UV Radiation

Sun Elevation

The higher the sun is in the sky, the higher the UV radiation level. Thus UV radiation varies with time of day and time of year.

Cloud Cover

UV radiation levels are highest under cloudless skies. Even with cloud cover, UV radiation levels can be high due to the scattering of UV radiation by water molecules and fine particles in the atmosphere.

Altitude

At higher altitudes, a thinner atmosphere filters less UV radiation. With every 1000 metres increase in altitude, UV levels increase by 10% to 12%.

Ground Reflection

UV radiation is reflected or scattered to varying extents by different surfaces, e.g. snow can reflect as much as 80% of UV radiation, dry beach sand about 15%, and sea foam about 25%.

Source: WHO INTERSUN program www.who.int

In Canada – the highest UV radiation levels occur from May to August between 11 am and 4 pm.



