

# Practice Skill V:

## Reporting Pesticide Exposure and Supporting Surveillance Efforts

### Content

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

- Identify illnesses and hazards that are potentially related to pesticide exposure.
- Review available data that allow for trend analysis of pesticide exposures and health effects.
- Monitor a given population for disease occurrence.
- Identify hypersensitive individuals to develop strategies to prevent disease in others.
- Remove individuals from exposure as indicated.
- Provide information to individuals, groups, and committees about efforts (e.g., reporting and tracking exposures) to further the understanding of pesticide-related advanced health outcomes.
- Be able to access and report data for local, regional, and national surveillance programs.

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

- The Environmental Protection Agency (EPA) is the lead federal agency for regulation of pesticide use under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). FIFRA requires training and certification of pesticide applicators which is enforced through delegated authority to the states. Health care providers can obtain pesticide information and surveillance data from state agencies and EPA.
- The Federal Food, Drug, and Cosmetic Act (FFDCA) is the basic food and drug law in the U.S. and is administered by the Food and Drug Agency (FDA). It establishes the concept of a tolerance (the maximum legally permissible level of residue at harvest) for pesticide residues in or on human food and animal feed. Tolerances are specific to a pesticide/commodity combination. FFDCA requires EPA to establish these residue tolerances for pesticides in or on food, feed, and byproducts.
- Under the Food Quality Protection Act (FQPA) of 1996, EPA is to review all tolerances for existing pesticides within ten years to determine that they meet the new health-based standard – i.e., that they pose a "reasonable certainty of no harm" from aggregate and cumulative exposures.

(Aggregate exposure refers to exposures from all sources, including residues in food and drinking water, occupational exposures, and incidental exposures. Cumulative exposure refers to exposure to different pesticides that share a common mechanism of action.) FQPA also provides extra protection for infants and children, by requiring an explicit determination that tolerances are safe for children, including an additional safety factor of up to 10-fold, if necessary, to account for uncertainty in data relative to children; and requiring consideration of children's special sensitivity and potential exposure to pesticides.

- Other federal agencies also have important roles in pesticide exposure control, and offer resources for health care providers.
  - ▶ The **Occupational Safety and Health Administration (OSHA)** has authority over work-related exposures (e.g., pesticide manufacturing). OSHA can perform inspections to determine if a hazard is present. Anonymous calls can be made to prompt an investigation.  
[www.osha.gov](http://www.osha.gov)
  - ▶ The **National Institute for Occupational Safety and Health (NIOSH)** conducts research, funds professional occupational safety and health education, and conducts health hazard evaluations. Providers can obtain educational materials and surveillance data from NIOSH related to occupational safety and health.  
[www.cdc.gov/niosh/homepage.html](http://www.cdc.gov/niosh/homepage.html)
  - ▶ The **Centers for Disease Control and Prevention (CDC)** offer epidemiological data and guidance, surveillance, health statistics reports, and laboratory information.  
[www.cdc.gov](http://www.cdc.gov)
  - ▶ The **Agency for Toxic Substances and Disease Registry (ATSDR)** develops case studies in environmental medicine and risk profiles for individual pesticides.  
[atsdr.cdc.gov](http://atsdr.cdc.gov)
- EPA's Worker Protection Standard is the regulation that applies to agricultural pesticide handlers and field workers. It includes requirements for: warnings about pesticide applications, use of personal protection equipment, restrictions on re-entry into treated areas, decontamination, emergency medical assistance, and pesticide safety training.
- State departments of agriculture, health or environment will investigate pesticide exposure incidents. State specific requirements for reporting to Workers' Compensation may vary.

### V-3. Report pesticide exposures as required.

- Know the mandatory reporting requirements in the state in which the provider is practicing (over 25 states have mandatory reporting requirements).
- Report pesticide-related illness to the appropriate authorities, such as local and state health departments.
- Be aware of workers' potential reluctance to get involved in reporting of workplace exposures, due to fears of retaliatory action and economic loss. Consent of the patient should be obtained prior to reporting.
- Report and validate Workers' Compensation claims as indicated in each state.

## Resources

EPA Office of Pesticide Programs:  
[www.epa.gov/pesticides](http://www.epa.gov/pesticides)

EPA Worker Protection Standard:  
<http://ace.orst.edu/info/npic/state1.htm>  
[www.epa.gov/oppfead1/safety/workers/workers.htm](http://www.epa.gov/oppfead1/safety/workers/workers.htm)

Food Quality Protection Act:  
<http://npic.orst.edu/fqpa/fqpa.htm>

NIOSH:  
[www.cdc.gov/niosh/homepage.html](http://www.cdc.gov/niosh/homepage.html)

State-Based Pesticide Poisoning Surveillance Systems:  
[www.cdc.gov/niosh/pestsurv/default.html#states](http://www.cdc.gov/niosh/pestsurv/default.html#states)

State Pesticide Regulatory Agencies:  
<http://npic.orst.edu/state1.htm>

U.S. Department of Labor, "State Workers Compensation Laws:"  
[www.dol.gov/esa/regs/statutes/owcp/stwclaw/stwclaw.htm](http://www.dol.gov/esa/regs/statutes/owcp/stwclaw/stwclaw.htm)

- 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](http://www.epa.gov/oppfead1/pmreg/index.html)
  - ▶ NEETF's Pesticides Resource Library: [www.neetf.org/Health/Resources/healthcare.htm](http://www.neetf.org/Health/Resources/healthcare.htm)