

# Ultraviolet Disinfection Lighting for Safer Spaces



**Ultraviolet (UV) disinfection is good for business because it's very bad for pathogens. UV technology has been used for decades in a broad number of applications to kill viruses, bacteria, and mold.**

- When used properly, UV light is safe. It is currently being used to disinfect drinking water, wastewater, air, pharmaceutical products, and surfaces.
- Unlike traditional disinfection methods, UV light is a physical method for killing pathogens. Therefore, they don't build resistance to UV light like they can to chemical methods.
- A one-time investment in UV light disinfection technology can save you time and money for years by eliminating the maintenance and labor costs of other disinfection methods.

## Key Industry Applications

- Airports
- Bus Terminals
- Trains & Stations
- Elevators
- Offices
- Retail/Grocery
- Hotels
- Theme Parks
- Museums
- Gyms
- Stadiums/Arenas
- Locker Rooms & Club Houses
- College & Universities
- Schools & Daycare
- Healthcare
- Warehousing & Manufacturing



## Consider UV Disinfection for These Locations

### Classrooms

UV-C lights installed with the proper controls can disinfect unoccupied spaces in preparation for student's arrival, whether throughout the day or at night.

### Hospitals, Casinos, Restaurants, and Hospitality

Air cleansing units can be installed to kill pathogens that are potentially in the air. Mobile sterilization units can sanitize unoccupied spaces before/after use.

### Public Entertainment

Utilizing various UV products can help neutralize pathogens in targeted areas.

### Restrooms

UV-C light is ideal for disinfecting sinks, handles, and doors in restrooms. With proper planning and controls these areas can be safer.

### Offices

UV-A or Near UV light fixtures are well suited to occupied spaces and provide protection from bacteria and mold.

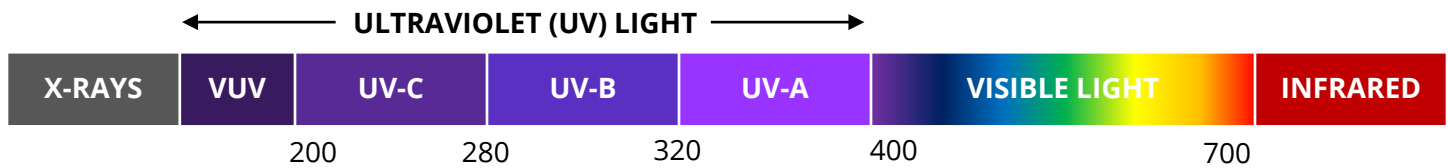
### Warehousing & Manufacturing

Disinfect tools, machines and high touch areas with UV Light. Handheld units can be utilized by staff to neutralize pathogens for an afterhours deeper clean.

More information about UV disinfection



# Ultraviolet Light Disinfection Information



## What is ultraviolet light?

Ultraviolet (UV) is wavelength of light that is not visible to the human eye. It is shorter than that of visible light but longer than X-rays.

## How does UV light neutralize harmful pathogens?

The different subtypes of UV light work differently. UV-C light causes photochemical reactions in microbial DNA and RNA, resulting in inactivation and failure to reproduce. UV-A light causes oxidation of proteins and lipids, resulting in microbial cell death. Near UV blue light inhibits bacterial growth by prompting generation of reactive oxygen species which are toxic to bacterial cells.

## Is UV disinfection safe?

UV disinfection lighting has undergone extensive testing for efficacy and safety and is regulated by the Environmental Protection Agency, the Food and Drug Administration, as well as the Occupational Safety and Health Administration. It has been safely used to disinfect drinking water in Europe for over 100 years, and sterilize juices in the U.S. for nearly 20 years. Like all disinfection methods, UV disinfection products must be used according to each manufacturer's specifications in order to be safe and get the full disinfection benefit.

Information based on:

*Ultraviolet Light Disinfection in the Use of Individual Water Purification Devices*, U.S. Army Public Health Command.

*Safety Tips for Using Germicidal Lamps*, Lawrence Berkeley National Laboratory



For a customized UV disinfection solution for your space, contact [energysolutions@wesco.com](mailto:energysolutions@wesco.com).

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