

DISINFECTION WITH ULTRAVIOLET LIGHT

Ultraviolet (UV) light produced from UV lamps has been shown to be an effective disinfectant. In disinfecting water the amount of UV radiation needed depends on factors such as turbidity, color, and dissolved iron salts, which prevent ultraviolet energy from entering the water.

Cylindrical UV units with standard plumbing fittings have been designed for use in water lines. They should be checked often for light intensity and cleaned of any material that would block radiation from reaching the water. An advantage of disinfection with UV light is that the equipment is readily available and easy to operate and maintain. A disadvantage of UV light is that it does not provide a residual disinfectant in the water, as will chlorine. Thus, there is no protection against recontamination in UV-disinfected water and another disinfectant such as chlorine may be needed to maintain a bacteria controlling residual in the distribution system. Another disadvantage of UV is that it is not effective against some microorganisms, such as *Giardia lamblia* cysts.