Fact or Fiction?

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A Pesticide Mystery

Did you know someone who died in an automobile accident? If not, you've certainly read about a recent accident or saw the daily television news with pictures of wrecked cars. Imagine a plane crashing and killing all 120 people on board every day for a year. The death toll for the year would be 43,800, which is about the number of people killed annually in automobile accidents in the U.S.[1]

Now, here's the $64,000 question. How many people do you know who died of pesticide poisoning? Don't know about you, but I have a real problem coming up with even one name. Yet here was some information that appeared in *Audubon Magazine*, January-February 1999.[2]

"Pesticides have become more toxic and their use more widespread. Since 1945 global use of pesticides has risen 50-fold. In the US, more than 220,000 people die each year as a result of pesticide exposure."

This information appeared under a vivid color picture of belching smokestacks with a large column title "Death by Breath." If this many people truly died of pesticide poisoning, it would mean that five times as many people in the U.S. die of pesticide poisoning each year than die from automobile accidents. Using the jet plane example, that's equivalent to 600 people dying each day of a year.

Another part of the report that caught my attention was that it mentioned Cornell University ecologist David Pimentel in a number of places. If you want quotes about the sorry state of the world, Professor Pimentel is a good person to use.[3] So when I see him quoted, I immediately think that things aren't as bad as they are being pictured.

What Could Be Wrong?

Clearly, something is wrong with the figure of 220,000 deaths per year. I wrote to *Audubon Magazine* and eventually connected with the author of the article who is now a professor of journalism. Gretel Schueller agreed that it was incorrect data and told me that a correction was printed in the *Audubon* March-April 1999 issue. It was listed in a "Letters" section under "Corrections" and read as follows: "In 'Death by Breath,' we reported that 220,000 people in the United States die each year as a result of pesticide exposure. In fact, the figure is a worldwide estimate."[4]

This is certainly an improvement, even though you had to really search to find this statement, which in this case was in an obscure spot not highlighted with a belching smokestack. A question that remains, however, is where did they get the number of 220,000 as an estimate for the number of pesticide deaths worldwide? Further research revealed the following information from Robert Proctor's book, *Cancer Wars*. "The World Health Organization in 1990 estimated that there were three million cases of acute severe pesticide poisonings each year throughout the world, responsible for about 220,000 annual deaths. Ninety-nine percent of these deaths were claimed to be in the developing world."[5]

A Different Slant

This still sounded high to me, so I dug further. Here's the same information from Julian Morris and Roger Bate in their book, *Fearing Food*, but with a different slant: "The World Health Organization (WHO) estimates that pesticides cause about 200,000 human deaths per year. However, more than 90 percent of these deaths are suicides. For example, pesticides are a relatively cheap and painless aid to suicide in India, while chewing the leaves of a local tree produces an agonizing death. Another seven percent of the pesticide deaths are accidental household poisonings—children getting into rat poison, or an adult drinking something from an unlabelled bottle. The remaining few percentage points of the 200,000 deaths are farm workers who apply products carelessly or return to a field too soon after the spraying of one of the harsher pesticides, such as methyl parathion."[6]

Research Findings

Bjorn Lomborg discloses the following: "In 1996, the U.S. National Research Council, part of the National Academy of Sciences, produced a 500-page report on carcinogens in food, sponsored by, among others, the U.S. Environmental Protection Agency (EPA). Its main conclusion was

that the great majority of individual naturally occurring and synthetic chemicals in the diet appear to be present at levels below which any significant adverse biologic effect is likely, and so low that they are unlikely to pose an appreciable cancer risk."[7] Lomborg also adds: "The National Research Council was not alone in its evaluation. In 1997, the World Cancer Research Fund and the American Institute of Cancer Research, with the help of the WHO, the National Cancer Institute, the FAO and the International Agency for Research on Cancer (IARC) scrutinized more than 4,500 studies in order to investigate the effect of foods on the development of cancer." The 650-page report also discusses the problem of pesticides and concludes that:

"There is no convincing evidence that any food contaminant (including pesticides) modifies the risk of any cancer, nor is there evidence of any probable causal relationship. Indeed, there is currently little epidemiological evidence that chemical contamination (pesticides) of food and drink, resulting from properly regulated use, significantly affects cancer risk."[7]

W. Alan Sweeney says this about Bruce Ames of the University of California, Berkeley. "Ames calculates that the amount of pesticide residue the average person consumes in a year is less than the amount of similar natural compounds consumed in a single cup of coffee or a single serving of peanuts, mushrooms, basil or wheat flour!"[8]

Morris and Bate sum it up quite nicely. "We are still looking for the first victim of pesticide residues, 50 years after we began using them broadly, and after billions of dollars in medical research spent trying to find such a victim. In contrast, the U.S. Centers for Disease Control estimate that 250 Americans are being killed every year by the virulent new strain of *E. coli 0157*."[9]

Summary

So what's a person to believe? By just reporting one side of this issue one could develop a scary scenario about pesticides. Once some research is done to discover "the rest of the story," however, a noticeably different picture is obtained. Part of the problem is that some folks only want to present the part that will support their position—*e.g.,* all chemicals are bad, so pesticides are bad. Another item relates to the fact that reporters are often on a time scale and don't have the time to do all the research needed to fully develop both sides of an issue. So they rely on the words of some "authority" who is readily quotable, especially with negative comments. I'm afraid this happens much too often. ***P&SF***

References

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