months.** Babies should be kept out of the sun and covered or shaded when they’re outside.
- **Protect children older than 6 months** by using sunscreen, dressing them in protective clothes and urging them to play in the shade.