



Environmental Health Division
Sanitation and Safety Bureau

Tanning Operator Training

Purpose

The purpose of the regulation of tanning facilities and the requirement of training for operators is to provide a minimum standard for the safe operation of tanning equipment and to protect public health and safety. Tanning operators have a responsibility to educate themselves and to operate facilities in a manner that will minimize adverse safety and health effects. The misuse of tanning equipment may, in addition to immediate undesirable results, cause permanent damage.

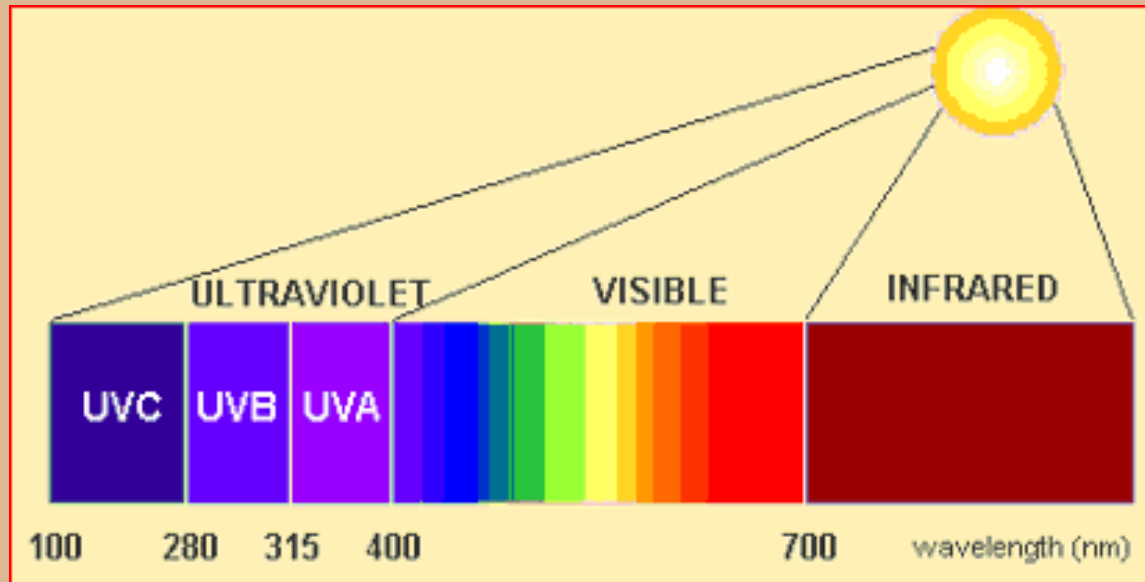
Light and Ultraviolet Radiation

- ★ Ultraviolet radiation (UV) is found in sunlight.
- ★ It is divided according to wavelength and measured in nanometers.
- ★ One nanometer is one-millionth of a millimeter.



Ultraviolet Light

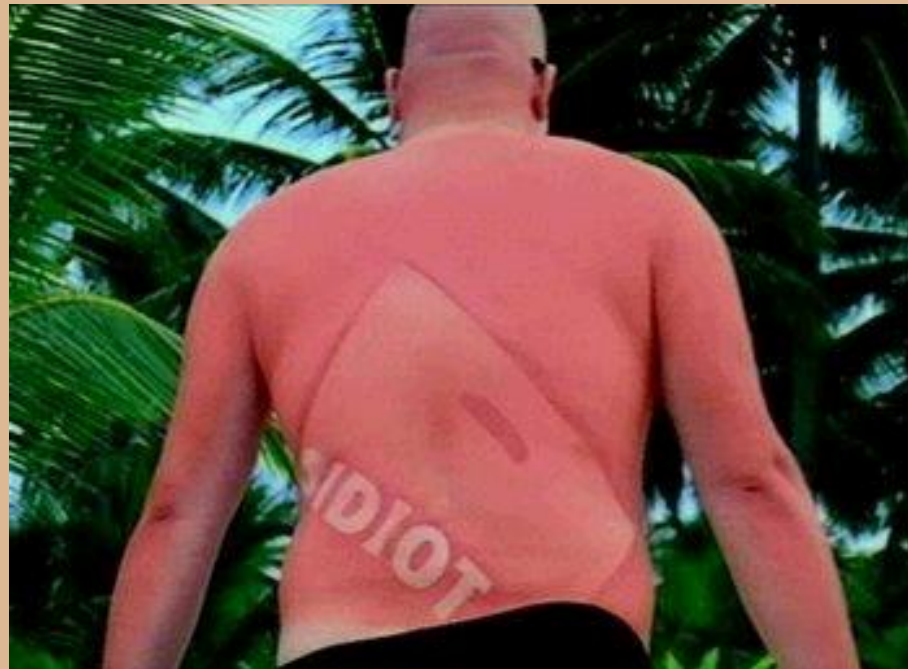
- ★ Ultraviolet (UV) light from the sun can be divided into the following three categories:
 - ★ UVA – 315 to 400 nm
 - ★ UVB – 280 to 315 nm
 - ★ UVC – 200 to 280 nm



- ★ UVC is the shortest ultraviolet wave.
- ★ The ozone layer prevents it from reaching the earth's surface.
- ★ Most living things would be destroyed if UVC was not filtered.



- ★ UVB is usually associated with sunburn and the increased incidence of skin cancers.
- ★ However, UVB is the most efficient wavelength for tanning.

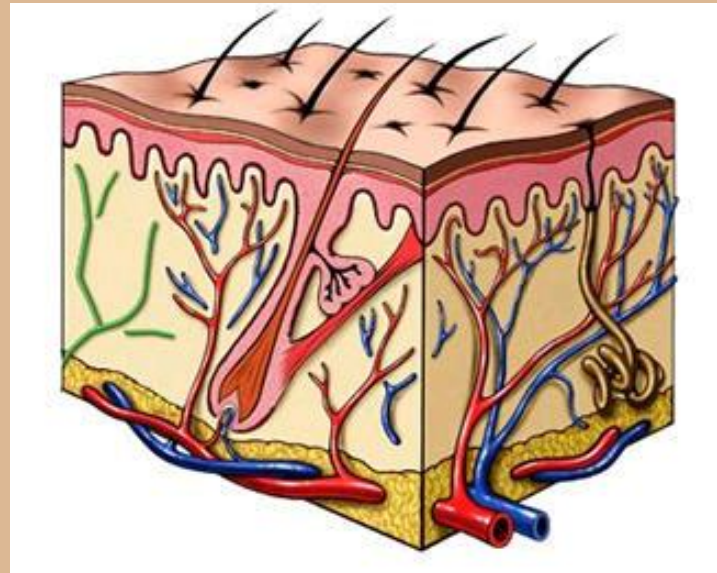


- ★ UVA is the longest ultraviolet wave.
- ★ Most indoor tanning equipment emits mostly UVA light.
- ★ UVA penetrates deeper into the skin than UVB.
- ★ UVA is responsible for an increase in the incidence of skin cancers, premature aging, fine wrinkling, age spots, and irregular pigmentation



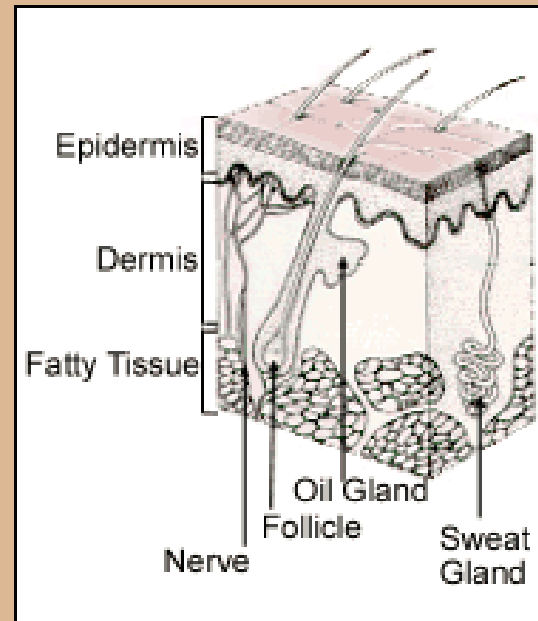
UV Light and its Effect on the Skin

- ★ The skin is the largest of the body's organs and is made up of millions of individual cells.
- ★ The skin guards against excessive exposure to UV rays by producing a protective pigmentation that results in darkening or "tanning" of the skin.



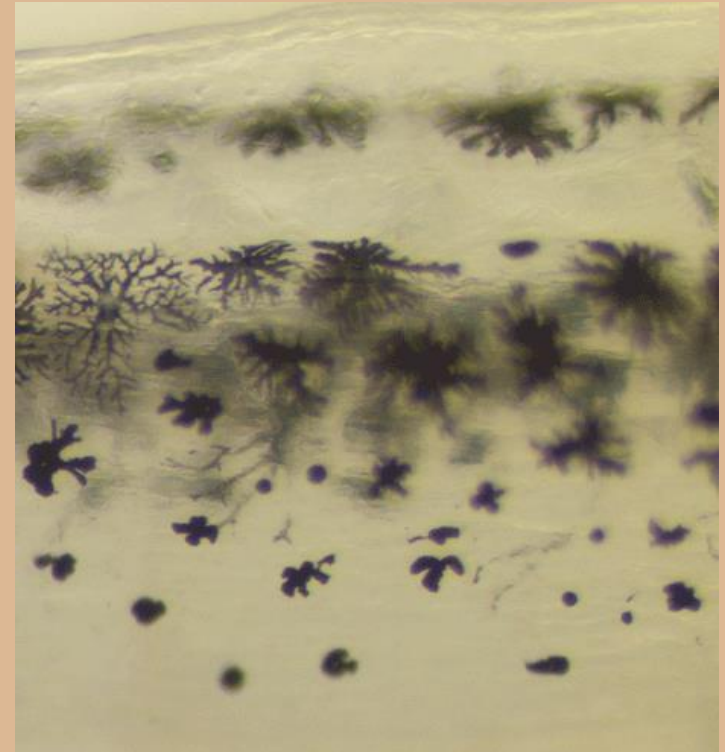
Epidermis

- The skin is divided into two main layers, the epidermis and the dermis.
- The epidermis is the outer layer.
- The epidermis normally replaces itself every 28-30 days as part of its repair mechanism.



Melanocytes

- ★ In the bottom layer of the epidermis are melanocytes that produce tiny granules of melanin.
- ★ All humans have about the same number of melanocytes.
- ★ Skin color is determined by the amount of melanin the melanocytes produce.



Melanin and Tanning

- ★ When exposed to UVB, the melanin darkens and rises to the skin's surface to darken or "tan" the skin.
- ★ Tanning is the skin's response to exposure of ultraviolet radiation and is the way it protects itself from more damaging UV rays.
- ★ However, each time the skin is forced to darken itself, it may be damaged permanently.



Darkness of a Tan

- ★ The darkness of a tan is determined by the following:
 - ★ The amount of pigmentation already naturally present in the skin
 - ★ The skin's capability to build up additional melanin
 - ★ The area of the body exposed
 - ★ The age of the individual



Tanning Only Impacts the Exposed Areas of the Skin



Tanning Phases

- ★ The first phase of tanning can be immediate – color begins immediately and may fade in minutes
- ★ The second phase (delayed tanning) is the familiar longer lasting tan induced by repeated exposure to UV.
- ★ Since results are usually not readily visible for 36-48 hours, tanning more frequently than every 48 hours can encourage burning.



Sunburns

- ★ If the melanin cannot rise quickly enough, erythema or reddening of the skin (sunburn) occurs.
- ★ Burns become visible one-half to eight hours following exposure, reaching maximum at 12 to 24 hours.
- ★ Avoiding further exposure is necessary once burning occurs in order to allow the skin to heal itself.



Sunburns Can Cause Permanent Damage

- Severe burns or chronic exposure can destroy the melanocytes and permanently impair the function of the melanin so it cannot protect the skin properly.



Minimum Erythema Dose

- Minimal Erythema Dose (MED) refers to the least amount of UV radiation received on the skin that can cause sunburn to appear within 7 to 24 hours following exposure.
- Many tanning beds list the MED for various skin types on the manufacturer's label.

DANGER: ULTRAVIOLET RADIATION. FOLLOW INSTRUCTIONS. AVOID OVER EXPOSURE. AS WITH NATURAL SUNLIGHT, OVEREXPOSURE CAN CAUSE EYE AND SKIN INJURY AND ALLERGIC REACTION. REPEATED EXPOSURE MAY CAUSE PREMATURE AGING OF THE SKIN AND SKIN CANCER.

WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONG-TERM INJURY TO THE EYES

CAUTION! EXPOSURE POSITIONS OTHER THAN SPECIFIED CAN BE HARMFUL AND ARE NOT RECOMMENDED

THIS PRODUCT IS IN CONFORMITY WITH PERFORMANCE STANDARDS FOR SUNLAMP PRODUCTS UNDER NO. 21 CFR SUBCHAPTER J.

MEDICATION OR COSMETICS MAY INCREASE YOUR SENSITIVITY TO THE ULTRAVIOLET RADIATION. CONSULT PHYSICIAN BEFORE USING SUNLAMP IF YOU ARE USING MEDICATIONS OR HAVE A HISTORY OF SKIN PROBLEMS OR BELIEVE YOURSELF ESPECIALLY SENSITIVE TO SUN LIGHT. IF YOU DO NOT TAN IN THE SUN, YOU ARE UNLIKELY TO TAN FROM THE USE OF THIS PRODUCT.

THIS DEVICE IS INTENDED TO BE USED BY ONE PERSON AT A TIME. YOU MAY LIE DIRECTLY ON TANNING SURFACE.

THE MINIMUM EXPOSURE POSITION IS 0.5 IN. (1.27CM) FROM THE LAMP'S SURFACE (PRESET BY THE MANUFACTURER). READ THE INSTRUCTION BOOKLET BEFORE USING THIS DEVICE.

SKIN TYPE II - THIS IS THE INDIVIDUAL THAT USUALLY BURNS EASILY AND SEVERELY, TANS MINIMALLY OR LIGHTLY AND PEELS.
SKIN TYPE III - OFTEN REFERRED TO AS 'AVERAGE' COMPLEXION, BURNS MODERATELY AND TANS ABOUT AVERAGE.
SKIN TYPE IV - THIS INDIVIDUAL BURNS MINIMALLY, TANS EASILY AND ABOVE AVERAGE.
SKIN TYPE V - THIS INDIVIDUAL'S SKIN RARELY BURNS, TANS EASILY AND SUBSTANTIALLY.

FOR PARTS AND SERVICE CALL:
SonnenBräune, Inc.
Ringgold GA
1-800-829-6533

SKIN TYPE	RECOMMENDED EXPOSURE SCHEDULE:				BI-WEEKLY MAINTENANCE SESSIONS
	WEEK 1 SESSIONS 1-3	WEEK 2 SESSIONS 4-6	WEEK 3 SESSIONS 7-10	WEEK 4 SESSIONS 11-15	
II FAIR	2 MIN.	4 MIN.	6 MIN.	8 MIN.	10 MIN.
III MEDIUM	2 MIN.	4 MIN.	6 MIN.	8 MIN.	10 MIN.
IV DARK	4 MIN.	8 MIN.	10 MIN.	12 MIN.	12 MIN.
V VERY DARK	4 MIN.	8 MIN.	10 MIN.	12 MIN.	12 MIN.

MAXIMUM USE TIME: 12 MINUTES

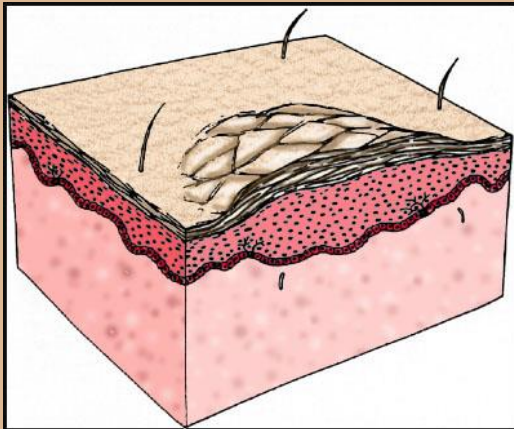
IN MOST CASES, TANNING WILL APPEAR WITHIN SIX HOURS OF THE FIRST APPLICATION, PROVIDED YOUR SKIN IS CAPABLE OF DEVELOPING A TAN. A MOISTURIZER MAYBE USED AFTER EACH TANNING SESSION. THIS SYSTEM IS INTENDED TO BE USED ONLY WITH THE WOLFF SYSTEM BODYSKAN XR F71/R100W BIPIN OR BODYSKAN XXR F71/R160W BIPIN AND PHILIPS CLEO HPA/30 SIV 400W

The Dermis and UVA

- ✿ The dermis is much thicker than the epidermis, contains fewer cells, and consists mostly of connective tissue and blood vessels.
- ✿ Its main function is to hold the body together and to give the body shape and elasticity.
- ✿ Since UVA penetrates to the dermis and there is no built-in repair mechanism in the dermis, chronic overexposure causes permanent damage such as basal cell carcinoma, squamous cell carcinoma, and malignant melanomas, and an increased chance of skin thickening and premature aging.

Skin Thickening

- ★ Skin thickening is a skin reaction where both dermis and epidermis become thicker because cells divide more frequently thereby leading to a great increase in the epidermal tissue growth rate.
- ★ Skin thickening is a natural defense mechanism to protect the body from UV light.



Prematurely aged skin is not very attractive...



UV Light and Skin Cancer

- ★ UV light overexposure has been labeled as the leading cause of skin cancer.
- ★ There are three basic types of light-induced skin cancer:
 - ★ Basal Cell Carcinoma
 - ★ Squamous Cell Carcinoma
 - ★ Malignant Melanoma



Basal Cell Carcinoma

- ✿ Basal cell cancer is the most common and least harmful form.
- ✿ Usually appears as a raised pinkish lump, which is smooth-surfaced with a depression in the center that may bleed easily or will not heal.
- ✿ Most commonly found on the face.



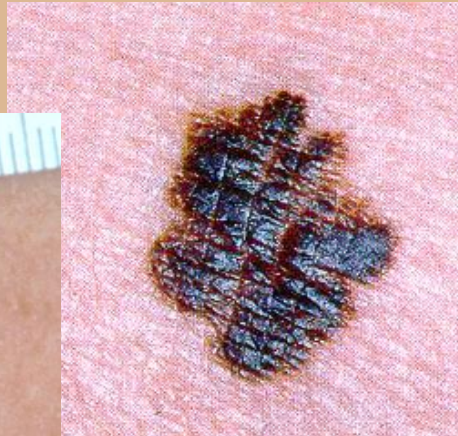
Squamous Cell Carcinoma

- ✿ Squamous cell cancer appears as a sore that will not heal or that has a crusted, heaped-up appearance.
- ✿ The cancer can spread to local lymph nodes and to distant body sites.







Malignant Melanoma

- ★ Malignant melanoma is the least common, but a deadly form of skin cancer that spreads internally
- ★ The following are indications of melanoma:
 - ★ Asymmetry
 - ★ Border
 - ★ Color
 - ★ Diameter

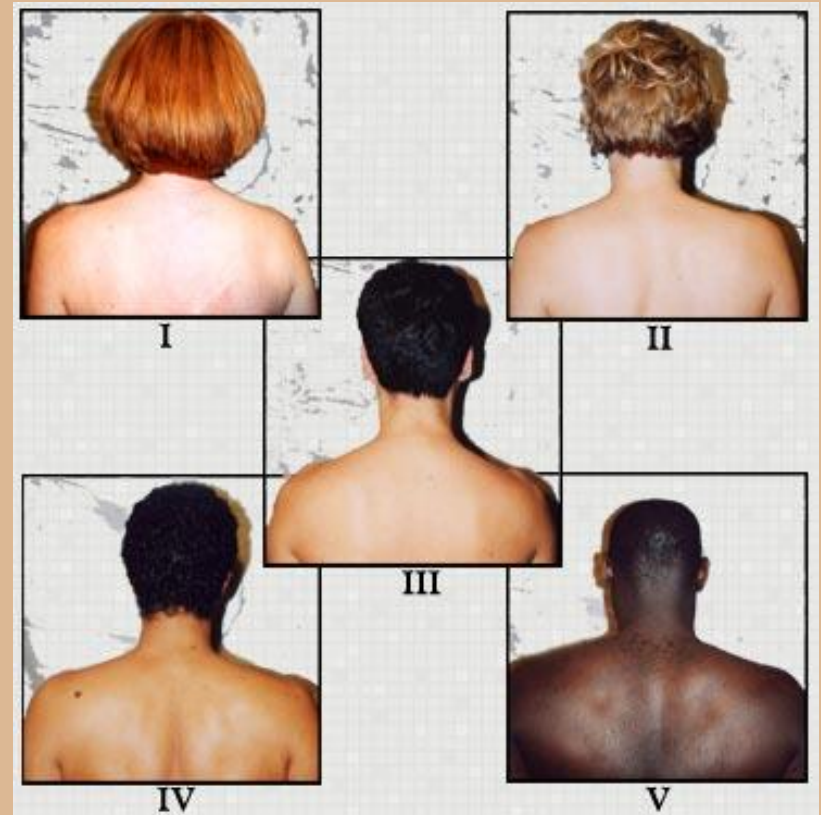


Consult your dermatologist immediately if any of your moles or pigmented spots exhibits:

			
A Asymmetry-one half unlike the other half.	B Border irregular-scalloped or poorly circumscribed border.	C Color varied from one area to another; shades of tan and brown; black; sometimes white, red or blue.	D Diameter larger than 6mm as a rule (diameter of pencil eraser).

Skin Type

- ✿ It is necessary that operators and patrons know how to determine the patron's skin type as accurately as possible.
- ✿ The patron form must provide the patron with a mechanism for determining skin type (see sample patron form).



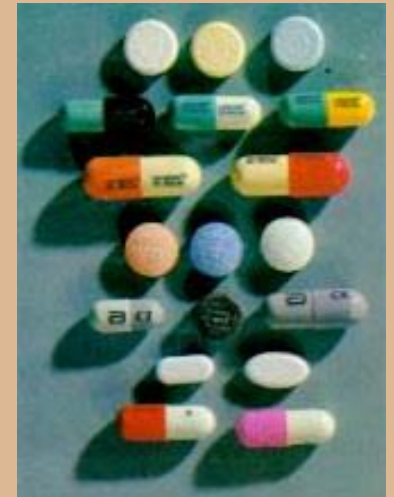
Skin Type and You

- ✿ Explain to persons who sunburn easily and don't tan in the sun (skin type I) that they probably won't tan in a tanning bed and shouldn't be using one.
- ✿ If in doubt about a consumer's skin type, choose a lighter skin type and start with less tanning time.
- ✿ There is no such thing as a "safe" tan for any skin type.
- ✿ Releasing melanin is the body's way to protect itself against UV light.



Photosensitivity

- ☀️ Photosensitivity is a condition in which the human skin reacts abnormally to light, especially ultraviolet rays (UVA) or sunlight.
- ☀️ If a substance is a photosensitizer, it acts in combination with UV light and causes a sensitivity reaction in the skin.
- ☀️ Common photosensitizers are medications, cosmetics, or toiletry items.



Symptoms of Photosensitivity

- ★ Symptoms of photosensitivity include: severe burning, blotchy formation, rash, and uneven pigmentation.



“Is it okay to tan if I’m taking...?”

- ★ A patron or prospective tanner must be provided with a comparative list of photosensitizing agents.
- ★ If there is any question about potential adverse effects, the prospective tanner should seek medical advice and written permission from a doctor before tanning.



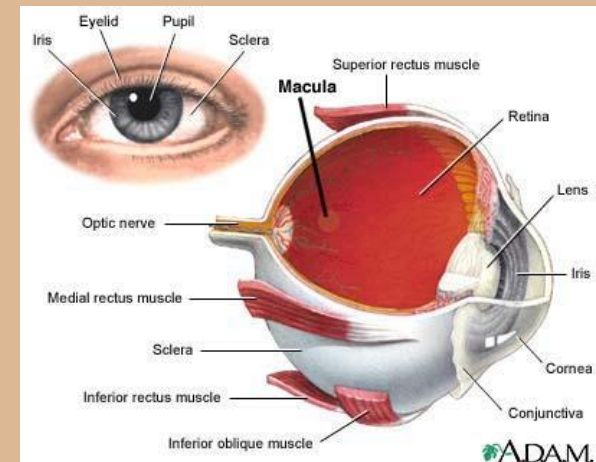
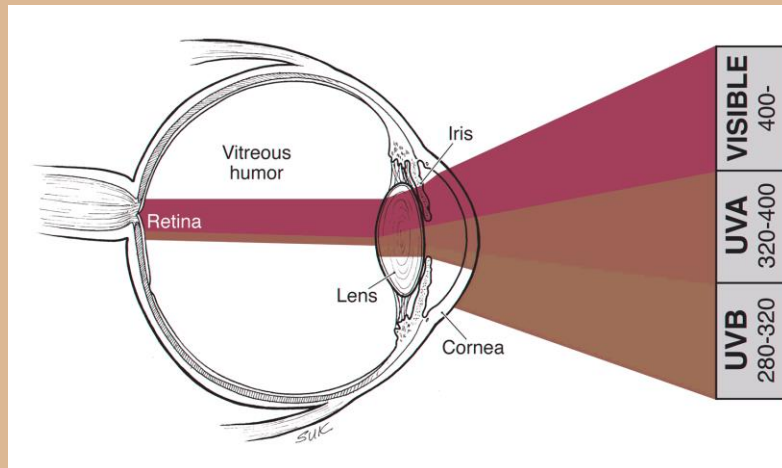
Pregnancy and Tanning

- ✿ Tanning may be inadvisable during pregnancy.
- ✿ Overheating and/or skin blotching may occur.
- ✿ Have the patron consult her physician before using the tanning device if she thinks she might be pregnant.



UVA, UVB, and Your Eyes

- ✿ The human eye is poorly adapted for protection against ultraviolet light.
- ✿ Too much UVA can damage the retina and contribute to a loss of color perception.
- ✿ Too much UVB can damage the cornea.



Permanent Eye Damage

- ★ UVA and UVB may cause:
 - ★ Permanent eye injury, cataracts, or blindness.
 - ★ Reduced visual sharpness, decreased sensitivity to color, and difficulty with night vision.



Normal Eye



Eye with Cataract

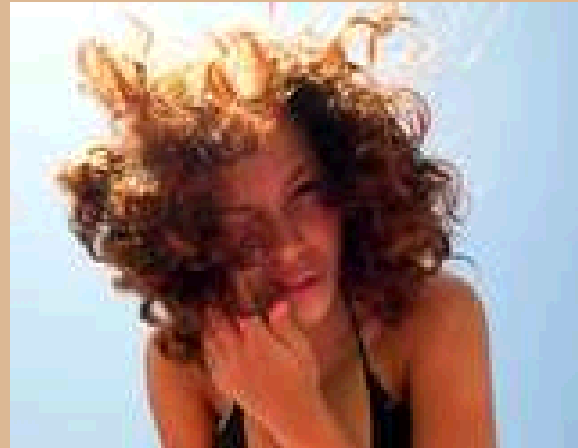
Eye Protection

- Goggles or eye protection must be:
 - Approved to block UVA and UVB rays.
 - Used according to manufacturer recommendations.



One Time May Hurt...

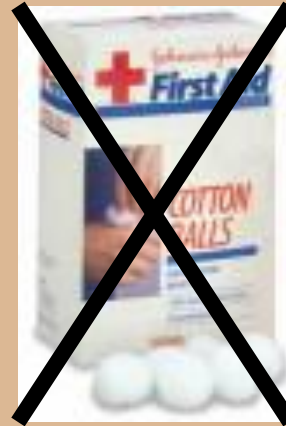
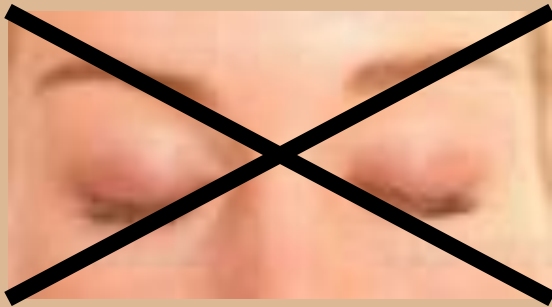
Only **one** tanning session without eye protection for UVB can cause swelling of the eye tissue, redness, soreness, and the sensation of sand in the eye.



Is it worth the risk of eye damage?

The following are not acceptable ways to protect your eyes against UV exposure:

- ✿ Closing the eyes
- ✿ Applying cotton wads
- ✿ Using sunglasses



These methods are ***not*** strong enough to filter the damaging UV light.

Illegal Advertising

- ☀ Tanning equipment cannot be advertised or promoted as:



~~“Safe!
Safe tanning!
No harmful rays!
No adverse effect!
Free from
risk!”~~

or other similar wording or concepts.

UV Warning Signs

★ Warning Signs:

- ★ Must be posted in the immediate proximity of all tanning equipment.
- ★ Must be clearly visible and legible.



Warning Sign Verbiage

☀ The warning sign must read:

"DANGER- Ultraviolet radiation. Follow instructions. Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer. FAILURE TO USE PROTECTIVE EYEWEAR MAY RESULT IN SEVERE BURNS OR LONGTERM INJURY TO THE EYES. Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician before using sunlamp if you are using medications, have a history of skin problems, or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use of this product."

- ★ Patrons must be provided with a form containing the following information:
 - ★ List of potentially photosensitizing drugs
 - ★ Potential negative health effects related to ultraviolet exposure including increased risk of skin cancer, skin wrinkling, premature aging, and possible activation of some viral conditions
 - ★ Information on how different skin types respond to tanning
 - ★ An explanation of the need to use eyewear to prevent against UVA and UVB exposure with a warning that closing the eyes is not sufficient to prevent possible eye damage
 - ★ Information that tanning may be inadvisable during pregnancy

Patron Records

- Patrons must have the opportunity to read the information on the form and ask questions
- Forms must be reviewed, signed, and dated by the patron each year.
- Forms must be kept at the tanning establishment and be available for inspection by the Health Department

WT. PHONE _____ H.M. PHONE _____
CITY _____ STATE _____
1. Are you taking any drugs which would cause sensitivity to sunlight? (Your doctor would have provided this information when he prescribed the drug.) Yes ___ No ___
2. Are you in any way allergic to sunlight? Yes ___ No ___
3. Have you ever had a skin condition? Do you color your hair? Yes ___ No ___
4. Do you have oily or dry skin?
5. How much exposure to sunlight do you get per day?
6. Are you active in outdoor activities? Yes ___ No ___
7. Do you presently use a tanning or moisturizer? Yes ___ No ___
8. For your health and safety, you MUST always use Protective Eyewear. Use of the Sunbed Unit without protective eyewear can cause early formation of cataracts and/or temporary or permanent blindness.
9. I, the undersigned, hereby state:
1. I have truthfully answered the written questions with regard to the use of the tanning facility.
2. I have advised _____ personnel that I have no health problems or sensitivities which would prevent me from utilizing the ultraviolet facility provided.
3. I hereby release _____ from any and all liability resulting from my use of the facility and assume all risks, known and unknown, in connection therewith.
I am of lawful age and have read and fully understand the contents of this Sunbed Unit and represent myself as physically fit and capable of using the SUNBED facility provided me.
Date _____ Signature Karl Hartman
If under legal age, parent or guardian must also sign the consenting to the above.
Signature _____
Parent or Guardian

Tanning Establishment Operator

- ★ Anyone who instructs and/or assists patrons in the proper operation of tanning equipment:
 - ★ Must be properly trained
 - ★ Must be present whenever tanning equipment is being used
 - ★ Must be available for immediate assistance to the patron
 - ★ Must know how to determine skin type
 - ★ Must know how to use the exposure schedule shown on the tanning equipment to minimize risk of injury or other adverse effects
 - ★ Must control exposure time
 - ★ Must record the date and minutes of each patron's tanning session

Physical Booth

- Operators must ensure that the facility interior temperature does not exceed 100° F
- Physical barriers shall protect patrons from injury induced by falling against or breaking the lamps
- Units must be maintained in good repair



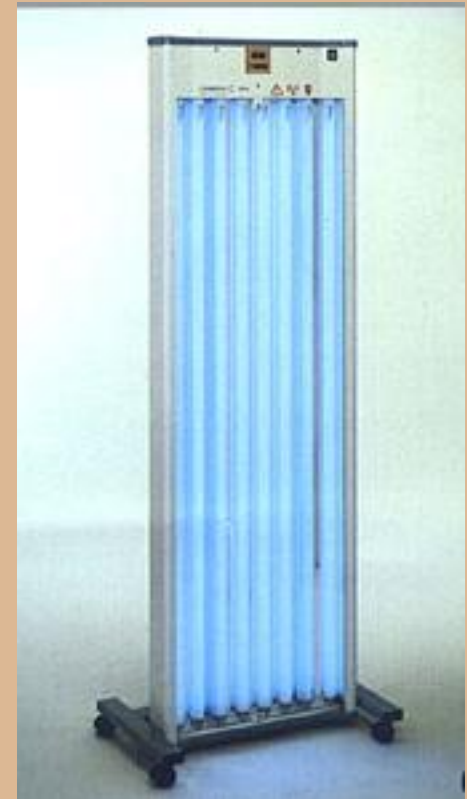
Cleaning and Maintenance

- ✿ All tanning equipment shall be kept clean, in good repair, and maintained sanitary.
- ✿ The operator shall clean and sanitize all tanning equipment and goggles after each patron's use (UV light produced by the tanning equipment itself is not an approved sanitizing agent).



Cleaning and Maintenance

- ★ The operator shall replace burned out or defective tanning lamps or bulbs with the type intended for use in the tanning equipment according to the manufacturer's label.



Cleaning and Maintenance

- ✿ The operator shall clean and sanitize all linens and towels, if provided.



Tanning injuries

- ✿ Tanning injuries must be reported to the Health Department within 5 days of their occurrence.
- ✿ The report should contain the name and address of the affected individual, the name and location of the tanning establishment involved, the nature of the injury, and any other relevant information.



Tanning Injury Recognition

- ✿ Reportable tanning injuries may include:
 - ✿ Erythema (sunburn)
 - ✿ Blisters
 - ✿ Red spots on the skin
 - ✿ Rash, itching, scaly skin
 - ✿ Sandy or gritty sensation in the eye
 - ✿ Pink or blood shot eyes
 - ✿ Headaches, weakness, dizziness, nausea, cramps, pale and clammy skin, convulsions, loss of consciousness
 - ✿ Heat cramps in the legs and abdomen

Timers

- ✿ Tanning equipment shall have a timer which complies with FDA requirements. Maximum time shall not exceed manufacturer's maximum recommended time.
- ✿ Tanning equipment must have method of remote timing so consumers cannot control or extend exposure time.



Acrylic and Timer

- ★ The tanning acrylic in the bed should be replaced generally after every 1500 hours of use, but definitely when it is broken or severely cracked.
- ★ Periodically check the timer to make sure it is functioning properly



Bulbs and Lamps

- Tanning beds are the basic equipment used in tanning salons
- Defective or burned-out bulbs must be replaced under the manufacturers specifications
- Flickering lamps should be replaced. Dirty lamps may reduce tanning exposure results and shorten the life of the unit



Inspections

- ★ A SLCoHD inspector will visit your facility once a year to insure proper operation and maintenance, review records, determine operator knowledge and assure compliance with SLCoHD regulations



Record Keeping

- Records of operator training, lamp replacement, and patron tanning times and dates must be readily available.



Common Violations

- ✿ The most common Health Regulation violations noted in inspections include:
 - ✿ Failing to show first-time consumers the Manufacturer's label on the tanning device.
 - ✿ Starting first-time consumers with longer tanning sessions than recommended.
 - ✿ Lack of signatures and dates indicating that patrons have read the Health Warnings and Drug list.
 - ✿ Allowing tanning sessions more frequently than recommended.

Permit Requirements

- ✿ All tanning facilities must have a permit from the SLCoHD
- ✿ Each facility must apply for a permit to operate before beginning to operate
- ✿ The permit is not transferable from owner to owner



Enforcement Actions

- ✿ Permits can be Denied, Suspended or Revoked for any of the following reasons:
 - ✿ Submission of false statements
 - ✿ Conditions warranting refusal on application
 - ✿ Operating in a manner that causes or threatens to cause hazard to public health or safety
 - ✿ Operating without tanning facility or tanning operator permits
 - ✿ Refusing to allow inspectors to inspect the tanning facility
 - ✿ Failure to pay permit fees
 - ✿ Violation of the SLCoHD regulations