



FDA Issues Warning on Metal Halide and Mercury Vapor Lighting

The U.S. Food and Drug Administration recommends that steps be taken to prevent the public from being exposed to short-wave ultraviolet radiation from broken metal halide or mercury vapor lighting.

The FDA said it had learned of a recent incident in a high school gymnasium in which more than 100 people were exposed, and 18 had to be treated for severe eye and skin burns. The FDA said an investigation determined a broken metal halide bulb caused the injuries.

“The best way to reduce the risk of burns is to use fully-enclosed fixtures or self-extinguishing “T” type mercury vapor lights in facilities where the public can be exposed to the ultraviolet radiation from the broken bulb,” said an FDA advisory.

The bulbs have an inner quartz tube, which contains the mercury vapor discharge. An outer glass bulb that filters out ultraviolet radiation encloses the tube. If the outer bulb breaks and the inner tube continues to operate, intense radiation is emitted.

A “T” type light has a self-extinguishing feature that shuts off the light if the outer bulb is broken.

Indoor facilities using the lights should assure there are regular inspections of both the lights and the light fixtures to ensure they are not broken, according to the FDA. The inspections should be conducted with the lights turned off.

The FDA also recommends:

- Replacing open fixtures or fixtures with wire guards with fixtures that are fully enclosed with a lens of glass or plastic to protect the bulbs from breakage.
- In open fixtures or fixtures with wire guards, “T” type lights should be installed.
- Replacing bulbs that are broken or punctured.

Information on this hazard is posted at <http://www.fda.gov/cdrh/radhlth/urburns.html>.

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