

(//case.edu/)

# Environmental Health and Safety

Search...



(https://case.edu/ehs/)

HOME (/EHS/) > SAFETY SUBJECT > INDOOR AIR QUALITY

## Safety by Subject

(/ehs/safety)

Biological (/ehs/safety-by-subject/biological)

Chemical Safety (/ehs/safety-by-subject/chemical-safety)

Ergonomics (/ehs/safety-by-subject/ergonomics)

Facility Safety (/ehs/safety-by-subject/facility-safety)


Fire Safety (/ehs/safety-by-subject/fire-safety)

**Indoor Air Quality (/ehs/safety-by-subject/indoor-air-quality)**

Radiation and Laser Safety (/ehs/safety-by-subject/radiation-and-laser-safety)

## Indoor Air Quality

Environmental Health and Safety (EHS) is committed to working together with facilities, maintenance, custodial and building occupants to ensure that acceptable indoor air free of recognized hazards is provided to building occupants. There are currently no specific regulations related to indoor air quality but several resources provide guidance on achieving and maintaining acceptable air quality.

- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) publication entitled, "Ventilation for Acceptable Air Quality"
- United States Environmental Protection Agency (USEPA) Publication, **An Office Building Occupant's Guide to Indoor Air Quality** (<https://www.epa.gov/indoor-air-quality-iaq>),
- Occupational Safety and Health Administration (OSHA) publication, **Indoor Air Quality in Commercial and Institutional Buildings**  (PDF).

Factors which may contribute to the quality of indoor air include but are not limited to:

- Indoor contaminants such as bacteria and mold, dust, volatile organic compounds, construction or maintenance activities, ozone from copiers, pesticides, cleaning chemicals, tobacco smoke, sewer gas, and perfumes and other cosmetics.
- Outdoor contaminants such as exhaust from motor vehicles, fumes from construction and renovation, outdoor mold and pollen levels, landscape maintenance activities, and exhaust from adjacent buildings.

The build-up of contaminants is largely influenced by the design, maintenance and operation of the building heating ventilation and cooling (HVAC) system. An evaluation of the building HVAC system is an important element of the indoor air quality investigation where inadequate ventilation is suspected to be causing

health related symptoms. A thorough inspection of the building HVAC system including a review of the system design, inspection of outside air intakes, fans and distribution systems, review of building maintenance schedules and controls may be conducted. Measurements of temperature, relative humidity, carbon dioxide and carbon monoxide may be conducted to evaluate ventilation effectiveness and identify and correct any problems with the system.

Monitoring for specific contaminants may also be conducted, depending on the findings of the IAQ questionnaires, reported symptoms, observations during site inspections, a review of SDS sheets for chemicals used in the building, and a review of documented clinical illnesses in the area, if applicable. This is evaluated on a case by case basis and many times, the identification of the source of indoor air contaminants can be identified and corrected without specific monitoring. Indoor contaminants are frequently present at levels far below occupational standards.

Building occupants can also take steps to improve air quality in their workplace. Here are a few of the recommendations from USEPA:

- Do not block air vents or grilles.
- Comply with the office and building smoking policy.
- Water and maintain office plants properly.
- Dispose of garbage promptly and properly.
- Store food properly.
- Avoid bringing products into the building that could release harmful or bothersome odors or contaminants.
- Notify your building or facility manager immediately if you suspect an indoor air quality issue.



© 2018 Case Western Reserve University (<http://www.case.edu/>)

10900 Euclid Ave. Cleveland, Ohio 44106

216.368.2000

Legal Notice (<http://case.edu/utech/policies/legal-privacy-notice/>) |

Privacy Policy (<http://case.edu/privacy-statement/index.html>)

## ENVIRONMENTAL HEALTH AND SAFETY

Campus Location:  
2220 Circle Dr.  
Cleveland, OH 44106

Email: [cwruehs@case.edu](mailto:cwruehs@case.edu) (<mailto:cwruehs@case.edu>)

Site Feedback  
(<mailto:cwruehs@case.edu>)

## CWRU LINKS

Apply (<http://case.edu/admissions/>)

Give

([https://securelb.imodules.com/s/1526/index.aspx?](https://securelb.imodules.com/s/1526/index.aspx?sid=1526&gid=1&pgid=327&cid=914)

[sid=1526&gid=1&pgid=327&cid=914](https://securelb.imodules.com/s/1526/index.aspx?sid=1526&gid=1&pgid=327&cid=914))

Visit (<http://case.edu/visit/>)

Directory (<https://webapps.case.edu/directory/>)