UV Disinfection

THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

Hazard: Many biosafety cabinets are equipped with UV light for the disinfection of work surfaces. UV radiation is considered carcinogenic to humans. Improperly used or maintained equipment may not be effective and may create a false sense of security.

Safety: The CDC, NIH, NSF and American Biosafety Association (ABSA) agree that the use of UV light is not necessary or recommended for decontamination of biosafety cabinets. For proper use, UV lamps must be cleaned weekly to remove any dust and dirt that may block the germicidal effectiveness of the ultraviolet light. The lamps should be checked weekly with a UV meter to ensure emission of the appropriate intensity of UV light. Bulbs that do not provide the necessary intensity must be replaced (often before they burn out – generally after approximately 4,000 hours of use). UV lamps must be turned off when the room is occupied to protect eyes and skin from UV exposure, which can burn the cornea and cause skin cancer. If the cabinet has a sliding sash, close the sash when operating the UV lamp.

The UTHSC IBC requires the use of a suitable (non-alcohol) surface disinfectant. The use of chemical disinfection and following good aseptic work practices is enough to protect researchers from exposure to infectious materials.

Contact the Office of Research Safety Affairs at ext. 8-6114 or labsafety@uthsc.edu for additional information about the proper management of biohazardous materials.

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