

APPENDIX G

RESOURCES FOR ADDITIONAL INFORMATION RELATED TO PESTICIDE POISONING SURVEILLANCE



APPENDIX G ■

RESOURCES FOR ADDITIONAL INFORMATION RELATED TO PESTICIDE POISONING SURVEILLANCE

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This chapter serves as a starting point for any new PPSP to develop their own list of resources. Any compendium of this nature is always incomplete and becomes outdated. Efforts have been made to select references and resources that should remain available and are updated periodically. It includes resources that existing PPSPs find particularly useful. Listings and links are not an endorsement or guarantee of the accuracy of any Web site, publication, or other resource material. Also, any mention of specific products or laboratory resources are not an endorsement and are provided purely for informational purposes.

G.1 GENERAL PESTICIDE RESOURCES

Several Internet Web sites are particularly useful when looking for information about any aspect of pesticides including regulation, toxicology, safety and health, and medical management. Links to most of the resources listed in this chapter can also be found at these sites.

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION (CDPR)

<http://www.cdpr.ca.gov/docs/dprdocs/docsmenu.htm>

This site provides links to publications from the different CDPR programs. Subject areas include enforcement and worker safety (note that searches for publications including useful research reports may be done from a link in this section) and environmental monitoring.

CANADIAN CENTER FOR OCCUPATIONAL HEALTH AND SAFETY (CCOHS) HEALTH AND SAFETY INTERNET DIRECTORY

<http://www.ccohs.ca/resources/hshome.html>

This site has links to a large number of sites that address a broad range of occupational safety and health issues. It is divided into subject areas and also has a section on recently added links.

DUKE OCCUPATIONAL AND ENVIRONMENTAL MEDICINE

<http://gilligan.duhs.duke.edu/oem/default.htm>

This site provides many resources in the area of occupational and environmental medicine. A link connects to the National Library of Medicine to conduct literature searches. This page provides links to a moderated e-mail list that is used by many health care and public health professionals to exchange information and pose questions related to practice. Also at this site is a link to Duke's OEM WWW resource list that contains links to many of the sites referenced in this chapter.

PESTICIDE MANAGEMENT RESOURCE GUIDE

<http://www.epa.gov/oppfead1/pmreg/>

This EPA electronic resource compendium likely contains a link that can help you find what you need. The guide can be searched by subject, title, source, or full text. The general subject areas include alternative pest control methods (including IPM), bibliographic information, chemical and physical properties, chemical identification, environmental effects and fate, pesticide exposure in food, occupational pesticide exposure, formulation, information exchange, regulatory issue topics, training to develop pesticide regulatory staff, and worker safety. All listings contain summary information, how to access the resource, whether there is a cost, and some additional information about the resource when available (e.g., intended audience, language, updates, etc.).

UNIVERSITY OF NEBRASKA

<http://pested.unl.edu/>

This Web site contains a broad range of links related to pesticides. The links are categorized as follows: *IPM, Education, Health and Safety, Databases, Laws and Regulation, Newsletters, Environmental Protection, Organizations, and Product Manufacturers*. It also provides access to electronic versions of training materials from the Nebraska Agricultural Extension Service.

G.2 RECOGNITION AND MANAGEMENT OF PESTICIDE POISONING, INCLUDING MATERIALS FOR HCPs

This section provides information about resources related to the clinical recognition and management of pesticide poisoning. Resources Section G.3 *Pesticide Toxicology* also contain clinically relevant information.

G.2.1 PESTICIDES AND HUMAN HEALTH CONCERNS

G.2.1.1 TELEPHONE HOTLINES

LOCAL AND REGIONAL POISON CONTROL CENTERS (PCCs)

Local and regional PCCs provide case management information to HCPs who contact them. They provide assistance in identifying products and the constituent ingredients involved in poisonings. Poison centers also answer inquiries from the public, providing immediate first-aid information and referring individuals to seek medical consultation as needed. Poison centers also conduct public education campaigns to prevent poisonings. Some poison centers have additional functions including contractual relationships with certain manufacturers to provide information on product safety and health, and case management. In 2002, the American Association of Poison Control Centers (AAPCC) established a toll-free number (1-800-222-1222) that routes a caller to the PCC closest to them. Many PPSPs have found PCCs to be an important source of case reports. An up-to-date list of PCCs is available at <http://www.aapcc.org/>.

NATIONAL PESTICIDE INFORMATION CENTER (NPIC)

<http://npic.orst.edu/index.html>

NPIC is an EPA-funded resource available to the general public and HCPs. This is a toll-free telephone service that provides information about pesticide toxicology, environmental chemistry, and other product-specific information as well as recognition and management of pesticide poisoning. NPIC staff will refer callers to other resources as needed. NPIC's Web site provides ready access to EXTTOXNET (the Agriculture Extension Service's library of information about pesticide toxicology) and to public consumer-oriented EPA publications. Telephone, Internet, electronic and mail access to fact sheets, brochures, and NPIC's annual reports are available from this resource.

Oregon State University
333 Weniger Hall; Corvallis, OR 97331-6502
E-mail: npic@ace.orst.edu
Telephone: 1-800-858-7378
Fax: 541-737-0761
Hours: 6:30 am-4:30 pm Pacific time, daily, except holidays.

The National Antimicrobial Network (NAIN) was the companion program addressing concerns about antimicrobial products (disinfectants, sterilants, and sanitizers), but it was discontinued March 31, 2002. For further information or assistance regarding antimicrobial products, contact the Antimicrobial Division in the EPA Office of Pesticide Programs by calling 703-308-0127, sending a fax to 703-308-6467, or e-mailing Info_Antimicrobial@epa.gov.

NATIONAL PESTICIDE MEDICAL MONITORING PROGRAM (NPMMP)

<http://oregonstate.edu/npmmmp/>

NPMMP provides informational assistance in the assessment of human exposure to pesticides. NPMMP has a close relationship with NPIC. Both programs are based at the same location at OSU. Most of the inquiries received by NPMMP are referred from NPIC. When HCPs or others call NPIC in need of immediate medical information, they can usually be directly transferred from NPIC to the NPMMP. NPMMP also receives information requests from the general public and Federal and State agencies. NPMMP maintains a large paper and electronic library of information that is available upon request. Finally, NPMMP has limited funds to support the environmental investigation of suspected exposures using laboratory analyses.

G.2.2 PUBLICATIONS FOR HCPs**RECOGNITION AND MANAGEMENT OF PESTICIDE POISONING, 5TH ED. 1999**

<http://www.epa.gov/oppfead1/safety/healthcare/handbook/handbook.htm>

JR Reigart, JR Roberts, eds. Publication No. EPA 735BRB98B003
Environmental Protection Agency; Office of Prevention, Pesticides and Toxic Substances
Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460
Cost: Free. (This publication is also available in Spanish.) To order 1 to 5 copies, call 703-305-7666
(Fax: 703-308-2962); for 6 or more copies, use the following:

U.S. EPA, National Service Center for Environmental Publications
PO Box 42419, Cincinnati, OH 45242-0419
Telephone: 800-490-9198
Fax: 513-489-8695
Internet: <http://www.epa.gov/ncepihom>

CASE STUDIES IN ENVIRONMENTAL MEDICINE

Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry (ATSDR)

Self-instruction for primary HCPs. Continuing medical education (CME) credits are available through ATSDR. Pertinent case studies include the following:

- Arsenic
- Chlordane
- Cholinesterase inhibiting pesticides
- Pentachlorophenol
- Reproductive/developmental hazards

- Skin lesions
- Taking an exposure history (with an additional erratum document)

Cost: Free—There is a charge for CME. Some case studies can be downloaded in PDF format. An order form for case studies in print format can be downloaded from ATSDR at <http://www.atsdr.cdc.gov/HEC/CSEM/status.html>

To request copies of ATSDR Case Studies, call 404-498-0265, or contact:
Continuing Education Coordinator, ATSDR
Division of Health Education and Promotion, EB33
1600 Clifton Road, NE; Atlanta Georgia 30333

ENVIRONMENTAL HEALTH IN FAMILY MEDICINE

This is a set of self-teaching modules on aspects of environmental health pertinent to family medicine and primary care, which includes a pesticide training module with pediatric, adult, and geriatric cases. The curriculum can be downloaded from the International Joint Commission at <http://www.ijc.org/rel/boards/hptf/modules/content.html>.

GUIDELINES FOR PHYSICIANS WHO SUPERVISE WORKERS EXPOSED TO CHOLINESTERASE-INHIBITING PESTICIDES, 4TH ED., 2002

Pesticide and Environmental Toxicology Section, Office of Environmental Health Hazard Assessment (OEHHA), California Environmental Protection Agency, Oakland, CA.

Office of Environmental Health Hazard Assessment
Pesticide and Environmental Toxicology Section
1515 Clay Street, 16th Floor; Oakland, CA 94612
Telephone: 510-622-3170

Cost: Free—PDF version available at <http://www.oehha.ca.gov/pesticides/programs/Helpdocs1.html>

HANDBOOK OF PEDIATRIC ENVIRONMENTAL HEALTH, 2ND ED., 2003

RA Etzel, SJ Balk, eds.; American Academy of Pediatrics, Elk Grove Village, IL

This book is designed for pediatric HCPs and contains a chapter on pesticides.

American Academy of Pediatrics; PO Box 927,
141 Northwest Point Boulevard; Elk Grove Village, IL 60009-0927

Cost: \$44.95. This book can be ordered online from the bookstore at <http://www.aap.org/>

OCCUPATIONAL SKIN DISEASE, 3RD ED., 1999

RM Adams, J Fletcher, eds. W B Saunders, Philadelphia, PA.

This is a useful reference that covers contact dermatitis, contact urticaria, systemic toxicity arising from percutaneous absorption, and other relevant topics.

PESTICIDE EXPOSURE AND THE HEALTH CARE PROFESSIONAL'S ACCESS TO PESTICIDE APPLICATION RECORD INFORMATION

<http://www.ams.usda.gov/science/sdpr.htm>

This brochure describes licensed HCPs' legal right of access to pesticide application records from certain pesticide applicators when the records may help in diagnosis and treatment of an exposed person. To obtain copies of this brochure or to request permission to customize the brochure with State-specific information, contact:

Pesticide Recordkeeping Program Staff
 USDA Agricultural Marketing Service
 Science and Technology, Pesticide Records Branch
 87000 Centerville Road, Suite 202; Manassas, VA 20110
 Telephone: 703-330-7826
 E-mail: amspesticide.records@usda.gov

PESTICIDE POISONING SYMPTOMS AND FIRST AID, 2002

<http://muextension.missouri.edu/xplor/agguides/agengin/g01915.htm>

F Fishel, P Andre. MU Extension, University of Missouri-Columbia. Publication G 1915.

Electronic and PDF versions are available.

Cost: \$.75-To order hard copies, call 1-800-292-0969.

PESTICIDE DERMATOSES, 2001

H Penagos, M O'Malley, H Maibach. CRC Press, Boca Raton, FL.

This is a comprehensive reference on skin reactions to pesticides, which includes diagnosis, treatment, and testing methods with case studies.

PESTICIDES AND EPIDEMIOLOGY, 2003

<http://www.btny.purdue.edu/Pubs/PPP/PPP-43.pdf>

F Whitford, J Acquavella, C. Burns. Purdue Pesticide Programs, Purdue University Cooperative Extension Service, West Lafayette, IN. Publication PPPB43.

A brief primer on pesticide epidemiology useful for explaining pesticide epidemiology to a wide variety of audiences.

G.2.3 INTERNET RESOURCES

The following case study modules and clinical resources are available on the Internet.

ASSOCIATION OF OCCUPATIONAL AND ENVIRONMENTAL CLINICS (AOEC)

<http://www.aoec.org/LLDIR.htm#Peer-reviewed%20Module>

This association represents a network of clinics and occupational/environmental health specialists. Resources include a lending library of educational materials, environmental health-related course syllabi, and bibliographic references for HCPs. A helpful series of PowerPoint presentations on pesticide illness is available.

AOEC; 1010 Vermont Avenue NW, Suite 513
Washington, DC 20005
Telephone: 202-347-4976

CHILDREN'S ENVIRONMENTAL HEALTH CASE STUDY SERIES

<http://www.uic.edu/sph/glakes/kids/case1/about.htm>

This is from a project funded by AOEC, ATSDR, and EPA. A pediatric environmental health case study is included.

ENVIRODX

<http://medlib.med.utah.edu/envirodx>.

This is a multimedia computer-based learning program on environmental-related disease. It is a case-focused system described as a virtual clinic. The reader views video clips that provide the clinical history. Physical exam and test findings are provided. The reader is then provided an opportunity to select the diagnosis from a multiple choice list. A video clip of the prevention counseling provided to the patient is also available.

ENVIRRN

<http://envirn.umaryland.edu/>

This Web site offers a broad spectrum of information about environmental health from a nursing perspective and includes educational and resource links. A pesticide case study is on this Web site (<http://envirn.umaryland.edu/interventions/pestcase.htm>).

PESTICIDE POISONING DIAGNOSTIC TOOL (POISONING DATABASE)

http://www.pesticideinfo.org/Search_Poisoning.jsp

This tool, developed by PANNA, is designed to help HCPs and others recognize, diagnose, and report pesticide-related illnesses. The database currently provides symptom, first aid, and treatment-related information for approximately 1,900 pesticides. It can be searched for possible pesticide poisoning agents by entering as little or as much relevant information as is available. Searches by chemical or product name, pesticide use type, geographic location, and/or crop or application site are possible. In addition, a HCP (or other user) can search by observed signs and symptoms. This online resource also provides reporting information (legal requirements, reporting instructions, and official reporting contacts) for all 50 States. The database lists specific county-level reporting information for California and Florida.

PESTICIDE USE ON AIRLINES

<http://ostpxweb.dot.gov/policy/Safety%20Energy%20Env/disinsection.htm>

There is concern about pesticide exposures of workers and passengers in the air transportation industry. Some countries require arriving international flights to undergo disinsection. Disinsection involves either spraying aerosol insecticide in the cabin with airline passengers present, or applying a residual insecticide to the cabin when passengers are not present. The Web site provides more information on this topic, including a list of airline contacts and a list of countries that require disinsection.

SPECIFIC MEDICAL TESTS PUBLISHED IN THE LITERATURE FOR OSHA REGULATED SUBSTANCES

<http://www.cdc.gov/niosh/nmed/medstart.html>

This resource on medical tests for particular chemicals is on the NIOSH Web site. This site provides information about specific medical tests that have been published for OSHA regulated substances, and includes some pesticides.

G.2.4 ADDITIONAL RESOURCES RELATED TO HCP TRAINING ON RECOGNITION AND MANAGEMENT OF PESTICIDE POISONING

This section includes background material related to curricula for health provider training programs.

NIOSH AGRICULTURAL HEALTH AND SAFETY CENTERS

The NIOSH Agricultural Health and Safety Centers offer seminars (usually jointly sponsored with other partners) on pesticide medicine. They can provide information about the curriculum used for those seminars. See Section G.11 *Agriculture Safety and Health* for contact information.

PESTICIDES AND NATIONAL STRATEGIES FOR HCPS

<http://www.neetf.org/Health/providers/index.shtm>

There is an ongoing national initiative for increasing HCP education and training to improve recognition, management, and prevention of pesticide-related health conditions. This is a long-term, collaborative process created by the EPA, U.S. Department of Health and Human Services (DHHS), U.S. Department of Agriculture, and the National Environmental Education and Training Foundation (NEETF). The initiative advocates the education of health professionals while they are in school as well as developing model programs and practice guidelines to incorporate pesticide poisoning recognition, management, and prevention into the health care setting. The development and dissemination of training curricula and other resources targeted at practicing HCPs have also been proposed. To obtain *Pesticides and National Strategies for HCPs: Pesticides Initiative, National Pesticide Competency Guidelines for Medical & Nursing Education*, or *National Pesticide Practice Skills Guidelines for Medical and Nursing Practice* and other publications as they become available, contact NEETF.

National Environmental Education & Training Foundation
1707 H Street, NW; Suite 900; Washington, DC 20006
Telephone: 202-261-6481
<http://www.neetf.org>

The NEETF Pesticides Resource Library Web site is

<http://www.neetf.org/Health/Pestlibrary.shtm>

G.2.5 PESTICIDES AND ANIMAL HEALTH CONCERNS**NATIONAL ANIMAL POISON CONTROL CENTER**

<http://www.asPCA.org/site/PageServer?pagename'apcc>

This is a nonprofit PCC that addresses concerns and provides veterinary diagnostic and treatment information for poisoned animals. It requires a fee-for-service, which is paid by the animal owner, veterinarian, or a product manufacturer.

ASPCA National Animal Poison Control Center (member of AAPCC)
1717 South Philo Road; Suite 36 Urbana, IL 61802
Emergency Telephone: 888-426-4435

G.3 PESTICIDE TOXICOLOGY (ALSO SEE SECTION G.4 PESTICIDE PRODUCTS)

This section lists toxicological resources that provide information about pesticides. The listed resources include a few books that the PPSP may choose to include in a basic library. The Internet-based data resources can be accessed free of charge. Many other proprietary Internet-based data systems are not listed here.

G.3.1 PUBLICATIONS***CASARET AND DOULL'S TOXICOLOGY: THE BASIC SCIENCE OF POISONS, 6TH ED., 2001***

CD Klaassen, ed. McGraw-Hill, Medical Publishing Division, New York, NY.

This is a standard toxicology text that includes chapters on pesticide toxicology and occupational toxicology, in addition to sections on principles of toxicology and other aspects of toxicology.

CLINICAL ENVIRONMENTAL HEALTH AND TOXIC EXPOSURES, 2ND ED., 2001

JB Sullivan, GR Krieger, eds. Lippincott Williams & Wilkins, Philadelphia, PA.

This clinical reference on environmental toxicology has sections on workplace and emergency responses to hazardous material exposures and information about specific exposures including pesticides.

HANDBOOK OF PESTICIDE TOXICOLOGY, 2ND ED., 2001

RI Krieger, ed. Academic Press, San Diego, CA

This is a two-volume set that covers a wide variety of topics and includes toxicology reviews on many classes of pesticides.

THE PEST BOOK, 5TH ED., 2000

GW Ware. Thomson Publications, Fresno, CA

This reference covers chemistry, mode of action, and issues related to handling of pesticides.

TOXICOLOGY OF THE EYE: EFFECTS ON THE EYES AND VISUAL SYSTEM FROM CHEMICALS, DRUGS, METALS AND MINERALS, PLANTS, TOXINS, AND VENOMS, 4TH ED., 1999

WM Grant, JS Schuman. Charles C. Thomas Pub., Ltd., Springfield, IL.

This reference on toxicology of the eye includes information about some pesticides and some chemicals used as inerts and carriers in pesticide products.

G.3.2 INTERNET DATA RESOURCES

The sites listed here contain toxicological data on pesticides. While many other sources are available, those listed provide links to other sources and are a good starting point.

EPA REREGISTRATION ELIGIBILITY DECISION DOCUMENTS (REDS)

The REDS can be a useful source of toxicology information since they contain regulatory reviews of pesticides that were first registered before November 1, 1984. FIFRA requires that these active ingredients be

reviewed to determine if they can be reregistered (that is, they must not cause unreasonable risks to people or the environment when used in accordance with the approved label). These documents can be accessed from the EPA Office of Pesticide Programs home page at <http://www.epa.gov/pesticides>, or be ordered from the National Service Center for Environmental Publications (NSCEP).

EXTOXNET

<http://ace.ace.orst.edu/info/extoxnet/>

EXTOXNET—The EXtension TOXicology NETwork—is a useful source of toxicology-related information about pesticides. The toxicological information in this data system is developed cooperatively by the University of California-Davis, Oregon State University, Michigan State University, Cornell University, and the University of Idaho.

HAZARDOUS SUBSTANCES DATA BANK (HSDB)

<http://toxnet.nlm.nih.gov>

The HSDB is one of the toxicology data files in the National Library of Medicine's Toxicology Data Network (TOXNET7). It includes information about human exposure, industrial hygiene, emergency handling procedures, environmental fate, and regulatory requirements. The sections on treatment include much of the information that is found in the POSINDEX7 data system used by PCCs.

INCHEM

<http://www.inchem.org/>

This site is produced by the International Programme on Chemical Safety (IPCS), which is a cooperative program of the World Health Organization (WHO), International Labor Organization (ILO), and the United Nations Environment Programme (UNEP). It provides access to several series of documents produced by WHO and its partners. The information sources that will likely be of greatest use to PPSPs are described below. Additionally, this Web site has International Agency for Research on Cancer (IARC) summaries, evaluations of the toxicity of pesticide residues in foods, and information on non-pesticide chemicals and pesticidal inert ingredients.

ENVIRONMENTAL HEALTH CRITERIA MONOGRAPHS

This is a series of monograph publications from the WHO. Many of these monographs describe the characteristics and effects of pesticides on humans and animals. Each monograph on a class of compounds covers physical properties and analytical methods, sources of exposure, information about environmental transport and fate, review of human and animal health effects, and risks.

HEALTH AND SAFETY GUIDES

A more simply worded general use series on a range of chemicals that includes risks of exposure, summary information about effects, and medical and administrative issues related to exposure.

PESTICIDE DATA SHEETS

These are peer-reviewed fact sheets that give basic toxicologic information about pesticides in broad worldwide use, as well as those that have been found to be particularly hazardous. There is some duplication with fact sheets available from the EXTOWNET site. It also includes information about products registered for use outside of the United States.

POISON INFORMATION MONOGRAPHS

This peer-reviewed series emphasizes the health effects related to exposure from a variety of pesticides and other toxins. It includes information about patient evaluation and management.

INTEGRATED RISK INFORMATION SYSTEM (IRIS)

<http://www.epa.gov/iriswebp/iris/index.html> or <http://toxnet.nlm.nih.gov>

IRIS is a database on the human health effects that may arise from environmental chemical exposure. It provides specific hazard and dose response information. It is designed for users with knowledge about toxicology and life sciences. This system also provides information to aid users in accessing and understanding IRIS data.

PAN PESTICIDE DATABASE

<http://www.pesticideinfo.org/Index.html>

This database has been compiled by PANNA and includes peer-reviewed scientific information about pesticide products and ingredients. Information about acute and chronic health effects, and ecotoxicity is summarized from a number of sources including the EPA, IRIS, National Toxicology Program, International WHO, National Toxicology Program (NTP), National Institutes of Health (NIH), International Agency for Research on Cancer (IARC), the European Union (EU), and the State of California.

G.4 PESTICIDE PRODUCTS**G.4.1 DATABASES ON PESTICIDE PRODUCTS**

These data systems provide the PPSP with the ability to search and identify pesticide products, formulations, ingredients, and regulatory status.

THE CALIFORNIA PESTICIDE DATABASES—USEPA/OPP PESTICIDE-RELATED DATABASE QUERIES

<http://www.cdpr.ca.gov/docs/epa/epamenu.htm>

The California Department of Pesticide Regulation (CDPR) has developed a query system using data from the US EPA Office of Pesticide Programs (OPP) pesticide product information system (PPIS). (The PPIS system is also used to develop the pesticide ingredient and product information used in the

SPIDER surveillance database system.) The databases found at this site include a pesticide product database, a chemical ingredient database, and a pesticide manufacturer database. In addition, links are provided to pesticide label images located at EPA.

PAN PESTICIDE DATABASE

<http://www.pesticideinfo.org/Index.html>

This database has been compiled by the PANNA and includes peer-reviewed scientific information about pesticide products and ingredients. The system can be searched by pesticide product name or registration number. A variety of advanced searches can be performed (e.g., a search for all products containing a particular active ingredient). Information about acute, chronic and ecotoxicity is summarized from a number of sources including the EPA, IRIS, National Toxicology Program, WHO, National Toxicology Program (NTP), National Institutes of Health (NIH), International Agency for Research on Cancer (IARC), the European Union (EU), and the State of California.

G.4.2 PESTICIDE PRODUCT LABELS

There are several Internet sources for obtaining pesticide product labels. In addition to these sources, the label as registered in each State is available from the State department of agriculture (or other designee responsible for registration).

EPA PESTICIDE PRODUCT LABEL SYSTEM

<http://www.epa.gov/pesticides/pestlabels/>

The EPA pesticide product label system is a collection of images of product labels that have been approved by OPP. (Labels are in TIFF format.) Apart from the label, additional correspondence and amended labels are included in the system. Because the system is indexed by the product registration number, you will first need to enter this number. The CDPR site is a useful source of registration numbers, and it can be searched for all federally registered products (and their corresponding registration number) by active ingredient, product name or company name (<http://www.cdpr.ca.gov/docs/epa/epamenu.htm>).

GREENBOOK

<http://www.greenbook.net>

The *Greenbook* is produced by the Chemical and Pharmaceutical Press. Labels, supplemental labels, and MSDSs are obtained from the pesticide companies and compiled into a variety of formats (book, CD-ROM, Internet access).

G.4.3 MATERIAL SAFETY DATA SHEET (MSDS) DIRECTORIES

In addition to the *Greenbook* site described above, several other sites contain pesticide product MSDSs. Some entries in Section G.1 also contain links to MSDS directories. PPSPs have found the following sites to be useful:

CDMS LABEL / MSDS INFORMATION

<http://www.cdms.net/manuf/manuf.asp>

VERMONT SIRI MSDS COLLECTION

<http://www.siri.org/msds/links.html>

WHERE TO FIND MSDS ON THE INTERNET

<http://www.ilpi.com/msds/index.html>

There is no directory of Spanish language MSDSs for pesticide products registered in the United States. Some manufacturers have MSDSs in Spanish for particular products that are available on request. These MSDSs are not posted on Web sites, and therefore require a telephone or written request to the manufacturer. See the following link for further information about this issue: <http://www.ilpi.com/msds/faq/parte.html#foreign>.

G.4.4 PESTICIDE MANUFACTURERS

The following sites contain links to pesticide manufacturers:

CROPLIFE AMERICA

<http://www.croplifeamerica.org>

This is a nonprofit trade organization for the crop protection, pest control, and biotechnology industries. Their Web site has links to many pesticide manufacturers.

NPIC

<http://npic.orst.edu/manuf.htm>

PESTWEB

<http://www.pestweb.com/>

This is a pest control industry Web site that contains links to many manufacturers.

UNIVERSITY OF NEBRASKA

<http://pested.unl.edu/>

G.5 PESTICIDE USAGE

Information about pesticide use can be helpful during the process of developing a PPSP and in analyzing and evaluating PPSP data. There is no comprehensive source of pesticide use information. Some

systems collect data on a segment of pesticide applications while others conduct periodic surveys to obtain data and create estimates of pesticide usage. Six States mandate some form of pesticide use reporting: Arizona, California, New Hampshire, New York, New Jersey, and Oregon. Not all of these State systems provide data in a readily accessible format. Other States are in varying stages of developing or exploring the development of pesticide use reporting systems. This section will briefly describe some sources of available data and reviews of data. Other sources of data not described here include Federal and State systems that monitor pesticide residues in food.

G.5.1 DATA SOURCES

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, C DPR

<http://www.cdpr.ca.gov/docs/dprdocs/docsmenu.htm>

CDPR within the California Environmental Protection Agency has maintained a database since 1970, which includes use of restricted use pesticides by farmers and all applications by pest control operators. In 1990, the system changed to require that all agricultural pesticide use be reported on a monthly basis. Agricultural use is broadly defined within this system and includes right-of-way, park, and golf course applications. An overview of this pesticide use reporting system and reports are under the topic heading of Pesticide Sales and Use. This data is also accessible at the PANNA site (http://www.pesticideinfo.org/Search_Use.jsp).

EPA

<http://www.epa.gov/oppbead1/pestsales/>

EPA has conducted surveys to obtain information about homeowner and commercial pesticide use. This data and USDA agricultural pesticide-use data have been combined to produce estimates of pesticide use in agricultural and nonagricultural sectors. The most recent sales and usage reports are available from the NSCEP or on the web as a PDF file.

NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYDEC)

<http://www.dec.state.ny.us/website/dshm/pesticid/prl.htm>

This State enacted pesticide reporting legislation in 1996. The NYDEC initiated data collection February 1, 1997. The system collects information about pesticide use by commercial pesticide applicators, sales of restricted-use pesticides to farmers, and sales of restricted-use pesticides to commercial applicators and dealers. A description of the program and a link to data reports is available at their Web site.

UNITED STATES GEOLOGIC SURVEY, NATIONAL WATER QUALITY ASSESSMENT PROGRAM

<http://water.usgs.gov/nawqa/>

This program started in 1991 and assesses trends in water quality. Pesticides are considered an important issue in this program. Data and maps describing pesticides in streams, groundwater, and sediments, along with methodology, are available.

USDA

National Agricultural Statistics Service (NASS)

<http://www.usda.gov/nass/offices.htm>

The NASS conducts a variety of surveys on the use of pesticides and fertilizers on farms and ranches. Annual reports are available from this system that list chemical application rates and acres treated for major crops. Information about some fruit and vegetable crops is reported in alternate years. The NASS has 45 local field offices that work with State agencies and organizations to collect survey data. State reports are released on a periodic basis. A listing of State NASS offices and access to reports is available at the NASS Web site.

CENSUS OF AGRICULTURE

<http://www.nass.usda.gov/census>

Originally conducted by the Census Bureau, the Census of Agriculture collects data on agricultural production and provides data down to the county level. It has been conducted in some form since 1840, initially every 10 years. It has been conducted every 5 years since 1925, currently on a schedule of years ending in 2 and 7. The survey collects information about land use, ownership, acreage, production, economic information, number of hired farmworkers, injuries and deaths, and chemical, fertilizer and machinery use. Available reports include an atlas of maps prepared from these data.

OTHER USDA REPORTS

http://usda.mannlib.cornell.edu/ess_entry.html

Other relevant agricultural reports can be obtained from the USDA Economics and Statistics System, which incorporates a variety of USDA datasets.

G.5.2 REVIEWS OF PESTICIDE USE DATA SOURCES

Two documents have reviewed the availability of pesticide use data in the last few years. These reviews were done for different purposes. Each describes available data and gaps in data.

OREGON PESTICIDE USE REPORTING SYSTEM: ANALYTICAL REVIEW. MAY 2000

The information presented in this report was gathered and formatted by staff of the Oregon Health Sciences University (OHSU) and Oregon State University (OSU), under contract with the Oregon Department of Agriculture (ODA). The report provides information to be considered by ODA in the development and implementation of the Oregon Pesticide Use Reporting System and can be obtained from ODA or downloaded from <http://oda.state.or.us/purs/history/anreview/index.html>.

Oregon Department of Agriculture, Pesticides Division
635 Capitol Street N.E.; Salem, OR 97301-2532
Telephone: 503-986-4635

THE TOXIC TREADMILL. PESTICIDE USE AND SALES IN NEW YORK STATE, 1997–1998

Audrey Thier, Environmental Advocates, and New York Public Interest Research Group. October, 2000 (Revised 3/29/01). This report reviews and critiques pesticide use reporting in New York State and is available at <http://www.eany.org/>.

G.6 PESTICIDE SAFETY AND HEALTH INFORMATION TO ASSIST WORKERS AND EMPLOYERS

A large body of information is available on this subject. This section highlights some of the core publications, electronic documents, and electronic listings of training materials and other resources.

AMERICAN ASSOCIATION OF PESTICIDE SAFETY EDUCATORS

<http://aapse.ext.vt.edu/aapse.html>

This is an association of persons and organizations involved in providing education on pesticide safety. The Web site provides links to State resources, a speakers bureau, EPA regulations, newsletters, and journals. It has tools for developing and presenting training programs and also provides access to materials for evaluating pesticide applicator training programs.

ASSOCIATION OF FARMWORKER OPPORTUNITY PROGRAMS (AFOP)

<http://www.afop.org>

Radio Pesticida. Set of six cassettes with a guide, includes five mini-dramas and five accompanying talk shows addressing drift, exposure, and safety at home and work.

Cost: \$50.00. Tapes are in Spanish, and the training manual is in English and Spanish.

Radio Pesticide, Haitian Creole version: \$25.00

Telephone: 703-528-4141

BIBLIOGRAPHY FOR TRAINERS OF FARMWORKERS UNDER THE WORKER PROTECTION STANDARD, 2000

Melissa Frisk, Institute for Agriculture and Trade Policy.

This document is an annotated listing of more than 75 resources for training farmworkers in pesticide safety. Contact information for ordering resources is included. (45 pages)

Cost: \$3.00 (including postage). Available online as a PDF document.

Contact: Candace Falk, Institute for Agriculture and Trade Policy (IATP)

2105 First Avenue South; Minneapolis, MN 55404

Telephone: 612-870-3453

Fax: 612-870-4846

E-mail: cfalk@iatp.org

Web site: <http://www.iatp.org/labels/> (Click on the *Resources* button on the left, then click on the *library* tab near the top and select the pull-down selector for *by IATP staff* to locate the document.)

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION (CDPR)

The CDPR Worker Health and Safety Branch produce the *Pesticide Safety Information* series to assist employers to comply with regulatory training requirements. The series is available in English and Spanish and covers both crop and noncrop settings. All of the documents are available in PDF format from <http://www.cdpr.ca.gov/docs/whs/psisenglish>.

The *Worker Health and Safety Reports* are an additional series of publications that address other worker health and safety issues. A search for these reports can be made using a keyword or publication number at <http://www.cdpr.ca.gov/docs/whs/whsrep.htm>.

CROPLIFE AMERICA

www.croplifeamerica.org

A crop protection, pest control, and biotechnology industry nonprofit trade organization site that contains worker safety and health information under its *Stewardship* and *Publication* links. Topics include safe work practice information in English and Spanish and storage and disposal information. Guidance documents designed as tips for pesticide users are also available. A list is available of things a grower should be aware of when working with aerial applicators, including the need to provide advance notification to neighbors and workers.

EPA

<http://www.epa.gov/pesticides/health/worker.htm>

The EPA has many educational resources available on worker safety and training.

PESTICIDE EDUCATION—UNIVERSITY OF NEBRASKA

<http://pested.unl.edu/>

This Web site provides links to the Nebraska Agricultural Extension pesticide safety education resources as well as links to other sites.

PESTICIDE SAFETY TEACHING RESOURCES, VA TECH LIST

<http://www.vtpp.ext.vt.edu/htmldocs/trainres.html>

This Web site contains links to resources for teaching pesticide safety.

THOMSON'S SPANISH-ENGLISH ENGLISH-SPANISH, ILLUSTRATED AGRICULTURAL DICTIONARY

RP Rice, Jr. [1993] Thomson Publications, Fresno, CA

An illustrated dictionary of terms used in agriculture, including tools, irrigation, animals, crops, and plant propagation, with a broader non-illustrated section that includes terms related to pesticides and pesticide application.

UNIVERSITY OF CALIFORNIA STATEWIDE IPM PROGRAM

<http://anrcatalog.ucdavis.edu>

This program offers a wide range of high quality publications on integrated pest management (IPM) and safe application of pesticides. A few publications of interest are listed here by title, with year of publication. The relevant publications are listed under the headings of *Pest and Disease Management* and *Pest Control Training and DPR Test Materials* in the Agriculture and Natural Resource (ANR) Catalog.

- *Establishing IPM Policies and Programs: A Guide for Public Agencies, 2003.*
- *La seguridad en el manejo de pesticidas, 1999.*
- *Illustrated Guide to Pesticide Safety, 1999.* (Instructor version; worker versions in English, Spanish, and Punjabi)
- *Jorge's New Job: Getting Tested for Cholinesterase, 2000.* (English and Spanish)
- *La lotería de los pesticidas, 1992.* (Spanish/English pesticide safety training game with trainer's manual)

University of California; Agriculture and Natural Resources (ANR) Communications Services
 6701 San Pablo Avenue; Oakland CA 94608-1239
 Telephone: 1-800-994-8849
 Fax: 510-643-5470

G.7 FARMWORKER EMPLOYMENT, DEMOGRAPHICS, CULTURAL ISSUES, AND SERVICE ORGANIZATIONS

G.7.1 EMPLOYMENT ISSUES

MIGRANT AND SEASONAL AGRICULTURAL WORKER PROTECTION ACT (MSPA) (29USC', ET SEQ.)

This act provides legal protections for migrant and seasonal agricultural workers in their interactions with labor contractors, employers, and providers of housing. The act addresses issues of labor contract registration and disclosure of terms of employment and housing occupancy. A poster lists the rights and protections of this group of workers. The Wage and Hour Division of the United States Department of Labor (DOL), along with its State level designees, is responsible for enforcing the MSPA. More information about the MSPA and the poster are available at <http://www.dol.gov/esa/whd/mspa/index.htm>.

WORKERS' COMPENSATION COVERAGE FOR AGRICULTURAL WORKERS

State laws vary widely on whether agricultural workers are covered by workers' compensation. The two reports listed here provide some background information about this issue.

Legal Background Paper: Protection of Migrant Agricultural Workers in Canada, Mexico, and the United States. 2002

<http://www.naalc.org/english/study4.shtml>

The Secretariat of the Commission for Labor Cooperation. Washington DC.

Increasing Farmworkers' Access to Workers Compensation Benefits.

S Davis, Farmworker Justice Fund, Inc., 1999. PC499

Report available from HRSA Contact: 1-800-BASKBHSA or <http://www.ask.hrsa.gov/>

G.7.2 CHILD LABOR IN AGRICULTURE

PPSP staff should be familiar with the agricultural exemptions of the Fair Labor Standards Act and other factors influencing the safety and health of children working in agriculture. The following publications provide a starting point for becoming familiar with the issue.

Child Labor in Agriculture: Changes Needed to Better Protect Health and Educational Opportunities, 1998. (GAO/HEHSB98B193.) U.S. General Accounting Office, Washington, DC; <http://www.gao.gov>

Fingers to the Bone: United States Failure to Protect Child Farmworkers, 2000. Human Rights Watch, Washington, DC. Telephone: 202-612-4321; <http://www.hrw.org/>

The Ones the Law Forgot: Children Working in Agriculture. Shelley Davis and James B. Leonard, Farmworker Justice Fund; http://www.fwjjustice.org/fjf_reports.htm.

Pesticides: Improvements Needed to Ensure the Safety of Farmworkers and Their Children, 2000. (GAO/RCEDB00B40.) U. S. General Accounting Office, Washington, DC; <http://www.gao.gov>.

G.7.3 FARMWORKER DEMOGRAPHICS

Changes in agricultural work, immigration patterns, and government policies all impact the demographics of agricultural workers in the United States. These demographics are important to consider when developing programs, interventions, and studies. A few sources of information are provided here.

CALIFORNIA INSTITUTE FOR RURAL STUDIES (CIRS)

Suffering in Silence: A Report on the Health of California's Agricultural Workers. Nov 2000.

In 1999, the CIRS conducted the study described in this report. The report provides baseline data on the health status of California's agricultural workers. Included is a health status assessment based on a medical exam with blood chemistry, information about access to health care, occupational injuries, workers' compensation coverage, pesticide safety training, and sanitation. The report can be obtained from CIRS or downloaded from the Internet. Further analysis of these data and follow-up studies will be available from CIRS.

California Institute for Rural Studies
P.O. Box 2143, Davis, CA 95616
Telephone: 530-756-6555
Web site: www.cirsinc.org

ENUMERATION STUDIES

The Migrant Health Program at the Bureau of Primary Care, Health Resources and Services Administration, U.S. Department of Health and Human Services (DHHS), has contracted for enumeration studies of migrant seasonal farmworker populations at the county level in ten States (Arkansas, California, Florida, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Texas, and Washington). Profiles may be developed for additional States. The Migrant Health Program definition of migrant and seasonal farmworker was used for this study. The scope does not include all sectors of the agricultural industry or year-round nonmigrant agricultural workers. The reports are available from

their office (see Section G.10 for the address and telephone number), at their Web site (<http://bphc.hrsa.gov/migrant/>), or at the Web site of the National Center for Farmworker Health (<http://www.ncfh.org>).

NATIONAL AGRICULTURAL WORKER SURVEY (NAWS)

This extensive survey is conducted by the US DOL. It collects information on farmworkers, including information about household members, detailed demographics on the farmworker, detailed employment information (e.g., location and work type), wages, working conditions, availability of safety and health training and equipment, household income, legal status, and use of social services. The questionnaire and periodic reports can be obtained from the DOL at <http://www.dol.gov/asp/programs/agworker/naws.htm> or by telephone at 202-219-6197.

G.7.4 FARMWORKER CULTURAL ISSUES

The three resources listed here explore some pertinent cultural issues. Farmworkers come from culturally diverse backgrounds. By understanding the farmworker's perception of risk, safety behavior, and use of health care, valuable insight can be gained on the effect of these beliefs on the surveillance of pesticide-related illness and injury.

BIBLIOGRAPHY OF BOOKS ON MIGRANT WORKERS

<http://www.fwjustice.org/bibliography.htm>

The Farmworkers Justice Fund has developed a selected bibliography of books, both fiction and non-fiction, on migrant agricultural workers. The listing includes current and older works that provide insight into the historical, social, and cultural aspects of migrant agricultural work.

ETHNOMED

<http://www.ethnomed.org>

This Web site provides information about cultural beliefs and medical issues that relate to health care. The cultural groups included are recent immigrant groups in the Seattle area since the site is located at the Harborview Medical Center, University of Washington. PPSP staff may find useful information in the Cultural Profiles and at some of the related Web site links.

MIGRANT CLINICIANS NETWORK (MCN)

<http://www.migrantclinician.org/excellence/cultural/>

Dr. Jennie McLuarin has written two pieces on cultural competency for *Streamline*, the MCN newsletter (March/April 2002 and November/December 2002). The articles and other cultural competency resources can be accessed from the Web address given above.

G.7.5. FARMWORKER SERVICE ORGANIZATIONS

ASSOCIATION OF FARMWORKER OPPORTUNITY PROGRAMS (AFOP)

<http://www.afop.org>

AFOP is an alliance of organizations serving farmworkers and their families. The services provided by AFOP include information, education, support, advocacy, and representation at the national level.

Since 1995, AFOP has had a collaborative program with AmeriCorps to support work in rural farmworker service agencies. The US EPA provides these farmworker service agencies with curriculum materials to promote pesticide safety. AFOP's national headquarters coordinates the program activities and provides expert technical assistance and training. By the end of 2000, the program had trained more than 215,000 farmworkers, provided at least 82,000 community services, and placed some 450 AmeriCorps members in communities throughout the United States. For more information about this program, contact 703-528-4141. The *ASAFE: Serving America's Farmworkers Everywhere* link on the AFOP Web page provides information about AFOP members who participate in the program in Arizona, Arkansas, California, Florida, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee, Virginia, and Washington.

FARMWORKER JUSTICE FUND (FJF)

<http://www.fwjustice.org/>

FJF is a nonprofit organization that works to improve working and living conditions for migrant and seasonal farmworkers in the United States. FJF provides training, legal advocacy, and technical assistance. Their Web site provides links to farmworker labor organizations, migrant farmworker labor law sites, and GAO reports on farmworkers.

LEGAL SERVICES CORPORATION (LSC)

<http://www.lsc.gov/index2.htm>

LSC is a private nonprofit corporation established by Congress in 1974 to provide civil legal assistance to those who are otherwise unable to afford it. A listing of LSC-funded programs and links to programs with Web sites is available on the homepage listed above. The local legal services offices were mentioned in Chapter 3 as a source of reports, since farmworkers with concerns about pesticide exposures and workplace safety may seek legal assistance.

MEXICAN CONSULATES

<http://www.mexonline.com/consulate.htm>

The consulates can be valuable partners for outreach and education activities aimed at Mexican national and immigrant agricultural workers.

NATIONAL CENTER FOR FARMWORKER HEALTH (NCFH)

<http://www.ncfh.org>

This is a nonprofit organization that serves farmworkers and farmworker health service agencies and organizations. It sponsors four annual conferences that focus on the health issues impacting the different migratory streams traveled by farmworkers in the United States. This organization has a catalogue of products, many of which are free or low cost. Materials include videos, resources for HCPs, patient education materials, a bibliography, and some research information. This group also sponsors an electronic discussion group on migrant health research issues. This listserv encourages the exchange of information, resources, grant opportunities, and original research in the area of migrant health. Subscriptions to the listserv are available on the organization's homepage.

G.8 NONOCCUPATIONAL EXPOSURE ISSUES (HOMEOWNER, SCHOOLS, VECTOR CONTROL, ETC.)

G.8.1 PUBLIC CONSUMER INFORMATION

A broad body of information is available for the general public on the safe use of pesticides. Most of the sources have already been mentioned in other sections of this appendix. All of the sites listed in the General Resources section contain some materials aimed at the general public. NPIC's Web site provides ready access to EXTOWNET, the Agriculture Extension Service's library of information about pesticide toxicology and to consumer-oriented EPA publications (see Section G.3.2). The EPA-OPP Web site home page has additional consumer resources including fact sheets on drift and pesticides in the home (www.epa.gov/pesticides). Some topic-specific areas of information for the public are listed below.

G.8.2 PESTICIDES IN SCHOOLS

The use of pesticides in and around schools has been an area of public concern in the last few years. Several States have passed legislation addressing the use of pesticides in schools, including the adoption of parental notification. Links to some recent reports on pesticide use in schools and resources on IPM in schools are provided below:

CALIFORNIA SCHOOL INTEGRATED PEST MANAGEMENT PROGRAM

<http://www.cdpr.ca.gov/cfdocs/apps/schoolipm/main.cfm>

This site also has several resources on school IPM. Among them is this report:

Overview of Pest Management Policies, Programs, and Practices in Selected California Public School Districts. March 1996. PM 96-01.

Sewell E. Simmons, Timothy E. Tidwell, and Terrell A. Barry, Pest Management Analysis and Planning Program.

State of California Environmental Protection Agency; Department of Pesticide Regulation
 Division of Enforcement, Environmental Monitoring, and Data Management
 Environmental Monitoring and Pest Management Branch
 1020 N Street, Sacramento; California 95814-5624.

This report provides findings from a study conducted by CDPR, in cooperation with the California Department of Education, which examined pest management programs in California's public school districts. The report provides an overview of current practices and recommended improvements to these practices.

EPA-IPM IN SCHOOLS

<http://www.epa.gov/pesticides/ipm/>

This Web site provides access to EPA and State resources addressing IPM in schools.

PESTICIDE USE AT NEW YORK SCHOOLS: REDUCING THE RISK

http://www.oag.state.ny.us/press/reports/pesticide_school/pesticide_school.html

This document contains a review of the issue and recommendations. Appendix 3 of the document contains a listing of information about IPM in schools.

POISONED SCHOOLS: INVISIBLE THREATS, VISIBLE ACTIONS. MARCH 2001

This report is a combined effort involving member organizations of the Child Proofing Our Communities: Poisoned School Campaign. This is a locally based, nationally connected campaign to protect children from exposure to environmental health hazards in schools, homes, and communities. It is available on the internet at <http://www.beyondpesticides.org>, or can be ordered from:

Child Proofing Our Communities Campaign
 c/o Center for Health, Environment and Justice
 P.O. Box 6806; Falls Church, VA 22040
 Telephone: 703-237-2249
 E-mail: childproofing@chej.org

THE SCHOOLING OF STATE PESTICIDE LAWS—2002 UPDATE: A REVIEW OF STATE PESTICIDE LAWS REGARDING SCHOOLS.

Kagan Owens and Jay Feldman. *Pesticides and You*, 20:2:16–23, 2000.

Beyond Pesticides/National Coalition Against the Misuse of Pesticides. (This report updates two earlier reports released in *Pesticides and You*, 20;2:16-23, 2000 and 18:3:1998.) Available from Beyond Pesticides at <http://www.beyondpesticides.org/>

G.8.3 VECTOR CONTROL AND PEST ERADICATION PROGRAMS

The use of pesticides in the eradication of disease vectors and economic pests raises issues and concerns about potential public exposure. Several publications and resources are provided here. This is an area with many available sources of information, so this listing is just a starting point.

AMERICAN MOSQUITO CONTROL ASSOCIATION

<http://www.mosquito.org/>

This professional association provides links to educational materials, State and local affiliate organizations, and other relevant resources.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

<http://www.usda.gov/>

Provides information about pest eradication programs.

DEPARTMENT OF DEFENSE PEST MANAGEMENT HOMEPAGE

<http://www.afpmb.org/>

This site contains access to directive and guidance documents on pest control from the Armed Forces Pest Management Board. The Contingency Pest Management Guidance document contains information that may be useful for PPSPs involved in the public health aspects of vector control.

TOXICOLOGICAL PROFILE FOR MALATHION DRAFT FOR PUBLIC COMMENT

<http://www.atsdr.cdc.gov/toxprofiles/tp154.html>

U.S. Department of Health and Human Resources, Agency for Toxic Substances and Disease Registry, Atlanta, Georgia, September, 2001.

EMERGING INFECTIOUS DISEASE JOURNAL

<http://www.cdc.gov/ncidod/EID/index.htm>

This journal can be searched for articles on mosquito control and other relevant topics.

EPA AND MOSQUITO CONTROL

<http://www.epa.gov/pesticides/factsheets/skeeters.htm>

This site has fact sheets related to mosquito control (larvicides, repellents, malathion, naled, pyrethrins, etc.), a joint EPA/CDC statement on mosquito control, and links to other sites.

HUMAN HEALTH SURVEILLANCE DURING THE AERIAL SPRAYING FOR CONTROL OF THE AMERICAN GYPSY MOTH ON SOUTHERN VANCOUVER ISLAND, BRITISH COLUMBIA, 1999

http://www.caphealth.org/btk_journals.html

A report to the Administrator, Pesticide Control Act, Ministry of Environment, Lands and Parks, Province of British Columbia. Prepared by the Capital Health Region, Office of the Medical Health Officer, Director of Research, December 31, 1999.

WEST NILE VIRUS HOME PAGE—CDC DIVISION OF VECTOR BORNE INFECTIOUS DISEASES

<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

Provides much information about West Nile virus infections, including background information, entomology, vertebrate ecology, virology, and surveillance.

G.9 STATE PPSP CONTACT INFORMATION

The following list of State contacts is not a comprehensive list of all States that may collect some pesticide-related illness surveillance data. It includes those that routinely produce annual reports and/or who are partners with EPA and NIOSH in efforts to standardize and enhance pesticide poisoning surveillance.

ARIZONA

Arizona Department of Health Services
Office of Environmental Health
3815 North Black Canyon Highway
Phoenix, AZ 85028
Telephone: 602-230-5830
<http://www.hs.state.az.us/phs/oeh/invsurv/pesticide/index.htm>

Telephone: 510-540-3547 Fax: 510-540-3472
<http://www.cdpr.ca.gov>
Program Brochure:
<http://www.cdpr.ca.gov/docs/whs/pisp.htm> and
click on *About the program*.

CALIFORNIA

California Department of Health Services
Occupational Health Branch
1515 Clay Street Suite 1901
Oakland, CA 94612
Telephone: 510-620-5757 Fax: 510-620-5743
<http://www.dhs.ca.gov/ohb/AgInjury/Default.htm>

FLORIDA

Florida Department of Health
Bureau of Environmental Epidemiology
4052 Bald Cypress Way Rm. 215L
Tallahassee, FL 32399-1712
Telephone: 850-245-4115 Fax: 850-922-8473
<http://www.doh.state.fl.us/>

California Department of Pesticide Regulation
Pesticide Illness Surveillance Program
1020 North Street, Room 200
Sacramento, CA 95814

IOWA

Iowa Department of Health
321 E. 12th Street Lucas State Office Bldg.
Des Moines, IA 50319-0075
Telephone: 515-281-6596 Fax: 414-242-6384
http://www.idph.state.ia.us/eh/toxicology_env_health.asp#pesticide

LOUISIANA

Louisiana Office of Public Health
 Environmental Epidemiology and Toxicology
 325 Loyola Avenue Suite 210
 New Orleans, LA70112
 Telephone: 504-568-8322 Fax: 504-568-5815
<http://www.dhh.state.la.us>

MICHIGAN

Michigan Department of Community Health
 Division of Environmental and Occupational
 Epidemiology
 3423 N. Martin Luther King, Jr. Blvd.
 P.O. Box 30195
 Lansing, MI 48909
 Telephone: 517-335-8761
<http://www.michigan.gov/mdch/>

MISSISSIPPI

Mississippi State Department of Health
 2423 North State Street
 Felix J. Underwood Building
 Jackson, MS 39216
 Telephone: 601-960-7725

NEW MEXICO

New Mexico Department of Health Services
 1190 St. Francis Ave
 Santa Fe, NM 87502
 Telephone: 505-476-3583 Fax: 505-476-3589
[http://www.health.state.nm.us/Web site.nsf/
frames?ReadForm](http://www.health.state.nm.us/Web%20site.nsf/frames?ReadForm)

Border Health
 1170 North Solano Drive Suite L
 Las Cruces, NM 88001
 Telephone: 505-528-5156 Fax: 505-528-6045

NEW YORK

New York Department of Health
 Bureau of Occupational Health
 547 River Street Flanigan Square - Rm 230
 Troy, NY 12203
 Telephone: 518-402-7900 Fax: 518-402-7909
[http://www.health.state.ny.us/nysdoh/pest/
pesticid.htm](http://www.health.state.ny.us/nysdoh/pest/pesticid.htm)

OREGON

Environmental and Occupational
 Epidemiology
 Department of Health Services
 800 NE Oregon St, # 827
 Portland, OR 97232 2162
 Telephone: 503 731 4025 Fax: 503 872-5398
<http://www.ohd.hr.state.or.us/pesticide/index.cfm>

TEXAS

Texas Department of State Health Services
 Environmental & Occupational Epidemiology
 Program
 1100 West 49th Street
 Austin, TX 78756
 Telephone: 512-458-7111 Fax: 512-458-7699
<http://www.dshs.state.tx.us/epitox/pest.shtm>

WASHINGTON

Washington State Department of Health
 Office of Toxic Substances
 7171 Clean Water Lane, Building 4
 Olympia, WA98501
 Telephone: 360-236-3361 Fax: 360-586-4499
<http://www.doh.wa.gov/ehp/ts/pest.htm>

G.10 FEDERAL AGENCY CONTACT INFORMATION

G.10.1 U.S. DEPARTMENT OF AGRICULTURE (USDA)

The USDA programs relevant to pesticide illness surveillance were described in Chapter 5, “Case Intake and Investigation” and in Section G.5. The agency descriptions are not repeated here. USDA also maintains the National Agricultural Library, which is a national network that provides a wide variety of information about agricultural issues. Information about the USDA services described here are available at <http://www.usda.gov/AgenciesandOffices/>.

ANIMAL PLANT HEALTH INSPECTION SERVICE

For telephone contact information, look in your local phone directory, or search using the term *state plant regulatory officials* at <http://www.aphis.usda.gov/ppq/searchpage.html>.

COOPERATIVE STATE RESEARCH EDUCATION AND EXTENSION SYSTEM (CSREES)

Local offices of CSREES are available in the Federal or county government listings of your local telephone directory, usually under the heading of Agricultural Extension Service, Extension Service, or Farm Services. The main State contacts are at land grant universities. A listing of State universities with land grant university status is available at http://www.nasulgc.org/About_Nasulgc/about_nasulgc.htm.

Contact: CSREES; USDA; Washington, DC 20250-0900

Telephone: 202-702-3029

Fax: 202-690-0289

FEDERAL GRAIN INSPECTION SERVICE (FGIS)

<http://www.usda.gov/gipsa/>

Federal Grain Inspection Service; Grain Inspection and Stockyards, Administration; STOP 3601
1400 Independence Avenue; Washington, DC 20250-3601

For telephone contact information, look in your local phone directory or search using the term *The Animal Plant Health Inspection Service* at <http://www.usda.gov/gipsa/>.

NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

NASS Hotline 1-800-727-9540

NASS Census Division can be reached by calling 1-800-523-3215

Listings for NASS State offices are available at <http://www.usda.gov/nass/sso-rpts.htm>.

G.10.2 U.S. DEPARTMENT OF EDUCATION—OFFICE OF MIGRANT EDUCATION

This office supports educational programs for migratory children. The local offices can be partners in PPSP education and outreach efforts. This program has produced a *Directory of Services for Migrant and Seasonal Farmworkers and Their Families* (1999). The directory is now maintained as an online database that is available at <http://www.ael.org/eric/mied/>. For more information and access to State offices, see <http://www.ed.gov/about/offices/list/oese/ome/index.html>.

G.10.3 U.S. DEPARTMENT OF LABOR (DOL)**OSHA**

<http://www.osha.gov/>

This agency's Web site provides access to regulations and interpretations, technical documents, and directories of Federal and State program offices.

WAGE AND HOUR DIVISION

This division of DOL has responsibilities for enforcement of the Fair Labor Standards Act and the National Migrant and Seasonal Agricultural Worker Protection Act (MSPA). Information about Federal rules on labor contractors, wage and hour issues, child labor, the HB2A program, and a listing of district offices are available at <http://www.dol.gov/esa/whd/>. To locate a local Wage and Hour Office or get additional information, call toll-free 1-866-487-9243.

G.10.4 U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA/Office of Pesticide Programs 7506 C; Ariel Rios Building
1200 Pennsylvania Ave, NW; Washington, DC 20460
Telephone: 703-305-7666
Fax: 703-308-2962

<http://www.epa.gov/pesticides>

Regional pesticide contacts are available at this site as well as access to the EPA FIFRA rules (FQPA, WPS).

To receive weekly e-mail updates from this office, you can subscribe to the mailing list by visiting http://www.epa.gov/oppfead1/cb/csb_page/form/form.html.

An EPA-OPP contact that is useful for PPSPs is provided below. Questions about general pesticide issues, exposure concerns, and reporting of clusters and unusual illnesses and injuries from pesticides should be directed to either of the two numbers below.

EPA/ Office of Pesticide Programs; Health Effects Division 7509C
401 M Street SW; Washington DC 20460
Telephone: 703-305-7576 or 703-305-5336
Fax: 703-305-5147

G.10.5 U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES—CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

NATIONAL CENTER FOR ENVIRONMENTAL HEALTH (NCEH), CDC

The Environmental Hazards and Health Effects Section of NCEH conducts investigations that increase knowledge of the relationship between human health and the environment and uses this understanding to develop national public policy and programs to prevent disease. NCEH studies ways to prevent or control health problems associated with exposure to air pollution, nuclear radiation, lead, and other toxicants, as well as hazards resulting from natural and technologic disasters. NCEH is a resource for environmental pesticide case surveillance and disease outbreak investigations. For general information about NCEH, see <http://www.cdc.gov/nceh/>.

The contact office for issues related to surveillance of pesticide-related illness and injury is:

National Center for Environmental Health; Health Studies Branch
Centers for Disease Control and Prevention
4770 Buford Highway, F46, Atlanta, GA 30341
Telephone: 770-488-3406
Fax: 770-488-3450

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH), CDC

<http://www.cdc.gov/niosh/topics/pesticides/>

NIOSH is the Federal agency responsible for conducting research on occupational disease and injury. NIOSH investigates potentially hazardous working conditions upon request, makes recommendations on preventing workplace disease and injury, and provides training to occupational safety and health professionals. NIOSH provides funding and technical support to the Sentinel Event Notification System for Occupational Risks (SENSOR)-Pesticides program and supported the development of the SPIDER software for State-based surveillance of pesticide-related illness and injury. NIOSH also supports State-based surveillance of other occupational diseases and injuries. For general information about NIOSH programs, see <http://www.cdc.gov/niosh/homepage.html>.

The NIOSH contact for PPSPs is:

Project Officer, SENSOR-Pesticides
NIOSH/ Division of Surveillance, Hazard Evaluations and Field Studies
4676 Columbia Parkway, RB17; Cincinnati, OH 45226
Telephone: 1-800-356-4674
Fax: 513-533-8573

G.10.6 U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES— HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)

MIGRANT HEALTH PROGRAM (MHP), BUREAU OF PRIMARY HEALTH CARE (BPHC)

The Migrant Health Act of 1962 was added to the Public Health Services Act. The Migrant Health Program provides medical and support services to migrant and seasonal farmworkers and their families. The MHP provides grant funds to public agencies and nonprofit organizations in 42 States and Puerto Rico for the development and operation of medical clinics. More information about the MHP and links to related resources are available at <http://bphc.hrsa.gov/migrant/>.

For information contact:

Division of Community and Migrant Health; Bureau of Primary Health Care
4350 East-West Highway, 7th Floor; Bethesda, MD 20814
Telephone: 301-594-4303
Fax: 301-944997

G.10.7 U.S. FOOD AND DRUG ADMINISTRATION (FDA)

The FDA is responsible for pesticide residue monitoring in foods as mandated by FIFRA and the Federal Food Drug and Cosmetic Act. Residue monitoring reports and other technical documents are available at <http://www.cfsan.fda.gov/~lrd/pestadd.html>.

G.11 AGRICULTURAL SAFETY AND HEALTH (OTHER THAN PESTICIDES)

G.11.1 EPA

EPA and OSHA have collaborated to produce materials on heat stress in agriculture. A training guide, posters, and a laminated card are available on this topic from EPA or through the Government Printing Office. The document titles and document numbers are listed here.

A Guide to Heat Stress in Agriculture, 1994, Document No. 055B000B00474B9

Controlling Heat Stress in Agriculture, 1996, Document No. 055B000B00557B5 (Available in English or Spanish, 8"x4" cards with key items on recognizing and preventing heat stress.)

Controlling Heat Stress Made Simple/Maneras Sencillas de Controlar la Fatiga Causada por el Calor. Document No. 055B000B00544B3. Two-sided poster, available in English or Spanish.

G.11.2 NIOSH

NIOSH has many projects related to agricultural safety and health. To obtain information about this topic, visit: <http://www.cdc.gov/niosh/topics/agriculture/>.

NIOSH AGRICULTURAL HEALTH AND SAFETY CENTERS

NIOSH has funded eight Agricultural Health and Safety Centers throughout the country, which involve clinicians and other health specialists in the area of pesticide related illness and injury. A listing of the NIOSH supported centers with links to the individual center Web sites is available at <http://www.cdc.gov/niosh/agctrhom.html>.