### GLOBAL INDOOR HEALTH NETWORK

"WORKING TOGETHER FOR HEALTHY INDOOR ENVIRONMENTS"

http://globalindoorhealthnetwork.com

#### **Inside This Issue**

- 1 OSHA Proposes New Rule about Crystalline Silica
- 1 GIHN New Members
- 1 GIHN Membership Application Process
- 2 Inhalation Effects of T-2 and Related Mycotoxins (1985 Research Study funded by the U.S. Army)
- 3 World Medical Association (WMA) Issues Statement on Fungal Disease Diagnosis and Management
- 3 Poisoned at work (Jamaica)
- Parents, Students Concerned About Asbestos
   Removal at Chapel Hill High School
- 4 Facing Lawsuits Over Deadly Asbestos, Georgia Pacific Corp Launched Secretive Research Program (Learn more about "Big Business and the Big Lie Strategy")
- 5 Quebec Government Investing \$400 Million for Clean Schools
- 5 Grambling State Football Team Refuses to Play Due to Horrible Conditions
- 6 A Year After Sandy, Mold a Lingering Problem
- 6 Former Prosecutor Settles Her Mold Lawsuit (Mold in Sinus Matches Mold in Courthouse)
- 6 Quick Links

# OSHA Proposes New Rule about Crystalline Silica

Inhalation of very small (respirable) crystalline silica particles puts workers at risk for silicosis, lung cancer, chronic obstructive pulmonary disease (COPD), and kidney disease. OSHA recently released a proposed rule to protect workers exposed to respirable crystalline silica.

This is a proposal, not a final rule. OSHA encourages the public to participate in development of the rule by submitting comments and participating in public hearings. Deadline is December 11, 2013.

#### **GIHN New Members**

We have four new members this month.

Cedric Cheong lives in Australia. He is the Managing Director of Mycologia Pty Ltd. He has visited various research centres in the Netherlands, Finland, Singapore, Canada and the USA. Cedric was the co-host of the SBS Scientific makeover television program, "Is Your House Killing You?" where Australian families were invited to take up the challenge of 'detoxifying' their homes.

Dan J.P. Ciernia lives in Arizona. He is a multiple Emmy award-winning director, producer and writer. Dan and his wife, Felice (another new member of GIHN), are working together to raise awareness about this illness through the creation of educational and informational resources.

Felice Ciernia lives in Arizona. Felice is ill due to exposure to chemicals, mold and mycotoxins at her place of employment and had to leave her 34-year career in the financial industry.

Naziha Hassanein, Ph.D. lives in Cairo, Egypt. She is a professor at Ain Shams University, Faculty of Science, Department of Microbiology in Egypt. Dr. Hassanein is Vice Chairman of the Microbiology Department and Chairman of the Mycology Unit. She has published research papers on this topic.

Please join me in welcoming our new members to GIHN.

#### **GIHN Membership Application Process**

Individuals and businesses can request an application for membership by going to our website and completing the form on the <u>Contact Us</u> page. They will receive a copy of our Code of Conduct and Conflict of Interest Policy. If they agree with our policies, then they complete the Membership Application and submit it via email. As a reminder, membership requests will not be approved for individuals or organizations that are primarily in the business of selling products.

# Inhalation Effects of T-2 and Related Mycotoxins (1985 Research Study)

The insurance industry, defense experts and other naysayers like to say that you can't get sick from mycotoxins unless you eat them. That statement is false!! The <u>following excerpts</u> are from a 1985 research study funded by the U.S. Army.

Swine and rats have been used to assess the effects of exposure to T-2 toxin. Acute systemic T-2 toxicosis is a cardiovascular shock syndrome characterized by reductions in cardiac output and blood pressure and increased plasma concentrations of epinephrine, norepinephrine, thromboxane B, 6-keto- PGF,9, and lactate. An initial leukocytosis is followed by a leukopenia Serum-bound calcium concentrations decrease, while magnesium, phospthorus, and potassium Increase. There was greater variation in the levels of selected cardiac bulk electrolytes of rats dosed with T-2 toxin than in control animals. In swine, myocardial, brain, renal, splenic, and pancreatic blood flow decreased, while that of the adrenals, liver, and gastrointestinal tract was increased or not affected following T-2 toxin administration.

Sublethal and/or lethal intravenous Injections of T-2 toxin produce heart and pancreatic lesions, in addition to the well-documented radiomimetic lesions. Grossly, there are subendocardial hemorrhages, pinpoint white foci in the myocardium, and pancreatic edema. Microscopic and ultrastructural changes in the heart include myofiber degeneration, vacuolization, necrosis, and mineralization with formation of hypercontraction bands. Pancreatic changes consist of acinar degeneration and necrosis which progress to a diffuse suppurative necrotizing pancreatitis.

toxin, diacetoxyscirpenol (DAS), and deoxynivalenol (DON), common trichothecene fungal toxins. According to a previous study, it was estimated that the pigs retained approximately 1/3 of the amount of nebulized toxin. Acute toxicosis from T-2 and DAS is a cardiovascular shock syndrome similar to, but distinct from, that of an endotoxin. The syndrome is similar following exposure by oral, inhalation, or intravascular routes.

Swine and rats were used to study toxic effects of T-2

The syndrome is similar following exposure by oral, inhalation, or intravascular routes.

### Inhalation Effects of T-2 and Related Mycotoxins (1985 Research Study)—cont'd

The pathologic effects of T-2 toxicosis were evaluated in 8 pigs. They were administered T-2 toxin in intravenous doses of 0.0 mg/kg (2 pigs) and 0.6 mg/kg (6 pigs) dissolved in 2.5 mL of 50 percent ethanol and were killed 24 and 48 hours later. On gross examination, pancreatic edema, multifocal subendocardial hemorrhages, and pinpoint white foci were present scattered throughout the myocardium of one pig killed at 48 hours. Myofiber degeneration and necrosis with contraction bands were seen in all T-2-dosed pigs, mainly in the subendocardial region. Although the lesions were present throughout the heart, they were predominant in the atria, papillary muscles of the left ventricle and lower left and upper right ventricles. In addition, myofiber vacuolization was another morphological alteration observed in some affected muscle bundles. Vacuolization was more often detected in papillary muscles of the left ventricle. Ultrastructural changes consisted of areas of sarcoplasmic edema with myofibrillar disorganization and loss of Z and M bands, as well as glycogen accumulation in mildly affected myocytes. In severely damaged myocytes, hypercontraction bands with myofibrillar, lysis or marked distension of sarcoplasmic reticulum with myofibrillar lysis was evident.

Pancreatic changes consisted of multifocal acinar degeneration and necrosis. These changes became a suppurative necrotizing pancreatitis in the pigs killed at 48 hours. Early ultrastructual changes consisted of dilation of the membranous portion of the rough endoplasmic reticulum and disorganization, as well as mitochondrial swelling and loss of cristae.

Click here to read the entire 480-page report.

# World Medical Association (WMA) Issues Statement on Fungal Disease Diagnosis and Management

October 29, 2013. At their 64th General Assembly in Brazil, the World Medical Association (WMA) adopted a statement on Fungal Disease Diagnosis and Management. The statement reads:

The WMA stresses the need to support the diagnosis and management of fungal diseases and urges national governments to ensure that both diagnostic tests and antifungal therapies are available for their populations. Depending on the prevalence of fungal diseases and their underlying conditions, specific antigen testing or microscopy and culture are essential. These tests, and personnel trained to administer and interpret the tests, should be available in all countries where systemic fungal infections occur. This will likely include developing at least one diagnostic centre of excellence with a sufficient staff of trained diagnostic personnel. Monitoring for antifungal toxicities should be available.

Physicians will be the first point of contact for most patients with a fungal infection and should be sufficiently educated about the topic in order to ensure an effective diagnostic approach.

The WMA encourages its members to undertake and support epidemiologic studies on the burden of fungal disease in their country and to inform the national government of the results.

The proposal to the WMA was prepared by Professor Arnaldo from Sao Paulo who commented:

"This is the first time that the World Medical Association had considered the size and severity of the problem of fungal disease. Their proposal to ensure that essential diagnostic tests done by trained personnel in all countries is critical to ensuring better patient care."

Click here to read the official statement by the WMA.

As noted in the WMA's statement: Invasive and chronic fungal diseases lead to estimated annual morbidity rates that are similar to global health concerns such as malaria and tuberculosis.



World Medical
Association



# Poisoned at Work (By Poor Indoor Air Quality)--Jamaica

Scores of Jamaicans are getting sick at work because of the poor quality of the air inside the buildings.

Employees who have experienced symptoms such as headaches, fatigue, trouble concentrating, and irritation of the eyes, nose, throat and lungs at work could all be facing poor indoor air quality.

However, the Jamaica Occupational Health Professionals' Association (JOHPA) notes that this is not unique to Jamaica.

"A growing body of scientific evidence has indicated that the air within buildings can be more seriously polluted than the outdoor air, even the largest and most industrialised cities," JOHPA said in a release last week.

Poisonous internal air quality and the effects on the health of employees over the long term will be the main focus of a JOHPA seminar this Wednesday.

This seminar will provide in-depth, up-to-date and relevant information and research on the present paradigm in building design operation and maintenance.

It will also focus on the alarming potential number of workers exposed to sick building syndrome (SBS), the economic impact of SBS for Jamaica, the spread of diseases in the working environment, and practical guidance for improving and maintaining the indoor environment.

Click <u>here</u> to read the entire article.

### Parents, Students Concerned About Asbestos Removal at Chapel Hill High School

The health of hundreds of students is under the microscope as Chapel Hill High School is dealing with asbestos and mold.

Mold was removed from this school just last month, which closed its library. Now, old floor tiles are the latest concern. Both are raising questions about one of the school system's oldest buildings.

The latest concerns started when photos started circulating among students at the school.

"The sign on the door showed that asbestos was in the classroom and it could potentially cause cancer and we weren't notified," said parent Robert Johnson.

The photo showed a classroom that was sealed off to students and staff for fear of asbestos contamination. As a precaution, work crews conducted air quality tests that showed no threat to students or staff.

"I think they should notify us more frequently, especially when it comes to asbestos," said Johnson. "They notified us of the mold issue with the library, but they didn't notify of this issue."

The school system said it issues a notice of asbestos containing materials at its schools every year but admits older school buildings like Chapel Hill High have become a problem.

"The current Chapel Hill High opened in 1966. It has become an expensive and challenging facility to sustain, as have many of our older buildings," said the district in a statement.

In the case of Chapel Hill High, it would cost the school system at least \$10 million to make a laundry list of repairs, and up to \$19 million to make repairs and new additions to the school. It would also cost \$47 million to tear down one of its oldest school buildings to make way for a new one.

Meanwhile, asbestos removal will continue on the weekends only, not when students are in school.

Click here to read the entire article.



### Facing Lawsuits Over Deadly Asbestos, Georgia-Pacific Corp Launched Secretive Research Program

In the spring of 2005, Georgia-Pacific Corp. found itself facing nearly \$1 billion in liability from a product it hadn't made in nearly three decades: a putty-like building material, known as joint compound, containing the cancer-causing mineral asbestos.

Named in more than 60,000 legal claims, Atlanta-based Georgia-Pacific sought salvation in a secret research program it launched in hopes of exonerating its product as a carcinogen, court records obtained by the Center for Public Integrity show. It hired consultants known for their defense work to conduct studies and publish the results, with input from the company's legal department — and is attempting to keep key information hidden from plaintiffs.

Under its research program, Georgia-Pacific paid 18 scientists a collective \$6 million, documents show. These experts were directed by Georgia-Pacific's longtime head of toxicology, who was "specially employed" by the company's in-house counsel to work on asbestos litigation and was under orders to hold "in the strictest confidence" all information generated.

This framework, taking a page from the tobacco industry playbook hatched years earlier, allowed Georgia-Pacific to control the science and claim all communications as privileged — not subject to discovery in litigation.

Click here to read the entire article.

Click <a href="here">here</a> to learn more about "Big Business and the Big Lie Strategy."

See Quebec Investing \$400 Million in Schools on page 5

### Quebec Government Investing \$400 Million for Clean Schools

After years of mounting concerns about air quality in schools across the province affecting students and teachers alike, the Quebec government has decided to invest more than \$400 million to repair or reconstruct dilapidated buildings — starting with the most severe cases of the Commission scolaire de Montreal.

At a news conference Friday, Education Minister Marie Malavoy, flanked by the Quebec government minister responsible for Montreal, Jean-François Lisée, said of all the issues she has had to deal with in her first year in office, the situation of schools infested with mould has been the most troubling.

"It has haunted me to know that children have had to go to schools where there's poor air quality or have had to be transferred elsewhere," Malavoy said. "I'm happy to say the Quebec government has taken the problem to heart and made the choice to invest massively in order to correct the problem."

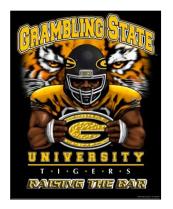
A total of \$46.5 million is available immediately, Malavoy said, to deal with the 19 schools in Quebec with severe mould problems, 16 of which are CSDM schools. Together, they welcome 10,000 students and 600 teachers plus other staff every school day.

At the top of the list is École Baril, in Hochelaga-Maisonneuve, one of three schools in the district where children have had to be transferred to classes elsewhere for two years running, and where two weeks ago, large-format photographs of children wearing gas masks hung in the school's windows to draw attention to the problem.

Malavoy pledged another \$30 million to go toward diagnosing and detecting air-quality problems in schools — so that the situation can never reach such disastrous proportions again. That includes a guide of best practices for schools to follow to maintain their buildings, and inspections of all Quebec schools, she said.

"We don't want to be back here in 10 years, facing a similar situation," Malavoy said. "We won't be passing the buck between the education ministry and the school boards. We will work together to prevent and to correct problems."

Click <u>here</u> to read the entire article.



### Grambling State Football Team Refuses to Play Due to Horrible Conditions

On Friday, October 18, Grambling State canceled its football game against Jackson State after Grambling's disgruntled players refused to travel from their Louisiana campus to Jackson, Mississippi, for the game Saturday because of the horrible conditions in their athletic facility.

"It's horrible," Pogue said of the situation in an interview with ESPN. "Grambling is the institution when it comes to athletics. Whether Eddie Robinson - there are legends abound. So it's horrible when the focus is in the negative on athletics."

The players' letter says "there are certain factors that are hindering us from reaching our goals" and then elaborates on many of them.

The athletic complex "is in horrible condition, and has many hazards that may contribute to our overall health," the letter says. "First, the complex is filled with mildew and mold. Mildew and mold can be seen on the ceiling, walls and floor, and are contributing to water leaks because of faltering walls and ceilings."

As has been reported before, the players say that the floor is coming up in the weight room, but the letter also asks that the university supply better detergent for uniforms.

"The uniforms are poorly cleaned and contribute to the multiple cases (of) staph infection," the letter reads. "Several players have been infected with staph multiple times."

Click <u>here</u> to read the entire article.

See A Year After Sandy, Mold Problems on page 6

# A Year after Sandy, Mold a Lingering Problem

One year after Superstorm Sandy, the smell hasn't gone away. Hundreds — possibly thousands — of structures sit in limbo, musty with the stench of mold growing behind padlocked doors.

"People are still in limbo," said Tom Peter, the owner of Insurance Restoration Specialists in New Jersey. "There are a lot of houses that haven't been touched."

In New York City alone, 433 buildings remain redtagged as unsafe to enter a year after Sandy blew ashore on Oct. 29, 2012, while 1,013 others are yellow-tagged with some restrictions, according to the Buildings Department.

The numbers may be even higher because some people continue to live in their homes if the mold is growing out of sight, such as in basements or behind walls. And that mold can contribute to health problems.

He estimated there are a couple of hundred New York City apartment buildings in need of cleanup, and 2,000 to 3,000 single-family homes with mold and other hurricane contamination problems.

"Staten Island and Rockaway are probably some of the areas that are furthest behind on the road to recovery."

Probably hundreds of homeowners are in the same situation in New Jersey.

The mold can pose a health threat as well.

"There are still people out there a year out that are suffering from the health effects of Sandy," said Dr. Neil Schachter, medical director of the respiratory care department at Mount Sinai Hospital in New York.

Click <u>here</u> to read the entire article.

Next Newsletter: December 1, 2013



### Former Prosecutor Settles Her Mold Lawsuit (Mold in Sinus Matches Mold in Courthouse)

A former prosecutor in Florida has settled a "sick building" suit that claimed the mold in her sinuses was caused by the Broward County Courthouse in Fort Lauderdale.

Stefanie Krathen Ginnis will receive \$166,500 in a settlement approved by county commissioners on Tuesday, the Sun Sentinel reports. She was among 19 current and former courthouse employees who sued and was the first to settle. The plaintiffs claimed they became sick as a result of toxic mold and asbestos fibers at the courthouse.

Ginnis' husband, Eric Ginnis, was also a plaintiff. He told the Sun Sentinel his wife had "strong evidence" of cause because the mold found in her nose during complex sinus surgery matched the mold in the courthouse.

Click here to read the entire article.

#### **Quick Links:**

Website: http://globalindoorhealthnetwork.com

#### **Health Effects:**

http://globalindoorhealthnetwork.com/health\_effects.html

#### **Position Statement:**

http://globalindoorhealthnetwork.com/files/GIHN\_position\_statement\_Revised\_12\_17\_2012.pdf

**Working Together for Healthy Indoor Environments**