

SUN EXPOSURE- Bright ideas to avoid damage



Just about everyone enjoys a bright sunny day, but did you know that the sun can cause damage that you can't even see? Ultraviolet rays are energy that comes from the sun that can cause damage in many ways. Everyone's skin ages at a different rate, but most people will begin to see age-related changes at around age 28. At that age, the epidermis (outermost layer of the skin) begins to thin and the normal renewal capacity of the dermis (next layer) becomes less elastic. The effects of the sun on aging skin can show up as brown spots, areas of redness, wrinkles, and thinner appearing skin. The sun is one of the main culprits for accelerating these age-related changes.

There are 2 types of ultraviolet rays that can cause damage:

1. **UVA**- these are the rays that are the longest, and most powerful, and can come through even on a cloudy day. UVA rays are about the same year-round, so there is always risk of over-exposure. Exposure to UVA rays reduces the amount of collagen (elastic portion) in the skin, and results in wrinkles, thinning of the skin layers, and dilation of the tiny surface blood vessels. The UVA rays cause the most damage, as they can penetrate auto glass, some clothing and even office/home windows. If you commute a long distance in your car, you might notice brown spots on your hands- that may be due to UVA exposure of your hands on the steering wheel. Tanning beds are especially dangerous, as they emit UVA rays and can increase the risk of skin cancers.
2. **UVB**- these are the rays that most commonly cause sunburn, age spots and freckles, as they penetrate the outer layer of the skin more easily. Because UVB rays typically penetrate the outer skin layer, they are also more dangerous and are more often associated with the development of skin cancers. UVB rays are typically stronger in the summer, in higher elevations and in locations closest to the equator, however, they do not penetrate glass as easily as UVA rays. Both UVA and UVB rays can accelerate the development of cataracts and eye damage.

High risk individuals

- Those who work out in the sun (construction/roofers/street workers/landscapers)
- Those who have fair or light colored skin
- Anyone with a family history of skin cancer
- Those with a family history of cataracts
- Those who live in high elevations or near the equator
- Persons who take certain medications (always review the medication insert for precautions)
- Elderly individuals, infants and small children
- Persons with illnesses that suppress the immune system

Tips to avoid hazardous exposure

- Avoid tanning beds- these generally emit about 97% of UVA rays, and can increase the risk of skin cancers
- Wear a wide brim hat or use an umbrella when out in the sun
- If you must use a tanning bed, always wear eye protection, as the rays can cause serious damage to the eye
- Find a tree or rest in the shade
- Wear long sleeves when mowing the lawn
- Wear sun glasses to avoid UV exposure to the eyes
- Wear clothing/hats with UV protection (usually stated on the product label)
- Wear light or bright colored clothing when in the sun- will reflect some of the rays away
- Wear gloves, sunglasses, and cover exposed skin when skiing or out in the snow
- Sunlight helps to metabolize vitamin D- but generally only about 10 minutes should be enough
- Always use SPF >30 sun screen and reapply every hour, or more frequently if in the water.
- Apply sunscreen at least 30 minutes before going out in the sun
- Use sunscreen when skiing or hiking, as the sun reflects off the snow
- Avoid exposure during the hottest time of the afternoon- usually 10:00am to 3:30pm
- Use sunscreen even on cloudy days
- Sunscreen should NOT be used on infants less than 6 months old
- Both light and darker skin persons need sun block
- Use sun screen when skiing, as the rays bounce off the snow and can cause serious damage
- Never allow an infant or small child to be in the sun without protection
- Some medications should not be used if you are exposed to the sun- discuss all medications with your primary care provider
- Drink plenty of water to keep your skin hydrated
- If you spend long periods of time driving in the car, UV rays penetrate the glass, so apply sunscreen to your hands and arms often.
- Use a vehicle sun shade on the side windows if you have an infant/child in a car seat
- If you get a sunburn, get in the shade or indoors immediately, apply cool cloth, and aloe vera gel. If you note blistering, seek medical attention immediately. Never pop or scratch a blister
- Examine your skin monthly and see your primary care provider if you notice odd discoloration
- If you have any dark colored mole, or any mole that looks like it is changing in appearance or size, have it checked out immediately. Melanoma is one of the deadliest forms of skin cancer- if caught early, it can be stopped.

