

Prevention of UV-related damage due to sun exposure

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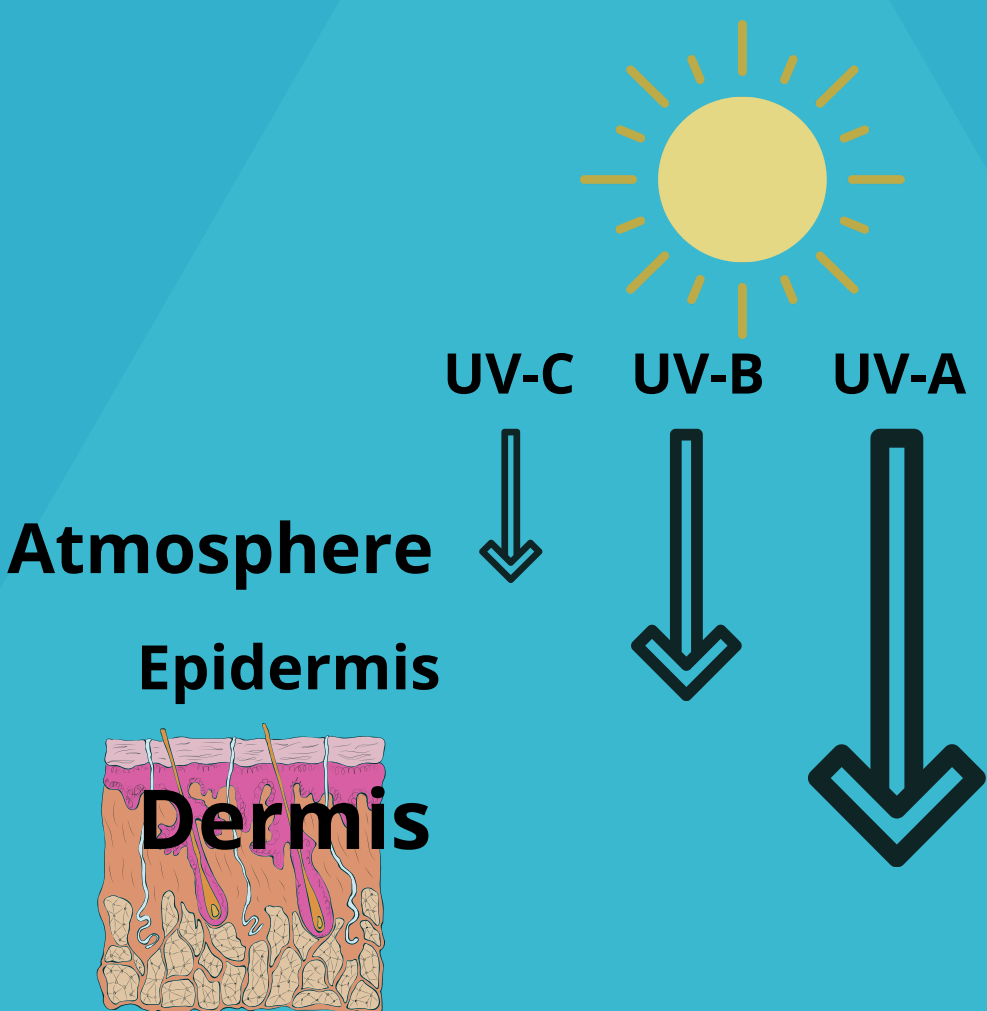
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How important is sun protection in everyday life?

According to WHO, the worldwide incidence of melanoma continues to increase. However, the most important factors favoring the development of melanoma appear to be related to recreational sun exposure and a history of sunburns.

These factors are the responsibility of each individual

Are UV-A and UV-B rays equally dangerous?



UV-B rays are short-wave and responsible for sunburns. This high-energy radiation damages the DNA molecules of the skin cells in our outermost skin layer (epidermis)

The longer-wave UV-A radiation reaches the earth mostly unimpeded. UV-A rays have less energy than UV-B rays, but penetrate deeper into the skin - right into our dermis--> age the skin

How dangerous is sunburn?

higher the current UV Index reading



the higher the radiation levels



more likely you are to get a sunburn

The damage is admittedly much more severe in the case of sunburns:

Only one sunburn in the childhood is enough to double the skin cancer risk

Be careful even when the sun isn't shining. Up to 80 percent of UV rays can penetrate clouds.

Solarium visits increase the risk: According to DKG (German Cancer Society) the first visit to a solarium before the age of 35 is associated with an 87% increase in melanoma risk. Furthermore, each additional solarium use per year is associated with a 1.8% increase in skin cancer risk.

Sunprotection

Important! Sole use of sunscreen is not enough, the combination is important:

1) Dark clothing protects from UV rays



2) Avoid the sun at midday



3) Stays in the shade are advisable



Sources:

Prävention von Hautkrebs: Bei intensiver Sonne sind mehrere Faktoren notwendig (aerzteblatt.de)

Sonnenschutz: Was sind Fakten, was ist Fiktion? - quarks.de

Radiation: Ultraviolet (UV) radiation and skin cancer (who.int)

Challenges in Sun Protection - Karger Publishers