

# Pesticide Practice Skills Guidelines for Medical & Nursing Practice: Content and Resources for Practice Settings

The six Practice Skills included in these guidelines are based on the work carried out by NEETF and an interagency committee in 1999 and 2000 under the *National Strategies for Health Care Providers: Pesticides Initiative*. The skills were identified by the Practice Workgroup in 1999 (U.S. EPA, 1998) and were included in the draft and final Implementation Plans (NEETF 2000, 2002). Practice settings in which these skills are expected to be used include, for purposes of this initiative, community health centers and clinics; poison control centers; managed care clinics; hospitals and emergency departments; private practices; urgent care centers; poison control centers; and work and/or school-based clinics.

The six practice skills are shown on the next two pages, along with more specific elements of the skill areas. The first three skill areas – taking an environmental history, awareness of community and individual pesticide risk factors, and knowledge of key health principles – provide the background data, knowledge, and insight that go into making a differential diagnosis and managing a pesticide exposure, described in Practice Skill IV. The remaining two practice skills cover longer-term and wider concerns for managing pesticide exposures, through reporting cases of exposure to the proper authorities, supporting surveillance efforts, and providing guidance and education to patients.

In the remaining sections of this document, each practice skill is discussed in more detail, along with relevant references. A more complete resource library with links to sources of information is available online at [www.neetf.org/Health/Resources/healthcare.htm](http://www.neetf.org/Health/Resources/healthcare.htm).

## References

The National Environmental Education & Training Foundation (NEETF). *Pesticides and National Strategies for Health Care Providers: Draft Implementation Plan*. Washington, DC: NEETF, U.S. EPA, U.S. Dept. of Agriculture, U.S. Dept. of Health and Human Services, U.S. Dept. of Labor; July 2000.

The National Environmental Education & Training Foundation (NEETF). *Implementation Plan: National Strategies for Health Care Providers: Pesticides Initiative*. Washington, DC: NEETF, U.S. EPA, U.S. Dept. of Agriculture, U.S. Dept. of Health and Human Services, U.S. Dept. of Labor; March 2002.

U.S. Environmental Protection Agency, *Pesticides and National Strategies for Health Care Providers: Workshop Proceedings, April 23-24, 1998*. Washington, DC: U.S. EPA, Office of Prevention, Pesticides and Toxic Substances, EPA #735-R-98-001, July 1998.

## Six Practice Skills

### Practice Skill I: Taking an Environmental History

- I-1. Understand the purposes and general principles for taking an environmental history.
- I-2. Incorporate general environmental screening questions into routine patient histories.
- I-3. Be able to take a complete environmental exposure/health history for adults and children, covering occupational and non-occupational exposure factors.

### Practice Skill II: Knowledge of Key Health Principles

- II-1. Possess basic awareness of environmental aspects of communities in which patients live.
- II-2. Recognize high risk occupations for pesticide exposure.
- II-3. Develop community resource list.

### Practice Skill III: Awareness of Community and Individual Pesticide Risk Factors

- III-1. Demonstrate key principles of environmental/occupational health, epidemiology, and population-based health.
- III-2. Understand the dose-response relationship.
- III-3. Understand measures of morbidity/mortality and study designs.

### Practice Skill IV: Clinical Management of Pesticide Exposure

- IV-1. Recognize the signs and symptoms of pesticide exposures (both acute and chronic).
- IV-2. Diagnose pesticide-related illness using appropriate testing procedures and treat pesticide over-exposures.
- IV-3. Treat and manage health conditions associated with pesticide exposure or refer patients to appropriate specialists and resources, and follow up appropriately.

## **Practice Skill V: Reporting Pesticide Exposure and Supporting Surveillance Efforts**

V-1. Understand the importance of surveillance and reporting.

V-2. Know the roles of federal and state regulatory agencies with regard to pesticide exposure control.

V-3. Report pesticide exposures as required.

## **Practice Skill VI: Providing Prevention Guidance and Education to Patients**

VI-1. Engage in primary prevention strategies to promote health and prevent disease among patients.

VI-2. Work proactively with patients and the community to prevent exposure, ensure early detection, and limit effects of illness.