UV Tanning Equipment

Tanning occurs when the skin produces additional pigment (coloring) to protect itself against burns from ultraviolet (UV) rays. Overexposure to these rays can cause eye injury, premature wrinkling of the skin, light-induced skin rashes, and can increase your chances of developing skin cancer.

UV is divided into three different categories based on wavelength:

- **UVA wavelengths** are only slightly affected by ozone levels. Most UVA radiation is able to reach the earth's surface and can contribute to sunburn, skin aging, eye damage, and can suppress your immune system.
- **UVB wavelengths** are strongly affected by ozone levels. Decreases in stratospheric ozone mean that more UVB radiation can reach the earth's surface, causing sunburns, snow blindness, immune system suppression, and a variety of skin problems including skin cancer and premature aging.
- **UVC wavelengths** are very strongly affected by ozone levels, so that the levels of UVC radiation reaching the earth's surface are relatively small.

Most sun lamps and tanning equipment emit ultraviolet radiation, like from the sun. This equipment mainly produces UVA radiation, sometimes known as “tanning rays.” While UVA radiation from artificial-tanning equipment is less likely to cause sunburn than UVB radiation from sunlight, contrary to the claims of some tanning parlors, that does not make UVA radiation safe. UVA rays have a suspected link to malignant melanoma, and, like UVB rays, they also may be linked to immune system damage.

Long-term exposure to artificial sources of ultraviolet rays, like tanning beds (or to the sun's natural rays), increases the risk of developing skin cancer. In addition, exposure to ultraviolet light actually thins the skin, making it less able to heal and increases the damage caused by sunlight. Women who use tanning beds more than once a month are 55 percent more likely to develop malignant melanoma, the most fatal form of skin cancer.

Who is protecting you

The States

Where the FDA regulates tanning equipment, individual states regulate the tanning salon businesses. States have the authority to issue operation licenses for tanning devices, mandate periodic facility inspections, and train tanning salon owners and employees.

U.S. Food and Drug Administration (FDA)

The FDA is in charge of regulations that deal with labels on tanning devices, including tanning equipment, labels and protective eyewear. The labels are meant to inform consumers of the appropriate use and potential dangers of using such tanning equipment. If tanning equipment is being used inappropriately, the FDA also can remove tanning equipment from that location.

U.S. Federal Trade Commission (FTC)

FTC investigates false, misleading, and deceptive advertising claims about the devices. When the FTC determines that advertisements are not truthful, they may take corrective action.

What can you do to protect yourself

There are several ways that you can prevent your exposure to artificial sources of ultraviolet rays:

- Avoid tanning beds and booths.
- If using tanning equipment, always use protective eyewear that provides 100% UV ray protection.
- Instead of using tanning beds at tanning salon, try tanning sprays. In fact, some salons now provide only tanning spray services.
- Regardless of your exposure to natural or artificial UV rays, conduct a monthly skin self-exam looking for any abnormalities (like bumps or sores that don't heal) or moles that have changed size, color or shape. Be sure to check all areas. Have a friend or family member check your back.
- Visit your physician or a dermatologist to get annual exams. If caught early, most cases of skin cancer can be cured.

Resources

You can explore this radiation source further through the resources at the following URL:
http://www.epa.gov/radtown/tanning-equipment.html#resources

We provide these resources on-line rather than here so we can keep the links up-to-date.