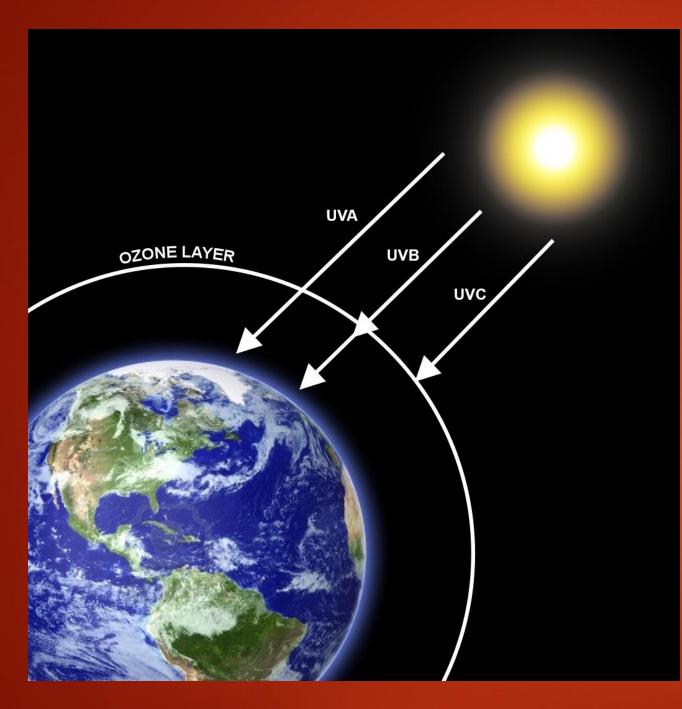
SKIN CANCER

Presented by Industrial Sunscreen™



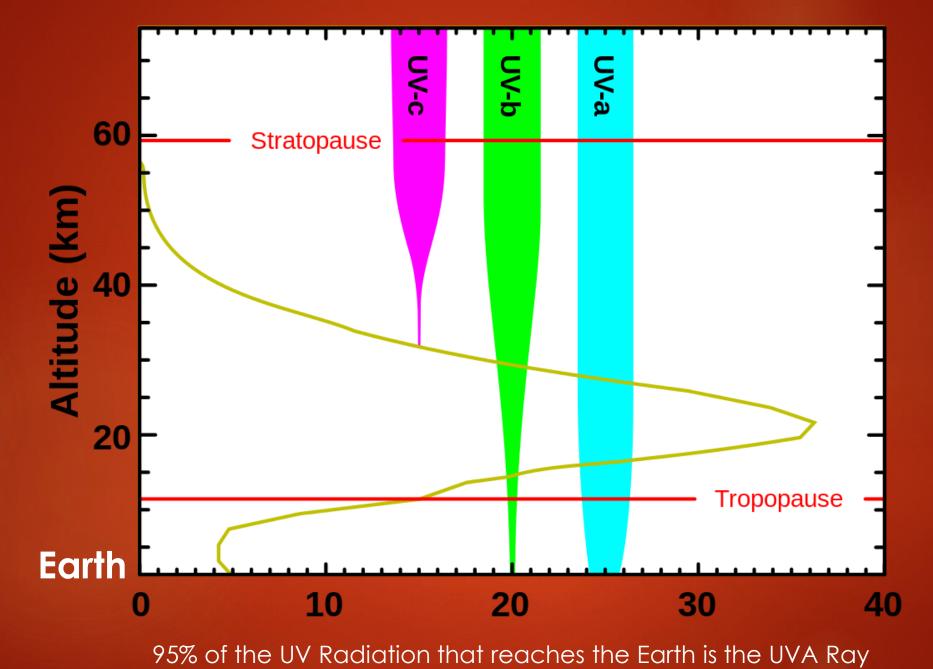
AN ULTRAVIOLET CAMERA CAN SHOW NOT-YET-VISIBLE CHANGES TO YOUR SKIN



UVC Rays – Weakest UVB Rays – Moderate UVA Rays - Strongest

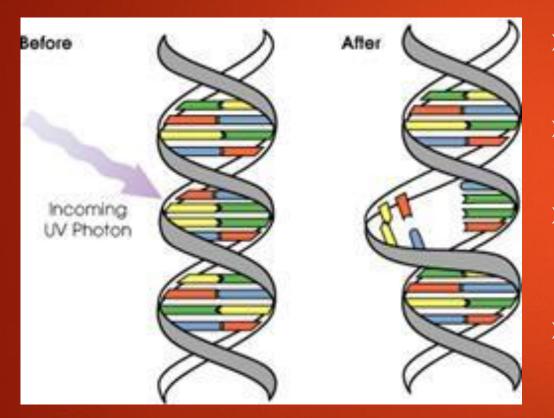
UVC Rays get Stopped by Ozone Layer

Presented by Industrial Sunscreen®



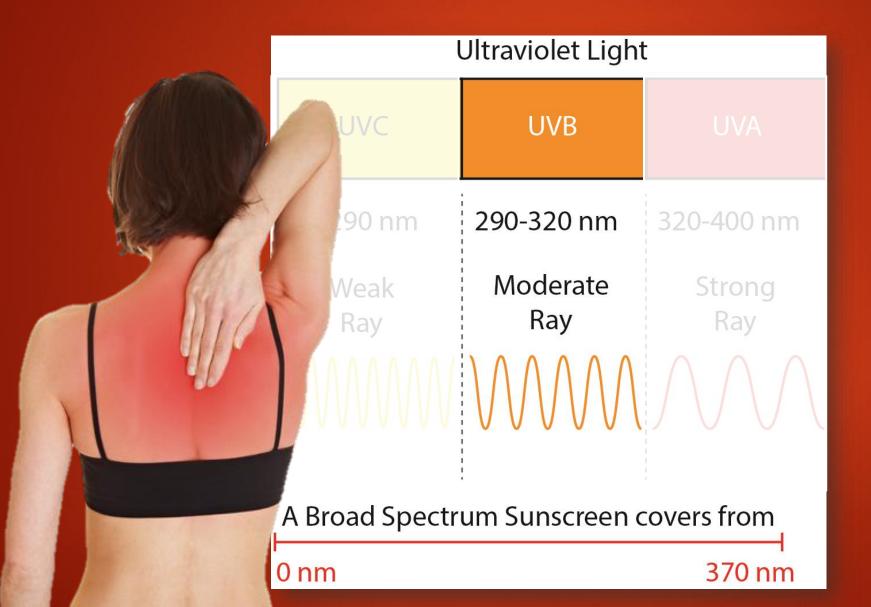
Presented by Industrial Sunscreen®

UVA Rays Cause Skin Cancer



- UV rays continually damage and alter the structure of our skin cells DNA.
- Skin cells continually fix and repair damaged DNA
- The continuous repair and skin cell corrections actually lead to a cell dying or becoming cancerous
- "...UV kills cells because of the accumulation of DNA damage."
 - Chair of Biology Westminster College

UVB Rays = SUNBURN

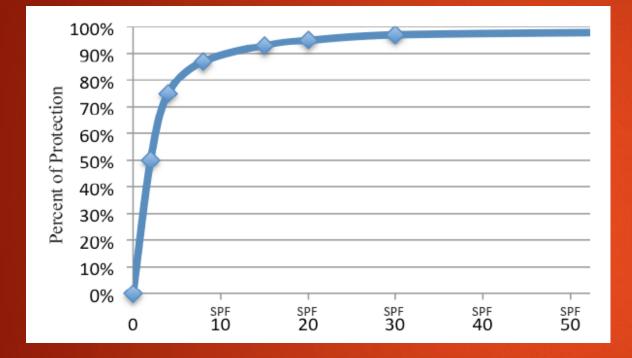


UVB radiation causes sunburn, darkening and thickening of the outer layer of the skin

UVB Rays do not penetrate the outer layer of your skin

UVB Rays are the chief culprit behind Sunburns

SPF = "Sun Protection Factor" Against getting a Sunburn

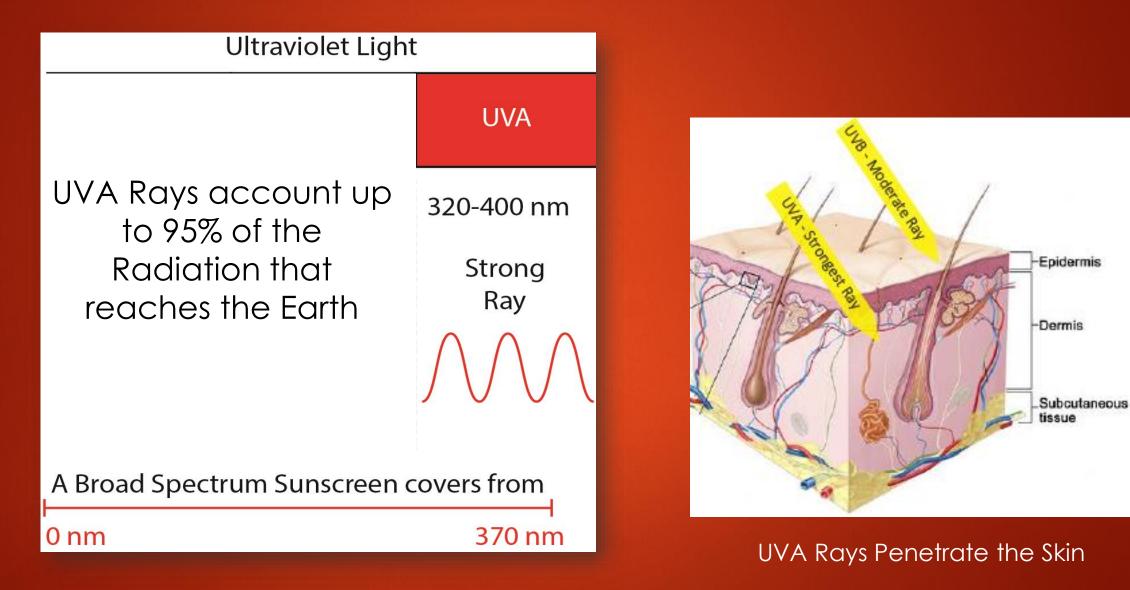


The difference between SPF 30 and SPF 50 is 1 % protection The number of the SPF represents the level of sun burn protection against the UVB Ray only.

SPF 30 = 300 minutes Sun Burn Protection

Any sunscreen with an SPF below 15 cannot claim "Protection Against Skin Cancer."

UVA Rays – Strongest



Presented by Industrial Sunscreen®

UVA Rays Reflect Off Water, Concrete, Asphalt & Snow



UVA Rays cause Wrinkles, Skin Aging, Moles, Sun Spots, and Cataracts

 UVA Rays can penetrate glass, windshields, and clothing The outside worker receives a double dose of UVA Rays - One from the Sun and one from the reflection as shown above.

Skin Cancer is the #1 diagnosed cancer in the world, Over 7 million cases diagnosed in the United States



- Basal Cell
- Most common. Over 2.8 million cases US cases each year.
- Small reddish patch, shiny bump or pink growth.
- Very treatable, has to be cut out of your skin or burned off with cauterizing pen.

- Squamous Cell
- Over 700,000 new cases ever year.
- Scaly red patch, wart like, or an elevated growth.
- Very treatable, has to be cut out of your skin or burned off with cauterizing pen

- Melanoma
- Can be fatal if not treated.
- 178,560 cases of melanoma will be diagnosed in the U.S. in 2018
- Can metastasize quickly and spread to other areas of the body.
- Usually a brown or black mark but also red or even white.
- > 1 person dies of Melanoma every 52 minutes

What to Look For & Skin Cancer Prevention

Moles, Birthmarks, & Discolorations

- Change in color
- Increase in size or thickness
- Change in texture
- Irregular outline
- Larger than a pencil eraser



2014 FDA Sunscreen Labeling Requirements



New Labeling Requirements for FDA Registered US Manufactures

No Longer Legal to be Manufactured Per FDA

"The agency currently considers <u>wipes, towelettes</u>, powders, body washes, and shampoo not eligible for the monograph. Therefore, they cannot be marketed without an approved application"

http://www.fda.gov/forconsumers/cons umerupdates/ucm258416.htm



FDA States Spray Sunscreens are Bad for Children



Contains up to 70% Denatured Alcohol "Poison" The active ingredients have never been tested internally in the body.



Flammable, Harmful & Toxic

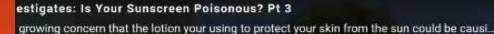
"We now say that until the FDA completes its analysis, the products should generally not be used by or on children"

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Physical vs Chemical



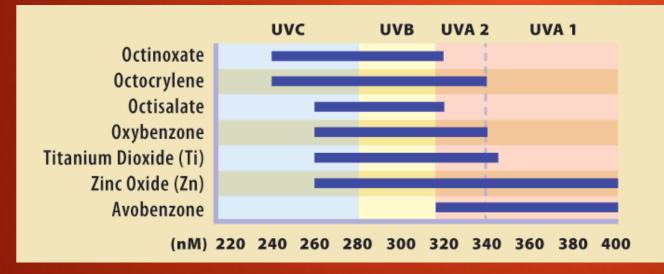
- "…lose as much as 90% of their effectiveness in just an hour, so they need to be reapplied often…"
- "...Zinc Oxide and Titanium Dioxide, the two minerals or Physical Sunscreens...they sit on the surface of the skin and physically block UVB & UVA Rays."





Chemical vs. Physical Sunscreens

For UVA protection the FDA has approved 3 Active Ingredients



CHEMICAL PROTECTION

Avobenzone

PHYSICAL PROTECTION

Zinc Oxide

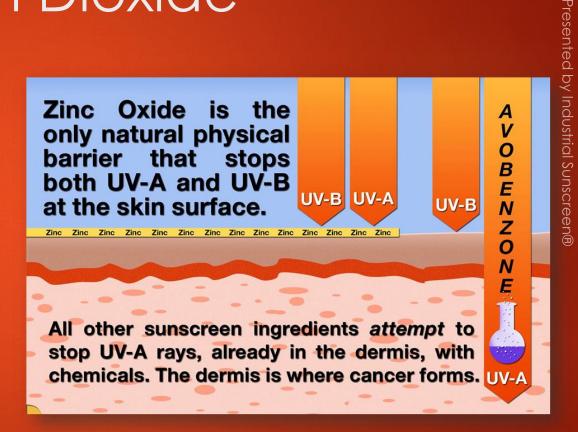
Titanium Dioxide

Chemical Sunscreens with Avobenzone

- 90% of Sunscreens are Manufactured with the active ingredient "Avobenzone" for UVA protection.
- Avobenzone takes up to 20 mins to absorb into your skin.
- In a sunscreen formulation, Avobenzone is used only to protects against UVA Rays from 357-400nm.
- Avobenzone in a sunscreen formulation must include a stabilizer like octocrylene, otherwise Avobenzone can lose as much as 36% of its effectiveness in just an hour.
- Avobenzone works by absorbing the rays and converting them to energy that is less damaging to the skin and DNA.

Physical Sunscreens with Zinc Oxide & Titanium Dioxide

- Physical Sunscreens with both Zinc and Titanium protects against both UVA and UVB rays. They are not absorbed into the skin.
- Physical Sunscreens protect the immediately when applied.
- Zinc & Titanium lay on the top of your skin, reflecting both UVA and UVB rays.
- Zinc Oxide provides better protection from UVA than Titanium Dioxide.
- A Physical Sunscreen can help keep your body cooler.



UV Protective Clothing



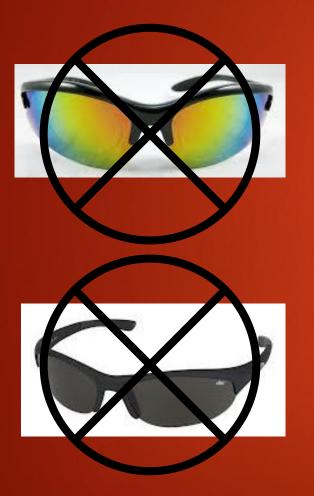
- UPF Ultraviolet Protection Factor
- Determines the amount of UV radiation that is being absorbed or blocked from the clothing
- UPF 50 = 1/50th of the UV radiation penetrating the fabric
- The following features affect the natural level of sun protection provided by any fabric

Weave Stretch Age Color Wetness Weight



Polarized

UV Coated



- UVB & UVA Rays can cause cataracts and burning of the skin around your eye.
- VV protectant sunglasses physically protect against UVB & UVA Rays from the Sun.
- Polarized lens' only block the glare from water and snow.
 - UV Lenses should meet ANSI Z80.3 blocking requirements. (This refers to standards set by the American National Standards Institute.)

Look for lenses with "UV 400 protection"





Sunscreen & Vitamin D

Vitamin D supports calcium absorption in the body that promotes healthy bones & the body's immune system.

How long do you have to be in the sun before you reach your maximum Vitamin D daily intake?

Just 5-10 minutes a day – MAX vitamin D intake



In conclusion we believe the outside worker should have

- A 4 inch brimmed hat
 Wear Clothes with UPF of 25-39
 A Full Broad Spectrum SPF 30+ Physical Sunscreen with 80 Minute Water Resistance that meets ASTM D120(Lineman Clove) & ASTM 52421(FR Clothing)
 - D120(Lineman Glove) & ASTM F2621(FR Clothing) Standards







Made by Americans for the American Outdoor Worker

REPELLENT

INDUSTRIAL SUNSCREEN

Deet Free 8 Hour Protection against Ticks & Mosquitoes The only Zinc Oxide Sunscreen that Rubs in Clear & Leaves No White Residue 'Alcohol Free' Lotion Kills 99.99% of Germs Skin Protectant & Remoisturizer

HAND SAN

For Samples Please Call 480.443.9255