

ultraviolet radiation

What is Ultraviolet Radiation?

Ultraviolet (UV) radiation is a type of radiation that is produced by the sun and some artificial sources. It has wavelengths shorter than visible light, making it invisible to the naked eye. These wavelengths are classified as UVA, UVB or UVC.

UVA has the longest rays of the three UV radiations and is further divided into two wave ranges: UVA I and UVA II. UVC has the shortest rays and most of it is absorbed by the ozone layer and does not reach the earth.

UVA rays

- Penetrates the skin more deeply than UVB
- Can damage DNA of the skin cells
- Play a major part in skin aging and wrinkling (photo aging)
- Contributes to and may even initiate the development of skin cancers
- Intensity remains the same during all daylight hours throughout the year, i.e. does not change during Summer or Winter
- Can penetrate clouds and glass

UVB rays

- Have slightly more energy than UVA rays
- Directly damages DNA of the skin cells
- Main cause of skin reddening and sunburn
- Tends to damage the skin's more superficial epidermal layers and plays a key role in the development of skin cancer
- Contributory role in tanning and photo aging
- Intensity varies by season, location and time of day
- Reflective surfaces such as snow or ice bounce back up to 80 percent of the rays
- Does not significantly penetrate glass

UVC Rays

- More energy than the previous two types of UV rays but does not get through our atmosphere

The Cloudy Day myth uncovered?

The effect of clouds can vary. Sometimes cloud cover blocks some UV from the sun and lowers UV exposure, while some types of clouds can reflect UV and can increase UV exposure. What is important to know is that UV rays can get through, even on a cloudy day, so there is no excuse not to wear a

Tanning

UVA is the dominant tanning ray which causes cumulative damage over time, whether outdoors or in a salon.

A tan results from injury to the skin's DNA. The skin darkens in an imperfect attempt to prevent further DNA damage. These imperfections, or mutations, can lead to skin cancer. Unfortunately, there is no such thing as a healthy tan.

UV penetration into the layers of the skin

