



Portland Community College

INDOOR AIR QUALITY

Maintaining a safe and healthy workplace involves a combination of good building design and construction, on-going and preventative maintenance and occupant participation in prevention activities. Below you will find commonly asked questions from PCC employees, students and stakeholders on this topic.

What is "indoor air quality"?

Indoor air quality (also called "indoor environmental quality") describes how inside air can affect a person's health and ability to work. Indoor air quality may be impacted by temperature, humidity, ventilation, water intrusion or chemicals. Currently, OSHA has no indoor air quality (IAQ) standards but it does provide guidelines about the most common IAQ workplace complaints.

How is acceptable IAQ maintained in a building?

Acceptable IAQ may be achieved if the building is being properly maintained, there is good housekeeping and/or occupants are not engaged in activities that may generate a nuisance smell or harmful concentrations of certain materials. For example, cooking food other than the occasional snack or leaving food in wastebaskets that are not emptied daily can produce odors which can result in IAQ complaints.

What do you mean by "harmful concentrations?"

Examples would be carbon monoxide (CO), lead dust, or asbestos concentrations exceeding established exposure limits set by regulatory agencies such as the Oregon Occupational Safety and Health Division (OR-OSHA) or Environmental Protection Agency (EPA).

Is there a test that can find an IAQ problem?

There is no single test to find an IAQ problem. Environmental, Health and Safety may be able to check measurements of temperature, humidity and air flow as well as test for harmful concentrations of certain materials.

What do I do if I notice poor housekeeping or I have a coworker(s) who insist on cooking to excess?

Housekeeping problems should be reported to Facilities Management Services (FMS) as soon as possible. The more specific you can be about the problem (e.g. housekeeping or maintenance not being done, event cleaning needed) the more timely and comprehensively it may be resolved. You can contact FMS through the SRC process or at src@pcc.edu.

Co-worker relations (e.g. excessive cooking, not cleaning out refrigerators, leaving food scraps in wastebaskets) need to be handled by the workgroup(s) on site. Neither Environmental, Health and Safety nor FMS should be engaged for localized nuisance smells generated from these occupant activities.



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I've noticed a bad smell in my building; is this an IAQ problem?

When odors are periodic and not constant, the building occupants themselves are often better able to identify the source than an outsider. In these instances you should look around the area to see if you can ascertain the cause of the odor. In some cases you can correct the problem at the site (asking smokers to move away from the door). Other times there may be nothing that can be done (road work nearby). Other smells may be indicative of poorly ventilated restrooms; cigarette smoke or exhaust from idling vehicles outside; roadwork (e.g. asphalt paving) taking place nearby; or building maintenance activities. If you can't identify the source, notifying the SRC and providing specific information such as where the smell seems to be strongest and what activities or time periods the smell is associated with, may help track down the source. This information should be provided to a manager or supervisor who in turn should notify FMS through the SRC process.

When odors are ongoing and/or impacting occupancy health, immediately contact Public Safety and FMS. If employee health and safety is a concern, notify your manager of the need to relocate work activities and complete an incident notification form for Risk Services. If medical treatment is needed, contact Public Safety and/or 911 and obtain prompt medical care.

Item to note: A strong rotten-egg smell may be indicative of a natural gas leak in the building. In these cases occupants should evacuate the building and use a phone outside of the building to contact Public Safety (ext 4444) at once. Public Safety will notify the proper entities of the problem. The building should not be reentered until an FMS or Public Safety representative receives a determination from the gas company that there is not a natural gas leak.

Will FMS let us know when they're going to be doing work in our building?

When possible, FMS staff may provide advanced notification to campus communications team members when maintenance activities are scheduled to take place. For large scale projects that require up front planning as well as for integrated pest management (IPM) activities, campus communications team members will notify occupants of timing and impact, if any. For emergency response or unanticipated/unexpected incident response, FMS may not be able to contact campus communication in a timely manner. As a result, staff or contractors may begin work before impacted campus staff are notified.

I feel tired and irritable at work and fine when I'm out of the building. Is this due to poor IAQ?

Symptoms such as headaches, fatigue (tiredness), and irritation (eye, nose, or other) are termed "non-specific" because they can be caused by several agents including, but not limited to poor indoor air quality.

Employee reports of a potential IAQ problem based on non-specific symptoms should be reported to a manager or supervisor who may choose to notify Environmental Health and Safety (EHS).

Upon interview and investigation completion, if building systems (e.g. ventilation) are operating as intended, there are no known sources of contaminants, and measured ventilation parameters



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are within acceptable limits, the IAQ evaluation will be considered completed unless building occupants have other specific information they can provide. Specific information should be addressed to EHS and could include a causative agent that may be responsible for the occupants' symptoms or a specific time that they notice problems.

Why not just sample the air and see what's in it?

To test the air, it is necessary to determine what specific agents should be lab tested and analyzed. Different agents require different sampling and analysis methods. It is not possible to run a single test for "anything out of normal range." This is why air sampling is rarely done during IAQ evaluations, and when it is done it's usually only after there is information on a specific causative agent. Since non-specific symptoms have myriad causes, air sampling is not routinely recommended. If there is a very specific diagnosis pointing to particular causative agent(s) then air sampling may be warranted.

Is mold a problem?

Any time there is water damage inside a building there is a potential for mold growth. This is why it is imperative that water damaged materials be cleaned, dried or discarded as soon as possible. If you notice water damage notify your manager or supervisor and contact FMS immediately to report the situation.

Many instances of water damage can be addressed via routine custodial service by responding to small spills and cleaning them up. Building occupants can prevent problems by also cleaning up small spills and reporting larger ones to FMS so they can be quickly addressed.

Do we have to evacuate if we have mold contamination?

No. This is assuming that your building has not been subject to extensive flooding. If reported early on most water damage is contained in a fairly small area and can be cleaned up promptly and completely. The Environmental Protection Agency has guidelines on mold clean up that are based on the size of the area impacted.

Where can I find more information?

The following are links to additional IAQ resources:

United States Environmental Protection Agency (EPA):

<http://www.epa.gov/iaq/>

Oregon Occupational Safety and Health Division (OR-OSHA):

<http://www.cbs.state.or.us/external/osha/pdf/pubs/fs10.pdf>

California Indoor Air Quality Program:

<http://www.cdph.ca.gov/programs/iaq/Pages/default.aspx>