GLOBAL INDOOR HEALTH NETWORK

"WORKING TOGETHER FOR HEALTHY INDOOR ENVIRONMENTS"

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Additional Research Papers

Dr. Jack Thrasher provided the following research papers:

Antibiotic use and risk of non-Hodgkin's lymphoma: a population-based case—control study (2008)

In vivo Hypoxia and a Fungal Alcohol Dehydrogenase Influence the Pathogenesis of Invasive Pulmonary Aspergillosis (2011)

Measurement of Mycotoxins in Patients with Chronic Rhinosinusitis (2011)

Medication Use and Risk of Non-Hodgkin's Lymphoma (2005)

The following paper was also added to our website:

Toxic-Metabolite-Producing Bacteria and Fungus in an Indoor Environment (2001)

Researchers Find Shortage of Oxygen in Lungs after Invasion of Mold

Researchers led by Montana State University have found a surprising condition that occurs in the lungs after an invasion of a common mold that can cause deadly infections in humans.

In the most oxygen-rich environment in the body -- the lungs -- the scientists discovered a shortage of oxygen. The shortage resulted from inflammation and invasive growth of the mold, which greatly reduced the oxygen available to the pathogenic mold *Aspergillus fumigatus*.

The mold is generally found in hay, soils and compost piles and can cause a variety of lung infections when inhaled by humans. The most lethal of those infections is invasive aspergillosis, which can kill 30 to 90 percent of its victims depending on the patient population.

"We think this (the lack of oxygen) is a really big stress on the pathogen," said Nora Grahl, a doctoral candidate at MSU.

Based in Dr. Robert Cramer's laboratory in MSU's Department of Immunology and Infectious Diseases, the study was the first to show a strong link between hypoxia, or low oxygen levels in the lungs, and fungal infections, Grahl said.

The study was conducted in mice and showed a variety of ways that the lungs and mold respond to each other. The scientists noted, for example, that low levels of oxygen are just one of many challenges that mold has to overcome before it can cause a lung infection. When the shortage occurs, though, microbes may adapt through fermentation or other changes in metabolism. An important finding of the study was that the mold's fermentation could also influence the host immune response to the pathogen.

<u>Surprising Condition Occurs in Lungs after an Invasion of Mold, Study Shows</u>

See Mold Can Be Found All Over the School on page 2

Mold Can be Found All Over the School

The resurfacing of news about past contamination at Mount Greylock Regional High School has triggered growing concerns about health issues at the decaying school now, something school officials hope will lead to solutions.

Perchlorate, a chemical used in fireworks, was discovered in the school's water in 2004; the school shuttled in bottled water for two years until it received a \$300,000 grant to drill a new well and build pumps and pipes to the school.

Now, seven years later, some residents are still wondering if that perchlorate has caused cancerdespite no known linkage.

School officials have shifted their focus from a brandnew building to constructing a hybrid school that preserves the most recent \$1.5 million in repairs.

That statement also outlines many of the health issues that school currently faces.

School officials often close off and clean classrooms because of mold infestations. In one room, a partition that separated the space into two classrooms had to be removed because of extensive mold. Mold can be found all over the school.

School Committee Chairman Robert Ericson said that while rebuilding the locker rooms, contractors found seven univents that had never been cleaned and were filled with mold. There was so much mold, that ventilation system technicians refused to work in the area until it was cleaned.

"It was filled with dirt, mold, bugs and all sorts of things," Ericson said. "The engineer took one look at it and said they would not install anything in that condition."

Adding to the mold, groundwater bubbles up through the school's floor tiles and the tiles are continuously replaced.

Health Concerns Resurface at Mt. Greylock Regional



Damaged ceiling tiles at Mount Greylock Regional High School in Williamstown, Massachusetts

Mould Causing "Horrendous" Skin Condition (U.K.)

Mouldy walls in an Arun council property (in the U.K.) have given the tenant breathing difficulties and a "horrendous" skin condition, she claims.

Asthmatic Clare Timms, 44, of Helyers Green, Wick, says her health problems have been added to by "out-of-control" anti-social behaviour in the area.

Clare suffers from a debilitating spinal injury as a result of a car crash more than 19 years ago.

As well as battling on a day-by-day basis against constant pain, she is fighting severe anxiety and a situation, which she has described as "terrifying at best".

She claimed that her flat, where she has lived for more than 20 months, was "over-run" with mould.

A tearful Clare said: "This place is hell on earth and I'm close to breaking point.

"The mould has given me a horrendous skin condition and has affected my lungs to the point where at times, it becomes difficult to breath.

<u>Wick Woman Said Home is Causing her "Horrendous"</u> Problems

How to Build a Cancer Fighting House

How much of a role does your home play in your risk of cancer? Quite a bit, according to Ohio State's Steven Clinton who teamed up with cancer survivor Charles Ruma of Virginia Homes to build a house, auction it, and donate the proceeds to fund cancer research.

Here are some of the highlights of the house:

- All the air that comes into the house is extensively cleaned with a filtration system. This tech is used in hospitals and intensive care units, and it eliminates 99.9% of allergens, germs, and bacteria within the home. This is particularly important for treatment patients with compromised immune systems. The simple plug-in goes into the HVAC system.
- Carpets and insulation are formaldehyde-free. Hardwood floors are made of bamboo, an easy-toclean natural product that doesn't emit toxic chemicals.
- The wood products and paints have very low levels of volatile organic compounds (VOCs). According to the EPA, high levels of VOCs can cause irritation, damage to the liver, kidney and central nervous systems, and some are known or suspected to cause cancer.
- 4. Space is dedicated for a home gym to encourage exercise and a garden for growing fruits and vegetables.
- 5. The kitchen is equipped with a built-in steam convection oven that cooks food while preserving the nutrients that might be cancer fighting.

"When you look at that one thing at a time it may not seem like too much, but when you put them all together, there really is such a thing as composing a healthy lifestyle," Clinton says. "All of these together, I think make this a place where any family is going to be able to live a very healthy and productive life."

How to Build a Cancer Fighting House



Healthy House built in Dublin, Ohio.

The house was sold at auction for \$400,000, and the proceeds will be used for cancer research.

Mold Exposure in Infancy Raises Asthma Risk

Infants raised in a home with moldy areas may be more likely to develop childhood asthma.

A new study shows that infants who lived in moldy homes were nearly three times more likely to have childhood asthma by age 7.

"Early life exposure to mold seems to play a critical role in childhood asthma development," researcher Tina Reponen, PhD, professor of environmental health at the University of Cincinnati, says in a news release.

"This study should motivate expectant parents-especially if they have a family history of allergy or asthma -- to correct water damage and reduce the mold burden in their homes to protect the respiratory health of their children," Reponen says.

Mold exposure in the home was measured using EPA standards, and the children were evaluated for asthma at age 7.

The results showed that 18% of the children had childhood asthma by age 7. Children who lived in a home rated as having a high level of mold during the first year of life were 2.6 times more likely to have asthma as those who lived in homes with a low level of mold.

Mold Exposure in Infancy Raises Asthma Risk

Member Profile: Dr. Scott McMahon

Scott McMahon, MD, has been a practicing physician for nearly 20 years. Dr. McMahon completed his medical training at Creighton University School of Medicine and his residency at Duke University Medical Center. He has been in private practice pediatrics in Roswell, New Mexico, since 1992, and helping "mold" patients since 2009.

Dr. McMahon was serendipitously introduced to mold via 14 students and a former teacher all hailing from one local high school and all suffering from similar symptoms. At that time, he consulted with Dr. Ritchie Shoemaker who graciously "showed him the ropes." Astounded by the similarity of symptomatology, amazed by the multi-system involvement (especially in children) and impressed by the number of positive biomarkers, Dr. McMahon understood that mold-related illness was real and that potentially thousands of suffering persons were living in his city. He is now attempting to teach his local medical community and patients the truth about mold.

Dr. McMahon became involved in ACHEMMIC and helped in the transition to GIHN. He currently sits on GIHN's Board of Directors. He was a co-author on the POA position paper regarding exposure to indoor mold and is the senior author of GIHN's Position Paper on Indoor Toxins (currently in the review process.)

Dr. McMahon is also active outside of medicine. He is a devoted Christian, a family man with a loving wife and 4 children (5th on the way), a pastor, speaker, educator and author. He has organized 9 mission/church trips to Mexico, Uganda and Nigeria over the last 6 years and met his beautiful wife, Mary, during one of those adventures.

Dr. McMahon currently sees adult and pediatric mold patients full-time. While progress can be slow, he has seen amazing recoveries in around 90% of his patients who are compliant with the therapy protocols. He believes that hope is just around the corner for most sufferers of chronic fatigue!

Dr. McMahon will soon have a website. To schedule an appointment with his office, call 575-627-5571.



Scott and Mary McMahon

Austin (Texas) High School Mold Outbreak

High summer temperatures and humidity recently caused an outbreak of mold at Austin High School that led to an inspection by the Texas Department of State Health Services.

According to the district's official statement on the mold situation, the outbreak was caused by maintenance work at the school, which shut down the air conditioning for a short period.

"Over the summer, Austin High School replaced its air conditioning towers. As a result, there were some interruptions in air conditioning services and during this time one of the three chillers had to be used to cool the building," said Mary Ellen Edge, Austin High School's principal. "The air conditioning towers were replaced, chillers were repaired and all three chillers were fully operational by Monday, August 1. A professional HVAC contractor, Fort Bend Mechanical, is working closely with FBISD Auxiliary Services to closely monitor the building temperatures and humidity levels to ensure the air conditioning system continues to work properly."

On August 4, a representative from the Department of state Health Services performed a mold project inspection on the high school after someone filed a complaint.

Austin High School Outbreak of Mold

Ironton Social Security Administration Office Closes Due to Mold Problems

In the November 19, 2010, GIHN Newsletter, we included an article about mold problems in the Social Security Administration office in Ironton, Ohio. They finally made the decision to close the office. Check out the latest article:

More than two years after union members started rallying to have the Ironton Social Security office shut down for mold problems, the agency announced Monday that the office would close until a new facility could be completed.

The SSA issued a press release Monday stating that the Ironton office, located at 405 S. Third St., will be closed and its employees will work at other area offices until the new facility, located at 611 Vernon St., is completed in November. Construction was begun in September 2010.

Members of the American Federation of Government Employees Local 3448 had been at odds with SSA and General Services Administration, which acts as the federal government's real estate manager and leases space for the SSA, since employees in the office discovered mold in the summer of 2009.

Neither the SSA nor GSA denied that mold exists in the facility, but the debate was whether the mold was causing an unsafe work environment for employees and posing a danger to the public.

Carmen Moreno, regional communications director for the SSA, said the closure comes after the discovery of new mold found in the office about a week and a half ago and is an act of an "abundance of caution."

Moreno said the SSA felt the best way to address the issue was to close the office until the new facility was completed.

Rick Hanna, vice president of the AFGE, said the union was notified Friday evening of the closure.



Ironton, Ohio, SSA Office is now closed

Ironton Social Security Administration Office Closes Over Mold (continued)

"This is a great, great win," Hanna said. "The big thing is, we're getting them out. They are going to offices that are closest to them. The agency is also paying for any additional expenses and time it's taking them to get to the other offices."

Although the union is celebrating the closure as a victory, they are still questioning why it took the SSA more than two years to take action.

David Sheagley, president of the union, said in a press release that was issued Monday, the mold was not a minor issue.

"Employees at the Ironton Social Security office have had to work in a building infested with mold for more than two years, and many have developed eye, throat and respiratory irritations, Sheagley said in the release. "We've been fighting with SSA management to get this facility shut down for two years. Although we are pleased the agency has taken notice, it's a travesty that employees have had to suffer through two years of breathing mold-infested air due to inaction by SSA leadership."

In June, Sheagley and Hanna visited the office and filed a group grievance. Previously, nine out of 11 union workers filed individual worker's compensation claims due to the mold. They also encouraged employees to file presidential inquiries on the White House website.

Ironton SSA Office Closes Over Mold

Family of Dead 67-Year-Old Woman Blame Moldy Living Conditions

The family of a churchgoing South Bronx grandmother who died last month of lung cancer is slamming the city agency responsible for her rotting, unhealthy apartment.

Maria Vasquez passed away June 10 after begging the New York City Housing Authority (NYCHA) for lasting repairs and a transfer to another apartment.

Vasquez's doctor at Memorial Sloan-Kettering Cancer Center had warned the NYCHA to act.

Her family said the "terrible" condition of her apartment made her disease worse.

The 67-year-old nonsmoker developed breathing problems about five years ago, when leaky plumbing first ravaged the bedroom and bathroom walls of her unit at the Morris Houses in Morrisania, her family claims.

Last month, the Daily News reported that many NYCHA tenants wait years for repairs because of the agency's severe backlog. There are nearly 200 open work orders at the Morris Houses, said a NYCHA spokeswoman, adding that Vazquez's unit has been newly plastered and was slated to be painted this month.

Vasquez slept on a hospital cot in her living room to escape the noxious fumes in her bedroom and stayed overnight with her sons, who couldn't afford to move her out of public housing.

NYCHA workers attempted to repair the moldy walls several times, slapping on paint and plaster, but failed to solve the plumbing problem, her family said.

<u>Family of Dead 67-Year-Old Woman Blame Moldy</u> <u>Living Conditions</u>

Next Newsletter: Friday, August 26, 2011



Family members of Maria Vasquez.

Maria died in moldy housing in New York.

Mold Cleanup Underway at Santa Barbara School

The rush is on to cleanup mold in portable classrooms at Washington School, located on the Mesa.

The Santa Barbara Unified School District Board of Trustees unanimously approved funding for the project during Tuesday night's meeting.

Concerned parents have been pressuring district officials for months to make sure the entire campus is free of mold and even though they are happy the work is finally underway, some say it may be too little too late.

A group known as PEPS, "Parents for Excellence in Education" is not quite ready to give the district a passing grade. In a letter to the Board of Trustees, "PEPS" has requested the contractor have IICRC certification, a level of credentialing that the group feels is important. The concerned parents do not believe the district is taking their advice and believe school officials are more worried about speed rather than quality.

Mold Cleanup at Washington School

Quick Links

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