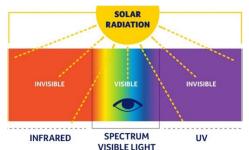


## **Dangers of Ultraviolet Light**

What is ultraviolet light, and what should I do if I encounter one?



Ultraviolet light is a type of electromagnetic radiation. This can be produced from many sources, but one that we are all exposed to on a daily basis is the sun. Fortunately for us, the earth's atmosphere protects us from most dangerous UV radiation, however, we all know that if we expose ourselves to direct sunlight for too long, we can get sunburned.

Another common way that we encounter UV light is through welding activities. When you weld strong UV radiation is produced that can reflect off smooth surfaces around you and give you an effect similar to sunburn. For some, they may encounter UV light inside of HVAC units. Some of these units have UV lights installed in them to assist with the disinfection of the air. **Health Effects:** 

Just like anything else, too much exposure to UV light can have adverse effects. As we discussed, a common effect of over exposure is sunburn. For those working in HVAC units or doing welding activities, failure to protect yourself properly can result in a condition called corneal flash burns, or more commonly known as Welder's eye. This occurs when your eyes are exposed to bright UV lights, which results in blurred vision, bloodshot eyes, and a sand-like feeling in your eyes. The intensity of this condition varies based on your method of exposure and time, which is why it's important to protect yourself.



## How do we protect ourselves?

Knowing the common exposure methods, and protection methods can help protect you from UV light. Firstly, when we are working in HVAC units that contain UV lights, ensure that proper Lockout-tagout procedures are being follow, and that all UV lights are shut off. UV light reflects off of surfaces, this is important to consider even if you are not working in the section of an HVAC unit where you will be



exposed directly to the lights, as it can bounce off the interior walls and still affect you, which is why it is important to ensure all lights are off before entering.

For welding activities, a welding hood must be worn to protect your eyes. In addition, wearing clothing to fully cover the back of your head, and neck

will prevent reflected light from giving you sunburn in exposed areas.

For protection from the suns UV rays, wearing sunblocks with a proper SPF rating will help protect you from a lot of the adverse effects of sunlight. Additionally, avoiding standing in direct sunlight for an extended period and looking for shady areas to conduct work when possible.