

CLEANUP PROCEDURE FOR BROKEN FLUORESCENT LIGHTS

Mercury vapor contained in fluorescent lamps is immediately released in to the air when a fluorescent lamp is broken. A portion of the mercury will remain with the glass and white powder (phosphors). This results in initially high concentrations of mercury vapor. The initial concentration will rapidly go down as fresh air circulates in to the building. EPA and ATSDR studies do not indicate that mercury exposure resulting from occasional cleanup of broken fluorescent lamps will result in adverse health effects.

1. **ISOLATE THE SPILL AREA:** If possible, keep non-essential personnel out of the area. Avoid traffic going through the spill area. Those who have come into direct contact with fluorescent lighting debris should be directed to remove contaminated shoes or clothing. If contamination is significant, porous items, such as clothing should be disposed of with the fluorescent lighting debris. Non-porous surfaces, such as the bottom of shoes, can be cleaned with soap and water.
2. **ASSEMBLE CLEAN-UP SUPPLIES:** Clean-up supplies are available from department offices or Housekeeping. The following cleanup supplies are recommended as a minimum:
 - ✓ tape (wide, duct, or masking) – to help pick up mercury beads
 - ✓ plastic bags with zipper seal – to store mercury-contaminated debris and equipment
 - ✓ ziploc or trash bags – for containing mercury waste
 - ✓ index cards – for collecting mercury beads (do not use a broom!)
 - ✓ flashlight – to help see the mercury
3. **COLLECT ALL VISIBLE DEBRIS:** Don nitrile gloves. Broken lamp glass is sharp! Use a dust pan or rigid paper to pick up all large pieces of glass and place in to a disposal bag. Clean up small visible debris and dust with index cards or rigid pieces of paper. Push the visible debris away from any carpet, fabric, or porous surfaces, slide it onto another sheet of rigid paper, then transfer to a disposal bag. Use adhesive tape strips to clean up visible debris on porous surfaces (carpets). Never use a broom, vacuum, or HEPA vacuum on a mercury spill because it will disperse the mercury in to the air. Wipe down the area with paper towels dampened with soap and water.
4. **CAREFULLY PLACE DEBRIS INTO A PLASTIC BAG:** Place the broken fluorescent lamp and debris in a ziploc storage bag or a carefully tied trash bag. Place the bag into another bag. Be sure all bags are zipped or tied tight. If there are glass fragments mixed with the mercury, place the double-bagged fluorescent lamp debris into another puncture proof container or cardboard box. Call Facilities Services for pickup, x2317.
5. **VENTILATE:** Ventilate as much as possible to completely air out the affected area. Normal building ventilation will provide four air changes per hour. One hour is considered sufficient time to restore room air after a single lamp cleanup.

Source: <http://www.epa.gov/iris/subst/0370.htm#refinhal>
<http://www.epa.gov/mercury/spills/index.htm#fluorescent>
<http://dhfs.wisconsin.gov/eh/HlthHaz/fs/HGtherm.htm>