SUNBURN

Patient Information Fact Sheet

>What is sunburn?

Sunburn is the reddening of the skin when exposed to the sun or other ultraviolet light. There are two types of UV radiation that may affect the skin, UVA and UVB. Too much UVA exposure can cause wrinkles and aging of the skin. UVB rays have been linked to skin cancer development. Excessive sun exposure can seriously affect health and may lead to the development of skin cancer. More than 1 million people in the United States are diagnosed with skin cancer each year, making it the most common form of cancer in the country that can be prevented.

>What are the symptoms of sunburn?

Although the first signs of sunburn may take a few hours to appear, the full effects may not be visible until 24 hours later. Possible symptoms include red tender skin, blisters that appear hours to days later, peeling skin, and serious reactions (eg, fever, chills, nausea, rash). Symptoms of sunburn are usually temporary, but skin damage is often permanent and can have serious long-term effects. The pain is the worst between 6 and 48 hours after sun exposure. Blistering may occur in severe cases of sunburn.

>What are the causes of sunburn?

Sunburn is caused by excess exposure to the sun or UV light. Sun rays are the strongest between 10am and 2pm. Infants and children are extremely sensitive to sun exposure, thus increasing the risk of sunburn. People with fair skin also have a higher risk of sunburn, but even dark skin can burn and should be protected. Antibiotics such as doxycycline can also increase the susceptibility to sunburns.

>How is sunburn treated?

For mild cases of sunburn try taking a cool shower or bath, or place cold wet washcloths on the burn. Avoid using products that contain benzocaine, lidocaine, or petroleum (eg, Vaseline). Dry bandages may help prevent infections if blisters are present. Apply moisturizing cream or aloe to relieve discomfort from blisters. NSAIDs such as ibuprofen may help relieve pain from sunburn. Avoid administering aspirin to children. Cortisone cream may reduce inflammation. Remember to drink plenty of fluids to prevent dehydration.

Contact a healthcare provider immediately if a fever with sunburn or signs of shock, heat exhaustion, dehydration, or other serious reactions occur. These signs include dizziness, high pulse, rapid breathing, extreme thirst, sunken eyes, no urine output, nausea, fever, chills, rash, pale, clammy or cool skin, sensitivity to light, or severe painful blisters.

>How is sunburn prevented?

Avoid the sun when sun ray intensity is the strongest. Apply a broad-spectrum sunscreen with a sun protection factor (SPF) of at least 15 to the whole body.

Remember to wear protective clothing such as hats and sunglasses with UV protection. Remain in shady areas to avoid sun exposure. Keep babies and children out of direct sunlight due to extreme vulnerability to sunburn.



The American Academy of Pediatrics recommends using sunscreen on infants for small areas such as the face and back of hands where protection from clothing is inadequate. Be careful to avoid the area around the eyes. When using a spray sunscreen do not spray near the face due to the risk of inhaling harmful chemicals. Consult a health care professional before applying sunscreen to children under six months of age. Sunscreen can be used in children older than six months.

>How to choose a sunscreen?

It is important to choose sunscreens that are "broad-spectrum" for full protection against both UVA and UVB rays. For protection against UVB choose products that contain ingredients such as titanium dioxide, zinc oxide, avobenzone, Mexoryl, and oxybenzone. SPF only protects the skin from UVB rays. Be aware that a sunscreen with an SPF 30 is not twice as protective as an SPF15 sunscreen. The number refers to how much longer it would take the skin to redden with the sunscreen compared to skin without sunscreen. Sunscreens that have the "water resistant" label maintain their SPF 40 minutes after water immersion and "very water resistant" maintain their SPF 80 minutes after water immersion.

Always apply sunscreen about 20 minutes prior to outdoor activities, regardless if it's sunny or cloudy since sun rays can still penetrate through clouds and car windshields. Reapply after swimming and every two hours after the first application. Thoroughly rub into the face, nose, ears, shoulders, and other areas that may be exposed to the sun. Do not forget areas under bathing suit straps, necklaces, bracelets, and sunglasses. Even though some products state they are "water resistant," apply sunscreen regularly because sweating, water exposure, and towel drying may remove the protective layer. Buy sunscreen with the most updated product labeling since the FDA has recently issued new labeling regulations.

>Further Information

U.S. National Library of Medicine: www.nlm.nih.gov/medlineplus/ency/article/003227.htm

Skin Cancer Foundation: www.skincancer.org/prevention/uva-and-uvb/understanding-uva-and-uvb

Environmental Protection Agency: www.epa.gov/sunwise/doc/sunscreen.pdf

FDA: www.fda.gov/ForConsumers/ConsumerUpdates/ucm049090.htm

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