MISSISSIPPI STATE UNIVERSITY EXTENSION

MSU DAWG TRACKS

The fume hood is an important piece of safety equipment in the laboratory where it is considered a primary means of protection against inhalation hazards. However, a fume hood's performance is greatly affected by the way a person uses it and they do have limitations to its protection.

- ✓ Fume hoods must be inspected at least annually for adequate flow & function. For an easy quick check, the user can visually access airflow by taping a small piece of tissue paper to the corner of the sash noting that the paper is pulled gently into the hood when it's running. Never continue work in a malfunctioning hood.

- ✓ Maintain operations at least 6" inside the hood face. A tape line can be attached to the work surface to serve as a visual reminder.

- ✓ Know the hazardous properties of the substances you are working with. Be able to identify signs and symptoms of overexposure. A user should still wear personal protective equipment such as gloves, safety glasses, & lab coats to prevent physical contact as appropriate.

- ✓ Use extreme caution with ignition sources inside a chemical hood. Ignition sources such as electrical connections and open flame can be used inside a chemical hood as long as there are no operations involving flammable or explosive vapors.

- ✓ Keep hood storage to an absolute minimum - do not use your fume hood as a storage area. When chemicals are not in use, be sure to store them in cabinets appropriate for the chemical.

- ✓ Each item placed in the hood interferes with the directional airflow, causing turbulence and eddy currents that could allow contaminants to be drawn out of the hood. Keep only items needed for the ongoing operation inside the hood. Maintain clearance near the rear-bottom slots at all times as it serves as an exhaust port for fumes generated near the work surface. Raise large objects at least 1 1/2 inches off the hood surface to minimize air flow disruption.

- ✓ Keep the sash at the level as indicated by arrows or inspection sticker when working in the hood. Close the sash completely when not in use.

- ✓ Minimize foot traffic around the fume hood. A person walking past can create competing air currents at the hood face, causing vapors to be pulled out. Other sources of competing air currents such as open windows, open doors, and fans must also be taken into account when using a chemical hood.

- ✓ Do not use a hood for a function in which it is not intended. Certain chemicals or reactions require specially constructed hoods. This is also true of work involving perchloric acid and radioactive or biohazard materials.

For more info contact:
Leslie Woolington
MAFES/MSU-Extension
Risk Mgmt./Loss Control
662.325.3204

Sources:
https://www.labconco.com