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# Sun Protection

Sun protection at any age is important to prevent the short-term as well as long-term damaging effects of sunlight. Sunscreen plays a major part and should be used in conjunction with other sun safety steps for optimal sun protection.

A single overexposure to sunlight can result in painful, red, sunburned skin. A bad burn when young can have serious consequences such as skin cancer later in life. Long-term overexposure can cause skin cancer, wrinkles, freckles, age spots, dilated blood vessels, and changes in the texture of the skin that make skin look older.

## The cause of Sun Damage

The sun produces both visible and invisible rays. The invisible rays, known as ultraviolet A (UVA) and ultraviolet B (UVB), cause most of the problems, including sunburn, sunburn, and sun damage. There is no "safe" ultraviolet (UV) light, and there is no such thing as a safe tan.

## Sun Protection

Sun protection helps prevent skin damage, wrinkles, and reduces the risk of developing skin cancer. Newer broad-spectrum sunscreens contain products to block both UVA and UVB rays. Sunscreen should be reapplied at least every two hours to work. The American Academy of Dermatology recommends that you seek shade when possible. Avoid sunbathing, wear a wide-brimmed hat, sunglasses and protective clothing. A typical white tee shirt has an SPF of 3. Colorless dyes are available as laundry products, which increase the SPF of fabrics to an SPF of 30. If you must be in the sun, use a broad-spectrum sunscreen with a sun protection factor of at least 15, even on cloudy days. Sunscreens, however, are not perfect. Because some ultraviolet light may still get through sunscreens, they should not be used as a way of prolonging sun exposure.

## Types of Sunscreens

Sunscreens that block UVB rays are composed of some or all of the following chemicals: padimate O, homosalate, octyl methoxycinnamate, benzophenone, octyl salicylate, phenylbenzimidazole sulfonic acid, and octocrylene. Broad-spectrum sunscreens add oxybenzone or avobenzone (Parsol 1789) to block UVA rays. Mexoryl is a chemical that blocks UVA; its broad-spectrum characteristics allow sunscreens to be made with very high SPF factors. Physical sunscreens/blocks or chemical-free sunscreens contain titanium dioxide and/or zinc oxide, which reflect UVA and UVB and especially useful for people allergic to chemical sunscreens.

## Proper Use of Sunscreen

Sunscreen should be applied one half hour before going outdoors. Even water-resistant sunscreens should be reapplied often, about every two hours or after swimming, drying off, or perspiring. Sunscreen should be applied generously and evenly so as not to miss any areas of sun-exposed skin. It should be kept out of the eyes, and UV light-blocking sunglasses should be worn.

## Protecting Children from Sun Damage

Sun protection should begin in infancy and continue throughout life. It is estimated that we get about 80 percent of our total lifetime sun exposure in the first 18 years of life. Therefore, sun prevention in early childhood is very important to prevent skin cancer later in life.

## Which types of sun damage lead to skin cancer?

Severe sunburns may be related to the development many years later of the most dangerous kind of skin cancer called Melanoma. Melanomas can develop in all age groups, including teenagers and young adults. Melanomas can spread to other parts of the body and are potentially fatal.

Built-up invisible sun damage can lead to skin cancer. Basal cell skin cancers usually appear as early as the teenage years. These cancers rarely spread to other parts of the body. However, their continuous destruction of skin and underlying structures makes their removal necessary. Squamous cell skin cancers can spread to other parts of the body if they are not treated early.

## How can I protect my children from the sun?

Begin now to teach your children to follow the "ABCs for FUN In the SUN." A = AWAY. Stay away from the sun in the middle of the day. B = BLOCK. Use SPF 15 or higher sunscreen. C = COVER UP. Wear a T-shirt and a hat. S

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= SPEAK OUT. Talk to family and friends about sun protection.

#### Additional Information About Sun Protection

The greatest sun damage occurs between 10 a.m. and 4 p.m. when the sun's rays are strongest. Even on cloudy days, when it does not feel hot, or when under trees, sunscreen and other sun-protective measures should be used because sunburn and sun damage to the skin can occur. Beach umbrellas and other kinds of shade are a good idea, but they do not provide full protection. UV rays can still bounce off sand, water, and porch decks sunscreen usage is a must. Remember, UV rays are invisible. Most clothing absorbs or reflects UV rays, but lighter colored and loose-knit fabrics as well as wet clothes that cling to your skin do not offer much protection. The tighter the weave, the more sun protection the clothing offers. Artificial UV light from tanning beds causes the same types of problems, photodamage, and cancers that natural sunlight can cause. The use of indoor tanning for non-medical purposes should be avoided. Sun protection is important in the winter. Snow reflects up to 80 percent of the sun's rays, causing sunburn and damage to uncovered skin. Winter sports in the mountains increase the risk of sun damage because there is less atmosphere to block the sun's rays. To learn more about sun protection, contact your dermatologist or one of the site links to the right of this page.