FARM WORKERS: AMONG THE LEAST PROTECTED

They Suffer the Most from Pesticides

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World Resources Institute estimates that 313,000 farm workers in the United States suffer from pesticide-related illnesses each year.

While many people are aware of the dangers of pesticide residues in food and the detrimental effects of pesticides on the environment, few appreciate the serious health hazards that pesticides pose to farm workers and their families. The fact is that farm workers are disproportionately affected by the pesticides that characterize agriculture in the United States.

The United States is the largest single user of pesticides in the world.

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By EPA's own estimate, each year U.S. farmers use about 1.2 billion pounds of pesticides at an expenditure of $4.6 billion. More than 600 active ingredients are combined with other ingredients to form approximately 35,000 different commercial formulations. Yet, full evaluation of their hazards lags far behind the development of new products. Less than 10 percent of the products in current use have been fully tested for potential health effects; of the 600 active ingredients in these products, EPA was recently able to provide full safety assurance for only six.

Those who suffer most directly from the chemical dependency of U.S. agriculture are farm workers, who are working in the fields while some of the most toxic substances known to humans are sprayed. The World Resources Institute has estimated that as many as 313,000 farm workers in the United States may suffer from pesticide-related illnesses each year. Another source estimates that 800 to 1,000 farm workers die each year as a direct consequence of pesticide exposure.

Ninety percent of the approximately two million hired farm workers in the United States are people of color: The

majority are Chicanos, followed by Puerto Ricans, Caribbean blacks, and African Americans. This primarily minority population has among the least protected jobs of all workers. Farm workers are intentionally excluded from the Occupational Safety and Health Act (OSHA), which governs health and safety standards in the workplace; from the Fair Labor Standards Act, which governs minimum wages and child labor; and most importantly, from the National Labor Relations Act, which guarantees the right to join a union and bargain collectively.

The exclusion of farm workers from OSHA regulations has particular relevance to the pesticide issue. Under OSHA's principles of environmental hygiene, when workers are exposed to a toxic substance in the workplace the priority course of action is to eliminate the substance from the workplace altogether or to replace it with a non-toxic or less toxic substitute. If this is impossible, the option next in priority is to separate the workers from the toxic substance. The last option usually involves provisioning workers with some protective measures (e.g., protective clothing, masks, glasses, etc.).

Not being covered by OSHA, and therefore not able to legally petition the Occupational Safety and Health Administration, farm workers are forced to petition EPA, which is the agency in charge of regulating pesticides. But such petitioning offers few formal legal remedies, leaving farm workers virtually unprotected against pesticide hazards. Under the Federal Insecticide, Rodenticide, and Fungicide Act, which is intended to regulate pesticide use, "re-entry" times (the interval that must elapse between the application of a pesticide and workers' re-entry into the fields) have been set for just 12 pesticides. Moreover, there is no provision to assure that these regulations specifying re-entry times of either 24 or 48 hours are enforced.

In fact, it is not uncommon to see farmers spraying while workers are in the field. A study conducted by the Florida Rural Legal Service in 1980 reported that 48 percent of more than 400 farm workers interviewed had been sprayed at least once while harvesting. Seventy-five percent of the workers surveyed said they had experienced one or more symptoms of pesticide poisoning while at work. In addition, many growers do not provide workers with protective masks or gloves and do not inform workers when and what chemicals are being used.

Furthermore, evidence indicates that for some acutely toxic pesticides, extant protective measures are ineffective. A case in point is the deadly pesticide ethyl parathion, a leading cause of farm worker poisoning in the United States and worldwide. In 1986, EPA found that parathion caused poisoning among all categories of workers who came in contact with it. In addition, EPA admitted that parathion was associated with unacceptable risks to farm workers and that poisonings occurred even under the most stringent protective conditions. In other words, little or no margin of safety exists for parathion use. Nevertheless, it is still legally used on nine major crops in the United States.

Parathion is only one of many acutely toxic pesticides belonging to the organophosphate family. These pesticides came into wide use approximately 20 years ago, when environmental awareness called for limitations on persistent pesticides that were contaminating the environment and damaging wildlife. Many of the persistent pesticides belong to the organochloride family and have been associated with chronic health effects, including cancer, reproductive malfunctions, birth defects, and a broad range of developmental and behavioral growth problems. The organophosphates, on the other hand, degrade much faster and therefore reduced the risk for wildlife and for consumers.

However, for farm workers the switch from organochlorines to organophosphates meant exposure to more acutely toxic pesticides, since many of these rapidly degradable pesticides (parathion is one of them) are characterized by acute toxicity, which can cause dizziness; vomiting; irritation of the eye, upper respiratory tract, and skin; and death. There is an irony here that has not escaped the attention of farm workers: The new wave of environmental consciousness, which forced welcome changes in production technologies, may have actually made things more precarious for farm workers, substituting acute symptoms for chronic ones.

In the past, the EPA has operated under the assumption that these chemicals are essential for high productivity in U.S. agriculture. This notion was recently challenged by a 1989 report of the National Research Council, which concluded that low input agriculture was not significantly less productive than chemically intensive agriculture. As noted in this report, pesticides are not the only option for pest control. Integrated Pest Management, for example, is a strategy that combines alternative methods of pest control (including biological and cultural controls) to achieve a significant reduction in chemical pesticide applications.

Public awareness of these issues is burgeoning, and, consequentially, pressure on agencies like EPA is likely to intensify. Farm workers, the vast majority of whom are people of color, are building their consciousness and are taking their place alongside industrial workers in demanding a safe workplace. Environmentalists, heeding the call for environmental justice, are being challenged not to stand by and allow environmental policies that solve problems for some, yet leave others at risk—and they are responding. Consumers, while insisting on safe produce, are increasingly unwilling to allow others to be poisoned in their stead.

All this is occurring in the context of new revelations that chemical pesticides have not been all that successful in the first place and that alternatives are already available which could lead to a new agriculture. Such an agriculture—call it sustainable or ecological or low input or simply rational—is now on the horizon. The time seems ripe to reject the anachronistic notion that chemical poisons must be part and parcel of modern agriculture and redefine the meaning of "modern" to include the health and safety of farm workers, farmers, consumers, and the environment. □