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Farmers Fighting for Their Health: Taking on Chemical Companies and Transitioning to Sustainable Agriculture

The Ecologist reported recently that three French farmers have successfully sued chemical companies for cancer and Parkinson’s disease that resulted from their occupational use of pesticides—an issue as widespread as it is under-reported. A cereal farmer with 100,000 hectares of land in the Vosges region, Dominque Marchal was the first farmer to have his leukemia associated with his daily pesticide use. His wife was determined to get to the bottom of the issue. From the Ecologist:

She employed a lawyer to help her gather the scientific evidence and herself set about gathering invoices and receipts to list which pesticides her husband had been using in previous years. Then, from their own pesticide stocks and with the help of neighbouring farms, she was able to gather samples of each of the potential cancer-causing substances. Her lawyer helped her find a laboratory willing to analyse the contents, and when the results came back they showed that 40 per cent contained benzene, a substance not marked on any of the contents labels but that is known to increase the risk of leukaemia.

No farmer has succeeded in taking on Big Chem for their illnesses in the U.S. because it is especially difficult to get medical recognition for the disease-occupation correlation, despite the fact that there is plenty of evidence that exposure to certain pesticides increases the risk of illness. (See Washington University in St. Louis’ epidemiological study that shows high rates of Parkinson’s disease in the Midwest and Northeast, where agriculture and metal processing—two occupations that use chemicals associated with Parkinson’s—are most prevalent. And the long term Agricultural Health Study focused on Iowa and North Carolina, which began in 1994, has found elevated risk for farmers of multiple myeloma and cancers of the lip, gallbladder, ovary, prostate, and thyroid.)

However, many farmers and rural Americans are taking note of the increasing rate at which their family members and neighbors are diagnosed with cancer and other diseases. Sandra Zellmer, who lost her mother, father and uncle, all farmers, to cancer between 2004-2008, wrote recently about the link between the herbicide atrazine and the pesticide DDT to the types of cancers that killed her family. Her findings echo the blockbuster piece on atrazine in the New York Times last summer, which brought attention to the issues posed by heightened exposure to and weak regulation of the weed killer, noting that “Laboratory experiments suggest that when animals are exposed to brief doses of atrazine before birth, they may become more vulnerable to cancer later.”

The EPA is currently re-assessing atrazine, which has been found in the drinking water of 33 million Americans. A recent report by the Pesticide Action Network North America (PANNA) and the Land Stewardship Project entitled The Syngenta Corporation and Atrazine: The Cost to the Land, People and Democracy [pdf] includes the stories of five farmers who’ve decided to stop using atrazine for health and safety reasons, and also draws attention to the possibility of a link between atrazine and breast cancer. From the report:

Atrazine increases the activity of an enzyme called aromatase that can, in turn, increase levels of estrogen. According to Dr. [Janet] Gray [Board Member and Acting Science Adviser to the Breast Cancer Fund], “This is of great concern when it comes to breast cancer because we know that increased exposures to estrogens are one of the major risk factors for increased incidences of breast cancer.”

Here is Zellmer's response to these disturbing facts:

No wonder farming is considered one of the most dangerous occupations in the United States. Who knew that farmers' families, their neighbors, and their neighbors' neighbors were at risk, too. If we miss this opportunity to delve deeply into the potential link between a widely used chemical and the health of our food producers and their communities, anger--not acceptance--is the appropriate response.

Marcia Ishii-Eiteman, PhD, Senior Scientist at the PANNA said that the problem with making these connections is related to the structural failure of our regulatory system:

Farmers, farmworkers and their families have been on the frontlines of pesticide exposure for decades. Parkinson’s, asthma, birth defects and childhood cancers are just a few of the diseases farming communities suffer in disproportionate amounts. Each year new studies come out further substantiating the links between exposure and disease. In the U.S. though, these studies have not amounted to policy change because -- unlike in much of Europe -- our legal frameworks for regulating toxic chemicals and pesticides is effectively designed to protect chemical companies over public health. So people continue to get sick and die, while pesticide companies get rich and our public agencies look the other way.

At present, the U.S. system is set up to allow two means of addressing environmental and public health harms: litigation and regulation, and both require levels of proof inadequate to the task of protecting public health. For instance, FIFRA [the Federal Insecticide, Fungicide, and Rodenticide Act] & TOSCA [the Toxic Substances Control Act] are the two legal frameworks governing pesticides and toxic chemicals -- both treat chemicals as innocent until proven guilty (it takes decades to ‘prove’ a chemical guilty). The head of the EPA states flatly that TOSCA is toothless from a regulatory standpoint, and FIFRA makes it nearly impossible to take legal action against a pesticide company or applicator.

What we need is a comprehensive re-orientation of the U.S. government's approach to public health. We can follow Europe's lead here by adopting the "precautionary principle" as a guide.

Many farmers are changing their practices, sparing themselves from routine chemical exposure and thus risk. Mary Howell Martens and her husband Klaas Martens run a 1300-acre organic farm in upstate New York, where they grow corn, beans and grains. Here is what she had to say in an article she wrote about her farm's transition away from chemical agriculture:

...after a long and successful day of spraying, Klaas would invariably come in the house with clothes reeking of pesticide despite the Tyvek suit, his head aching and a queasy stomach. We wanted to believe that it was due to 'just a germ' since he had been working such long hours, but we knew better. My husband was slowly being poisoned.

How do two people so apparently committed to the agribusiness ideal of American farming end up operating over 1300 acres organically just 10 years later? We truly believe that we were like many conventional farmers, using the chemical fertilizers and pesticides simply because we saw no other alternatives, but hating what it might be doing to us, our family, our land, and our environment. We farmed conventionally because we had been told so often that it was the only way to survive in agriculture today.

One evening later that year, we read a small classified advertisement in a regional farm paper looking for organic wheat. Immediately Klaas was on the telephone and we were excited -- was there really a market for organic field crops? We quickly decided that we would leap at this new challenge. If there was a way to grow our crops organically, we were going to figure it out!

In her article, which is geared towards helping other farmers, Martens goes on to describe the changes they had to make in farm management, and how they learned to adapt to new soil fertility and weed control practices.

In order to decrease the risks from routine pesticide exposure in farming, it is going to take both rebuilding rural communities, so that farmers will have new markets and support, along with recognition from policy makers that chemical agriculture has some serious fallout: aside from destroying the productivity of the soil, damaging the environment, and supporting the production of unhealthy food, it is costing human lives.

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