Agency Data
2006

PIRT

2007 Annual Report
Pesticide Incident Reporting and Tracking Review Panel

Approved by PIRT Panel - July 15, 2008

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Pesticide Incident Reporting and Tracking Review Panel

2007 Annual Report

A report to the Governor, agency heads, the legislature and the public as required by Chapter 380, Laws of 1989, and RCW 70.104.

Approved by the Pesticide Incident Reporting and Tracking Review Panel,
July 2008.

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The annual report is available in electronic format on the Internet at http://www.doh.wa.gov/ehp/Pirt/#pirtreports. Errors or errata found after publication of this report will also be posted at this address.

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Report suspected pesticide-related illness to Washington State Department of Health at the toll-free number 1.877.485.7316.

Washington State Department of Health

Division of Environmental Health
Office of Environmental Health Assessments
Pub # 334-171

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List of Acronyms

DOH	Washington State Department of Health
DOSH	Division of Occupational Safety and Health
DPP	Definitely, Probably or Possibly
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
L&I	Washington State Department of Labor and Industries
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollutant Discharge Elimination System
PCO	Pest Control Operator
PIRT	Pesticide Incident Reporting and Tracking
RCW	Revised Code of Washington
SPI	Structural Pest Inspection
UPEST	Urban Pesticide Education Strategy Team
WAC	Washington Administrative Code
WDO	Wood Destroying Organism
WISHA	Washington Industrial Safety and Health Act
WPC	Washington Poison Center
WPS	Worker Protection Standard
WSDA	Washington State Department of Agriculture

Executive Summary

The annual report summarizes pesticide incidence data collected by agencies during 2006 and activities of the PIRT Review Panel for 2007.

The legislature created the Pesticide Incident Reporting and Tracking (PIRT) Review Panel to monitor pesticide-related incidents that have suspected health or environmental effects (RCW 70.104.070 through 70.104.090). PIRT Panel members include representatives of six state agencies and the Washington Poison Center (WPC) that respond to statewide incidents, two university members, and a Governor-appointed toxicologist and a member representing the public. (Appendix A).

Member agencies conduct pesticide incident investigations in accordance with their specific statutory responsibilities and report findings to the PIRT Panel for evaluation. PIRT submits an annual report summarizing pesticide incidents to the legislature, Governor, agency heads and the public. This 2007 report presents individual and combined agency data for 2006 and a summary of the activities of PIRT and its member agencies for 2007.

Panel Activities and Issues for 2007

PIRT made 11 recommendations for collective and member agency action for 2007 (Appendix G). Ongoing, mandated recommendations include review of member agencies' independent strategies to reduce pesticide incidents based on combined PIRT data, and reporting on product labels that are inadequate or unclear.

The PIRT Panel monitored the following issues in 2007: pesticide drift, pesticide air monitoring, pesticide use in schools, pesticide use in response to West Nile virus, the Worker Protection Standard, and the WSDA pesticide notification pilot project.

Findings and Recommendations

The PIRT Panel presents the following findings and recommendations based on all agency information.

1. The PIRT Panel acknowledges that pesticide incident investigators need to have high levels of training and rapid response capacity. It is important that agencies have sufficient first line staff and redundancy within their organizations to accomplish rapid, effective investigations when they are needed. Loss of staff and lack of resources potentially reduced the number of investigations conducted by Department of Labor and Industries (L&I) in 2006. Staff vacancies also compromised Department of Health's (DOH) capacity to collect sufficient information to classify cases as definitely, probably or possibly related to pesticide exposure. Remaining staff lacked

resources (primarily time) to locate difficult-to-reach individuals and employers.

2. The PIRT Panel recommends that the legislature work with regulatory agencies to assess whether the penalties associated with violations are sufficient to prevent and deter illegal behavior. The financial penalties for pesticide-related label violations and worker protection violations appear inconsistent with potential damages. Department of Agriculture (WSDA) fines averaged $961 with a median of $600 for fines in 2004-2006. WSDA fine maximums are set in statute and lesser amounts are determined by a penalty matrix set in rule. In 2006, L&I fined a total of $13,050 for seven failures to abate* and issued ten serious pesticide-related citations. The average failure to abate penalty is $958, and the average serious citation penalty for violations is $720. L&I defines a serious violation as a "substantial probability that death or serious physical harm could result" from a workplace condition The PIRT Panel has not attempted to compile estimates for the costs to human health, the environment, and crops associated with the documented violations, but the fines appear inconsistent with potential damages.

3. Pyrethrin and pyrethroid pesticides have largely replaced organophosphate and carbamate insecticides in urban and suburban pest control. Although the newer products are less acutely toxic to humans, pyrethrins and pyrethroids still can cause significant injury to humans and the environment if misused. In addition, the Panel is concerned about the growing evidence that allergic and respiratory reactions to inhaled pyrethroids can cause serious medical outcomes, including death. DOH and their Oregon counterparts recently completed a paper highlighting this emerging problem. The paper will soon appear in *Public Health Reports*. Fish, crustaceans, and non-target insects are particularly sensitive to pyrethroids. Analysis of pyrethrins and pyrethroids in aquatic sediment will be conducted by Ecology in late 2008. Pyrethroid products are a frequent source of pesticide-related human exposure calls to WPC. More attention must be paid to ensure that packaging, user instructions, and educational materials to sales establishments and users are appropriate to reduce pesticide exposures and incidents associated with these pesticides. Additional information received in 2007 indicates that labeling and consumer usage patterns contributed to these incidents. The PIRT Panel recommends that member agencies work to improve packaging, user instructions, and educational materials.

4. The PIRT Panel recommends investigation, analysis, and support of education and outreach activities to reduce pesticide exposures in children. Pesticide exposure incidents involving children appear to have occurred primarily as a result of human body pest (lice, flea, mosquito) products or

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* An employer has not corrected a violation that has been cited, or for which a corrective notice has been issued, and the abatement date has passed.

lawn/home/garden products. There are additional mechanisms by which children can become exposed. There was one WSDA-verified incident of drift from a commercial lawn application that exposed several children. Fortunately, no adverse health effects occurred. There were also two school-related incidents involving a school bus driver and a kindergarten teacher. The bus driver reported symptoms after her bus received insecticide spray drift from an orchard sprayer. No students on the bus reported symptoms. The kindergarten teacher reported symptoms after an herbicide was used near her classroom. The public and consumers must continue to be attentive to practices that keep pesticides away from children and promote uses only in compliance with label instructions.

5. PIRT recommends that resources be provided so first line pesticide incident investigators or others reviewing cases can create a concise summary of information (crop, target pest, active ingredient, associated and contributing factors to the incident) to help derive conclusions about causal factors and formulate solutions. The PIRT report, especially the WSDA and DOH appendices, is a useful archive of core information about pesticide incidents in a calendar year. If an assessment of associated and contributing factors were included in such reports, then prevention strategies could be more easily developed and targeted.

6. As in prior years, drift continues to be a leading factor in documented illness in agriculture and in complaints to WSDA in agriculture. Three PIRT member agencies continue to collect information on the factors associated with known drift events through the drift checklist project sponsored by National Institute for Occupational Safety and Health and through the Pesticide Air Monitoring study funded by the Washington State Legislature. This air monitoring study is sampling for organophosphates commonly used in tree fruit and for metam sodium break-down products used in potato production. DOH will complete these studies, evaluate resulting data, and provide policy recommendations in future reports.

7. The PIRT Panel recommends that adequate bilingual programs and bilingual staff capacity receive strong support. Bilingual outreach, education, and investigation are an important part of reducing incidents. Anxiety increases and safety is reduced when workers cannot communicate or understand the warnings and procedures of their supervisors and pesticide safety materials. Investigations suffer when investigators can not communicate with those involved. Bilingual programs, pesticide information, safety materials, WPC poison information specialists, and agency investigators improve training, response time, investigation quality, enforcement actions, and safety. WSDA, L&I, and DOH all participate in, or conduct, bilingual pesticide safety education programs and investigations. WPC uses a telephone interpretation service and does not currently employ Spanish-speaking phone center professionals to respond to calls.

8. PIRT recommends that resources be available to counties for preventative and safe mosquito management efforts such as surveillance and larviciding and for implementing effective public notification when pesticide applications occur. As West Nile virus moves into Washington, health, pesticide regulatory, and emergency management agencies must be ready to address health concerns and possible increased pesticide use with sufficient incident information, technical assistance capability, and regulatory capacity. State agencies should assist county agents and others charged with addressing preventive measures through public education and mosquito control to assure all parts of Washington are appropriately prepared.

9. In 2007-2008, the DOH and PIRT attempted to streamline the PIRT report and produce 2006 data summaries and important conclusions prior to or during the 2007 Legislative Session. PIRT attempted to produce a Preliminary Report of DOH cases accompanied with summary and recommendations from the Panel. A full report with complete data would be available during the legislative session. This strategy was not successful. Neither the Preliminary Report nor the PIRT transmittal letter were prepared or approved quickly enough to be delivered to the legislature by close of session in April, 2008. The PIRT Panel is limited in its legal authority to control how quickly specific agencies produce their data summaries, or how quickly reports are reviewed by agency upper management, or how quickly they are reviewed by the Office of Financial Management. PIRT Panel members are addressing this failure. In 2008, PIRT agencies have committed to assemble their investigation data earlier and the PIRT Panel will start reviewing the agency data and preparing the full report earlier. The PIRT Panel has organized a subcommittee charged with identifying barriers to timely report production and will make recommendations in the coming year on a reasonable schedule for report production and delivery.

2006 Summary Data for PIRT Agencies

The following agency summaries identify key points from the analysis of 2006 pesticide incident data.

Department of Agriculture

In 2006, WSDA investigated 206 pesticide-related complaints. After investigation, it was determined that 128 (62%) involved pesticide applications and 78 (38%) were unrelated to actual applications. During 2006, 137 (67%) of WSDA complaint investigations resulted in some type of violation. Drift continues to be one of the most frequent types of complaint involving pesticide applications. WSDA received 63 complaints about drift in general and 16 complaints specifically about human exposure due to drift. Licensing, misuse, sales and distribution, and Structural Pest Inspections were other areas in which WSDA received numerous complaints. Other complaints concerned such issues as direct misapplications and animal deaths.

Department of Ecology

In 2006, Department of Ecology (Ecology) investigated 34 pesticide-related complaints involving threats to air, water, or soil. Ten complaints concerned threats to ground or surface water, ten involved unsafe pesticide storage and handling, nine involved pesticide disposal or waste concerns, and five involved spills or fires. Ecology is responsible for oversight of contaminated areas requiring cleanup or monitoring. During 2006, Ecology placed seven new pesticide-contaminated sites on the Toxic Cleanup Program list. Ecology's Water Quality program is responsible for aquatic pesticide and mosquito control permitting, as detailed in Ecology's summary.

Department of Health

In 2006, DOH investigated 232 pesticide incidents involving 254 individuals. Of the 254 illnesses/injuries, 149 (59%) were classified as definitely, probably, or possibly (DPP) related to pesticide exposure.

There were 105 non-agricultural DPP cases in 2006. Thirty-eight of these occurred on the job (occupational) and 67 were non-occupational. Of the 38 occupational cases, 26 involved handling pesticides at the time of exposure. Sixty-six of the 67 non-agricultural, non-occupational exposures occurred in residential settings.

There was a decrease in agricultural cases in 2006. Forty-four (30%) of the 2006 DPP cases were related to agriculture. Twenty-eight agricultural cases were associated with the tree fruit industry, two with other fruit crops, eight with field and vegetable crops, and three with ornamental nurseries. The remaining three cases were not associated with applications to specific crops. Thirty-seven agricultural cases involved agricultural workers. Of these, 26 workers were handling pesticides at the time of their exposure.

Department of Labor and Industries

L&I's Division of Occupational Safety and Health (DOSH) Services conducted 17 pesticide-related safety and health inspections in 2006. Fourteen (82%) of the inspections resulted in general, serious, or failure to abate citations being issued to the employer, and three inspections did not involve citations.

In 2006, the L&I Insurance Services Division, Claims Administration Program received 110 claims which appeared to be related to pesticide illness and referred these to DOH. Of the 110 claims, 74 (67%) were compensated by L&I as being work related injuries and 36 were rejected. Fifty-nine (54%) were related to agriculture and 51 were non-agricultural. DOH investigated the 110 claims and classified 33 agricultural and 26 non-agricultural claims (54% of all claims) as having signs or symptoms that were definitely, probably, or possibly related to the pesticide exposure.

Of the 33 DPP agricultural workers, 26 claims involved workers in the tree fruit industry, four claims involved workers in other crop production industries, and three claims involved nursery workers.

Washington Poison Center

In 2006, WPC provided immediate professional medical advice regarding pesticide-related questions and emergencies to 2,144 callers. Of the 2,144 calls, 1,213 involved insecticides and 104 involved insect repellents. Herbicides were involved in 385 of the calls. Thirty-six (1.7%) pesticide-related human exposure calls involved moderate or major health effects. Fifty-two (2.4%) calls involved intentional exposure. DOH screened all human pesticide-related illness calls to WPC and investigated 124 calls where the caller sought medical care and the exposure was not part of a suicidal gesture. Eighty of these involved illnesses determined to be definitely, probably or possibly related to pesticide exposure. One of these accidental exposure cases resulted in death.

Introduction

Created in 1990, the PIRT Review Panel continues to protect citizens against pesticide exposure through the understanding of incident causes and by developing prevention strategies.

The Pesticide Incident Reporting and Tracking (PIRT) Review Panel was created to monitor pesticide-related incidents that have suspected health or environmental effects (RCW 70.104.070 through 70.104.090). The Panel consists of representatives of the Washington State Departments of Agriculture (WSDA), Ecology (Ecology), Health (DOH), Labor and Industries (L&I), Natural Resources (DNR), and Fish and Wildlife (DFW), representatives of the University of Washington, Washington State University, and Washington Poison Center (WPC), a practicing toxicologist, and a member of the public (Appendix A).

Member agencies and the WPC investigate pesticide incidents in accordance with their specific statutory responsibilities and report findings to the Panel for evaluation. The Panel is mandated to perform the following activities:

- Centralize the receipt of information regarding pesticide complaints and their investigations and monitor timeliness of agencies' response to complainants.
- Review and recommend procedures for investigation of pesticide incidents.
- Identify inadequacies of pesticide regulations to protect public health.
- Submit an annual report summarizing pesticide incidents to the Governor, agency heads, the legislature and the public.

The Panel has no regulatory authority, but serves a review function and makes recommendations to the agencies, to the Governor and the legislature, and to federal agencies such as Environmental Protection Agency (EPA) and National Institute of Occupational Safety and Health (NIOSH).

This 2007 report is the Panel's sixteenth annual report. It summarizes pesticide-related incident reports, complaints or calls to WSDA, DOH, Ecology, L&I, and WPC. The report:

- Provides analyses of each agency's incidents and follow-up activities for 2006.
- Describes Panel and member agency activities for 2007.

2006 Summary Data

Table 1 summarizes 2006 pesticide-related data for each agency. Pesticide-related data from each agency are described in detail in the following Agency Summary Reports. Individual incident descriptions are provided in Appendix C.

Table 1. Individual Agencies' Summaries of Their Specific Pesticide Events, 2006

Department of Agriculture: 206 Complaints Resulting in 137 Violations			
Complaints	**206**	**Violations**	**137**
Location of Complaint		Violations by Type of Activity	
Eastern Washington	128	Agriculture	42
Western Washington	78	Commercial/industrial	25
		Structural Pest Inspection (SPI)	28
		Residential (homeowners)	12
Enforcement Actions*	137	Right-of-way	4
Notice of correction (NOC)	93	Other (license/records)	26
Notice of intent/Admin action (NOI)	22		
Advisory letter/Warning letter	12	License Involved with Violations	137
Referred	0	Commercial applicator	32
Verbal warning	5	Unlicensed	43
Notice of correction/Notice of Intent	5	Private applicator	24
		Structural Pest Inspection	17
*No action indicated	69	Public operator	8
		Dealer	5
		Other	5
		Several	3
Department of Health: 232 Incidents (Events) Involving 254 Individual Cases			
Type of Incident	**232**	**Classification of Cases**	**254**
Agriculture	83	Definite	21
Residential	99	Probable	39
Commercial/Industrial	25	Possible	89
Other	15	Suspicious	16
Unknown	10	Unlikely	34
		Insufficient information	55
Childhood Cases < 18 years old	**32**	**Definite, Probable or Possible Cases**	**149**
Definite, probably or possible cases	17	Agriculture	44
		Non-Agriculture	105
Department of Labor and Industries: 17 Industrial Safety and Health Inspections 110 Worker Compensation Claims			
Pesticide-related Inspections	**17**	**Worker Compensation Claims**	**110**
Serious and/or General Citations	14	Agriculture	59
No citations	3	Non-Agriculture	51
Type of Business	17	**Benefits**	**110**
Orchard	9	Accepted – Medical/time loss	72
Other agricultural	5	Rejected	36
		Pending	1
Non-agricultural	3	Kept on salary	1
Department of Ecology: 34 Pesticide Complaints (Complaints may involve more than one category)			
Threats to ground or surface water	10		
Spills or fires	5		
Pesticide disposal or waste concerns	9		
Unsafe pesticide storage or handling	10		
Washington Poison Center: 2,144 Human Exposure Pesticide-Related Calls			
DOH-identified calls for investigation (see DOH criteria for investigation, page 32)	124		

Combined 2006 Agency Data

The agency workload related to pesticide incident response, regulation of licensed pesticide professionals and calls made to WPC for the years 2002 - 2006 are listed in Table 2.

Table 2. Agency Workload related to pesticide regulation and incident response, 2002 - 2006

	2002	2003	2004	2005	2006
WSDA Complaints	255	222	200	193	206
Ecology Complaints	46	33	29	39	34
DOH Events	216	242	245	220	232
DOH Individuals Involved	270	275	269	252	254
DOSH Inspections	64	22	43	31	17
L&I Claims	109	133	101	93	110
WPC Calls	2,043	1,937	2,342	2,430	2,144

Some incidents involved more than one agency. When overlap is removed, PIRT state agencies investigated approximately 482 separate pesticide incidents, exposures, and complaints against licensed pesticide professionals in 2006. In approximately 42 cases, more than one agency was involved because referrals were made to other agencies (e.g., for enforcement). In addition, WPC responded to approximately 2,020 calls that reported a human exposure to a pesticide which did not meet the threshold for DOH investigation. These additional cases include asymptomatic exposures and minor symptomatic cases which were medically managed at home with the help of WPC staff. Of the 254 human illness/injury cases investigated by DOH, 149 cases were deemed likely-related to pesticide exposure. One person died from accidental exposure. This death was of a 64-year-old female with chronic obstructive pulmonary disease who sprayed her home for wasps using a pyrethroid product that dripped over her hands and arms. Although she received emergency medical care and was hospitalized, she died nine days after exposure. Fortunately, most reported symptoms were low in severity.

PIRT is unable to provide a precise number of unique incidents across all agencies because some agency data sets represent the total number of people involved and others count an event involving many people as a single investigation. When two agencies are involved, an incident may be counted as one investigation by WSDA and L&I Division of Occupational Safety and Health (DOSH) but may appear in the DOH data set as multiple cases (i.e. people ill from pesticide exposure).

It is difficult to further summarize aggregate PIRT data because each agency responds to different types of pesticide problems. The types of data are listed below. Agency data are more completely described in report chapters and appendices.

- WSDA investigates complaints about misuse or misapplication, licensing, and structural inspections. WSDA enforces the language on pesticide labels and coordinates with L&I DOSH to enforce the Worker Protection Standard (WPS) for agricultural workers.
- Ecology investigates and enforces remediation of incidents involving spills or environmental contamination by pesticides.
- DOH investigates reported cases of suspected pesticide-related illness. Usually, at least one person involved in the pesticide exposure needs to have seen or been referred to a health care provider to trigger a DOH investigation.
- L&I DOSH manages the cholinesterase monitoring program, conducts safety and health workplace inspections in agriculture/industry and investigates employee complaints and referrals from agencies and others. With WSDA, DOSH enforces the Worker Protection Standard (WPS) for agricultural workers. DOSH also enforces other workplace safety rules.
- L&I Claims Insurance Services Division adjudicates and administers worker compensation insurance claims related to pesticide exposures.
- WPC provides information and medical advice to the public and to health care providers who call about pesticides.

Strengths and Limitations of PIRT Data

The strengths and limitations of PIRT data were discussed in depth in the *2004 Annual Report* (pages 21-26). The limitations of state comparisons of pesticide-related illnesses are also discussed in the *2004 Annual Report*. The *2004 Annual Report* is available on the PIRT Web site at http://www.doh.wa.gov/ehp/Pirt/pirt2005ar-2004data.pdf.

Agency Response Times

Revised Code of Washington 70.104.080 (Appendix A) specifically directs the PIRT Review Panel to monitor agency response time to pesticide-related incidents for the departments of Agriculture, Health, and Labor and Industries. Response time is defined as the interval between initial report of an incident and an agency's first response to the report. The first response may be a phone call, a request for medical or spray records or other agency action. Response time may also be a function of the staffing available, including bilingual staffing. Available Agency response times for 2006 are listed in Table 3.

Table 3. Agency Response Times, 2006

Agency Mandates	Agency Response Times
Agriculture • Immediate response when complaints involve humans or animals • All other complaint investigations must be initiated within 48 hours	• 93% of human exposure cases within 24 hours* • 93% of all cases within 24 hours
Ecology • No legislative mandate for response time.	• Majority within 24 hours • All within 30 days
Health • Hospital admission, death, or threat to public health within 24 hours • All others within 48 hours	• The one death and two severe reports within 24 hours • 95% within 48 hours
Labor and Industries (DOSH) • Serious complaints within 30 days • All others within 120 days	• Majority within 30 days • All within 120 days

*For the two remaining WSDA cases, DOH had already responded to one complaint, and the other was mailed to WSDA.

Agriculture

Washington State Department of Agriculture's summary of pesticide-related complaint investigations during 2006.

Background

The Pesticide Management Division of the Washington State Department of Agriculture (WSDA) protects human health and the environment by ensuring the safe and legal distribution, use, and disposal of pesticides in Washington State.

WSDA investigates all complaints it receives concerning possible pesticide misuse, storage, sales, distribution, applicator licensing, and building structure inspections for wood destroying organisms. The division also inspects marketplaces, importers, manufacturers, and pesticide application sites for compliance with state and federal laws and regulations on a non-complaint basis.

Complaints

During 2006, WSDA investigated 206 complaints (Table 4). After investigation, WSDA determined that 128 (62%) complaints involved pesticide applications and 78 complaints (38%) were unrelated to actual applications. Examples of complaints unrelated to applications are structural inspections or licensing complaints. There were 137 violations associated with the 206 complaints. Appendix C lists all WSDA pesticide-related complaint investigations for 2006.

Table 4. WSDA Complaints and Violations, 2002 - 2006

Year	Total Complaints	Violations
2002	255	169 (66%)
2003	222	151 (68%)
2004	200	122 (61%)
2005	193	113 (59%)
2006	206	137 (66%)

Location of Complaints

There were significant differences in population, types of pest problems, and the nature of complaints between the eastern and western portions of the state. In general, western Washington complaints were about structural pest inspections, homeowner complaints about drift, intentional misuse, and complaints about unlicensed applicators. Most eastern Washington complaints were about agricultural applications and drift. Drift continues to be one of the most frequent types of complaint involving pesticide applications. Licensing, records and Structural Pest Inspections were the most frequent non-pesticide application complaints. With the exception of drift, complaints in 2006 continue to cover more diverse topics than in the early years of the PIRT report.

In 2006, 128 (62%) of complaint investigations occurred in eastern Washington and 78 (36%) in western Washington.

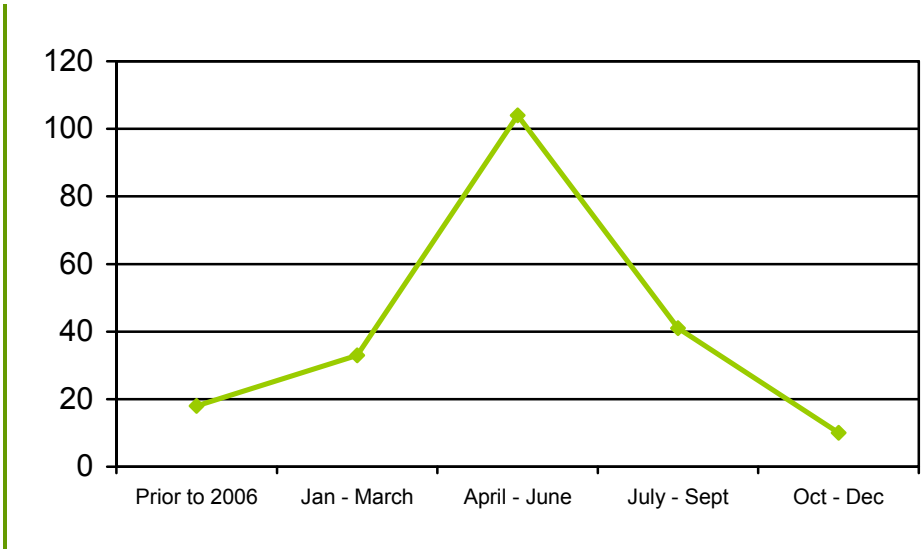
Table 5 lists the counties with the most complaint investigations from 2002 through 2006.

Table 5. WSDA Counties with the Most Complaints, 2002 – 2006

2002		2003		2004		2005		2006	
Spokan	28	King	23	King	28	Spokan	22	Spokane	20
King	27	Pierce	22	Grant	20	King	20	Grant	19
Yakima	26	Grant	19	Spokane	17	Chelan	18	Pierce	18
Thursto	17	Spokan	19	Benton	15	Grant	16	Yakima	15
Pierce	17	Yakima	13	Yakima	15	Yakima	12	King	13
Chelan	16	Benton	12	Walla Walla	11	Douglas	11	Douglas	11
Grant	16	Chelan	12	Pierce	11	Pierce	10	Okanoga	10
Multiple	9	Clark	11	Snohomish	10	Benton	8	Franklin	9
		Multiple	10	Chelan	8			Whatcom	8

For 2006, complaint investigations were also graphed according to the period when the incident occurred (Figure 1). From this graph, it can be seen that approximately half of the incidents occurred in the period April through June, which is not surprising as a large percentage of the applications are made in this time period.

Figure 1. WSDA Investigations by Time Period, 2006



Response Time

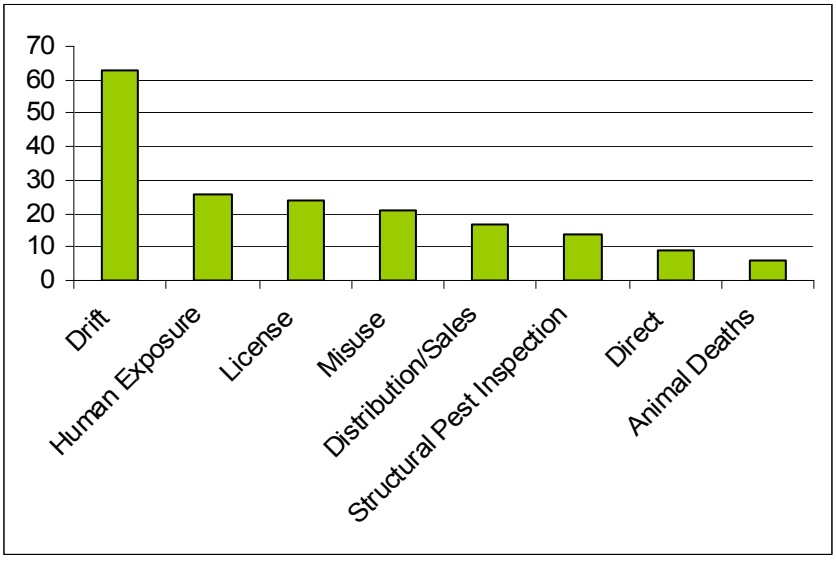
In 2006, WSDA responded within one day for 192 (93%) of the 206 complaints. Twenty-five of the 27 (93%) human exposure complaints were investigated within 24 hours. For the two remaining human exposure cases, one was investigated within three days. This case was a referral from DOH about a skin rash. DOH had already responded to the alleged human exposure. The probable cause of

the rash was exposure to poison hemlock. The second case was investigated within seven days of the complaint. This complaint was mailed to the department and also concerned a skin rash that occurred a month earlier that was alleged to come from mowing a treated area. No definitive link was found between the application and the rash.

Nature of Complaints

Complaints for 2006 were categorized according to the nature of the initial complaint received. The categorization of complaints for 2006 is shown in Figure 2. Investigation may find the complaint not valid, substantiate the initial complaint, or identify additional violations. For example, an initial complaint concerns a possible drift. When the agency investigates, it may determine that drift did not occur, but may find that the applicator applied at the wrong rate or did not keep proper records. Although the applicator would not be cited for drift, he or she could be cited for being "faulty, careless, and negligent" or for record keeping violations. When complaints are associated with numerous possible violations, the most serious complaint is used to categorize the case. For example, a complaint involving human exposure caused by drift from application by an unlicensed applicator would be categorized as human exposure even if the only final outcome of the case was a Notice of Correction for record keeping. However, in general, the initial complaint is a fairly reliable indicator of the final outcome of the case and reflects the concerns of the complainant.

Figure 2. WSDA Nature of Initial Complaints by Number, 2006



In 2006, WSDA received 63 general complaints about drift and 16 complaints specifically about human exposure due to drift. There were 29 complaints about drift to property or vehicles and 18 crop-related drift complaints (Table 6). Pesticides moving off-target appears to be one of the major reasons why complaints were registered with WSDA. As in previous years, many of these complaints were not substantiated as the damage seen was due to drought,

insects or frost, rather than pesticide drift. Non-agricultural complaints from actual applications generally concerned damage to ornamentals from commercial applications or from a neighbor's application.

Non-licensed individuals and faulty structural inspections are two other areas where WSDA received numerous complaints (Table 6). In 2006, WSDA received 24 complaints about improper or no licensing, nine complaints about direct misapplications, and 14 complaints specific to Structural Pest Inspections (SPI) (in addition to complaints about improper SPI licenses or records). There were no reported bee kills for 2006.

Table 6. Initial Complaints, WSDA Cases, 2006

Animal Deaths	6	Faulty SPI Inspection	14
Animal Exposure	3	Human Exposure - Drift	16
Direct	9	Human Exposure - Direct	9
Disposal	3	Human Exposure - Residue	1
Distribution	3	License	24
Drift to crop	15	Misuse	21
Drift to organic crop	3	No Backflow Prevention	1
Drift to ornamentals	6	Notification/Posting	4
Drift to Property	29	Personal Protective Equipment	2
Drift to trees	8	Records	9
Drift to Water	2	Sale	14
False Exam	1	Water Contamination	3

For 2006 cases, the initial complaint was compared to actions taken by the department to see if the violation was related to the complaint; that is, whether the complaint was valid. Action may not have been taken on the case even though the complaint was valid. For instance, if the violator could not be identified for a drift case, no action could be taken. One hundred and thirty-five (66%) of the 2006 cases had the original complaint verified (i.e., the complaint was valid). Action was taken on an additional two cases, but these actions were unrelated to the original complaint. For example, the complaint may have been about misuse, but after investigation, the applicator was cited for failure to keep records. The percent of cases where action was taken on the original complaint has been steadily increasing each year. This may reflect that people are better able to recognize pesticide damage as opposed to damage due to drought or insects or that people have a better understanding of agency roles for enforcement. This trend is allowing the agency to better utilize resources by investigating valid complaints instead of responding to complaints about issues other than pesticides.

Drift

There were 63 general complaints about drift (Table 7); WSDA took action on 37 (59%) of these. There were 16 complaints about drift to humans with four (25%) verified.

Table 7. Number of WSDA Drift Complaints, 2006

	Number of Complaints	Complaint Verified
Drift		
Drift to Property	29	16
Drift to Crop	15	12
Drift to Trees	8	4
Drift to Ornamentals	6	3
Drift to Organic Crop	3	1
Drift to Water	2	1
Human Exposure		
From Drift	16	4
From Direct	9	3
From Residue	1	0

Application Methods

In 2006, WSDA received 36 complaints about aerial applications, 104 complaints about ground applications, 52 complaints about items other than an application, and six complaints where the application method was undetermined or unknown.

Violations

Complaint investigations may result in a determination that a violation of state or federal laws or rules has occurred. During 2006, 67% of WSDA complaint investigations resulted in some type of violation. Most violations were not severe in nature (see Table 9 on page 21) and most violators were issued a warning or correction notice rather than issued fines or license suspensions.

Type of Activity in Complaints with Violations

Complaints are classified by WSDA according to the following type of activities:

- Agricultural: Incidents occurring in an agricultural environment such as farming, forestry, greenhouses, or Christmas tree farming.
- Commercial/industrial: Incidents by licensed operators making applications to offices, restaurants, homes, and landscapes.
- Pest Control Operator (PCO): Incidents involving a subset of commercial/ industrial operators licensed to make applications to control structural pests.
- Structural Pest Inspections (SPI): A change in law established a separate definition for a license for this work. Replaces the previous wood destroying organism incident count. No pesticide applications are made.
- Residential: Includes any application of a pesticide in a residential environment by the homeowner, resident, or neighbor.
- Right-of-ways: Applications made on public land such as roadways, electric lines, and irrigation canal banks.

- Other: The WSDA code for undefined use and includes licensing, storage, registration, records, and similar activities.

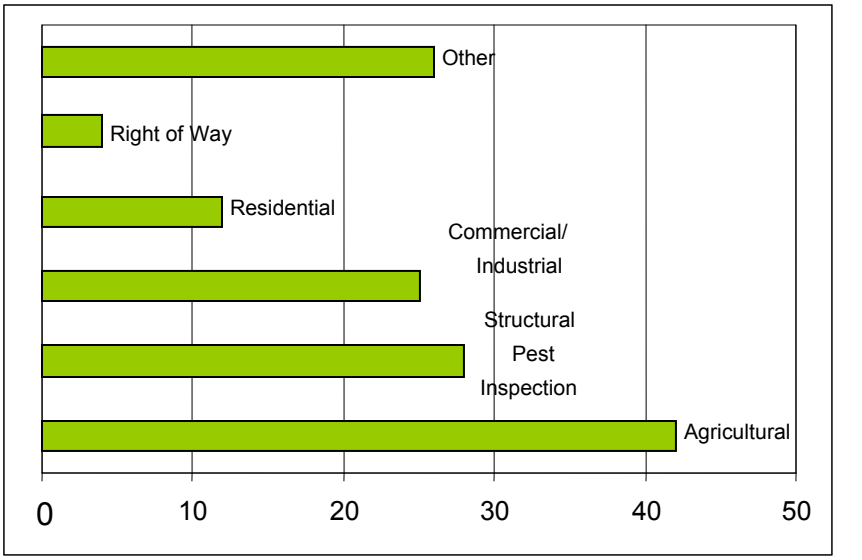
Table 8 shows complaints with violations by type of activity from 2002 through 2006.

Table 8. WSDA Violations by Type of Activity, 2002 - 2006

Activity	2002	2003	2004	2005	2006
Agricultural	69	39	42	39	42
Commercial/Industrial	31	38	17	36	25
Structural Pest Inspection	16	33	22	8	28
Residential (non commercial)	13	7	5	4	12
Right-of-Way	3	5	5	5	4
Other (licenses, records, etc.)	37	29	31	21	26
Total Violations	**169**	**151**	**122**	**113**	**137**

Figure 3 identifies the violations by type of activity for 2006.

Figure 3. WSDA Violations by Type of Activity, 2006



n = 137

Violations alone do not give an accurate picture of pesticide exposures. For example, if drift occurs and the violator cannot be proven, no action can be taken. Sometimes the applicator has moved away, often out of state, and cannot be located. However, violations generally give a good representative picture of the validity and severity of pesticide incidents.

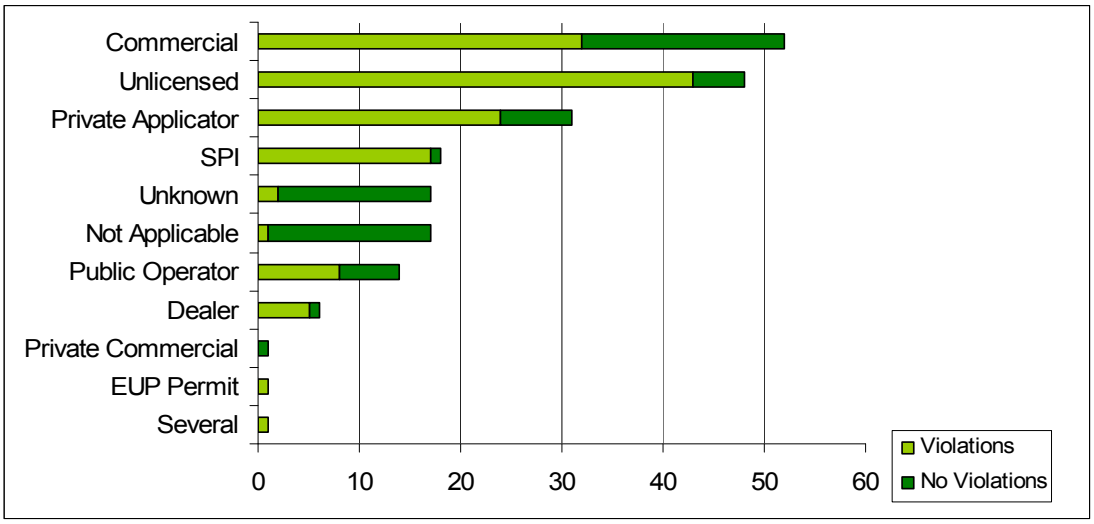
Type of License in Complaints with Violations

In 2006, WSDA licensed approximately 5,300 commercial applicators and operators and over 11,800 private applicators. WSDA also issued approximately

9,900 other individual license types for a total of over 27,000 licensees. Although WSDA licenses fewer commercial applicators than private applicators, commercial applicators make many more applications per licensee and more applications on land not owned by the applicator. This increases the probability of complaints for commercial applicators. Further information about WSDA license types is available in Appendix D.

In 2006, commercial applicators were involved in 52 complaints with 32 violations. Private applicators were involved in 31 complaints with 24 violations. Unlicensed applicators were involved in 48 complaints with 43 violations. Most of these applicators were unlicensed and conducting structural pest inspections that required a licensed inspector (Figure 4).

Figure 4. WSDA Type of Licensee Involved in Cases With and Without Violations, 2006



Agricultural Complaints

In agriculture, most complaints with violations involve pesticides applied to orchards. This is not unexpected, as orchards tend to be located in more populous areas and may be on smaller acreages intermixed with other crops, housing, and heavily traveled roads. The most frequent agricultural complaints in 2006 were from applications to orchards drifting on property or other crops.

Non-Agricultural Complaints

In 2006, investigations due to faulty Structural Pest Inspections and licenses, recordkeeping or distribution were the most frequent non-agricultural complaints. Generally, complainants felt that the individual using pesticides was not properly licensed for the work being done. The most frequent type of violation cited by WSDA was failure to keep accurate or adequate records (for instance, not recording conditions conducive to rot or the presence of insects) and failure to obtain the proper license type for the application.

Complaints about drift from commercial lawn care applications were again significantly reduced from previous years. However, there were four cases where commercial companies misapplied pesticides and directly damaged or killed ornamental plantings or lawns. In these cases, the companies were liable for replacing plants and were fined by the department.

Complaint distribution has been consistent over the years and points to the need for greater education of applicators, particularly for drift reduction techniques. Some violations may reflect the transient nature of employment or lack of applicator training and some, particularly for structural pest inspections, may reflect willful fraud. Economic pressure to sell real estate may encourage inspectors to overlook possible wood-destroying organism conditions. The number of preventable violations points to the continuing need for a strong agency enforcement program. Given that the estimated number of applications is in the hundreds of thousands, the number of complaints directed to the department for serious offenses is relatively small.

Children and Farmworker Cases

In 2006, children were involved directly or indirectly in five cases. Pesticide exposure was not verified in four of the five cases. The fifth case involved several children who may have been exposed to residue when a commercial lawn application drifted to another lawn and the children later played on that lawn. No heath symptoms were reported but residue was found on the lawn. Three cases were drift, one was an alleged overspray from an airblast application to a school bus that was not verified and the remaining case was a rash on a child that allegedly came from contact with pesticide treated grass at a school. No pesticide application occurred prior to the alleged contact. An Advisory Letter was issued for the school bus case, a Notice of Intent for the lawn drift case where children later were playing and the remaining cases were given Notices of Corrections for other violations than the alleged exposure.

There was one case involving a farmworker.

The individual was sprayed by a neighboring application of naphalene acetic acid, a plant growth regulator. He did not wash or change his clothing but had no health effects. WSDA issued a Notice of Correction to the applicator.

Severity of Reported Complaints

The WSDA rates the severity of a case after complaint investigation is complete. Table 9 gives a detailed description of each rating. As in previous years, the majority of complaints were assigned a severity rating of “2” or less.

Table 9. Severity Rating of WSDA Complaint Cases, 2002 – 2006

Rating	2002	2003	2004	2005	2006	Criteria
0	30 12%	22 10%	26 14.5%	29 15%	21 10%	Problem not due to pesticides and/or no cause determined; Structural Pest Inspection with no violations.
1	76 30%	51 23%	65 32.5%	77 40%	63 30%	Pesticides involved, no residue, no symptoms occurred; possible pesticide problem, not substantiated; issues involving records, registration, posting, notification (multiple chemical sensitivity) or licensing; DOH classified "unlikely" or "insufficient information".
2	114 45%	112 50%	83 41.5%	54 28%	92 45%	Residue found, no health symptoms (human, animal); health symptoms not verified; multiple minor violations; off label use; worker protection violations; PPE violations with no health symptoms; plants with temporary or superficial damage only; Structural Pest Inspection faulty inspections; DOH classified "possible".
3	31 12%	22 10%	18 9%	16 8%	12 6%	Minor short-term health symptoms (rash, eye irritation, shortness of breath, dizzy, nausea, vomiting); bee kills of less than 25 hives; minor fish kills; economic plant damage under $1000; evidence of deliberate economic fraud; DOH classified "probable".
4	3 1%	13 6%	8 4%	17 9%	14 7%	Short-term veterinary or hospital care; bee kills of greater than 25 hives; significant fish kills; significant economic plant damage (over $1000); environmental damage; illness involving children; DOH classified "probable".
5	1 0.4%	2 1%	0	0	4 2%	Veterinary or hospital care overnight or longer; physician diagnosed children's illness as caused by pesticides; animal death due to pesticides; significant environmental damage; DOH classified "definite".
6	0	0	0	0	0	Human death due to pesticides.
Total	***255***	***222***	***200***	***193***	***206***	

In 2006, of the 14 cases with a severity rating of 4, four were misapplications by commercial lawn care companies that damaged plantings. There were also two drift cases from commercial lawn care applications. The applicators were given Notices of Intent (generally leading to fines and/or license suspensions) on all of the cases plus being liable for replacement plantings. Five cases were drift to crops, one case was an animal exposure from eating improperly applied slug bait, one case resulted in a human exposure from drift where the person sought medical attention and the last case was human exposure to metaldehyde from

improperly cleaned cardboard boxes sent to a recycling plant. Although extensive damage was noted, the department could not take action on three drift cases due to lack of evidence for a source.

The four cases with a severity rating of 5 were all animal deaths due to misapplied pesticides.

- Carbofuran was eaten by ducks which were subsequently eaten by eagles. Several eagles died. No source for the carbofuran could be determined.
- Dogs ate mice poisoned by strychnine in a cherry orchard. There was no evidence of misuse by the applicator.
- Dogs died after eating aldicarb used in hamburger to kill coyotes. The individual was issued a Notice of Intent.
- Zinc phosphide used to control mice in a cherry orchard killed free roaming ducks and chickens. The applicators were issued Notices of Corrections.

Type of Pesticide Involved

In 2006, herbicides were involved in 112 complaints and insecticides in 44 complaints. There were relatively fewer complaints about other pesticides such as fungicides (6), fumigants (2), and rodenticides (3). This may be because there are more obvious detrimental effects from herbicide and insecticide misuse and because herbicides and insecticides are generally applied at a higher frequency with more power equipment over larger areas.

Overall, complaints about applications in 2006 continue to show a greater variety of pesticides than seen in previous years. There were no complaints about azinphos-methyl or endosulfan drift. Complaints on both products continue to be minimal. Herbicide drift constitutes the greatest number of complaints. Applicators may be using more pest-specific products with a greater diversity of active ingredients and placing less reliance on broad-spectrum pest control products. This change could increase the number of single-product complaints, resulting in fewer, more general, complaints.

Two herbicides, 2,4-D (27 complaints) and glyphosate (17 complaints), were again the most frequently reported active ingredients in 2006 investigations (Table 10). This is consistent with previous years' numbers and probably reflects the frequency of use, use by unlicensed (untrained) applicators and the high visibility of misuse of these products. Many complaints involved tank mixes of several products or complaints about drift from an unspecified or unknown pesticide.

Table 10. Active Ingredients Most Commonly Involved in WSDA Complaints, 2006

Active Ingredient	
2,4-D/Phenoxy	27
Glyphosate	17
Miscellaneous	10
Eggs/Blood (repellant)	10
Diuron	7

Complaints reported to WSDA should be regarded as indicators of potential problem areas rather than a definitive summary of all misapplications. For example, drift involving products such as sulfur and kaolin (clay) may occur more often than reported. Such products are more identifiable. People may be less worried about unknown effects from these products. These products also have minimal health effects and minimal detrimental effects on non-target plants and property.

Enforcement Actions

Complaint investigations may result in the determination that a violation of state or federal laws or rules has occurred. Generally, first offenders or minor infractions are given a Notice of Correction and a period of time to come into compliance. For more serious infractions, WSDA follows the penalty matrix for any legal actions as specified in WAC 16-228-1130.

Cases that may be taken to court are listed as Notice of Intent. The violator may pay the penalty as stated or they have the right to appeal and take the case to court. The court may impose the fine and/or license suspension given by the agency or it might dismiss the case. As cases appealed may take several years to settle, all cases are listed as NOI in order to complete this report. Final settlement of these cases can be determined by contacting WSDA.

Sometimes more than one corrective action is taken on a case. In this report, only one corrective action per category is identified. For example, if more than one Notice of Correction was issued, the action would be listed as one Notice of Correction. However, if more than one type of corrective action was taken, such as a Notice of Correction and a Notice of Intent (which could happen if several applicators were involved in the same investigation), both types are listed.

The corrective actions taken in 2006 are listed in Table 11. (See Appendix D for definitions of the Enforcement Actions.)

Table 11. WSDA Agency Actions, 2002 - 2006

	2002	2003	2004	2005	2006
No action indicated	84	71	76	77	69
Verbal warning	6	3	1	6	5
Advisory letter/Warning letter	8	8	4	9	12
Notice of correction	127	116	98	76	93
Notice of intent/Administrative action	31	26	20	23	22
Referred	2	0	2	2	0
Notice of correction/Notice of intent	0	0	0	0	5
Total actions	***258***	***224***	***201***	***193***	***206***

Fines and License Suspensions Levied 2004 through 2006

In addition to license suspensions, the agency assessed $67,285 in fines during this three year period. (Note: some incidents occurred prior to 2004 and not all 2004-2006 cases have been finalized). The maximum fine was $9,600 against a company for multi-year violations for distribution of unregistered pesticides. The minimum fine collected was $100. One company agreed to invest in spray drift reduction technology in lieu of a $1,600 fine.

The average fine was $961 and the median fine amount was $600. There were seven fines that were $2,000 or more.

The maximum license suspension was 12 months. This case concerned an illegal disposal of pesticides. Most license suspensions were for periods of less than a month.

Other Agencies Involved

WSDA works in cooperation with other state and local agencies in the collection of evidence and testimony. Cooperating agencies may independently report their involvement in these cases or they may do no further independent investigation.

In 2006, WSDA consulted with other state, federal and local agencies, including local police, in 35 investigations. The agencies most frequently consulted were Department of Health (23), Department of Ecology (4) and the local sheriff (2). No cases were referred to another enforcement body during 2006.

Ecology

Washington State Department of Ecology's summary of pesticide-related Spill Program complaints, Toxic Cleanup Program and Aquatic Pesticide Permits during 2006.

Background

Multiple programs within the Department of Ecology are involved in pesticide-related activities. Ecology works with National Marine Fisheries Service and other federal and state agencies to reduce the impacts of pesticide applications to salmonids under the Federal Endangered Species Act. The agency participates in an interagency Urban Pesticide committee, the Washington State Healthy Schools Initiative and other projects. Ecology is responsible for oversight of contaminated areas requiring cleanup or monitoring, including areas contaminated with pesticides. Ecology's pollution prevention and sustainability efforts emphasize prevention of the overuse and misuse of pesticides.

This report presents data for three programs: Spill Prevention, Preparedness, and Response Program; Toxics Cleanup Program; and Water Quality Program. These programs track data on pesticide spills, on the cleanup of pesticide contamination, and on the use of pesticides to protect water quality. This report also provides a brief description of the Surface Water Monitoring Program for Pesticides in Salmonid-Bearing Streams, April to December 2006.

Spill Prevention, Preparedness, and Response Program: Pesticide-Related Incidents

The Spill Program responds to pesticide-related complaints and is responsible for ensuring that damage from a spill is contained as much as possible and cleaned up as quickly as possible. Ecology uses the data from pesticide-related spills and complaints to identify where additional education is necessary to reduce the impacts of pesticides on human health and the environment.

Table 12 lists the types of pesticide-related complaints received from 2001 to 2006. Complaints can involve more than one category of concern. The 34 pesticide-related complaints listed for 2006 are out of 3,890 total spill complaints received by Ecology.

Table 12. Ecology Pesticide-Related Complaints, 2001 - 2006

Type of complaint*	2001	2002	2003	2004	2005	2006
Pesticides threatening ground or surface water	11	23	13	10	23	10
Pesticide disposal or waste concern	14	12	12	6	2	9
Spills and fires	1	12	5	10	12	5
Unsafe pesticide storage or handling	6	11	10	3	5	10
Totals	***32***	***58***	***40***	***29***	***42***	***34***

**Complaints may involve more than one category.*

There were 11 pesticide-related complaints involving threats to air, water, and/or soil in 2006. Spill Program response to complaints may include follow-up by phone, referral back to involved parties for voluntary cleanup, referral to another agency, or issuance of a notice or requirement for cleanup. Complaints that are resolved during the initial contact and do not require technical assistance, investigation, or referral are classified as "No follow-up". A request for information is an example of a "No follow-up" complaint. Investigations are initiated for complaints requiring field work, research, coordination with other agencies, or technical assistance.

Ecology responded within 24 hours in 100 (%) of the 11 complaints in 2006. Ecology investigated all but one of the 11 complaints (one reported incident occurred in Oregon).

After Ecology Spill staff respond and stabilize the initial emergency, the case is closed if it is determined that there are no long-term impacts. If there are long-term impacts, the case is referred to another program within the agency. When indicated, Ecology refers complaints to other state or local agencies. In 2006, the Spill Program referred five of the 11 complaints involving pesticides to tribes, Department of Transportation, the Environmental Protection Agency, city and county public works departments and WSDA. There were no spill incidents in 2006 where humans were potentially exposed to pesticides.

Toxics Cleanup Program: Contaminated Sites Containing Pesticides

Ecology is responsible for oversight of contaminated areas requiring cleanup or monitoring. These sites may have been contaminated from leaking underground petroleum tanks, historic or current pesticide use, spills, or industrial processes. When a contaminated site is added to Ecology's cleanup list, it remains on the list until it is either cleaned up or requires no further action. A site may be on the list for more than one year.

Ecology added seven pesticide-contaminated sites to the cleanup list in 2006. Two sites were added in Chelan County and one each in Island, King, Klickitat, Thurston and Yakima Counties.

Of the seven pesticide-contaminated sites identified in 2006, Ecology designated four sites as active and undergoing cleanup, two as awaiting cleanup and one as a non-active (remediated) site that was cleaned up or required no further action.

There were a cumulative total of 207 pesticide-contaminated sites in 2006. Of those, 79 sites remained active in the cleanup process at year's end. The status for all sites for 2006 is summarized in Table 13.

Table 13. Status of Pesticide-Contaminated Sites Statewide, 2006

Pesticide-contaminated sites	2006
Sites undergoing cleanup at year's end	79
Sites with no further action needed	70
Sites awaiting further investigation	58
Total pesticide-contaminated sites for the year	***207***

Water Quality Program: Aquatic Pesticide Permits

Ecology is delegated by the EPA to implement all federal water pollution control laws and regulations through the state's laws. These include the issuance of permits for the use of aquatic pesticides to protect water quality. The permitting process ensures that chemicals are sparingly and properly applied, thereby reducing the potential for exposure to natural resources and people. The data below is Ecology's only data for pesticide use in or near aquatic ecosystems.

Aquatic Plant and Algae Management NPDES Permit

Table 14 contains the pesticide use reporting information for pesticides applied in lakes and ponds under Ecology's Aquatic Plant permit in 2006.

Table 14. Aquatic Plant and Algae Management Permit, 2006

Product	Pounds of active ingredient (a.i.)
2, 4-D	7,948
Diquat	1,955
Endothall	349
Fluridone	267
Glyphosate	255
Triclopyr	623
Total pounds of active ingredient applied	***11,397***

Oyster Grower's NPDES Permit

The Oyster Grower's NPDES Permit is an individual permit issued directly to the Willapa Bay/Grays Harbor Oyster Growers Association. It allows the use of carbaryl, an insecticide in the carbamate family, to control burrowing shrimp in oyster beds. The data for 2005 and 2006 is shown in Table 15.

Table 15. Oyster Growers Permit, Carbaryl Usage, 2005 and 2006

Year	Acres treated	Pounds of active ingredient (a.i.)
2005	576	3,629
2006	593	4,741
Total pounds of active ingredient applied		***8,370***

Noxious Weed NPDES Permit

The Noxious Weed NPDES Permit is issued to government agencies, homeowners, lake-advocacy groups, and marinas to treat fresh and saltwater environments for noxious, non-native plant species. The treated areas are located throughout Washington State. The product totals are listed in Table 16.

Table 16. Noxious Weed NPDES Permit, 2006

Product	Pounds of active ingredient (a.i.)
2, 4-D	99
Diquat	18
Glyphosate	42,047
Imazapyr	4,049
Triclopyr	322
Total pounds of active ingredient applied	***46,535***

Fish Management NPDES Permit

The Fish Management NPDES Permit is issued to the Department of Fish and Wildlife for fish management in Washington lakes. In 2006, eight lakes were treated in three counties under this permit (Table 17).

Table 17. Fish Management NPDES Permit, 2006

Water Body	Pounds of active ingredient (a.i.)
Pearrygin Lake	885
Long Lake (Okanogan County)	30
Vic Meyers (Rainbow) Lake	68
Park Lake	1,732
Blue Lake (includes Alkali Lake)	2,882
North Potholes (Westlake Ponds)	3
Alkali Lake	1
McDowell Lake	10
Total pounds of active ingredient applied	***5,611***

Irrigation District NPDES Permit

The Irrigation District NPDES Permit is issued for products to control weeds and algae in irrigation systems. The permit was issued to 16 of the 97 Washington irrigation districts during the 2006 application season. The 16 districts include

81% of the total irrigated land in Washington. The amounts of active ingredients applied in irrigation systems are listed in Table 18.

Table 18. Irrigation District NPDES Permit, 2006

Product	Pounds of active ingredient (a.i.)
Acrolein	29,843
Copper products	41,597
Green Clean	978
Xylene	7,825
Total lbs. of active ingredient applied	***80,243***

Mosquito General NPDES Permit

To prepare for the arrival of West Nile virus, the number of groups treating for mosquitoes in Washington State rapidly increased. Ecology allows mosquito control districts and government agencies to apply for coverage under a general permit through DOH. Table 19 summarizes pesticide totals statewide from the 2006 application season.

Table 19. Mosquito General NPDES Permit, 2006

Product type	Pounds of active ingredient (a.i.)
Bacillus spaericus (H-5a5b)	213
Bacillus thuringiensis israelensis (Bti)	1,760
Methoprene (all formulations)	939
Monomolecular film	54
Paraffinic white mineral oil	152
Total lbs. of active ingredient applied	***3,118***

Surface Water Monitoring

The Departments of Ecology and Agriculture have a cooperative agreement for an ongoing study to investigate pesticide occurrence in salmonid-bearing streams. The complete report, Surface Water Monitoring Program for Pesticides in Salmonid-Bearing Streams, 2006 Monitoring Data Summary, is available online at: www.ecy.wa.gov/biblio/0703016.html.

Pesticide concentrations were measured in an urban drainage represented by Thornton Creek in the Cedar-Sammamish watershed, and in agricultural drainages represented by the Lower Yakima watershed in the east, and the Lower Skagit-Samish watershed in the west. 2006 was the first year of a three-year study cycle to investigate pesticide occurrence in the Skagit-Samish watershed and the fourth in a six-year cycle to study pesticides in the Cedar-Sammamish and Lower Yakima watersheds.

A total of 42 current use pesticides, historical pesticides, and/or degradate compounds were detected in the urban and agricultural drainages. Three of these – 4,4-DDE, azinphos methyl, and chlorpyrifos – exceeded either a state

water quality standard or a recommended water quality criteria at least once during 2006.

When pesticides were detected, the most commonly found general pesticide category for both the urban and agricultural basins was herbicides. Dichlobenil was the most frequently found chemical in the urban watershed. Atrazine was the most frequently detected compound in the eastern agricultural basins while 2,4-D was the most frequently detected compound in the western basins.

Health

Washington State Department of Health's summary of pesticide-related investigations during 2006.

Background

The Department of Health (DOH) Pesticide Program investigates reports of illnesses related to pesticide exposure. DOH and others use data collected from these investigations to identify public health problems and develop strategies for prevention.

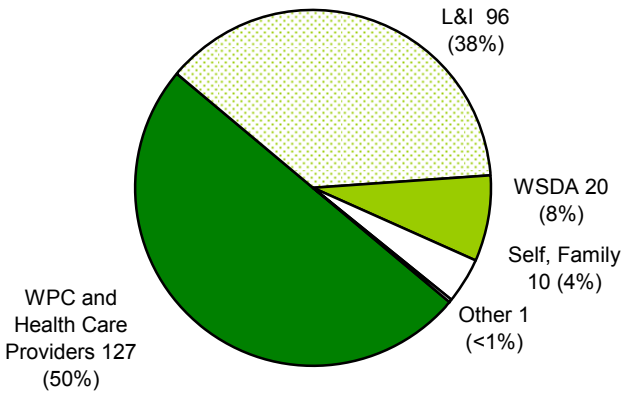
This DOH report on 2006 pesticide-related data describes sources of case reports, classification and severity of investigated cases, and the number and location of DOH investigations. DOH presents data on occupational, agricultural, and non-agricultural cases here. Conclusions and recommendations can be found at the end of this section.

Sources of Case Reports

DOH receives reports of suspected pesticide illness events from numerous sources, including Washington Poison Center (WPC), Department of Labor and Industries (L&I) Claims Administration Program, Washington State Department of Agriculture (WSDA), health care providers, and others (Figure 5). More than one agency may report the same illness event. An event may involve exposure to one or more individuals. Each individual exposure is investigated by Pesticide Program staff as a separate case. Figure 5 shows the number of individual cases investigated and the proportion of report sources based on the first report received by DOH per case.

Figure 5. Sources of Case Reports,* 2006

n = 254 cases investigated



*Although some cases were reported by more than one agency or organization, DOH defines source by the first entity submitting the report to DOH.

Electronic reporting from WPC provided approximately 50 percent of the total reports, more than any other source. Electronic reporting from L&I Worker's Compensation claims unit was the second largest source, providing 38 percent of reports.

Case Investigation Criteria

DOH receives report information from more than one source. Any single event may involve multiple people who experience pesticide illness. DOH reviews all referred reports and investigates those which meet the following criteria:

- A pesticide exposure is reported.
- Symptoms are reported.
- At least one individual involved saw a health care provider.
- The pesticide exposure occurred during the last three months.
- The pesticide exposure occurred in Washington State.
- The pesticide exposure was not a suicide attempt.

DOH occasionally investigates cases of special circumstance even if all criteria are not met. Examples are: unusual exposures to children, incidents involving multiple ill people, moderate to severe illness or injuries for which the individual did not seek health care, and cases referred by another state agency for co-investigation with DOH. Although many disinfectants are regulated as pesticides under federal law, DOH does not investigate disinfectant-related injury unless the product is specifically being used as a fungicide (e.g., sprayed on mold).

Classification of Investigated Cases

DOH Pesticide Program investigators interview individuals, obtain pesticide application and medical records, and, at times, conducts field visits. Investigators use these data to determine the likelihood that reported symptoms are related to a pesticide exposure. Investigators classify cases using documentation of exposure and health effects, and evaluation of the causal relationship. DOH uses the National Institute for Occupational Safety and Health (NIOSH) Case Classification System to distinguish between Definite, Probable, Possible, Suspicious, Insufficient Information, and Unlikely cases (Appendix B). Minimum criteria for assignment to Definite, Probable, and Possible classifications include: symptoms are characteristic of known toxicological effects of the pesticide, and the time between exposure and symptom onset is consistent. Further description of Definite, Probable, and Possible (DPP) cases is provided in Table 20.

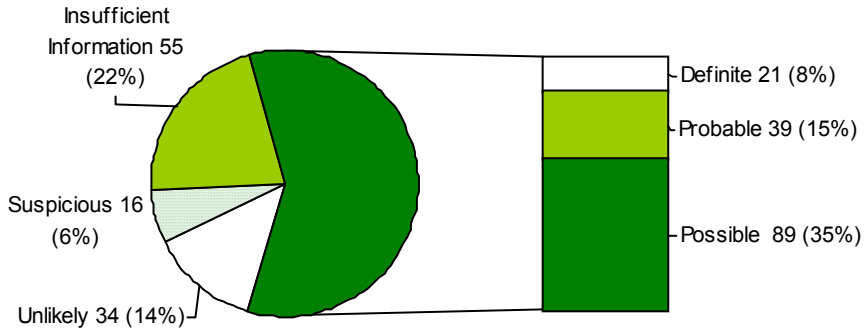
Table 20. Classification Criteria of Definite, Probable, and Possible Cases

	Evidence of Exposure	Evidence of Health Effects
Definite	Laboratory, clinical, or environmental evidence corroborates exposure, and →	Two or more post-exposure health effects (one a sign*) or lab findings are reported by a licensed health care provider.
Probable	Laboratory, clinical, or environmental evidence corroborates exposure, and →	Two or more post-exposure symptoms** are reported by the individual or a health care provider.
	Evidence of exposure is based on report from case, witness, application, observation of residue or contamination, and →	Two or more post-exposure health effects (one a sign) or lab findings are reported by a licensed health care provider.
Possible	Evidence of exposure is based on reports from case, witness, application, observation of residue or contamination, and →	Two or more post-exposure symptoms** are reported by the individual or a health care provider.

**Signs are considered objective evidence of illness and are observable on examination by a health care provider (e.g. low heart rate, cough, rash, depressed cholinesterase activity).*
***Symptoms are considered subjective evidence of illness and may not be observable on examination by a health care provider (e.g. headache, nausea, dizziness).*

In 2006, investigators classified 149 (58%) of the 254 cases as definitely, probably, or possibly related to pesticide exposure. Figure 6 shows the classification of cases for 2006.

Figure 6. Classification of Investigated Cases by Number and Percentage, 2006



n = 254 cases

The numbers of DPP cases for the years 2002 through 2006 are listed in Table 21.

Table 21. Definite, Probable, and Possible (DPP) Case Classification, 2002 – 2006

Classification	2002	2003	2004	2005	2006
Definite	50	69	63	49	21
Probable	60	53	55	48	39
Possible	64	62	86	91	89
Total DPP	***174***	***184***	***204***	***188***	***149***
All Cases Reported	270	275	269	252	254
Percent DPP	64%	67%	76%	75%	58%
Percent Insufficient Information	17%	17%	14%	17%	22%

The percentage of cases classified as DPP increased between 2002 and 2005, and then decreased in 2006. One reason for this change may be the increase in cases classified as having insufficient information in 2006.

DOH investigators classified 55 of the 254 cases as “insufficient information”. Common reasons that investigators classify cases as having insufficient information include: the person or provider reports only one symptom; investigators cannot determine the type of pesticide involved; investigators cannot sufficiently characterize exposure details (e.g., cannot reach the person for an interview); or, medical and/or spray records are inconsistent with the patient’s illness report. None of these four reasons result in automatic insufficient information classification. However, these factors increase the likelihood that an investigator would classify the case as having insufficient information. The number of “insufficient” cases may also be higher in 2006 as the Pesticide Program lost two full-time investigators mid-season. Remaining staff lacked resources (primarily time) to locate difficult-to-reach individuals and employers.

Severity of Medical Outcome

DOH uses the NIOSH Severity Index for classifying signs and symptoms associated with pesticide cases (Appendix B). The “mild” category includes transient and spontaneously resolving symptoms such as nausea, vomiting, shortness of breath, headache, dizziness, and skin or eye irritation. With mild severity cases, there is typically minimal time loss (three days or less) from work or normal activities. Even relatively pronounced symptoms such as profuse sweating, ataxia, peripheral neuropathy, eye pain, and difficulty breathing can be classified as mild if a health care provider did not directly observe the symptoms.

"Moderate" illness or injury includes signs and symptoms which are pronounced and/or prolonged and in most cases must be observed by a health care provider. These include second and third degree skin burns, ocular burns, systemic symptoms such as altered heart rate, slurred speech, and asthma attack. For moderate cases, the time loss from work or normal activities is usually three to five days.

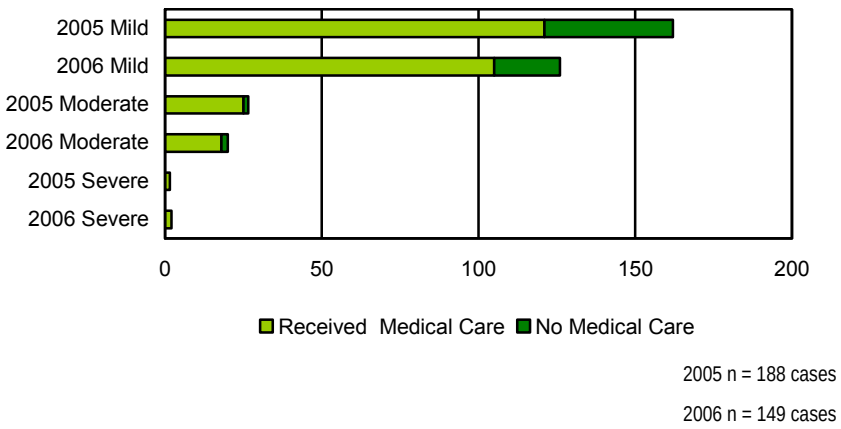
Cases are classified as "severe" when the illness or injury is considered life threatening; these cases typically require treatment or hospitalization to prevent death. Signs and symptoms include, but are not limited to: coma, cardiac arrest, renal failure, and/or respiratory depression. The individual often sustains substantial loss of time (more than five days) from regular work.

The "death" classification describes a fatality from exposure to one or more pesticides.

In 2006, 126 (85%) of the 149 definite, probable, or possible DOH cases were classified as mild. Twenty (13%) cases were classified as moderate and two (1%) cases were classified as severe (Figure 7). There was one pesticide-related death in 2006. This death was of a 64-year-old female with chronic obstructive pulmonary disease who sprayed her home for wasps using a pyrethroid product that dripped over her hands and arms. Although she received emergency medical care and was hospitalized, she died nine days after exposure.

These results are compared to 2005 data. In 2005, 161 (86%) of the 188 definite, probable, or possible DOH cases were classified as mild. Twenty-six (14%) cases were classified as moderate and one (0.5%) case was classified as severe. The absolute number of DPP cases is smaller in 2006 than in 2005, but the percentages for the mild and moderate categories are similar.

Figure 7. Severity of Medical Outcome, 2005 and 2006 DPP Cases



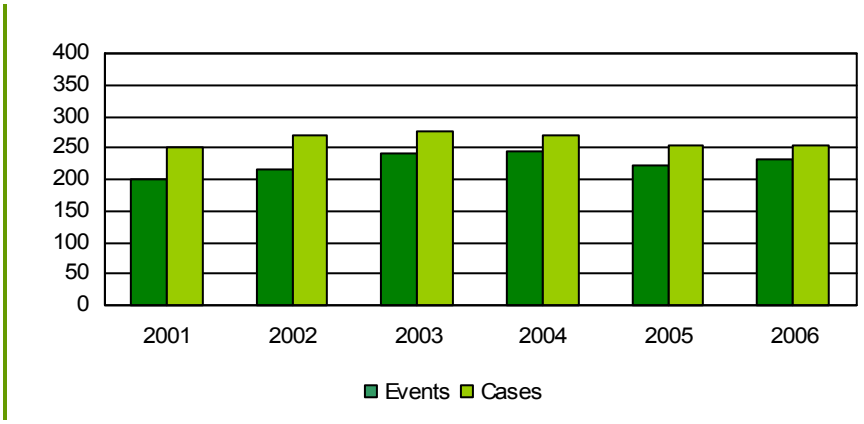
Of the 149 DPP cases in 2006, 129 (87%) received medical care for their symptoms. Of the 188 DPP cases in 2005, 146 (78%) received medical care for their symptoms. Medical care is defined as a physician office, clinic, hospital, or emergency room visit, or assistance from an emergency responder. This medical care definition differs slightly from having visited a health care provider as emergency responders are not considered providers.

Number and Location of Investigated Cases

Number of Events

During 2006, the Pesticide Program investigated reports of 232 events involving 254 cases of potential pesticide illness (Figure 8).

Figure 8. Total DOH Reported Events and Cases, 2001 – 2006



Number of Persons Involved in DPP Cases

There were 139 events that involved 149 definite, probable, or possible cases. Of the 139 events, 131 (94%) involved one individual and seven (5%) involved two individuals. One event involved four individuals.

In comparison, in 2005 there were 160 events involving 188 definite, probable, or possible cases. Of the 160 events, 147 (92%) involved one individuals, eight involved two individuals, three involved three individuals, one involved four individuals, and one pesticide drift incident involved 12 symptomatic individuals.

Location

In 2006, 26 of the 39 counties in Washington had cases that were classified as definitely, probably, or possibly related to pesticide exposure. Table 22 lists the ten counties with the most reported cases. Of the 149 DPP cases, 116 (78%) came from these ten counties. Seventy-seven percent (4.8 million) of the state population (6.2 million) resides in these ten counties. Table 22 lists the ten counties with the most reported cases adjusted for the population of those counties.

Table 22. Top Ten Counties with the Most Reported DPP Cases, 2006

County	DPP Cases	DPP Cases per 100,000 Population	Population
King	23	1.24	1,861,300
Spokane	17	3.77	451,200
Yakima	17	7.26	234,200
Grant	17	20.61	82,500
Snohomish	11	1.60	686,300
Pierce	8	1.01	790,500
Clark	7	1.69	415,000
Benton	6	3.68	162,900
Whatcom	5	2.66	188,300
Chelan	5	0.71	71,200

King and Spokane counties have the most reported DPP cases. However, when the county population is considered, they fall out of the top ten counties with DPP cases because they are more heavily populated. Table 23 lists the ten counties with the most reported cases adjusted for county population.

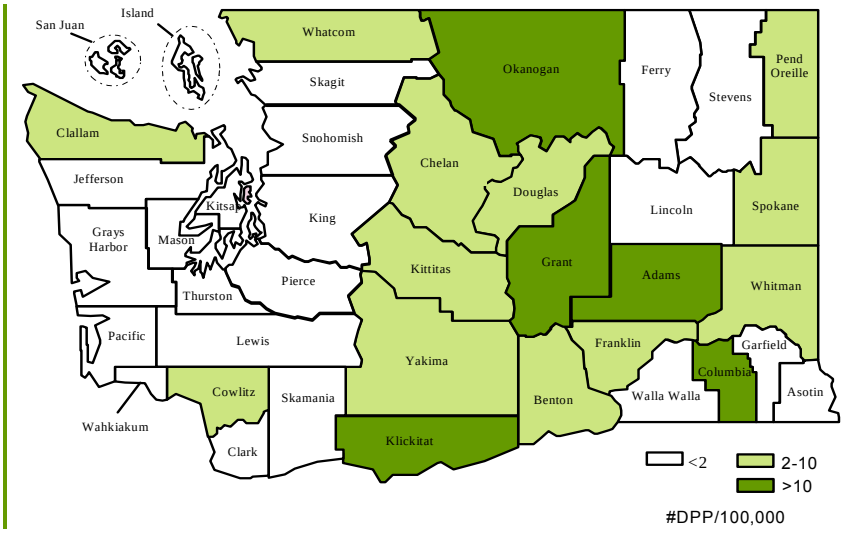
Rural counties with smaller populations appear to have the most DPP cases adjusted for population. When using both methods, the counties of Grant, Yakima, and Chelan remain in the top ten.

Table 23. Top Ten Counties with the Most DPP Cases per 100,000 Population, 2006

County	DPP Cases per 100,000 Population	DPP Cases	Population
Columbia	48.78	2	4,100
Grant	20.61	17	82,500
Okanogan	12.56	5	39,800
Adams	11.36	2	17,600
Klickitat	10.05	2	19,900
Pend Oreille	7.94	1	12,600
Yakima	7.26	17	234,200
Chelan	7.02	5	71,200
Franklin	5.93	4	67,400
Whitman	4.68	2	42,700

Figure 9 shows the location of definite, probable or possible cases adjusted for population for 2006. More of the 149 DPP cases occurred in eastern Washington (82) than in western Washington (67).

Figure 9. Number of DPP Cases per 100,000 Population, 2006



Agricultural and Non-Agricultural Cases

Table 24 displays the distribution of cases defined as definite, probable, or possible by agricultural and non-agricultural setting from 2001 through 2006.

Table 24. Annual Agricultural and Non-Agricultural DPP Cases, 2001 – 2006

Year	Agricultural	Non-Agricultural	Total Cases
2001	58 (48%)	62 (52%)	120
2002	75 (43%)	99 (57%)	174
2003	73 (40%)	111 (60%)	184
2004	64 (31%)	140 (69%)	204
2005	77 (41%)	111 (59%)	188
2006	44 (30%)	105 (70%)	149

Since 2000, the number of non-agricultural DPP cases has increased as a percentage of the total. This increase is partly due to improvements in reporting from the WPC which receives more residential calls from urban areas.

Agricultural cases occur when the pesticide application is intended for agricultural commodities such as fruit and field crops, nursery, livestock, and forest operations. Agricultural cases include exposure during pesticide handling, exposure to drift or foliar residues of an agricultural application, and spills at agricultural storage facilities. Typical non-agricultural cases involve residential use of pesticides and may include a spill or splash while opening and pouring pesticides, or wind blowing spray during the application.

The number of agricultural DPP cases reported in the last six years has ranged from 30 percent to 48 percent of total DPP cases. Although agricultural cases are 37 percent of the case total for 2006, they represent a higher percentage (40%) of cases classified as insufficient information (Table 25). In general,

agricultural cases may be more likely to be classified as insufficient information because they are more difficult to investigate.

Table 25 shows the number of agricultural and non-agricultural cases classified by DOH as insufficient information. Sixty percent of cases with this classification were non-agricultural and 40 percent were agricultural. DOH is looking at these cases more closely to determine what barriers exist to obtaining enough information to definitively classify cases.

Table 25. Non-Agricultural and Agricultural Cases Classified as Insufficient Information, 2006

Type of Case	All Other Classifications*	Insufficient Information	Total Cases
Non-Agricultural	126 (63%)	27 (60%)	153 (63%)
Agricultural	73 (37%)	18 (40%)	91 (37%)
Total	199 (100%)	45 (100%)	244 (100%)*

**In ten instances, case coding of agricultural versus non-agricultural was unknown.*

Seasonality of Agricultural and Non-Agricultural Events

In 2006, 70 (47%) of all DPP cases occurred in April through June, and 48 (32%) occurred in July through September (Table 26). For non-agricultural events, this pattern corresponds to periods when people are most likely to control landscape weeds and insects, garden pests, and home insect pests. The seasonal pattern for agricultural cases appears to have narrowed during the last two years. In both 2005 and 2006, the majority (68% and 66%, respectively) of investigated agricultural-related cases occurred in the three months from April through June. This differs from 2004 where a similar percentage (67%) of agricultural events occurred in the six months from April to September. This may be due to a shift in pesticide use patterns in orchards. Late season azinphos-methyl applications are being supplanted by use of spinosad and acetamiprid products, which have much lower acute toxicity. Based on U.S. Department of Agriculture National Agricultural Statistics Service (September, 2006) the total amount of azinphos-methyl applied to apples in Washington dropped over 30 percent from 2003 to 2005. This drop was due to a decrease in apple acreage treated, and to a 20 percent drop in the number of annual applications to the same acreage. During the same time, acetamiprid treatments on apples increased 64 percent, while spinosad use increased 55 percent.

Table 26 shows 2006 agricultural and non-agricultural DPP cases by season.

Table 26. DPP Cases by Season of the Year, 2006

	Agricultural	Non-Agricultural	Total Cases
January - March	2	11	13
April - June	29	41*	70
July - September	11	37*	48
October - December	2	16	18
Total	***44***	***105***	***149***

**Includes one case with exposure occurring in 2005 and investigation completed in 2006.*

Age and Gender

In 2006, males (53) reported more occupational exposures than females (22). Females (38) and males (35) reported comparable numbers of non-occupational exposures (Table 27).

There were 17 cases involving children younger than 18 years that were determined to be definitely, probably, or possibly related to pesticide exposure. Eleven of the children were under the age of six, five were between ages six and 11, and one was a teenager. Below are case examples.

- Four had ocular symptoms from lice shampoo.
- Five were from aerosol sprays.
- Two were related to flea treatments.
- One accidentally ingested an herbicide.
- One accidentally ingested an ant killer.
- One intentionally ingested slug bait.
- One child thought that insecticide was mosquito repellent.
- One teenager had a flea fogger accidentally discharge in her face.

Table 27 lists the age and gender of 2006 DPP occupational and non-occupational cases.

Table 27. Occupational and Non-Occupational DPP Cases by Age and Gender, 2006

	Occupational		Non-Occupational		
Age	**Female**	**Male**	**Female**	**Male**	**Total**
0-5			5	6	11
6-11				5	5
12-18		1	1		2
19-29	4	11	4	2	21
30-49	9	33	9	8	59
50+	9	8	19	14	50
Total	***22***	***53***	***38***	***35***	***148****

**Not included is a male in the 12-18 age range where occupational status of exposure is unknown.*

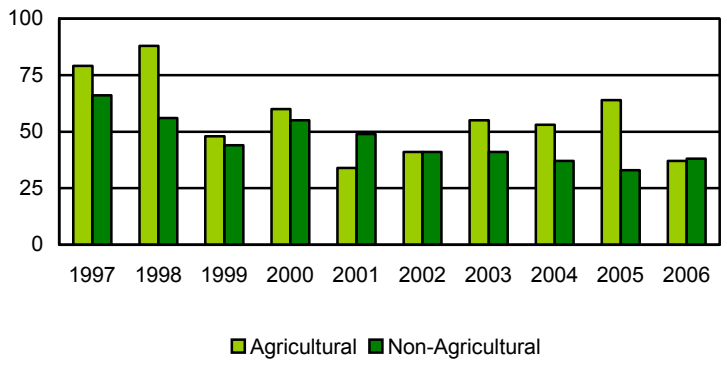
Occupational Cases of Pesticide-Related Illness

In 2006, 108 (43%) of all reported cases investigated by DOH involved a pesticide exposure on the job. Of these, 75 (69%) were classified as definite, probable, or possible cases compared to 98 (73%) in 2005.

Thirty-seven of the 75 DPP cases were agricultural workers, and 38 were from other occupations. Figure 10 shows DOH agricultural and non-agricultural occupational cases for the years 1997 through 2006.

Although the number of agricultural DPP cases has increased since 2001, cases overall are lower than what was reported in the mid-1990s. Changes in reporting and investigation procedures may have contributed to this change. The lowest number of agricultural DPP cases occurred in 2001. Since then, there has been a gradual increase in cases peaking in 2005 when five drift events resulted in a greater number of cases compared to prior years (Figure 10). In 2006, a decline in the number of agricultural cases classified as DPP occurred. This finding may be a result of Pesticide Program understaffing during 2006, described previously.

Figure 10. Agricultural and Non-Agricultural Occupational DPP Cases, 1997 – 2006



Agricultural Pesticide Events

The annual number of drift cases tends to be variable since a single event can affect multiple people. Drift to workers generally involves agricultural workers. Drift to non-workers generally involves people in their homes, driving on roads, or in parks. Table 28 shows the numbers of occupational and non-occupational drift cases for 2001 through 2006.

Table 28. Agricultural Drift to Workers and Others, 2001 – 2006

Year	Occupational	Non-occupational	Total Drift Cases
2001	14	13	27
2002	16	30	46
2003	12	12	24
2004	5	11	16
2005	20	10	30
2006	9	7	16
Total Cases	***76***	***83***	***159***

In 2006, DOH investigated 91 reports of suspected pesticide-related illness involving agricultural operations. These exposures occurred when the pesticide application was intended for agricultural commodities such as fruit and field crops, nursery, livestock, and forest operations. Of the 91 cases, DOH classified 44 as definite (3), probable (16), and possible (25). An additional 18 cases were classified as having insufficient information. In 2006, there were more drift exposures than any other single type of exposure (Table 29). This finding also occurred in 2004 and 2005 and indicates that pesticide drift is a continuing problem.

Table 29. Agricultural Occupational and Non-Occupational DPP Cases by Source, 2006

Source of Pesticide Exposure	Occupational	Non-Occupational	Total
Drift	9	7	16
Direct spray/dust during application*	12	0	12
Leak/Spill	6	0	6
Other	3	0	3
Unknown	3	0	3
Indoor Air	2	0	2
Surface/foliar residues	2	0	2
Total Cases	***37***	***7***	***44***

**Can be direct exposure to the handler or overspray to a bystander. Includes exposure to fumes while mixing or loading.*

Pesticides Involved in DPP Cases with Agricultural Workers

In 2006, there were 37 workers with illness/injury classified as definitely, probably, or possibly related to pesticide exposure during agricultural occupational activities. Twenty-six of the 37 agricultural workers were handling pesticides at the time of their exposure. Handling is defined as applying, mixing/ loading, transporting pesticides, or maintaining pesticide equipment. Eleven workers were exposed to pesticide drift or residues on leaves while thinning, pruning, handling nursery plants, or doing other agricultural work.

As in prior years, insecticides continue to be the most problematic class of pesticide in terms of reported illnesses and injuries in Washington agriculture. Fifteen (41%) of the 37 DPP cases among agricultural workers involved exposure to insecticides either alone or in combination with other pesticides.

Fungicides were involved in eight of the 37 exposures, although the majority of these were from fungicides in tank mixes with insecticides. This reflects the common practice of tank mixing insecticides and fungicides in tree fruit applications. Herbicides were involved in eight of the 37 cases.

Cholinesterase inhibiting insecticides are the class of pesticides most associated with illness reports. Ten (67%) of the 15 DPP insecticide cases in agricultural workers involved a cholinesterase inhibitor. However, there are three factors which appear to be decreasing the number of cases associated with cholinesterase inhibiting insecticides over time: required phase-out of certain cholinesterase inhibitors by the Environmental Protection Agency, improvements in worker safety provided by the cholinesterase monitoring program, and increased use of alternatives to cholinesterase inhibitors.

Table 30 shows the pesticide active ingredients for DPP cases involving agricultural workers. Since pesticides are commonly tank-mixed with other active ingredients, the number of total cases involving exposure to a specific chemical is often higher than indicated in the table.

Table 30. DPP Cases Involving Agricultural Workers by Pesticide Ingredient, 2006

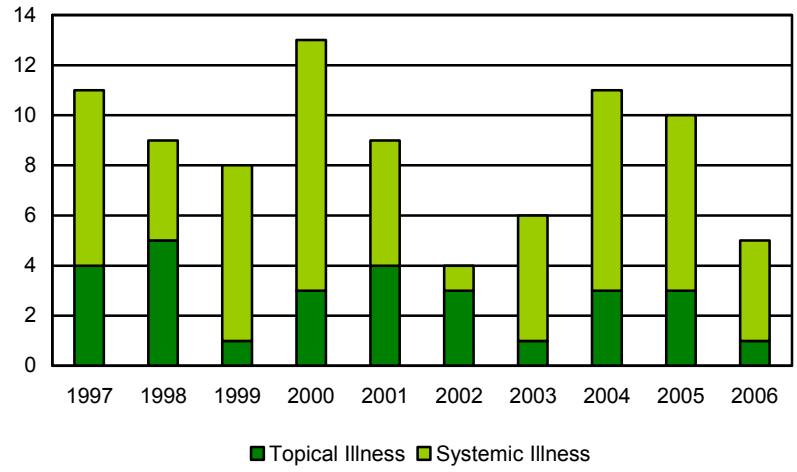
Pesticide	Handlers	Other Workers
Cholinesterase Inhibitors		
Dimethoate (ANSI)	1	
Carbaryl		1
Chlorpyrifos	1	
Combination of cholinesterase inhibitors with other pesticides	3	4
Other insecticides		
Combinations of insecticides and other pesticides (no cholinesterase inhibitors)	4	1
Herbicides		
Glyphosate (mostly as Roundup)	3	
Paraquat dichloride	2	1
Herbicide combinations	1	1
Fungicides		
Calcium polysulfide (lime sulfur)	2	
Chlorothalanil	1	
Sulfur	1	
Triadimefon	1	
Combinations of fungicides	1	2
Other		
Disinfectant	1	
Fenpyroximate	1	
Kaolin	1	
Prohexadione calcium	1	
Safer Soap	1	
Spinosad		1
Totals	***26***	***11***

Cholinesterase-Inhibiting Insecticides

With the statewide implementation of cholinesterase monitoring by L&I in 2004, there is continued interest in data specific to cholinesterase inhibiting insecticides. In 2006, DOH documented five DPP cases in pesticide handlers associated with cholinesterase inhibitors. This is about half of what was documented in 2005. DOH has seen an average of about ten cases annually among handlers for the last ten years. Overall, cholinesterase inhibitors were associated with about one-third of DPP handler pesticide cases in 2004 and 2005.

Figure 11 shows the number of handlers that experienced systemic symptoms (which affects the body internally) and the number that had topical symptoms (which affects the body externally) from 1997 to 2006. In 2006, four handlers had systemic symptoms and one had topical symptoms.

Figure 11. Type of Illness and Injury for Handlers of Cholinesterase-Inhibiting Pesticides,* 1997 – 2006



**Agricultural workers who handle cholinesterase inhibitors via mixing, loading, applying, or repairing equipment.*

Crops Associated with DPP Cases for all Agricultural Pesticides

Table 31 shows the crop associated with the 44 DPP cases resulting from agricultural pesticide use in 2006. The crops involved were fruit (30) and field or vegetable (8). The remaining six exposures were from other agricultural targets.

In 2006, as in past years, the leading crops associated with reported cases are tree fruit, one of the primary agricultural sectors of the state economy. These are labor-intensive crops requiring workers to be thinning, pruning, or harvesting during the same times of year that pesticides are applied. Dense planting of trees impedes the applicator's line of sight and requires communication with farm foremen and with neighboring farms to keep all workers clear of pesticide applications. The airblast sprayer is commonly pulled by a tractor that has no enclosed cab, as it does not fit well between the rows of trees. This leaves

drivers of airblast sprayers relatively exposed to the high pressure spray and reliant on personal protective equipment to protect them from contact with spray. The high pressure spray is also prone to drift.

Table 31. DPP Agricultural Cases by Target and Activity, 2006

Crop	Handlers		Other Workers	Bystanders		Total
	Applying	Mix/Load /Repair	Routine Work	Exposed while Outdoor	Exposed while Indoor	Total
Fruit						
Apples	9	6	9			24
Cherries	1		1	1		3
Pears				1		1
Grapes	1					1
Strawberries	1					1
Field and Vegetable Crops						
Lentils				1		1
Peas	1				2	3
Mint				2		2
Wheat			1			1
Miscellaneous Vegetable	1					1
Other Agricultural						
Ornamental nurseries	2	1				3
No applicable target		3				3
Totals	***16***	***10***	***11***	***5***	***2***	***44***

Non-Agricultural Pesticide Events

Of the 254 cases investigated in 2006, 153 were associated with non-agricultural pesticide use. DOH determined 105 (68%) of these to be definitely, probably, or possibly related to pesticide exposure (Table 32). Non-agricultural events include pesticide misapplications or spills that occur at homes, commercial buildings, industrial sites, or from roadside spraying. Of the 105 DPP non-agricultural exposures, 75 (71%) were at a residential site at the time of their exposure. Thirty-eight (36%) of the individuals were working at the time of exposure and 67 (64%) were not at work.

Table 32. Exposure Site for Non-Agricultural, Occupational and Non-Occupational DPP Cases, 2006

Exposure Site	Occupational	Non-Occupational
Residential building or grounds (home, apartment)	9	66
Other residential institution	1	
Industrial facility	4	
Office, retail or service businesses	16	
Park, lake, camp grounds	1	
Road, right-of-way or vehicle	3	
School, prison, hospital/clinic	4	
Other		1
Total non-agricultural pesticide use	***38***	***67***

Non-Agricultural Occupational

In 2006, of the 38 non-agricultural cases that occurred on-the-job; 26 were males and 12 were females. The 26 males were handling pesticides at the time of exposure. None of the females were handling pesticides.

Non-Agricultural Non-Occupational Exposures by Applicator Type

In 2006, nine of the 67 non-agricultural, non-occupational DPP cases were exposed to applications by professional (paid) applicators (Table 33).

The remaining 58 exposures were due to applications made by home owners, landlords, and coworkers. Specifically, these involved pesticide treatments of:

- Outdoor insects/slugs (2).
- Insects in or around the home (14).
- Treatments to people or pets for lice or fleas (9).
- Deer, raccoon, or rodent (3).
- Herbicides/treatments for moss or weeds (16).
- Accidental ingestion or release of pesticide products (14).

Table 33. Target Pest for Non-Agricultural, Non-Occupational Cases Exposed to Pesticide Applications by Professional* and Non-Professional Applicators, 2006**

	Professional Applications	Non-Professional Applications
Landscape/Garden Use		
Insects	1	1
Weeds	2	13
Moss in Lawn		1
Deer Repellent		1
Slugs		1
Use In/Around Structures		
Insects/Spiders	5	14
Raccoons		1
Rodents		1
Moss on Roof		2
Applications to People/Pets		
Lice/Scabies Treatments		7
Fleas on Pets		2
Aquatic (fish eradication)	1	
Accidental/Non-Targeted		
Non-Targeted		13
Repellent		1
Total	***9***	***58***

**Professional is defined as persons paid (licensed or unlicensed) to apply the pesticide.*
***Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.*

Conclusions and Recommendations

Although the number of cases DOH classified as Definite, Probable, or Possible declined in 2006 when compared to 2005 (149 versus 188 DPP cases, respectively), this finding is likely due to the increase in insufficient information classifications for 2006 (22% from an average of 17%). The DOH Pesticide Program was understaffed in 2006. Understaffing impacts the program's ability to identify the pesticide involved in an illness and to characterize the exposure details. Understaffing also makes it difficult to obtain medical and spray records in a timely fashion. As the Pesticide Program was fully staffed for the majority of 2007, DOH will attempt to determine if the number of DPP cases remains on the decline for 2007. DOH will also explore the reasons for classifying cases as "insufficient" over a multi-year period and include a description of the findings in next year's report.

DOH data consistently show that most pesticide illness cases occur seasonally, during the period of April through September. As in prior years, drift continues to be the number one source of pesticide illness in agriculture. Cholinesterase inhibiting insecticides continue to be the class of pesticide most highly associated

with DPP cases. DOH continues to study the mechanisms and risks associated with drift exposures through the drift checklist project in conjunction with NIOSH and through the drift air monitoring study funded by the Washington State Legislature 2007-2009 budget. DOH will complete these studies, evaluate resulting data, and provide policy recommendations in future reports. DOH is also coordinating with L&I on transitioning the cholinesterase monitoring database system to the Division of Occupational Safety and Health while maintaining data quality and access for the Pesticide Program.

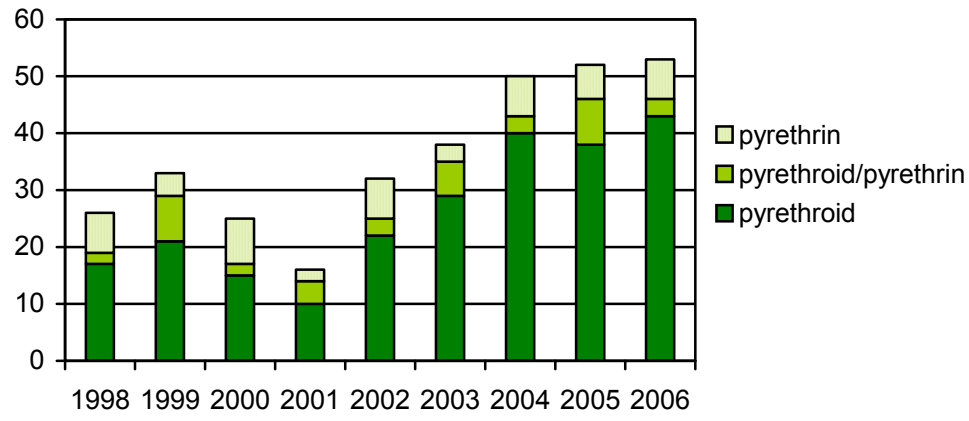
Since 2000, the number of non-agricultural DPP cases has increased as a percentage of the total and most of these cases are associated with non-occupational use around residential buildings and grounds. DOH staff shall continue to explore these trends to determine potential causal factors.

As in prior years, most individuals who experienced a pesticide related illness suffered mild symptoms. A smaller percentage (15%) of the exposures produced moderate or severe medical outcome, including one death. However, even mild symptoms may cause distress and other problems, including loss of work time.

Highlight on Pyrethroid and Pyrethrin Insecticides

Following the phase-out of home uses of two organophosphates insecticides in 2001 and 2003, pyrethrin and pyrethroids have become the most common pesticides in household insecticides. These products are sold as total release foggers (i.e., bug bombs), aerosol sprays, flea collars, and pump sprays. There is an increasing trend in pyrethroid-related illnesses and injuries in Washington since 2001 (Figure 12).

Figure 12. DPP Non-agricultural Cases* of Illness or Injury Associated with Pyrethrins, Combinations of Pyrethrins and Pyrethroids, or Pyrethroids since 1998.



**Some cases involved exposure to other pesticides as well*.

Pyrethrin and pyrethroid insecticides are neurotoxic and effective at low doses in insects. In mammals, these compounds are poorly absorbed through the skin and rapidly detoxified and excreted if absorbed. This species difference in susceptibility provides a general safety margin for human use. The most common human symptoms of over-exposure documented in Washington state are respiratory irritation (e.g., cough, irritated nose and throat, shortness of breath), systemic symptoms (e.g., headache, dizziness and nausea) and eye or skin irritation (e.g., numbness, stinging, burning). Some of these symptoms are probably due to solvents and other hydrocarbons in the fogger and aerosol formulations. People with asthma or other respiratory impairments appear to be more susceptible to adverse respiratory reactions including asthma attack, and severe shortness of breath. In a recent combined five-year analysis of Washington and Oregon pyrethroid and pyrethrin cases, people with any type of pre-existing condition were more likely to have a moderate or high illness severity.[1]

Although most pyrethroid/pyrethrin illnesses reported in the Pacific Northwest are low in severity (92%)[1], DOH is concerned with the emergence of moderate and severe outcomes, including two deaths. One death occurred in Oregon in 2005, after a licensed pesticide applicator applied pyrethroids and pyrethrins to the interior and exterior of a residence. The occupants returned three and a half hours later; one individual suffered acute respiratory symptoms and cardiac arrhythmia. Resuscitation efforts were unsuccessful and the woman died at the scene. The emergency responders and her spouse experienced less severe respiratory symptoms and recovered shortly after seeking fresh air. The deceased had a history of significant heart disease[1]. A second possible death case occurred in Washington in 2006 and is described on page 35. In 2007, DOH presented its concerns to EPA and at the Washington State Public Health Association and Washington State Environmental Health Association Joint Conference on Health, and is working to publish these findings and bring this to the attention of health care providers, the EPA and the general public.

[1] Walters, J; L Boswell; M Green; M Heumann; L Karam; B Morrissey; J Waltz, Pyrethrin and pyrethroid illnesses in the Pacific Northwest: A five year review. Public Health Reports (*in press*)

Labor and Industries

Washington State Department of Labor and Industries' summary of pesticide-related activity for 2006.

Background

Within the Department of Labor and Industries, four divisions are involved in pesticide-related activities: the Division of Occupational Safety and Health (DOSH), Specialty Compliance Services, Industrial Insurance Services, and Field Services.

- DOSH has a mandate to ensure workplace safety and health. DOSH creates workplace safety and health regulations, provides stakeholder training and outreach, holds the Annual Governor's Safety Conference and Agricultural Safety Day, inspects workplaces for safety and health, handles appeals of safety and health violations, and generates the L&I section of the PIRT report. DOSH enforces the Agriculture Worker Protection and Cholinesterase Monitoring rule and runs the Cholinesterase Monitoring program. L&I Consultation Services, a division of DOSH, provides no-cost safety consultations to employers. These consultations are confidential and will not be discussed in this report.
- The Specialty Compliance program issues farm labor contractor licenses, and enforces agricultural wages, breaks, rest periods, recordkeeping requirements, and prohibited jobs for teens.
- Insurance Services provides risk management and loss control assessments. The Safety & Health Assessment & Research for Prevention (SHARP) group researches pesticide and agricultural related safety and health issues. The Claims Program administers wage replacement and medical benefits through worker compensation to Washington workers who become ill or injured on the job.
- Field Services provides support for several of the other services in the different regions through out the state.

The pesticide-related activities of DOSH and Industrial Insurance Services are described below.

Cholinesterase Monitoring

The Department of Labor and Industries adopted Chapter 296-307-148 WAC, Cholinesterase Monitoring, in December 2003. The cholinesterase monitoring rule became effective February 1, 2004. This rule requires agricultural employers to document the number of hours their employees spend handling toxicity category I or II organophosphate or N-methyl carbamate pesticides. A depression in cholinesterase levels can lead to a range of physical symptoms,

including: blurred vision, headache, increased sweating, nausea, diarrhea, and fatigue. A severe depression can result in slowing of the heart rate, seizures, unconsciousness, respiratory failure, and death.

Employers are required to offer their employees the opportunity to participate in the cholinesterase monitoring program if their number of handling hours of target pesticides is expected to exceed the threshold as defined by the rule. Monitoring of cholinesterase levels in the blood in both red blood cells and serum can detect cholinesterase depression before the onset of illness. Workers receive a baseline test prior to use of targeted pesticides. Cholinesterase levels are tested periodically during the application season and are compared to baseline cholinesterase levels. A decrease from baseline by 20% or more indicates a cholinesterase depression. L&I intervenes based on the level of depression.

To encourage participation in cholinesterase monitoring, L&I held numerous outreach and training workshops on the monitoring rule for grower and medical provider communities throughout the state.

Cholinesterase Monitoring Results

Based on the *Scientific Advisory Committee for Cholinesterase Monitoring Final Report – Cholinesterase Monitoring of Pesticide Handlers in Agriculture, 2004 - 2006*, in 2006:

- 244 employers had their employees participate in baseline testing, a 31% decrease from 2005 and a 34% decrease from 2004. The largest number of participants from one employer was 148, the median was four per employer, and the mean was 7.7 handlers per employer. See Table 34 for baseline and periodic test numbers by employer size and by year.
- 1,899 employees participated in the program, a 17% decrease from 2005 and a 29% decrease from 2004. Each enrolled worker had a baseline test.
- 471 (25%) of these workers reached the pesticide-handling hour threshold for 30 hours in 30 consecutive days and received subsequent periodic testing.
- 57 (12%) workers had depressions triggering workplace evaluations of the participants with periodic tests with at least one cholinesterase depression of more than 20 percent from baseline. Depressions in these 57 workers triggered their employers to perform a workplace evaluation and generated alerts to L&I.
- Seven of these alerts were issued to workers with cholinesterase depressions requiring removal from further exposures to cholinesterase inhibiting pesticides (depressions greater than or equal to 30 percent for RBC and 40 percent for serum). Four of these workers had depressions triggering workplace evaluations, continued to work, and had subsequent periodic tests with depressions severe enough to trigger removal from pesticide exposure.

- In 2006, L&I offered work place evaluations and consultations to employers with employees whose cholinesterase levels were depressed to the workplace evaluation or exposure removal levels. Compliance inspections were triggered by multiple depressions with the same employer.

Table 34. Baseline and Periodic Testing for Cholinesterase Monitoring Participants by # of Handlers per Employer, 2006

Number Handlers per Employer	Number Employers Total	Base lines	Number and Percent Handlers with at Least One Periodic Test	Number and Percent Handlers with at Least One Depression
> 50	5	463	129 (28%)	11 (9%)
11 – 49	37	747	189 (25%)	32 (17%)
1 – 10	202	679	154 (23%)	14 (9%)
Total 2006	244	1,889	471 (25%)	57 (12%)
Total 2005	312	2,263	611 (27%)	59 (10%)
Total 2004	370	2,655	580 (22%)	119 (21%)

To assess declinations and numbers of eligible handlers who are opting out of participation, L&I surveyed the five health care clinics that performed about 75% of the total baseline cholinesterase tests in 2005. These health care clinics estimated the proportion of eligible handlers who were referred to the clinic but declined baseline testing. All clinics had a declination estimate less than the 15% rate declination rate in the 2003 Cholinesterase Monitoring Small Business Economic Impact Statement. The total number of participants went down each year but the rate for persons getting follow-up testing fluctuated. In an effort to determine the most likely causes for the decrease in participants from 2004 to 2006, L&I investigated about 25 percent of the employers who ceased participating in ChE monitoring between the second and third years. These investigations provided evidence for the following:

- Changes in pesticide use patterns, including eliminating the use of, or applying less, organophosphate or N-methyl Carbamate pesticides;
- Lessening handler exposure below the 30-hour time period for mandatory testing through handler rotation or an increase in the number of pesticide applicators;
- Increased handling of pesticides by those not covered under the rule, e.g. owner and family members;
- Employer non-compliance or handlers refusing to participate.

Health care providers sent the number of the 2006 pesticide-handling hours to the DOH Public Health Laboratory with each periodic test request. The laboratory forwarded the handling reports to L&I.

From 2004 through 2006, on average, serum cholinesterase was shown to be depressed by 6.8 percent among periodically tested handlers. Red blood cell (RBC) enzyme activity has shown less frequent or extensive depression.

Consistent with these observations are the results from analyses of handlers with pre-baseline testing exposures to insecticides (i.e., working baselines). That subset of handlers also tends to have lower ChE levels in their baseline tests than handlers without pre-baseline exposures.

Regardless of the lack of a strong correlation between hours worked and serum ChE depression, the consistency of observations for average population depressions suggest that exposures sufficient to depress at least serum ChE activity had occurred in a number of handlers. A small but significant relationship was found for serum (plasma) cholinesterase with hours worked. On average, a 0.053 percent serum cholinesterase depression could be expected for every hour spent handling category I or II organophosphate or N-methyl carbamate pesticides. This equates to an approximate 1.5 percent serum cholinesterase depression for every 30 hours spent handling in the 30 days prior to testing; a small decrease.

If L&I finds that a worker experienced symptoms that could be associated with cholinesterase depression, the case is referred to DOH for investigation. L&I referred two cases to DOH during 2005. After investigation, DOH determined that neither of these illnesses was associated with organophosphate or N-methyl Carbamate exposure.

During 2004, and 2006, L&I conducted confidential consultations with employers to evaluate workplaces where employees had cholinesterase depressions compared to their baseline tests. Because of the confidential nature of these consultations, they are not included in this report. During 2005, L&I also conducted research investigations with employers to evaluate workplaces where employees had cholinesterase depressions compared to their baseline tests.

Preliminary results of cholinesterase monitoring for 2005 and 2006 were compared to the results from 2004. Improvements in the cholinesterase monitoring program from 2005 that were maintained in 2006 included: 1) faster laboratory turnaround of baselines test (from 24 days to one or two days); 2) L&I notifications of depressions (from seven days to three days); and 3) decreased amount of time between notice of depression and initiation of an investigation (from 35 days to nine days).

More information on the cholinesterase monitoring rule is available at the L&I cholinesterase monitoring Web site:

http://www.lni.wa.gov/Safety/Topics/AtoZ/Cholinesterase/default.asp.

The Science Advisory Committee's Final Report and recommendations based on 2004 – 2006 data is available online at:

http://www.lni.wa.gov/Safety/Topics/AtoZ/Cholinesterase/files/2004-06ChESACreport.pdf.

The L&I Reports to the legislature are also available online. The report on the first year of cholinesterase monitoring can be found at:

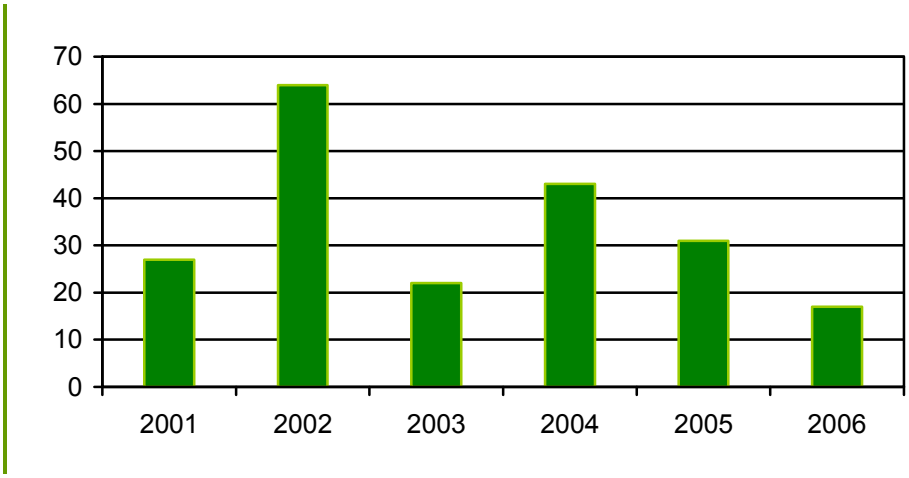
http://www.lni.wa.gov/Safety/Topics/AtoZ/Cholinesterase/files/ChELegRpt2004Final.pdf.

Division of Occupational Safety and Health (DOSH)

To enforce safety and health in the workplace, L&I DOSH staff members may issue citations requiring employers to implement changes in the workplace. Washington Industrial Safety and Health Act (WISHA) citations can be categorized as "serious" or "general." A serious violation presents a "substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations or processes which have been adopted or are in use, in the workplace . . ." A general violation is a situation where the "most serious injury, illness or disease that would likely result from a hazardous condition cannot be reasonably predicted to cause death or serious physical harm to exposed employees, but does have a direct and immediate relationship to their safety and health." Both categories of citations require employers to implement changes in the workplace. Serious violations have penalties assigned and follow-up inspections may be performed to assure compliance. If required changes in workplace safety and health have not been made, these citations are reissued as "failure to abate" the hazard with additional monetary penalties. Inspection conducted by DOSH can result in several violations and include both serious and general citations.

This section summarizes the results of pesticide-related safety and health inspections conducted by L&I DOSH. A description of each of the inspections is provided in Appendix C. The number of pesticide-related inspections decreased in 2006 (Figure 13). The decrease in the number of DOSH pesticide-related inspections in 2006 was from the result of having fewer investigators due to retention and recruiting issues.

Figure 13. WISHA Workplace Safety and Health Inspections, 2001 - 2006

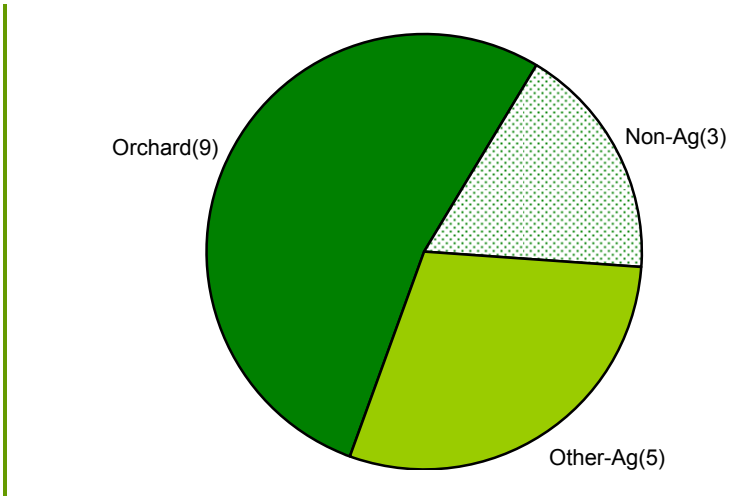


DOSH Inspections

Of the 17 inspections conducted in Washington involving pesticide related issues, 11 (65%) were located in eastern Washington and 6 (35%) were located in western Washington. Of the 17 pesticide-related DOSH inspections in 2006, nine were referrals from state agencies, health care providers, and others. Three inspections were initiated in response to employee or employee representative complaints. Three were planned inspections, one inspection was conducted in follow-up to an accident, and one was a follow-up from 2005.

Fifteen of the 2006 inspections occurred in agricultural environments. Two were in non-agricultural settings. Figure 14 shows the inspections by type of work place. Nine (53%) of the inspections involved orchards. The "Other Agricultural" workplace classification included one berry farm, one potato farm, one tree farm, one plant nursery, one vegetable and melon producer, and one apple/pear storage facility. Of the two non-agricultural inspections, one involved a raspberry research facility, and one occurred at a fruit packing and storage plant.

Figure 14. DOSH Inspections by Type of Workplace, 2006



DOSH Inspections Involving Violations

In 2006, L&I conducted seventeen inspections involving pesticides with 14 of those employers receiving citations. Several inspections resulted in both serious and general citations, and two inspections generated six "failure to abate" citations.

Monetary penalties totaling $13,050 were assessed for seven "failure to abate" and 10 serious pesticide-related citations from seven of the 17 total inspections. There were 27 general pesticide-related citations, with no penalties assessed for 14 of the 17 inspections. No citations were issued to the employer in three of the 17 total inspections.

In six of the seven "failure to abate" citations the monetary penalty totaled $5,750, with an average penalty of $958. One general citation was issued as "failure to abate" for $100. It was considered an outlier and not averaged with

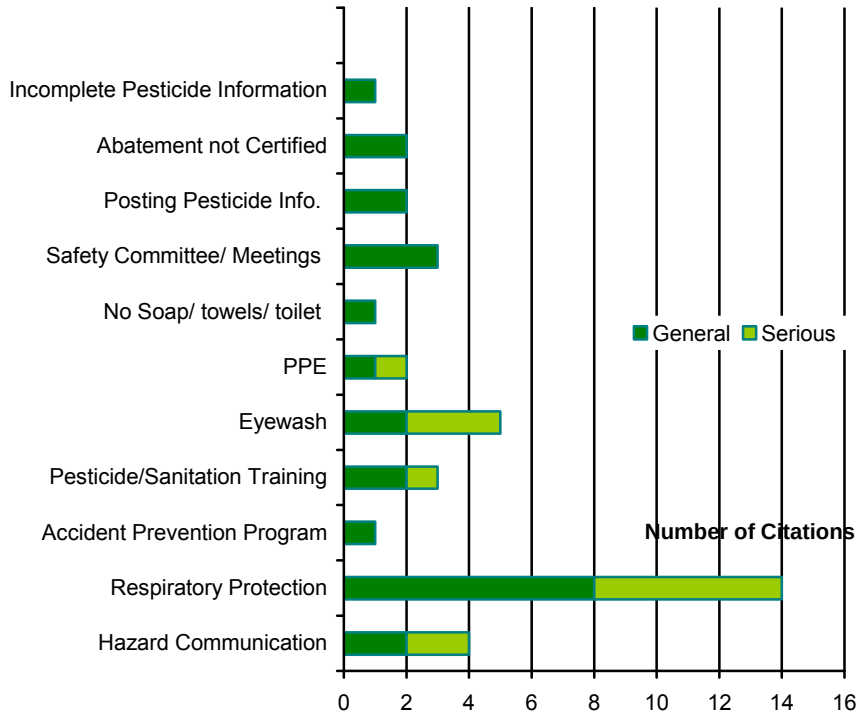
other “failure to abate” citations. The ten serious citations resulted in a total monetary penalty of $7,200 with an average penalty of $720.

The most frequent type of serious (16) and general (28) WISHA violations cited in 2006 were:

- Respirator deficiencies, including no respirator program, improper storage or cleaning of respirators, no medical evaluations of worker’s ability to wear a respirator, or no respirator fit-testing.
- Hazard communication deficiencies in safety programs, including: missing written programs, chemical inventories, or MSDS; no employee training; or insufficient chemical labeling.
- Accident prevention program deficiencies.
- Employees not trained about pesticides, their hazards, or field sanitation.
- No emergency eyewash provided.
- Deficiencies in appropriate personal protective equipment.
- No hand-washing facilities or toilet.
- No required safety committee or safety meetings.
- Not posting safety, emergency, or pesticide spray information as required.
- Abatement of previously cited hazards not certified.
- Incomplete pesticide inventory.

General and serious violations involving pesticides are categorized by type of violation in Figure 15.

Figure 15. WISHA General and Serious Violations Involving Pesticides, 2006



L&I Claims Insurance Services Division, Claims Administration Program

The Insurances Services Division, Claims Administration Program processes workers' compensation claims initiated by on-the-job injuries and illnesses. In 2006, the Claims Administration Program received 110 claims where the injury or illness initially appeared to be related to pesticide exposure (Table 35). The number of pesticide-related claims increased in 2006 by 15% from 2005.

L&I either accepts or rejects claims based on whether a work-related injury or illness is diagnosed. Compensation is determined in accordance with the following definitions:

- Medical Only/Non-Compensable Claim: A worker experienced symptoms that he/she believes occurred from exposure on-the-job and seeks medical evaluation. The physician finds the symptoms related to the exposure and there is objective evidence of injury. Therefore, the claim is allowed and medical evaluation and any follow-up medical care/treatment costs are paid. The employee misses less than three days of work. These lost workdays are not reimbursed to the employee.

- Time Loss/Compensable Claim: A worker has an allowable claim and misses more than three days of work immediately following an exposure on the job. The worker is paid a portion of salary while unable to work. All related medical costs are covered.
- Rejected Claims: Initial diagnostic and medical evaluation costs are covered but the claim is rejected because objective evidence is lacking relating symptoms to workplace exposure. Claims may be rejected because symptoms have resolved by the time treatment is obtained, there is no objective evidence of injury, the worker may not yet have symptoms of illness from the exposure, or exposure cannot be confirmed or documented. A rejected status can be appealed and is often reevaluated. However, once final, the worker can no longer reopen a claim based on original symptoms. Illness claims may be either opened or reopened up to two years after the identification of the onset of delayed symptoms. Costs of initial medical visits are usually paid.
- Pending: Additional information is being collected on the claim before a determination can be made.
- Kept on Salary: The employer elects to pay the claimant's salary instead of L&I paying time loss payments while the employee is recovering from an injury or illness.

Table 35. Status of L&I Claims Initially Related to Pesticides, 2001 - 2006

	2001	2002	2003	2004	2005	2006
Medical Only Non-compensable	75	79	83	70	62	68
Time Loss/ Compensable	8	4	4	4	2	4
Rejected	45	26	45	26	29	36
Pending/Unknown	-	-	1	1	-	1
Kept on Salary	1	-	-	-	-	1
Total	***129***	***109***	***133***	***101***	***93***	***110***

Claims categorized as "Medical only" and "Time loss" are compensated as work-related injuries. Of the 110 claims in 2006, 72 (65%) were compensated by L&I as being work- related injuries. L&I paid either time loss or medical benefits for a total of $206,860 in 2006.

As noted in the Rejected Claims definition above, most rejected claims were compensated for initial diagnostic and medical evaluations costs even if a determination could not be made to relate the symptoms to the work place.

L&I Claims Reported to Department of Health

L&I provides claims information involving pesticides to DOH to investigate whether the illness or injury is pesticide-related. L&I referred 110 claims to DOH to investigate during 2006 (Table 36). L&I assessed 74 of 110 claims as work-related. Of the 74 claims that L&I assessed as valid work related injuries, DOH classified 60 (55%) as definitely, probably, or possibly related to pesticides

(DPP). Based on the DOH criteria, 50 cases were classified as insufficient evidence to assess the link with pesticides, suspicious, or unlikely to be related to pesticide exposure. Of the 36 claims that L&I rejected, DOH classified 14 as likely to be associated with pesticide exposure (DPP).

Table 36 illustrates the difference in evaluation criteria and perspective between the two agencies.

Table 36. Comparison of L&I Claims and DOH Classification Status, 2006

L&I Claim Determination	DOH Classification						
	Definite	Probable	Possible	Insuf Inf	Suspicious	Unlikely	Total
Medical Only/ Non-compensable	4	11	27	10	5	11	68
Time Loss/ Compensable	--	2	-	--	--	2	4
Rejected	-	4	10	9	2	11	36
Pending/Unknown	--	1	--	--	--	--	1
Kept on Salary	--	--	1	--	--	--	1
Total	***4***	***18***	***38***	***19***	***7***	***24***	***110***

Seventy-three (66%) of the 110 claims L&I referred to DOH for evaluation were agricultural, and 33 (45%) of these were classified as DPP related to pesticide exposure. The 37 remaining claims were non-agricultural, and 26 (70%) of these were DPP. Non-agricultural cases worked in a variety of professions including landscaping, construction, pest control, maintenance, parks, and others.

Occupational exposures are described in detail in the DOH Section under Occupational Cases of Pesticide-Related Illness.

Washington Poison Center

Washington Poison Center's summary of phone calls received concerning human exposure to pesticides during 2006.

Background

Washington Poison Center (WPC) provides 24-hour emergency medical assistance, information, and education about toxic substances or suspected poisons by way of a toll-free telephone number. Pesticide-related calls to WPC include intentional and unintentional human exposures, confirmed and non-confirmed exposures, and requests for information only. WPC also receives calls concerning rodenticides, animal exposures, and other pesticide issues.

Human Exposure Calls

The total number of calls has not significantly changed over the past three years (Table 37).

Table 37. WPC Human Exposure to Pesticide Calls*, 2002 - 2006

Pesticide	2002	2003	2004	2005	2006
Fungicide	64	53	56	76	56
Herbicide	347	368	422	457	385
Fumigant	9	10	7	6	2
Insecticide	1,110	1,016	1,302	1,347	1,213
Insect repellent (e.g., mosquito, tick)	96	156	155	137	104
Animal repellent	3	5	17	16	16
Moth repellent	40	30	39	35	52
Rodenticide	374	299	344	356	316
Total*	***2,043***	***1,937***	***2,342***	***2,430***	***2,144***
Percent of Total Human Exposure Calls	2.9%	2.9%	3.5%	3.6%	3.2%
Total WPC Human Exposure Calls*	***70,298***	***65,857***	***67,517***	***67,986***	***67,032***

**Includes human exposure calls that may or may not involve illness. Excludes information only calls.*
***Forty-eight percent of calls were about pharmaceuticals, 30 percent about household products, cleaners, and chemicals, and nine percent about intentional exposures.*

WPC classifies a call as a *Human Exposure* when a caller reports that they or someone else inhaled, ingested, injected, or inserted a pesticide, or got a pesticide on their skin or in their eyes. Human exposure calls also include situations where the caller only suspects that there was an exposure to a pesticide. Most human exposure calls do not report any perceived associated symptoms. Additional information about severity of human exposures is provided

below. Calls to obtain pesticide information only are classified as 'No Identifiable Patient' and are not considered exposures.

WPC Human Exposure Calls Reported to Department of Health

By Washington State law, health care providers are required to report pesticide poisoning to the Department of Health (DOH) (WAC 246-101-105). Health care providers may report cases by calling the WPC. WPC helps to manage the case and forwards information to DOH.

In 2004, WPC collaborated with DOH and the University of Washington Clinical Informatics Research Group to develop a system for automated selection of WPC call records that meet DOH reporting criteria. Using the University of Washington extraction routine and a secure file transfer mechanism, files with all pertinent reports are now automatically sent from WPC's Toxicall data system to DOH's Pesticide Program every 24 hours. DOH Pesticide Program staff then use a record review system, the Pesticide Illness Electronic Reporting System, to upload and view WPC reports.

DOH reviews reports of suspected pesticide illness incidents and conducts preliminary interviews to determine if incidents should be investigated. An incident is investigated if all of the following conditions apply:

- A pesticide exposure is reported.
- Symptoms are reported.
- The pesticide exposure occurred during the last three months.
- The pesticide exposure occurred in Washington State.
- The pesticide exposure was not an intentional suicide gesture.
- The person sought care from a professional health care provider.

An incident may involve multiple cases (persons) who experience pesticide illness.

In 2006, DOH reviewed all human pesticide-related illness calls to WPC and identified 124 calls for investigation. After investigation, DOH determined that 80 of the 124 calls involved illnesses definitely (17), probably (19), or possibly (44) related to the pesticide exposure (Table 38). These 80 illnesses are included in the detailed analyses of definite, probable, and possible cases in the DOH Section of this report.

Table 38. Pesticide-related Calls to WPC Investigated by DOH, 2002 - 2006

Year	Investigated by DOH	DOH DPP (%)*
2002	106	73 (69%)
2003	122	88 (72%)
2004	150	128 (85%)
2005	130	100 (77%)
2006	124	80 (65%)

**Percentage of cases investigated by DOH classified as definitely, probably or possibly related to the pesticide exposure.*

Of the 80 WPC calls that DOH determined to be illnesses definitely, probably or possibly related to pesticides in 2006, 66 involved residential exposures, three involved agricultural exposures, and ten occurred in other public settings. One exposure site was unknown.

In 2006, there were 17 WPC calls involving children under the age of 18 that DOH determined were definitely, probably or possibly related to the pesticide exposure. Of these:

- Four children got lice shampoo in their eyes.
- Three children ingested the product.
- Three children were sprayed in the face by themselves or another child.
- Two children had ocular symptoms after exposure to product.
- Two children developed symptoms while inside after indoor insecticide applications.
- One child developed multiple symptoms when wind blew product into his face while spraying a wasp's nest.
- One child applied insecticide to himself, thinking it was mosquito repellent.
- One child had a rash after playing on a lawn treated with a weed and feed lawn product.

Type of Pesticides Involved in WPC Human Exposure Calls

As in the past, more than half of the human exposure calls involved insecticides. Table 39 illustrates WPC exposure calls by pesticide type for different age groups for 2006. Of all pesticide calls, 1,213 (57%) were about insecticides.

In 2006, WPC received 385 calls about potential herbicide exposures, representing 18% of the 2,144 pesticide calls (Table 39). Ninety-two (24%) of herbicide calls involved 2,4-D or other chlorophenoxy herbicides (i.e., MCPA, MCPP, and 2,4,5-T) and 149 (39%) involved exposure to glyphosate (the active ingredient in Round-up).

Table 39. WPC Pesticide-Related Exposures by Age of Case, 2006

Pesticide Type	<6 Years	6-19 Years	>19 Years	Unknown Age	Total Calls
Fungicide	11	5	40	0	56
Herbicide	98	37	248	2	385
Fumigant	1	0	1	0	2
Insecticide	363	129	716	5	1,213
Animal repellent	6	1	9	0	16
Insect repellent	69	16	19	0	104
Moth repellent	25	4	22	1	52
Rodenticide	243	11	60	2	316
Totals	***816***	***203***	***1,115***	***10***	***2,144***

Table 40 lists the types of insecticides involved in human exposure calls to WPC for 2002 through 2006. Because the product involved in an incident frequently involves more than one type of pesticide, the totals over-represent the number of people exposed.

Table 40. WPC Type of Insecticide Involved in Human Exposure Calls, 2002 - 2006

Generic description	2002	2003	2004	2005	2006
Arsenic-based compounds	6	8	5	5	19
Borates/Boric Acid	33	22	29	49	52
Carbamate only	46	37	60	47	40
Carbamate with other pesticides	9	19	27	23	7
Chlorinated hydrocarbon only	29	26	20	20	8
Chlorinated hydrocarbon with other insecticide	4	3	4	14	5
Insect growth regulator	3	6	5	2	2
Metaldehyde	31	22	36	56	38
Organophosphate only	198	124	137	130	73
Organophosphate with carbamate	4	0	1	3	0
Organophosphate with chlorinated hydrocarbons	1	0	0	0	0
Organophosphate with other pesticide	36	28	45	26	34
Organophosphate/Carbamate/Chlorinated hydrocarbons	1	0	0	0	0
Piperonyl butoxide/Pyrethrins/Pyrethroids	418	405	529	542	556
Rotenone	2	1	3	1	5
Veterinary insecticide	6	6	11	12	5
Other	155	181	266	282	258
Unknown	128	128	124	135	111
Totals	***1,110***	***1,016***	***1,302***	***1,347***	***1,213***

In 2006, 154 (11%) of the reported insecticides contained organophosphates (107) and carbamates (47). The Poison Center data match a national trend of decreasing frequency of organophosphate exposure and increasing frequency of exposure to pyrethrins and pyrethroids. Increases in reported arsenic and borate exposures were from ant bait compounds. Exposed patients developed only mild symptoms.

Severity of Human Exposures to Pesticides

WPC classifies human exposure calls by severity of medical outcome. Definitions used by WPC to define severity are listed below:

Minor Effect	Symptoms are minimally bothersome and resolve rapidly (e.g., skin irritation, first-degree skin burn, transient cough, mild systemic symptoms such as nausea or headache).
Moderate Effect	Symptoms are more pronounced, more prolonged or more systemic in nature. Usually some form of medical treatment is indicated (e.g., corneal abrasion, disorientation, pronounced wheezing, brief seizures that respond readily to treatment).
Major Effect	Symptoms are life-threatening or result in significant residual disability. Medical treatment is required (e.g., repeated seizures, acute cholinergic crisis, respiratory compromise requiring intubation).

WPC follows up on calls by calling back to the home, workplace, or health care facility for exposures where there are moderate or major effects present at the time of the call or there is a high potential for moderate or major symptoms to develop based on the history given by the caller or an evaluation of the substance.

The number of WPC exposures with medical outcomes does not match the number of pesticide-related calls investigated by DOH because of differences in agency classification criteria. DOH primarily investigates WPC referrals where medical care was sought. Table 41 shows the disposition of WPC calls by medical outcome.

In 2006, 36 (1.7%) pesticide-related human exposure calls involved moderate or major health effects. Fifty-two (2.4%) pesticide-related calls involved intentional exposure. The one death case occurred when a patient suffered a fatal flair of her lung disease after spraying a pyrethroid insecticide indoors.

Table 41. WPC Human Exposure Calls by Medical Outcome/Disposition*, 2006

Follow-up	
No health effect	104
Minor health effect/outcome	153
Moderate health effect/outcome	32
Major health effect/outcome	4
Death	1
No Follow-up	
Nontoxic exposure	234
Minimal toxicity expected	1,368
Potentially toxic exposure**	31
Unrelated	217
Total (follow-up and no follow-up)	***2,144***

**Cases coded as 'confirmed non-exposure' are not included.*

***Cases where the caller either refused to provide a name or contact information or there are other circumstances that did not allow follow-up.*

Appendix A
Pesticide Incident Reporting and Tracking (PIRT) Review Panel

Pesticides – Health Hazards RCW 70.104.070-090

2007 Panel Representatives

Pesticide Incident Definition

Primary Agency Responsibilities Related to Pesticide Exposure

Agency Response Time Mandates

Pesticides – Health Hazards RCW 70.104.070-090

RCW 70.104.070 Pesticide incident reporting and tracking review panel -- Intent. The legislature finds that heightened concern regarding health and environmental impacts from pesticide use and misuse has resulted in an increased demand for full-scale health investigations, assessment of resource damages, and health effects information. Increased reporting, comprehensive unbiased investigation capability, and enhanced community education efforts are required to maintain this state's responsibilities to provide for public health and safety.

It is the intent of the legislature that the various state agencies responsible for pesticide regulation coordinate their activities in a timely manner to ensure adequate monitoring of pesticide use and protection of workers and the public from the effects of pesticide misuse.

[1989 c 380 § 67.]

Severability -- 1989 c 380: See RCW 15.58.942.

RCW 70.104.080 Pesticide panel -- Generally.

(1) There is hereby created a pesticide incident reporting and tracking review panel consisting of the following members:

(a) The directors, secretaries, or designees of the departments of labor and industries, agriculture, natural resources, fish and wildlife, and ecology;

(b) The secretary of the department of health or his or her designee, who shall serve as the coordinating agency for the review panel;

(c) The chair of the department of environmental health of the University of Washington, or his or her designee;

(d) The pesticide coordinator and specialist of the cooperative extension at Washington State University or his or her designee;

(e) A representative of the Washington poison control center network;

(f) A practicing toxicologist and a member of the general public, who shall each be appointed by the governor for terms of two years and may be appointed for a maximum of four terms at the discretion of the governor. The governor may remove either member prior to the expiration of his or her term of appointment for cause. Upon the death, resignation, or removal for cause of a member of the review panel, the governor shall fill such vacancy, within thirty days of its creation, for the remainder of the term in the manner herein prescribed for appointment to the review panel.

(2) The review panel shall be chaired by the secretary of the department of health, or the secretary's designee. The members of the review panel shall meet at least monthly at a time and place specified by the chair, or at the call of a majority of the review panel.

[1994 c 264 § 41; 1991 c 3 § 363; 1989 c 380 § 68.]

Severability -- 1989 c 380: See RCW 15.58.942.

RCW 70.104.090 Pesticide panel -- Responsibilities. The responsibilities of the review panel shall include, but not be limited to:

(1) Establishing guidelines for centralizing the receipt of information relating to actual or alleged health and environmental incidents involving pesticides;

(2) Reviewing and making recommendations for procedures for investigation of pesticide incidents, which shall be implemented by the appropriate agency unless a written statement providing the reasons for not adopting the recommendations is provided to the review panel;

(3) Monitoring the time periods required for response to reports of pesticide incidents by the departments of agriculture, health, and labor and industries;

(4) At the request of the chair or any panel member, reviewing pesticide incidents of unusual complexity or those that cannot be resolved;

(5) Identifying inadequacies in state and/or federal law that result in insufficient protection of public health and safety, with specific attention to advising the appropriate agencies on the adequacy of pesticide reentry intervals established by the federal environmental protection agency and registered pesticide labels to protect the health and safety of farmworkers. The panel shall establish a priority list for reviewing reentry intervals, which considers the following criteria:

(a) Whether the pesticide is being widely used in labor-intensive agriculture in Washington;

(b) Whether another state has established a reentry interval for the pesticide that is longer than the existing federal reentry interval;

(c) The toxicity category of the pesticide under federal law;

(d) Whether the pesticide has been identified by a federal or state agency or through a scientific review as presenting a risk of cancer, birth defects, genetic damage, neurological effects, blood disorders, sterility, menstrual dysfunction, organ damage, or other chronic or subchronic effects; and

(e) Whether reports or complaints of ill effects from the pesticide have been filed following worker entry into fields to which the pesticide has been applied; and

(6) Reviewing and approving an annual report prepared by the department of health to the governor, agency heads, and members of the legislature, with the same available to the public. The report shall include, at a minimum:

(a) A summary of the year's activities;

(b) A synopsis of the cases reviewed;

(c) A separate descriptive listing of each case in which adverse health or environmental effects due to pesticides were found to occur;

(d) A tabulation of the data from each case;

(e) An assessment of the effects of pesticide exposure in the workplace;

(f) The identification of trends, issues, and needs; and

(g) Any recommendations for improved pesticide use practices.

[1991 c 3 § 364; 1989 c 380 § 69.]

Effective date -- 1989 c 380 §§ 69, 71-73: "Sections 69 and 71 through 73 of this act shall take effect on January 1, 1990." [1989 c 380 § 90.]

Severability -- 1989 c 380: See RCW 15.58.942.

2007 Panel Representatives

Department of Health (Chair)	Robert Duff
	Cynthia Lopez, DrPH, MPIA
Department of Agriculture	Ann Wick
Department of Ecology	Kelly McLain
Department of Fish and Wildlife	Bridget Moran
Department of Labor and Industries	Pam Edwards
Department of Natural Resources	Karen Ripley
General Public	Alice C. Larson, PhD
Practicing Toxicologist	Steven Gilbert, PhD, DABT
University of Washington	Matthew Kiefer, MD
	Richard Fenske, PhD
Washington Poison Center	William O. Robertson, MD
	William Hurley, MD
Washington State University	Allan Felsot, PhD

2007 PIRT Panel Coordinator

Department of Health	Fran McBride

Pesticide Incident Definition

A pesticide incident includes:

- Documented or suspected human cases of pesticide poisoning reported by health care providers as stated in Title 246 WAC, Chapter 246-101 WAC.
- Suspected pesticide poisoning of animals that may relate to human illness.
- Cases of human exposure where there is concern, but no medical evidence to substantiate a pesticide poisoning.
- Emergencies relating to pesticides that represent an imminent and/or future hazard to the public and/or labor force due to the toxicity of the material, the quantities involved, or the environment in which the incident occurs.
- Documented impacts to the environment including ground, surface water or soil contamination, crop or other resource damage due to the use or misuse of pesticides.
- Violations of worker protection related to pesticide use.
- Property loss or damage from the use or application of any pesticide.

A pesticide incident appropriate for review by the PIRT Panel includes a case or situation where information received by Departments such as Agriculture, Health, or Labor and Industries indicates that the use of a pesticide may be related to a current or future threat to the public health and welfare.

A pesticide incident appropriate for resolution by the PIRT Panel is any case described above for which unresolved issues remain after agencies have conducted investigations. Incidents concerning human health are given top priority.

Adopted April 19, 1990

Primary Agency Responsibilities Related to Pesticide Exposure

Washington State Department of Agriculture

The Washington State Department of Agriculture (WSDA) is responsible for protection of health, welfare, and the environment under authority of the Pesticide Control Act and the Pesticide Application Act. These laws give the department the authority to regulate the handling, transportation, storage, distribution, use, and disposal of pesticides and their containers. WSDA administers the Federal Insecticide, Fungicide, and Rodenticide Act and the state pesticide laws. In administering these programs, WSDA

- Adopts and administers pesticide regulations including state pesticide registration;
- Tests and certifies pesticide applicators;
- Administers continuing education requirements for pesticide applicators; and,
- Investigates complaints of pesticide misuse or misapplication.

Washington State Department of Health

Under Chapter 70.104 RCW, the Washington State Department of Health (DOH) is responsible to protect and enhance the public health and welfare related to the use of pesticides. This includes the determination and documentation of health effects resulting from pesticide poisonings and exposures, and delineation of public health risks. The major elements of DOH Pesticide and Surveillance Section are set forth in RCW 70.104.030 and include:

- Conduct medical investigations of suspected human pesticide poisonings and those animal poisonings that may relate to human illness.
- Provide technical assistance regarding health effects and risks of pesticides to health care providers, other agencies, and individuals.
- Provide community information regarding health effects of pesticide exposure.
- Secure and provide for analysis of environmental samples or human and animal tissues to determine the nature and cause of any suspect case of pesticide poisoning.
- Establish, chair, and staff the multi-agency Pesticide Incident Reporting and Tracking Review Panel (PIRT).
- Establish pesticide illness/exposure reporting mechanisms to be used by health care providers.
- Develop a program of medical education for physicians and other health care providers regarding pesticide poisonings.

Washington State Department of Ecology

The Washington State Department of Ecology (Ecology) is responsible for protection of public health and the environment, particularly under these

jurisdictions: Chapter 90.48 RCW, Water Pollution Control Act; Hazardous Waste Management Act; Chapter 70.105D RCW, Model Toxics Control Act; and, Chapter 70.94 RCW, Washington Clean Air Act. The following elements apply to pesticide incidents.

- Protect wetlands, shorelands, and water including control and prevention of pollution from pesticide activities.
- Implement an aquatic pesticide application permit system.
- Administer a regulatory and education program directed at proper management and disposal of pesticide wastes.
- Investigate and enforce remediation of incidents involving spills or environmental contamination by pesticides.
- Provide educational and technical assistance to make voluntary compliance with environmental laws easier.

Washington State Department of Labor and Industries

The Washington State Department of Labor and Industries (L&I), the Division of Industrial Safety and Health, administers the Washington Industrial Safety and Health Act of 1973, Chapter 49.17 RCW. L&I has primary responsibility for ensuring that employers provide safe and healthful working conditions for every worker in Washington State at a level which is at least as effective as the Federal Occupational Safety and Health Act of 1970. In administering Chapter 49.17 RCW, L&I:

- Conducts safety and health workplace inspections in agriculture and industry;
- Promulgates workplace safety and health standards;
- Investigates employee complaints;
- Provides employers information and consultation; and,
- Conducts training and education programs.

L&I also focuses on hazardous chemicals through administration of the Worker Right to Know Law, Chapter 49.70 RCW, and administers the Workers Compensation Program, Title 51 RCW, through the Division of Industrial Insurance.

Washington State Department of Natural Resources

The Washington State Department of Natural Resources administers the Forest Practices Rules and Regulations, Title 222 WAC, Chapter 222-38 WAC, pertaining to forest chemicals including pesticides and fertilizers. These regulations are written to protect timber resources, fish, and wildlife from the misuse or misapplication of forest chemicals. The elements of the program that apply to pesticides involve issuing permits for pesticide applications in forests and monitoring permit restrictions.

Agency Response Time Mandates

Washington State Department of Agriculture

WAC 16-228-233 directs the Washington State Department of Agriculture to respond to complaints involving humans or animals immediately. All other complaint investigations must be initiated within 48 hours.

Washington State Department of Health

RCW 70.104.030 directs the Washington State Department of Health (DOH) to respond to incidents within time periods based on severity. In the event of a pesticide-related hospital admission, death, or a threat to public health, DOH must respond within 24 hours. For all other cases, DOH must respond within 48 hours after notification.

Washington State Labor and Industries

The Washington State Department of Labor and Industries (L&I) response times are mandated in the Federal Occupational Safety and Health Act operations manual. Serious complaints require response within 30 days; all others within 120 days. The goal of the L&I Consultation and Compliance Services Division is to respond to serious complaints within 15 days; all others within 30 days. Response is defined as a site visit, not a telephone call.

Appendix B
Case and Severity Classifications

National Public Surveillance System Relationship Classifications

NIOSH Severity Classifications

Signs and Symptoms by Severity Category

National Public Surveillance System Relationship Classifications

Definite Case: 1. Laboratory clinical or environmental evidence corroborates exposure, 2. Two or more new post-exposure abnormal signs and/or test/laboratory findings are reported by a licensed health care provider, and 3. The finding documented under health effects are characteristic for the pesticide and the temporal relationship between the exposure and health effects is plausible and/or the findings are consistent with an exposure-health effect relationship based upon the known toxicology of the putative agent.

Probable Case: 1. Laboratory clinical or environmental evidence corroborates exposure, 2. Two or more post-exposure abnormal symptoms reported but do not meet the threshold of a definite, and 3. The finding documented under health effects are characteristic for the pesticide and the temporal relationship between the exposure and health effects is plausible and/or the findings are consistent with an exposure-health effect relationship based upon the known toxicology of the putative agent.

Or

1. Evidence of exposure based solely upon written or verbal report by case, witness, application, observation of residue and/or contamination by other than a trained profession or other evidence suggesting that an exposure occurred, 2. Two or more new post-exposure abnormal signs and/or test/laboratory findings are reported by a licensed health care provider, and 3. The finding documented under health effects are characteristic for the pesticide and the temporal relationship between the exposure and health effects is plausible and/or the findings are consistent with an exposure-health effect relationship based upon the known toxicology of the putative agent.

Possible Case: 1. Evidence of exposure based solely upon written or verbal report by case, witness, application, observation of residue and/or contamination by other than a trained profession or other evidence suggesting that an exposure occurred, 2. Two or more post-exposure abnormal symptoms reported but do not meet the threshold of a definite, and 3. The finding documented under health effects are characteristic for the pesticide and the temporal relationship between the exposure and health effects is plausible and/or the findings are consistent with an exposure-health effect.

Suspicious Case: 1. Laboratory clinical or environmental evidence corroborates exposure, or evidence of exposure based solely upon written or verbal report by case, witness, application, observation of residue and/or contamination by other than a trained profession or other evidence suggesting that an exposure occurred, 2. Two or more new post-exposure abnormal signs and/or test/laboratory findings are reported by a licensed health care provider or two or more post-exposure abnormal symptoms reported but do not meet the threshold of a DEFINITE, and 3. Insufficient toxicological information is available to determine causal the relationship between the exposure and health effects.

Unlikely Case: 1. Laboratory clinical or environmental evidence corroborates exposure, or evidence of exposure based solely upon written or verbal report by case, witness, application, observation of residue and/or contamination by other than a trained profession or other evidence suggesting that an exposure occurred, 2. Two or more new post-exposure abnormal signs and/or test/laboratory findings are reported by a licensed health care provider or two or more post-exposure abnormal symptoms reported but do not meet the threshold of a DEFINITE, and 3. Evidence of exposure-health effect relationship is not present due to no observed health or effect, a temporal relationship does not exist, or the constellation of health effects are not consistent based upon the known toxicology of the putative agent.

Insufficient Information: Insufficient data in the documentation of the pesticide exposure or insufficient data in the documentation of adverse health effects.

Not a Case: Strong evidence that no pesticide exposure occurred or insufficient toxicological information is available to determine causal relationship between exposure and health effects.

NIOSH Severity Classifications

Severity Index for Use in State-based Surveillance of Acute Pesticide-related Illness and Injury Descriptions of Severity Categories

04 Mild illness or injury: Low severity. Often involves skin, eye or upper respiratory irritation. May also include fever, headache, fatigue or dizziness. Typically the illness or injury resolves without treatment. There is minimal lost time (less than 3 days) from work or normal activities.

03 Moderate illness or injury: This category often involves systemic manifestations. Usually treatment is provided. The individual is able to return to normal functioning without any residual disability. Usually, less time is lost from work or normal activities (3-5 days) compared to those with severe illness or injury. No residual impairment is present although effects may be persistent.

02 Severe illness or injury: Considered life threatening and typically requires treatment. Commonly involves hospitalization to prevent death. Signs and symptoms include, but are not limited to, coma, cardiac arrest, renal failure and/or respiratory depression. The individual sustains substantial loss of time (more than 5 days) from regular work. Can include assignment to limited or light work duties or normal activities if not employed. This level may include the need for continued health care after the exposure, prolonged time off of work, and limitations or modification of work or normal activities. The individual may sustain permanent functional impairment.

01 Death: Includes a human fatality resulting from exposures to one or more pesticides.

Signs and Symptoms by Severity Category

(Modeled after Persson et. al., 1998 and includes SPIDER database elements)

ORGAN SYSTEM	SEVERITY CATEGORY AND CODE			
	FATAL	HIGH	MODERATE	LOW
	1	2	3	4
			Pronounced or Prolonged Signs or Symptoms	**Mild, transient, and spontaneously resolving symptoms**
• Gastrointestinal • System		• Massive hemorrhage/perforation of gut	• Diarrhea (G14, **sign only**) • Melena (GI7) • Vomiting (GI6, **sign only**)	• Abdominal pain, cramping (GI1) • Anorexia (GI2) • Constipation (GI3) • Diarrhea (GI4, **symptom**) • Nausea (GI5) • Vomiting (GI6, **symptom**)
Respiratory System		• Cyanosis (RESP 2) + Respiratory depression (RESP 7) • Pulmonary edema (RESP6) • Respiratory arrest	• Abnormal pulmonary x-ray • Pleuritic chest pain/pain on deep breathing (RESP8) • Respiratory depression (RESP7) • Wheezing (RESP9) • Dyspnea, shortness of breath (RESP4, **sign only**)	• Cough (RESP1) • Upper respiratory pain, irritation (RESP3) • Dyspnea, shortness of breath (RESP4, **symptom**)
Nervous System		• Coma (NS3) • Paralysis, generalized (NS10) • Seizure (NS5, **sign only**)	• Confusion (NS4) • Hallucinations (NS99 Other) • Miosis with blurred vision (NS14) • Seizure (NS5, **symptom**) • Ataxia (NS1, **sign only**) • Slurred speech (NS12) • Syncope (fainting) (NS17) • Peripheral neuropathy (NS11, **sign only**)	• Hyperactivity (NS2) • Headache (NS7) • Profuse sweating (NS13) • Dizziness (NS15) • Ataxia (NS1, **symptom**) • Peripheral neuropathy (NS11, **symptom**)
Cardiovascular System		• Bradycardia/ heart rate <40 for adults, < 60 infants and children, <80 neonates (CV1) • Tachycardia/ heart rate>180 for adults, >190 infants/children, >200 in neonates (CV4) • Cardiac arrest (CV2)	• Bradycardia / heart rate 40-50 in adults, 60-80 in infants/children, 80-90 in neonates (CV1) • Tachycardia / heart rate=140-180 in adults, 160-190 infants/children, 160-200 in neonates (CV4) • Chest Pain (CV7) + Hyperventilation, Tachypnea (RESP5) • Conduction disturbance (CV3) • Hypertension (CV6) • Hypotension (CV5)	

Signs and Symptoms by Severity Category

(Modeled after Persson et. al., 1998 and includes SPIDER database elements)

ORGAN SYSTEM	SEVERITY CATEGORY AND CODE			
	FATAL	HIGH	MODERATE	LOW
	1	2	3	4
			Pronounced or Prolonged Signs or Symptoms	**Mild, transient, and spontaneously resolving symptoms**
Metabolism		• Acid Base disturbance (pH< 7.15 or >7.7)	• Acid Base disturbance (pH = 7.15-7.24 or 7.60-7.69) • Elevated anion gap (MISC4)	• Fever (MISC1)
Renal System		• Anuria (GU2) • Renal failure	• Hematuria (GU3) • Oliguria (GU2) • Proteinuria (GU4)	• Polyuria (GU1)
Muscular system		• Muscle rigidity (NS9) + elevated urinary myoglobin + elevated creatinine	• Fasciculations (NS6) • Muscle rigidity (NS9) • Muscle weakness (NS8, **sign only**)	• Muscle weakness (NS8, **symptom**) • Muscle pain (NS16)
Local effects on skin		• Burns, second degree (involving >50% of body surface area) • Burns, third degree (involving >2% of body surface area)	• Bullae (DERM1) • Burns, second degree (involving <50% of body surface area) • Burns, third degree (involving <2% of body surface area)	• Skin Edema/Swelling, Erythema, Rash, Irritation/Pain, Pruritis (DERM3 - 7) • Hives/Urticaria
Local effects on eye		• Corneal ulcer/perforation	• Corneal abrasion (EYE3) • *Ocular burn (EYE2)*	• Lacrimation (EYE4) • Mydriasis (EYE6) • Miosis (EYE1) • Ocular pain/irritation/inflammation (diagnosis of conjunctivitis) (EYE5)
Other effects				• Fatigue (MISC5) • Malaise (MISC6)

Appendix C
Agency Data Summaries

Washington State Department of Agriculture

Washington State Department of Health

Washington State Department of Labor and Industries

WSDA 2006 Case Data

Case#	001-06	2006	Pesticide Involved	No	License	Unlicensed	Date	1/23/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	SPI
County	Skagit		Nature of Case	Records			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		None	NOC	SPI Inspection
NA	NA	NA				

Faulty WDO inspection complaint November 2005./Requested records were not provided.

Case#	002-06	2006	Pesticide Involved	No	License	NA	Date	2/9/2006	Farmworker?	No	# People	NA	Severity	0	Application Inf	NA
County	Thurston		Nature of Case	Misuse			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		None	NAI	Landscape/Road
NA	NA	NA				

Landscape application of granular material going onto road./Material was fertilizer, discussed proper application methods with applicator.

Case#	003-06	2006	Pesticide Involved	Yes	License	Commercial	Date	2/6/2006	Farmworker?	No	# People	one	Severity	1	Application Inf	Commercial
County	King		Nature of Case	Human Exposure-residue, odor			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide bifenthrin	Insecticide Esfenvalerate	Insecticide Permethrin		DOH	NAI	Insects/Person

Renter had apartment treated because of insects. Became ill, went to the hospital./Numerous unresolved issues. Many dead insects in apartment. Residues found do not match known application. Two weeks elapsed between application and complaint and apartment cleaned. No medical report although DOH "probable. "No evidence of any violations.

Case#	004-06	2006	Pesticide Involved	Yes	License	Unknown	Date	2/15/2006	Farmworker?	No	# People	NA	Severity	5	Application Inf	Agriculture
County	Skagit		Nature of Case	Dead Birds			Response time	Same Day			Children Involved?	No			Ag	Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide carbofuran				USF&W	NAI	Unknown/birds

Dead ducks and two dead eagles plus two sick eagles. Suspect secondary poisonings from eating dead ducks./Carbofuran found in dead birds, probable cause of deaths. Sick birds treated and recovered. No source identified, probably application many months ago.

Case#	005-06	2006	Pesticide Involved	Yes	License	PA	Date	2/23/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Walla Walla		Nature of Case	Animal Exposure, misuse			Response time	Four days			Children Involved?	No			Ag	Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide naled				None	NOCs	Alfalfa/cattle

Naled applied to alfalfa seed fields over label rate. New owner of property grazed cattle on fields contrary to label./NOCs issued for use over rate and for allowing cattle to graze on treated fields.

WSDA 2006 Case Data

Case#	006-06	2006	Pesticide Involved	No	License	Commercial	Date	6/28/2005	Farmworker?	No	# People	NA	Severity	0	Application Inf	NA
County	Spokane		Nature of Case	No business license			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		None	NAI	License
NA	NA	NA				

No Master Business license/Company has pesticide license. Thought Corporation License was MBL. Assisted in getting MBL.

Case#	007-06	2006	Pesticide Involved	No	License	Unlicensed	Date	2/17/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	SPI
County	Lewis		Nature of Case	License			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		None	NOC	SPI/License
Na	NA	NA				

Advertising as Structural Pest Inspector without a license./Verified

Case#	008-06	2006	Pesticide Involved	No	License	Commercial	Date	March '06	Farmworker?	No	# People	NA	Severity	1	Application Inf	Commercial
County	Spokane		Nature of Case	Disposal			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		DOE	NOC	Disposal
NA	NA	NA				

Anonymous complaint to DOE about dumping of leftover chemicals by lawn care company on lot across street and by office./Not verified, NOC on records and making spider applications without proper category.

Case#	009-06	2006	Pesticide Involved	Yes	License	NA	Date	2/6/2006	Farmworker?	No	# People	NA	Severity	5	Application Inf	NA
County	Yakima		Nature of Case	Dead dogs			Response time	Same Day					Children Involved?	No	NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Rodenticide				None	NAI	Unknown/dogs
Strychnine						

Two dead dogs, third ill. Vet analysis showed strychnine in stomach contents./Dogs running loose, no evidence of misuse or intentional poisoning. Third dog seen eating mice, dog treated and recovered.

Case#	010-06	2006	Pesticide Involved	No	License	Commercial	Date	3/2/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	License
County	King		Nature of Case	License			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		None	NOC/NOI	Records/License
NA	NA	NA				

Records deficient and not on approved form. No commercial applicator licensed. Repeat violations.

WSDA 2006 Case Data

Case# 011-06 2006	Pesticide Involved Yes	License Unknown	Date 2/13/2006	Farmworker? No	# People NA	Severity 5	Application Inf Agriculture
County Grant	Nature of Case Animal deaths		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide aldicarb				WDFW	NOI	coyotes/dogs, birds

Employee placed poison into hamburger to poison coyotes. Done by instruction of employer./Warning letter to employee, NOI to employer - he would not say where he obtained the aldicarb.

Case# 012-06 2006	Pesticide Involved No	License Commercial	Date 11/22/2004	Farmworker? No	# People NA	Severity 2	Application Inf SPI
County Jefferson	Nature of Case Faulty WDO inspection		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA	NA NA	NA NA		None	NOC	SPI inspection

Faulty WDO inspection./Verified. Failed to report evidence and diagram.

Case# 013-06 2006	Pesticide Involved Yes	License Unlicensed	Date 7/1/2005	Farmworker? No	# People NA	Severity 1	Application Inf Residential
County Grant	Nature of Case Drift to ornamentals		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA	NA NA	NA NA		None	NAI	weeds/ornamental

Said touch up application of glyphosate and oil drifted from neighbors and damaged ornamentals./Application nearly a year ago. No evidence of any damage or drift.

Case# 014-06 2006	Pesticide Involved Yes	License PA	Date 3/23/2006	Farmworker? No	# People NA	Severity 1	Application Inf Agriculture
County Yakima	Nature of Case Drift to property		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide Copper Hydroxide	Insecticide oil	Insecticide malathion		None	NOC	orchard/property

Airblast sprayer did not shut of at row ends and made off target application to neighbor's property./No residues in samples collected. NOC for recordkeeping violations.

Case# 015-06 2006	Pesticide Involved Yes	License PA	Date 3/18/2006	Farmworker? No	# People one	Severity 2	Application Inf Agriculture
County Chelan	Nature of Case Human Exposure - drift		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide Kaolin				None	NOC	orchard/person

Kaolin being applied to orchard by portable sprayer with hand boom attachment drifted on motorcycle rider./Verified. Motorcyclist had no health symptoms, concerned about white residue on leather jacket.

WSDA 2006 Case Data

Case#	016-06	2006	Pesticide Involved	Yes	License	PA	Date	3/18/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Chelan		Nature of Case	Drift on property			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide Kaolin				None	NOC	Orchard/Boat, truck

Airblast application to orchard drifted on neighbor's property./Verified.

Case#	017-06	2006	Pesticide Involved	Yes	License	PA	Date	3/27/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Yakima		Nature of Case	Drift on property			Response time	One Day			Children Involved?	No			Ag	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide chlorpyrifos	Insecticide sulfur	Insecticide oil		None	NOC	cherries/property

Cherry application drifted to neighbor's property./Verified. Also chlorpyrifos labeled only for wheat.

Case#	018-06	2006	Pesticide Involved	Yes	License	PA	Date	3/24/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Douglas		Nature of Case	Drift on property			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide Sulfur	Insecticide oil			None	Verbal	pears/house, truck

Airblast application to pears drifted on house and pickup. Neighbor said windy during application./Residue detected but at low levels. Grower took precautions to avoid drift.

Case#	019-06	2006	Pesticide Involved	Yes	License	PA	Date	3/26/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Yakima		Nature of Case	Drift on property			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide chlorpyrifos				None	NOC	orchard/property

Drift on property from orchard application. Ongoing dispute./Residue at property line. Several previous complaints.

Case#	020-06	2006	Pesticide Involved	Yes	License	PA	Date	3/27/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Okanogan		Nature of Case	Drift on property			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide Kaolin				None	NAI	orchard/shed

Drift on shed from orchard application./Complainant agreed to drop case if applicator cleaned shed. Shed was cleaned.

WSDA 2006 Case Data

Case# 021-06 2006	Pesticide Involved Yes	License PA	Date 3/28/2006	Farmworker? No	# People NA	Severity 2	Application Inf Agriculture
County Yakima	Nature of Case Drift on truck		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide				None	NOC	orchard/truck
chlorpyrifos						

Orchard airblast application drifted across highway and on WSDA truck./Verified. Winds gusty during spraying.

Case# 022-06 2006	Pesticide Involved No	License NA	Date 2/7/2006	Farmworker? No	# People NA	Severity 0	Application Inf NA
County Cowlitz	Nature of Case Direct - Misuse		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		WSU Extension	NAI	Ornamentals
NA	NA	NA				

Neighbor applied pesticides to their trees to preserve view./No evidence found of pesticide use. Plant damage appears to be deer, site and environmental conditions. Neighbor-neighbor dispute.

Case# 023-06 2006	Pesticide Involved Yes	License PA	Date 3/29/2006	Farmworker? No	# People NA	Severity 2	Application Inf Agriculture
County Okanogan	Nature of Case Drift to property		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide				None	NAI	Orchard/lawn
Kaolin						

Neighboring grower drifted to her lawn./Complainant dropped case when she found out what product was and grower said he would be more careful in future.

Case# 024-06 2006	Pesticide Involved No	License NA	Date 3/14/2006	Farmworker? No	# People NA	Severity 0	Application Inf NA
County Grays Harbor	Nature of Case Misuse - trees, cat		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA	NA	NA		None	NAI	Trees, cat
NA	NA	NA				

Complainant concerned that someone applied pesticides to trees causing them to loose foliage and her cat's hair to fall out./No evidence to substantiate complaint. Tree damage appears due to trimming. Cat hair loss appears normal shedding.

Case# 025-06 2006	Pesticide Involved Yes	License Commercial	Date 4/18/2006	Farmworker? No	# People NA	Severity 2	Application Inf Agriculture
County Franklin	Nature of Case Drift to organic orchards		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide	Herbicide			Organic Program	NOC	corn/apples, cherries
Atrazine	Dimethenamid					

Neighbor spraying corn drifted to organic apples, cherries./Verified by residue.

WSDA 2006 Case Data

Case# 026-06 2006	Pesticide Involved No	License Unlicensed	Date 4/1/2006	Farmworker? No	# People NA	Severity 2	Application Inf Sale
County Lewis	Nature of Case Sale of non-registered pesticide		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellents Quat. Ammonium	NA	NA		None	NOI	Sales, Records

WSDA investigator noticed unregistered pesticides offered for sale./Dealer inspection verified, also no Licensed Manager present, incomplete records on sales.

Case# 027-06 2006	Pesticide Involved No	License SPI	Date 6/2/2004	Farmworker? No	# People NA	Severity 0	Application Inf SPI
County Cowlitz	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA	NA	NA		None	NAI	SPI

Faulty SPI done in 2004. Areas of wood rot missed./Damaged wood replaced at time of complaint. Not able to determine if rot visible to inspector due to removal

Case# 028-06 2006	Pesticide Involved Yes	License Commercial	Date 4/7/2006	Farmworker? No	# People NA	Severity 2	Application Inf SPI
County Spokane	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Fungicide Ammonium Chloride				None	NOC	SPI inspection

Improper WDO inspection and report./Verified. Did not follow procedures. Claimed rodent infestation which did not exist. Applied fungicide contrary to label.

Case# 029-06 2006	Pesticide Involved Yes	License PO	Date 8/16/2005	Farmworker? No	# People NA	Severity 1	Application Inf gation canal
County Franklin	Nature of Case Misuse		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide acrolein				None	Warning Letter	Irrigation canal

Over rate use of acrolein to irrigation canal./Not verified. Did release within 25 days to retention pond with fish but no formal DOE position on this.

Case# 030-06 2006	Pesticide Involved Yes	License PO	Date 6/13/2005	Farmworker? No	# People NA	Severity 2	Application Inf gation canal
County Grant	Nature of Case Misuse		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide acrolein				None	NOC	Irrigation canal

Over rate use of acrolein to irrigation canal./Confirmed. Not held for 6 days as required by label.

WSDA 2006 Case Data

Case# 031-06 2006	Pesticide Involved Yes	License PO	Date 6/28/2005	Farmworker? No	# People NA	Severity 1	Application Inf gation canal
County Yakima	Nature of Case Misuse		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide acrolein				None	NOI	Irrigation canal

Over rate use of acrolein./Not verified. NOI for not submitting records.

Case# 032-06 2006	Pesticide Involved Yes	License PO	Date 6/28/2005	Farmworker? No	# People NA	Severity 1	Application Inf gation canal
County Kittitas	Nature of Case Misuse		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide acrolein				None	NOC	Irrigation canal

Over rate use of acrolein./Not verified. NOC on record keeping.

Case# 033-06 2006	Pesticide Involved Yes	License Commercial	Date 4/12/2006	Farmworker? No	# People NA	Severity 1	Application Inf ROW
County Pierce	Nature of Case Drift to water		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide glyphosate	Herbicide sufonyl urea	Herbicide Chlorsulfuron		None	NAI	ROW/Creek

Commercial application drifted into creek./Not verified, no damage or residue found.

Case# 034-06 2006	Pesticide Involved No	License SPI	Date 10/12/2005	Farmworker? No	# People NA	Severity 2	Application Inf SPI
County Douglas	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

SPI inspection missed termites. Inspection done 2 years ago./Inconclusive. NOC for licensing violation.

Case# 035-06 2006	Pesticide Involved Yes	License Unknown	Date 4/19/2006	Farmworker? No	# People One	Severity 1	Application Inf Agriculture
County Whitman	Nature of Case Human Exposure - drift		Response time Three Days		Children Involved? No		Ag Air

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Unknown Unknown				DOH	NAI	unknown/person

Alleged human exposure from nearby aerial application. Became ill, went to hospital. /Not verified. Probably due to Poison Hemlock exposure when cutting weeds.

WSDA 2006 Case Data

Case# 036-06 2006	Pesticide Involved Yes	License Unlicensed	Date 4/18/2006	Farmworker? No	# People NA	Severity 2	Application Inf Commercial
County Benton	Nature of Case License		Response time Five days		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide glyphosate				None	NOC	Ornamentals

Unlicensed application to commercial site./Verified.

Case# 037-06 2006	Pesticide Involved Yes	License PA	Date 4/10/2006	Farmworker? No	# People One	Severity 1	Application Inf Agriculture
County Okanogan	Nature of Case Human Exposure - drift		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide Kaolin				DOH	NAI	orchard/person

Person ill from white powder drifted to property./Did not call after application that allegedly made person ill. Called about later application but dropped complaint after talking to neighbor. Complaint not verified.

Case# 038-06 2006	Pesticide Involved Yes	License Unknown	Date 4/23/2006	Farmworker? No	# People NA	Severity 2	Application Inf Residential
County Kittitas	Nature of Case Misuse - Intentional		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide dichlobenil				Sheriff	NAI	Trees

Unknown white granular material found at base of trees./Material was Casseron, no evidence of responsible person.

Case# 039-06 2006	Pesticide Involved Yes	License PA	Date 4/24/2006	Farmworker? No	# People One	Severity 2	Application Inf Agriculture
County Chelan	Nature of Case Drift to car		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide acetamiprid				DOH	Advisory Letter	Orchards/truck

Person driving truck drifted on by orchard application./Residue on truck. Could not determine which of two applicators was responsible. Person's health symptoms (minor) not verified.

Case# 040-06 2006	Pesticide Involved Yes	License PO	Date 4/19/2006	Farmworker? No	# People Two	Severity 2	Application Inf ROW
County Island	Nature of Case PPE		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide glufosinate	Herbicide oryzalin			None	NOC	weeds/improper PPE

WSDA observed lack of PPE by city employees making weed applications./Verified, also improper records, pesticides not out of reach of children.

WSDA 2006 Case Data

Case#	041-06	2006	Pesticide Involved	Yes	License	PA	Date	4/13/2006	Farmworker?	No	# People	NA	Severity	4	Application Inf	Agriculture
County	Walla Walla		Nature of Case	Drift to cherries			Response time	Same Day					Children Involved?	No	Ag	Ground

Chemicals Involved:	Herbicide 2,4-D	Herbicide tribenuron methyl		Other Agencies None	Final Action NOI	Target/Complaint Area hay/cherries

Drift to cherry trees caused damage./Verified, damage estimated over $40K. Unlicensed use of RUP, off label use of herbicide in prohibited area, use of hay without following grazing and feeding recommendations

Case#	042-06	2006	Pesticide Involved	Yes	License	PA	Date	4/26/2006	Farmworker?	No	# People	One	Severity	1	Application Inf	Agriculture
County	Okanogan		Nature of Case	Human Exposure - drift			Response time	Same Day					Children Involved?	No	Ag	Ground

Chemicals Involved:	Fungicide mycobutanil			Other Agencies None	Final Action NAI	Target/Complaint Area orchard/person

Said she was drifted on by application to neighbor's orchard./Complainant dropped case. Agreed to purchase some of adjacent property.

Case#	043-06	2006	Pesticide Involved	Yes	License	Unknown	Date	3/1/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	ROW
County	Pierce		Nature of Case	Drift to water			Response time	Same Day					Children Involved?	No	NonAg	Ground

Chemicals Involved:	Herbicides mscl			Other Agencies None	Final Action NAI	Target/Complaint Area ROW/Water

Commercial ROW application entered Carbon River./Damaged plants (blackberries) in area suggested that application entered water. No responsible person found.

Case#	044-06	2006	Pesticide Involved	No	License	Unlicensed	Date	4/5/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Sale
County	Multiple		Nature of Case	Sale of non-registered pesticide			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	Repellents eggs	Herbicides eugenol		Other Agencies None	Final Action NOI	Target/Complaint Area Sales, Records

Sale of non-registered pesticides. No Dealer license, failure to provide records.

Case#	045-06	2006	Pesticide Involved	Yes	License	PA	Date	4/28/2006	Farmworker?	No	# People	NA	Severity	1	Application Inf	Agriculture
County	Douglas		Nature of Case	Drift to property			Response time	Same Day					Children Involved?	No	Ag	Ground

Chemicals Involved:	Insecticide Sulfur			Other Agencies None	Final Action NAI	Target/Complaint Area Apples/property

Airblast application to apples drifted to her property./No evidence of drift. Complainant withdrew complaint after learning what product was. Records complete, applicator took precautions to avoid drift.

WSDA 2006 Case Data

Case#	046-06	2006	Pesticide Involved	Yes	License	PO	Date	5/1/2006	Farmworker?	No	# People	NA	Severity	1	Application Inf	ROW
County	Stevens		Nature of Case	Drift to property			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide 2,4-D			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	ROW/property

Odor from ROW applications bothers her./No evidence of drift, complaint mostly about odor. Reached agreement with county to post no-spray signs on both sides of road.

Case#	047-06	2006	Pesticide Involved	Yes	License	Commercial	Date	5/1/2006	Farmworker?	No	# People	one	Severity	2	Application Inf	Commercial
County	Grant		Nature of Case	Notification			Response time	One Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide 2,4-D	Herbicide Dicamba		Other Agencies	Final Action	Target/Complaint Area
				None	NOC	weeds/notification

Person is on pesticide sensitive list and was not notified./Verified. No evidence of drift. Records incomplete.

Case#	048-06	2006	Pesticide Involved	Yes	License	Commercial	Date	4/5/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Agriculture
County	Whatcom		Nature of Case	Drift to crop			Response time	5 days			Children Involved?	No			Ag	Ground

Chemicals Involved:	Herbicide glyphosate			Other Agencies	Final Action	Target/Complaint Area
				None	Verbal Warning	fields/berries

Raspberries drifted on from neighbor's application./Initial symptoms appeared to be glyphosate. Herbicide used on adjacent field. Raspberries recovered, evidence of drift inconclusive.

Case#	049-06	2006	Pesticide Involved	Yes	License	PA	Date	5/4/2006	Farmworker?	No	# People	One	Severity	1	Application Inf	Agriculture
County	Adams		Nature of Case	Human Exposure -Direct			Response time	Same Day			Children Involved?	Yes			Ag	Ground

Chemicals Involved:	Insecticide carbaryl			Other Agencies	Final Action	Target/Complaint Area
				DOH	Advisory Letter	orchard/person

School bus driver said she was sprayed when airblast application not turned off when bus drove past. Said she became ill./No evidence bus drifted on. Drove for two days after alleged exposure. No children reported ill.

Case#	050-06	2006	Pesticide Involved	Yes	License	Unlicensed	Date	5/8/2006	Farmworker?	No	# People	NA	Severity	2	Application Inf	Residential
County	Clark		Nature of Case	Misuse - Intentional			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide 2,4-D			Other Agencies	Final Action	Target/Complaint Area
				None	Advisory Letter	ornamentals

Neighbor spraying pesticides over fence to his property./Neighbor spraying bamboo on fence line. Neighbor -neighbor issue.

WSDA 2006 Case Data

Case# 051-06 2006	Pesticide Involved Yes	License Unlicensed	Date 5/2/2006	Farmworker? No	# People Two	Severity 1	Application Inf Commercial
County Kitsap	Nature of Case Human Exposure - Drift		Response time Same Day		Children Involved? Yes		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide glyphosate	Herbicide 2,4-D			DOH	NOC	Weeds/person

Runny nose, swollen eyes and congestion alleged from landscape application. Said pets and son also with symptoms./Symptoms not consistent with herbicides used. Physician said allergies. Operating as a Commercial applicator without license.

Case# 052-06 2006	Pesticide Involved Yes	License PA	Date 5/9/2006	Farmworker? No	# People None	Severity 2	Application Inf Agriculture
County Grant	Nature of Case Drift to cars		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide carbaryl	Insecticide Spinosad	Fungicide mycobutanil		None	NOC	apples/cars

WSDA observed drift from airblast applications across passing cars./Use inspection showed residues.

Case# 053-06 2006	Pesticide Involved Yes	License PA	Date 5/8/2006	Farmworker? No	# People None	Severity 2	Application Inf Residential
County Kittitas	Nature of Case Drift to property		Response time One day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide MSMA	2,4-D	MCPP		None	NOC	driveway/property

Neighbor's application to driveway drifted on his property due to wind./No residue found. Application site not on label. Records insufficient.

Case# 054-06 2006	Pesticide Involved No	License SPI	Date 6/25/2005	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Lewis	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

Faulty SPI./Verified. Failed to report evidence of WDO conditions.

Case# 055-06 2006	Pesticide Involved No	License SPI	Date 7/25/2005	Farmworker? No	# People None	Severity 2	Application Inf SPI
County King	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOI	SPI

Faulty SPI./Verified. Failed to report evidence of WDO conditions.

WSDA 2006 Case Data

Case# 056-06 2006	Pesticide Involved No	License SPI	Date 11/22/2004	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Jefferson	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

Unlicensed SPI./Verified. Also failed to note conducive WDO conditions.

Case# 057-06 2006	Pesticide Involved No	License NA	Date 3/1/2006	Farmworker? No	# People None	Severity 0	Application Inf Agriculture
County Grant	Nature of Case Dead birds/cow		Response time Same Day		Children Involved? No		Ag NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NAI	birds. Cow

WDFW found dead birds and a cow./No pesticide found in bird remains. Cow disappeared. F&W handled case.

Case# 058-06 2006	Pesticide Involved Yes	License Commercial	Date 4/21/2006	Farmworker? No	# People None	Severity 4	Application Inf Commercial
County Benton	Nature of Case Misuse		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide Glyphosate	Herbicide 2,4-D	Insecticide Imidacloprid		None	NOI	Ornamentals

Commercial application to property damaged plants./Verified. Insecticide spray also contained herbicides. Incomplete records.

Case# 059-06 2006	Pesticide Involved No	License Commercial	Date 5/12/2006	Farmworker? No	# People None	Severity 1	Application Inf Agriculture
County Douglas	Nature of Case Drift to cars		Response time Same Day		Children Involved? No		Ag Air

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NAI	Orchard/Car

Motorhome drifted on by helicopter. Sticky substance./Helicopter applying mating disruptor. Complaint dropped, applicator cleaned motorhome.

Case# 060-06 2006	Pesticide Involved yes	License Unlicensed	Date 5/12/2006	Farmworker? No	# People None	Severity 2	Application Inf Residential
County Spokane	Nature of Case drift to property		Response time Same Day		Children Involved? No		NonAg

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide glyphosate				None	Warning letter	Weeds/sunflowers

Neighbor drifted on sunflowers./Verified. Small amount of drift and damage to sunflowers.

WSDA 2006 Case Data

Case#	061-06	2006	Pesticide Involved	Yes	License	Commercial	Date	5/15/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Forestry
County	Whatcom		Nature of Case	Drift to property			Response time	Same Day			Children Involved?	No			Ag	Air

Chemicals Involved:	Herbicide 2,4-D			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	Trees/garden

Drift from helicopter application to their organic garden./Not verified. No residue found. Probably dust from log truck traffic.

Case#	062-06	2006	Pesticide Involved	yes	License	Public Oper	Date	5/10/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	ROW
County	Spokane		Nature of Case	Drift to property			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide sulfuron methyl	Herbicide glyphosate	Herbicide sulfentrozone	Other Agencies	Final Action	Target/Complaint Area
				None	NAI	ROW/ornamentals

Roadside application damaged plants./Could not verify, no residues found. May be frost damage.

Case#	063-06	2006	Pesticide Involved	Yes	License	Commercial	Date	5/16/2006	Farmworker?	No	# People	Two	Severity	1	Application Inf	Agriculture
County	Grant		Nature of Case	Human Exposure - drift			Response time	Same Day			Children Involved?	No			Ag	Air

Chemicals Involved:	Herbicide quizalofop			Other Agencies	Final Action	Target/Complaint Area
				DOH	NAI	mint/person, dog

Application to mint drifted. Smelled strong odor./Some off-target movement. Could not verify human exposure. Records incomplete.

Case#	064-06	2006	Pesticide Involved	No	License	NA	Date	5/11/2006	Farmworker?	No	# People	One	Severity	4	Application Inf	Disposal
County	Pierce		Nature of Case	Human Exposure - Direct			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	Insecticide carbaryl	Insecticide metaldehyde		Other Agencies	Final Action	Target/Complaint Area
				DOH	NOC	Cardboard

Employee shredding cardboard for recycling ill from white powder on boxes./Verified carbaryl and metaldehyde exposure from boxes from pesticide company.

Case#	065-06	2006	Pesticide Involved	Yes	License	PO	Date	5/3/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	ROW
County	Okanogan		Nature of Case	Drift to crops			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:	Herbicides mscl			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	Weeds/person

Right of way application moved to pear orchard./Lack of rainfall did not adhere pesticide to soil. Label directions followed so no violation.

WSDA 2006 Case Data

Case#	066-06	2006	Pesticide Involved	No	License	NA	Date	5/18/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	Agriculture
County	Grant		Nature of Case	Drift to property			Response time	Same Day			Children Involved?	No			Ag	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NAI	NA
NA						

Drift on yard from aerial application./Yellow substance was pine pollen (not sulfur).

Case#	067-06	2006	Pesticide Involved	No	License	NA	Date	5/15/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	Agriculture
County	Grant		Nature of Case	Drift to ornamentals			Response time	Same Day			Children Involved?	No			Ag	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NAI	corn/trees
NA						

Drift from application to corn damaged tree/No applications made, no residues found, damage could be frost or drought.

Case#	068-06	2006	Pesticide Involved	No	License	DealerMan	Date	5/17/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	Whatcom		Nature of Case	Sale of unregistered pesticides			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellents	Herbicides			None	NOI	Sale
egg solids	citric acid					

Dealer inspection at farm store showed sale of unregistered pesticides./Verified. Also no records. Previous violations.

Case#	069-06	2006	Pesticide Involved	No	License	Unlicensed	Date	5/17/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	Whatcom		Nature of Case	Sale of unregistered pesticides			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellents	Herbicides			None	NOC	Sale
egg solids	eugenol					

Dealer inspection at nursery store showed sale of unregistered pesticides./Verified. No Dealer Manager present.

Case#	070-06	2006	Pesticide Involved	Yes	License	Commercial	Date	5/22/2006	Farmworker?	No	# People	One	Severity	1	Application Inf	Commercial
County	Pierce		Nature of Case	Human Exposure- drift			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Mscl				DOH	NAI	ornamentals/person
Mscl						

Person said commercial applications at neighbors making her and family ill./No evidence of any drift or exposure. Complainant ill even when no pesticides applied (pruning or mowing).

WSDA 2006 Case Data

Case# 071-06 2006	Pesticide Involved No	License Unlicensed	Date 5/24/2006	Farmworker? No	# People None	Severity 1	Application Inf Exam
County Clark	Nature of Case Falsified Exam sheet		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	exam

Housing Authority called about WSDA call about retaking exam./Employee falsified exam sheet to state he passed and was licensed. No evidence on who called and said they were a WSDA employee.

Case# 072-06 2006	Pesticide Involved Yes	License Commercial	Date 5/16/2006	Farmworker? No	# People None	Severity 1	Application Inf ROW
County Spokane	Nature of Case Misuse-direct		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicides Mscl				DOE	NAI	ROW/trees

Concerned that railroad ROW applications harming native trees and getting into water./No evidence found of misuse. Aspen tree defoliation natural causes.

Case# 073-06 2006	Pesticide Involved Yes	License PA	Date 4/13/2006	Farmworker? No	# People None	Severity 2	Application Inf Agriculture
County Walla Walla	Nature of Case Misuse		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide 2,4- D Amine	Herbicide 2,4-D ester	Herbicide tribenuron methyl		None	NOIs	Hay

Drift to apples. Use of RUP to unlicensed applicator./Verified. Sale and use to unlicensed applicator. Drift to apples. Use of hay in spite of grazing and feeding restrictions.

Case# 074-06 2006	Pesticide Involved No	License Unlicensed	Date 5/10/2006	Farmworker? No	# People None	Severity 1	Application Inf SPI
County Clark	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

Performing SPI inspections without a license./Verified. Also records and insurance.

Case# 075-06 2006	Pesticide Involved Yes	License PA	Date 5/29/2006	Farmworker? No	# People two	Severity 3	Application Inf Agriculture
County Douglas	Nature of Case Human Exposure- drift		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Fungicide myclobutanil	Insecticide acetamiprid	Insecticide oil		DOH	NOC	Apples/persons

Airblast application to apples drifted on two people in car. Felt spray. Burning sensation to eyes./Application probably drifted due to wind but no residues on car. Could not verify human exposure.

WSDA 2006 Case Data

Case# 076-06 2006	Pesticide Involved Yes	License Unlicensed	Date 4/18/2006	Farmworker? No	# People NA	Severity 1	Application Inf Commercial
County Pierce	Nature of Case License, Misuse		Response time Six days		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Fungicide Neem oil			None	NOC	hedge

Unlicensed applicator sprayed photina and damaged it./Unable to verify cause of damage. Neem oil used. Applicator said not aware he needed a license to apply (commercial).

Case# 077-06 2006	Pesticide Involved Yes	License PA	Date 5/31/2006	Farmworker? No	# People None	Severity 2	Application Inf Agricultural
County Douglas	Nature of Case Drift to property		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Insecticide acatamiprid	Fungicide myclobutanil		None	NOC	cherries/property

Airblast application to cherries drifted to her residence and garden./Verified by residue.

Case# 078-06 2006	Pesticide Involved Yes	License Commercial	Date 5/11/2006	Farmworker? No	# People Five	Severity 3	Application Inf Agricultural
County Douglas	Nature of Case Human Exposure - drift		Response time Same Day		Children Involved? Yes		Ag Air

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide 2,4-D	Herbicide thiosulfuron methyl		DOH	NOC	wheat/persons

Family of five drifted on from aerial application to wheat./Residues found on property. Could not prove human exposure. Insufficient medical evidence.

Case# 079-06 2006	Pesticide Involved Yes	License Unlicensed	Date 4/21/2006	Farmworker? No	# People No	Severity 1	Application Inf Commercial
County Chelan	Nature of Case License		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicides Unknown			None	NOC	weeds

Application to weeds outside of restaurant by unlicensed company.

Case# 080-06 2006	Pesticide Involved Yes	License Unlicensed	Date 6/1/2006	Farmworker? No	# People No	Severity 2	Application Inf Residential
County Douglas	Nature of Case Direct Overspray		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicides glyphosate			None	Verbal Warn	weeds

Application to fence line oversprayed to his property and damaged grass./Verified. Slight overspray in spite of precautions. Neighbor neighbor dispute.

WSDA 2006 Case Data

Case# 081-06 2006	Pesticide Involved No	License Unlicensed	Date 2/1/2006	Farmworker? No	# People None	Severity 1	Application Inf SPI
County Clark	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	SPI
NA						

Performing Structural Pest Inspections without a license./Verified. Also no insurance, records.

Case# 082-06 2006	Pesticide Involved Yes	License unknown	Date 6/30/2006	Farmworker? No	# People None	Severity 4	Application Inf Agricultural
County Grant	Nature of Case Drift to crop		Response time Same Day		Children Involved? No		Ag Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	Advisory letter	Unknown/potatoes
phenoxy						

Drift to potato field damaged crop./Verified, no source determined. Advisory letter on records.

Case# 083-06 2006	Pesticide Involved Yes	License Unlicensed	Date 5/22/2006	Farmworker? No	# People None	Severity 1	Application Inf Commercial
County Pierce	Nature of Case License, records		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicides				None	NOC	Weeds
mscl						

Unlicensed applications as lawn care business./Verified. Also failure to submit records.

Case# 084-06 2006	Pesticide Involved Yes	License Commercial	Date 6/8/2006	Farmworker? No	# People None	Severity 1	Application Inf Agricultural
County Lincoln	Nature of Case Drift to property		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide	Herbicide			None	NOC	weeds/pasture
2,4-D	dicamba					

Drift from noxious weed application to pasture/None detected. NOC to complainant for recordkeeping.

Case# 085-06 2006	Pesticide Involved Yes	License Commercial	Date 6/9/2006	Farmworker? No	# People None	Severity 2	Application Inf Commercial
County Spokane	Nature of Case Animal Exposure -direct		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide	Herbicide	2,4-D		None	NOC	weeds/marmots
dicamba						

Intentionally spraying marmots when doing weed control./Verified, felt threatened by animals. NOC on potential harms to animals.

WSDA 2006 Case Data

Case# 086-06 2006	Pesticide Involved No	License NA	Date 6/2/2006	Farmworker? No	# People One	Severity 0	Application Inf Residential
County Snohomish	Nature of Case Human Exposure - Direct		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NAI	Person
NA						

Said neighbor threw herbicide on her property and made her ill./Not verified. White granular material not identified as pesticide.

Case# 087-06 2006	Pesticide Involved No	License Commercial	Date 5/1/2006	Farmworker? No	# People None	Severity 1	Application Inf Records
County Island	Nature of Case Records		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	records
NA						

Records requested from school during inspection./Records submitted were incomplete and not on approved forms.

Case# 088-06 2006	Pesticide Involved No	License SPI	Date 5/26/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County King	Nature of Case Faulty SPI and report		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	SPI
NA						

Faulty SPI and report./Verified. Failed to report conducive conditions.

Case# 089-06 2006	Pesticide Involved Yes	License Unlicensed	Date 6/11/2006	Farmworker? No	# People None	Severity 1	Application Inf Residential
County Pierce	Nature of Case Misuse- Direct		Response time 4 days		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide	Herbicide			None	NAI	weeds
2,4-D	Dicamba					

Said neighbor sprayed plants on her yard with herbicide./Found residue and saw phenoxy symptoms on plants. No evidence of source.

Case# 090-06 2006	Pesticide Involved Yes	License unknown	Date 6/19/2006	Farmworker? No	# People None	Severity 3	Application Inf Agricultural
County Grant	Nature of Case Drift to crops.		Response time Same Day		Children Involved? No		Ag Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	NAI	corn
unknown						

Drift to corn fields./Verified, extensive damage. No source could be determined.

WSDA 2006 Case Data

Case# 091-06 2006	Pesticide Involved No	License Unlicensed	Date 6/14/2006	Farmworker? No	# People None	Severity 1	Application Inf Records
County Pierce	Nature of Case Records		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	Records, license
NA						

Same as Case 83-06, Unlicensed applicator. Request for records./Failed to submit records on approved forms.

Case# 092-06 2006	Pesticide Involved No	License Unlicensed	Date 4/5/2006	Farmworker? No	# People None	Severity 2	Application Inf Distribution
County Multiple	Nature of Case Distribution of Unregistered Pe		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellents	Herbicides			None	NOC	Distribution
egg solids	eugenol					

Company distributed nonregistered pesticides into state. Acted as Dealer without license./Verified

Case# 093-06 2006	Pesticide Involved Yes	License Unknown	Date 6/5/2006	Farmworker? No	# People None	Severity 2	Application Inf Agricultural
County Benton	Nature of Case Drift to crop		Response time Same Day		Children Involved? No		Ag Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	NAI	Grapes
phenoxy						

Possible 2,4-D drift to vineyard./Symptoms seen, no residue, no source determined.

Case# 094-06 2006	Pesticide Involved Yes	License PA	Date 6/1/2006	Farmworker? No	# People None	Severity 3	Application Inf Agricultural
County Franklin	Nature of Case Drift to crop		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	NOI	asparagus/corn
glyphosate						

Drift from asparagus onto seed corn. Spraying in high wind./Verified.

Case# 095-06 2006	Pesticide Involved No	License Unlicensed	Date 5/25/2006	Farmworker? No	# People None	Severity 2	Application Inf Sale
County Clark	Nature of Case Sale of non registered pesticide		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellents	Repellent			None	NOC	Sale
garlic	quat. Ammonium					

Sale of non registered pesticides./Verified

WSDA 2006 Case Data

Case# 096-06 2006	Pesticide Involved No	License Unlicensed	Date 6/3/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Snohomish	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

Performing SPI inspections without being licensed./Verified. No insurance.

Case# 097-06 2006	Pesticide Involved Yes	License Commercial	Date 6/9/2006	Farmworker? No	# People None	Severity 1	Application Inf Commercial
County Pierce	Nature of Case Direct Overspray		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide napropamide				None	NAI	ornamentals

Said commercial applications to landscape plants damaged them./Some evidence of damage seen but not consistent with herbicide damage. No residues detected. No other complaints from customers of the same company.

Case# 098-06 2006	Pesticide Involved Yes	License Unlicensed	Date 5/7/2006	Farmworker? No	# People One	Severity 1	Application Inf School
County Pend Oreille	Nature of Case Human Exposure- drift		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide 2,4-D				DOH	NAI	weeds/person

Parent said child exposed and symptoms from herbicide application to school grounds./Applicator school employee. Prenotification done. Posting and rates OK. Person notified and only walked on sidewalk. Odor problem.

Case# 099-06 2006	Pesticide Involved Yes	License Commercial	Date 6/1/2006	Farmworker? No	# People None	Severity 1	Application Inf Commercial
County Spokane	Nature of Case Direct		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Unknown Unknown				None	NAI	lawn

Spray company wanted WSDA to investigate application where customer said they damaged lawn./Customer did not want investigation. Company said OK to drop case if customer does not desire it.

Case# 100-06 2006	Pesticide Involved Yes	License PA	Date 6/18/2006	Farmworker? No	# People None	Severity 2	Application Inf Agricultural
County Yakima	Nature of Case Drift to property		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide carbaryl				None	NOC	Cherries/property

Drift from airblast application to cherries unto neighbor's property./No residues found from house or yard. NOC on application records.

WSDA 2006 Case Data

Case#	101-06	2006	Pesticide Involved	Yes	License	PO	Date	6/12/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	ROW
County	Stevens		Nature of Case	Water Contamination			Response time	Same Day			Children Involved?	No			ROW	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide 2,4-D	Herbicide Chlorsulfuron		DOE	NAI	ROW/water

Water contamination from ROW application./Affected weeds over twelve feet from nearest water. No drift or off-target movement seen. No off use seen.

Case#	102-06	2006	Pesticide Involved	Yes	License	Unlicensed	Date	6/6/2006	Farmworker?	No	# People	None	Severity	4	Application Inf	Residential
County	Snohomish		Nature of Case	Animal Exposure- Direct			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Molluside metaldehyde			None	Advisory Letter	slugs/dog

Dog ate slug bait in flower bed at apartment building during walk on leash./Verified. Dog taken to vet and survived. No "misapplication" but label does say to keep away from pets and apartment owner does allow pets. Talked to apartment owner on other options.

Case#	103-06	2006	Pesticide Involved	Yes	License	Unknown	Date	6/10/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Agricultural
County	Chelan/Okanogan		Nature of Case	Drift to grapes			Response time	Same Day			Children Involved?	No			Ag	Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide phenoxy			None	NAI	unknown/grapes

Phenoxy damage seen on grape vines./Some damage noted, no residues detected. Several vineyards affected. No source found. May be long-range transport.

Case#	104-06	2006	Pesticide Involved	Yes	License	Unknown	Date	Spring '06	Farmworker?	No	# People	None	Severity	4	Application Inf	Agricultural
County	Grant		Nature of Case	Direct to nursery trees			Response time	Same Day			Children Involved?	No			Ag	Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide sulfonylurea			None	NAI	nursery trees

Drift to nursery trees caused damage./Verified, probably sulfuron ureas but no source determined.

Case#	105-06	2006	Pesticide Involved	Yes	License	Unknown	Date	6/12/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Agricultural
County	Okanogan		Nature of Case	Drift to grapes			Response time	Same Day			Children Involved?	No			Ag	Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide phenoxy			None	NAI	unknown/grapes

Phenoxy damage seen on grape vines./Some damage noted, no residues detected. Several vineyards affected. No source found. May be long-range transport.

WSDA 2006 Case Data

Case#	106-06	2006	Pesticide Involved	Yes	License	Commercial	Date	6/9/2006	Farmworker?	No	# People	None	Severity	4	Application Inf	Agricultural
County	Franklin		Nature of Case	Drift to corn			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:	Herbicide			Other Agencies	Final Action	Target/Complaint Area
	rimsulfuron			None	NAI	Potatoes/corn

Drift from application to potato field damaged corn./Verified damage but could not proceed with case without requested damage report.

Case#	107-06	2006	Pesticide Involved	Yes	License	Unlicensed	Date	6/6/2006	Farmworker?	No	# People	None	Severity	3	Application Inf	Residential
County	Franklin		Nature of Case	Drift to grapes			Response time	One day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide			Other Agencies	Final Action	Target/Complaint Area
	2.4-D	dicamba	MCPP	None	NOC	lawn/grapes

Homeowner applied herbicide to lawn, it volatized and damaged adjacent vineyard./Verified. Watered lawn same day contrary to label.

Case#	108-06	2006	Pesticide Involved	Yes	License	Commercial	Date	6/1/2006	Farmworker?	No	# People	None	Severity	4	Application Inf	Commercial
County	Benton		Nature of Case	Direct to lawn			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide			Other Agencies	Final Action	Target/Complaint Area
	glyphosate			None	NOI	Lawn

Commercial application of fertilizers and pesticides damaged lawn./Verified, residue showed glyphosate. Damage over $21,000. No Commercial Applicators license.

Case#	109-06	2006	Pesticide Involved	NA	License	Dealer	Date	March '06	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	Lincoln		Nature of Case	Sale			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	Rodenticide			Other Agencies	Final Action	Target/Complaint Area
	aluminum phosphide			None	NOC	Sale of RUP

Sale of RUP to Public Operator without proper category on license./Verified.

Case#	110-06	2006	Pesticide Involved	Yes	License	Unknown	Date	5/18/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Commercial
County	Spokane		Nature of Case	Human Exposure - drift			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicides			Other Agencies	Final Action	Target/Complaint Area
	Unknown			DOH	NAI	person

Said herbicides applied to landscaping at work made her ill./Case from DOH via L&I. Employee did not want pursued. Resolved by employer.

WSDA 2006 Case Data

Case#	111-06	2006	Pesticide Involved	Yes	License	Commercial	Date	6/10/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Agricultural
County	Whitman		Nature of Case	Drift to crop			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:	Herbicide chlorsulfuron	Herbicide sulfometuron		Other Agencies	Final Action	Target/Complaint Area
				None	NAI	ROW/peas

ROW application drifted unto and damaged peas./Some damage seen but not consistent with herbicide damage. No residue found. Addressed some recordkeeping items.

Case#	112-06	2006	Pesticide Involved	Yes	License	PA	Date	6/13/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Agricultural
County	Skagit		Nature of Case	Drift to property			Response time	Same Day			Children Involved?	No			Ag	Ground

Chemicals Involved:	Herbicide 2,4-D			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	grass field/property

Neighbor sprayed grass field and drifted to his property and damaged plants./2,4-D and triclopyr found in residue. No source for this application.

Case#	113-06	2006	Pesticide Involved	Yes	License	PO	Date	6/12/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	ROW
County	Skagit		Nature of Case	Direct to water			Response time	One day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide 2,4-D			Other Agencies	Final Action	Target/Complaint Area
				None	Advisory Letter	ROW/water

Application to roadside went into water./Overspray into ditch that may have had flowing water confirmed by residue. Applicator did take precautions in area.

Case#	114-06	2006	Pesticide Involved	Yes	License	PA	Date	6/22/2006	Farmworker?	No	# People	One	Severity	2	Application Inf	Residential
County	Spokane		Nature of Case	Human Exposure - drift			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide MCPA			Other Agencies	Final Action	Target/Complaint Area
				DOH	NOC	weeds/person

Weed application near his home drifted and made him ill. Required trip to hospital./Could not verify drift. No residues or symptoms seen on property or adjacent areas. Two trips to hospital made. Violation of sundown rules for application and wrong type of license for vacant lot.

Case#	115-06	2006	Pesticide Involved	Unk	License	Unknown	Date	5/1/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Residential
County	Spokane		Nature of Case	Animal death - direct			Response time	Same Day			Children Involved?	No			NonAg	Unknown

Chemicals Involved:	Unknown Unknown			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	cat

Cat died from ingesting aldicarb./Took cat to vet but it died. Said U of I toxicology analysis found aldicarb in stomach contents. Did not want case pursued, no vet report sent to WSDA.

WSDA 2006 Case Data

Case#	116-06	2006	Pesticide Involved	No	License	SPI	Date	3/2/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	SPI
County	King		Nature of Case	Faulty SPI			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	SPI

Faulty WDO and report./Verified. Failed to report conditions and no control number.

Case#	117-06	2006	Pesticide Involved	Yes	License	Commercial	Date	May '06	Farmworker?	No	# People	One	Severity	3	Application Inf	Agricultural
County	Whitman		Nature of Case	Human Exposure - drift			Response time	Same Day			Children Involved?	No			Ag	Air

Chemicals Involved:	Insecticide dimethoate			Other Agencies	Final Action	Target/Complaint Area
				DOH	NOC	lentils/person

Drift from aerial application to person and property./Verified drift occurred, slight symptoms for person - did not seek medical attention.

Case#	118-06	2006	Pesticide Involved	Yes	License	Unlicensed	Date	5/1/2006	Farmworker?	No	# People	None	Severity	3	Application Inf	Residential
County	Snohomish		Nature of Case	Misuse - direct			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide casoron			Other Agencies	Final Action	Target/Complaint Area
				None	Advisory Letter	fence/trees

Neighbor sprayed his trees and damaged them./Neighbor used casoron along fence line. Casoron vaporized and damaged trees.

Case#	119-06	2006	Pesticide Involved	Yes	License	PO	Date	6/7/2006	Farmworker?	No	# People	One	Severity	1	Application Inf	ROW
County	Lincoln		Nature of Case	Human Exposure - direct			Response time	7 days			Children Involved?	No			ROW	Ground

Chemicals Involved:	Herbicide triclopyr	clopyralid		Other Agencies	Final Action	Target/Complaint Area
				DOH	NAI	weeds/person

Alleged herbicide application to ROW caused rash when he mowed 20 hours later. No warning so he did not wear PPE./Could not connect application to rash. No label violations. Applicator said person watched him spray.

Case#	120-06	2006	Pesticide Involved	Yes	License	Commercial	Date	7/5/2006	Farmworker?	No	# People	one	Severity	3	Application Inf	Agricultural
County	Yakima		Nature of Case	Human Exposure - direct			Response time	Same Day			Children Involved?	No			Ag	Air

Chemicals Involved:	Insecticide malathion			Other Agencies	Final Action	Target/Complaint Area
				DOH	NOI	cherries/person

Said helicopter application to cherries flew over his house and sprayed him. Felt mist and had burning in throat./Residue found on property. Person had showered and washed clothes.

WSDA 2006 Case Data

Case#	121-06	2006	Pesticide Involved	Yes	License	Commercial	Date	6/30/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	Commercial
County	Kitsap		Nature of Case	Misuse - direct			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide			Other Agencies	Final Action	Target/Complaint Area
	glyphosate	triclopyr		None	NOC	weeds

Said landscape company using gasoline to control blackberries./Only glyphosate and triclopyr used. No evidence of any gasoline use. NOCs on records and supervision.

Case#	122-06	2006	Pesticide Involved	Yes	License	Commercial	Date	7/1/2006	Farmworker?	No	# People	One	Severity	4	Application Inf	Agricultural
County	Columbia		Nature of Case	Human Exposure - drift			Response time	One day			Children Involved?	No			Ag	Air

Chemicals Involved:	Insecticide			Other Agencies	Final Action	Target/Complaint Area
	dimethoate			DOH	NOI	peas

Aerial application to peas drifted and made her ill. Two hospital visits. No residues found but samples taken 6 days later than application. Photos taken at time show evidence of drift. Dr. report said organophosphate exposure. Applicator had called but homeowners did not hear message.

Case#	123-06	2006	Pesticide Involved	Yes	License	Unknown	Date	6/30/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	Residential
County	Yakima		Nature of Case	Drift to trees			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	NA			Other Agencies	Final Action	Target/Complaint Area
	NA			None	NAI	cherry trees

Said a neighbor's application of glyphosate and 2,4-D damaged his cherry trees./Damage probably due to nutrition or environmental factors.

Case#	124-06	2006	Pesticide Involved	NA	License	SPI	Date	6/2/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	SPI
County	Pierce		Nature of Case	Faulty SPI			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	NA			Other Agencies	Final Action	Target/Complaint Area
	NA			None	NOC	SPI

Faulty SPI and report./Verified. Failed to report conditions and no control number.

Case#	125-06	2006	Pesticide Involved	NA	License	SPI	Date	1/26/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	SPI
County	Kitsap		Nature of Case	Faulty SPI			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	NA			Other Agencies	Final Action	Target/Complaint Area
	NA			None	NOC	SPI

Faulty SPI and report./Verified. Failed to report conditions and no control number.

WSDA 2006 Case Data

Case#	126-06	2006	Pesticide Involved	Yes	License	Commercial	Date	June '06	Farmworker?	No	# People	two	Severity	4	Application Inf	Commercial
County	Grant		Nature of Case	Drift to ornamentals			Response time	Same Day					Children Involved?	Yes	NonAg	Ground

Chemicals Involved:	Herbicide diuron	Herbicide glyphosate		Other Agencies DOH	Final Action NOI	Target/Complaint Area ornamentals/ornamentals

Application to adjacent property damaged trees and plants./Verified. Application drifted probably due to wind. Damage over $1000.Possible later exposure to two children playing on lawn.

Case#	127-06	2006	Pesticide Involved	Yes	License	Numerous	Date	April '06	Farmworker?	No	# People	None	Severity	1	Application Inf	Agriculture
County	Franklin		Nature of Case	Drift to crop			Response time	Same Day					Children Involved?	No	Ag	Ground

Chemicals Involved:	Herbicides mscl			Other Agencies None	Final Action NOIs/NOCs	Target/Complaint Area Weeds/potatoes

Alleged applications at Hanford Reach damaged his potato crop./Could not determine application source of picloram. Numerous recordkeeping violations from several operators, irrigation district. NOIs on license, records and supervision.

Case#	128-06	2006	Pesticide Involved	Yes	License	Commercial	Date	7/7/2006	Farmworker?	No	# People	None	Severity	3	Application Inf	Commercial
County	Benton		Nature of Case	Drift to ornamentals			Response time	Same Day					Children Involved?	No	NonAg	Ground

Chemicals Involved:	Herbicide glyphosate	Herbicide paraquat		Other Agencies None	Final Action NOIs/NOCs	Target/Complaint Area Ornamentals/ornamentals

Application at neighbor's drifted and damaged ornamentals and garden./Verified. Probably due to wind.

Case#	129-06	2006	Pesticide Involved	Unk	License	Unknown	Date	March '06	Farmworker?	No	# People	None	Severity	1	Application Inf	Agriculture
County	Franklin		Nature of Case	Drift to crop			Response time	Same Day					Children Involved?	No	Ag	Unknown

Chemicals Involved:	Growth Regulator unknown			Other Agencies None	Final Action NAI	Target/Complaint Area Potatoes

Potatoes showing symptoms consistent with Growth Regulator application./Three circles with symptoms. No residue detected. No source found.

Case#	130-06	2006	Pesticide Involved	No	License	Dealer	Date	7/13/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	Mason		Nature of Case	Sale			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	Repellents blood			Other Agencies None	Final Action NOCs	Target/Complaint Area Sale

Sale of unregistered pesticides./Verified plus distribution of general use products without license.

WSDA 2006 Case Data

Case#	131-06	2006	Pesticide Involved	Yes	License	NA	Date	7/10/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Aquatic
County	Pend Oreille		Nature of Case	Possible Water Contamination			Response time	Four days					Children Involved?	No	NonAg	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				DOE	NAI	Aquatic weeds

Call from DOE. Person had contacted them concerned about a milfoil application scheduled for river./Called person. Complainant was just interested in getting more information.

Case#	132-06	2006	Pesticide Involved	Yes	License	PO	Date	6/1/2006	Farmworker?	No	# People	None	Severity	4	Application Inf	Agriculture
County	Grant		Nature of Case	Drift to crops			Response time	Same Day					Children Involved?	No	Ag	Ground

Chemicals Involved:	Herbicide diuron	Herbicide glyphosate		Other Agencies	Final Action	Target/Complaint Area
				None	NOI	weeds/grapes, cherries

Drift from noxious weed application damaged grapes, cherries, apples./Verified.

Case#	133-06	2006	Pesticide Involved	No	License	Unlicensed	Date	5/18/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	King		Nature of Case	Sale of unregistered pesticides			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	Repellents blood	Repellent eggs		Other Agencies	Final Action	Target/Complaint Area
				None	NOI	Sale

Sale of non registered pesticides./Verified

Case#	134-06	2006	Pesticide Involved	No	License	Unlicensed	Date	5/18/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	Pierce		Nature of Case	Sale of unregistered pesticides			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	Repellents blood	Repellent eggs		Other Agencies	Final Action	Target/Complaint Area
				None	NOI	Sale

Sale of non registered pesticides./Verified

Case#	135-06	2006	Pesticide Involved	No	License	Unlicensed	Date	4/28/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Sale
County	Out of State		Nature of Case	Sale of unregistered pesticides			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	Repellents eugenol	Repellent eggs		Other Agencies	Final Action	Target/Complaint Area
				None	NOI	Sale

Sale of non registered pesticides./Verified

WSDA 2006 Case Data

Case# 136-06 2006	Pesticide Involved No	License Unlicensed	Date 4/1/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Chelan	Nature of Case License		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOCs	SPI

Law firm alleged home inspection without a license./Verified.

Case# 137-06 2006	Pesticide Involved No	License Unlicensed	Date 7/18/2006	Farmworker? No	# People None	Severity 2	Application Inf Sale
County King	Nature of Case Sale of unregistered pesticides		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellents quat ammonium	Repellent eggs			None	NOC	Sale

Sale of non registered pesticides./Verified

Case# 138-06 2006	Pesticide Involved No	License NA	Date 7/11/2006	Farmworker? No	# People None	Severity 0	Application Inf Residential
County Walla Walla	Nature of Case Misuse -direct		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				Sheriff	NAI	trees

Police Department referred call stating neighbor sprayed person's trees and damaged them./ No herbicide residue detected. Damage seen, some oil detected. Source unknown. Referred back to police.

Case# 139-06 2006	Pesticide Involved yes	License Unlicensed	Date 7/19/2006	Farmworker? No	# People None	Severity 1	Application Inf School
County Lincoln	Nature of Case Posting		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide bifenthrin				None	Advisory letter	posting

School did not notify or post before pesticide application./Verified.

Case# 140-06 2006	Pesticide Involved Yes	License Commercial	Date 7/14/2006	Farmworker? N	# People One	Severity 1	Application Inf Commercial
County Pierce	Nature of Case Drift to property		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide pyrethrin				None	NAI	Ornamentals/ornamentals

Person complained of drift from commercial application to neighbor's yard./ Not verified, no residue. Complainant said she felt on her skin but no evidence of this

WSDA 2006 Case Data

Case# 141-06 2006	Pesticide Involved Yes	License PA	Date 7/20/2006	Farmworker? No	# People None	Severity 2	Application Inf Agriculture
County Okanogan	Nature of Case Drift to property		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Insecticide	Herbicide			None	NOC	pears/property
kaolin	glyphosate					

Pesticide applied to pears drifted on her property./Verified.

Case# 142-06 2006	Pesticide Involved No	License SPI	Date 7/12/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Kitsap	Nature of Case Records		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	SPI
NA						

Failure to provide SPI inspection report on request./Verified

Case# 143-06 2006	Pesticide Involved No	License SPI	Date 6/29/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Pierce	Nature of Case License		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	SPI
NA						

Performing SPI inspections without being licensed./Verified.

Case# 144-06 2006	Pesticide Involved Unk	License Unknown	Date 5/15/2006	Farmworker? No	# People None	Severity 0	Application Inf ROW
County Yakima	Nature of Case Drift to organic crop		Response time Four days		Children Involved? No		ROW Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Unknown				None	NAI	ROW/pears
Unknown						

Drift from a ROW application damaged pears./Application made Nov 2005, parties unable to resolve. WSDA could not determine correlation between symptoms and applications in area.

Case# 145-06 2006	Pesticide Involved Yes	License Unlicensed	Date Spring '06	Farmworker? No	# People None	Severity 2	Application Inf Residential
County Whatcom	Nature of Case Drift to trees		Response time one day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide	Herbicide			None	Verbal Warning	blackberries/trees
2, 4-D	glyphosate					

Neighbor sprayed blackberries and damaged trees./Dispute over property line and blackberries. Chemical volatilized and damaged trees. Not clear who owns property where blackberries are.

WSDA 2006 Case Data

Case#	146-06	2006	Pesticide Involved	No	License	PA	Date	7/22/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	Agriculture
County	Douglas		Nature of Case	Drift to organic crop			Response time	Same Day					Children Involved?	No	Ag	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NAI	cherries/organic nectarines

Organic nectarine grower concerned that application to cherries drifted on his crop. Applicator said he only applied Nu-Film. Wanted verification./No evidence of drift, two products applied are both approved organics so would not affect certification.

Case#	147-06	2006	Pesticide Involved	No	License	SPI	Date	3/8/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	SPI
County	King		Nature of Case	License			Response time	Same Day					Children Involved?	No	SPI	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NOC	SPI

Performing SPI inspections without being licensed./Verified.

Case#	148-06	2006	Pesticide Involved	No	License	NA	Date	7/1/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	Residential
County	Pierce		Nature of Case	Misuse -direct			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NAI	lawn

Neighbor applying pesticides to her property without permission./No pesticides found. Neighbor neighbor dispute.

Case#	149-06	2006	Pesticide Involved	Yes	License	Commercial	Date	2/24/2006	Farmworker?	No	# People	None	Severity	3	Application Inf	ROW
County	Franklin		Nature of Case	Drift to trees			Response time	Same Day					Children Involved?	No	ROW	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide diuron	2,4-D		None	NOI, NOC	ROW/tree

ROW application killed aspen tree./Verified. Foliage sample tested positive. Records, improper license.

Case#	150-06	2006	Pesticide Involved	No	License	Unlicensed	Date	7/6/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Distribution
County	Pierce		Nature of Case	Distribution			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide corn gluten			None	NOC	distribution

Distribution of an unregistered pesticide./Distributed a non Washington State registered pesticide into WA State.

WSDA 2006 Case Data

Case# 151-06 2006	Pesticide Involved No	License Unlicensed	Date 4/5/2006	Farmworker? No	# People None	Severity 2	Application Inf Distribution
County Multiple	Nature of Case Distribution		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Repellent egg solids	Repellent eugenol			None	NOC	distribution

Distribution of an unregistered pesticide./Distributed a non registered pesticide into WA State.

Case# 152-06 2006	Pesticide Involved Yes	License PO	Date Spring '06	Farmworker? No	# People None	Severity 1	Application Inf ROW
County Asotin	Nature of Case Drift to tree		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NAI	weeds/ornamentals

ROW application drifted to plants./No evidence of drift seen.

Case# 153-06 2006	Pesticide Involved No	License SPI	Date 3/20/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Pierce	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

Faulty SPI inspection and report./Verified, failed to report conditions and no diagram.

Case# 154-06 2006	Pesticide Involved Yes	License Unlicensed	Date 7/6/2006	Farmworker? No	# People None	Severity 2	Application Inf Commercial
County Pend Oreille	Nature of Case License		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicides mscl				None	NOC	License

Making commercial pesticide applications without a license./Verified.

Case# 155-06 2006	Pesticide Involved Yes	License Commercial	Date 7/28/2006	Farmworker? No	# People One	Severity 1	Application Inf Commercial
County Yakima	Nature of Case Notification		Response time 4 days		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
insecticide bifenthrin				None	NOC	Notification

Made pesticide application without notification. On pesticide sensitive list./Verified.

WSDA 2006 Case Data

Case# 156-06 2006	Pesticide Involved Yes	License Unlicensed	Date 7/6/2006	Farmworker? No	# People None	Severity 2	Application Inf Residential
County Spokane	Nature of Case Drift to garden		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide 2,4-D	dicamba			None	NOCs	weeds/beans

Drift to bean plants from neighbor's application./Verified also used RUP without license, NOC to dealer on sale.

Case# 157-06 2006	Pesticide Involved Yes	License Commercial	Date Spring '06	Farmworker? No	# People None	Severity 4	Application Inf Commercial
County Grant	Nature of Case Direct		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide diuron	Herbicide paraquat			None	NOI	weeds/trees

Herbicide application to control weeds around trees damaged trees./Verified. Off label use of product.

Case# 158-06 2006	Pesticide Involved Yes	License Commercial	Date 7/1/2006	Farmworker? No	# People None	Severity 3	Application Inf Agriculture
County Grant	Nature of Case Drift to trees		Response time Same Day		Children Involved? No		Ag Air

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide MCPA	Herbicide dicamba	Herbicide carfentrazon		None	NOI	hay/tree

Aerial application to timothy hay drifted and damaged trees./Verified. Also use off label.

Case# 159-06 2006	Pesticide Involved Yes	License Unknown	Date 7/27/2006	Farmworker? No	# People None	Severity 1	Application Inf Agriculture
County Lewis	Nature of Case Misuse - Direct		Response time Same Day		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide 2,4-D	Herbicide glyphosate			None	NAI	weeds

Neighbor sprayed on his property without permission./Herbicides used along fenceline. Property boundary not clearly identifiable.

Case# 160-06 2006	Pesticide Involved No	License Unlicensed	Date 9/14/2005	Farmworker? No	# People None	Severity 2	Application Inf SPI
County King	Nature of Case Faulty SPI		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	SPI

Faulty SPI inspection and report./Failed to report conducive condition, no diagram, improper license.

WSDA 2006 Case Data

Case#	161-06	2006	Pesticide Involved	No	License	NA	Date	8/5/2006	Farmworker?	No	# People	One	Severity	0	Application Inf	Residential
County	Spokane		Nature of Case	Misuse - Direct			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				DOH	NAI	garden
NA						

Said neighbor is spraying something on their vegetable garden. Daughter ill earlier this summer./Private lab found no pesticide residues. Conflicting children's stories. Possible use of chlorothalonil on plant.

Case#	162-06	2006	Pesticide Involved	Yes	License	Commercial	Date	5/8/2006	Farmworker?	No	# People	None	Severity	4	Application Inf	Commercial
County	Spokane		Nature of Case	Misuse-Direct			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	NOC	weeds/tree
dichlobenil						

Commercial application made near curb damaged tree. /Verified. Tree died from root uptake.

Case#	163-06	2006	Pesticide Involved	Yes	License	Commercial	Date	7/1/2006	Farmworker?	No	# People	None	Severity	3	Application Inf	Commercial
County	Franklin		Nature of Case	Drift to ornamentals			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	NAI	weeds/ornamentals
unknown						

Subcontracted weed application drifted and damaged ornamentals./ Initial concern was drift and license. License valid. Company replaced plants and took other actions and complaint withdrawn.

Case#	164-06	2006	Pesticide Involved	Yes	License	Unlicensed	Date	8/11/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Residential
County	Lincoln		Nature of Case	Drift to property			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide				None	NOC	weeds/blackberries
2,4-D						

Neighbor's application to weeds drifted on garden, blackberries./Verified.

Case#	165-06	2006	Pesticide Involved	No	License	NA	Date	8/15/2006	Farmworker?	No	# People	None	Severity	0	Application Inf	NA
County	Spokane		Nature of Case	Drift to ornamentals			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NAI	ornamentals
NA						

Concerned that stunting and yellowing of ornamentals was caused by drift from neighbor./Damage not due to pesticides. Complaint withdrawn.

WSDA 2006 Case Data

Case# 166-06 2006	Pesticide Involved yes	License Commercial	Date 8/8/2006	Farmworker? No	# People None	Severity 1	Application Inf Commercial
County Spokane	Nature of Case Direct to ornamentals		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NAI	ornamentals

Commercial application damaged ornamentals./Not verified. Insecticide application would not have caused damage, cause unknown.

Case# 167-06 2006	Pesticide Involved Yes	License PA	Date 8/25/2006	Farmworker? No	# People None	Severity 1	Application Inf Agriculture
County Douglas	Nature of Case Drift to property		Response time three days		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	insecticide carbaryl	Insecticide azinphos-methyl		None	NOC	apples/property

Said airblast application drifting towards her property./ No evidence of drift seen, applicator took precautions. Records inadequate.

Case# 168-06 2006	Pesticide Involved Yes	License Unlicensed	Date 6/27/1905	Farmworker? No	# People None	Severity 1	Application Inf Agriculture
County Multiple	Nature of Case EUP crop destruction		Response time Same Day		Children Involved? No		Ag Unknown

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	EUP metarhizium anisopliae			WSU	NOC	carrots

WSU did not destroy 2 carrot crops treated under an EUP./WSU has taken corrective actions. No adverse effects reported.

Case# 169-06 2006	Pesticide Involved Yes	License Unlicensed	Date 8/20/2006	Farmworker? No	# People One	Severity 1	Application Inf Residential
County Grays Harbor	Nature of Case Human Exposure -drift		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide 2,4-D			DOH	NAI	blackberries/person

Person said she was ill from neighbor's application to blackberries. Odor only./No evidence of drift. DOH will respond as multiple chemical sensitivity.

Case# 170-06 2006	Pesticide Involved Yes	License PA	Date 5/30/2006	Farmworker? No	# People None	Severity 2	Application Inf Agriculture
County Snohomish	Nature of Case Drift to property		Response time 17 days		Children Involved? No		Ag Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide clomazone			None	Advisory letter	pumpkins/blackberries

Concerned that application to pumpkins drifted to blackberries and water./No evidence of drift. Label warns of volatilization to sensitive plants.

WSDA 2006 Case Data

Case#	171-06	2006	Pesticide Involved	No	License	NA	Date	Summer '06	Farmworker?	No	# People	One	Severity	0	Application Inf	NA
County	Spokane		Nature of Case	Human exposure-direct			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	Grass

Said he smelled chemical when mowing grass at vacant property. Thinks company treated wrong property./ No evidence of any application. No sample available as grass mowed.

Case#	172-06	2006	Pesticide Involved	No	License	Dealer	Date	7/1/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Dealer
County	Douglas		Nature of Case	Sale			Response time	Same Day					Children Involved?	No	NonAg	NA

Chemicals Involved:	Herbicide 2,4-D			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	Sale

Sale of 2,4-D in larger container to unlicensed person./Conflicting information from WSDA investigator. Correct information provided.

Case#	173-06	2006	Pesticide Involved	Yes	License	PA	Date	8/18/2006	Farmworker?	No	# People	None	Severity	5	Application Inf	Agriculture
County	Okanogan		Nature of Case	Bird deaths - direct			Response time	three days					Children Involved?	No	Ag	Ground

Chemicals Involved:	Rodenticide zinc phosphide			Other Agencies	Final Action	Target/Complaint Area
				None	NOCs	Mice/birds

Zinc Phosphide spread under cherry trees to control mice killed 14 ducks and chickens./Verified. Birds were free ranging and were in orchard. NOCs for applications without direct supervision.

Case#	174-06	2006	Pesticide Involved	Yes	License	EUP Permit	Date	6/26/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	ROW
County	Mason		Nature of Case	Misuse - Direct			Response time	Same Day					Children Involved?	No	ROW	Ground

Chemicals Involved:	Herbicide triclopyr			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	ROW

Applicator with an EUP permit applied herbicide to forest ROW./Verified. EUP permit not sufficient for application.

Case#	175-06	2006	Pesticide Involved	Yes	License	Commercial	Date	9/18/2006	Farmworker?	No	# People	numerous	Severity	2	Application Inf	Commercial
County	Grant		Nature of Case	Human Exposure -drift			Response time	Same Day					Children Involved?	No	NonAg	Ground

Chemicals Involved:	insecticide bifenthrin			Other Agencies	Final Action	Target/Complaint Area
				L&I, DOH	NOC	building/persons

L&I office evacuated due to odors from PCO application that morning outside building./No evidence pesticide entered building. May be odor only. Numerous recordkeeping violations.

WSDA 2006 Case Data

Case# 176-06 2006	Pesticide Involved Yes	License PA	Date 9/25/2006	Farmworker? Yes	# People One	Severity 2	Application Inf Agriculture
County Yakima	Nature of Case Human Exposure - direct		Response time Same Day		Children Involved? No		Agricult Ground

Chemicals Involved:	Other Agencies	Final Action	Target/Complaint Area
Growth Reg NAA	DOH	NOC	apples/person

Person sprayed by neighboring application. Did not wash or change clothes./ NAA detected. Person was employee picking apples. No health effects.

Case# 177-06 2006	Pesticide Involved Yes	License PrivateCom	Date 6/28/1905	Farmworker? No	# People None	Severity 1	Application Inf PO
County Wahkiakum	Nature of Case Water Contamination		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:	Other Agencies	Final Action	Target/Complaint Area
Herbicide glyphosate	None	NAI	weeds/river

Land trust applying pesticides near river./Properly licensed. Pesticide has aquatic labeling.

Case# 178-06 2006	Pesticide Involved No	License Dealer	Date 8/16/2006	Farmworker? No	# People None	Severity 1	Application Inf Records
County Whatcom	Nature of Case Records		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:	Other Agencies	Final Action	Target/Complaint Area
NA NA	None	NOC	Records

Failed to provide requested records to WSDA in specified time./Verified.

Case# 179-06 2006	Pesticide Involved No	License Unlicensed	Date 7/25/2006	Farmworker? No	# People None	Severity 2	Application Inf WDO
County Okanogan	Nature of Case License		Response time Six Days		Children Involved? No		WDO NA

Chemicals Involved:	Other Agencies	Final Action	Target/Complaint Area
NA NA	None	NOI	WDO

Performed WDO inspection without license./Verified. Second offense.

Case# 180-06 2006	Pesticide Involved Yes	License Commercial	Date 10/4/2006	Farmworker? No	# People None	Severity 2	Application Inf Commercial
County King	Nature of Case License. Records		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:	Other Agencies	Final Action	Target/Complaint Area
Insecticides Mscl	None	NOC	Buildings/license

Commercial applicator's records review showed numerous violations of licenses, records.

WSDA 2006 Case Data

Case# 181-06 2006	Pesticide Involved Yes	License Unlicensed	Date 9/26/2006	Farmworker? No	# People None	Severity 2	Application Inf Commercial
County Jefferson	Nature of Case License		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	license
NA						

Inspector observed landscape company making application without proper license and numerous other violations./Verified.

Case# 182-06 2006	Pesticide Involved No	License Unlicensed	Date 9/9/2004	Farmworker? No	# People None	Severity 2	Application Inf WDO
County Benton/Pierce	Nature of Case SPI License		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	SPI
NA						

Performing SPI/WDO inspections without a license./Verified.

Case# 183-06 2006	Pesticide Involved No	License NA	Date 9/1/2006	Farmworker? No	# People One	Severity 0	Application Inf NA
County Island	Nature of Case Human Exposure - direct		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				DOH	NAI	Person
Na						

Person claimed she was being poisoned by numerous pesticide applications being made around her condominium./No evidence of any pesticide misuse.

Case# 184-06 2006	Pesticide Involved No	License Unlicensed	Date 10/18/2006	Farmworker? No	# People None	Severity 1	Application Inf License
County Whatcom	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA				None	NOC	License
NA						

Acting as Dealer without a license./Verified

Case# 185-06 2006	Pesticide Involved Yes	License Commercial	Date 7/15/2006	Farmworker? No	# People None	Severity 4	Application Inf Commercial
County Spokane	Nature of Case Drift to trees		Response time Same Day		Children Involved? No		NonAg Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
Herbicide diuron	Herbicide bromacil			None	NOI	weeds/trees

Bare ground herbicide application damaged adjacent pine trees./Verified. Label violation, applied over root zone of trees, root uptake.

WSDA 2006 Case Data

Case#	186-06	2006	Pesticide Involved	No	License	PO	Date	10/12/2006	Farmworker?	N	# People	One	Severity	1	Application Inf	Commercial
County	King		Nature of Case	Human Exposure - direct			Response time	Same Day					Children Involved?	Yes	NonAg	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				DOH	NOC	Person

Child had rash on stomach after falling on lawn at school. Notice said pesticides applied./No residues found. No pesticides actually applied for two weeks. NOC on records.

Case#	187-06	2006	Pesticide Involved	Yes	License	Commercial	Date	10/27/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Agriculture
County	Adams		Nature of Case	No backflow prevention			Response time	Same Day					Children Involved?	No	Agricult	Ground

Chemicals Involved:	Fumigant metam sodium			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	chemigation backflow

Soil fumigation being done without proper backflow prevention./Verified. Tank did not have Identifier also.

Case#	188-06	2006	Pesticide Involved	No	License	Commercial	Date	10/27/2006	Farmworker?	No	# People	One	Severity	2	Application Inf	Agriculture
County	Grant		Nature of Case	PPE			Response time	Same Day					Children Involved?	No	Agricult	NA

Chemicals Involved:	Fumigant metam sodium			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	PPE

Employee transferring metam sodium between truck and trailer without PPE./Verified. Told to wear by employer and did not. No label on site.

Case#	189-06	2006	Pesticide Involved	Yes	License	Commercial	Date	10/15/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Residential
County	Yakima		Nature of Case	Drift to property			Response time	Same Day					Children Involved?	No	NonAg	Ground

Chemicals Involved:	Herbicide diuron			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	ground/lawn

Application to fenceline harming lawn./Verified. Blown-in soil damaging pasture.

Case#	190-06	2006	Pesticide Involved	Yes	License	Commercial	Date	4/1/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Commercial
County	Walla Walla		Nature of Case	License			Response time	Same Day					Children Involved?	No	NonAg	Ground

Chemicals Involved:	Herbicides mscl			Other Agencies	Final Action	Target/Complaint Area
				None	NOI/NOC	License

Unlicensed person had another unlicensed person apply for compensation./Verified, one had PA license.

WSDA 2006 Case Data

Case# 191-06 2006	Pesticide Involved No	License SPI	Date 9/16/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County King	Nature of Case Records		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NOC	Records

Failed to provide records of SPI on request./Verified.

Case# 192-06 2006	Pesticide Involved Yes	License NA	Date 8/15/2006	Farmworker? No	# People None	Severity 0	Application Inf NA
County Stevens	Nature of Case Drift to trees		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NAI	trees

Trees damaged from nearby application to wheat./No evidence of drift occurred.

Case# 193-06 2006	Pesticide Involved Yes	License Commercial	Date 6/15/2006	Farmworker? No	# People None	Severity 1	Application Inf Agriculture
County Spokane	Nature of Case Drift to trees		Response time Same Day		Children Involved? No		Agricult Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide tordon	Herbicide 2,4-D		None	NAI	weeds/trees

Noxious weed application damaged trees./No evidence of any drift or uptake. Source of damage unknown.

Case# 194-06 2006	Pesticide Involved No	License SPI	Date 2/21/2006	Farmworker? No	# People None	Severity 2	Application Inf SPI
County Kitsap	Nature of Case Faulty SPI and report		Response time Same Day		Children Involved? No		SPI NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NOC	Faulty Sip

Faulty SPI and report./Verified. Failed to report conducive conditions.

Case# 195-06 2006	Pesticide Involved Yes	License WDO	Date 2/10/2006	Farmworker? No	# People None	Severity 2	Application Inf WDO
County Kitsap	Nature of Case Recordkeeping		Response time Same Day		Children Involved? No		WDO NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA NA			None	NOC	Records

Failed to keep proper records for carpenter ant application./Verified.

WSDA 2006 Case Data

Case# 196-06 2006	Pesticide Involved No	License Commercial	Date 6/28/1905	Farmworker? No	# People None	Severity 0	Application Inf Commercial
County Walla Walla	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA			None	NAI	License
	NA					

Anonymous compliant said company using unlicensed applicator and dumping chemicals down drain./Unsubstantiated.

Case# 197-06 2006	Pesticide Involved Yes	License Commercial	Date 6/15/2006	Farmworker? No	# People None	Severity 2	Application Inf Agriculture
County Spokane	Nature of Case Direct to trees		Response time Same Day		Children Involved? No		Agricult Ground

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	Herbicide	Herbicide		None	Advisory letter	weeds/trees
	Picloram	2,4-D				

Applicator hired to spray weeds directly over tree./Misunderstanding regarding damage to small trees that would occur.

Case# 198-06 2006	Pesticide Involved No	License Dealer	Date 8/16/2006	Farmworker? No	# People None	Severity 2	Application Inf Dealer
County Whatcom	Nature of Case Sale, Records		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA			None	NOC	Sale, records
	NA					

Inspection found store sold non-registered pesticides, no Dealer Manager present, incomplete records.

Case# 199-06 2006	Pesticide Involved No	License Commercial	Date 9/14/2006	Farmworker? No	# People None	Severity 2	Application Inf stry Records
County Lewis	Nature of Case Records		Response time Same Day		Children Involved? No		Agricult NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA			None	NOC	Records
	NA					

Records not on correct form, incomplete, did not have direct supervision, handlers not WPS trained - forestry application.

Case# 200-06 2006	Pesticide Involved No	License Commercial	Date 9/14/2006	Farmworker? No	# People None	Severity 2	Application Inf stry Records
County Lewis	Nature of Case Records		Response time Same Day		Children Involved? No		Agricult NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
	NA			None	NOC	Records
	NA					

Records not on correct form, incomplete, did not have direct supervision, handlers not WPS trained - forestry application.

WSDA 2006 Case Data

Case#	201-06	2006	Pesticide Involved	No	License	Unlicensed	Date	11/6/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Sale
County	Yakima		Nature of Case	Sale			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				None	NAI	Sale

Hardware store donated rodenticides to charity. Person offered to sell to exterminator./Store and person unaware illegal to give away or sell damaged pesticides Provided information regarding WSDA disposal program.

Case#	202-06	2006	Pesticide Involved	Yes	License	Commercial	Date	11/8/2006	Farmworker?	No	# People	None	Severity	2	Application Inf	Commercial
County	Grant		Nature of Case	Notification, drift to property			Response time	Same Day			Children Involved?	No			NonAg	Ground

Chemicals Involved:	Herbicide diuron			Other Agencies	Final Action	Target/Complaint Area
				None	Advisory letter	Notification &weeds

Application made without notifying pesticide sensitive individual and products found off target./Verified.

Case#	203-06	2006	Pesticide Involved	No	License	Unlicensed	Date	10/24/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	Dealer
County	Yakima		Nature of Case	Distribution			Response time	Same Day			Children Involved?	No			NonAg	NA

Chemicals Involved:	Repellants mscl			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	Distribution

Distribution of non-registered pesticide./Verified. Not aware they were pesticides.

Case#	204-06	2006	Pesticide Involved	No	License	SPI	Date	3/11/2005	Farmworker?	No	# People	None	Severity	2	Application Inf	SPI
County	King		Nature of Case	Incomplete SPI			Response time	Same Day			Children Involved?	No			SPI	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	SPI

Incomplete SPI./Verified. Failed to report conducive conditions.

Case#	205-06	2006	Pesticide Involved	No	License	SPI	Date	11/6/2006	Farmworker?	No	# People	None	Severity	1	Application Inf	SPI
County	Okanogan		Nature of Case	License			Response time	7 days			Children Involved?	No			SPI	NA

Chemicals Involved:	NA NA			Other Agencies	Final Action	Target/Complaint Area
				None	NOC	SPI

Performed complete SPI inspection without SPI license./Verified.

WSDA 2006 Case Data

Case# 206-06 2006	Pesticide Involved No	License Unlicensed	Date 6/28/1905	Farmworker? No	# People None	Severity 1	Application Inf Commercial
County Pierce	Nature of Case License		Response time Same Day		Children Involved? No		NonAg NA

Chemicals Involved:				Other Agencies	Final Action	Target/Complaint Area
NA NA				None	NOC	Moles

Doing mole control as a business without a license. Previously told he needed a license.

Washington State Department of Health

Pesticide Incidents

Annual Summary Report of Definite, Probable, and Possible Exposures

Case	Exposure Date	Incident Description
060001	01/04/2006	A 44 y/o male applied one ampule (.5ml.) of cat flea insecticide to his cat. Then, while getting ready to treat the dog, the cat ran in front of him and his hand touched his eye. He had ocular discomfort and redness. The next day he went in for medical attention. Multiple (product is classified as multiple classes ...): Methoprene, S-; Fipronil 1 Definite severity: Low/Mild
060002	01/15/2006	A 15 y/o developmentally delayed female was helping with house work. The fogger was not stored and she picked it up and set it off. She was taken to the ER for ocular & dermal symptoms. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide; Methoprene, S-; N-octylbicycloheptene dicarboximide 1 Probable severity: Low/Mild
060003	01/18/2006	A 2 y/o boy was bathed by his parent and got some lice shampoo in his eye. His eyes were irrigated and he went to bed. When he awoke his left eye was very irritated and swollen. He was taken for medical attention. After treatment he was referred to an ophthalmologist and sent home. Unknown: Pyrethrins, Piperonyl butoxide 1 Definite severity: Low/Mild
060005	02/06/2006	A 44 y/o female reported strong odor and dermal & systemic symptoms after returning to her apartment nine hours after crack & crevice treatment with an insecticide. She went to ER that night and did not return to apartment. Ten days later movers complained of foul odor and slight symptoms in moving her boxes out of apartment. She also had relapse of symptoms when unpacking boxes in new apartment. Packing boxes were swabbed for evidence of pesticide residue. None detected. Suspected mold & bacteria secondary to cleaning may have played role in symptoms. Unknown: Permethrin, mixed cis,trans (ANSI), Esfenvalerate, Chlorothalonil (ANSI) 1 Probable severity: Moderate
060008	03/01/2006	A mother age 29 and her 8-month-old son, a 9 y/o girl and an 11 y/o boy reentered their apartment almost 4 hours after a tank mix had been applied. The carpet was moist and the smell strong. The apartment had one window which she opened. They left briefly and then returned. The baby crawled on the carpet when not being carried by other family members. The infant had diarrhea, nausea, and vomiting and was taken for medical care two days later. The others had headaches and the mother also had nausea and diarrhea. Educational/prevention materials were provided to the mother. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI), Bifenthrin (ANSI) Other (Includes bilogical controls, plant growth regulators, antibiotics, etc.): Methoprene, S- 2 Possible severity: (2) Low/Mild 2 Insufficient Information severity:
060011	03/19/2006	A father shampooed his 4 y/o daughter's hair to control for lice. While rinsing, the shampoo went into the child's eyes. He flushed her eyes, but she was taken to an ER the next day as the daughter complained of blurred vision. She was treated and discharged. Unknown: Pyrethrins, Piperonyl butoxide 1 Definite severity: Low/Mild

Case	Exposure Date	Incident Description
060012	03/22/2006	A 51 y/o female ordered a lawn treatment from a commercial application company. She had "second thoughts" about the application and cancelled. The applicator did not get word she had cancelled her request and treated the lawn. She reported symptoms shortly afterwards. She thought the application was to be "organic". She went for medical attention for what appeared as an allergic response. Fungicide: Thiophanate-methyl (ANSI) Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI) 1 Possible severity: Low/Mild
060013	03/02/2006	A 28 y/o male nursery employee was moving a hand-pump sprayer after an application when it discharged, spraying the product in his face. He sought medical care for eye symptoms. The employee was not assigned to do pesticide handling tasks and was not wearing appropriate PPE. Disinfectant/broad spectrum for water sanitation: Alkyl* dimethyl benzyl ammonium chloride *(60%C14, 30%C16, 5%C18, 5%C12); Quaternary Ammonium; Alkyl* dimethyl ethylbenzyl ammonium chloride *(50%C12, 30%C14, 17%C16, 3%C18) 1 Definite severity: Low/Mild
060014	03/27/2006	A 64 y/o male using a hand shaker applied a granular moss control product to the roof of his home. He then began working on his gutters when the wind blew some of the granules and associated dust from the roof into his face. He washed his face with water. The discomfort continued and he went to the ER for attention. Herbicide/algicide: Zinc sulfate monohydrate 1 Definite severity: Low/Mild
060015	03/28/2006	A 50 y/o male walked into his garage at 6:15 am and took a daily medication along with a swallow from a water bottle on his work bench. He remembered he had put the last of some concentrated moss control product in the empty, unlabeled water bottle. He drank milk, his wife called WPC, and then he drove to the ER for medical attention. This person spent ten days in the hospital recovering from GI symptoms. Herbicide/algicide: Zinc chloride 1 Definite severity: High/Severe
060016	04/02/2006	A 49 y/o female homemaker developed a burning sensation in one eye after some of the pesticide she was spraying bounced off a surface and hit her right eye. Later her eye looked dry. She sought medical care after the incident. The label did not require the use of eye protection. Insecticide (excluding solely IGR and fumigants): Lambda-cyhalothrin 1 Probable severity: Low/Mild
060017	03/28/2006	A 32 y/o male installing irrigation pipe developed neurological and gastrointestinal symptoms from application close to him. He reported smelling the application and developed a taste in his mouth. He did not feel the spray on his skin but could observe the tractor spraying. He sought medical care the same day. His employer said that there was an application in the area and that they did not think there was a drift hazard. Fungicide: Fenarimol (ANSI) Insecticide (excluding solely IGR and fumigants): Clofentezine (ANSI), Mineral oil - includes paraffin oil from 063503 Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Possible severity: Moderate

Case	Exposure Date	Incident Description
060018	04/07/2006	A 63 y/o female applied a weed & feed product to her lawn. She reported wearing safety glasses and she recalled touching her left eye lid with her unwashed hand. Later the eye lid and facial area began to swell. She decided to seek medical attention. It was not determined to be pesticide related, as it also was considered to be the result of an insect bite. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dimethylamine 2-(2-methyl-4-chlorophenoxy)propionate 1 Probable severity: Low/Mild
060019	04/16/2006	A 53 y/o male had completed spraying his roof for moss control. As he came down from the roof, he removed his goggles worn for eye protection. As he climbed down the ladder, some of the chemical dripped into his left eye from the hand sprayer. He immediately washed his eye for ten minutes. The irritation continued and he went to the ER for care. Herbicide/algicide: Zinc chloride 1 Definite severity: Low/Mild
060020	03/31/2006	A 35 y/o male pest control operator reports that he developed ocular symptoms when the wind shifted and blew spray in under his safety glasses. He sought medical care two days later for continuing ocular symptoms. All required PPE was being worn. Insecticide (excluding solely IGR and fumigants): Cyfluthrin 1 Possible severity: Low/Mild
060022	04/10/2006	Two female orchard workers ages 19 and 31 developed symptoms after they were drifted upon. They both observed the application being conducted on a nearby orchard and they could smell it. They could see the cloud from the application moving toward them. One woman had neurological, respiratory, gastrointestinal, and ocular symptoms and sought medical care. The other person had neurological and dermal symptoms and did not seek medical care. Spray records from the adjacent orchard confirmed the application. Fungicide: Triflumizole Insecticide and fungicide (1 and 4): Sulfur 2 Possible severity: (2) Low/Mild
060024	03/15/2006	A 51 y/o female sprayed a deer repellent on foliage around her home landscape. While applying, a gust of wind blew some spray back into her face and she inhaled some of the spray mist. She reports gastrointestinal problems through the night. Three days later she sought medical care when respiratory symptoms occurred. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Garlic oil; Capsaicin (in oleoresin of capsicum); Putrescent whole egg solids 1 Possible severity: Low/Mild
060025	04/10/2006	A 59 y/o male employee developed irritant respiratory and systemic symptoms after working in office for 30 minutes with the door closed. The office had been sprayed for ants six days prior but the office had not been used since. He felt better after leaving the office but sought health care the same day. Symptoms resolved rapidly. Insecticide (excluding solely IGR and fumigants): Esfenvalerate 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060027	04/20/2006	A 2 y/o female developed ocular symptoms after a lice cream rinse solution was placed on her scalp for 10 minutes. The mother followed all the label requirements and the next morning the child had red, matted and tearing eyes. The child suffers from chronic allergies and was taken to health care provider for care. Unknown: Permethrin, mixed cis,trans (ANSI) 1 Probable severity: Low/Mild
060028	04/23/2006	A 46 y/o male homeowner applied an herbicide to remove unwanted vegetation. While applying, the hose from the spray tank detached under pressure and the herbicide sprayed his face, mouth and eyes. He washed off, but the irritation caused him to call WPC, 911 and then be taken to the hospital ER. He sustained some corneal abrasion. Herbicide/algicide: Glyphosate, isopropylamine salt; Imazapyr, isopropylamine salt 1 Definite severity: Low/Mild
060030	04/25/2006	A 30 y/o pregnant female who had asthma was working as a cashier at a retail food center. She described picking up a container of the product and dust from it came up into her eyes. As she was wearing contacts, she took them out, washed her face, and went to a clinic for an exam. She continued to have dry eyes that bothered when she was awake. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Metaldehyde 1 Definite severity: Low/Mild
060035	05/01/2006	A 52 y/o female university employee had a severe but short-lived asthma attack after a nearby office was sprayed with an insecticide. She reported that the ventilation system carried pesticide to her office. No samples were taken to confirm this. She took asthma medications and was seen in the ER 30 minutes post-exposure. Symptoms resolved shortly afterwards. Employer implemented new policy to use alternative methods of pest control and notify her before any application in her area. Insecticide (excluding solely IGR and fumigants): Chlorfenapyr 1 Possible severity: Low/Mild
060036	04/24/2006	A 50 y/o male reported a non-occupational pesticide exposure with respiratory symptoms after being drifted upon by an orchard application while driving his pickup. He reported having windows and vents open at the time and said he could smell the spray but not feel it. He did not seek medical care and the symptoms resolved the next day. WSDA investigated and detected spray residues from swab samples taken from the complainant's truck. WSDA was unable to determine the exact source of the residues as two different orchards were applying the same product on opposite sides of the road at the same time. Fungicide: Triflumizole Insect Growth Regulator (IGR): Buprofezin Insecticide (excluding solely IGR and fumigants): Acetamiprid, Formetanate hydrochloride 1 Probable severity: Low/Mild
060038	05/03/2006	A 60 y/o male was using a backpack sprayer to apply herbicide around his home and fruit trees. He wore no PPE. The wind caused some spray to come into his face and eyes. He did not wash off until later in the day. Two days later he sought medical care for ocular symptoms. Herbicide/algicide: Glyphosate, isopropylamine salt; Diquat dibromide; Imazapic, ammonium salt 1 Definite severity: Low/Mild

Case	Exposure Date	Incident Description
060040	04/21/2006	A 35 y/o male applying to apples developed gastrointestinal and neurological symptoms. Worker said he was spraying from an enclosed cab but spray was entering the cab because of wind. He reported he was wearing a half face mask and did not smell the chemicals. His employer said he was smoking inside the cab while spraying. He sought medical care three days later for continuing dizziness. Fungicide: Mancozeb Insecticide and fungicide (1 and 4): Sulfur 1 Possible severity: Low/Mild
060042	04/24/2006	A 26 y/o male spraying apples sought medical care for ocular symptoms. He told his health care provider that he felt the spray come in under his goggles. Management reported they have really good goggles with side protection and employee said he had not taken off the goggles. Patient could not be located for an interview to determine how goggles fit. Insecticide and fungicide (1 and 4): Calcium polysulfide 1 Definite severity: Low/Mild
060045	05/04/2006	A 63 y/o female school bus driver reported neurological and gastrointestinal symptoms after her bus was drifted upon by an orchard sprayer as she drove on a road adjacent to the orchard. Her window was open. She did not seek medical attention. No students on the bus reported symptoms from the incident. She reported spray was heavy enough that she had to turn on her windshield wipers. WSDA investigated but did not take samples as the bus was driven through other orchard areas on two additional days before incident was reported. Insecticide and other: Carbaryl (ANSI) Other (Includes bilogical controls, plant growth regulators, antibiotics, etc.): Benzyladenine, N6- 1 Possible severity: Low/Mild
060046	05/07/2006	A 31 y/o female used a hand-held applicator to apply a "weed n feed" product to her lawn. The wind came up and whipped the product's dust component into her face and eyes. She did not wear any eye protection. Within 15 minutes she went in and washed herself and her eyes. Her eyes and sinuses were still feeling irritated and congested two days later so she went for treatment. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate 1 Possible severity: Low/Mild
060049	05/10/2006	Two male employees, ages 36 and 51, at a cardboard recycling plant developed systemic symptoms after boxes with pesticide residue were processed. WSDA sampled equipment and confirmed residues. Neither worker sought medical attention. Symptoms lasted several days. One employee could not be reached for interview. Insecticide (excluding solely IGR and fumigants): Carbaryl (ANSI) Other (Includes bilogical controls, plant growth regulators, antibiotics, etc.): Metaldehyde 1 Probable severity: Low/Mild 1 Insufficient Information severity:
060053	04/29/2006	A 57 y/o male farm applicator was filling his spray tank and was sprayed in the face via a valve that had not been properly closed. He washed his face immediately. Soon thereafter he became ill with neurological, gastrointestinal and respiratory symptoms. He was taken to the hospital for treatment. Insecticide and fungicide (1 and 4): Calcium polysulfide 1 Possible severity: Moderate

Case	Exposure Date	Incident Description
060056	05/10/2006	A 62 y/o female bus driver reported she was drifted upon from an orchard application as she drove down a driveway to deliver children to a day care. The driveway had orchard extending along both sides. She reported neurological and respiratory symptoms. She sought medical care seven days later for lingering respiratory symptoms. No children were ill as windows were closed where children were seated. Insecticide and other: Carbaryl (ANSI) 1 Possible severity: Low/Mild
060057	05/16/2006	A female age 79 and male age 54 had ocular, respiratory and neurological symptoms after an aerial application occurred close to their home. They did not seek medical treatment. Foliage samples collected by WSDA found no residues on complainant's property and only a trace (unquantifiable) of the active ingredient was found on right of way adjacent to their property. Herbicide/algicide: Quizalofop-ethyl 2 Possible severity: (2) Low/Mild
060059	05/01/2006	A 42 y/o orchard manager reported dermal symptoms after working on a sprayer. He reported he had his hands in axle grease that may have been contaminated with any number of products including lime-sulfur. When symptoms did not resolve he sought health care. 1 Possible severity: Low/Mild
060062	04/27/2006	A 27 y/o male spraying apples reported he developed neurological, cardiovascular, gastrointestinal and respiratory symptoms. He sought medical care the same day. The Department of Labor and Industries (DOSH) investigated. Insecticide (excluding solely IGR and fumigants): Mineral oil - includes paraffin oil from 063503 Insecticide and fungicide (1 and 4): Calcium polysulfide 1 Probable severity: Low/Mild
060064	05/15/2006	Two brothers, ages 8 and 12, developed a rash and puffiness on face after playing on lawn 30 minutes after treatment with weed & feed product. One child was taken to MD. Symptoms were also consistent with seasonal allergies. Product label required that product be watered in and that grass dry before allowing contact with treated grass. This was not done. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; Dimethylamine 2-(2-methyl-4-chlorophenoxy)propionate 1 Probable severity: Low/Mild
060065	05/18/2006	A 47 y/o male reported he discharged a "bug bomb" in a storage shed at his residence, but when he went to leave he could not open the door. It took him several minutes to exit the shed. When he exited he had neurological, gastrointestinal and respiratory symptoms. His wife called 911 and he was evaluated at home. He was transported to the ER by his wife, but was basically asymptomatic by the time he arrived. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060068	05/04/2006	A 46 y/o male had an allergic-type dermal reaction after wearing coveralls that were possibly contaminated with insecticide residue. The crew area had been treated that day and he took the coveralls on the top. He developed a dermal reaction where his skin was in contact with the coveralls. He sought medical care and symptoms resolved after 9 days. He missed 2 days from work. Insecticide (excluding solely IGR and fumigants): Cyfluthrin 1 Probable severity: Low/Mild
060069	05/09/2006	A 45 y/o female apple thinner at a fruit tree nursery reported smelling an aerial herbicide application to an adjacent wheat field. Within thirty minutes she developed respiratory, neurological, gastrointestinal and other symptoms. She sought medical care within the hour. She returned to work the next day. She told her health provider that the other workers were on break at the time of the incident. Herbicide/algicide: Bromoxynil octanoate, Carfentrazone-ethyl 1 Possible severity: Low/Mild
060070	05/08/2006	A 30 y/o spraying weeds in an apple orchard turned off the tractor, removed goggles and went to pull a stick from the spray boom. While doing so he received an ocular exposure and a foreign object in the left eye. He sought medical attention the next day for ocular symptoms. Herbicide/algicide: Glyphosate, isopropylamine salt, Dimethylamine 2,4-dichlorophenoxyacetate 1 Probable severity: Low/Mild
060073	05/16/2006	A 20 y/o male working at a golf course was unloading a sprayer from a cart when it dropped. He was wearing sunglasses, but he turned his head when the sprayer dropped and was sprayed in the face when the nozzle discharged. He sought medical care for ocular symptoms. Herbicide/algicide: Acetic acid, (2,4-dichlorophenoxy)-, 2-ethylhexyl ester; Bromacil (ANSI) 1 Definite severity: Low/Mild
060074	05/18/2006	A 9 y/o child applied the product to himself to repel mosquitoes. He apparently did not understand that the product was not intended for use on humans. He had respiratory and dermal symptoms and was taken for medical care. 1 Possible severity: Low/Mild
060076	05/24/2006	A 36 y/o male pest control operator suffered an eye exposure when the backpack sprayer fell over and discharged in the back of the truck. He experienced ocular and dermal symptoms in one eye and flushed his eye. When symptoms did not resolve he sought medical care. He was not wearing PPE as he had not started to spray. Insecticide (excluding solely IGR and fumigants): Deltamethrin 1 Possible severity: Low/Mild
060081	05/27/2006	A 35 y/o male experienced a dermal exposure to his back from a leaking backpack sprayer while applying an herbicide at his grandfather's residence. He washed his back immediately, but had mild dermal symptoms and sought medical consultation as he had minor surgery on his back one month previous. He was treated and released. Unknown: Glyphosate, isopropylamine salt 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060082	05/28/2006	An 18 m/o boy was found with neurological symptoms in the living room shortly after his grandmother sprayed an aerosol insecticide in kitchen for 20 minutes. Child had been present in kitchen during the application. Child was taken to Urgent Care and improved with oxygen. DOH provide educational material regarding pesticide safety and IPM for ant control. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI); Imiprothrin 1 Probable severity: Low/Mild
060088	05/31/2006	A 12 m/o female pulled ant bait out of a cupboard and began to eat it. It had been placed there by a PCO. She then began vomiting and crying as if in pain. She was taken to the ER. She had diarrhea later that evening. The mother said she has asked that the baits not be placed in their home. Insecticide (excluding solely IGR and fumigants): Borax (B4Na2O7.10H2O) (1303-96-4) 1 Possible severity: Low/Mild
060091	05/17/2006	A 56 y/o female kindergarten teacher reported smelling herbicide odors as she walked from parking lot to the school building. The odor permeated her classroom which was about 25-30 feet from the treated area. Within 45 minutes she reported neurological, ocular and respiratory symptoms. She left school early and sought medical care the next day. WSDA investigated and all notification requirements had been met. There were no other reports of illness. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dichlorophenoxyacetic acid, 2,4- 1 Possible severity: Moderate
060092	05/22/2006	A 36 y/o male real estate agent developed ocular symptoms while applying a weed and feed product around a building. Wind blew product into his eye. He sought medical care. No PPE was used. Herbicide/algicide: Dicamba, dimethylamine salt; Mecoprop-P; 2,4-dichlorophenoxyacetic acid 1 Definite severity: Low/Mild
060093	05/24/2006	A 32 y/o male applicator spraying apples developed ocular symptoms when the spray entered through the openings on the right side of what he described as goggles. It appears he wore all label-required PPE. He continued to spray for the next two days, but symptoms worsened and he sought medical care. He missed 3-4 days work and reported some visual disturbance lingering for at least two weeks post exposure. Fungicide: Pyraclostrobin; Boscalid Insecticide (excluding solely IGR and fumigants): Acetamiprid 1 Definite severity: Moderate
060095	06/01/2006	A 2 y/o male drank from a plastic water bottle in his yard which contained an unknown herbicide. The bottle had been brought by a friend to control weeds. The mother saw the child with the bottle up to his mouth and making an expression of dislike. She immediately washed his mouth out, but within 30 minutes he had gastrointestinal symptoms. The child was taken to the local emergency hospital, treated and released. Amount ingested is unknown. The mother reported that the product resembled apple juice in appearance. The mother's friend, who brought the bottle, did not have the original container to provide the exact name of the herbicide. 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060097	06/03/2006	A 6 y/o boy was playing with a friend and ingested an unknown amount of the product. He was taken to the ER for gastrointestinal symptoms. He was discharged the next day. Educational information was provided to the family. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Metaldehyde 1 Possible severity: Low/Mild
060098	06/07/2006	A 48 y/o female was transferring an herbicide from an applicator that was not working to another at her residence, when it splashed into both eyes. She experienced ocular symptoms and sought medical treatment. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Definite severity: Low/Mild
060101	05/23/2006	A 42 y/o male applying to apples reported respiratory, facial dermal and ocular symptoms while spraying. He sought medical care three days later. He reported wearing more than label required PPE. However, he reported feeling the spray with wind shifts. One of four products used has a label "Warning" for substantial but temporary eye injury and requires use of protective eyewear. He wore safety glasses rather then goggles which may have permitted entry of products at side of glasses. Fungicide: Trifloxystrobin Insecticide (excluding solely IGR and fumigants): Novaluron Insecticide and other: Carbaryl (ANSI) Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Potassium 1-naphthaleneacetate 1 Probable severity: Low/Mild
060102	06/13/2006	A 50 y/o male placed Elimite Scabies cream in his eyes because he thought there were scabies in his eyes. He left cream in for 2 hours and then went to ER for eye irritation. This was contrary to instructions for Elimite. Patient received education, treatment and was released. Unknown: Permethrin, mixed cis,trans (ANSI) 1 Probable severity: Low/Mild
060103	05/18/2006	A 39 y/o female corrections recreation officer was out in the recreational yard when the area adjacent and exterior to the fence was being sprayed for weeds. While in the yard she began to have dermal and respiratory symptoms prior to knowing that the application was taking place. She did not recall a pesticide odor or exposure to spray mist. She had similar symptoms the next day when they sprayed a different area. She sought medical care several days later when symptoms did not dissipate. Herbicide/algicide: Sulfentrazone, Glyphosate, isopropylamine salt 1 Possible severity: Low/Mild
060111	06/05/2006	A 20 y/o female student in college horticulture class received drip of insecticidal soap in eyes while spraying hanging baskets. She developed ocular symptoms in and around her right eye and sought health care the following day. DOH spoke with her teacher who said that she had not worn gloves or goggles per school policy. He planned to use this as a teaching case so that students can understand even insecticidal soap can be hazardous. Insecticide (excluding solely IGR and fumigants): Potassium salts of fatty acids 1 Probable severity: Low/Mild

Case	Exposure Date	Incident Description
060113	06/22/2006	A 26 y/o female garden shop employee for a retail store experienced an accidental facial exposure to dust from a slug control product. She sought medical care the same day for mild respiratory and neurological symptoms. Patient lost to follow-up. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Metaldehyde 1 Possible severity: Low/Mild
060114	06/22/2006	A 60 y/o male working in his open garage reported symptoms after smelling an herbicide application being conducted on field across the road from his home. He was taken to hospital shortly after by his spouse. He was taken to the decontamination facility and then examined. He was treated and released. WSDA residue and vegetation samples taken from the patient's home yard four days post application did not detect measurable residues for herbicides reported. WSDA also reported that growing points and new leaves on a grape plant showed no herbicide symptoms. The irritant symptoms he experienced are plausible with reported exposure, but systemic symptoms are not consistent for this type of exposure. Approximately three weeks after the above incident and while picking berries in his yard the patient reported having symptoms again, was taken to the hospital, examined and released. Herbicide/algicide: Clopyralid (ANSI); MCPA, 2-ethylhexyl ester 1 Possible severity: Low/Mild
060118	06/19/2006	A 52 y/o male was sprayed in mouth and face when he moved a plug on the side of his spray handle during an application to blackberry bushes. He ran into his house and showered immediately. The GI symptoms began within about two hours. He consulted with HCP over phone but was not seen. The symptoms resolved in three days. Herbicide/algicide: Butoxyethyl 2,4-dichlorophenoxyacetate; Butoxyethyl triclopyr 1 Possible severity: Low/Mild
060119	06/29/2006	A 40 y/o male aerial applicator noticed fumes from the product he was applying. The spray apparatus developed a minor leak under the fuselage and allowed the fumes to come into the cockpit. He put on a respirator and continued to apply until early afternoon with no symptoms. After he landed he went to town to obtain parts and supplies and while doing so developed neurological and respiratory symptoms. He drove himself to the hospital for medical care. Insecticide (excluding solely IGR and fumigants): Dimethoate (ANSI) 1 Possible severity: Moderate
060125	06/13/2006	A 36 y/o grape applicator reports that after turning on the air conditioner in the cab of the tractor he could smell the pesticide and became ill. He initially reported gastrointestinal, ocular and respiratory symptoms. He sought medical are eight days later for increasing respiratory symptoms. Fungicide: Quinoxyfen, Cyprodinil (Proposed common name) Insecticide (excluding solely IGR and fumigants): Petroleum distillate, oils, solvent, or hydrocarbons; also paraffinic hydrocarbons, aliphatic hydrocarbons, paraffinic oil 1 Probable severity: High/Severe
060126	06/07/2006	A 24 y/o male spraying cherries reported ocular symptoms in the left eye about two hours into the day's application. The next day he sought medical care. He reports wearing all required PPE. However, his goggles would get wet when he turned at end of rows, but does not recall specific exposure. Fungicide: Triflumizole Insecticide (excluding solely IGR and fumigants): Endosulfan (ANSI) Insecticide and other: Carbaryl (ANSI) 1 Probable severity: Low/Mild

Case	Exposure Date	Incident Description
060127	06/01/2006	A 48 y/o female nurse working in a convalescent center walked by a room that had just been treated with an aerosol insecticide. She could smell the product. Within two hours she began to have respiratory symptoms. Later that evening her symptoms worsened and she was taken to the ER. Insecticide (excluding solely IGR and fumigants): Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Possible severity: Low/Mild
060128	07/03/2006	A 5 y/o female played in plastic playhouse in grandmother's yard 1-2 hours after it was sprayed for a wasp nest. The playhouse had not been wiped down before the child arrived. The child developed ocular symptoms to both eyes. The symptoms consistent with allergic reaction to wasp spray or other compounds in yard. She was examined at an ER. Insecticide (excluding solely IGR and fumigants): Lambda-cyhalothrin; Prallethrin 1 Possible severity: Low/Mild
060131	07/04/2006	A 18 m/o male found a non-aerosol container of an RTU spray at his grandmother's home and squirted himself in the face with product found in the bathroom. They washed his face and flushed his eyes. He had some mild ocular symptoms continuing the next day and was taken to the ER. Insecticide (excluding solely IGR and fumigants): Bifenthrin (ANSI) 1 Possible severity: Low/Mild
060133	06/30/2006	A 52 y/o female homeowner was outside and could feel the spray mist from aerial application to adjacent lentil field. She then video taped the application as it was made to the field and drifted over her property. She reported neurological, respiratory, and ocular symptoms. No medical care was sought. WSDA took samples from the homeowner's property that were positive for the product being applied. Insecticide (excluding solely IGR and fumigants): Dimethoate (ANSI) 1 Probable severity: Low/Mild
060135	07/01/2006	A 48 y/o female and a 47 y/o male reported five days post-application to the EPA that an aerial application had been made in early morning to a pea field adjacent to their property. They reported aerial drift onto their home and both individuals reported symptoms. The windows of the house were open and they could smell the application. A few hours later they mowed the grass and worked in the yard adjacent to the treated field. The woman reported symptoms, which may have also exacerbated under lying conditions, and sought medical care. Combinations of general, neurological, gastrointestinal, ocular and respiratory symptoms were reported, some of which were atypical for the pesticide. WSDA investigated and took action. Insecticide (excluding solely IGR and fumigants): Dimethoate (ANSI) 1 Probable severity: Moderate 1 Possible severity: Low/Mild
060136	07/05/2006	A 26 y/o male was drifted upon by an aerial application while on the porch of his house and in his yard. Shortly thereafter he had ocular and respiratory symptoms. No medical care was sought. WSDA investigated and residue samples from complainant's home were positive for chemical applied. Insecticide (excluding solely IGR and fumigants): Malathion (ANSI) 1 Probable severity: Low/Mild

Case	Exposure Date	Incident Description
060137	06/21/2006	A 21 y/o cherry picker reported ocular symptoms which he thought were related to an application occurring in orchard area 200 feet away. He reported neither feeling nor smelling the application. He sought medical care two days later. Management reports that they had instructed picker to leave the orchard two hours prior to the application and were not aware that the worker reentered the orchard. There were no other reports of illness. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Spinosad (proposed common name for FactorA+FactorD) (110003+110004) 1 Probable severity: Low/Mild
060138	05/15/2006	A 30 y/o male applicator sought treatment for respiratory and neurological symptoms that developed while spraying. He had also handled a carbaryl product in the past week. All PPE was worn except he occasionally took off the respirator and mask as it interfered with his breathing. He sought medical care in Oregon and limited medical records were obtained. Insect Growth Regulator (IGR): Prohexadione calcium 1 Possible severity: Low/Mild
060139	06/27/2006	A 31 y/o female spread an herbicide in powder form with her bare hands. Later that evening she had neurological and dermal symptoms. She repeated the application again with bare hands two weeks later and was seen two days later by a health care provider. Another adult confirmed the applications. Educational / prevention information was provided. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; Dimethylamine 2-(2-methyl-4-chlorophenoxy)propionate 1 Possible severity: Low/Mild
060141	07/10/2006	A physician reported a case to DOH involving a 33 y/o male landscaper. He developed temporary dermal and systemic symptoms after working 1.5 hours in a yard that had just been sprayed. The plants were still dripping with pesticide and he wore no gloves. He did not see any posted sign at the site. Investigation revealed the yard had been treated by a professional service. He called his doctor for advice but was not medically evaluated. Symptoms resolved in 24 hours. The landscaper did not want to pursue and file complaint with WSDA. DOH did discuss the general nature of the case with WSDA. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide Insecticide and fungicide (1 and 4): Sulfur 1 Possible severity: Low/Mild
060144	06/29/2006	A 35 y/o male apple thinner reported to his health care provider respiratory symptoms with thoracic muscle pain. He had been picking up ladders in an orchard he said was sprayed the day previous. He also had potential for dust and/or residue exposure from the orchard they were thinning. The employee reported leaves were covered with dust and other thinners were coughing. L&I investigated and reported that the orchard foreman said ladders were brought by trailer to the shop each night and that the employee had experienced an injury several days previous while trying to move an apple bin. The crew foreman also reported no other employees reported any illnesses. L&I investigation concluded there was no substantiated exposure to pesticide residues prior to the end of the re-entry interval. Insecticide (excluding solely IGR and fumigants): Lambda-cyhalothrin, Acetamiprid 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060145	06/06/2006	A 49 y/o male farm worker was unloading a plastic 50-gallon drum of pesticide when it fell. Breakage occurred and he was splashed in the face and right eye. He immediately washed his face and flushed his eyes. He was not wearing PPE at the time as they were moving the containers and not mixing/loading or applying. Later that day he sprayed the product without incident. Three days later he awoke with eye irritation and sought medical care. Herbicide/algicide: Paraquat dichloride 1 Probable severity: Low/Mild
060146	07/15/2006	A 69 y/o male dropped plastic bottle of moss killer while cleaning his back yard shed. The bottle broke and he was splashed with concentrate. He rinsed eye immediately and sought health care for eye symptoms. The symptoms resolved in a few days. Herbicide/algicide: Zinc chloride 1 Definite severity: Low/Mild
060148	06/15/2006	A 46 y/o unlicensed male breathed in fumes of spray of a restricted use product. He was driving a tractor over a 6 week period. He may not have been using his respirator and sought medical care for respiratory and cardiac symptoms. Herbicide/algicide: Paraquat dichloride 1 Possible severity: Low/Mild
060149	06/10/2006	A 32 y/o male was mixing/loading/applying herbicide when a drop splashed up and entered his right eye. He had persistent eye problems and visited doctor one month later. He was not wearing eye protection at the time and the label does not require it. Herbicide/algicide: Glyphosate, isopropylamine salt; Glyphosate, monoammonium salt 1 Possible severity: Low/Mild
060150	07/22/2006	A 41 y/o female found that a herbicide had leaked from its container into a bucket in her garage. The fumes were strong and some contacted her hands. She had neurological and respiratory symptoms and sought medical care the same day. Educational materials were provided. Herbicide/algicide: Glyphosate, isopropylamine salt; Diquat dibromide; Imazapic, ammonium salt 1 Possible severity: Low/Mild
060155	07/24/2006	A 28 y/o male was helping an older friend spray a wasp's nest on his roof. He wore netting over his head and had a bandana around his fore head. The spray came down on his head, soaked the bandana and he developed dermal, respiratory, ocular and neurological symptoms. Insecticide (excluding solely IGR and fumigants): Tetramethrin (ANSI); Sumithrun 1 Probable severity: Low/Mild
060156	07/16/2006	A 52 y/o female with a history of asthma and a friend were spraying knapweed near her home. She walked In front and to the side of the tractor that her friend was driving. She used a wand that was attached to tank on the front of the tractor. At the same time the friend activated a spray from the rear tank. She wore no PPE, applied for 2-3 hours, and at one point the wand flipped and sprayed her on the lower part of her face. She developed respiratory, gastrointestinal and neurological symptoms; sought medical care and missed 3 days work. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; Clopyralid (ANSI); Monosodium methane arsonate (MSMA), Glyphosate, isopropylamine salt; Imazapyr, isopropylamine salt 1 Probable severity: Moderate

Case	Exposure Date	Incident Description
060158	07/10/2006	A 41 y/o male was spraying ants in his apartment and some of the spray went into his cup of coffee. He drank all of the coffee, could taste the chemicals and then developed gastrointestinal symptoms. He sought medical care one week later due to continuing to be ill. He also was known to drink well water but all testing of biologic samples was negative. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI) 1 Possible severity: Low/Mild
060159	07/22/2006	A 64 y/o female homeowner applied the product by holding her hand and arm vertically over her head. She thought she was spraying a foam that would stick to the roof and so she tipped the can to spray it. The liquid material ran down her arm. Her husband witnessed this and said that then she did not change her clothes. They ate dinner and she went to bed. The next morning while her husband was away she had respiratory symptoms and called 911. The EMTs found her unresponsive, took her to the hospital, and she expired 9 days later. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Possible severity: Death occurred
060165	07/25/2006	A 62 y/o male wore an equipment strap that had been previously contaminated with a moss killer concentrate. The container had tipped over in his garden shed & the product had leaked out. At 30 minutes after exposure he began to experience dermal symptoms. He developed a chemical burn where the strap rested on his back. He was seen by his health care provider and symptoms resolved in several weeks. Unknown: Sodium hypochlorite 1 Definite severity: Moderate
060169	04/19/2006	A 55 y/o truck driver was exposed when a herbicide shipping container leaked in his truck. He had herbicide on clothing, skin and breathed volatiles. He developed brief systemic symptoms. He sought health care the same day but the symptoms had largely resolved by the visit. Herbicide/algicide: EPTC 1 Possible severity: Low/Mild
060171	08/02/2006	A 56 y/o female set off two foggers in her small home. She covered all food & kitchen counters, but did not cover the furniture, including her bed. Soon after returning to air out the home, she began to develop neurological, ocular, gastrointestinal and renal symptoms. She sought medical care 3 days after the exposure. She was diagnosed with pneumonia with related respiratory symptoms. Insecticide (excluding solely IGR and fumigants): Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Possible severity: Moderate
060173	06/19/2006	A 62 y/o female clinic employee came to work at 6:00 AM and upon entering the basement where she worked she began to have neurological and respiratory symptoms. She initially saw her own HCP and then was referred to an allergist. Two products had been used the night before and both the windows and ventilation system were closed. Insecticide (excluding solely IGR and fumigants): Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl d-trans-2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate, 2-; Phenothrin, D-, Bifenthrin (ANSI) 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060174	04/10/2006	A 59 y/o female health professional with preexisting asthma had respiratory symptoms after disinfectant was sprayed by another worker to kill ants. She sought medical care the next day. Disinfectant/broad spectrum for water sanitation: Alkyl* dimethyl benzyl ammonium chloride*(58%C14, 28%C16, 14%C12) 1 Probable severity: Low/Mild
060181	05/19/2006	Two or more tribal staff were present when a container of one or more pesticides spilled while being moved. This occurred in a hallway of an office. A 34 y/o female had neurological, gastrointestinal, ocular and respiratory symptoms. She went home and returned to work 4 days later and again became ill. She went to the clinic. A 51 y/o male was directed 3 days after the spill to clean it up. He used a window cleaner in a spray bottle in order to dilute and wipe up the materials. He had neurological and gastrointestinal symptoms and also sought medical care. The NW Washington Indian Health Board was asked to clean up the spill. Prevention in terms of safe storage and transportation was discussed with the cases and their supervisor. Unknown: Malathion (ANSI) 1 Probable severity: Moderate 1 Possible severity: Low/Mild
060182	07/05/2006	A 35 y/o male was assigned to spray weeds outside low cost housing. As he hoisted the backpack onto his shoulders, it leaked onto his shoulders and back. He went home and showered. He developed dermal symptoms and sought medical care. Herbicide/algicide: Acetic acid, (2,4-dichlorophenoxy)-, 2-ethylhexyl ester; Bromacil (ANSI) 1 Possible severity: Low/Mild
060184	06/28/2006	A 34 y/o female apple thinner reported the occurrence of dermal symptoms at work. The orchard grass had been sprayed with an herbicide 2-5 days previous to onset of symptoms. The re-entry requirements had been met. The worker sought medical care three days later when symptoms did not resolve. Herbicide and Fungicide (03 & 04): Paraquat dichloride 1 Probable severity: Low/Mild
060188	08/16/2006	A 48 y/o male PCO was separately applying liquid and dust formulations of the products. The wind blew into his face causing the dust to block his mask. He took the mask off, then sprayed the third product, and the spray contacted his face. He went home to shower and then went to the ER with respiratory, cardiovascular and neurological symptoms. He had a concurrent infection. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide; N-octylbicycloheptene dicarboximide, Allethrin, d-; Phenothrin, D-, Deltamethrin 1 Probable severity: Low/Mild
060190	07/21/2006	A 42 y/o male apple applicator was cleaning a sprayer nozzle of debris when he accidentally sprayed his right eye. He was wearing recommended PPE, including safety glasses, but spray went underneath eye protection. He went to clinic several days later and was treated for ocular symptoms. Insecticide and fungicide (1 and 4): Kaolin 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060191	07/25/2006	A 33 y/o male landscaping employee was applying pesticides during the day and felt the spray come through his dust mask. He did not use any eye protection. He developed respiratory, dermal, neurological, and ocular symptoms. He sought medical care and was treated for the exposure as well as back strain. He was off work for one week. Herbicide/algicide: Butoxyethyl 2,4-dichlorophenoxyacetate; Butoxyethyl triclopyr, Glyphosate, isopropylamine salt 1 Probable severity: Low/Mild
060192	08/16/2006	A 51 y/o male security guard was drifted upon the forearm while standing out side a roadside barricade building during an exterior application to the building. He initially reported some mild dermal symptoms to his arm. Later that night he had an onset of neurological, dermal, respiratory and gastrointestinal symptoms. He sought medical care the next day. Shortly after the dermal exposure he opened the barricade building and aired it out for approximately 10 minutes. Second set of symptoms are atypical for the dermal exposure reported. Another worker, who was not near the application reported being ill with similar symptoms for the same evening. Insecticide (excluding solely IGR and fumigants): Cyfluthrin, Esfenvalerate 1 Possible severity: Low/Mild
060193	08/19/2006	A 11 y/o boy was standing in the doorway spraying up at a wasp's nest when the wind blew up and the spray hit his face. He began to have respiratory, ocular and gastrointestinal symptoms. He was taken to the ER. Insecticide (excluding solely IGR and fumigants): Tetramethrin (ANSI); Sumithrun 1 Possible severity: Low/Mild
060194	08/19/2006	A 22 y/o female homeowner was spraying weeds when the wind came through and the spray went into her eyes. She had dermal and ocular symptoms and sought medical care. Herbicide/algicide: Glyphosate, isopropylamine salt; Triclopyr 1 Probable severity: Low/Mild
060196	08/22/2006	A 28 y/o male spraying apples sought medical care for ocular symptoms. The product splashed up while mixing/loading the sprayer. He reported wearing protective eye wear but said the splash came over the top of his goggles. Insecticide (excluding solely IGR and fumigants): Fenpyroximate 1 Probable severity: Low/Mild
060197	08/23/2006	Two 36 y/o male lumberyard employees were moving a wood pallet and were exposed when an aerosol can fell off the fork lift. It was punctured on the gravel when it fell. Both of them had neurological, gastrointestinal and respiratory symptoms. They sought medical care the same day and returned to work. Insecticide (excluding solely IGR and fumigants): Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl d-trans-2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate, 2-; Tralomethrin (ANSI) 2 Possible severity: (2) Low/Mild
060198	08/24/2006	A 64 y/o female had inhalation exposure to insecticide fogger when the can malfunctioned. She developed immediate respiratory distress and called 911. Her symptoms began resolving with fresh air and EMT aid. She was not transported to hospital. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060200	08/05/2006	A ground application was made to an apple orchard adjacent to where two female apple thinners ages 34 and 29 were working. The women developed gastrointestinal and neurological symptoms and sought medical care. They were told to avoid further exposures and to not return that day to work. Four efforts were made to obtain spray records and they were received in April 2007. Insecticide (excluding solely IGR and fumigants): Azinphos-Methyl, Bacillus thuringiensis subsp. kurstaki, Imidacloprid 2 Possible severity: (2) Low/Mild
060201	06/25/2006	A 28 y/o male applicator was spraying apples for mildew and described the chemicals got into his eye. He sought health care 2 days later for ocular, neurological and respiratory symptoms. He also was seen again 2 days later and was referred to an eye specialist. Fungicide: Triadimefon 1 Probable severity: Low/Mild
060202	08/20/2006	An adult female experienced multiple systemic symptoms after her neighbor applied herbicide to adjacent property. She did not seek health care, but did ask DOH and WSDA to come to her house and document the problem. Odor was still noticeable one week after application (person is sensitive to pesticides and other chemicals). Neighbor is absentee landlord and could not be reached. WSDA did not cite for drift since no plant damage was apparent. 1 Probable severity: Moderate
060205	08/16/2006	A 44 y/o police officer and 56 y/o fireman were dispatched together to an emergency intentional exposure at a residence. They reported that the interior incident location and patient had a very strong insecticidal smell. According to information provide by the responders the product involved came from an older looking container. They were able to identify the ingredient of the bottle to poison control as Dimethoate. Both responders reported mild dermal symptoms of short duration and were seen by health care providers. WPC was contacted regarding the intentional exposure. Unknown: Dimethoate (ANSI) 1 Possible severity: Low/Mild 1 Insufficient Information severity:
060208	09/01/2006	A 54 y/o arborist developed mild systemic symptoms after using a tree injection system to treat trees. He smelled insecticide briefly. It was a highly concentrated organophosphate. He sought HCP the next day but symptoms were resolved. He was not a licensed applicator and information was provided on licensing requirements. Insecticide (excluding solely IGR and fumigants): Dicrotophos 1 Possible severity: Low/Mild
060210	08/17/2006	A 47 y/o female developed respiratory and systemic symptoms after clearing weeds from a lawn. She treated herself. She sought medical attention at ER one week later. Ten days after exposure, she developed dermal symptoms and allergic reaction that progressed to point that she required hospitalization. Allergic symptoms may not be related. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; MCPP, Dimethylamine Salt, Ferrous sulfate monohydrate 1 Possible severity: Moderate

Case	Exposure Date	Incident Description
060214	08/10/2006	A 53 y/o female nursery worker developed dermal and systemic symptoms after working in a greenhouse before the re-entry interval had expired. She sought health care five days after her exposure for persistent symptoms. The green house had not been posted so she was not aware it had been sprayed. WSDA and L&I co-investigated. The employer was cited for WPS violations. Insecticide (excluding solely IGR and fumigants): Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Possible severity: Low/Mild
060215	08/18/2006	An 18 y/o male doing grounds maintenance at an industrial site was exposed to herbicide when wind blew his spray back into his face. He saw doctor the same day. The symptoms were mild. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Probable severity: Low/Mild
060216	09/09/2006	A 2 y/o male picked up a bottle of herbicide and squirted some in his eye. He complained that his eye hurt and he cried. His parents took him to ER because they were not sure the eye wash at home was sufficient. Symptoms resolved quickly. Family was sent material about keeping pesticides out of reach of children. Unknown: Glyphosate, isopropylamine salt 1 Possible severity: Low/Mild
060220	06/18/2006	Adult employees of a Washington State office complained of mild symptoms after strong interior odors were observed from an application to the exterior of the building for insects. The building was evacuated and aired out. The odor was carried via the air conditioning units to the building interior. DOH was able to contact only six persons, although multiple attempts were made to contact others. Five complained of mild symptoms which dissipated in hours. No health care was sought by employees DOH interviewed. WSDA investigated the complaint and was unable to detect residues of the product on air filters from the HVAC system or interior building swabs where odor was reported to be quite strong. WSDA did not sample the exterior of the building as it had been washed down prior to there arrival. Insecticide (excluding solely IGR and fumigants): Bifenthrin (ANSI) 4 Possible severity: (4) Low/Mild 1 Insufficient Information severity:
060228	09/08/2006	A 33 y/o male applicator presented at ER complaining of dermal symptoms. He had been applying pesticides to an apple orchard. He wore PPE. Insecticide and other: Carbaryl (ANSI) Other (Includes bilogical controls, plant growth regulators, antibiotics, etc.): Potassium 1-naphthaleneacetate 1 Possible severity: Low/Mild
060233	09/29/2006	A 24 y/o female sprayed an insecticide, fixed lunch, and left the room. She returned to eat and suspected that her 3 y/o son may have sprayed the insecticide in her soup. She suffered neurological and gastrointestinal symptoms within 20 minutes of eating. She went to the ER and was treated for symptoms and released. 1 Possible severity: Low/Mild

Case	Exposure Date	Incident Description
060234	08/31/2006	A 23 y/o male employee of a small farm did not wash hands after applying and prior to using the bathroom. He had dermal symptoms and sought medical care. He could not be located and the employer no longer had the farm. Unknown: Chlorothalonil (ANSI) 1 Probable severity: Low/Mild
060235	09/29/2006	A 21 y/o male employee sprayed two cans of roach and ant killer inside small empty truck for roaches. He then immediately set off 3-4 foggers in the same space. He began to have respiratory, neurological and gastrointestinal problems and was taken to the ER. He had an abnormal EKG and was admitted for one night. He had a history of asthma and unknown exposures while in Iraq. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI); Imiprothrin Insecticide and other: Pyrethrins; Octyl bicycloheptene dicarboximide, N-; Permethrin, mixed cis,trans (ANSI); Pyriproxyfen 1 Probable severity: Moderate
060242	08/16/2006	A 25 y/o male security guard reported that at one of the field security stations that he could smell the pesticide application made earlier in the day. He reported neurological and respiratory symptoms and sought medical care the next day. Insecticide (excluding solely IGR and fumigants): Esfenvalerate 1 Possible severity: Low/Mild
060243	10/04/2006	A 58 y/o female applied product to herself and reported that she left it on for about 1.5 days. She had gastrointestinal and dermal symptoms as well as a fever. She also had multiple preexisting medical problems and sought medical care. Unknown: Permethrin, mixed cis,trans (ANSI) 1 Possible severity: Low/Mild
060244	10/05/2006	A 32 y/o male pest control company employee wore gloves but no goggles or other PPE while cleaning up a mix of spilled pesticide inside a vehicle. He developed dermal, gastrointestinal, and neurological symptoms and sought health care a few days later. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI), Chlorfenapyr 1 Possible severity: Low/Mild
060245	10/08/2006	A 53 y/o female and her husband went to their son's house to do a security check as he was out of town. On entering she could both taste and smell chemicals. She walked to the back of the house and began to have neurological, gastrointestinal, ocular and respiratory symptoms. She observed 2-3 pesticide containers. Her spouse took her to the ER. The bombs had been set off that morning and the house was not ventilated following application. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI) 1 Possible severity: Low/Mild
060249	10/12/2006	A 77 y/o female tenant entered the room in her apartment where her son had set off 2 foggers a few hours earlier. The room had not been ventilated and the window was closed. She immediately began to have respiratory and neurological symptoms and was taken by ambulance to the ER. One fogger was labeled to treat 5000 cubic feet. The room was about 880 cubic feet. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Probable severity: Low/Mild

Case	Exposure Date	Incident Description
060250	10/14/2006	A 6 m/o female was sprayed in face by her 2 y/o brother. The parents flushed out her eyes at home and took the child to the ER for an evaluation. Irritant ocular symptoms resolved by next day. Insecticide and other: Tetrachlorvinphos 1 Definite severity: Low/Mild
060252	10/16/2006	A 22 y/o female used a flea and tick spray product on her dogs. It contained an organophosphate. She thought that she may have had dermal contact although she had washed and showered following the application. She developed gastrointestinal symptoms the next morning. Insecticide and other: Tetrachlorvinphos 1 Possible severity: Low/Mild
060254	09/30/2006	A 22 y/o male nursery worker was spraying and the spray fumes got into his face. He is a licensed applicator. He experienced general, cardiovascular, ocular and dermal symptoms. He was seen at the emergency room the day after his exposure. Fungicide: Mancozeb Insecticide (excluding solely IGR and fumigants): Abamectin (ANSI) 1 Possible severity: Low/Mild
060256	08/15/2006	A 45 y/o male purchased a garden product in early spring 2005. He decide not to use it because it was dangerous and placed the unopened product on his garage shelf. He was unaware that the product fell off the shelf and began leaking for an unknown period of time. In the fall of 2006, when cleaning the garage, he accidentally touched the liquid and subsequently his arm, developing dermal symptoms within the hour even after washing with soap and water. Long term low levels of exposure prior to discovery of leak may have contributed to other symptoms, such as headaches, fatigue and diarrhea. Patient had a medical visit and tests prior to dermal exposure in relation to other symptoms. Fungicide: Calcium polysulfide 1 Possible severity: Low/Mild
060258	09/26/2006	A 55 y/o female was in her home yard when she smelled strong odor from herbicide application at nearby cemetery. She had ocular and respiratory symptoms but did not seek medical attention. Symptoms resolved by next day. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; Dimethylamine 2-(2-methyl-4-chlorophenoxy)propionate; Mecoprop-P, Fluroxypyr 1 Possible severity: Low/Mild
060259	10/19/2006	A 29 y/o male tenant who was apparently previously healthy set off a fogger in his 800-900 sq. foot studio apartment and left for 1.5 hours. The REI was two hours. He opened the windows and turned on the air conditioner. He put on food sanitation gloves to remove the plastic used to cover the furniture. He folded these and placed them on the linoleum floor in the kitchen. His father brought his two cats and dog back to the apartment. His father complained of the strong smell, helped him for a short time, and then left. The tenant developed dermal, neurological, respiratory, gastrointestinal, and ocular symptoms after lying down. He did not have health insurance and did not seek medical care. Both cats became ill and died; the dog vomited. A month later a commercial application of a pyridine product was made. Details of the second application were not made available. Four months after the exposures he was contacted. He continued to have GI symptoms as well as headaches. He now had health insurance and planned to seek medical care. Resources were given to him to share with his provider. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Possible severity: Moderate

Case	Exposure Date	Incident Description
060261	10/24/2006	A 67 y/o female with chronic obstructive pulmonary disease lived in a small first floor apartment that only had windows at the front. She set off a bug bomb in the back & closed the door but did not block the crack below the door. She stayed in the living room at the front with the windows closed. She developed respiratory symptoms. EMS took her to the ER. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Possible severity: Low/Mild
060264	06/14/2006	A 39 y/o male landscaper was driving when a backpack sprayer full of herbicide tipped over in his van. The product leaked out the air release valve. He could smell product for 15 minutes or so before he had a chance to pull over and clean-up the spill. He developed respiratory and systemic symptoms that night, with most symptoms resolving by the next day. He sought health care one week later for respiratory symptoms. DOH discussed prevention with both landscaper and his supervisor. Herbicide/algicide: Glyphosate, isopropylamine salt, Butoxyethyl 2,4-dichlorophenoxyacetate; Triclopyr 1 Possible severity: Low/Mild
060265	11/04/2006	A 55 y/o female was taken to the ER by her husband with ocular and dermal symptoms from using head lice shampoo. She got it in her eyes after applying it on her hair and taking a shower. Unknown: Pyrethrins, Piperonyl butoxide 1 Definite severity: Low/Mild
060266	07/20/2006	A 51 y/o female employee came into the office where the product had been spilled. She had respiratory, neurological, ocular and gastrointestinal symptoms. She sought medical care 3 days later when the symptoms did not resolve. Insecticide (excluding solely IGR and fumigants): Bifenthrin (ANSI) 1 Possible severity: Moderate
060267	11/08/2006	A 75 y/o male was taken to the ER five days post exposure for gastro-intestinal, respiratory and neurological symptoms. He had applied aluminum phospide at his own residence and did not wear PPE. Unknown: Aluminum phosphide 1 Possible severity: Moderate
060272	09/01/2006	An 80 y/o retired man burned treated wood in his home fireplace insert. He knew it was hazardous, so he went outside to avoid the effects. He came back in house and inhaled invisible fumes, suffering neurological effects (headaches). He called WPC and was advised to seek medical care. Unknown: Copper Oxide, Chromic Acid, Arsenic Pentoxide 1 Possible severity: Low/Mild
060273	11/16/2006	A 44 y/o male fell into water while protesting application of pesticides to lake by a government agency. He changed his clothes and rinsed his eyes but 30 minutes later developed burning in eyes and throat. He sought medical attention and was discharged the same day. Three agencies, WSDA, Fish & Wildlife and Ecology, were involved in the incident. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Rotenone 1 Probable severity: Low/Mild

Case	Exposure Date	Incident Description
060275	11/02/2006	Two male farmworkers, ages 30 and 41, while spraying weeds attempted to fix the nozzles on sprayer when the hose detached and they were sprayed. They developed eye and skin irritation. Both washed immediately and sought medical treatment the same day. Herbicide/algicide: Glyphosate, isopropylamine salt 2 Possible severity: (2) Low/Mild
060278	11/14/2006	A 33 y/o male applicator sought medical care for dermal symptoms from exposure while spraying an insecticide. Product contacted his hand and he then accidentally rubbed his face. Sought medical care the same day. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Possible severity: Low/Mild
060279	11/28/2006	An 84 y/o female with hypertension and a history of dizziness and weakness was exposed for two weeks to 28 ounces of moth balls. They had been placed under her trailer by an unlicensed laborer to repel raccoons. A family member entered her home, found the odor to be very strong and the homeowner ill with neurological and respiratory symptoms. She was removed from her home and taken for medical care the next day. Scientific information was given to the health care provider and prevention literature was sent to family members. The family was contacted 4 weeks later and said that the woman was much improved. The residual of the product was cleared out and an air purifier was activated in her home. Insecticide (excluding solely IGR and fumigants): Naphthalene 1 Possible severity: Moderate
060280	12/14/2006	A 56 y/o female set off a fogger in one end of her mobile home. It malfunctioned and sprayed into her face. She then set off a 2nd fogger in the other end of her home. Some of the spray from that fogger went onto her hands and she may have gone into the kitchen to wash before exiting the premises. Within 15 minutes she had respiratory, neurological, and dermal symptoms. She returned 3 hours later and her symptoms worsened. She sought medical care, was followed for 5 weeks, and then was referred to a pulmonologist. The first health care provider recommended that she live elsewhere on a temporary basis. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Probable severity: Moderate
060282	12/20/2006	A mother was applying head lice shampoo to the head of her 7 y/o boy. The shampoo washed into his eyes. He was taken to the hospital with complaint of burning eyes. Unknown: Pyrethrins, Piperonyl butoxide 1 Definite severity: Low/Mild
060283	12/23/2006	A 62 y/o male with a history of asthma saw a cockroach in his apartment. The spray he wanted to use was empty. He then used a fogger as an aerosol and sprayed the roach. He immediately experienced neurological and respiratory problems and sought his next door neighbor for help. He went to hospital, was examined and released. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Definite severity: Moderate

Washington State Department of Labor and Industries

Summary of Pesticide Inspections, 2006

City, County Inspection # region	Pesticides Involved	#of Employees	How exposed	Other agencies involved	Incident date	Compliant date	Inspection date (opened) (closed)	Citations/costs	Type of inspection	Type of Business
Orting Pierce 309238483	Chlorpyrifos Lorsban Thionex 50W	15		WSDA T013-2005			8/18/05 1/26/06	**Failure to Abate Citations:** No respiratory protection program $1250.00 No Respirator fittest $1250.00 Not effective Respirator training $1250.00 **General Citations:** Employer did not certify that violations had been abated $100.00 **Penalties Assessed** $3,850.00	Follow-up 307863548	Vegetables and Melons
La Center Clark County 310108188	Herbicide or pesticides	10	Mixing and application				6/23/2006 8/14/2006	**Failure to Abate Citations :** Accident Prevention Program did not	Follow-up 306710054	Raspberry/ blueberry

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								address pesticide hazards: $1000.00 No written Haz Com Program: $500.00 No MSDS for Pesticide and herbicides: $500.00 **Serious Citation**: No emergency eye wash: $100.00 **General Citations:** No medical evaluation for respirator program No written respiratory program No respirator fit test **Penalties**		

Washington State Department of Labor and Industries

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								Assessed $2100.00		
Yakima Yakima County 310283635	Pesticide Organophosphate Carbamate	10		WSDA			8/23/2006 11/15/2006	**Serious Citations:** No fit testing of respirator: $750.00 **General Citations:** No APP No safety meetings No toilet facilities for pesticide handlers No Written Hazard Communication program No Written Respiratory Protection Program for certified pesticide applicators No training on how to store respirators	Referral	Orchard Apples

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								Penalties Assessed $750.00		
Wenatchee Chelan County 310003215	Fungicide Miticide	25	Spraying pesticide	DOH AG	5/29/06		6/16/2006 12/31/2006	**Serious Citations:** No fit testing of respirators for pesticide handlers: $300 No medical evaluations for respirators users: $300.00 **Penalties Assessed $600.00**	Referral	Orchard
Mattwa Grant County 309998144	Lorsban Success Guthion Assail	35	Mixing and spraying				5/18/2006 7/20/2006	**Serious Citations:** The employer didn't ensure employees wore chemical resistant headgear: $1500.00 No emergency	Referral	Apple Orchard and Fruit packing

Washington State Department of Labor and Industries

Summary of Pesticide Inspections, 2006

City, County Inspection # region	Pesticides Involved	#of Employees	How exposed	Other agencies involved	Incident date	Compliant date	Inspection date (opened) (closed)	Citations/costs	Type of inspection	Type of Business
								eyewash:$1500.00 **Penalties Assessed $3000.00**		
Snohomish Snohomish County 310341284	Dursban	122	Entered the nursery before the pesticide had dried on the plants which was prohibited by the label				10/12/2006 12/20/2006	**Serious Citations:** Pesticide was not applied according to the label: $500.00 **General Citations:** No training for pesticide handlers before exposure **Penalties Assessed$500.00**	Referral	Plant nursery
Bingen Klickitat County 310134119	Pesticide Ethoxyquin fungicide Fungicides Thiabendazole Mertect	250	During application			7/13/2006	8/9/2006 12/13/2006	**Serious Citations:** No annual fit test for respirator: $500.00 No Emergency eyewash:$250.00	Complaint	Fruit packing and storage

Washington State Department of Labor and Industries

Summary of Pesticide Inspections, 2006

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	Pnebotec 400 Methyl Bromide Pear wrap							No written respirator program$1500.00 **General Citations:** No medical exam for respirators No on the hazards of the chemicals in employees work place workplace **Penalties Assessed $2250.00**		
Bridgeport Douglas County 309372753	Fungicide Carbamate	250	16 workers exposed to chemicals being sprayed by helicopter with in 100ft of work area		10/9/05		10/30/2005 3/6/2006	**General Citations:** No hand washing facilities No pesticide information posted at the time of application or within 30 days **No Penalties Assessed**	Referral	Orchard

Washington State Department of Labor and Industries

Summary of Pesticide Inspections, 2006

City, County Inspection # region	Pesticides Involved	#of Employees	How exposed	Other agencies involved	Incident date	Compliant date	Inspection date (opened) (closed)	Citations/costs	Type of inspection	Type of Business
Wenatchee Chelan County 309488039	Rodenticides	1				12/6/2005	12/15/2005 2/16/06	**General Citations:** No Hazard Communication training for chemicals and pesticides No adequate personal protection (PPE) gloves **Penalties Assessed $0.00**	Complaint	Fruit storage
Lyden Whatcom county 310330105	Pesticide	20					10/10/2006 10/10/2006	**General Citations:** Pesticide labels were not available to employee No safety training **Penalties Assessed $0.00**	Referral	Potatoes
Zillah Yakima County 310341045	Pesticides	50	During mixing and loading				9/22/2006 9/22/2006	**General Citations:** No eyewash station	Complaint	Apple Orchard

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Summary of Pesticide Inspections, 2006

City, County Inspection # region	Pesticides Involved	#of Employees	How exposed	Other agencies involved	Incident date	Compliant date	Inspection date (opened) (closed)	Citations/costs	Type of inspection	Type of Business
								Penalties Assessed $0.00		
Othello Adams County 309387181	Pesticides	30	Exposed during mixing and loading				10/21/2005 1/17/2006	**General Citations:** No emergency eyewash No posting of time pesticides being applied No list of chemicals being used or training on how to use the chemicals No change out schedule for respirator program **Penalties Assessed $0.00**	Accident	Orchard
Pasco Franklin County 309873628	Phosphine	37	Fumigation of hay				4/10/2006 4/14/2006	**General Citations:** No medical evaluations for respirator	Planned	Hay Cubing operation

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City, County Inspection # region	Pesticides Involved	#of Employees	How exposed	Other agencies involved	Incident date	Compliant date	Inspection date (opened) (closed)	Citations/costs	Type of inspection	Type of Business
								Two employees not fit tested for respirator **No Penalties Assessed**		
Mount Vernon Skagit County 310070438	Dursban	15					7/5/2006 8/30/2006	**General Citations:** Employer did not ensure Personal Protective Equipment was used in the field during REI No training on safe use of pesticides **Penalties Assessed $0.00**	Planned	Dursban
Wapato Yakima County 310450937	Herbicide Round-up	19		DOH			11/9/2006 11/9/2006	**No Citation issued** No Personal Protective Equipment **No Penalties Assessed**	Referral	Deciduous Tree Fruits Orchard

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Summary of Pesticide Inspections, 2006

City, County Inspection # region	Pesticides Involved	#of Employees	How exposed	Other agencies involved	Incident date	Compliant date	Inspection date (opened) (closed)	Citations/costs	Type of inspection	Type of Business
Richland Benton County 309996635	Organophosphate or Carbamate	40					5/14/2006 6/8/2006	**No citation issued** **No Penalties Assessed**	Referral	Apple Orchard
Brewster Okanogan County 310330261	Warrior insecticides Guthion Assail	25	Drift exposure while thinning apples	DOH			9/7/2006 10/13/2006	**No citation** **No Penalties Assessed**	Referral	Orchard

Appendix D
License Types and Enforcement Action Definitions

Washington State Department of Agriculture, Pesticide License Types

Washington State Department of Agriculture, Enforcement Action Definitions

Washington State Department of Agriculture, Pesticide License Types

WSDA Pesticide License Types

Commercial Applicator	A person engaged in the business of applying pesticides to the land/property of another. This land can either be publicly or privately owned. Prior to license issuance, a Financial Responsibility Insurance Certificate (FRIC) must be filed with WSDA by the insuring company.
Commercial Operator	A person employed by a WSDA-licensed commercial applicator to apply pesticides to the land of another. This land can either be publicly or privately owned.
Commercial Pest Control Consultant*	A person who sells or offers pesticides for sale at other than the licensed pesticide dealer outlet from which they are employed. In addition, commercial consultants may offer or supply technical advice or make recommendations to the users of non-home and garden pesticides. They may also perform wood destroying organism inspections. Licensed and employed commercial applicators and commercial operators may act as commercial consultants without acquiring the consultant's license.
Dealer Manager*	A person who supervises the distribution of pesticides (other than home and garden products) from a licensed pesticide dealer outlet.
Private Applicator	A person who applies or supervises the application of a "Restricted Use" pesticide on land owned or rented by him or his employer for the purpose of producing an agricultural commodity.
Private Commercial Applicator	A person who applies of supervises the use of a "Restricted Use" pesticide on land owned or rented by him or his employer for purposes other than the production of an agricultural commodity.
Public Operator	A person who, while acting as an employee of a governmental agency, applies restricted use pesticides by any means or general use pesticides by power equipment on public or private property. Public operators may act as public consultants. (Public operators licensed only in the Public Health category are exempt from the fee.)
Public Pest Control Consultant*	A person who, while acting as an employee of a governmental agency, offers or supplies technical advice, supervision, aid, or makes recommendations to the user of pesticides other than home and garden products. Public Consultants may not act as public operators without the operator's license.
Demonstration and Research Applicator	A person who applies or supervises the use of any experimental or restricted use pesticide to small experimental plots at no charge. Public employees performing research applications fall

	under the licensing requirements of the public operator.
Structural Pest Inspector	An individual who performs the service of inspecting a building for wood destroying organisms, their damage, or conditions conducive to their infestation. Wood destroying organisms include insects or fungi that will consume, excavate, develop in, or otherwise modify the integrity of wood or wood products. They include, but are not limited to, carpenter ants, moisture ants, subterranean termites, damp wood termites, beetles in the family Anobiidae, and wood decay fungi (wood rot).

**License does not allow the holder to use or supervise the use of a restricted use pesticide. Refer to other types for appropriate license.*

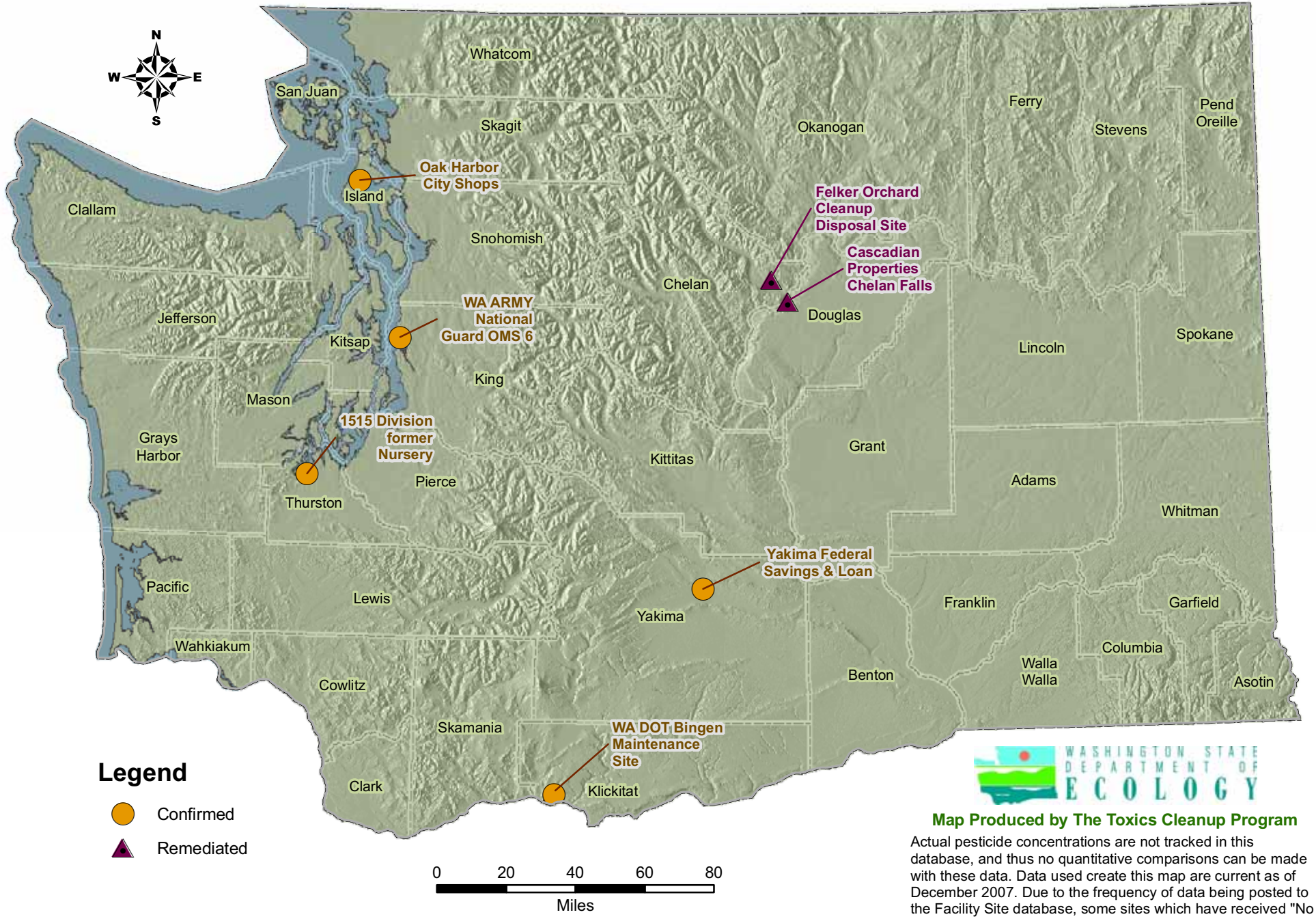
Washington State Department of Agriculture, Enforcement Action Definitions

WSDA Enforcement Action Definitions	
No action indicated	Not a pesticide complaint, or Not valid, or No violations noted, or No further action required.
Technical assistance	WSDA provided information only.
Verbal Warning	No evidence for further legal action but person was cautioned verbally by WSDA. No permanent record of warning.
Advisory letter/Warning letter	Some evidence of violation but not enough to take legal action. Person was warned to be more cautious.
Notice of correction	Notified that a minor violation must be corrected. Usually given thirty days. If corrected, no further action. If not corrected, further action is taken.
Notice of Intent/Administrative action **Legal case**	Usually results in a fine and/or license suspension for a varying interval.
Referred	Sent to another agency for action. The violation is not in WSDA jurisdiction.
Stop sale	Further sale of the product is prohibited until violation corrected. Generally an unregistered or damaged product.

Appendix E
Department of Ecology

Washington State Department of Ecology Maps

Pesticide Contaminated Sites (7) Added in 2006



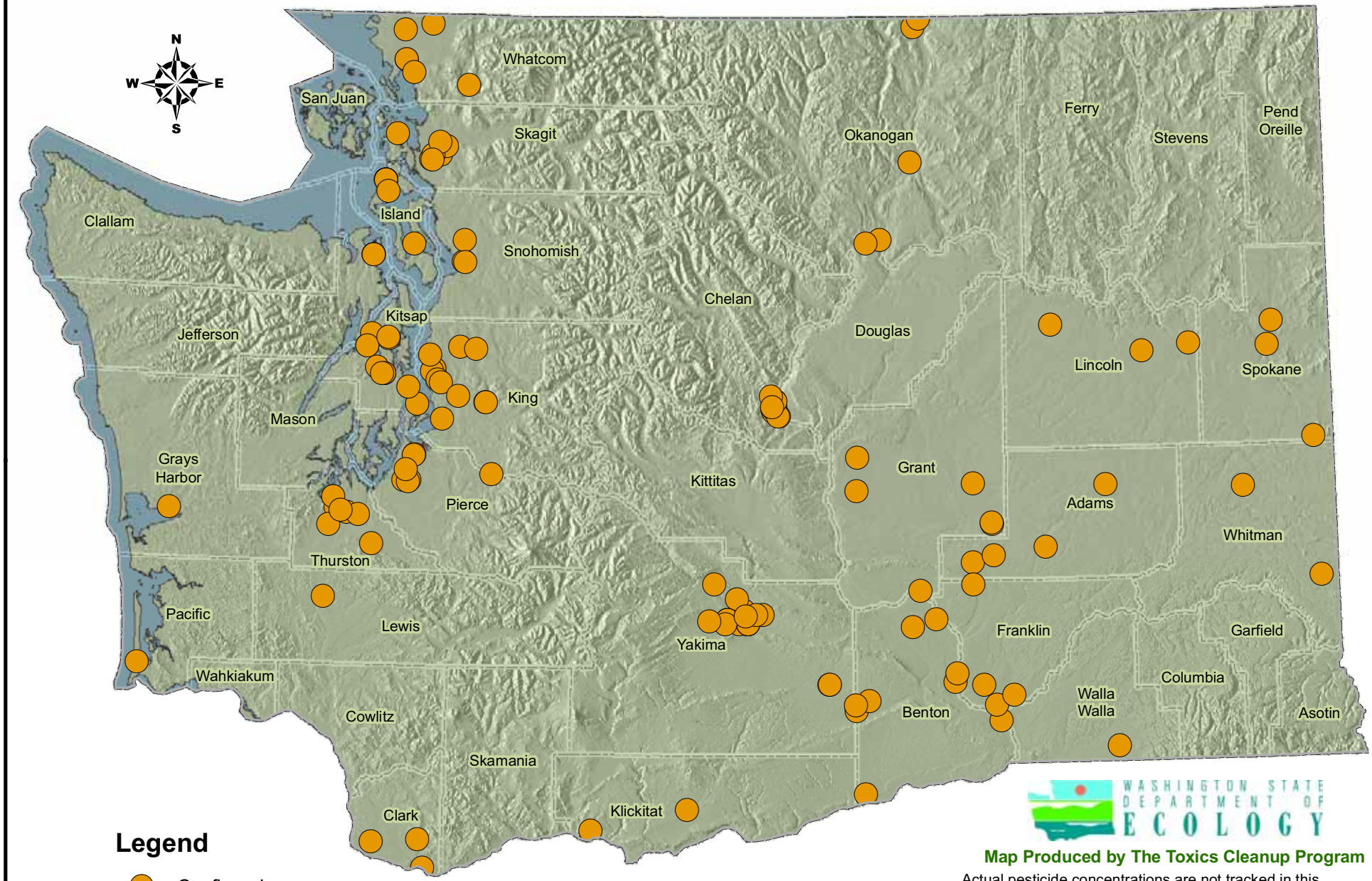
WASHINGTON STATE DEPARTMENT OF ECOLOGY

Map Produced by The Toxics Cleanup Program

Actual pesticide concentrations are not tracked in this database, and thus no quantitative comparisons can be made with these data. Data used create this map are current as of December 2007. Due to the frequency of data being posted to the Facility Site database, some sites which have received "No Further Action" status may not be listed as such in this map.

\\ecylcyfsvrxfile\tcp\ICU\AppDevTeam\GIS_TCP\Projects\08023_PIRT_Fran\mxd\2006_sites.mxd - 4/10/2008 @ 9:01:27 AM

Active Pesticide Contaminated Sites (137) Through 2006



WASHINGTON STATE DEPARTMENT OF ECOLOGY

Map Produced by The Toxics Cleanup Program

Actual pesticide concentrations are not tracked in this database, and thus no quantitative comparisons can be made with these data. Data used create this map are current as of December 2007. Due to the frequency of data being posted to the Facility Site database, some sites which have received "No Further Action" status may not be listed as such in this map.

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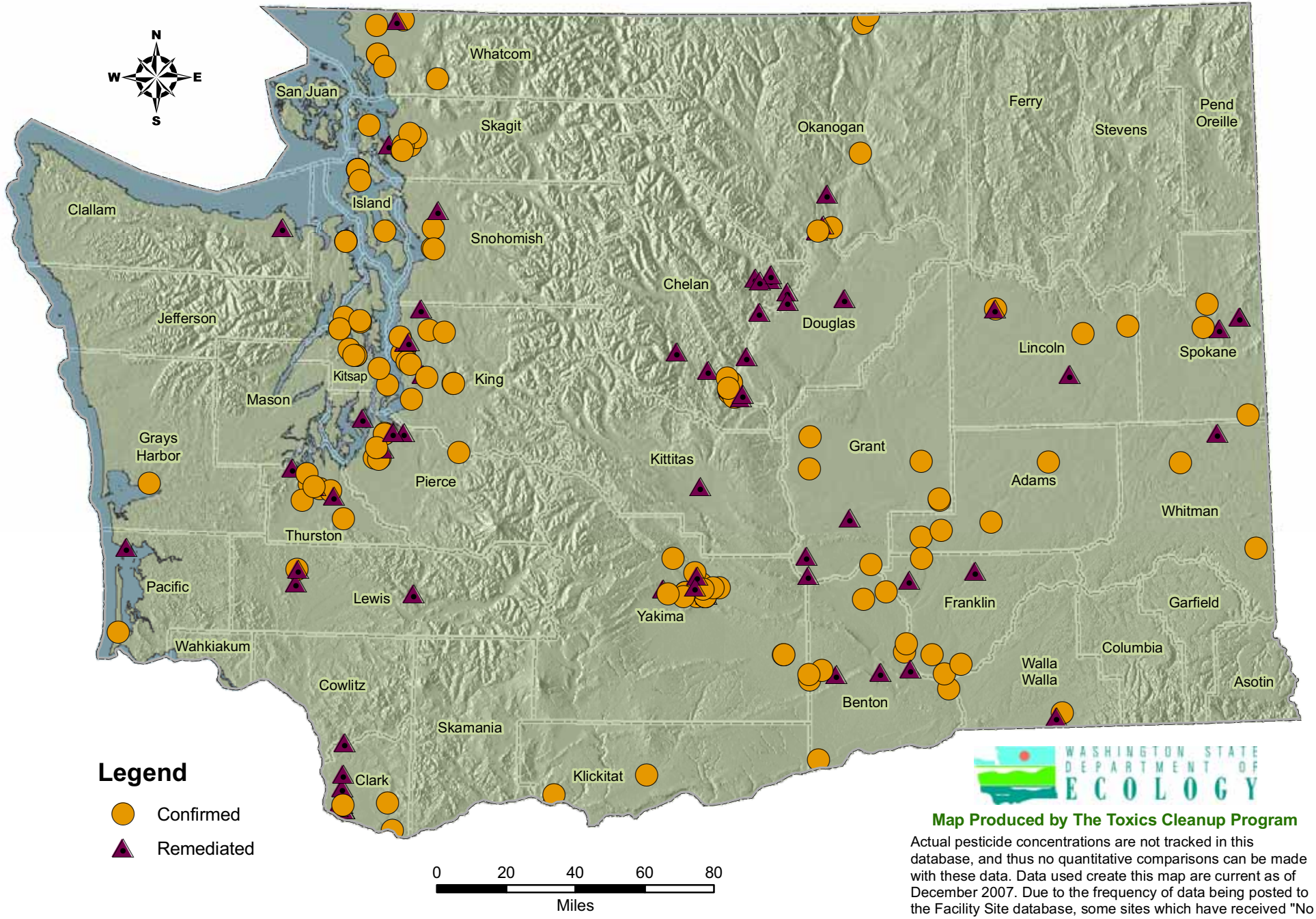
Pesticide Contaminated Sites (207) Through 2006



WASHINGTON STATE DEPARTMENT OF ECOLOGY

Map Produced by The Toxics Cleanup Program

Actual pesticide concentrations are not tracked in this database, and thus no quantitative comparisons can be made with these data. Data used create this map are current as of December 2007. Due to the frequency of data being posted to the Facility Site database, some sites which have received "No Further Action" status may not be listed as such in this map.

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Appendix F
2007 PIRT Letters

DEPARTMENT OF HEALTH

PESTICIDE INCIDENT REPORTING AND TRACKING REVIEW PANEL

P.O. Box 47846
Olympia, Washington 98504 – 7846

February 21, 2007

The Honorable Representative Tom Campbell
Chair, House Select Committee on Environmental Health
House of Representatives
334 John L. O'Brien Building
Post Office Box 40600
Olympia, Washington 98504-0600

Dear Representative Campbell:

The Pesticide Incident Reporting and Tracking (PIRT) Panel was established by the Washington State Legislature in 1990 to ensure that state agencies responsible for pesticide regulation coordinate their incident investigations, reporting, and education activities in a timely manner to protect workers and the public from pesticide misuse. The PIRT consists of representatives from six state agencies, along with the University of Washington, Washington State University, the Washington Poison Center, a toxicologist and a member of the public. The PIRT provides the governor, agency heads, legislature, and public with an annual report on PIRT activities and agency pesticide incidents.

The PIRT would like to express support for House Bill 1810, which creates a pilot project to gather pesticide drift data for use in assessing the off-target migration of pesticides and the potential human health impacts from such exposure. Numerous studies in Washington State and elsewhere have raised concern over the off-target movement of pesticides and the impacts to public health, especially to children. Data obtained from air monitoring would be used for creation of effective policy and programs for the safer application of pesticides, and to inform populations in agricultural areas of the health risks associated with the air they breathe. PIRT recently approved a resolution on drift which is enclosed for your information.

As a legislatively mandated panel, PIRT is willing to provide a forum for input and ongoing discussion of project results with stakeholders. PIRT will include findings from this pilot project in the Pesticide Incident Reporting and Tracking Review Panel Annual Report.

Thank you for your attention to this important matter.

Sincerely,

Rob Duff
Chair, PIRT

Enclosure: PIRT Resolution on Drift

Pesticide Incident Reporting and Tracking (PIRT) Review Panel Resolution on Air Monitoring

February 15, 2007

Whereas, it is important to have data on the types and concentrations of agricultural pesticides in the air in order to engage in informed discussions about policies and programs related to those pesticides.

Whereas, data on the types and concentrations of agricultural pesticides in the air can be used by epidemiologists and other scientists in studies examining acute and chronic health effects and their potential causes.

Whereas, individuals living in agricultural areas have a right to know about pesticides in the air that may lead to exposures for themselves and their children.

Whereas, there is evidence of health effects associated with low or moderate pesticide exposure in children and adults.

Whereas, data collected in Washington State by research institutions, agencies and farm worker organizations have raised concerns about pesticide off-target movement and potential exposures for children and adults.

Whereas, active involvement of stakeholders is critical to the credibility of any air monitoring program.

Therefore, the PIRT Panel recommends that the state of Washington establish an air monitoring program in agricultural areas which will measure concentrations of agricultural pesticides in the air during periods of pesticide application, and that a mechanism for active stakeholder involvement be part of the program.

DEPARTMENT OF HEALTH

PESTICIDE INCIDENT REPORTING AND TRACKING REVIEW PANEL

P.O. Box 47846
Olympia, Washington 98504 – 7846

February 22, 2007

The Honorable Representative Tom Campbell
Chair, House Select Committee on Environmental Health
House of Representatives
334 John L. O'Brien Building
Post Office Box 40600
Olympia, Washington 98504-0600

Dear Representative Campbell:

In 1990, the Pesticide Incident Reporting and Tracking (PIRT) panel was established to ensure coordination among the various state agencies involved in pesticide regulation. The PIRT panel consists of representatives from six state agencies, along with the University of Washington, Washington State University, the Washington Poison Center, a toxicologist and a member of the public. Annually, the PIRT prepares a report summarizing the prior years activities and distributes this report to the governor, agency heads, legislature, and the public.

The PIRT panel supports House Bill 1946, which would establish a pesticide use reporting system in Washington State. Detailed information on pesticide use in Washington is vital for relating human exposure and health outcome data, for studying agricultural trends, and for determining which pesticides are the most problematic with regard to human health and the environment. The benefits of such a reporting system have been demonstrated in California and Oregon. However, the adoption of this bill will only be of benefit if funding for its implementation is also provided.

Thank you for your attention to this important matter.

Sincerely,

Rob Duff
Chair, PIRT

STATE OF WASHINGTON

PESTICIDE INCIDENT REPORTING AND TRACKING REVIEW PANEL

243 Israel Road Southeast
P.O. Box 47846
Tumwater, Washington 98504 – 7846

July 31, 2007

Judy Schurke, Director
Washington State Department of Labor and Industries
P.O. Box 44000
Olympia, Washington 98504-4000

Dear Director Schurke:

Since the inception of Labor and Industries' (L&I) Cholinesterase Monitoring Program, the PIRT Panel has provided L&I with occasional programmatic reviews and recommendations.

The program provides valuable information to pesticide applicators, their health care providers, and employers, as well as to the legislature via L&I's annual report and the PIRT report. Program information has also been incorporated into prevention activities to reduce morbidity among this high-risk sub-population.

Last year, PIRT expressed concerns regarding the transfer of the blood sample analyses from the State Public Health Laboratory to a commercial laboratory (May 26, 2006 memorandum). Unfortunately, these concerns were justified as Pathology Associates Medical Laboratory (PAML) has had difficulty instituting the cholinesterase RBC methodology, implementing QA/QC procedures, and maintaining data quality. PIRT understands that L&I is aware of the problems and is taking steps to address them.

The PIRT panel would like to support and encourage L&I in the department's efforts to provide additional oversight and advice to PAML for the purpose of re-instituting the high quality Cholinesterase Monitoring Program reminiscent of 2005 and 2006. Specifically, we support your efforts to:

- Reconvene the Scientific Advisory Committee (SAC), or a comparable scientific advisory committee or sub-committee, to review the quality of the 2007, and future, cholinesterase data;
- Work with the committee or sub-committee to develop an oversight plan to ensure that PAML's 2008, and future, cholinesterase measurements will be of high quality;
- Centralize reporting of all cholinesterase measurements, preferably at the Department of Health, such that the State can easily ascertain the frequency of handler exposures that exceed thresholds each year, as has been done previously;

- Maintain L&I's abilities to alert, and continue reporting, cholinesterase depressions not only to the affected parties, their health care providers and employers, but also to the Department of Health and relevant stakeholders;
- Stay in contact with concerned stakeholders and provide them frequent reports about the CMP transition process, oversight, as well as relevant findings from the analyses;
- And, develop a specific, detailed, plan and timeline for achieving the objectives listed above.

We suggest that you request a report from the current SAC or sub-committee, and include this report in the appendix to L&I's annual report on the Cholinesterase Monitoring Program. Last, we request that a representative from this L&I program regularly update PIRT on your progress. The PIRT Panel appreciates your consideration of these suggestions.

PIRT considers the Cholinesterase Monitoring Program essential to protecting the health and welfare of pesticide applicators in Washington State. We believe the above actions are necessary in order to maintain a high quality program and to retain the ability to evaluate the effectiveness of the program over time.

Please let us know if PIRT may be of any additional support to your future program efforts.

Sincerely,

Cynthia Lopez
Chair, PIRT Panel
Signed on behalf of the PIRT panel

cc: Mary Selecky

Appendix G
2007 PIRT Panel Activities

2007 PIRT Panel Activities

Recommendations to the PIRT Review Panel and Member Agencies for 2007

Conclusion

2007 PIRT Panel Activities

The PIRT Annual Report summarizes the activities of the PIRT Review Panel for 2007.

Issue	PIRT Activity
Pesticide-Related Legislation	PIRT monitored the following 2007 legislation: • House Bill 1810, creating a project to monitor pesticides in air and health impacts. • House Bill 1946, establishing a pesticide use reporting system. • High hazard pesticides used on school facilities. PIRT wrote letters supporting the following legislation: • February 21 letter to Representative Campbell expressing support for House Bill 1810, creating a pilot project to assess off-target migration of pesticides and the potential human health impacts from such exposure. • February 22 letter to Representative Campbell in support of House Bill 1946, establishing a state pesticide use reporting system to obtain detailed information on pesticide use for relating health exposure and human outcome data, studying agricultural trends, and determining the most problematic pesticides.
Pesticide Drift	• PIRT reviewed the pesticide air monitoring project funded by the legislature in June 2007. • Steve Gilbert (PIRT Toxicologist) presented highlights from several papers on pesticide drift and drafted a PIRT resolution on drift. • Barbara Morrissey (DOH) presented a summary of 2004 and 2005 drift data. • Carol Dansereau (Farm Worker Pesticide Project) presented results of "Community Air Monitoring for Chlorpyrifos in the Northern Yakima Valley." • Dr. Vince Hebert (WSU) presented "MITC Community Air Assessment; South Franklin County, WA." • Randy Segawa (California Department of Pesticide

	Registry) presented information on California's Regulatory Program for Pesticides in the Air.
Pesticide Use Reporting	• PIRT wrote a letter to Representative Campbell in support of House Bill 1946 (see above). • PIRT formed subcommittees on pesticide use reporting and roadside spraying to inform the legislature of benefits, costs, and trade-offs of pesticide use reporting. PIRT compiled agencies' input regarding use reporting, and communicated with states that currently have such a system, at the request of Representative Tom Campbell. • Cliff Weed and Kirk Cook (WSDA) presented on pesticide use reporting at the November PIRT meeting.
West Nile Virus (WNV)	• PIRT received updates from staff of the DOH Zoonotic disease program on 2007 WNV activities in 2007, including: collaboration between the DOH Zoonotic Disease and Pesticide Programs, surveillance by local health jurisdictions, messages to the public, funding for emergency outbreaks, and adequate notification of adulticide spraying. • Alan Felsot (WSU PIRT designee) PIRT member led a Science Corner discussion on risk assessment of WNV versus insecticides used to control adult mosquitoes, and on ecological risks of insecticides used for mosquito management. • The Ecology designee to the panel served on the WNV task force with DOH and other agencies. • PIRT agreed to monitor these issues in 2008 and to formulate recommendations for best practices required for state funding for emergency mosquito control and issues such as public notification of spraying.
Reappointment and Recruitment of PIRT Toxicologist and Public Member	• PIRT formed a subcommittee in June 2007 to develop a qualification statement and questions for each position, and to interview candidates and bring findings to the panel. • The subcommittee interviewed candidates and brought findings to the October meeting panel approval. PIRT voted to reappoint Steve Gilbert, the present toxicologist, and to appoint Liesl

	Zappler as public member. PIRT's recommendations were forwarded to the Governor's Office.
Historic View of PIRT Legislation	• Senator Margarita Prentice, one of the framers of the legislation creating the PIRT panel in 1989, spoke at the October meeting about the legislative intent for establishing the PIRT panel and gave advice on how PIRT can be effective today. PIRT was established to ensure better communication between state agencies and for reduction in the amount and toxicity of pesticides used.
Streamlining the PIRT Report	• PIRT formed a subcommittee to review and streamline the PIRT report and work with agency representatives to make the report available sooner. PIRT developed a preliminary report and transmittal letter.
Yakima PIRT Meeting	• The April PIRT meeting in Yakima is highlighted because it was planned specifically for, and was well-attended by, the agricultural community, including farm workers and organic growers. This was the first PIRT meeting to provide simultaneous interpretation into Spanish. Agenda topics included: • Transition of apple insect pest management to new pest control technology. • Cholinesterase monitoring. • El Proyecto Bienestar – Community based research project to improve the heath of farm workers and their families in the Yakima Valley. • Surface water monitoring for pesticides in salmon searing streams. • 2007 drift checklist: collecting information on risk factors for agricultural drift. • The public comment period was extended to provide an opportunity for the agricultural community to voice concerns and give feedback to the PIRT panel.
Cholinesterase Monitoring	• PIRT wrote a letter to L&I director Judy Schurke supporting that agency's efforts to re-institute the

	high quality cholinesterase monitoring program that suffered when 2007 cholinesterase testing was transferred to a private laboratory. • John Furman (L&I DOSH) presented on the monitoring program at the April PIRT meeting in Yakima.

Recommendations to the PIRT Review Panel and Member Agencies for 2007

PIRT adopted the following recommendations in 2007 for Panel action and member agency action. PIRT Panel members implement these recommendations through their respective agencies and organizations, collaborative efforts, subcommittee work, and at PIRT meetings.

Recommendation 1	*PIRT and member agencies will continue to report on actions taken in response to findings from the DOH investigations into under-reporting of pesticide-related illnesses.* *Lead: Cynthia Lopez*
Recommendation 2	*DOH will provide updates to PIRT on activities related to the NIOSH funded project "Identifying preventable causes of pesticide-related illness among agricultural workers."* *Lead: Cynthia Lopez*
Recommendation 3	*PIRT will obtain and review data from WSDA and other sources to evaluate Washington Schools' compliance with tracking and pesticide usage requirements, including requirements pertaining to 1) central collection of annual pesticide use reports, and 2) dissemination of information about tracking requirements and tracking tools to school districts.* *Lead: Steve Gilbert*

Recommendation 4	*PIRT will assemble recommendations to EPA on revision of the Worker Protection Standard.* *Lead: Ann Wick*
Recommendation 5	*PIRT will collect and review incident data related to the tree fruit industry to identify trends and recommend prevention strategies. Findings will be summarized in the 2006 Annual Report.* *Lead: Cynthia Lopez*
Recommendation 6	*PIRT will continue to compile data related to drift and report on member agencies' drift reduction efforts. PIRT will continue to work on setting up a Washington Symposium on Drift.* *Lead: Ann Wick*
Recommendation 7	*PIRT will collaboratively communicate with other entities on strategies to reduce pesticide incidents.* *Lead: Alice Larson and Cynthia Lopez*
Recommendation 8	*PIRT will continue to review the activities of the medical monitoring program for agricultural workers who handle cholinesterase-inhibiting insecticides.* *Lead: Cynthia Lopez*
Recommendation 9	*PIRT will continue to monitor for any increase in pesticide incidents related to control of mosquitoes.* *Lead: Cynthia Lopez*

Recommendation 10	*PIRT members will continue to report on possible instances of unclear labeling of pesticide product labels. WSDA will clarify or forward unclear federal labels to EPA for response.* *Lead: Ann Wick*
Recommendation 11	*PIRT will identify available data on residential and agricultural pesticide use. PIRT will examine and report on the costs benefits.* *Lead: Steve Gilbert*

Conclusion

The PIRT Review Panel met eleven times in 2007. The Panel monitored each agency's response time to incidents (see Table 3. Agency Response Times, 2006, page 11), and monitored actions stemming from recommendations made in previous years. The Panel also analyzed incident data to identify trends and patterns of problems related to pesticides, and responded to requests for special activities from the panel members.