OP-ETC-CMU-04

Difference in UV intensity Indoor and outdoor areas at the Faculty of Associated Medical Sciences, Chiang Mai University

Malisa Tamang[1], Suchart Kiatwattanacharoen[2]

[1,2]Faculty of Associated Medical Sciences,Chiang Mai University

Introduction: Ultraviolet (UV) radiation can occur when an object is heated at temperatures above 2,500 Kelvin, or the most common form of UV radiation is sunlight, about 10 percent of the total solar radiation that arrives at the Earth's surface. UV rays can cause damage to body depends on the UV intensity and prolonged UV exposure.

Purpose: Purpose: students, staff and the public aware of the dangers of UV exposure and preventive.

Methods: Method: Measured the sun's UV intensity every 2 hours from 8:00 AM to 4:00 PM at the Faculty of Associated Medical Sciences on 28 September 2020 and October 1, 2020 at the outdoors area in Chiang Mai University by a digital UV radiation detector model KF90, collected data and display the value in term of Ultraviolet index (UV index).

Results: At the Faculty of Associated Medical Sciences, the highest UV intensity measured was 1143 μW/cm2 at 9:20 AM. classified as 8 on the UV index scale. At the outdoors area in Chiang Mai University has 3000 μW/cm2 at 12:00 AM. classified as extreme on the UV index.

Conclusion: Outdoor areas have high UV intensity all day, that excessive exposure to UV radiation can result harmful to the body. Stay in the shade, especially during midday hours and protect yourself from UV radiation.

Keywords: Ultraviolet radiation, UV intensity, UV index

Corresponding author's E-mail: malisa_t@cmu.ac.th

References:

1. Armstrong B, Brenner DJ, Baverstock K, Cardis E. Solar and Ultraviolet radiation: IARC monographs Radiation volume 100D a review of human carcinogens. 2012; 35-101.
2. Larason T. C., Cromer C.L. Source of Error in UV Radiation Measurement. Journal of research of the Nation Institute of Standards and Technology,106(4), 649-656.