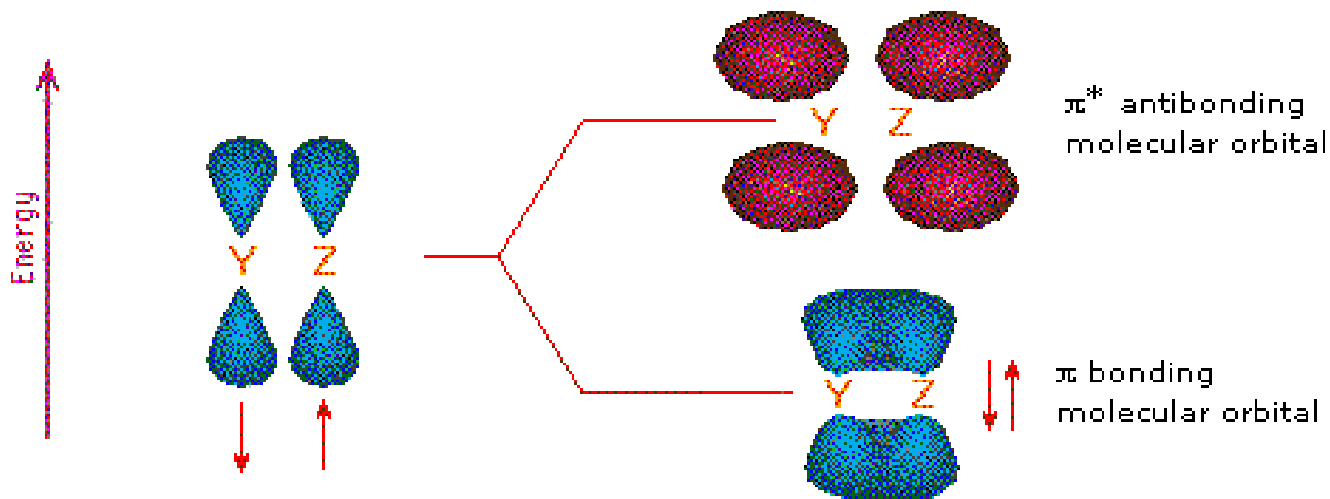


Efectos de la radiación UV en sistemas biológicos

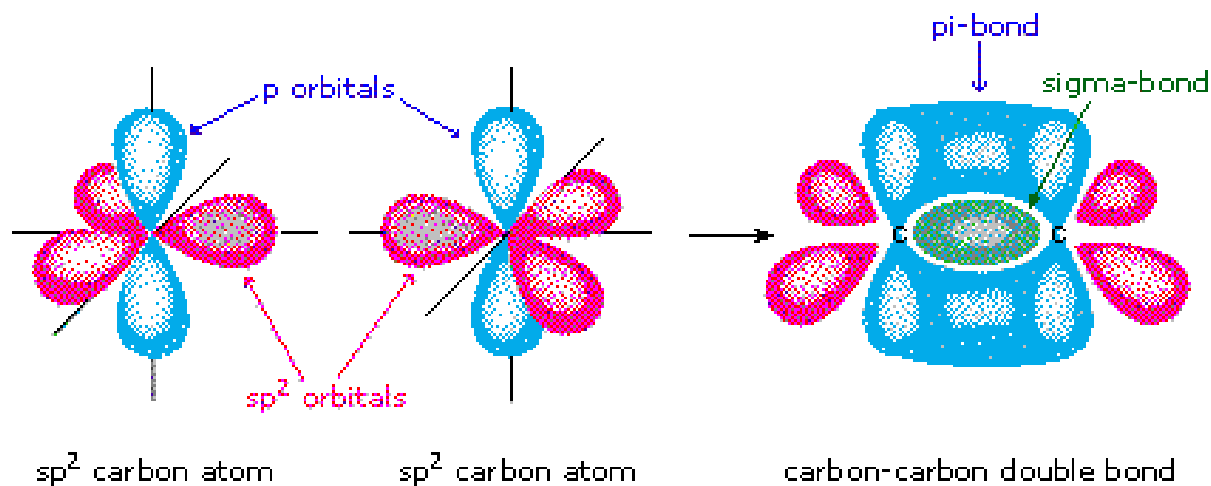
Oscar J. Oppezzo

Departamento de Radiobiología

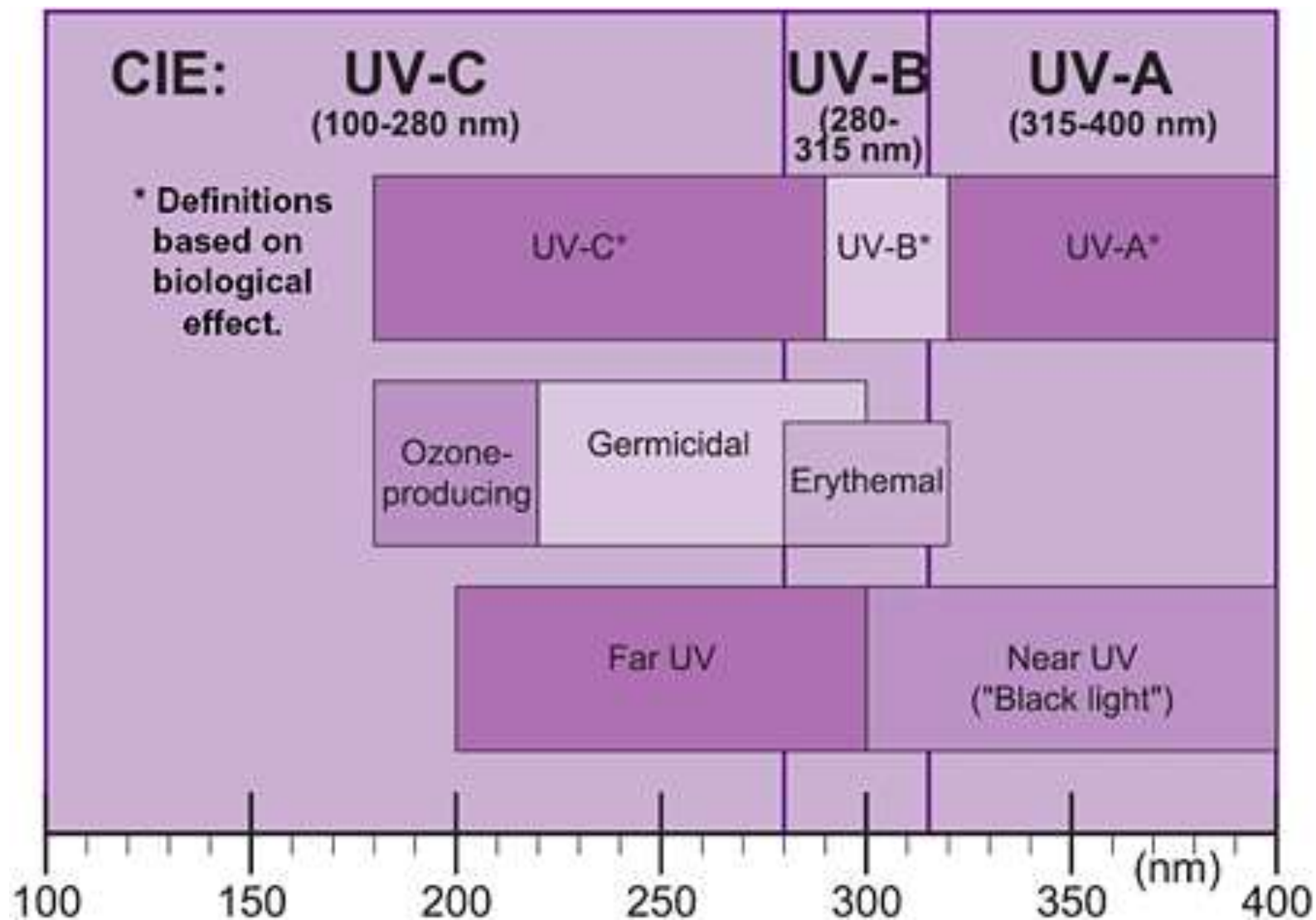
Comisión Nacional de Energía Atómica

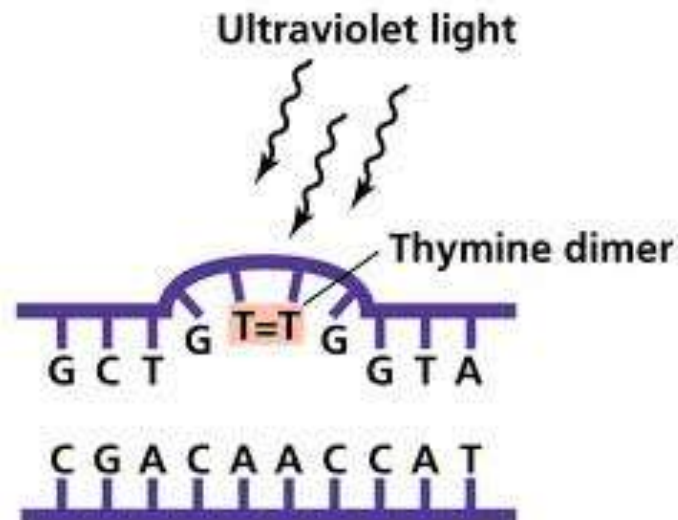


A π -orbital formation from two p-orbitals

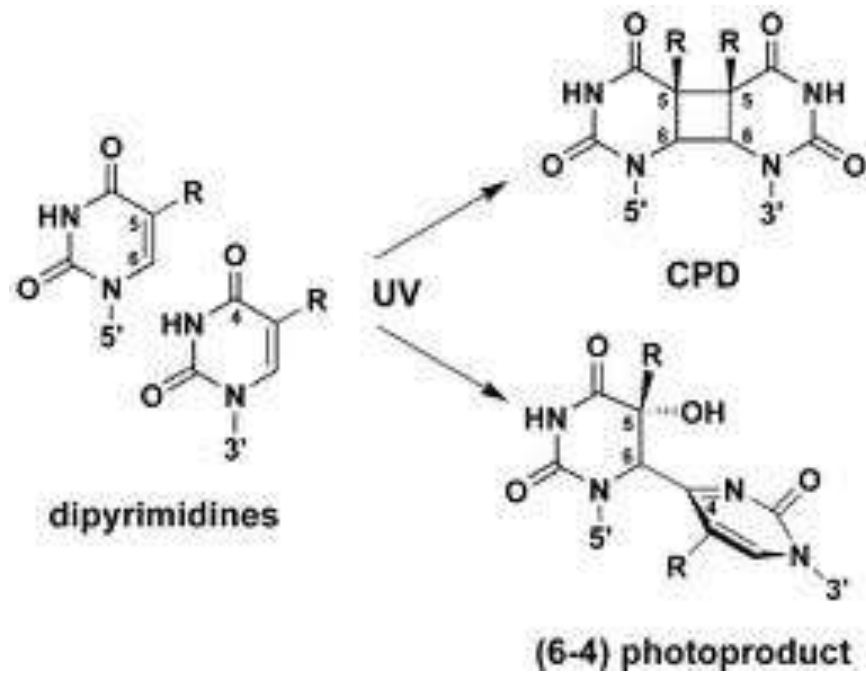


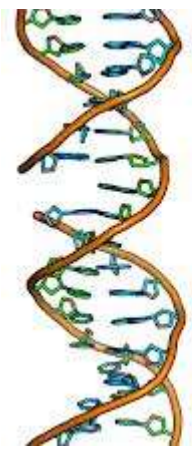
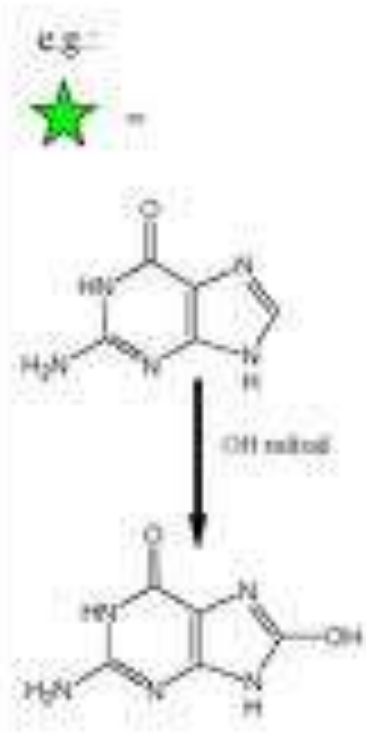
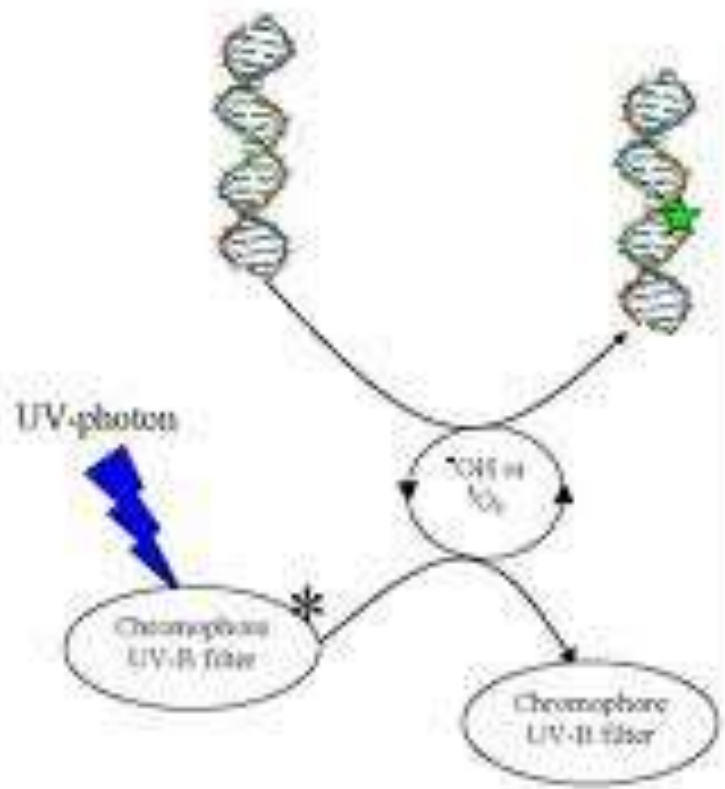
B Formation of σ - and π - molecular orbitals from two sp^2 hybridized carbon atoms



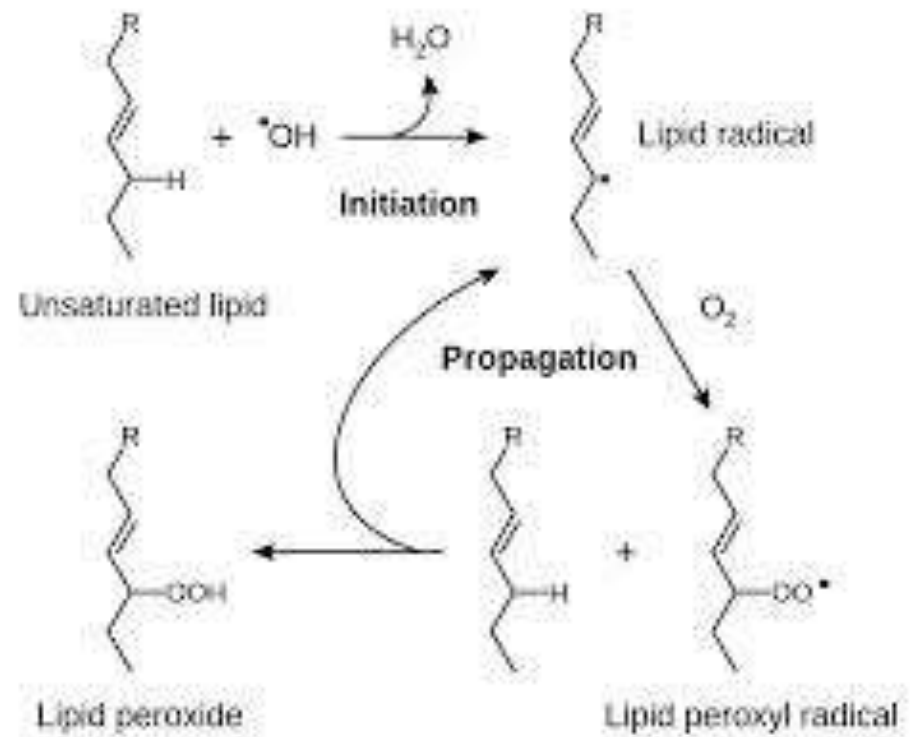
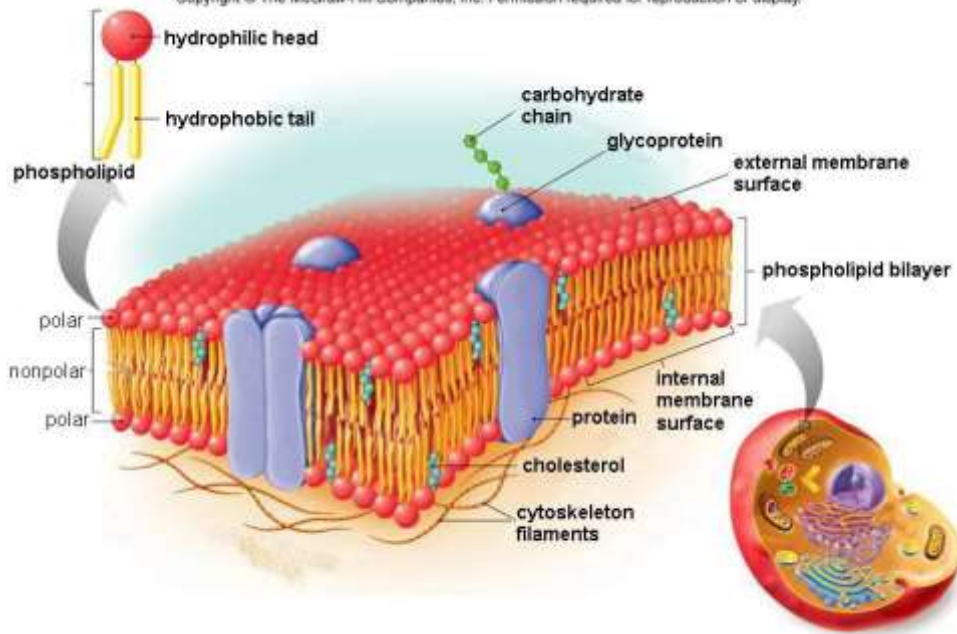


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Efectos sobre la salud humana

AGUDOS

CRÓNICOS

Piel

- eritema
- pigmentación

- aceleración del envejecimiento
- factor de riesgo de cáncer de piel

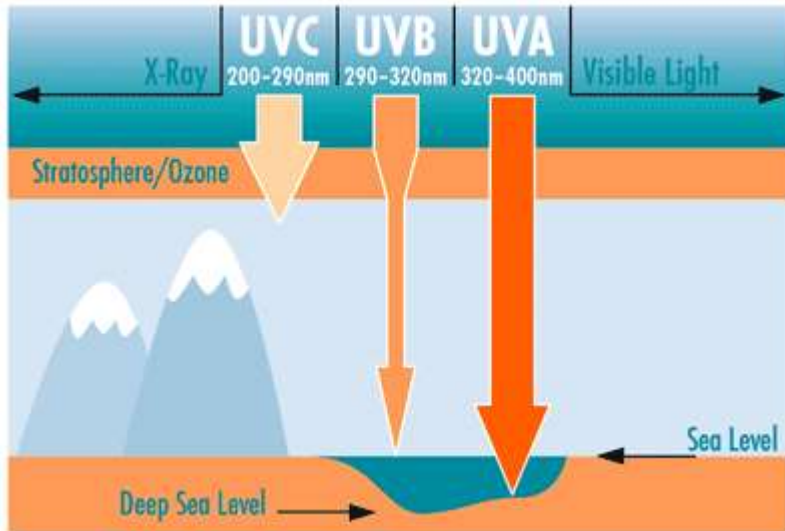
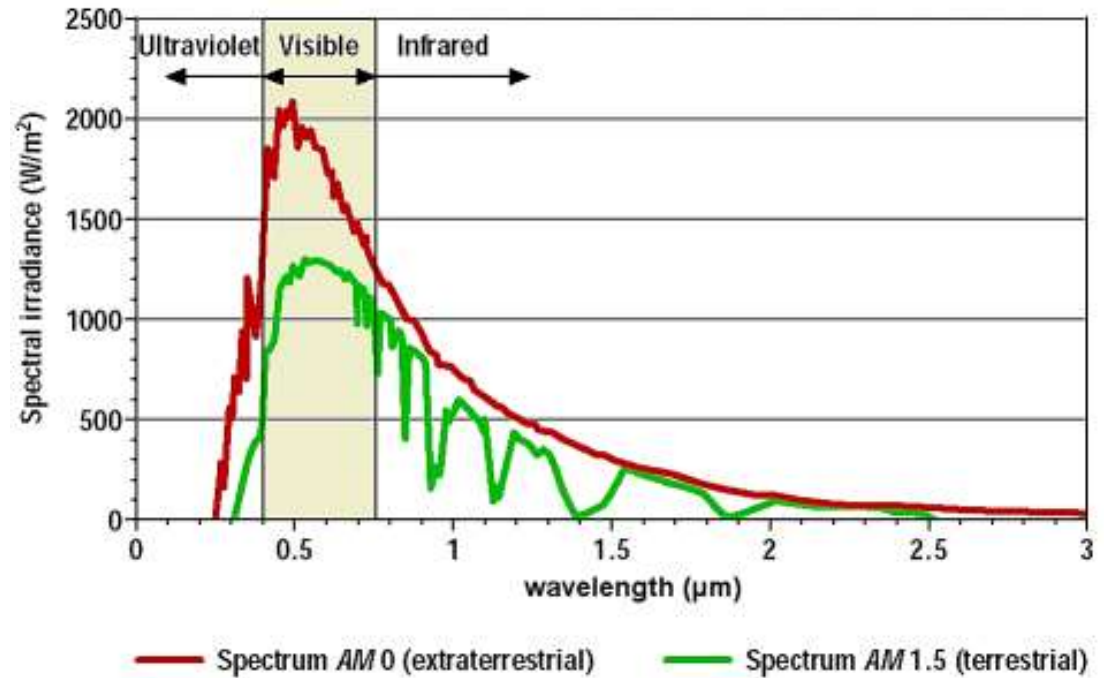
Ojos

- fotokeratitis
- fotoconjuntivitis

- factor de riesgo de cataratas

Sistema inmune

- inmunosupresión
-



- Ángulo cenital
- Latitud
- Cobertura de nubes
- Altitud
- Nivel de ozono
- Reflexión en el suelo

$$I_{UV} = k_{er} \cdot \int_{250nm}^{400nm} E_{\lambda} \cdot S_{er}(\lambda) d\lambda$$

Increase in Risk	UV Index	Protection Measures
↓	0-2	Cover head and/or eyes
	3-5	Cover head and eyes and use low SPF sunscreen
	6-7	Cover head, eyes, body, and use strong SPF or do not spend time outdoors
	8-10	Cover head, eyes, body, and use strong SPF or do not spend time outdoors
	11+	Do not go outdoors

