Vision, Expected Outcomes, and Evaluation

Vision

The goal of the *National Strategies for Health Care Providers: Pesticides Initiative* is to improve the recognition, management, and prevention of health effects from pesticide poisonings and exposures. In addition, all primary health care providers should consider the impact of pesticide overexposures on human health as they treat patients and prevent disease. All physicians, nurses, and other health care providers are expected to possess a basic knowledge of health effects related to pesticide exposures and an ability to take action to ameliorate such effects through clinical and preventive activities. This will be achieved through training and education of health professionals, faculty, and students, and the identification, development, dissemination, and use of appropriate resources and tools, in clinical and public health settings.

The Initiative is set in the broader context of environmental health and holds as its preamble the following recommendations, adopted from the Institute of Medicine (Pope and Rall, 1995):

- Environmental health concepts will be reflected in all levels of education of primary care providers, specifically defined as physicians, nurse practitioners, physician assistants, nurses, nurse midwives, and community health workers in the disciplines of family practice, pediatrics, internal medicine, emergency medicine, obstetrics/gynecology, preventive medicine, and public health.
- Interdisciplinary approaches will be used when educating primary health care providers so as to draw upon the expertise from various environmental health disciplines.
- Environmental health content will be an integral part of lifelong learning and continuing education of primary care providers.
- Professional associations, public agencies and private organizations will provide more resources and educational opportunities to enhance environmental health in primary care practice.

Expected Outcomes

By 2010, the following expected outcomes of the Initiative will have occurred:

1. Professional associations, decision-making bodies, academic institutions, and practice settings will have endorsed the need to address health conditions associated with pesticide poisonings and overexposures.

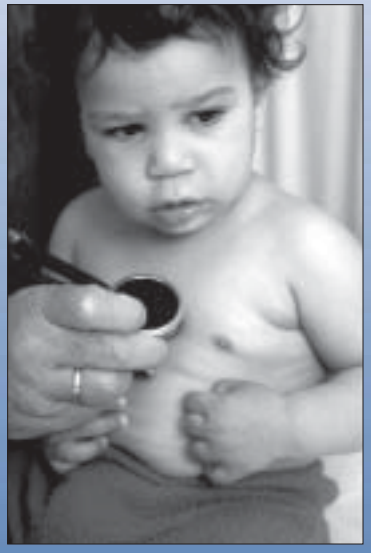
2. The need for educating health care providers about the health effects of pesticide exposures will be an accepted part of primary health care education and practice.
3. Education and practice settings will have integrated an endorsed set of educational competencies and practice skills for primary health care providers on pesticide exposures.
4. Evaluated tools and resources will be used by health care providers to recognize, manage, and prevent health effects from pesticide exposures.
5. A faculty champion on this issue will be positioned and funded in over 100 academic educational institutions, including academic health centers and accompanying nursing schools nationwide.
6. Certification, licensing, and accreditation requirements will include attention to the recognition, management, and prevention of health effects related to pesticide poisonings and exposures.
7. Over 100 pilot primary care practices will serve as models for effectively integrating attention to health effects from pesticides in clinical, educational, and/or preventive ways.
8. Primary care providers will be integrating attention to the health effects of pesticides in clinical, educational, and/or preventive ways.
9. An internet gateway will effectively guide health care providers and professional organizations to information resources and educational materials on the issue.
10. Incentives in the health care system will have increased the attention that primary care providers pay to the recognition, management, and prevention of health effects from pesticide poisonings and exposures.
11. Resource materials on pesticide poisonings will be easily located in the leading sources of information for the health care community (e.g., professional journals, newsletters, central internet sites, professional meetings).

Evaluation of Expected Outcomes

This Initiative has a long-term perspective and ultimately its success will depend on how well it leads to changes and improved health care in this country. Evaluating its progress along the way and its long-term success will be important, both for making mid-course corrections as needed, and for learning from its achievements and failures. An evaluation team will be contracted to design and implement the evaluation. The evaluation will begin early on in the Initiative to ensure that measurement indicators are clearly built into all aspects of implementation. The evaluation will be both formative and summative in nature so as to track both process and outcome measures. The following set of indicators will be used to evaluate the components of the Plan.

Professional Endorsement

- The major professional associations and organizations involved with the Initiative's target audiences endorse and/or adopt a position paper supporting this Implementation Plan.
- Professional journals increase the number of peer-reviewed articles and commentaries making the case for recognizing, managing, and preventing health effects from pesticide poisonings and exposures.



"If you make it relevant to teachers, they'll find a way to teach their students."

— Marcia Owens, JD
Minority Health Professions Foundation

Educational Institutions

- Over 40 percent of educational institutions take steps towards integrating pesticide education into their settings (e.g., adopt components into their curriculum from the National Guidelines, hire a faculty champion, hold periodic Grand Round lectures on the topic, create practice-based internships that address the issue).
- Over 100 educational institutions have a "faculty champion" on faculty who integrates a pesticide perspective into the education of health professional students.
- Certification and licensing requirements include a component related to pesticides and address the broader understanding of environmental health so that students are tested on at least a portion of the endorsed competencies.

Practice Settings

- Over half of practice settings have taken steps towards building a "model practice" that addresses health effects related to pesticides (i.e., patient education, history taking, community outreach, use of tools and resources, access to internet gateway).
- Model practice settings document improvements based on changes in recognizing, managing, and preventing pesticide exposures. Specific models are tracked in high-impact areas (e.g., migrant farmworker communities, urban settings).
- Re-certification and continuing education requirements include a component related to pesticides, or address the broader understanding of environmental health so that practitioners are evaluated on at least a portion of endorsed practice skills.
- Incentives are in place in the health care system to reward health care providers who recognize, manage, and prevent pesticide-related health conditions.

Utilization of Tools and Resources

- Tools and resources are being used at an increased rate by health care providers as tracked through sales, requests, downloading off the internet, and distribution at conferences.
- An endorsed list of resources is available to health care providers online and through the key dissemination mechanisms.

Increased Reporting and Surveillance

- More health care providers are reporting suspected pesticide poisoning and exposures to state and federal agencies.
- States with existing surveillance systems have improved outreach to health care providers statewide to report suspected cases.
- More states implement pesticide surveillance systems with effective outreach and involvement of health care providers.

Improvements Recognized by Communities/General Public

- Community organizations report improved communication and activities by local health care providers and clinics.