#### GLOBAL INDOOR HEALTH NETWORK

WORKING TOGETHER FOR HEALTHY INDOOR ENVIRONMENTS
IN OUR HOMES, SCHOOLS AND BUSINESSES









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# Letter from Howard County Teacher Who Resigned over Mold Concerns

Rather than HCPSS transferring me to another building for the remainder of the school year, I was forced to either continue working in a mold-stricken environment that caused me to experience heart palpitations, extreme dizziness, shortness of breath and several other symptoms, or to use all of my own leave and take the rest of the year off. To read the letter, click <a href="https://example.com/heres/beta/40/">here</a>.

# More than 100 LAPD Officers Filed Claims Over Mold, Health Hazards (California)

Soon after Donna Wheeler became a detective at the Southeast Community Police Station, which serves Watts and surrounding areas, she started having trouble breathing.

Her respiratory problems were worse at the end of a workday, she said. When she was on vacation, her symptoms improved. Her doctor diagnosed her with asthma caused by irritants in her environment.

Wheeler is one of about 115 LAPD officers and civilian employees who have filed worker compensation claims alleging that their respiratory issues are caused by unsanitary conditions at Southeast Community Police Station, including mold and bird feathers in the ceiling vents that have existed since 2008.

The city of Los Angeles recently commissioned a report from mold consultants, who inspected vents in the station's detective area. The report, completed in November, did not find a microbial health hazard but recommended that the city should try to reduce the mold.

"We can accept our jobs being dangerous on the streets, but it shouldn't be dangerous at the police station," said Jerretta Sandoz, vice president of the Los Angeles Police Protective League, the union that represents rank-and-file officers, at a news conference outside the station Wednesday.

The lobby's ceiling vents are streaked with a black substance. The same is true of vents in the watch commander's office, the records room and the detective room. To read the article, click here.

See Poor hospital air quality page 2

# Poor Hospital Air Quality for Patients and Employees

There is no overstating the importance of hospital air quality, because these facilities are supposed to be sterile and clean, enabling patients to recover from illnesses.

But hospitals that do not maintain an effective air filtration strategy may find that airborne contaminants become a health issue within a facility that is intended to protect people from getting sick.

With outdoor air pollution becoming worse every year, maintaining good indoor air quality at hospitals has become even more challenging, but no less important.

#### Sources of Contamination

Multiple studies have shown that in addition to patientborne illnesses and chemicals used to clean hospitals, one of the largest sources of airborne pollutants in a hospital is outside air.

In fact, research by the U.S. Environmental Protection Agency (EPA) has found that in many areas, indoor air quality is 10 times worse than the quality of outdoor air.

Vehicle exhaust and diesel fuel from generators designed to prevent power failures at hospitals are two of the biggest sources of indoor contaminants from outdoor pollution.

What makes the problem worse is that many urban hospitals which were built in the 1950s or before have not undergone the kind of upgrades in their ventilation systems that would mitigate the amount of bad outdoor air that circulates through the inside of a hospital.

#### Effect on Hospital Staff Productivity

Hospital air quality isn't just an environmental problem though; it has actual human costs as well.

A study by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) found that indoor air quality that was improved by effective ventilation reduced acute respiratory illnesses (ARIs) by 23 percent to 76 percent.



# Poor Hospital Air Quality for Patients and Employees (continued)

Furthermore, hospitals are already plagued by a number of airborne viruses, bacteria, and contaminants which results in a statistically higher number of ARIs than in occupations where these pollutants are not as concentrated.

Hospitals with poor or ineffective ventilation systems are at a higher risk of incubating illnesses caused by airborne contaminants, and these illnesses will have a debilitating effect on the productivity of hospital staff who will either have to work at reduced capacity, or miss work entirely due to respiratory illnesses.

#### Effect on the Health of Patients

Moreover, the level of pollutants may also affect patients at hospitals with poor air quality.

There's an irony in the fact that doctors take the Hippocratic Oath, which states: "First do no harm."

The irony is that doctors can't even guarantee that their patients are safe in a hospital, which is the one place in the world that patients should feel that their health is being made better, not worse.

Patients are also at the mercy of hospital cleaning staffs that often use high-grade chemicals to clean rooms and surfaces. These chemicals create toxic gases that become airborne and can affect the well-being of patients.

To read the article, click <u>here</u>.

#### Florida Supreme Court Uses Concurrent— Cause Doctrine to Settle Case

The Florida Supreme Court recently used concurrentcause doctrine, rather than the efficient proximatecause doctrine, in determining the coverage of an allrisk property-insurance policy.

<u>The court ruled in favor of the policyholder</u> and came to its decision in the case Sebo v. American Home Assurance Co. Inc.

The plaintiff, John Sebo, wanted a review of the determination by the 2nd District Court of Appeals that sided with the insurer, American Home Assurance Co. Inc. The court denied coverage to Sebo on his \$8 million homeowner's insurance policy.

The Sebo case concerned a private, high-ticket residence in Naples, Florida. The property first experienced water damage during rainstorms that were caused by construction defects. Then, in 2005, Hurricane Wilma hit, and more property and wind damage was incurred.

The water damage because of defects was denied by the homeowner's insurance policy. The homeowner decided to file suit against their insurer.

"The insurer relied on exclusionary language in the insured's policy," Perry Goodman, an attorney with Lewis Brisbois Bisgaard and Smith LLP, told The Florida Record. "However, the court determined if you have independent perils and one is covered and the other is excluded, they converge to cause a single loss. The policy must then provide coverage under the concurrent-cause doctrine, and this is what the court applied."

The Florida Supreme Court upheld a ruling that was previously adopted in Wallach v. Rosenberg, a case heard in 1988, which stated if one cause is not the efficient cause among multiple causes, the two causes must be deemed equal.

"That's basically what the case found," Goodman said. "And that is where the concurrent-cause doctrine comes into play."

The court determined if you have independent perils and one is covered and the other is excluded, they converge to cause a single loss. The policy must then provide coverage under the concurrent-cause doctrine.

#### Florida Supreme Court Uses Concurrent-Cause Doctrine to Settle Case (cont'd)

The concurrent-cause doctrine is used when there are two combined defects, or multiple causes, causing a single peril. If one peril is covered under a homeowner's insurance policy, the other must be covered, as well.

The court determined that the efficient-proximate cause could not be used in the Sebo case. It was decided that, when defects in the structure of the home and hurricane damage converge, the main reason for the cause of damage could not be found. Therefore, the efficient-proximate cause could not be determined.

"The concurrent-cause doctrine, rather than the efficientproximate cause, was the appropriate method in this determination," Goodman said. "Because the causes were concurrent, the loss must be covered."

The Florida Supreme Court found indisputable evidence that Sebo's homeowner's insurance policy included both structural defects caused by rainwater damage and hurricane-wind damage combined to cause property damage.

Therefore, the efficient proximate-cause doctrine could not be used and the concurrent-cause doctrine came into play.

"This could change the way insurance companies look at the language of a policy," Goodman said.

To read the article, click here.

### Baxter International to Pay \$18 Million over Mold at North Carolina Plant

Baxter International has agreed to pay \$18 million to resolve its criminal and civil liability over claims its unit ignored mold in air filters at a plant where sterile intravenous solutions were made, the U.S. Justice Department said on Thursday.

The resolution includes a deferred prosecution agreement and penalties and forfeiture totaling \$16 million and a civil settlement under the False Claims Act with the federal government totaling approximately \$2.158 million, the Justice Department said in a statement.

The government charged that managers at Baxter Healthcare Corp's North Cove plant in Marion, North Carolina, ignored an employee's warning that mold was found in air filters in the ceiling of the room where sterile intravenous solutions were manufactured, the statement said.

A Baxter spokeswoman said the handling of the mold concerns "was not consistent with Baxter's standards" and the company had made some changes as a result.

"We took a number of actions to address these issues, including terminating several members of the facility's management team and enhancing the training and compliance processes for employees throughout the facility," Baxter spokeswoman Deborah Spak said in a statement.

Problems with mold in Baxter's air filters were revealed several years ago, after FDA inspectors issued the company a warning letter about the problem.

"We are especially concerned that you have not identified the root cause that allowed the mold to proliferate" to a level that was too numerous to count, the FDA said in its May 2013 letter.

The letter also said the mold problem represented a "repeat violation" from a 2012 inspection.

To read the article, click here.



### Medical Marijuana Riddled with Mold and Bacteria

Though medical marijuana is marketed to ease suffering which is always a noble endeavor, efforts to investigate potentially harmful contaminants have not gotten substantially underway. Hence, why a research team from UC Davis embarked on a journey to explore further, concerned over the possible lethal risks infectious agents could cause when directly inhaled into the lungs of patients—in particular the most vulnerable (e.g. those with cancer, AIDS, organ transplant recipients, uncontrolled diabetes or any condition involving a suppressed or weakened immunity).

With multiple explorations in the works, their recent findings were accepted for publication in Clinical Microbiology and Infection in a letter entitled "A microbiome assessment of medical marijuana." The researchers examined twenty samples purchased from Northern California dispensaries for the presence of microorganisms. Testing yielded a wealth of diverse bacteria and fungi known to cause serious infections (especially in the immunocompromised patient), many of the lungs—among them Aspergillus, Cryptococcus, Mucor, Klebsiella pneumoniae, E. Coli, and Acinetobacter baumannii.

The authors underscore that the heat generated to smoke marijuana is not sufficiently maintained to guarantee safety, so they strongly advise against its use in immunocompromised patients.

To read the article, click **here**.

# Beware of Mould in Vancouver's Hot Condo Market (Canada)

As Vancouver's condo market heats up again, a West End Vancouver family wants to warn everyone to slow down to make sure they know what they're buying.

Chavisa Horemans says she and her husband David were stunned when they took possession of their new West End condo and discovered mould behind a murphy bed.

"We bought a home to enjoy our family and instead we've got a disaster on our hands!" she exclaimed.

Certified mould inspector Brian MacKenzie of ABM Environmental was called out to investigate.

"It definitely would be considered a health hazard, yes," he told CTV News.

Mould was found in the kitchen and blamed on leaky plumbing but an enclosed solarium was a much bigger problem and has now been cordoned off with heavy plastic.

Within months of moving in, the family moved out and is now living in a rented apartment while their condo sits empty.

"The house is contaminated. It's made us very, very sick," Chavisa Horemans said.

The family is suing the sellers and others involved in the real estate transaction claiming that misrepresentations were made.

However, there were some red flags that there could be problems.

An engineering report they received before purchasing indicated water intrusion in the building in some common areas. And their home inspection report indicated the solarium didn't conform to code for a bedroom.

The Horemans say they weren't provided a 2009 engineering report that indicated the solarium had leaks and was unsuitable to live in.



### Beware of Mould in Vancouver's Hot Condo Market (Canada)—continued

"Had we had the information and facts then we never would have purchased this property," Horemans said.

No water issues were disclosed in the property disclosure statement but the seller told CTV News he'd repaired the leaks. In his response to the lawsuit he stated that the buyers were informed about it and that they had plenty of time to fully investigate any defects that could affect the use.

The Horemans acknowledged that they were told about the repairs but say they were led to believe it was 100 per cent fixed.

The Horemans were prepared to spend \$200,000 to renovate but the strata council denied their application because of concerns over their renovations plans and how they'd affect common property.

The condo now sits empty and the dispute is going to mediation.

If you suspect or know of any water issues in a building, experts recommend that you get a mould inspection. Unfortunately, the Horemans didn't do that until it was too late.

To read the article, click here.

See Federal office building mold problems on page 6

# Federal Office Building Exposed Government Employees to Black Mold

Federal employees were potentially exposed to black mold in an ill-maintained building leased by the government, a watchdog reported Friday.

The Public Building Service (PBS) – an agency within the General Services Administration (GSA) – leases the Kress Building on behalf of Customs and Border Protection, but didn't make sure the lessor repaired significant maintenance issues, GSA's inspector general reported.

"PBS has not enforced the terms of the full service lease at the Kress Building and may have exposed tenants to health risks," the report said. "Specifically, we found that PBS did not hold the lessor accountable for maintenance and repair issues in a timely fashion. In addition, PBS failed to timely notify the tenants about the presence of black mold in a training room."

Water intrusion caused a portion of the third floor's ceiling to fall in August, 2015, which exposed black mold, but tenants weren't notified until 33 days later.

"During this period, the tenants had access to the" room with exposed mold "because it was not fully contained or isolated," the report said. "As a result, tenants may have been unnecessarily exposed to black mold."

Customs and Border Protection logged 208 reported problems from 2015 to 2016, "some of which were repeated because the lessor" – Victor Properties LLC – "did not address them in a timely manner," the report said. Issues included "water intrusion, termite infestations, poor ventilation, exterior deterioration, mold, non-working water fountains and unsatisfactory maintenance and janitorial practices."

Tenants also sent similar complaints to the inspector general and "expressed concerns that the building is making them sick," the report said.

GSA has leased the building since 1995. Its latest extension expires November 3, 2018.

To read the article, click <u>here</u>.



#### Cost of Indoor Air Pollution is \$232 Billion--and \$215 Billion for Outdoor Air Pollution (Africa)

Carlos Dora, a coordinator in the WHOs Public Health, Environment and Social Determinants of Health department, was speaking at a conference sponsored by the Novartis Foundation on how Africa's rapid urbanization will affect the health of many citizens.

The annual number of deaths from outdoor or ambient air pollution rose sharply—by 36%—from 1990 to 2013 from what was a low base, according to the OECD. Indoor air pollution rose by 18% during the same period from what was already a relatively high base of 400,000 deaths in 1990.

Dirty air has led to the premature deaths of 712,000 Africans each year, more than the toll of unsafe water, malnutrition and unsafe sanitation. In September last year, researchers calculated the monetary cost of air pollution in Africa for the first time: \$215 billion from outdoor pollution and \$232 billion from indoor pollution (based on 2013 figures).

The solution to reducing air pollution, however, is complex, and requires everyone from urban planning, waste management to transport authorities to work together to address what is quickly becoming a health crisis. Renewable energy, said Dora, will be pivotal in reversing the damage of air pollution.

To read the article, click <u>here</u>. On a related note, to learn more about air pollution in southern Africa, click <u>here</u>.

### Mould and Fungus Push Residents Out of Uninhabitable Apartments (Australia)

These are the Melbourne buildings that experts say are "too dangerous" to occupy.

In some instances the problems are so severe residents have been forced to abandon their homes, in others hundreds of people continue to live in apartments that have serious health and fire concerns.

While questions remain about the safety of the Lacrosse building in Docklands, where there was a serious fire in 2014, it has been revealed that mould, fungus and building collapse has left a six-year-old apartment complex in the south-eastern suburbs virtually uninhabitable.

About half the residents of the building have already moved out after units were declared uninhabitable because of mould growth, including fungus "mushrooms" sprouting from the carpet.

"I've seen mould a metre and a half up a wall and four metres long," said an owners' corporation representative, who did not want to be named.

"I can show you carpet that you think is grass."

Twelve of the 15 apartments are said to have "major issues", including with fire proofing, and the defect bill is so large that the complex may eventually have to be demolished.

The roof of one of the units is being propped up by temporary timber framing because leaking from a balcony above it has caused the ceiling space to collapse. The owner is reportedly still paying off the mortgage.

The owners' corporation representative said if the local council's building surveyor was aware of the problems they would probably order the remaining residents to leave.

"These owners have a building that cost \$4 million to put up, and they have a repair bill of \$3.5 million, plus \$750,000 already in legal fees.

"They are very nearly nailed up against the wall with no place to go."



### Mould and Fungus Push Residents Out of Uninhabitable Apartments (Australia)—cont'd

Mould expert Dr. Wesley Black described the case as one of the worst he had seen in recent years.

"There is no drying it out, or spraying it or fogging it or gassing it. It will require a full strip out and possibly demolition," he said.

Dr. Black said he was also working on a case in outlying suburb in Melbourne where poor workmanship in a home less than five years old caused a family to drink water with high levels of copper (which is known to cause nausea, vomiting, diarrhea, gastric complaints and headaches).

He said the source was traced back to the kitchen tap, after a little girl living in the home was found to have high levels of copper in her blood.

Dr. Black said about 50 per cent of mould cases he investigates were caused by bad building practices, amid warnings from industry experts that thousands of homes and apartments in Victoria are so poorly constructed that they are at risk of becoming prematurely derelict.

The Metropolitan Fire Brigade has previously warned that future apartment fires may be so dangerous that firefighters could be ordered not to enter burning buildings to rescue residents.

To read the article, click here.

See Executive hypersensitive to EMF on page 8

### Former Silicon Valley Executive is now Hypersensitive to Electromagnetic Fields

Peter Sullivan and I are driving around Palo Alto, California, in his black Tesla Roadster when the clicking begins. The \$2,500 German-made instrument resting in my lap is picking up electromagnetic fields (EMFs) from a nearby cell tower. As we follow a procession of BMWs and Priuses into the parking lot of Henry M. Gunn High School, the clicking crescendos into a roar of static. "I can feel it right here," Sullivan says, wincing as he massages his forehead. The last time he visited the tower, he tells me, it took him three days to recover.

Sullivan is among the estimated 3 percent of people in California who claim they are highly sensitive to EMFs, the electromagnetic radiation emitted by wireless routers, cellphones, and countless other modern accouterments. Electromagnetic hypersensitivity syndrome—famously suffered by the brother of Jimmie McGill, the lead character on AMC's Better Call Saul—is not a formally recognized medical condition in most countries and it has little basis in mainstream science. Dozens of peerreviewed studies have essentially concluded that the problem is in peoples' heads.

That's what Sullivan used to think, too. A Stanford computer science major who has worked as a software designer for Excite, Silicon Graphics, and Netflix, he paid little mind to EMFs, which he once viewed as harmless and inevitable.

"I thought that anybody that talked about the health effects of EMFs was a complete idiot. I thought that they just were not science-y," Sullivan recalls. But then he got sick.

Around 2005, Sullivan started having trouble sleeping. He lost weight precipitously and struggled to maintain focus. After his top-flight Stanford doctors failed to figure out what was wrong with him, he tried every alternative remedy on the books, from cutting out gluten to taking chelating agents to purge his body of heavy metals. Nothing really worked. He noticed, however, that he felt weird after talking on a cellphone or plugging into a laptop charger. So like any good health hacker, he kept debugging.

To learn more about what he found, click here.



## Mum Describes her Mouldy Home as a Living Hell (United Kingdom)

A mum who describes her mouldy home as a "living hell" is desperately seeking help.

Emma Ford lives with husband, Matthew, and their three sons in a Colchester flat.

But their home, in Earlswood Way, is plagued with mould and despite promises to fix the problem from housing provider Genesis, the family said they had seen no improvement.

Mrs. Ford, 28, said workers washed down the walls before last summer – during which time the problem subsided. But when the cold weather hit late last year, it returned worse than ever.

"The smell really hits you every time you come in the door, when you wake up in the morning, it's there on the ceiling – it's not a home, it's a living hell."

She added: "We had to move the boys' beds because condensation was dripping on them during the night.

"We have to wash the bed clothes almost every day because mould grows on them. Your home is a place you're supposed to want to spend time with your children but we don't.

"You just don't want to go home because you know what is waiting for you there."

To read the article, click <u>here</u>.

See Mould in Melbourne Police HQ on page 9

#### Mold Plagues Melbourne Police HQ; New Building Discussed (Australia)

Airborne mold and water condensation plague the police department headquarters on Apollo Boulevard, and city officials want to replace the aging structure with a new building at an undetermined site.

This future police facility would also likely replace the department's Communications and Criminal Investigations Division building on Babcock Street, combining operations under one roof. Rough cost estimates peg the price of a new three-story, 58,000-square-foot headquarters at \$15.4 million.

During a special workshop meeting Wednesday night, the Melbourne City Council viewed photos of rusting doors and ceiling grids, broken brick mortar joints, deteriorated drywall, leaking skylights and a broken dehumidifier at the Apollo Boulevard building — which requires \$3.1 million in remediation repairs.

Paul Alfrey worked in that building as a K-9 officer from 2000-12, and he was elected to city council in November. Last week, he took a two-hour tour of his former workplace, where he took photos of gray splotches of mold behind peeling wallpaper next to the atrium.

"It has gotten bad. I can speak as a certified contractor and a home inspector. What you're saying is correct: The building is not designed correctly. The atrium — everything leaks," Alfrey said during Wednesday's meeting.

"I think we have more dehumidifiers than we have printers in there," he said.

"We had a pretty sophisticated air-quality study of the building done, and to cut to the chase what they told us was, 'Yes, there's a lot of mold," McNees told council members.

Council members supported the new police headquarters proposal, rather than spending an estimated \$5 million-plus repairing both police buildings during the next decade.

To read the article, click <u>here</u>.



# Study Confirms Connection between Ventilation Problems and Health (Finland)

A microbiology study from the University of Helsinki has proven that there is a connection between indoor ventilation problems and health. The study recorded a total of 136 mould- or mildew-related symptoms and 50 diseases from 232 teachers. Phenomena included pain, eye and joint trouble, feelings of illness and coughing. The severity of the symptoms directly correlated with the toxicity of the classrooms in question.

The study initially included more than 400 teachers from 15 Helsinki schools. Two different research groups gathered the teachers' health information and collected samples from the school buildings in the same month. The study material only included teachers who had worked in the same space for at least a year.

Instead of simply searching for impurities, the toxicity of classroom air and surfaces was measured using test cells, specifically pig sperm. The sperm cells are extremely sensitive to environmental toxins.

Chair Hanna Iso-Kurtti of the Trade Union of Education (OAJ) says that ventilation and mould troubles are "all too familiar" to teachers.

"There are far too many classrooms with these problems. People mostly talk about mould, but many other things such as ventilation are involved. Speech difficulties, head colds and congestion are common," Iso-Kurtti says.

To read the article, click here.

### Fragrance Sensitivities Can Be Very Severe, Study Finds

You may not love the scent of your coworker's hand cream, or the perfume wafting across the aisle on the train. But for some people, fragrances like those can trigger a range of very real symptoms, according to a new Australian study.

For her research, Anne Steinemann, PhD, a professor of civil engineering at the University of Melbourne School of Engineering, asked nearly 1,100 people to complete questionnaires about their exposure to fragranced products—such as personal care products, air fresheners, cleaning solutions, and laundry supplies—and any reactions those products may have triggered.

The findings, published in the journal Preventive Medicine Reports, suggest that fragrance sensitivity is not only a common issue, but can be quite severe. Onethird of the study participants reported experiencing one or more health issues from scented products (whether they used the items themselves, or were exposed to them in public places).

The most common reaction was respiratory difficulties, including coughing and shortness of breath. Almost 17% of participants reported this effect. Fourteen percent reported mucosal symptoms (such as congestion and watery eyes); 10% had experienced migraines; and 9.5% said they developed skin problems (like rashes, hives, tingling skin, and dermatitis).

Other reactions reported included asthma attacks (7.6%) and gastrointestinal problems (3.3%). Almost 5% of people said they suffered neurological symptoms (dizziness or fainting, for example); and 4.1% reported cognitive problems, such as trouble with their memory and difficulty concentrating.

"Based on my findings, it's clear that the health effects of fragrance sensitivities can be immediate, severe, and potentially disabling," says Steinemann. "This loss of functionality makes a fragrance sensitivity not just a health issue, but a societal and economic one too."

To read the article, click here.



#### Yeast in Gut Boosts Asthma Risk

Add a new set of actors to the throng of gut microbes that influence health: fungi.

So far, genetic sequencing of the microbiome has largely focused on bacteria, Brett Finlay, a microbiologist at the University of British Columbia in Vancouver, Canada, explained in a session here at the annual meeting of AAAS, which publishes Science.

In 2015, Finlay and colleagues identified four bacteria that seemed to protect Canadian kids from developing asthma. They suspected that these bugs shaped the nascent immune system by bumping up levels of immune-modulating cells in the gut.

But when the group sequenced the gut microbiome in a group of 100 children in Esmeraldas, Ecuador—a more rural setting, but with rates of asthma comparable to Canada's—the best microbial predictor of asthma wasn't a bacterium at all, but a genus of yeast known as Pichia (above).

To read the article, click here.

#### **Quick Links:**

Website: https://www.globalindoorhealthnetwork.com

#### **Health Effects:**

https://www.globalindoorhealthnetwork.com/healtheffects

Commemorative newsletter for Dr. Jack Thrasher: <a href="https://www.globalindoorhealthnetwork.com/2017-newsletters">https://www.globalindoorhealthnetwork.com/2017-newsletters</a>