



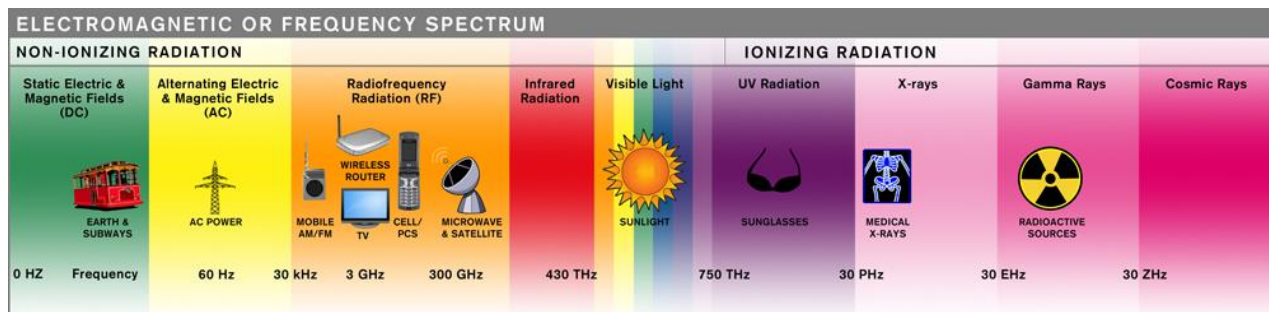
Cancer Association of South Africa (CANSA)

Fact Sheet on Actinic Cheilitis

Introduction

According to the SCC Scottish Sensory Centre, University of Edinburgh, UV radiation is described as follows: “In the electromagnetic spectrum there is an area of visible light. UV radiation has wavelengths shorter than visible light. We can't see it, although birds and insects can. The wavelength of UV light varies from 10-400 nm. Within this UV spectrum there are three different sorts of UV light. The first section, called UVA, has wavelengths of 320-400 nm. The second, UVB, has wavelengths of 290-320 nm. The third, UVC, has wavelengths of 10-290 nm.”

The diagram below shows ultraviolet (UV) radiation as part of the electromagnetic spectrum. The wavelength of ultraviolet radiation is between 10nm and 400nm which makes it shorter than the wavelengths of visible light (400nm to 700nm) and longer than X-rays.



[Picture Credit: EMF & RF Solutions]

Sources and Uses of Ultraviolet Radiation

Although there are manmade sources of ultraviolet (UV) radiation like arc welding, mercury vapour lamps and UV lamps, the sun is the major source of ultraviolet radiation.

Uses and benefits of ultraviolet radiation include:

- Phototherapy (also called light therapy or heliotherapy)
- Disinfection and sterilisation
- Triggers Vitamin D production in human skin
- Tanning

Harmful Effects of Ultraviolet Radiation in Humans

Overexposure to ultraviolet radiation may cause:

- Sunburn
- Skin cancer, especially squamous cell carcinoma
- Premature ageing of skin
- Suppression of the immune system
- Eye damage (macular degeneration, damage to the cornea of the eye, and cataract formation)

Actinic Cheilitis

Actinic Cheilitis is a pre-malignant condition which results of excessive exposure to the UV rays of the sun. It is especially the lower lip, more so than surrounding skin that is affected. It is mostly seen along the line that separates the lips from the skin of the face. Individuals with albinism are often affected by Actinic Cheilitis.



Other names for Actinic Cheilitis include actinic cheilosis, actinic keratosis of the lip, solar cheilosis, sailor's lip and farmer's lip. It presents mainly in adults with fair skin who spend a lot of time in the sun. It presents as a diffuse or patchy dryness on the lower lip. If neglected it may cause squamous cell carcinoma *in situ*.

[Picture Credit: Actinic Cheilitis]

Other parts of the body that may be affected include:

- Other parts of the face
- The hands
- The ear lobes
- The scalp (especially if there is thinning of the hair)

Incidence of Actinic Cheilitis in South Africa

The National Cancer Registry (2014) does not provide any information regarding the incidence of Actinic Cheilitis in South Africa as it is a pre-malignant condition.

Prevention of Actinic Cheilitis

The best protection against developing Actinic Cheilitis includes:

- Protection of the face against sun exposure by wearing a broad rim hat
- Regular application of an effective sunscreen (SPF 30)
- Avoid being outside when the sun is at its hottest

Assessment and Treatment of Actinic Cheilitis

When skin changes are noticed on the lower lip or other areas of the body, one should visit a dermatologist for assessment and treatment. This may involve:

- Clinical assessment
- Biopsy
- Electrosurgery
- Cryotherapy

Researched and Authored by Prof Michael C Herbst

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- Application of medication to the affected area.

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Sources and References Consulted and/or Utilised

Actinic Cheilitis

<https://www.patienthelp.org/diseases-conditions/actinic-cheilitis.html>

Canadian Centre for Occupational Health and Safety

https://www.ccohs.ca/oshanswers/phys_agents/ultravioletradiation.html

DermNet NZ

<http://www.dermnetnz.org/site-age-specific/solar-cheilitis.html>

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Science Learning Hub

<https://www.sciencelearn.org.nz/resources/1304-positive-and-negative-effects-of-uv>

Scottish Sensory Centre

<http://www.ssc.education.ed.ac.uk/BSL/physics/ultravioletradd.html>

Study.com

<http://study.com/academy/lesson/what-is-uv-radiation-definition-types-effects.html>

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