

How to Prevent Sick Building Syndrome

A "sick building," by the EPA's definition, is one in which "occupants experience acute health and comfort effects that appear to be linked to time spent in [the] building, but no specific illness or cause can be identified." Symptoms come and go as you enter and leave the building:

- Headache
- Eye, nose, or throat irritation
- Dry cough
- Dry or itchy skin
- Dizziness and nausea
- Difficulty in concentrating
- Fatigue
- Sensitivity to odors.

According to OSHA, improving ventilation and eliminating sources of pollution or contaminants in the air are the best actions to take if you suspect that you have a sick building. NIOSH research breaks down how frequently poor indoor air quality can be traced to specific sources:

Inadequate ventilation	52 percent of cases
Contamination from inside building	16 percent

Contamination from outside building	10 percent
Microbial contamination	5 percent
Contamination from building fabric	4 percent
Unknown sources	13 percent

A properly designed and maintained HVAC system can prevent a building from becoming sick in the first place. We recommend that you take these steps –

- ✓ Check <u>ventilation</u> to assure at least 15 cubic feet per minute (cfm) of outside air per occupant ... at least 20 cfm in active office spaces and 60 cfm in specific areas such as smoking lounges. This is especially important in "tight" buildings constructed in the 1970's and 1980's.
- ✓ Check <u>air balancing</u> to assure that fresh air is distributed uniformly throughout your workspace.
- ✓ Be sure that Air Intake Vents are located away from sources of <u>outside air pollution</u> such as motor vehicle exhausts, plumbing vents, or garages. Remove these pollution sources if possible (for example, require trucks at the loading dock to shut off their engines), or relocate the Air Intake.
- ✓ Check for sources of <u>indoor air pollution</u> such as unvented space heaters, wood or gas stoves, fireplaces, adhesives, carpeting, upholstery, manufactured wood products, pesticides, and cleaning agents. Reduce or eliminate pollution from these sources to the extent possible.
- ✓ Be sure that adequate <u>local exhaust ventilation</u> is in place to remove pollutants that accumulate in specific areas such as restrooms, copy rooms, and printing facilities.
- ✓ Check ducts, humidifiers, drain pans, ceiling tiles, carpeting, and insulation for any stagnant water that may have accumulated. Replace any water-stained ceiling tile and carpeting.
- ✓ Periodically <u>clean and replace filters</u> throughout the HVAC system. Changing the filters will improve efficiency and increase airflow.
- ✓ Inspect and clean <u>ductwork</u>. Remove any mold or dirt.
- ✓ If <u>adding a new wing or remodeling</u>, allow time for building materials in these areas to off-gas pollutants before occupancy.

Carey's stands ready to simplify this process for you. Think of it as a "wellness regimen" for your building that can insure maximum staff productivity in a happy workplace. Call Carey's today for a thorough inspection and maintenance for your HVAC system. We'll advise you if your building can benefit from an HVAC retrofit to resolve any specific problems and insure excellent indoor air quality.