

Practice Skill II:

Awareness of Community and Individual Pesticide Risk Factors

Content

II-1. Possess basic awareness of environmental aspects of communities in which patients live.

- Recognize differences in geographic dispersion of population in urban and rural living patterns and relationship to possible pesticide exposure. Recognize that different populations and communities have different exposures to pesticides.
- Use available community assessment data to begin an evaluation of the community (e.g., windshield surveys, citizen surveys, observation, newspaper, EPA website zipcode search, public library). Consider:
 - ▶ Location of homes near major industrial complexes or freeways
 - ▶ Air and water quality
 - ▶ Demographics of community members
 - ▶ What populations are at greatest risk (elderly, children, workers, pregnant and lactating women, other)?
 - ▶ Are there any cultural issues that may be predisposing to certain exposures?
 - ▶ Where do children play?
 - ▶ What community resources are available?
 - ▶ Where are high risk locales (farms, landfills, urban crowding)?
 - ▶ Which seasonal industries pose the greatest risk of exposure?
 - ▶ Are some population groups highly mobile or transient?
 - ▶ What are common problems related to pest infestation (rodents, mosquitos, ants, cockroaches)?
- Recognize potential environmental sources of exposure:
 - ▶ Recreational areas and fields
 - ▶ Yards
 - ▶ Golf courses
 - ▶ Schools and daycare facilities

II-2. Recognize high risk occupations for pesticide exposure.

The likelihood of pesticide poisoning depends in part on whether or not an individual is present in environments where pesticide exposure is likely to occur, such as:

- Farming, agriculture, migrant work, structural application
- Groundskeeping, schools, gardening (pesticide application): structural, agriculture, greenhouse, nurseries, golf courses, freeways, forestry, residential, schools
- Extermination services

Table 1 below lists numerous occupations that increase the chance for pesticide exposure, as well as some non-occupational sources that present an opportunity for pesticide exposure.

Table 1: Occupational and Non-Occupational Sources of Pesticide Exposure

Nonoccupational	Occupational
<ul style="list-style-type: none"> ▶ Accident or Intentional ingestion/suicide attempt ▶ Food residues ▶ Hazardous waste sites ▶ Industrial spills ▶ Laundering of clothing worn in pesticide application ▶ Residues from treated structures (houses, schools, office buildings) ▶ Residues in carpets and on domestic pets ▶ Residues on treated lawns and landscapes ▶ Termite control ▶ Treated wood structures ▶ Water residues 	<ul style="list-style-type: none"> ▶ Aerial equipment maintenance ▶ Agricultural application ▶ Agronomists ▶ Building maintenance work ▶ Emergency responders ▶ Entomologists ▶ Farm work ▶ Firefighters ▶ Flaggers ▶ Forestry workers ▶ Formulating end product ▶ Greenhouse, nursery, mushroom house work ▶ Hazardous waste workers ▶ Landscapers ▶ Livestock dippers and veterinarians ▶ Manufacturing active ingredient ▶ Marina workers ▶ Medical personnel ▶ Mixing and loading pesticides ▶ Park workers ▶ Pesticide applicators ▶ Plant pathologists ▶ Research chemistry ▶ Sewer work ▶ Storage/warehouse work ▶ Structural application ▶ Transportation ▶ Transporting pesticides ▶ Treating contaminated workers ▶ Vector control workers ▶ Wood treatment workers ▶ Work on highway or railroad rights of way

Adapted from: McConnell R. Chapter 37: Pesticides and Related Compounds. In: Rosenstock L, Cullen MR, eds. *Textbook of Clinical Occupational and Environmental Medicine*. Philadelphia, PA: W.B. Saunders Company; 1994.

II-3. Develop community resource list.

The resource listing shown in Table 2 below summarizes in one place the various people and organizations that might be consulted in the event of a pesticide-related incident. They include:

- Basic hospital/emergency care
- Poison control/toxicology assistance
- Health care professional specialists
- University/public agency supports
- Resources specific to locale

Resources

- Rosenstock L, Cullen MR, eds. *Textbook of Clinical Occupational and Environmental Medicine*. Philadelphia, PA: W.B. Saunders Company; 1994.

- Links to online pesticide resources and directories are available through:
 - ▶ National Pesticide Information Center (EPA-funded): <http://npic.orst.edu>
 - ▶ EPA's Pesticide Management Resource Guide (PMReG): www.epa.gov/oppfead1/pmreg/index.html
 - ▶ NEETF's Pesticides Resource Library: www.neetf.org/Health/Resources/healthcare.htm

Table 2: Community Resources for Assistance with Pesticide Exposures

Resource	Tel:	Fax:	E-mail:
Hospital			
Emergency/Medical Service/ Rescue Squad			
Pharmacy			
Poison Control Center (www.npic.orst.edu/poison.htm)			
State Pesticide Regulatory Agency (www.npic.orst.edu/state1.htm)			
State Health Dept (www.apha.org/public_health/state.htm)			
Toxicology Division			
Environmental and Occupational Health			
National Poison Control Hotline	1-800-222-1222		
Local Health Dept			
Pesticide Division			
Toxicology Division			
University Toxicologists			
University Agriculture Dept			
EPA Regional Office			
OSHA Regional Office			
County Extension Service (look in blue pages in local telephone directory or http://npc.orst.edu/countyext.htm)			
Public Library			
Specialists:			
Occupational Medicine			
Agriculture			
National Institute for Occupational Safety and Health (NIOSH)			
National Pesticide Information Center (NPIC)	1-800-858-7378		npic@ace.orst.edu
Agency for Toxic Substances and Disease Registry (ATSDR)			
North American Agromedicine Consortium			