

Taking an Environmental History

Taking a good environmental history is one of the critical tools for proper diagnosis of disease. The following elements of, and sample questions for, an environmental history can be used to guide health care providers in completing a detailed environmental history for the adult and pediatric patient covering occupational and non-occupational exposure factors. This environmental history information is taken from the *National Pesticide Competency Guidelines for Medical & Nursing Education* and the *National Pesticide Practice Skills Guidelines for Medical & Nursing Practice*, which outline the knowledge and skills that students in the health professions and health care professionals need to have about pesticides. These documents are part of the **National Strategies for Health Care Providers: Pesticides Initiative**.

Environmental History for ADULT PATIENTS:

Elements of Environmental History

- Occupation, including length of time on job, nature of work, kinds of work-exposures, involvement with hazardous materials, use of personal protective equipment, habits at worksite (eating, smoking), any specific pesticide or work exposure (e.g., agricultural application, structural pest control), sorting of contaminated clothing, hygiene practices of applicators, co-worker symptoms.
- Home environment, including presence of or use of pesticides in house, lawn, garden; use on pets; storage of pesticides and chemicals; anyone else in family sick; age of home; characteristics of heating and ventilation system
 - Relocation of home due to health problems
 - Source of heat in home (e.g., wood stove)
 - New/recent construction or new materials (e.g., carpets)
 - Recreational activities and hobbies of the patient or family (e.g., pottery, photography, painting, furniture stripping)
- Community exposures including home location near industry, businesses (e.g., auto repair shops, dry cleaners), landfills, hazardous substance spills, farms
- Source of drinking water
- Presence of pesticides on food (e.g. organic, farmer's market, supermarket, own garden)
- Medical condition and symptoms, including temporal relationship to any given place or time, others with similar problems (co-worker or family member)
- Use of tobacco, alcohol, other drugs (illegal, prescription, and over-the-counter), constant exposure to second-hand smoke

Sample questions to ask:

- What kind of work do you do?
- Do you notice the problems you are having while you are at work? at home? in your community? in a specific location?
- What causes symptoms to come and go?
- Have you recently used pesticides, solvents, insecticides, weed killers, or visited places you believe pesticides were used or sprayed?
- What kinds of hobbies do you have?
- Has your workplace been treated recently for insects, weeds, or other pest problems?



Environmental History for PEDIATRIC PATIENTS

Elements of Environmental History

- Occupation/hobbies of parents and other guardians or individuals living in the home to a level of detail similar to above. If parents have occupational exposure, is the clothing worn during application stored and washed separately from family clothing? If the child spends time with a sitter or at another person's home, inquire about occupations, hobbies, etc., in those homes as well.
- Where child goes to school, daycare, playground, play
- Whether child helps with gardening activities
- Use of pesticides in home/play areas; child's play activities in relation to areas treated; protection of toys and surfaces during pesticide application
- Proper washing of food (eggs, raw fruits, vegetables)
- For infants: if bottle-fed, inquire into source of water for formula; if breast-fed, consider maternal exposures
- Proper storage of dangerous chemicals (i.e., is home properly "child proofed")
- Amount of food consumed by the child, and relationship between amount of exposure/body weight for child compared to that of an adult
- Developmental history (e.g., infants crawling on the floor, walking, getting into objects)
- Pesticide use on pets
- Exposure to wooden decks or wooden play structures

Sample questions to ask:

- Where does your child go to school, daycare, and playgrounds?
- Have any of these places been treated recently (e.g., sprayed) for insects, weeds, or other pest problems?
- How often do pesticides get sprayed in your home/garden? Who sprays it, a licensed applicator or parent?
- Does your child help with gardening activities?
- Sources of food, water (e.g., well water), breast-feeding of infant?
- Are there foods that make up a disproportionate amount of your child's diet?
- Do you have a wooden deck? Does your child play on wooden structures in a playground?
- Have you used DEET on your child (number of applications and concentration)?

Specific Questions for AGRICULTURAL WORKERS and THEIR FAMILIES:

- Is there spraying going on while you are in the field?
- Do you feel sick while in the fields?
- Were the fields wet when you were picking? (Note: Dry fields can be a source of residues and are potentially hazardous with certain crops such as citrus, grapes)
- Do your children play in the fields?
- Do you eat, drink, or smoke in the fields?

Taking an Environmental History produced as part of the
National Strategies for Health Care Providers: Pesticides Initiative
is available in PDF format at <http://www.neefusa.org/health/pesticides/implplan.htm>.

Extensive pesticide resources can be found at
<http://www.neefusa.org/health/pesticides/index.htm>

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