

Sun Protection Hazards

"Suntan lotion" – When this is seen on a suntan product, know that this product offers no protection from sun.

"Sunscreen" – Filters UV rays for getting to skin, but does let some in. Sunscreen uses chemicals that will filter out the some of the sun's rays; some products will filter out SOME of the sun's UVA rays, some filter out SOME the UVB rays, and some offer filtration of both types of rays. Products that filter out both UVA and UVB rays are referred to as a "Broad spectrum" product, which would be the better choice Vs choosing a product that only filters out one type of sunray.

The 'UV filter' (from the chemicals in the sunscreen) get absorbed into the skin after sunscreen is applied to body. This process continues as the product sits on the skin (your skin is your largest organ and absorbs everything – which goes right into blood stream). The FDA has set human exposure limit, which of course the product needs to meet to be allowed for sale to the public. But as the product sits on your skin, the UV filter chemical penetration continues, which increases the amount getting into the blood (the blood exposure limits can exceed the recommended exposure limit by more than 15x allowable limit) !

The most notable chemicals used as a UV Filter that have been identified as carcinogens in sunscreens include:

- Avobenzone
- Octinoxate
- **Oxybenzone** – super bad stuff but probably the most frequently used in sunscreen products

"Sunblock" – Reflects sun rays from skin, the rays do not penetrate the skin. Also known as a "Physical Block Screen". These chemicals are in a more viscous application and will be tough to spread over a large body area.

The complete sun ray penetration obstruction occurs from chemicals within the sunblock that prevents all forms of sun rays from penetrating it, thus preventing skin damage from the sun's rays.

The chemicals in the sunblock that prevent the sun from penetrating it have been identified as carcinogens (cancer causing). Typically, there are one of two chemicals (or both) used in Sunblock and include:

- Titanium Dioxide
- Zinc Oxide

These chemicals are hazardous enough that they are regulated (by OSHA, EPA, or FDA) in the workplace to control the amount of employee exposure to these chemicals.

Suggestions :

- For healthier Sunscreen selections (Need to purchase the SPF as listed below to get the correct product):
 - Neutrogena Clear Face Broad Spectrum Sunscreen – SPF 50
 - Coppertone Sport – Oxybenzone free (SPF 50+)
 - Blue Lizard Australian Sunscreen (SPF30+)
- If you need to keep the sun off of an area of the body, you will need to use a sunblock. Using it for a day wont give you cancer. The hazards lie in the amount used over time (how much used and how frequently) that add up to create the hazard.
 - The ideal mitigation to not getting burned would be through a non-chemical exposure method. Some ways may include:
 - Sunproof SPF clothing (this way may be expensive, SPF wears off with each wash, exposed skin not covered by the clothing is vulnerable to sun damage).
 - Hats with a brim can keep sun off face and neck.
 - Regular clothing offers some sun protection