

GLOBAL INDOOR HEALTH NETWORK

"WORKING TOGETHER FOR HEALTHY INDOOR ENVIRONMENTS"

<http://globalindoorhealthnetwork.com>

Inside This Issue

- 1 GIHN New Member
- 1 Monmouth AM (U.K.) Backs School Asbestos Campaign
- 1 GIHN Position Statement—two corrections
- 2 Silent Killer: Radon in Iowa Schools and Homes
- 3 Merchants Battling Growing Mold Menace after Superstorm Sandy
- 3 Flooded Homes Harbor Health Threat
- 4 Member Profile: Benedikt Sigurjónsson
- 4 Education Suffering from Bad Air Quality in Classrooms (Austria)
- 5 The Basics of Post-Sandy Asbestos Exposure (and other contaminants)
- 6 The Basics of Post-Sandy Asbestos Exposure (and other contaminants)—continued
- 6 School Principal Resigns in Connection with Mold Concerns
- 6 Quick Links

GIHN New Member

Sharon Malone lives in LaMarque, Texas. She is ill due to mold exposure in her workplace over the past few years. She is now disabled, but she is continuing to learn about indoor environmental health and wants to share her experience and to provide encouragement to others.

Please join me in welcoming Sharon Malone.

Monmouth AM (U.K.) Backs School Asbestos Campaign

A Monmouthshire AM (U.K.) is backing a new campaign to give parents in Wales the right to know in which school buildings asbestos is present.

The Right to Know: Asbestos in Schools Wales campaign was launched after the recent alert at Cwmcarn High School.

[Monmouth AM Backs School Asbestos Campaign](#)

GIHN Position Statement—two corrections

We recently discovered there were two small errors in our Position Statement. There were two places where a statement was inadvertently attributed to an official with the U.S. EPA, but that statement came from an article about a presentation made by a Senior Programme Official in Ghana. We have made those two small corrections (on pages iii and 2) and have added a disclosure statement on the top of that page on our website. Although we did not send out any hard copies of our paper and only referred everyone to our website, we will be communicating this change as appropriate. To obtain the revised copy of the paper, go to:

http://globalindoorhealthnetwork.com/files/GIHN_position_statement_Revised_10_26_2012.pdf

As a reminder, this is a position statement (not a peer-reviewed, published research paper). There is a distinct difference between "position statements" and "peer-reviewed, published research papers." There are different criteria for each of these formats. An organization writes and publishes its position statement without outside review. In contrast, peer-reviewed research papers are required to meet specific criteria and are reviewed by outside parties who are credentialed in the subject matter being addressed. As the name clearly states, this is a "Position Statement" for GIHN.

Position statements can be brief and without references, or they can be more formal. For GIHN's Position Statement, we took a more formal approach. We included citations for key statements, facts and statistics. We also included 240 references and several additional components in the paper.

When we submit our paper to a peer-reviewed journal, we will follow the more rigorous requirements used for those types of papers. In anticipation of that process, we made sure that our position statement was written only by credentialed experts.

See *Radon in Iowa Schools and Homes* on page 2

Silent Killer: Radon in Iowa Schools and Homes

You send your children to school, assuming they will be reasonably safe. So, why is a middle school principal on a mission to warn all parents about a potential health hazard to Iowa students?

Steph Langstraat is like a breath of fresh air. Taking the awkwardness and anxiety that can fill a middle school and replacing them with confidence and fun. Ms. Langstraat is tough, but fair.

One of this principal's greatest passions, aside from students, is the learning environment at Prairie City-Monroe Middle School.

"A safe place", says Langstraat, "A safe place to breathe, a safe place in general to spend most of their day outside of their parents' care."

So, Ms. Langstraat is excited to show off the school's new set of plastic tubes. District officials hired a company to install them, after tests detected tiny amounts of something potentially hazardous, potentially deadly, seeping up through the foundation into the classrooms and halls.

Langstraat explains, "Based on our testing, we're safe here, but this is something that the district has decided hey, look, this is a big deal, we want to make sure our kids are safe."

Safe from the effects of radon.

"What is it and why would that cause lung cancer?" asked Langstraat. "Um, can it go away? Can we get rid of it? I just immediately wanted to know."

It started eons ago, when glaciers moved across North America. They deposited nutrients that enriched the soil that grows our food. The glaciers also brought a threat to our homes.

Iowa has the highest uranium concentration in the nation. As uranium breaks down it releases radon gas that has potential to cause lung cancer. The gas rises up through an estimated three-quarters of the homes and building foundations in Iowa.



Silent Killer: Radon in Iowa Schools and Homes (continued)

Testing is the only way to detect radon. It can cost a few hundred dollars. Neighbors heating and cooling is installing a dozen units to pump the gas from below the middle school's foundation. The system costs about \$20,000, but it promises to send the gas up the pipes and safely out through the roof. Like a sump pump for air, instead of water.

New construction is especially at risk says Rasmusson, "The problem with new construction is the homes and buildings are built tighter to keep the heat and the air inside and when you do that, you also keep the Radon inside."

Ms. Langstraat is truly grateful for the improvements.

"You know, of all people, I'm the one that's stuck here with lung cancer and as my mom has said, 'Well, why not you?'" she says.

For starters, she has never smoked, hardly been around smoke. She grew up healthy, even played college softball.

"Other than my mom with breast cancer, nobody in my family really has cancer, period, lung cancer, especially," says Langstraat.

That's precisely why doctors assume Steph is one of the 21,000 U.S. cancer patients each year whose carcinoma can be traced back to radon.

"It is a fact," says Dr. Voynov, a Radiation Oncologist at Mercy Medical Center. "It is a fact. We don't know to what extent."

[Silent Killer: Radon in Iowa Schools and Homes](#)

See *Merchants Battling Growing Mold* on page 3

Merchants Battling Growing Mold Menace after Superstorm Sandy

The devastated business owners who saw their South Street Seaport stores destroyed by Hurricane Sandy are under attack again — by thick green mold that has infested their once-bustling shops.

Workers in hazmat suits and surgical masks yesterday pulled large clods of the dangerous green growth from buildings in the low-lying area, which residents said suffered 10-foot storm surges.

“Fungus is everywhere. There was bad mold — it was green, an inch thick . . . I lost everything,” said a shaken Shawn Makani, owner of Cafe on the Pier, who plans to reopen.

We have to wear masks to protect ourselves. It’s dangerous,” said a worker who hauled moldy debris from the Abercrombie & Fitch on Water Street.

Mold growth isn’t covered by city health rules, but the Department of Health and Mental Hygiene has published guidelines for its removal.

The DOH suggests yanking out mold-infested sheetrock and wooden flooring and using blow-dryers to stop its growth in concrete and other materials.

Businesses in the neighborhood appeared to be following the city guidelines.

“I think the small businesses have done everything that needs to be done,” said Robert LaValva, who runs a food market at the old Fulton Fish Market building. “Everything that got soaked is being removed.”

The neighborhood’s oldest buildings — some of which date to the early 1800s — weathered the storm better than the Financial District office buildings nearby on Water Street, some of which will be closed for months.

To read the entire article:

[Merchants Battling Growing Mold Menace after Superstorm Sandy](#)



Flooded Homes Harbor Health Threat

Hurricane Sandy left many ugly reminders of her unwelcome visit to the Jersey Shore: docks and decks ripped away from bay-front homes, damaged appliances and destroyed possessions, and the residue of toxic flood water on roads, sidewalks and lawns.

But the ugliest reminder is one just beginning to appear. It can’t be seen from the street, the way piles of soaked carpeting, sodden mattresses and ruined keepsakes can.

What is it? It’s mold, a four-letter word with which many Jersey Shore property owners are about to become unhappily acquainted.

“The biggest danger is not mold you can see, but what you can’t see in the walls.”

“Mold will grow in three days, that’s the incubation period,” Isabell said. “In seven days, you can see mold on the underside of things.”

The Institute of Inspection Cleaning and Restoration Certification (IICRC) classifies water damage into three categories. As all black water presents the risk of serious illness, protective measures should be taken when encountering it. At minimum, eye protection, gloves and boots, or shoe covers, should be worn. Waterproof coveralls and respirators may also be appropriate protective equipment to use when treating damage from black water.

[Flooded Homes Harbor Health Threat](#)

To read about the CO2 threat in flooded homes, go to:

[CDC—Carbon Monoxide Exposures Reported to Poison Centers and Related to Hurricane Sandy](#)

See *Member Profile: Benedikt Sigurjónsson* on page 4

Member Profile: Benedikt Sigurjónsson

My name is Benedikt Porri Sigurjónsson, and I was born and raised in a very small town called Husavik on the north coast of Iceland. I have a BA degree in economics and am currently enrolled in the University of Iceland in an MSc programme in health economics, expecting to graduate next spring. My research project for the MSc is about the causality of dampness/mold and ill health using data from Iceland (yes, I want to try to establish the causal relationship). I am writing in English and hopefully you will be able to read it someday in a peer-reviewed journal.

This autumn I took a pause from the courses and now I am based at the World Health Organization (WHO) European Centre for Environmental Health in Bonn, Germany, as an intern. There, among other things, I am working with Matthias Braubach (see for example an article about CO poisoning in Europe in the November issue of Indoor Air) of the Housing and Health unit of the Environmental Exposures and Risks programme.

My father is a dentist and my mother is a lawyer. They operate an accommodation service in Husavik (cottages.is) and strive to have their cottages with good IAQ, so they should be fit for members of GIHN. I have two older sisters. One is a lawyer and the other is a certified housing inspector and is registered in an MPH programme at the University of Iceland and, of course, she is a member of GIHN (and her story could fill a couple of issues of the GIHN newsletter). We are all very engaged in the healthy indoor environment and all family dinners usually go into discussion of mold, dampness, etc.

We are also founding members of IcelAQ, the Icelandic chapter of ISIAQ, and held a conference, as an inauguration event, last spring on indoor air quality. This was the first conference specifically related to the indoor environment in Iceland. Among the speakers were doctors, engineers, key players from the building industry and authorities and institutions related to building construction and safety. The authorities, and the general public, were completely ignorant about these issues until a few years ago. They are now slowly but surely catching up.



Benedikt Sigurjonsson (on the left) with his friend Olupot Michael when he lived in Soroti, Uganda in 2010

Education Suffering from Bad Air Quality in Classrooms (Austria)

A recent investigation of 1,000 Austrian classrooms has revealed that the air is too dry, too warm and laden with CO₂. The investigation was carried out by Environmental Hygiene Expert Hans-Peter Hutter and his team at the Medical University of Vienna.

Hutter commented on the negative effect of such a classroom environment, stating that poor air quality decreased the motivation of both teachers and students. The results (of tests) showed that in over half of the classrooms (54.4 per cent) the recommended level of one part of CO₂ to every million parts of air (1000ppm) was exceeded.

The findings have caused great concern and the Ministry of Education and MeineRaumluft.at who have launched a competition to develop students' ideas for improving the situation. "Through this competition, the children will become more aware of their own health and think about solving problems. Their creativity is at the forefront of the competition and our aim is to make children see that health awareness can also be fun."

In addition to the schools experiment, the organisation also placed gauges in over 1,000 offices, apartments, hotel, restaurants and even public buildings. A third had high levels of CO₂.

[Educating Suffering from Bad Room Air in Classes](#)

See *Basics of Post-Sandy Exposure* on page 5

The Basics of Post-Sandy Asbestos Exposure (and other contaminants)

The day after Sandy hit the East Coast, thousands of volunteers and locals had already rallied, many to work (often ad hoc) on cleanup efforts of damaged buildings. "It's analogous to what happened at the Trade Center," says Raja Flores, MD, chief of Thoracic Surgery at The Mount Sinai Medical Center, where he and his colleagues have for years been tracking some 30,000 9/11 relief workers. **"You've got all these innocent people trying to help, and they're subjecting themselves to asbestos, a known carcinogen."**

Asbestos is indeed toxic; inhaling it raises your risk of developing a variety of lung diseases, among them lung cancer and mesothelioma. Nationwide, as many as 35 million homes, schools, and businesses may be contaminated with asbestos vermiculite alone, according to one Environmental Protection Agency report. (That asbestos ban you've heard about? It was largely overturned in 1991.)

Government agencies are taking the hazard seriously. Since the storm, the United States Department of Labor's Occupational Safety and Health Administration has tasked 60 ground personnel with the job of teaching workers and residents how to protect themselves against what it terms major environmental toxins, among them asbestos, according to a department of labor spokesperson.

Even so, in some cases word has been slow to get out. "The information isn't always there yet," says Jon Rose, whose nonprofit Waves for Water has been connecting existing volunteer programs to supplies and areas of needs. "It's not an issue of neglect, but there's such an aftermath to this. The scale and scope is just so great."

Most asbestos exposure happens through inhalation. When it's wet, as much was immediately following the storm, it can be relatively safe. However, some asbestos was presumably also burning. "There were multiple and prolonged fires," says Flores. "This means that even in those early days asbestos was likely sent out into the air."

When asbestos stays where it's supposed to be (inside your walls or pipes or roof shingles, for example) it's believed to be quite safe.



Crews cleaning up damage caused by Superstorm Sandy

The Basics of Post-Sandy Asbestos Exposure (and other contaminants)--continued

The danger arises when it's disturbed, a catch term for when it's been jostled such that its tiny, sharp fibers become dislodged and float into the air. From there, they can enter a person's lungs and become trapped, possibly leading first to internal scarring and inflammation, later to a variety of diseases.

Asbestos may be invisible, but reports of thick, dark mold infesting homes, businesses, and neighborhoods are vivid enough. "Mold is a very big concern post-Sandy," says Michael Reilly, DrPH, MPH, director of the Division of Planning and Response at the National Center for Disaster Preparedness and an assistant professor of Clinical Environmental Health Sciences at Columbia University's Mailman School of Public Health. "Spores can become airborne if disturbed, and when they get into your lungs they can lead to respiratory problems, pneumonia and serious infections. People end up quite ill."

Even more troubling may be floodwater that's been let stand since the storm. The Gowanus canal near Red Hook in Brooklyn, for example, was already a federal Superfund site from years of dumping, and following the storm it made its way into houses and streets. "It's highly contaminated with hydrocarbons and volatile organic chemicals, and now raw sewage, which flooded into the water when we lost power in the treatment plants," says Reilly. "The EPA has done samplings of housing projects and buildings out there and found incredibly [high levels of bacteria](#)."

...continued on page 6...

See *Basics of Post-Sandy (cont'd)* on page 6

The Basics of Post-Sandy Asbestos Exposure (and other contaminants)--continued

Still, there are always ways to protect yourself.

"Whether you're a professional, a homeowner, business owner, or volunteer, wear a hard hat, goggles, heavy work gloves, and water-tight boots with steel toes and insoles for cleanup work," said Christopher J. Portier, director of the Centers for Disease Control and Prevention's National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry. Add to that a mask, ideally an N95-type respirator (less daunting than it sounds). Because toxins can get on your clothes, change them (ideally, leaving them where you've been working) and shower when you stop for the day.

Also, get a tetanus shot. "We're seeing countless residents and volunteers who've stepped on nails or pieces of metal, and even more who've gotten tiny cuts and scrapes," says Reilly. "In an area that's so polluted, one small sore like that can and does put you at risk for a serious infection." If it's been more than ten years since your last booster, you're due.

Should you see extensive mold, or suspect asbestos (which should always be hosed down and double bagged) or toxic water, never handle it yourself. Always call an expert. Run a dehumidifier in any room that's flooded, and wear gloves plus a mask if you're scrubbing small amounts of mold off walls. Wear gloves, too, when sorting clothing donations, and discard wet items; they may have been exposed to mold or flood water. "If you have questions and see people with heavy machinery who are dressing the part, ask them," says Reilly. "Firefighters and other first responders are taught how to assess and handle toxic materials."

To read the entire article:

[The Basics of Post-Sandy Asbestos Exposure \(and other contaminants\)](#)

Next Newsletter: January 1, 2013



Stock photo showing Principal Hartley Gibbons (on the left)

School Principal Resigns in Connection with Mold Concerns

A principal who was escorted out of a Richmond County Board of Education meeting Tuesday night has announced his retirement.

Parents say they are scared. School police were called in when we tried to ask questions about mold concerns at the school.

"You can't be on the premises of the school. Don't record me," said the officer. "You need to go to the sidewalk."

The tense moments came after retiring school Principal Gibbons pounded the pavement outside the Board of Education to raise awareness about the issue.

"There is a stifling odor," said parent Joyce Munford. "And then I looked at teachers with the masks on."

"Teachers are wearing masks?" we asked.

[School Principal Resigns](#)

Quick Links:

Website: <http://globalindoorhealthnetwork.com>

Members:
<http://globalindoorhealthnetwork.com/members.html>

Working Together for Healthy Indoor Environments