

# Sun Protection Tips

## Pediatric Dermatology of Dallas

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Protecting children from sun damage at an early age develops good habits and it may reduce the incidence of non-melanoma skin cancer later in life.

A significant amount of our lifetime sun exposure occurs before 18 years of age, which makes early sun protection crucial. Forming a sun protection habit early in life is similar to seatbelt use: it is protective during childhood, but it also increases the likelihood that children will continue to practice those good habits later in life.

To achieve effective sun protection, Dr. Carder recommends that families:

- Use sunscreen with an SPF of at least 15 to 30.
- Apply sunscreen 30 minutes before going outdoors.
- Reapply sunscreen every 1-2 hours when outdoors, especially after swimming, perspiring, or towel-drying.
- Avoid mid-day (10 a.m. to 4 p.m.) sun, whenever possible.
- Seek shade.
- Wear wide brimmed hats, sunglasses and long-sleeved shirts.
- Keep infants out of direct sunlight.
- Use these sun protective measures even on cloudy days and in the fall and winter months.

### **Sunscreen vs. sunblock**

Sunscreens chemically absorb UV (ultraviolet) rays. Sunblocks physically deflect them.

#### ***Sunscreen***

Chemical sunscreens act as a filter to absorb ultraviolet light in a specific range. Chemical sunscreens include benzophenones (oxybenzone, sulisobenzone), PABA (aminobenzoic acid, padimate O, glyceryl PABA), methoxycinnamate and avobenzone (Parsol 1789). Most chemical sunscreens absorb UVB radiation, Carder said, however the benzophenones absorb some UVA radiation and Parsol 1789 gives significant UVA protection. Commercial sunscreens often combine more than one chemical sunscreen to provide what is called broad-spectrum, or UVA and UVB protection. According to the American Academy of Dermatology (AAD), sunscreen has long blocked UVB effectively and new ingredients, like octylcrylene, the benzophenones, avobenzone (Parsol 1789), and ecamsule (Mexoryl), work to screen a variety of UVA rays.

#### ***Sunblock***

Physical sunblocks (zinc oxide and titanium dioxide) act as a barrier to reflect and scatter the ultraviolet light. They protect consistently and effectively against both UVA and UVB radiation. Sunblocks are opaque, but more transparent micronized forms are now available. Sunblocks also tend to be less irritating when applied to sensitive skin, such as the face, and do not tend to cause allergic reactions. The

AAD reports that new preparations for sunblocks, such as micronized titanium dioxide, offer substantial UVA and UVB protection. These newer micronized sunblocks are less conspicuous on the skin and are more cosmetically acceptable than the original thick, white sunblocks.

### **Safety of sunscreens**

To date, there is no convincing data that any sunblocks or sunscreens are harmful to your health, but it should be noted that sunscreens should not be your only form of sun protection.

### **Proper techniques**

Sunscreens should not be used to increase the amount of time spent outdoors in mid-day sun. Care should be taken to apply a liberal amount of sunscreen and to thoroughly cover all exposed areas of skin” Some common mistakes include not applying an adequate amount of sunscreen and neglecting the following areas:

- Ears
- Neck
- Tops of the feet
- Exposed scalp

### **Protecting infants**

If shade is unavailable to protect an infant, Dr. Carder recommends using an umbrella or placing a blanket or towel over the infant carrier to provide protection from the sun. Other steps to take include dressing infants in protective clothing and hats and using protective shields on car windows. For infants, most physicians prefer these sun protection methods over sunscreens, although there is no evidence that sunscreens are harmful to infants. In situations where sunscreen is desired, physical sunblocks, namely zinc oxide and titanium dioxide, would be preferred over chemical sunscreens since they are less irritating and have little to no cutaneous absorption. Zinc oxide has a long record of safety in infants, since it is a commonly used therapy for diaper rashes.

### **Tanning Beds**

Tanning beds are no safer than the sun, in fact their effects may be more intense. They have been associated with melanoma development in young adults. Safer alternatives would be artificial tanning lotions and sprays or the Mystic tan (a spray-on tanning booth available at many tanning salons).

### **Skin cancer**

Sun and tanning bed use are the main causes of skin cancer, the most common form of cancer in the United States. The AAD estimates that one million new cases of skin cancer will be diagnosed this year. Sun exposure greatly increases the risk of developing non-melanoma skin cancer (basal cell and squamous cell carcinomas), and several studies have associated severe childhood or adolescent sunburns with the development of malignant melanoma, a potentially lethal form of skin cancer, later in life.

