

# Appendix C:

## Response to Public Comments

This Implementation Plan is a working document and will be widely shared and disseminated among stakeholders in professional associations, health organizations, education institutions, government agencies and other groups. To gather as much input as possible, the Federal Interagency Planning Committee widely distributed more than 4,500 copies of the draft Implementation Plan to stakeholders in 2000 for review and public comment. This final Implementation Plan reflects those public comments received, including many specific suggestions for text changes and requests for clarification and/or expansion.

While some reviewers submitted specific text changes, as well as ideas for expansion and/or clarification of Implementation Plan activities, several reviewers focused on broad perspectives of the *National Strategies for Health Care Providers: Pesticides Initiative* in general and related elements of this Implementation Plan. Two major themes emerged:

- Why are pesticides the topic of this model initiative?
- Will a focus on pesticides result in overdiagnosis of pesticides-related illness by health care providers?

In addition, reviewers cited changes to a range of issues. For example, one reviewer called attention to the critical issues of the relationship between chronic pesticide exposure and various types of cancers, as well as reproductive effects of exposures. These sections have been edited to reflect current scientific data and the recent emphasis on lymphoma research. Specifically, the text references the Lymphoma Foundation of America's 2001 report, "*Do Pesticides Cause Lymphoma?*," and incorporates additional information about the National Cancer Institute's prospective study of commercial pesticide applicators and their spouses.

The following is a summary of the Federal Interagency Planning Committee's response to the two major themes.

### Why Pesticides?

Reviewers raised this issue from two perspectives: that of the chemical industry and that of public health professionals. The chemical industry's concerns focused on the accuracy of some data presented, the depth of the issues, and a concern that the Implementation Plan will

overemphasize pesticides as a public health issue. The public health professionals' concerns focused on whether or not pesticides is the most important environmental health issue as the focus of the model initiative.

### *Addressing Industry Concerns*

Data are well documented through peer-reviewed journals, having been studied by government and non-government scientific organizations and individual researchers. Published research includes case studies, epidemiological reports, and clinical research.

Current statistics and clinical data on pesticide poisonings and human health effects may not accurately reflect what is actually occurring in the US due to misdiagnoses and lack of reporting and tracking by health care providers and others.

For example, as presented within the Making the Case chapter of this Implementation Plan, the American Association of Poison Control Centers collects data on acute pesticide poisoning via its Toxic Exposure Surveillance System. According to this data, in years 1993-1998 approximately 20,000 cases were seen each year in health care facilities in the United States, and 52 percent of the cases pertained to children less than six years of age. Studies by Chafee-Bahamon et al. (1983), Harchelroad et al. (1990), and Veltri et al. (1981) found that Poison Control Centers captured between 24 percent and 33 percent of all poisoning cases seen in hospitals as inpatients and/or outpatients. Since this does not include cases seen by health care providers who are not in a hospital setting, it is likely that the actual number of pesticide cases seen annually is much higher.

### *Addressing Public Health Concerns*

Pesticides as the focus of the Implementation Plan and this Initiative is, indeed, an appropriate topic as a model for the myriad environmental health issues that can affect the US population. First, pesticides are ubiquitous. While the principal at-risk group for pesticide exposure is farmworkers and pesticide applicators, virtually everyone in America is at risk of dangerous levels of exposure, including individuals living in nonagricultural rural areas, as well as urban and suburban communities.

Second, a large body of scientific knowledge on pesticides has been built over many years, allowing the health community to acquire some ability to deal with pesticides in a coordinated manner. Unfortunately, neither the information about other toxins nor the health community's ability to deal with them is so advanced. Pesticides can provide a training and education model for health care workers that can be developed and applied to environmental health risks overall. This Implementation Plan will become the blueprint for a coordinated approach to health care provider education and training.

## Fear of Overdiagnosis

As noted above and in the Making the Case section of this Implementation Plan, pesticide-related health conditions have been misdiagnosed in the United States. The development of a comprehensive national education and training strategy targeted at health care providers will bring attention to the current inadequacies in addressing pesticide-related health conditions.

The challenge is that pesticide-related health conditions can share many symptoms with common conditions like flu or food poisoning, so pesticide poisoning may not be considered as a possible diagnosis. As a result, not only are patients not given proper care, but also a public health issue is left inadequately addressed. If a case of pesticide poisoning is not identified as an index case, other individuals who may be affected are not being cared for.

In the absence of an occupational and environmental health history, health care providers may be likely to overdiagnose as well as underdiagnose pesticide-related health conditions. Taking a good health history and understanding how to rule out the likelihood of a pesticide-caused symptom or illness are critical steps in making the correct diagnosis. And because in most cases the appropriate health screening questions are not being asked, health care providers may be making a diagnosis based on what is most probable (e.g. food poisoning), rather than considering all the options and possible illnesses. Health care providers should consider all the possibilities, given similar symptoms, and check with a specialist to accurately assess the source of the poisoning, determine what testing can be done to confirm the diagnosis, and consult about treatment options.

The vision for this Implementation Plan is for all primary care providers to:

- Possess a basic understanding of the health effects associated with pesticide exposures as well as broader environmental exposures; and
- Take action to ameliorate such effects through clinical and prevention activities.

As this national pesticides education and training strategy is implemented, it is unlikely that pesticide-related health conditions will be overdiagnosed because health care providers will be taking a complete health history, considering pesticide exposure only as a possibility related to the presenting illness, and consulting with specialists when additional follow-up is necessary.

