

GLOBAL INDOOR HEALTH NETWORK

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



November 1, 2017

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Pollution is Killing More People Every Year than Wars, Disasters and Hunger

Environmental pollution — from filthy air to contaminated water — is killing more people every year than all war and violence in the world. One out of every six premature deaths in the world in 2015 — about 9 million — could be attributed to disease from toxic exposure, according to a major study released Thursday in *The Lancet* medical journal. The financial cost from pollution-related death, sickness and welfare is equally massive, the report says, costing some \$4.6 trillion in annual losses — or about 6.2 percent of the global economy. **(Go to page 6 of this newsletter to read more about this new report.)**

British Heart Foundation Calls for Urgent Action on Air Pollution

On Friday (October 20), the Lancet Commission on pollution published a report suggesting that outdoor and indoor air pollution, water and soil contamination and chemical pollutants are among the largest risk factors for premature death faced by populations globally.

Responding to the findings of the report, Simon Gillespie, chief executive of the British Heart Foundation said that the figures presented a stark reminder of the impacts of air pollution on human health and called for commitment from government for measures such as Clean Air Zones to remove older, polluting vehicles from city streets.

He said: "These figures are a stark reminder of the deadly toll air pollution is having worldwide. Globally, we know an estimated 80% of premature deaths from air pollution are caused by heart disease and stroke."

"In the UK we need to play our part in tackling this global problem. Alongside funding research to better understand how air pollution damages our heart health, we urgently need commitment from all levels of government to improve the nation's air quality, including through the creation of clean air zones."

We have put in place a £3 billion plan to improve air quality and reduce harmful emissions. We will also end the sale of new diesel and petrol cars by 2040, and next year (2018) we will publish a comprehensive Clean Air Strategy which will set out further steps to tackle air pollution. To read the article, click [here](#).

To learn more about the Lancet report, go to page 6. To learn more about the global impact of indoor air pollution, read GIHN's [new report](#) titled "Global Burden of Indoor Air Contaminants."

See *Ireland housing...in breach of law* on page 2

Ireland's Social Housing in Breach of European Law (Ireland)

The European Committee of Social Rights, in a decision published today, found that “a significant stock of local authority housing is of substandard quality.”

Ireland is, therefore, in breach of Article 16 of the European social charter.

The charter is a legally binding counterpart of the European Convention on Human Rights and is monitored and implemented by the committee.

In July 2014, the International Federation for Human Rights (FIDH) brought a complaint to the European committee against Ireland over alleged breaches of the charter linked to local authority housing.

These breaches related to sewage leaks, dampness, and mould.

FIDH, provided a range of evidence to the committee showing “that a number of local authority tenants reside in poor housing conditions amounting to housing that is inadequate in nature,” according to a summary of the decision.

This evidence came from tenants, architects, and engineers. There were “problems with mould, dampness, sewage invasions.”

According to the decision, some of the conditions in the social housing, raise “serious” concerns.

“Some of the conditions described regarding sewage invasions, contaminated water, dampness, persistent mould, etc., go to the core of adequate housing, raising serious concerns from the perspective of both habitability and access to services, in particular, the high number of residents in certain estates in Dublin complaining of sewage invasions,” reads the decision.

The complaint against the Government’s social housing stock was not, however, limited to just the conditions of the properties.



Ireland's Social Housing in Breach of European Law (Ireland)—cont'd

“No complete statistics on the condition of local authority housing have been collected since 2002 by the Irish authorities and no national timetable exists for the refurbishment of the local authority housing stock.”

“A significant number of regeneration programmes adopted by the Government for local authority estates in the last decade have not been completed with the effect that a number of local authority tenants remain living in substandard housing conditions.”

“The Government has failed to take sufficient and timely measures to ensure the right to housing of an adequate standard for not an insignificant number of families living in local authority housing and therefore there is a violation of article 16 of the charter in this respect,” reads the decision.

The complainant organisation, FIDH, also referred to the lack of progress in relation to the regeneration and building of more social housing.

“As a result of the economic crisis, the original regeneration programmes were delayed or halted, with a deterioration of conditions in some cases. New regeneration programmes have subsequently been developed, however not all of these have been completed to date,” state the findings.

Ireland is now obliged to “take steps” to address this violation and a meeting will be held with a view to “adopting a formal resolution to the Irish authorities” based on the findings. To read the article, click [here](#).

U.S. GAO: Climate Change Already Costing U.S. Billions in Losses

A non-partisan federal watchdog says climate change is already costing U.S. taxpayers billions of dollars each year, with those costs expected to rise as devastating storms, floods, wildfires and droughts become more frequent in the coming decades.

A Government Accountability Office report released Monday said the federal government has spent more than \$350 billion over the last decade on disaster assistance programs and losses from flood and crop insurance. That tally does not include the massive toll from this year's wildfires and three major hurricanes, expected to be among the most costly in the nation's history.

The report predicts these costs will only grow in the future, averaging a budget busting \$35 billion each year by 2050 - a figure that recent history would suggest is a conservative estimate.

"Climate change impacts are already costing the federal government money, and these costs will likely increase over time as the climate continues to change," the report said.

Calculating just how much of the spending from disasters is directly attributable to the changing climate is not possible, the report's authors conclude, but the trend is clear: "The impacts and costs of extreme events - such as floods, drought and other events - will increase in significance as what are considered rare events become more common and intense because of climate change."

The federal government doesn't effectively plan for these recurring costs, the report said, classifying the financial exposure from climate-related costs as "high risk."

"The federal government has not undertaken strategic government-wide planning to manage climate risks by using information on the potential economic effects of climate change to identify significant risks and craft appropriate federal responses," the study said. "By using such information, the federal government could take the initial step in establishing government-wide priorities to manage such risks."

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U.S. GAO: Climate Change Already Costing U.S. Billions in Losses (continued)

GAO undertook the study following a request from Republican Sen. Susan Collins of Maine and Sen. Maria Cantwell of Washington, the ranking Democrat on the Senate Committee on Energy and Natural Resources.

"This nonpartisan GAO report Senator Cantwell and I requested contains astonishing numbers about the consequences of climate change for our economy and for the federal budget in particular," said Collins. "In Maine, our economy is inextricably linked to the environment. We are experiencing a real change in the sea life, which has serious implications for the livelihoods of many people across our state, including those who work in our iconic lobster industry."

The report's authors reviewed 30 government and academic studies examining the national and regional impacts of climate change. They also interviewed 28 experts familiar with the strengths and limitations of the studies, which rely on future projections of climate impacts to estimate likely costs.

The report says the fiscal impacts of climate change are likely to vary widely by region. The Southeast is at increased risk because of coastal property that could be swamped by storm surge and sea level rise. The Northeast is also under threat from storm surge and sea level rise, though not as much as the Southeast. The Midwest and Great Plains are susceptible to decreased crop yields, the report said. The West is expected to see increased drought, wildfires and deadly heatwaves.

To read the article, click [here](#). To read the October 27 article from the Union of Concerned Scientists, click [here](#).

See *24% of Pakistanis...allergic rhinitis* on page 4

24% of Pakistanis Affected by Allergic Rhinitis (Pakistan)

Some 24.62 percent Pakistanis are affected by allergic rhinitis, with Sindh having highest prevalence of around 28%, health experts said on Thursday.

“We should come together to increase the level of awareness about allergic rhinitis and address this issue on all forums. It is a public health problem and disease burden may increase by many times if not controlled at the start of the season,” the experts said.

Dr. Umar Farooq, the Head of ENT Department at Dow University of Health Sciences said that allergic rhinitis or hay fever started when one breathed in something to which one is allergic. “The inside of the nose becomes inflamed and swollen. Allergic rhinitis is clinically defined as a symptomatic disorder of the nose and is characterized by nasal symptoms including rhinorrhea (runny nose), sneezing and nasal blockage and/or itching of the nose. It is often associated with ocular symptoms,” he said.

“It is triggered by allergens and allergens can be found both outdoors and indoors. When allergic rhinitis is caused by outdoor allergens, e.g., mould or trees, grass and weed pollens – it is often referred to as seasonal allergies, or hay fever. Allergic rhinitis may also be triggered by allergens found in the home, such as animal dander, indoor mould, or house dust mites. The goal of treatment of allergic rhinitis (AR) is to improve a patient’s well-being, or quality of life,” he said.

“Allergic rhinitis represents a global health problem. Allergic Rhinitis in adults and children has been shown to lead to substantial impairment of quality of life (QOL),” he added.

While highlighting the burden, Dr. Salman Matiullah, Head of ENT Department at Jinnah Medical and Dental College said that allergic rhinitis reduced learning ability in children.

“Around 88% of pediatric AR patients have sleep disorders. The presence of AR often precedes the development of asthma,” he added.

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24% of Pakistanis Affected by Allergic Rhinitis (Pakistan)--continued

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“Around 88% of pediatric AR patients have sleep disorders. The presence of AR often precedes the development of asthma,” he added.

“Allergic rhinitis can lead to Asthma. Many medical interventions, including non-sedating antihistamines, intranasal corticosteroids, and immunotherapy are approved for use in adults and children,” he said.

Prevalence of allergic rhinitis across the country is the real health issue of our society.

“We cannot undermine its consequences on the patient social life, educational performance and work productivity. It also affects quality of life, including psychological well-being and the ability to learn and process cognitive input,” he added.

To read the article, click [here](#).

Note from GIHN: We have numerous research papers on sinusitis and the connection with mold in water-damaged buildings. Please contact us for copies.

Silica in Construction Dust Harms Workers

George Elliott, technical specialist at science-based technology company 3M, is interviewed on the potential hazards of working with construction dust and methods for minimising the health risk.

Why is controlling hazardous construction dust such an important issue?

To put it bluntly, construction dust kills. According to the Health and Safety Executive (HSE), 43 workers were fatally injured in the UK construction sector in 2015/16 as a result of workplace accidents. This is a frightfully high number. However, it is less than a tenth of the number of deaths of construction workers as a result of exposure to respirable crystalline silica (RCS). The HSE estimates that RCS is responsible for around 500 deaths a year in the UK construction sector, or nearly 10 a week.

Also, most workers understand why they need to wear a hard hat, or fall protection equipment if they're working at height, because the risks are pretty obvious and can be easily visualised. Construction dust, on the other hand, is something of a hidden killer, as the potentially fatal respiratory diseases it causes are typically the result of years of exposure.

What can companies/employers/health and safety managers do to control construction dust hazards?

When faced with an industrial hazard, health and safety managers will look to reduce risks to the lowest practicable levels. Typically, they will consider and employ the following hierarchy of controls:

The first control to consider is elimination – can you eliminate the hazard in the first place?

The second is substitution – could you substitute the building material or tool equipment you're using for something less hazardous?

Next is engineering controls – for example, could you use water suppression to dampen down the dust and stop it becoming airborne, or alternatively use on-tool extraction to remove the majority of dust at source?



Silica in Construction Dust Harms Workers (continued)

Then comes administration – if someone doesn't need to be in the hazardous area, make sure they aren't. Some companies are now using designated cutting areas on site, in order to contain dust to one area.

Finally, personal protective equipment (PPE) control measures should always be seen as the last line of defence. With silica dust in particular, the HSE suggest that a minimum assigned protection factor (APF) of 20 is required.

What role does training and education have to play?

Training and education is important for increasing employees' awareness of the potential hazards they face. Those who understand the risks are far more likely to properly use the control measures available to them on site, such as extraction systems and respiratory protective equipment.

Where can people find additional resources?

The CDP's website – <http://www.citb.co.uk/> – is full of useful resources. For example, the website contains a 'toolbox talk' that's easy for health and safety managers and others to download and present to workers. There are also case studies on the website, giving examples of companies that have controlled dust on site using best practice methods – which could potentially be replicated.

To read the article, click [here](#). You can get additional information about the dangers of silica on government websites such as the CDC and OSHA.

See Pollution is killing more people on page 6

Pollution is Killing More People Every Year than Wars, Disasters and Hunger

Environmental pollution — from filthy air to contaminated water — is killing more people every year than all war and violence in the world. More than smoking, hunger or natural disasters. More than AIDS, tuberculosis and malaria combined.

One out of every six premature deaths in the world in 2015 — about 9 million — could be attributed to disease from toxic exposure, according to a major study released Thursday in *The Lancet* medical journal. The financial cost from pollution-related death, sickness and welfare is equally massive, the report says, costing some \$4.6 trillion in annual losses — or about 6.2 percent of the global economy.

There's been a lot of study of pollution, but it's never received the resources or level of attention as, say, AIDS or climate change," said epidemiologist Philip Landrigan, dean of global health at the Icahn School of Medicine at Mount Sinai, New York, and the lead author on the report.

The report marks the first attempt to pull together data on disease and death caused by all forms of pollution combined.

"Pollution is a massive problem that people aren't seeing because they're looking at scattered bits of it," Landrigan said.

Experts say the 9 million premature deaths the study found was just a partial estimate, and the number of people killed by pollution is undoubtedly higher and will be quantified once more research is done and new methods of assessing harmful impacts are developed.

Areas like Sub-Saharan Africa have yet to even set up air pollution monitoring systems. Soil pollution has received scant attention. And there are still plenty of potential toxins still being ignored, with less than half of the 5,000 new chemicals widely dispersed throughout the environment since 1950 having been tested for safety or toxicity.

Asia and Africa are the regions putting the most people at risk, the study found, while India tops the list of individual countries.

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Pollution is Killing More People Every Year than Wars, Disasters and Hunger (cont'd)

To reach its figures, the study's authors used methods outlined by the U.S. Environmental Protection Agency for assessing field data from soil tests, as well as with air and water pollution data from the Global Burden of Disease, an ongoing study run by institutions including the World Health Organization and the Institute for Health Metrics and Evaluation at the University of Washington.

Even the conservative estimate of 9 million pollution-related deaths is one-and-a-half times higher than the number of people killed by smoking, three times the number killed by AIDS, tuberculosis and malaria combined, more than six times the number killed in road accidents, and 15 times the number killed in war or other forms of violence, according to GBD tallies.

It is most often the world's poorest who suffer. The vast majority of pollution-related deaths — 92 percent — occur in low- or middle-income developing countries, where policy makers are chiefly concerned with developing their economies, lifting people out of poverty and building basic infrastructure, the study found. Environmental regulations in those countries tend to be weaker, and industries lean on outdated technologies and dirtier fuels.

"There is this myth that finance ministers still live by, that you have to let industry pollute or else you won't develop, he said. "It just isn't true."

To read the article, click [here](#). To see the full report, click [here](#).

See *Philadelphia Senators...requesting data* on page 7

Philadelphia State Senators Join Call for Release of School Environmental Data

The drumbeat is building for the District to release detailed environmental data about every school. All seven of Philadelphia's state senators have joined several members of the City Council and the Healthy Schools coalition in calling for the information to be made public.

In a letter to Superintendent William Hite, the state senators cite the mold outbreak at John B. Kelly Elementary School as the catalyst for demanding the data.

"We appreciate the District's work to remediate the problem and return students and staff to the school," the letter reads. "But it's alarming to us that this issue was not addressed prior to the start of school in September. Students and staff have been in that unhealthy environment for at least the past six weeks. That's simply unacceptable."

In response to initial calls for more data to be released last week, the District issued a statement about the progress it is making on environmental issues.

The letter from the state senators points out that the outbreak at Kelly was not an isolated incident, citing the mold outbreak at Muñoz-Marín over the summer, which covered roughly 20,000 square feet in the school.

The senators' letter applauds the District for releasing its Facilities Condition Assessment, describing it as a model for other districts in the state, but also criticizes officials for not going far enough in their efforts toward transparency.

"However, what is not captured in the Parsons report is environmental quality data for the District's buildings," the letter reads.

"Airborne contaminants, such as mold, lead and asbestos, are often prevalent in older buildings and are often triggers for asthma and other illnesses. Continued exposure to these contaminants leads to chronic health problems, missed learning time, and even the threat of serious illness."

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Philadelphia State Senators Join Call for Release of School Environmental Data (cont'd)

The letter also cites other mold outbreaks in districts around the state. East Pennsboro School District in Cumberland County had to close its high school for a month after a mold outbreak last school year, and that district is now dealing with mold spores found in the air at several other schools. Wyoming Valley West School District in Luzerne County had to close a middle school last year for five weeks due to a mold outbreak.

The state senators representing Philadelphia who signed the letter are Christine Tartaglione, Larry Farnese, John Sabatina Jr., Sharif Street, Vincent Hughes and Art Haywood, whose districts also cover parts of Montgomery County; and Anthony Williams, whose district also covers part of Delaware County.

The information they want from the District includes:

- Indoor environmental quality data
- Asbestos survey information
- Lead-in-water data
- Damaged lead paint and plaster survey
- Asthma prevalence data

"We would also like your thoughts on how the District should address these environmental quality issues, and welcome the opportunity to meet to discuss the information requested above," the letter reads. "We do believe that a clear strategy needs to be in place to address the concerns that we are raising."

To read the article, click [here](#).

See *Black Lung Disease* on page 8

Black Lung Disease Has Begun to Climb (Again) in Appalachia

Many coal miners who initially had a normal imaging test developed the most severe form of coal-dust-related lung disease within 21 years, and some within 10 years, according to a [recent NIOSH study](#) published in the journal Occupational and Environmental Medicine. These findings highlight the importance of regular chest imaging, or radiography, and lung function tests for all coal miners.

Work-related lung disease among coal miners, also known as black lung disease, results from breathing in coal mine dust, which causes inflammation and scarring, or fibrosis, in the lungs. Coal mine dust can also cause chronic obstructive pulmonary disease, or COPD. Regular screening is critical to catch early stages of black lung disease so that steps can be taken to prevent progression to severe disease. In the United States, coal miners are entitled to receive free screening when they start working in the industry and about every 5 years after that for as long as they keep working in coal mining. NIOSH recommends that miners take advantage of this important opportunity.

Black lung disease is severe, often deadly, and has no cure. It is also entirely preventable by avoiding exposure to coal dust. After decades of decline, however, the occurrence of advanced black lung disease, known as progressive massive fibrosis, recently began to climb, especially in central Appalachia.

To understand this increase, NIOSH investigators analyzed data from the Coal Workers' Health Surveillance Program. The NIOSH program provides the opportunity for all current coal miners to receive confidential health screenings at no cost to the miner. The investigators identified 192 miners who developed severe lung disease after the year 2000 and who had received at least two chest radiographs. It was found that most of these miners had a normal initial radiograph before progressing to severe lung disease nearly 21 years later, on average. Although almost half of the miners progressed from normal to severe lung disease in more than 20 years, 16.6% progressed in less than 10 years, and 35% in 11–20 years. Participants' average age at the beginning of the study was 29 years, and all were male. Most worked in Kentucky, Virginia, or West Virginia. To read the article, click [here](#).



New York State Bans Vaping Anywhere Cigarettes are Prohibited

Electronic cigarettes, the popular vapor substitute to traditional tobacco cigarettes, will soon be banned from public indoor spaces in New York State — just like the real thing.

Gov. Andrew M. Cuomo on Monday signed a bill to ban vaping anywhere cigarettes are already prohibited, like workplaces, restaurants and bars. The ban goes into effect in 30 days.

E-cigs, as the products that vaporize a variety of oils into an inhalant are generally known, were added to the state's Clean Indoor Air Act this summer by the State Assembly, and the measure was approved by the Senate. The original act has been around since 2003, when smoking tobacco products in public indoor areas was first banned in the state, one of the country's first such measures.

New York has come down fiercely on e-cigs, even as their popularity grows: they now represent a \$2.5-billion industry, according to the Centers for Disease Control and Prevention, which says that while the health consequences of the product are little understood, there are still reasons for concern, including nicotine addiction.

Jeff Seyler, the executive vice president of the American Lung Association's Northeast region, said, "This new law not only protects public health by restricting the use of e-cigarettes and the public's exposure to smoke-cigarette emissions," but it also shields children, for whom the products are "just another tool reeling them into a dangerous and often lifetime of addiction to nicotine." To read the article, click [here](#).

Florida Law Firm Illegally Accessed Computers of Opposing Party

Florida's absolute litigation privilege is a powerful shield, protecting against misdeeds including slander and lies in courtrooms or during formal discovery.

But a Florida state appellate court Wednesday found a Broward County law firm and its principal went well past those very broad boundaries when they gained unauthorized access to the opposing side's computer network, rifled around, then used that information to question witnesses.

"Absolute privilege cannot be stretched that far," Third District Court of Appeal Judge Robert J. Luck wrote in a unanimous decision with Chief Judge Leslie B. Rothenberg and Judge Edwin A. Scales concurring.

The decision went against insurance defense attorney Michael P. Rudd and his Hollywood civil litigation firm, Rudd & Diamond, which were accused of accessing a litigant's proprietary business records to help defeat claims against a client.

Rudd & Diamond in 2013 defended Citizens Property Insurance Corp. in a lawsuit over a homeowner's plumbing claim. Court records suggest the state-backed insurance carrier suspected Miami-based Arko Plumbing Corp. fraudulently pushed homeowners to file claims to replace cast-iron drain pipes that allegedly eroded over decades.

During litigation against one of the owners, Rudd and his firm had help from John Collucci, a former Arko employee who used his password, which remained active after he left, to access the company's global positioning system account. This GPS access allowed them to track the plumbing company's service vans and identify addresses and other information for 18 clients.

The ruling clears the way for Arko to pursue compensatory and punitive damages against Rudd. Parallel suits are pending against the insurance companies.

To read the article, click [here](#). To learn more about the tricks and crimes used by insurance companies during litigation, read GIHN's [paper](#) titled "Litigation Tips."

In 2017, so far 11,087 cases of pesticide poisoning have been recorded in Maharashtra, India, out of which 552 patients have died (1,283 deaths in 2015 and 2,180 deaths in 2016).

Doctors said at present no antidote is available for the pesticide mix made out of chemical combinations like Firponil-imidacloprid, difenthiro and glyphosate.

No Antidote for Pesticide Mixture Harming Farmers (India)

In India, senior government doctors treating pesticide inhalation patients say there is no antidote available for three chemical mixes from among those used by the victims. This is hampering effective treatment of many patients, they said.

Doctors made this revelation when Dr. Sandhya Kulshreshtha, a consultant in the Central Board of Insecticides and Registration Committee (CIB & RC), held a meeting to brief the doctors of Vidarbha here. The meet was convened to inform them about molecules used in pesticides nowadays so that a particular line of treatment could be adopted. Over 50 middle and senior level doctors attended the meeting.

It's come to fore that, in 2017, so far 11,087 cases of pesticide poisoning have been recorded in Maharashtra out of which 552 patients have died.

Since 2012 when 579 deaths out of 6,599 poisoning cases were reported, the number of cases has nearly doubled in Maharashtra. In 2015 the deaths were 1,283 and in 2016 it was 2,180.

Doctors said at present no antidote is available for the pesticide mix made out of chemical combinations like Firponil-imidacloprid, difenthiro and glyphosate (Monsanto's Roundup—a herbicide). The first two already figure in the list of chemicals which the state government has proposed to ban in the region.

To read the article, click [here](#). To learn more about the dangers of pesticides, read GIHN's [paper](#) titled "Indoor Air Contaminants."

See *Pesticides killing farmers* on page 10

Pesticides Killing and Harming Farmers in India (India)

Since July, over 1,000 farmers of Yavatmal in east Maharashtra have suffered from a toxic chemical exposure after spraying pesticides on the cotton crop. There have been fatalities too, with 23 farmers (so far) succumbing to toxic pesticides.

The farmers in Yavatmal mostly grow the genetically modified 'BT cotton,' considered pest-resistant. But according to Ramdas Vadai, a farmer in Manoli village, the cotton plants grew unusually tall this year, up to 6 feet, and attracted pests. While spraying pesticides above their head, farm workers inhaled some pesticide particles.

Some farmers said the lack of rain this year may have contributed to the growth of the cotton plant as it received more fertilizer. The unusually humid conditions and the high density of cotton crop also made farmers vulnerable to chemical contact while spraying pesticides.

Some of the cases were so severe that patients had to be tied to the hospital bed because of convulsions.

Almost all the infected and deceased farmers are cotton cultivators, or farm labourers who had gone to spray pesticide on the cotton crop. The post-mortem reports of the deceased farmers showed they had inhaled organophosphorus, a chemical compound used in pesticides, which resulted in respiratory failure.

Farmers of the region had been flocking to hospitals since the beginning of July in various parts of the district, but the issue came to light in the last week of September when the Vasantrao Naik Shetkari Swawlamban Mission (VNSSM) issued press statements informing the media about the spate of deaths.

GIHN note: There are numerous articles discussing this situation. To read this article, click [here](#). The chief minister has assured the victims that [the strictest action will be taken against those responsible](#) for this tragedy.



Pesticide Use During Pregnancy Linked to Childhood Brain Tumors

Previous epidemiological studies have suggested that exposure to pesticides during pregnancy may have a possible role in the development of childhood brain tumors.

In a new International Journal of Cancer analysis, researchers found a link between maternal residential pesticide use--particularly insecticides--and the risk of childhood brain tumors.

The analysis included 437 malignant childhood brain tumor cases and 3102 controls from two French studies. Pesticide use was associated with a 1.4-times increased risk of childhood brain tumors.

The investigators noted that many pesticide compounds are classified as probable carcinogens, and there is evidence that some insecticides can pass through the feto-placental barrier.

To read the article, click [here](#). To read the abstract, click [here](#).

Quick Links:

Website: <https://www.globalindoorhealthnetwork.com>

Health Effects:
<https://www.globalindoorhealthnetwork.com/health-effects>

EMF and RF:
<http://www.globalindoorhealthnetwork.com/emf-and-rf>