NEWSLETTER
September 9, 2011

GLOBAL INDOOR HEALTH NETWORK

"WORKING TOGETHER FOR HEALTHY INDOOR ENVIRONMENTS"

http://globalindoorhealthnetwork.com

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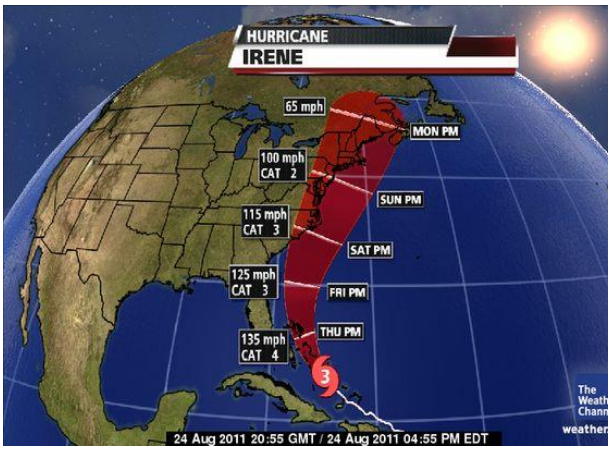


GIHN Member Announcements

Interviews with Dr. Jack Thrasher and Dr. Michael Gray were recently posted on Dr. Mercola's website.

Dr. Jack Thrasher's interview

Dr. Michael Gray's interview

Hurricane Irene's Health Risks Likely to Linger

Hurricane Irene's powerful one-two punch of high winds and heavy rainfall will undoubtedly result in dangerous airborne debris, fallen trees and flash floods.

But after her winds die down and her storm surges recede, a "whole suite of issues that may not have been considered" will remain, said Ronald Kendall, director of The Institute of Environment and Human Health at Texas Tech University.

Victims of Hurricanes Katrina, Rita and Ike know all too well that the lingering risks of contaminated water, toxic mold, weakened structures and infectious diseases can prove harmful over the days, weeks, and even months after the hurricane winds have passed. But this dangerous reality may not be on the radar of people along Hurricane Irene's unusual path.

One of these potentially unrecognized risks is what Patrick Breysse of Johns Hopkins Bloomberg School of Public Health calls the "soupy mess," which is likely to flow down the streets in heavy populated areas. And dodging the risk of drowning in it may not be enough to stay safe.

Floodwaters can be contaminated by a wide array of toxins and pathogens in metropolitan areas. Chemicals from cars, machinery, gas stations, dry cleaners, toxic waste dumps and oil distributors are just some of its likely ingredients. Pesticides, solvents and other household products stored in flooded basements and garages may also find their way into the mix.

Indoor water hazards can be even worse. Indoor flooding or water intrusion due to roof damage can quickly lead to the growth of mold within spaces where people live and work.

Hurricane Irene's Health Risks Likely to Linger

See *9/11 Firefighters…Higher Cancer Risk* on page 2

9/11 Firefighters Have Higher Cancer Risk

Male firefighters who were exposed to toxic dust and smoke from the 9/11 attacks on New York's World Trade Center have a 19 percent higher risk of getting cancer of all kinds than colleagues who were not exposed, U.S. researchers said Thursday.

The study is the first to look at cancer rates among all of the exposed firefighters, and the findings may help pave the way for federal health benefits for rescue workers now suffering from cancer nearly a decade after the attacks.

"This study clearly shows World Trade Center exposure in these firefighters led to an increase in cancer," said Dr. David Prezant of the Fire Department of the City of New York, whose study was published in The Lancet medical journal.

Firefighters working in the rubble of the World Trade Center after two planes hit its twin towers on Sept. 11, 2001, were exposed to a several known cancer-causing agents, including polycyclic aromatic hydrocarbons, polychlorinated biphenyls and dioxins.

To date, only a handful of smaller studies have shown increased rates of cancer, which can take five to 20 years to develop.

In July, a report released by Dr. John Howard, director of the National Institute for Occupational Safety and Health, concluded that there was not yet enough evidence to support a link between the 9/11 attacks and cancer.

Prezant told reporters he was not sure whether his report would be enough to make the case for federal health benefits for firefighters who developed cancer after the 9/11 attacks, but said Dr. Howard, who is tasked with making the decision, is aware of his study.

Prezant said the study had several strengths, including the fact that it looked at nearly 10,000 male firefighters.

The team only looked at cancers that developed in the first seven years after the World Trade Center attacks, comparing rates among exposed and non-exposed firefighters.

In honor of the 9/11 rescue workers

9/11 Firefighters Have Higher Cancer Risk (cont'd)

For example, they excluded data on 576 firefighters who were over age 60 on September 11, 2001, because the small number of men in that age group would have made the results statistically unstable. They also excluded data on 32 women, 13 Asians and 8 Native Americans for the same reason.

And they excluded data on 85 men who had a prior cancer diagnosis. After adjusting for these factors, they found the exposed firefighters had a 19 percent higher rate of having any type of cancer.

"This shows an increase in all cancers," Prezant said, adding the study was not designed to show increases in a particular type of cancer.

The study did not look at the health impacts on other types of rescue workers, which will be covered in a separate study.

Dr. James Melius of the New York State Laborers' Health Fund said the study supports addition of cancer to other federally funded medical disorders offered to 9/11 rescue workers.

Waiting until definitive studies have been completed "would be unfair and would pose a hardship for workers who willingly risked their health by responding without hesitation to the WTC crisis," he said.

9/11 Firefighters Have Higher Cancer Risk

See *Role of Bacteria in Mental Disorders* on page 3

Role of Bacteria in Mental Disorders

The past few years have seen numerous studies detailing the effect that the brain can have on gut bacteria (top-down control). It is known, for instance, that stress might modulate intestinal microbiota. However, recent research much of it preclinical suggests that the contrary also is true: Gut bacteria can influence the brain. These new findings are very important, for they justify consideration of patients' gastrointestinal health while treating psychiatric disorders.

A recent article published by Dr. Sergue O. Fetissov and Dr. Pierre Dechelotte in France, for example, suggests that eating disorders, major depressive disorder, and narcolepsy might originate outside the brain and might be a dysfunction of the "gut-brain axis involving the humoral immune system.

Dr. Fetissov and Dr. Dechelotte propose that the composition of the gut microbiome might represent a "key causative factor triggering production of certain neuropeptide-reactive autoAbs, which in turn will modulate corresponding peptidergic signaling resulting in modification of eating-related behaviors and eventually eating disorders."

Another study, by Dr. K. M. Neufeld and colleagues at McMaster University, Hamilton, Ont., indicates that intestinal microbiota play a role in the development of the central nervous system and behavior. They evaluated the basic behavioral characteristics of germ-free versus specific pathogen-free adult mice. The former have been found to show a hyperresponsive hypothalamic-pituitary-adrenal axis following stress, compared with regular laboratory mice (specific pathogen-free mice).

What is more intriguing, a related study showed, is that the behavioral phenotype of germ-free mice can be altered by administering them gut bacteria from regular laboratory mice, or specific pathogen-free mice. The result was that the behavior of the treated germ-free mice was similar to that of specific pathogen-free mice (that is, they showed an increase in anxiety). Moreover, polymerase chain reaction analysis of hippocampal tissue revealed a decrease in the expression of brain-derived neurotrophic factor.

Role of Bacteria in Mental Disorders (cont'd)

Not only do gut microbiota seem to play a role in behavior and response to stress, but stress seems to, in turn, affect the gut microbiota a two-way street of some sort. A study published this year by Dr. Michael T. Bailey and his colleagues indicates that social stress can have a profound impact on the population of various intestinal microbiota. The researchers used social disruption stress, a form of social stress used with mice and known to function as a chronic social stressor. They found that exposure to this stressor decreased the number of bacteria of the genus *Bacteroides,* but increased the number of bacteria in the genus *Clostridium*.

If further findings support the causal role of microbiota in certain mental disorders, it might eventually become relevant for physicians to consider preventing and treating mental disorders not only with psychotherapy and drugs targeting brain processes, but also with antibiotics targeting gut bacteria.

Dr. Laura Mark brought this information to my attention. To read the abstracts for these new studies, click here:

The New Link Between Gut-Brain Axis and Neuropsychiatric Disorders

Reduced Anxiety-Like Behavior and Central Neurochemical Change in Germ-Free Mice

The Intestinal Microbiota Determines Mouse Behavior and Brain BDNF Levels (available via email)

Exposure to a Social Stressor Alters the Structure of the Intestinal Microbiota: Implications for Stressor-Induced Immunomodulation

See *Member Profile: Joe Salowitz* on page 4

Member Profile: Joe Salowitz

I have lived in Brooklyn, N.Y. all of my life. At the age of 68, I find myself at the healthiest time of my entire life. I have had asthma since the age of 9. In 1952, asthma was considered a "mental disorder", and the treatment was to send me to a "convalescent home" for six months on the theory that my asthma was caused by "family friction" and separation from my family would "cure" me of my mental illness. It was beyond the diagnostic ability of my doctors to realize that any 9-year-old child struggling to breathe, would, naturally, be difficult to live with. Asthma medicines were not as effective back then. This childhood experience prepared me to be labeled a "mental case" when I encountered toxic mold in 1999.

When I encountered toxic mold, I thought my asthma had taken a turn for the worse. So, I quadrupled my dose of asthma medicine, and I was still getting sicker and sicker. [Asthma medication does nothing for a "toxic" mold reaction.] I had just started a new job, at a start-up company (I've been a salesman most of my working life), so I naturally assumed that I must be "allergic" to something at the job. One day, my job gave me a day-long assignment to spend the entire day outdoors in a forest. I thought to myself, "I will never leave that forest alive", as my worst asthma trigger was tree pollen, and I was still under the impression that my suffering was simply an exacerbation of my life-long asthma condition. But, as the only native English-speaking person at my company [it's N.Y.C., after all], I anticipated a bright future there, if, by some miracle, I didn't die that day.

After a few minutes outside in the forest, I thought to myself: "why aren't I dead?" Then I thought: "why do I feel so great?" The rest of my story can be found in the "personal stories" section of the GIHN website. My personal experience is that I can suffer BOTH an "allergic" and a "toxic" mold reaction, simultaneously. I was "LUCKY" to have asthma, as it taught me that environmental factors can cause suffering and death.

My father was not that lucky. He and I were both exposed to toxic mold in a car that we shared. He didn't believe me when I told him that the car was killing us. I stopped driving the car, and I lived. He drove the car for two years, and he died on October 11, 2008.

Joe Salowitz

Louisville Police Employees File Class-Action Lawsuit, Claim Exposure to Toxic Mold

A group of 15 current and former Louisville Metro Police employees have filed a class-action lawsuit against the city and the public housing authority, arguing they were sickened by exposure to toxic levels of mold and other contaminates in a city office building.

The lawsuit, filed Monday in Jefferson Circuit Court against the public works department and the housing authority, claims there could be more than 1,000 potential plaintiffs who suffered over two decades because of gross negligence, fraudulent concealment and "repeated failure to maintain" the building.

The suit requests that a judge issue injunctions requiring the housing authority and public works to bring the building up to compliance and follow previous orders by the Metro Occupational Safety and Health Administration; create a fund devoted to medical monitoring of the plaintiffs; and create a court-supervised program to provide treatment for the former and current employees.

The lawsuit claims the agencies failed to warn workers of the dangers associated with prolonged exposure to toxic airborne mold, failed to remove the mold and repeatedly assured workers the dangers had been abated.

Louisville Police Employees Sue

See *Implications of Ultra-Fine Particles* on page 5

Air Quality Researchers Tackle Health Implications of Ultra-Fine Particles

Three studies by a UC Davis, air-quality research group are adding to the growing body of data suggesting that very fine and ultra-fine airborne metal particles are closely linked to serious human-health problems, including heart disease.

"These studies yielded unique epidemiological data supporting a growing body of evidence from laboratory and medical studies, which strongly suggests that very fine and ultra-fine metal particles are damaging to human health," said Dr. Thomas Cahill, a professor emeritus of physics and atmospheric sciences.

"These tiny metal particles penetrate deep into the lungs and the cardiovascular system, damaging arteries and the heart itself," Cahill said.

He noted that risk-assessment of these particles is made more difficult by the fact that standard air samples don't separate out the dangerous particles.

Furthermore, there are almost no data available on the composition of these particles in the surrounding atmosphere.

In the three papers, Cahill and colleagues investigate the role that very fine and ultra-fine metal particles play in contributing to heart attacks, the reduction in heart attacks when ultra-fine particles were removed from the air in California's San Joaquin Valley, and the increase in estimated cancer rates downwind of a railyard in the Northern California town of Roseville.

The research team found a correlation between the levels of the particles in the air and the death rates due to ischemic heart disease, with the highest rates for both occurring in the southern San Joaquin Valley near Bakersfield. Ischemic heart disease is characterized by a reduction in blood supply, often due to the clogging of the arteries.

The researchers note that the findings from this study also may offer a clue as to why children who grow up near freeways are more likely to suffer loss of lung function.

UC Davis Researcher Thomas Cahill--risked his credibility as a career scientist by calling a press conference in 2002 to openly challenge the EPA's findings that the air near Ground Zero was safe to breathe in the aftermath of the September 11 attacks.

Air Quality Researchers Tackle Health Implications of Ultra-Fine Particles (cont'd)

In the second study, the researchers examined patterns in the atmospheric levels of very fine and ultra-fine aerosol particles of vanadium and nickel in the southern San Joaquin Valley. Levels of these metal aerosols, as well as ammonium nitrate and sulfate, had historically been much higher in the southern end of the San Joaquin Valley than in the northern end, due to the burning of crude oil to generate steam used to recover heavy petroleum from area oil wells.

The data revealed that there was a sharp decrease in ischemic heart disease observed in 2007 in the southern San Joaquin Valley that was mirrored by a dramatic decline in the levels of vanadium and nickel aerosols. Those data support a growing body of evidence from laboratory and epidemiological studies, which suggest that the vanadium and nickel aerosols may play a role in causing ischemic heart disease.

In the third study, Cahill and colleagues monitored inorganic and organic aerosols downwind from the Roseville Railyard, northeast of Sacramento, in order to develop a profile of emissions from the railyard activities.

Findings from this study identified very fine transition metals and contaminated soils that are potentially important to human health, and confirmed estimates of the health impacts of diesel exhaust downwind of the railyard that were made earlier by the California Air Resources Board.

Air Quality Researchers Tackle Health Implications of Ultra-Fine Particles

See *Woman Wins Lawsuit* on page 6

Woman Wins Lawsuit for Reasonable Accommodations and Housing

B. Osten recently won a lawsuit against her previous landlord for Retaliatory Eviction and refusing to provide reasonable accommodations for her companion animals, among other issues. Here's part of her story:

I lived in a substandard one-bedroom bungalow style unit for eight years. Its deplorable, toxic, and oppressive conditions deteriorated my physical and mental health. The landlord knew of my disability needs and ignored my numerous pleas to remove the toxic mold from my unit. The landlord refused to engage in an interactive process regarding my request and threatened to no longer participate in the Section 8 program.

The only time the landlord did address the toxic mold and other deficiencies was for the annual inspection by the Housing Authority. The day before the inspection, the landlord would paint over the toxic mold, only for it to return several days later.

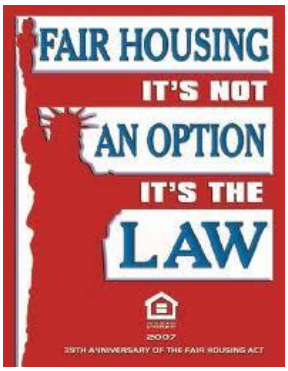
On the advice of my doctors, I notified the Health Department of the toxic mold, the lack of a sufficient heater, and other major deficiencies. The landlord retaliated by going after what would hurt me the most, my companion animals. The landlord threatened me with eviction if I did not remove my companion animals from the unit, which created a hostile and offensive living environment.

An unlawful detainer was filed against me and I left the unit under duress.

Through perseverance and help from the Fair Housing Counsel, I obtained a lawyer and filed a lawsuit against my previous landlord for Retaliatory Eviction, refusing to provide reasonable accommodations for my companion animals, discrimination, defamation of character, and pain and suffering. Under the federal and state fair housing laws, anyone with a disability is entitled to reasonable accommodations for the equal use and enjoyment from his or her dwelling and not be harassed or threatened with eviction for requesting the accommodations.

Woman Wins Lawsuit for Reasonable Accommodations and Housing

Next Newsletter: Friday, September 23, 2011



Flooding Raises Health Concerns in Northwest Missouri

Amid mold spores, rotting vegetation and mental strain, health officials warn flood victims of potential health concerns as floodwaters recede. Hundreds of area flood victims are anxiously waiting until recovery and cleanup efforts can begin.

"This water has been sitting around for a long time and people don't know what's been in it," she said. "There have been tons of fertilizer from the fields, farm animals, chemicals, just about everything, and I have seen in previous flood disasters that I have worked, the sores that have developed on people from walking in this water have been very, very bad."

"The smell is horrible, just a lot of rotting vegetation primarily," he said. "The smell is all over the Big Lake area, the Fortescue area south of 159 Highway, all the way to Forest City, the Corning area, Craig, and there is such a current, we won't know what the landscape will look like when the water goes down."

Flooding Raises Health Concerns in Northwest Missouri

Quick Links

Website: http://globalindoorhealthnetwork.com

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http://globalindoorhealthnetwork.com/members.html

Health Effects:
http://globalindoorhealthnetwork.com/members