



IEQ Strategies™

[Resources for
Energy &
Building
Professionals](#)

[Order Form](#)

[Sample](#)

[Guest Book](#)

[About IEQS](#)

[IEQS Home](#)

[Tables of
Contents](#)

[Subscribers
Say...](#)

1999 Tables of Contents



[\(to 1998\)](#)

January 1999	June 1999
February 1999	July 1999
March 1999	August 1999
April 1999	September 1999
May 1999	October 1999

For information on subscriptions, reprints, or ordering individual back issues, please contact our Client Services department by phone at 781-641-5118 (or 800-964-5118) by fax at 781-648-1950 (or 800-888-1816) or by e-mail at info@cutter.com.

IEQ STRATEGIES
January 1999; Vol. 12, No. 1
 [▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **What's Ahead for 1999: Worries About 2000 May Lead The List.** Don't look for any astounding changes in the IEQ landscape in 1999. The most compelling issue -- bound to heat up as the years progresses -- may be the year-2000 problem.

PRACTICAL RESEARCH BRIEFS

- **Lung Cancer Risk Associated with Ozone, PM₁₀, and SO₂.** A long-term study among nonsmokers indicates an increased relative risk of lung cancer from exposure to ozone, particulate matter below 10 micrometers, and sulfur dioxide.
- **Ice Skating Rinks Prone to Contamination from Resurfacing Machines.** The exhaust from ice skating rink resurfacing machines can cause severe indoor pollution from nitrogen dioxide emissions, according to a study in the Boston, Massachusetts area.
- **Smoking Restrictions Reduce ETS Exposure in Restaurant Study.** A study of restaurants indicates that those with smoking restrictions in place have significantly lower concentrations of particulate matter and tobacco-related contaminants than establishments with unrestricted smoking.

CASE STUDY

- **Dust Control Measure Effective During Microbial Remediation.** Researchers used three different control techniques during mold remediation to study the effectiveness of each. While all three reduced airborne contaminants, an asbestos dismantling technique with local exhaust proved most effective.

NEWS AND ANALYSIS

- **Scientists Recommend Classifying ETS as "Known Carcinogen."** An advisory committee to the US National Toxicology Program has recommended -- on a

unanimous vote -- that environmental tobacco smoke be classified as a "known carcinogen" in the ninth edition of the *Report on Carcinogens*.

- **US Prisons Propose to Expand Smoking Restrictions.** Smoking in US prisons may soon be restricted to outdoor locations only, according to a proposed regulation from the Bureau of Prisons.
- **Tobacco Settlement with 46 States Runs into Some Snags.** Although all of the states signed onto the deal before the deadline, and the industry agreed, health groups, anti-smoking advocates, and political opposition groups are fighting back.

INFORMATION EXCHANGE

- ACGIH Plans Course on Long-Awaited Bioaerosol Document
- University of Tulsa IAQ Program Offering Numerous Courses
- MEHRC Offers Two-Day Course on Health and Safety

IEQ STRATEGIES

February 1999; Vol. 12, No. 2

[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **25 Internet Tips That Will Help Make You More Productive in 1999.** If you've made a New Year's resolution to be more productive in the coming year, we present 25 Web sites to help you navigate the wealth of information on the Internet.
- **Bonus Site: Let NetMind Alert You to Web Changes.** An amazing Web site will actually track Web pages for you and alert you by e-mail whenever something new is added to the page or when the page moves.

PRACTICAL RESEARCH BRIEFS

- **Alpha Particle Study Calls Radon Death Estimates into Question.** The US Environmental Protection Agency has estimated that 20,000 Americans will die each year due to excessive radon exposure. This is the basis for the agency's radon control program and is not without its critics. A new study, which looked at the effects of a single alpha particle on a single cell, calls that estimate into question.
- **Study Says Bartenders' Health Improved After Smoking Ban.** Those who want to ban smoking in the workplace got a boost recently from a study showing that California bartenders experienced improvement in respiratory symptoms and an increase in lung function, following a state law banning smoking in bars.

CASE STUDY

- **Water Intrusion, Mold Cause High School Woes -- Part 1.** This case involves a high school where students, faculty, and staff had been complaining of symptoms typically associated with IEQ problems. A series of investigations revealed water intrusion and fungal growth, resulting in a \$3-million renovation program and heightened concern among those affected by the problems.

NEWS AND ANALYSIS

- Workers Get \$3 Million in Courthouse IEQ Suit
- Year-2000 Update: Some Assurances, but Growing Concern
- Industrial Hygiene Conference Features Many IEQ Presentations
- Paris Plans to Perfume Metro to Cover Up Foul Smells
- NTP Seeks Public Comments on Proposed Carcinogen Listings

INFORMATION EXCHANGE

- ASHRAE Sponsors Seminar on Remediation for Good IAQ
- Indoor Environment '99 To Take Place in April in Texas
- ACIGH Offers Courses in Ventilation and HVAC/IAQ Fundamentals
- Broward Community College Offers Variety of IEQ Courses

IEQ STRATEGIES
March 1999; Vol. 12, No. 3

[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **Standard 62 Comes Under Fire Again from Member Petition.** ASHRAE Standard 62-1989, which has been under assault on various fronts for several years, is facing a new challenge from a grassroots petition seeking to limit the scope and provisions of the standard.
- Statement Accompanying Petition Concerning Standard

PRACTICAL RESEARCH BRIEFS

- **Study Correlates SBS with *Penicillium* and *Stachybotrys*.** In 48 US schools with IAQ complaints, the complaint areas had significantly higher concentrations of *Penicillium* and *Stachybotrys* than the outdoor air or noncomplaint areas. Once remediation was complete, symptom complaints dropped dramatically.
- **Most in US Concerned about IAQ.** More than 75% of US residents are concerned about indoor air pollution from products, and 85% think there should be some type of standards governing product emissions.

CASE STUDY

- **Water Intrusion, Mold Cause High School Woes -- Part II.** A series of investigations revealed water intrusion and fungal growth in a high school, resulting in a \$3-million renovation program and heightened concern among those affected by the problems. This month we focus on the architectural and engineering aspects.

TOOLS AND TECHNIQUES

- **New Standard 62 Addendum Now Ready for Public Review.** The committee revising Standard 62-1989 has sent to ASHRAE headquarters an addendum that includes an entire section on operation and maintenance. The addendum must go out for public review and then be revised, if necessary.
- **Reader Responds to Article on Remediating Mold Contamination.** In a previous issue, three IAQ consultants wrote a special report on how to plan and conduct a mold remediation project. J. David Miller from Carleton University presents his view on the subject.

NEWS AND ANALYSIS

- **NSF International Plans Ambitious Program for First IAQ Event**
- **Tobacco Institute Closes Operations, Part of Tobacco Settlement**

IEQ STRATEGIES
April 1999; Vol. 12, No. 4

[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **Upper-Room Ultraviolet Irradiation Research Gaining Momentum.** Research is progressing on using UVGI to combat disease transmission in indoor spaces.

PRACTICAL RESEARCH BRIEFS

- **Study Finds Little Risk from Crack and Crevice Pesticide Treatment.** A recent research project using crack and crevice pesticide treatment found little dislodgeable residue, negligible effect in adults, and virtually no exposure risk to children.
- **Aggressive Housecleaning Can Reduce Blood Lead Levels in Children.** A new study shows that vigorous cleaning on a regular basis can help to reduce the lead levels in children's blood.
- **Study Finds Link Between PVC Flooring and Childhood Asthma.** Researchers have found a link between bronchial obstruction in children and the presence of PVC flooring and textile wall coverings in homes.
- **Epidemiological Studies May Not Account for Outdoor Radon.** Outdoor radon exposures may not be as benign as some believe and may skew the results of some epidemiological studies.

CASE STUDY

- **Multipoint Monitoring Shows Ventilation Effectiveness.** This case involves a five-building community college located in an urban area in the northeast US, near several major commuter highways. College officials began a proactive investigation to determine what impact, if any, the vehicular traffic had on the indoor air.

NEWS AND ANALYSIS

- **New Nonprofit Group to Study Building Remediation Issues.** A newly formed organization will study mitigating environmental problems in buildings and offer certification to remediation professionals.
- **Second-Largest US Government Building Seen as Vulnerable Target.** The massive Ronald Reagan Building in Washington, DC, is a waiting target for terrorist attacks, according to published reports, which say the government has ignored warnings about the building's vulnerability.
- **Courthouse IEQ Problems Have Long-Lasting Effects.** A building that once had serious IEQ problems is finding it difficult to convince potential tenants that the building is suitable for occupancy.

INFORMATION EXCHANGE

- **Canadian Conference to Examine Over 100 Mold, Yeast Species.** An intensive five-day conference sponsored by Agriculture and Agri-Food Canada and the Centraalbureau voor Schimmelcultures (Netherlands) will study more than 100 mold and yeast species common in indoor air and on food.

IEQ STRATEGIES
May 1999; Vol. 12, No. 5
[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **New York City Revising, Expanding Mold Contamination Guidelines.** The New York City Department of Health, which has extensive guidelines on investigating and mitigating *Stachybotrys* contamination, is in the process of revising those guidelines by expanding them to include other molds and fungi and fine-tuning procedures for cleaning up contaminated building areas.

PRACTICAL RESEARCH BRIEFS

- **Study Looks at Indoor-Outdoor Fungal Profiles in "Sick" Building.** Researchers at Texas Tech University have found that the indoor fungal profile of a contaminated building tends to remain constant, even while the outdoor fungal profile changes. The study concludes that single measurements of fungal concentrations indoors may provide useful information about the building.
- **Researchers Link Solvents and Miscarriages, Malformations.** In a prospective study among pregnant women, researchers conclude that occupational exposure to organic solvents in pregnancy can lead to miscarriages and major malformations of the fetus. In this study, the exposure came in industrial settings, laboratories, graphic arts facilities, and offices.
- **Literature Search Detects Common Causes in School IEQ Problems.** An extensive study has determined that school IEQ problems stem from several common causes, but recommends a broad research program to fill in the knowledge gaps.

CASE STUDY

- **Renovations, Disrepair Cause Numerous Courthouse IEQ Problems.** This case involves a Massachusetts courthouse, which has undergone numerous renovations over the years. As a result of the many changes, the original ventilation design no longer functions, and the only source of outdoor air for most sections of the building is infiltration from opened doors and windows.

NEWS AND ANALYSIS

- BP Amoco Confronts Cancer Cluster, Probes Possible IEQ Link
- Swedish Agency Uses Dogs to Find Hidden Mercury Indoors
- Many Building Owners and Managers Develop Year-2000 Plans
- Final Plans Under Way for *Indoor Air 99* in Edinburgh, Scotland
- State's Demands Threaten Settlement in Courthouse IEQ Suit
- BOMA Survey Lists IAQ as One of Top Issues for Building Owners
- Latex a Growing Concern Due to Increasing Allergies

INFORMATION EXCHANGE

- New Web Site Offers Information, Resources on Fungal Contamination
- University of Tulsa Offers IEQ Courses in Western US

IEQ STRATEGIES
June 1999; Vol. 12, No. 6
[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **ASHRAE Standard 62: Turmoil, Politics Roil Already Muddy Waters.** Standard 62-1989 is facing an uncertain future. The central question is whether it will continue to be the benchmark against which building operations are measured or whether it will become a "toothless tiger".
 - **Statement in Favor of Petition**
 - **Statement Opposed to Petition**
- **Standard 62 Addendum Revises Ventilation Rates.** In a change to ventilation rate procedure, the committee revising Standard 62 has introduced the concept of accounting for the building's contribution to IAQ and to occupant-generated contaminants.

PRACTICAL RESEARCH BRIEFS

- **Study Finds Correlation Between Fine Particles and Childhood Asthma.** A study looking at the association between fine particle concentrations and emergency room visits for children with asthma has found a positive correlation.

TOOLS AND TECHNIQUES

- **New Flooring System Offers Advantages of Both Carpet and Tile.** A new flooring system claims to combine the benefits of carpeting and hard flooring without the drawbacks of either. Company officials say that it offers the insulating and sound-dampening qualities of fabric flooring without concerns over providing a reservoir for microbial growth and other organisms.

CASE STUDY

- **Occupant Symptoms Improve After Removal from Building.** Employees were relocated from an office building where occupants had complained of IEQ-related problems for several years. While symptoms decreased, a study found only limited growth and no definite link between the symptoms and fungal growth.

NEWS AND ANALYSIS

- **Consumer Show Blamed for Legionellosis Outbreak, 22 Deaths.** Water-related exhibits at a flower show in the Netherlands are suspected as the source of infection for many cases of Legionellosis.
- **Court Throws Out New EPA Regulations on Ozone, Particulates.** Despite evidence that particulate matter is strongly associated with increased mortality and morbidity, a US Court of Appeals has thrown out EPA regulations that would have imposed new limits on air pollutants.
- **BASE Program Finishes Field Data, Working on Analysis**
- **97% of Flights to and from US Are Now Smoke-Free**

INFORMATION EXCHANGE

- *Bugs, Mold & Rot III* Set for June 9-10 in Washington, DC
- MEHRC Offers Four-Day Course on Responding to Microbial Contamination
- Turner Group Planning Annual Four-Day Hands-On IAQ Workshop
- AEE Offers IAQ Course, Certification at Two-Day Conference

IEQ STRATEGIES

July 1999; Vol. 12, No. 7
[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **IEQ Is Particularly Vulnerable to Potential Year-2000 Problems.** Year-2000 concerns are growing, especially since some businesses still haven't even begun to address potential problems. By the time you read this, we will have fewer than 130 working days until the end of 1999 and the onset of what experts estimate will range from "inconvenience" to catastrophe.

PRACTICAL RESEARCH BRIEFS

- **Coarse Particles Not Associated with Increased Mortality.** Increases in fine particle concentrations are associated with increased mortality, but recent research indicates that this association doesn't exist for coarse particles. This has broad implications for US EPA's efforts to toughen regulation of fineparticles.
- **Research Calls into Question Estimates of Radon's Health Effects.** The number of cancer cases attributed to radon may be altered with new research indicating that alpha particles need not strike a cell's nucleus to cause changes in the cell's structure.

In fact, researchers said that because the changes occur with traversal through the cytoplasm, the effects may be more carcinogenic than currently believed.

- **Household Pollutants Increase Pesticide's Toxic Effects.** Four pollutants typically found in household dust can increase the neurologic effects of common pesticides by inhibiting an important enzyme. More than 90% of US homes report using insecticides, and data indicates that the primary source of pesticide exposure is in the home.
- **Study: Significant Number of US Workers Exposed to ETS at Work.** A University of California researcher claims that a significant number of US workers are exposed to hazardous levels of environmental tobacco smoke (ETS) at work. According to the study, for 30% of the workers exposed at work but not at home, that exposure constitutes their principal source of ETS.
- **Study Finds No Loss of Hotel Revenue from Smoking Bans.** A recent study in San Francisco indicates that smoking bans in restaurants do not have the dire effects predicted by the tobacco industry and its allies in the hospitality industry. Despite the fear that such restrictions will lead to massive declines in tourism and related revenues, in most communities revenues increased following the ban.

CASE STUDY

- **Moisture from Several Sources Causes Mold in School Complex.** This case involves a multibuilding school where moisture and mold problems had persisted for several years. The investigators established a structured approach to investigating and mitigating the problem.

NEWS AND ANALYSIS

- **ASHRAE Offers Seven Standard 62 Addenda for Public Review.**
- **Facility Managers Say Poor IEQ Adversely Affects Productivity.**
- **NSF Attracts Nearly 200 for First IAQ Conference**

IEQ STRATEGIES

August 1999; Vol. 12, No. 8

[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **Frustration Continues over Standard 62; Addendum Appeal Loses.** Frustration within ASHRAE over the standard revision process continues on several fronts, despite the Board of Directors' rejection of an appeal that attacked several addenda to Standard 62-1989.

TOOLS AND TECHNIQUES

- **Why HVAC Commissioning Doesn't Work in Hot, Humid Climates.** Solving moisture and mold problems is difficult because current commissioning techniques cannot accurately predict airflows or their force. Owners cannot identify potential problems prior to acceptance of new buildings.

CASE STUDY

- **Building Pressurization Can Affect Possibility of Mold Growth.** Several cases demonstrate the various ways that forced-air systems can significantly affect building pressures. In each case, mold growth stemmed from moisture accumulation in drywall.

NEWS AND ANALYSIS

- **Veterans Affairs Researcher Finds Gulf War Illness Clusters.** Those who advocate for people with multiple chemical sensitivities are taking some small comfort in a research report from epidemiologists at the US Department of Veterans Affairs, indicating a cluster of related symptoms among military personnel who were deployed to the Persian Gulf during the 1991 war.
- **Grant Will Fund Study of *Aspergillus* Gene Sequence.** British researchers have received a major grant that will fund an effort to sequence the genome of *Aspergillus fumigatus*, a common mold that is considered responsible for adverse health reaction among affected persons. *Aspergillus* species commonly figure in IEQ investigations of moldy buildings.
- **Harvard Receives \$7.5-Million EPA Grant for Air Pollution Work.** EPA has awarded the Harvard School of Public Health a \$7.5-million grant to fund research into particulate air pollution.
- **Police Find Toxic Bombs in Apartment Building, Arrest Suspect.** In early July, police discovered a cache of highly toxic bombs in an apartment in Hastings, Nebraska.
- **Year-2000 Problem Already Ruins Holiday Plans for Some.** Whether or not the year-2000 problem lives up to its advance billing, some companies have already put key personnel on notice that they will be on duty during the date changeover.

INFORMATION EXCHANGE

- *Healthy Buildings 2000* Issues Call for Papers
- University of Minnesota Sponsoring IAQ Workshop for Healthcare
- AQS's Fifth IEQ Conference to Include the Role of Microbial Growth

IEQ STRATEGIES

September 1999; Vol. 12, No. 9

[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **Obscure Amendment Spawns Storm over Research Data.** An obscure amendment tacked onto the 1999 US government appropriations bill has caused a ruckus in Washington, DC, pitting some industry groups against nonprofit researchers

PRACTICAL RESEARCH BRIEFS

- **Airborne Samples Not Reliable for Detecting *Stachybotrys*.** Recent research indicates that collecting airborne samples is an unreliable indicator of *Stachybotrys* contamination.
- **Researchers Find Adverse Reactions to Mattress Cover Emissions.** Researchers studying whether infant crib mattress covers emit irritating compounds have found various adverse "asthma-like" reactions among mice exposed to the emissions.

TOOLS AND TECHNIQUES

- **EPA Offers Energy/IEQ Label for Buildings that Meet Standards.** Just four years after antiregulatory opposition forced the US EPA to abandon its Building Air Quality Alliance program, the agency is now offering its Energy Star label to buildings that meet both energy conservation and IEQ criteria.
- **EPA Guidelines for IEQ Assessment in Energy Star Program**

CASE STUDY

- **Family's CO Poisoning Results from an Unusual Source.** Public health authorities in Quebec recently reported a case of carbon monoxide poisoning that

resulted from an underground source, caused by nearby blasting at a sewer construction site.

NEWS AND ANALYSIS

- **Washington State Court Upholds Office Smoking Ban.** The Washington Supreme Court has upheld a rule from the state Department of Labor and Industries that banned smoking in private offices.
- **ASHRAE Board Tells Committees to Accommodate Smoking.** The ASHRAE Board of Directors has told standards committees that all ASHRAE standards and guidelines must provide directions for designers to include both smoking and nonsmoking environments in buildings.
- **Year-2000 Update: Failures Could Last Beyond January 1.** The White House's top year-2000 advisor has warned that problems associated with the millennium could endure long after January 1 or could remain hidden until later in the year -- something we've been predicting for some time.
- **Chem-Bio Terrorist Threats Jeopardize Public Pentagon Tours.** Pentagon officials said they are considering stopping tours of the facility in response to a threat of a biological terrorist attack. At the same time, the US FBI stopped its public tours in response to an unspecified threat.

IEQS COMMENTARY

- **Access to Research Data: A Wolf in Sheep's Clothing?** The law that snuck through the US Congress on the coattails of an appropriations bill could be a blessing or a curse.

IEQ STRATEGIES

October 1999; Vol. 12, No. 10

[▼ | ▲ | [Top](#) | [Order](#)]

FEATURE

- **Researcher Finds Immune Link Between Fungi and Chronic Sinusitis.** While discussion concerning fungus in indoor environments focuses on allergenic and toxic effects, a Mayo Clinic researcher now says he has identified an immune response to molds in patients with chronic sinusitis.

PRACTICAL RESEARCH BRIEFS

- **Carpeted Area Shows Higher Fungal Count than Noncarpeted Area.** A comparison of hospital wards indicates that a carpeted ward with 90% efficient filtering had higher fungal spore rates than a similarly ventilated, noncarpeted ward.
- **School IAQ Improvements Promise Energy Conservation.** A multiyear project by US EPA and the National Association of Energy Services hopes to achieve energy and maintenance savings in schools along with better indoor air quality.
- **Intervention Study Finds Symptom Reduction Following Cleaning.** A study among office workers indicated that aggressive cleaning can reduce mucosal membrane irritation, with greater effects among allergic subjects
- **Introducing Plants Shows No Effects on Microorganisms.** An intervention study to determine the effect of plants on microorganisms in offices indicates that introducing as many as six plants has little or no effect on airborne fungal spores.
- **Legionella in Whirlpool Spas Correlates with High Bacteria Counts**
- **Noise and Pollution Combine to Affect Occupant Satisfaction**

CASE STUDY

- **Intervention in Problem Office Building Results in Improved Perception.** In an

office where occupants registered indoor climate complaints, investigators adopted remediation techniques on one floor, but left another mostly unchanged to determine whether the mitigation techniques would affect occupant perceptions.

NEWS AND ANALYSIS

- **GAO Report: US Government Short-Changes Indoor Air Research.** Despite a 1991 call from GAO for increased research into indoor environmental issues, research spending declined after 1994 and only now is returning to pre- 1995 levels.
- **ASHRAE Publishes New Version of Standard 62-1989.** Standard 62.1- 1999 will be essentially the same, with the addition of four addenda approved by ASHRAE. A principal difference is that the new version contains no mention of smoking.
- **West Virginia Adopts IAQ Legislation for Schools**

INFORMATION EXCHANGE

- MEHRC Offers Courses on Investigation, Damage Mitigation
- University of Tulsa to Conduct Training Session on Allergen Control

[Top](#) | [Order Form](#) | [Sample Issue](#) | [Guest Book](#) | [IEQS Home Page](#) | [About IEQS](#)
[Tables of Contents](#) | [What Subscribers Say](#) | [Resources for Energy/Building Professionals](#)

© 1999 Cutter Information Corp. All rights reserved. Comments/suggestions to [webmaster](#).