

# [Uv index forecast](https://assignbuster.com/uv-index-forecast/)

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September 2, UV Radiation As a response to the serious public health threat posed by exposure to UV rays, EPA works with schools and communities across the nation through the SunWise Program. SunWIse teaches students how to protect themselves from overexposure to the sun. The Environmental Protection Agencys website on the Sunrise Program at www. epa. gov/sunrise/uvindex. html gives students valuable information regarding UVs and the danger of sun exposure. It gives a forcast of UV Index for every city or town in the United States. The UV index Forecast for Colorado Springs, CO, 80918 had a forecast of level 3 (moderatel-to-low) on the UVA Index Scale. There are five categories for UV index, level 1-2 (low--can safely enjoy being outside), level 3-5 (moderate--take precautions by wearing a hat and sunscreen SPF+15; seek shade during midday hours), level 6-7 (high--protection against sun damage is needed; use sunscreen SPF+15; wear long sleeves and pants where applicable), level 8-10 (very high--protection against sun damage needed; try not to be outside between 10am-4pm; shirt, hat sunscreen are a must; seek shade) and level 11+ (extreme--same as very high category).   
The UV Index is a next day forecast of the amount of skin damaging UV radiation expected to reach the earth’s surface at the time when the sun is highest in the sky (solar noon). The amount of UV radiation reaching the surface is primarily related to the elevation of the sun in the sky, the amount of ozone in the atmosphere, and the amount of clouds present. The UV Index can range from 0 (night time) to 15 or 16 (in the tropics under high elevations with a clear sky). The higher the UV Index, the greater the dose rate of skin damaging and eye damaging UV radiation. The higher the UV Index, the smaller the time it takes before skin damage occurs.   
  
  
Ultraviolet (UV) radiation is a specific part of the sun’s entire spectrum of wavelengths. UV-C spectrum is entirely absorbed by atmospheric ozone adn does not reach the earth’s surface. UV-B is mostly absorbed by the ozone, but can affect plants and animals, and affects humans by reddening of the skin, and possible development of skin cancer. UV-A radiation is needed by humans for the synthesis of Vitamin-, but too much UV-A causes toughening of the skin and other irritations. The variation throughout the day of UV radiation is much like that of visible light.   
The UV Index is a forecast of the probable intensity of skin damaging ultraviolet radiation reaching the surface during the solar noon hour (11: 30-12: 30 local time). In general, the darker one’s skin is (the more melanin one has in his skin) the longer (or the more UV radiation) it takes to cause skin reddening, For those who always burn and never tan the times to burn are relatively short compared to those who almost always tan.