

Agency Data
2004

PIRT

2005 Annual Report
Pesticide Incident Reporting and Tracking
Review Panel

December 2005

PIRT Review Panel Representatives

We wish to acknowledge and thank our panel representatives for their contributions:

Chair

Maryanne Guichard, Washington State Department of Health

Coordinator

Lucy Harter, Washington State Department of Health

Members

Ann Wick, Washington State Department of Agriculture

Maria Victoria Peeler, Washington State Department of Ecology

Vacant, Washington State Department of Fish and Wildlife

Dorothy Tibbetts, Washington State Department of Health

Gabrielle Toutonghi, Washington State Department of Labor and Industries

Karen Ripley, Washington State Department of Natural Resources

Alice Larson, PhD, General Public

Steve Gilbert, PhD, DABT, Practicing Toxicologist

Matthew Keifer, MD, MPH, University of Washington

William Robertson, MD, Washington Poison Center

Allan Felsot, PhD, Washington State University

Pesticide Incident Reporting and Tracking Review Panel

Annual Report

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

December 2005

DOH 333-175 December 2005

To obtain copies or for additional information, see www.doh.wa.gov/pesticidecontact.

This annual report is available online at www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/Pesticides.aspx.

Report suspected pesticide-related illness to the Washington State Department of Health at 1-877-485-7316 or the Washington Poison Center at 1-800-222-1222.

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).



Agency Contacts

Contacts for agencies whose pesticide-related data constitute the basis for this report.

Washington State Department of Agriculture

Ann Wick _____ 360.902.2051

Washington State Department of Ecology

Maria Victoria Peeler _____ 360.407.6704

Washington State Department of Health

Dorothy Tibbetts _____ 360.236.3361

Washington State Department of Labor and Industries

Gabrielle Toutonghi _____ 360.902.5478

Washington Poison Center

William Robertson, MD _____ 206.517.2356

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List of Acronyms

DPP	Definitely, Probably or Possibly
DOH	Washington State Department of Health
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
WSDA	Washington State Department of Agriculture
WPC	Washington Poison Center
WPS	Worker Protection Standard

Executive Summary

The annual report summarizes pesticide incidence data collected by agencies during 2004 and activities of the PIRT Review Panel for 2005.

The Pesticide Incident Reporting and Tracking (PIRT) Review Panel was created by RCW 70.104.090 to monitor pesticide-related incidents that have suspected health or environmental effects. Members of the Panel include representatives of six agencies that respond to statewide incidents, two university members, a practicing toxicologist and a member of the public appointed by the Governor (Appendix A).

Member agencies conduct pesticide incident investigations in accordance with their specific statutory responsibilities and report findings to the Panel for evaluation. The Panel submits an annual report summarizing pesticide incidents to the legislature. This 2005 report presents individual and combined agency data for 2004 and a summary of the activities of the Panel and agencies for 2005.

Combined Agency Data

The overlap in pesticide-related cases between agencies for 2004 is displayed in Table 1. The shaded cells show the total number of incidents reported to the Panel by each agency. The white cells show the numbers of incidents that overlap for the agencies represented by the cell. Where two numbers appear in the cells, the first number represents the number of events and the second number represents the number of people involved.

Table 1. Overlap of Pesticide-Related Events* by Agency, 2004

	WSDA	Ecology	DOH	L&I	WISHA	WPC
WSDA	200	2	16/30	1	2	1
Ecology	2	29	2/9	1	-	-
DOH	16/30	2/9	245/269	101	2	150
L&I Claims	1	1	101	101	1	21
WISHA	2	-	2	1	43	-
WPC	1	-	150	21	-	2342

* Events include WSDA complaints by event, Ecology complaints by event, DOH incidents by people involved, L&I claims by people involved, L&I WISHA inspections by employer, and WPC calls by people involved. Where two numbers appear, the first number represents events and the second number represents people involved.

It is difficult to aggregate PIRT data because each agency collects a different type of data. For example, data from the Ecology Spills Program includes both

actual environmental contamination and calls from concerned neighbors about the possible illegal use of pesticides that turn out to be legal. Data from Washington Poison Center (WPC) includes calls about human exposures with and without associated illness. Washington State Department of Agriculture (WSDA) data include actual violations, cases of crop damage, complaints about inadequate pest control inspections, and problems with licensing of pesticide applicators.

PIRT Panel Activities and Highlighted Issues for 2005

The Panel made ten recommendations for Panel action and member agency action for 2005. 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. Issues monitored by the Panel in 2005 include West Nile virus, cholinesterase monitoring, the Worker Protection Standard, and the proposed modification to the General Pesticide Rules concerning notification of certain pesticide applications.

Cholinesterase Monitoring

The Cholinesterase Monitoring Rule (Chapter 296-148 WAC) was implemented in February 2004. Based on the final report, *Cholinesterase Monitoring of Pesticide Handlers in Agriculture: 2005*, 2263 workers participated in the cholinesterase monitoring program during 2005. A baseline test was performed for each enrolled worker. A total of 904 periodic tests were performed for 611 workers who had reached the pesticide-handling hour threshold for 30 hours in 30 consecutive days. A total of 59 alerts were issued to workers at the workplace evaluation level and 10 to workers at the workplace removal level. Overall, the data indicate that 9.6 percent of enrolled workers had cholinesterase depression at the time of periodic testing during 2005.

Department of Agriculture Proposed Rule – PIRT Letter of Support

The Panel wrote a letter to WSDA in support of the proposed modification to the General Pesticide Rules, WAC 16-228. The proposed changes require notification of the application of highly toxic or corrosive pesticides via aerial, air blast, outdoor fumigation or overhead chemigation applications when the application site and the property boundaries touch and the application is within one-half mile of schools, hospitals, nursing homes, and adult and child day care centers.

Summary Data for PIRT Agencies

The following agency summaries identify key points from the analysis of 2004 pesticide incident data.

Department of Agriculture

In 2004, WSDA investigated 200 pesticide-related complaints. After investigation it was determined that 110 (55%) involved pesticide applications. The other

complaints concerned such issues as improper licenses and Wood Destroying Organism inspections. Sixty-four (32%) complaints were the result of pesticide drift to property and 22 (11%) concerned drift to humans. Of the 200 complaints, 122 (61%) involved one or more violations. This is consistent with previous years. Thirty-six (30%) of the violations involved commercial applicators.

Department of Ecology

In 2004, Washington State Department of Ecology (Ecology) investigated 29 pesticide-related complaints involving threats to air, water, or soil. Ten complaints concerned threats to ground or surface water, 10 involved spills or fires, and 6 involved pesticide disposal or waste concerns. Ecology is responsible for oversight of contaminated areas requiring cleanup or monitoring. During 2004, Ecology placed 11 new pesticide-contaminated sites on the Toxic Cleanup Program list.

Department of Health

In 2004, Washington State Department of Health (DOH) investigated 245 pesticide incidents involving 269 individuals. Of the 269 illnesses/injuries, 204 (76%) were classified as definitely, probably or possibly (DPP) related to pesticide exposure. Sixty-four (31%) of the 2004 DPP cases were related to agriculture. Agricultural cases most often involved the tree fruit industry (41). Most agricultural cases involved agricultural workers (53); 36 of the 53 workers were handling pesticides at the time of their exposure. Only 37 of the 140 non-agricultural cases were working at the time of their exposure; 14 of the 37 workers were handling pesticides. Of the 103 non-occupational, non-agricultural cases, 89 (86%) occurred in homes.

Department of Labor and Industries

In 2004, Washington State Department of Labor and Industries (L&I) Washington Industrial Safety and Health Act (WISHA) Services Division conducted 43 pesticide-related safety and health inspections. Eighteen (42%) of the inspections resulted in general or serious citations being issued to the employer and 25 inspections did not involve citations.

In 2004, the L&I Insurance Services Division, Claims Administration Program received 101 claims relating to pesticide illness. Of the 101 claims, 73 (72%) were related to agriculture and 28 were non-agricultural. Of the 101 claims, 70 claims were classified as medical only/non-compensable, 4 were time loss, 26 were rejected and 1 had an uncertain status. Fifty-three of the workers were handling pesticides at the time of their exposure. DOH investigated the 101 claims and classified 69 (68%) as having signs or symptoms definitely, probably or possibly related to the pesticide exposure.

Washington Poison Center

In 2004, Washington Poison Center (WPC) provided immediate professional medical advice regarding pesticide-related questions and emergencies to 2342

callers. Of the 2342 calls, 1302 involved insecticides and 155 involved insect repellents. Herbicides were involved in 422 of the calls. The caller reported at least a minor health effect in 218 of the 2342 calls. DOH followed-up on 305 calls where the caller sought medical care and where the exposure was not part of a suicidal gesture.

Summary Data

Table 2 summarizes 2004 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 2. Agency Summaries of Pesticide Events, 2004

Department of Agriculture 200 Complaints Resulting in 122 Violations			
Complaints	200	Violations	122
Location of Complaint		Violations by Type of Activity	
Eastern Washington	117	Agriculture	42
Western Washington	82	Commercial/industrial	17
Out-of-State	1	PCO/WDO	22
		Residential (homeowners)	5
Enforcement Actions*	125	Right-of-way	5
Notice of correction (NOC)	98	Other (license/records)	31
Notice of intent/Admin action (NOI)	20		
Advisory letter/Warning letter	4	License Involved with Violations	122
Referred	2	Commercial applicator	36
Verbal warning	1	Unlicensed	36
No action indicated	76	Private applicator	22
		Public operator	13
		Other (SPI, Dealer, Consultant)	15
<i>* One case had 2 actions.</i>			
Department of Health 245 Incidents Involving 269 Individual Cases			
Type of Incident	245	Classification of Cases	269
Agriculture	92	Definite	63
Residential	108	Probable	55
Commercial/Industrial	20	Possible	86
Other	25	Suspicious	11
		Unlikely	16
		Insufficient information	38
Childhood Cases ≤ 18 years old	34	Definite, Probable or Possible Cases	204
Definite, probably or possible cases	22	Agriculture	64
		Non-Agriculture	140
Department of Labor and Industries 43 Industrial Safety and Health Inspections 101 Worker Compensation Claims			
Pesticide-related Inspections	43	Worker Compensation Claims	101
Serious and/or General Citations	18	Agriculture	73
No citations	25	Non-Agriculture	28
Type of Business	43	Benefits	101
Orchard	28	Accepted – Medical/time loss	74
Vineyard	2	Rejected	26
Seeds	2	Pending	1
Berry	4		
Other farm	7		
Department of Ecology 29 Pesticide Complaints			
Threats to ground or surface water	10		
Spills or fires	10		
Pesticide disposal or waste concerns	6		
Unsafe pesticide storage or handling	3		
Washington Poison Center 2342 Human Exposure Pesticide-Related Calls			
Referred to DOH for follow-up	305		

Introduction

Created in 1990, 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 by RCW 70.104.090 to monitor pesticide-related incidents that have suspected health or environmental effects. The Panel consists of representatives of Washington State Departments of Agriculture, Ecology, Health, Labor and Industries, Natural Resources, and Fish and Wildlife, representatives of the University of Washington, Washington State University, and Washington Poison Center, a practicing toxicologist, and a member of the public (Appendix A).

Member agencies conduct pesticide incident investigations 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 make recommendations for procedures for investigation of pesticide incidents.
- Identify inadequacies of pesticide regulations to protect public health.
- Submit an annual report summarizing pesticide incidents to the legislature.

The Panel has no regulatory authority but acts in an oversight capacity to the six agencies and makes recommendations to the agencies, to the legislature, and to the federal Environmental Protection Agency (EPA).

This 2005 report is the Panel's fifteenth 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 2004.
- Describes Panel and member agency activities for 2005.
- Describes how pesticide-related calls, complaints, incidents, and investigations overlap between agencies.

Combined Agency Data

The number of incidents reported to agencies and calls made to WPC for the years 2000 – 2004 are listed in Table 3. There is not a consistent increase or decrease in the number of reported pesticide-related incidents across agencies. WSDA complaints were elevated in 2002, but are back to earlier levels in 2004. DOH cases have leveled out after a spike in 2000. In 2004, the number of L&I pesticide-related claims dropped to the low level seen in 2002 while the number of pesticide-related calls to WPC increased by 21% from 2003 to 2004.

Table 3. Pesticide Incidents Reported to Agencies and WPC, 2000 - 2004

	2000	2001	2002	2003	2004
WSDA Complaints	199	225	255	222	200
Ecology Complaints	63	35	46	33	29
DOH Incidents	302	200	216	242	245
DOH Cases	388	250	270	275	269
WISHA Inspections	34	27	64	22	43
L&I Claims	180	129	109	133	101
WPC Calls	2326	2171	2043	1937	2342

Overlap of Pesticide-related Events by Agency

Each agency's responsibility for responding to reports of pesticide-related incidents is outlined as follows:

- WSDA investigates complaints about misuse or misapplication, licensing, and structural inspections. WSDA enforces the language on pesticide labels and coordinates with L&I WISHA 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.
- L&I WISHA conducts safety and health workplace inspections in agriculture/industry and investigates employee complaints and referrals from agencies and others. WISHA enforces the WPS for agricultural workers with WSDA and 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.

Pesticide-related cases are referred between PIRT agencies when appropriate. For instance, if a WSDA investigation into a pesticide label violation finds a worker who was ill, the case is referred to DOH. If a DOH investigation finds a

label or safety violation, it is referred to WSDA or L&I WISHA. L&I claims related to pesticide-exposure are reported to DOH. These referrals result in overlapping agency data for cases involving pesticide-related illness.

As the state agency responsible for investigating cases of pesticide-related illness, DOH has formal arrangements with L&I, WSDA, and WPC to receive reports of suspected pesticide-related illnesses and injuries. With these arrangements, DOH data are the most reflective of human pesticide-related illness in the state.

Aggregation of PIRT Data

The overlap in pesticide-related cases between agencies for 2004 is illustrated in Table 4 and Figure 1. The shaded cells in Table 4 show the total number of incidents reported to PIRT by each agency. The white cells indicate the numbers of incidents reported by multiple agencies. Where two numbers appear in the cells, the first number represents the number of events and the second number represents the number of people involved. For example, WSDA responded to 200 complaints about incidents involving a pesticide application. Sixteen of these incidents involved 30 human illnesses and were co-investigated by DOH, 2 were investigated by the Ecology Spill Response Program, 1 involved a worker who filed an L&I claim and 1 involved a call to WPC.

It is difficult to aggregate PIRT data because each agency collects a different type of data. For example, Ecology Spills Program data include information on actual environmental contamination and on calls from concerned neighbors about pesticide use that turned out to be legal after investigation. Data from WPC includes calls about human exposures with and without associated illness. WSDA data include actual violations, cases of crop damage, complaints about inadequate pest control inspections, and problems with licensing of pesticide applicators.

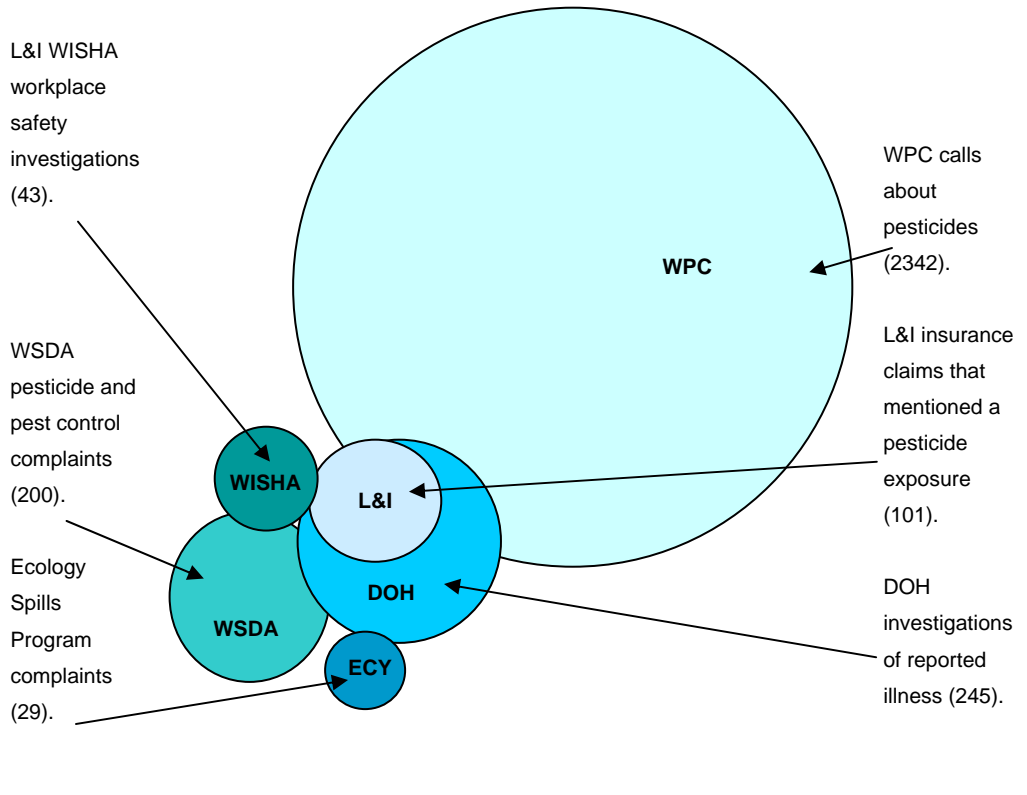
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L&I Claims	1	1	101	101	1	21
WISHA	2	-	2	1	43	-
WPC	1	-	150	21	-	2342

* Events include WSDA complaints by event, Ecology complaints by event, DOH incidents by people involved, L&I claims by people involved, L&I WISHA inspections by employer, and WPC calls by people involved. Where two numbers appear, the first number represents events and the second number represents people involved.

Figure 1 illustrates how the PIRT agency datasets overlap for 2004. The figure is not drawn to scale. The WPC circle is very large as it indicates the number of calls concerning pesticides, not the number of actual human exposures.

Figure 1. Overlap of PIRT Member Agencies Pesticide Related Events, 2004



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/ts/PIRT/pubs-pirt.htm>.

PIRT Report to Senate Agriculture Committee

Panel members presented information on PIRT activities and current pesticide issues to the Senate Agriculture Committee on January 27, 2005.

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. Agency response times for 2004 are listed in Table 5.

Table 5. Agency Response Times, 2004

Agency Mandates	Agency Response Times
<p>Agriculture</p> <ul style="list-style-type: none"> • Immediate response when complaints involve humans or animals • All other complaint investigations must be initiated within 48 hours 	<ul style="list-style-type: none"> • 100% of human exposure cases within 24 hours • 79% of all cases within 24 hours
<p>Health</p> <ul style="list-style-type: none"> • Hospital admission, death, or threat to public health within 24 hours • All others within 48 hours 	<ul style="list-style-type: none"> • All 4 severe reports within 24 hours • 94% within 48 hours
<p>Labor and Industries (WISHA)</p> <ul style="list-style-type: none"> • Serious complaints within 30 days • All others within 120 days 	<ul style="list-style-type: none"> • Majority within 30 days • All within 120 days

PIRT Panel Activities

The PIRT Annual Report summarizes the activities of the PIRT Review Panel and member agencies for 2005.

Background

The PIRT Review Panel met nine times in 2005. The Panel monitored each agency's response time to incidents (see Combined Agency Data, page 8), monitored actions stemming from recommendations made in previous years, analyzed incident data to identify trends and patterns of problems related to pesticides, and responded to requests for special activities from the panel members.

The Panel made the following recommendations for Panel action and member agency action for 2005.

Recommendations to the PIRT Review Panel and Member Agencies for 2005

Recommendation 1

PIRT Review Panel and member agencies will initiate action on findings from the DOH investigations into underreporting of pesticide-related illnesses.

Lead: Dorothy Tibbetts

Department of Health

The investigation into underreporting of pesticide-related illnesses recommended continuing efforts to improve reporting of pesticide-related illness by health care providers. See the full report, *Improving Data Quality in Pesticide Illness Surveillance*, at http://www.doh.wa.gov/ehp/oehas/eha_publications.htm. Reporting is likely to improve if health care providers are aware of the purpose and outcomes of their reporting. To this end, DOH re-instituted the practice of sending Pesticide Incident Summary Reports to health care providers who referred cases to DOH. Summary reports provide information obtained during the DOH investigation of the case. Summary reports for 2000-2003 cases were mailed to health care providers in April 2005 and reports for 2004 cases were mailed in October 2005. Summary reports were also mailed to local health jurisdiction health officers and environmental health directors.

In addition to the case summaries, each packet contained information on the pesticide-illness reporting requirement and a flyer on reporting, suitable for posting as a reminder to busy medical personnel. The flyer stressed that suspected pesticide-related illness or injury should be reported. The packets

contained information about the Pesticide Program and the classification system used by DOH to determine the likelihood that the symptoms reported were caused by a pesticide exposure. They also contained a link to the DOH Pesticide Program Web site with new Web pages specifically for health care providers at <http://www.doh.wa.gov/ehp/ts/Pest/pest-hcp-info.htm>.

Copies of the EPA publication *Recognition and Management of Pesticide Illness* were offered upon request. The 2004 Pesticide Incident Summary Report packets also included feedback cards to assist DOH in evaluating the usefulness of the reports and to measure knowledge about the reporting requirement among health care providers and local health officials. For the 2004 cases, summary reports were mailed to 259 health care providers, 34 environmental health directors, and 24 health officers. Ninety-three (36%) of the evaluation cards were returned. Most (62%) of the 93 responses were from health care providers, 12% were from local health officials, and for 26% of the responses it was unknown whether they were from providers or local health officials.

Table 6 summarizes the results of the evaluation responses.

Table 6. Responses to Evaluation Forms Sent to Health Care Providers, Health Officers and Environmental Health Directors, 2005

	Yes	No
Was this mailing useful to you?	85 (93%)	6 (7%)
Did you know that suspected pesticide illnesses or injuries are reportable?	48 (53%)	43 (47%)
Would you like a copy of the clinical manual <i>Recognition and Management of Pesticide Poisonings</i> ?	64 (70%)	27 (30%)
Would you like to receive future PISRs by email?	36 (40%)	54 (60%)

Another recommendation from the report was to develop alternative means of reporting potential pesticide illness cases to reduce the time and effort required. During 2005, significant progress was made in instituting a system for the electronic transfer of reports of possible pesticide illness from WPC to DOH and from L&I to DOH.

Washington Poison Center and Department of Health

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 members then use a record review system, the Pesticide Illness Electronic Reporting System, to upload and view the reports from WPC. Daily transfer of reports began in December, 2004. The system underwent testing through March,

2005. During testing, reports continued to be faxed concurrently with electronic reports. The sensitivity and specificity of the automated case selection criteria were evaluated. Inconsistencies were detected and resolved. With testing of the transfer protocol completed, WPC discontinued faxing reports in April, 2005.

Labor and Industries and Department of Health

L&I and DOH also collaborated on a system for the electronic reporting of pesticide illness. L&I transfers weekly claims data to the DOH secure server. DOH downloads the cases for viewing and case ascertainment. The process was completed in February and paper reports were discontinued in March. The Pesticide Incident Electronic Reporting System will be upgraded to allow for review and storage of these reports in the system database.

Other Electronic Reporting Projects

DOH and Washington Environmental Public Health Tracking Network are currently exploring the feasibility and usefulness of obtaining electronic reports of pesticide illness cases from Inland Northwest Health Services Emergency Departments. A retrospective review of data from Inland Northwest Services databases for records with pesticide-related ICD-9 CM codes has been planned. The review will provide information about: a) whether this method of obtaining reports will increase the completeness and timeliness of pesticide illness reporting, and b) what would be required institutionally and technically to automatically provide these data to DOH.

Recommendation 2

DOH will revise and implement its data collection tool for identifying cause. DOH will report to PIRT on the progress of this project.

Lead: Dorothy Tibbetts

During 2005, DOH evaluated the feasibility of revising questions on the data collection instrument to better solicit information that could be used to prevent future incidents. The DOH data collection instrument contained two sets of prevention/intervention questions. One set included questions relating to the WPS. DOH reviewed the WPS questions, and determined that, given the limitation of the interview process, it is difficult to elicit quality information in this context. The second set of questions was developed for the National Institute for Occupational Safety and Health (NIOSH) and included questions on how the exposure could have been prevented. DOH revised these questions to obtain better information.

In July of 2005, DOH received funds from NIOSH to conduct a 5-year study entitled *Identifying Preventable Causes of Pesticide-related Illness Among*

Agricultural Workers. This project will enable DOH to more effectively identify preventable causes of illness and injury.

The project will identify and track existing pesticide risks to workers in the agricultural sector by expanding DOH case investigations and analysis of specific, common exposure scenarios. These include drift, exposures due to inadequate personal protective equipment practices, and the adequacy of WPS training. DOH will use the information derived from this effort to critically evaluate the adequacy of existing programs and policies, and to modify and expand current outreach efforts to address gaps in our prevention activities.

The specific objectives of this effort include the following:

- Critically assess the capability of the current data collection process for capturing the information needed to address specific areas of concern (for example, drift exposures; exposures due to inadequate personal protective equipment practices)
- Identify and develop necessary changes to the data collection process and data systems
- Expand analysis of collected data on specific areas of concern
- Develop, implement, and evaluate new prevention activities or modifications to current prevention activities based on the information generated with this effort

Data collection and data analysis strategies will identify root causes of occupational accidents resulting in pesticide illness by asking why events occurred or conditions existed. Intervention strategies will include policy recommendations to state and federal agencies and direct outreach to agricultural workers. Prevention messages will be incorporated into existing DOH outreach and education activities.

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

Action recommendation 3 was carried forward to 2006.

Recommendation 4

PIRT will review the Report on the National Assessment of EPA's Worker Protection Program and findings from Matt Keifer and Rich Fenske's University of Washington Pesticide and Public Health class regarding the adequacy of this rule to determine relevance for WPS implementation in Washington State. Additionally, the Panel will discuss future action that it might undertake.

Lead: Gabrielle Toutonghi

At the October, 2005, PIRT meeting, Allan Welch of EPA Region 10, presented information from EPA's *National Assessment of the Worker Safety Program*. The presentation focused on potential regulatory changes to the WPS (40 CFR Part 170). Potential changes include:

- Strengthening the worker training provisions including content, grace period, retraining interval, trainer requirements, and verification system.
- Establishing a hazard communication program for workers including training and field notification and possible changes to the central posting requirements.
- Reconsidering the retaliation provisions of the WPS.
- Expanding the scope of the applicator rules to include all individuals that mix, load or apply any pesticide as part of their occupation, including licensing handlers as currently defined in the WPS.

In November, the EPA will publish a Federal Register Notice of Intent to proceed with proposed changes to the WPS and Applicator Training regulation. A rule proposal is expected to be published in the Federal Register in February 2007.

University of Washington students in Matt Keifer and Richard Fenske's Pesticides and Public Health graduate class focused on WPS. They presented their recommendations for improvements to the WPS at the October 2005 PIRT meeting:

- Public Health Strategies for Minimizing Pesticide Exposure: Collateral Populations. Yolanda Sanchez addressed the four issues of pesticide drift, pesticide use reporting, decontamination, and exposure of children to pesticides.
- Evaluating and Revising the Training Portions of the WPS: Elizabeth Hom and Mac Rainey evaluated the current standard for training and recommended changes that address barriers to workers hearing the pesticide safety message, ensuring that training is documented, establishing incentives for growers to provide training, and enforcing compliance.

At the March 2005 PIRT meeting, Cliff Weed of WSDA described WSDA enforcement of the WPS through inspections at agricultural sites. In Tier-I inspections, the business place is inspected and the employer is interviewed for compliance with the WPS. In Tier-II inspections, workers are also interviewed. Historically, inspections have revealed that employers are doing well at providing the following:

- Information on re-entry after pesticide applications
- Appropriate personal protective equipment
- Emergency assistance

The following violations are most commonly identified during inspection:

- Failure to post information on pesticide applications at a Central Notification Board
- Failure to conduct Pesticide Safety Training, particularly for workers
- Insufficient Decontamination Supplies particularly for handlers at mix/load sites

In most cases violations are corrected without penalty.

Also, at the March 2005, PIRT meeting, Flor Servin of WSDA, discussed programs to train employers and farmworkers in pesticide safety. These include: Hands-on Training for pesticide handlers, Train-the-Trainer Program, Pre-license Training, and recertification courses. The programs cover appropriate personal protective equipment, mixing and loading, decontamination of personal protective and application equipment, and cholinesterase information. From 2002 through 2004, 336 pesticide handlers received training at 14 workshops. During 2003 and 2004, 952 individuals were trained at 35 pre-license classes. Representatives from industry, Jaime Reyes and Jaime Ramon, described what they learned in the Train-the-Trainer Program and how they apply the information to their work in WPS training.

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 PIRT Annual Report.

Lead: Dorothy Tibbetts

DOH will compile, review and summarize incident data related to the tree fruit industry. The summary will be included with the *2006 PIRT Report*.

Recommendation 6

PIRT will continue to compile data related to drift and report on member agencies' drift reduction efforts. PIRT will explore the feasibility of organizing a Washington Symposium on Drift.

Lead: Ann Wick

WSDA and DOH are working with Carol Ramsey, the Pesticide Education Coordinator for Washington State University, to develop a drift prevention symposium and field day. The purpose of these events is to encourage growers, primarily in the tree fruit industry, to learn about and adopt drift reduction technology. Ms. Ramsey is planning a hands-on demonstration day for the winter or early spring of 2006 and a symposium later to build on experiences from the field day. Ms. Ramsey is coordinating a planning committee with researchers, regulators, public health, and the tree fruit industry to develop the field day and symposium agenda.

Recommendation 7

The Panel will review and report on member agencies independent strategies to reduce pesticide incidents based on the combined PIRT data.

Lead: Dorothy Tibbetts

Each PIRT agency conducted pesticide incident prevention activities. Details of these activities are listed in each agency's Prevention Activities section in the following Agency Summary Reports.

Recommendation 8

PIRT will review the activities of the Medical Monitoring program for agricultural workers who handle cholinesterase inhibiting insecticides.

Lead: Dorothy Tibbetts

The activities of the Cholinesterase Monitoring Program for 2005 are described in detail in the L&I Section of this report.

Recommendation 9 | *PIRT will continue to monitor for any increase in pesticide incidents related to control of mosquitoes.*
Lead: Dorothy Tibbetts

West Nile virus was detected in Washington in 2005. One horse, 1 bird and 2 mosquito pools, all from Yakima County, tested positive for West Nile virus in September. DOH tracks illnesses associated with control of community disease vectors and incidents involving repellents. This allows DOH to identify pesticide illness cases specifically associated with West Nile virus control efforts. Table 8 summarizes DOH cases associated with mosquito control, 2002 through 2004.

Table 8. DOH Cases* Associated with Mosquito Control, 2002 - 2004

	2002	2003	2004
Adult mosquito control	3	4	2
Larval mosquito control	0	0	0
Mosquito repellent	1	6	4

* Limited to cases of illnesses classified by DOH as definitely, probably or possibly due to pesticide exposure. See Appendix B for more information on the DOH classifications.

Recommendation 10 | *PIRT member agencies will 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

Labels for the pesticide products, Lorsban and Guthion, were distributed to PIRT members. Because of time constraints, there was no discussion but members were asked to look at the directions regarding drift prevention and to be aware of mandatory and voluntary directions to applicators. This discussion will be continued as PIRT develops an agenda for the proposed drift conference.

Other Panel Activities for 2005

RCW 70.104.080-100 Pesticide Panel

The Panel is reviewing the Revised Code of Washington (RCW) governing PIRT activities (RCW 70.104.080-100 Pesticide Panel). A draft proposal for revisions to the RCW was distributed. Discussion will continue in 2006.

Letter of Support for Modification of General Pesticide Rules, WAC 16-228

The Panel wrote a letter to WSDA in support of the proposed modification to the General Pesticide Rules, WAC 16-228. The proposed changes require notification of the application of highly toxic or corrosive pesticides via aerial, air blast, fumigation (outside) or overhead chemigation applications when the application site and the property boundaries touch and the application is within one-half mile of schools, hospitals, nursing homes, or adult or child day care centers.

The Panel noted that drift is a potentially serious route of exposure to pesticides. Pre-notification of schools, daycares, and hospitals will increase their awareness of highly toxic pesticides used nearby, facilitate feedback to the growers about the timing of planned applications, and will expedite protective actions if drift occurs. The Panel also noted that others could benefit from notifications including: adjacent homes, assisted living facilities, senior centers, preschools, private schools, community pools, parks, dialysis centers, and medical clinics. A copy of the letter is located in Appendix F.

Sales Data on Pesticide Use

In August, 2005, Philip Dickey, PhD, from the Washington Toxics Coalition, presented *Insecticide Concentrations in Thornton Creek and Comparison to Retail Sales* based on the paper co-authored with Dean Wilson, *Comparison Between Consumer Sales of Diazinon and Carbaryl and Water Quality in an Urban Stream*. The report included data on retail sales of products containing diazinon and carbaryl at Lowe's and Home Depot Stores in King County from 1997-2002. Sales decreased after the EPA announced phase out of diazinon in December 2000. He indicated that diazinon concentrations decreased and carbaryl concentrations increased in Thornton Creek between January 1996 and January 2003. Follow-up discussion included consumer education on the use of pesticides within the watershed and using surveys to determine whether residents were dumping pesticide products in drains.

Agriculture

Washington State Department of Agriculture's summary of pesticide-related complaint investigations during 2004.

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 received by the agency regarding possible pesticide misuse, storage, sales, and distribution. It also investigates complaints about applicator licensing and building structure inspections for wood destroying organisms. The agency inspects marketplaces, importers, manufacturers, and pesticide application sites for compliance with state and federal laws and regulations.

Complaints

During 2004, WSDA investigated 200 complaints (Table 9). After investigation, it was determined that 110 (55%) involved pesticide applications and 90 (45%) were unrelated to actual applications. Examples of complaints unrelated to applications are structural inspections or licensing complaints. There were 122 violations associated with the 200 complaints. See Appendix C for a listing of all WSDA pesticide-related complaint investigations for 2004.

Table 9. WSDA Complaints and Violations, 2000 - 2004

Year	Total Complaints	Violations
2000	199	121 (61%)
2001	225	152 (68%)
2002	255	169 (66%)
2003	222	151 (68%)
2004	200	122 (61%)

Location of Complaints

There are significant differences in population, the types of pest problems, and the nature of complaints between the eastern and western portions of the state. Western Washington complaints generally concern wood destroying organism inspections, homeowner complaints about drift, intentional misuse, and complaints about unlicensed applicators. In 2004, the number of complaints investigated for Structural Pest Inspections decreased from previous years.

In 2004, 117 (58.5%) of the complaint investigations occurred in eastern Washington and 82 (41%) in western Washington. There was one out-of-state complaint. Figure 2 shows the range of complaints by county for 2004. Table 10 lists the counties with the most complaint investigations from 2000 through 2004.

Figure 2. WSDA Complaints by County, 2004

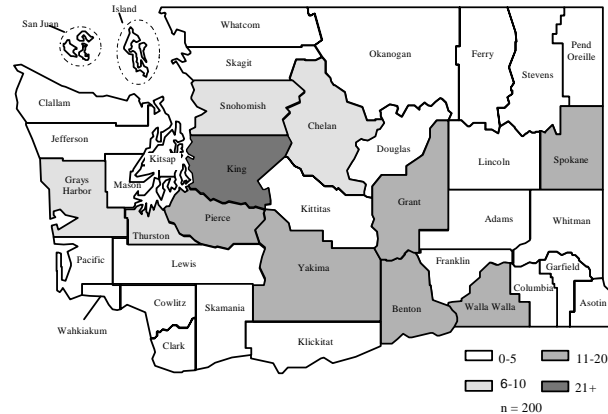


Table 10. WSDA Counties with the Most Complaints, 2000 - 2004

	2000	2001	2002	2003	2004
Yakima	26	King	21	Spokane	28
Grant	21	Grant	20	King	27
Pierce	16	Spokane	20	Pierce	22
Benton	14	Spokane	20	Grant	19
Chelan	13	Spokane	20	Spokane	19
Spokane	11	Yakima	18	Benton	12
Clark	10	Yakima	18	Spokane	19
Douglas	9	Benton	13	Yakima	13
King	8	Pierce	12	Chelan	12
		Thurston	10	Walla Walla	11
		Multiple	9	Yakima	15
				Benton	15
				Chelan	12
				Walla Walla	11
				Pierce	11
				Clark	11
				Multiple	10
				Chelan	10
				Spokane	17
				Benton	15
				Yakima	15
				Walla Walla	11
				Pierce	11
				Clark	11
				Multiple	9
				Clark	11
				Multiple	10
				Chelan	8

Response Time

In 2004, WSDA responded to 79% (157/200) of complaints within one day of the incident. As required, WSDA responded to all Human Exposure complaints (22) within one day.

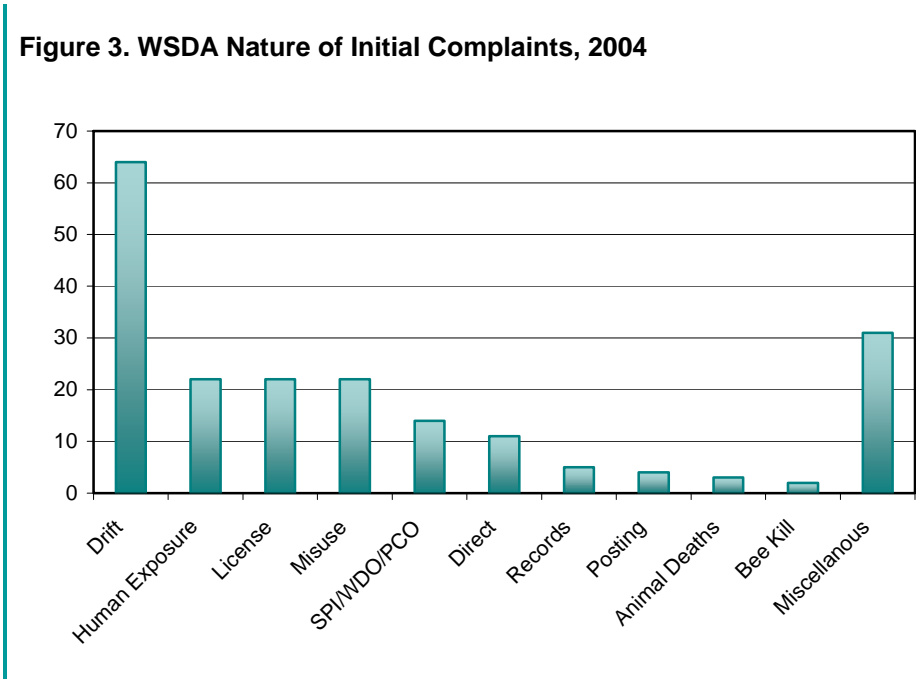
Nature of Complaints

Complaints are categorized according to the nature of the initial complaint. Investigation may find the complaint not valid, substantiate the initial complaint, or identify additional violations. For example, an initial complaint may concern a possible drift, but investigation determines that drift did not occur but 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 case is categorized by the most serious complaint. 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.

In 2004, WSDA received 64 general complaints about possible pesticide drift to property, water, or crops and 22 complaints specifically about human exposure to pesticides, some of which were due to drift (Figure 3). There were 38 complaints about drift to property or vehicles and 23 crop-related drift complaints. Pesticides moving off-target appears to be one of the major reasons to register a complaint with WSDA. Complaints about misuse of pesticides increased in 2004. Generally, these complaints concerned damage to ornamentals from commercial applications or from a neighbor’s application. Most of these complaints were not substantiated as the damage was due to drought, insects, or frost. WSDA receives numerous complaints about non-licensed individuals and faulty structural inspections. The WSDA received 22 complaints about improper or no licensing, 11 complaints about direct misapplications, and 14 complaints specific to Wood Destroying Organism (WDO) and Structural Pest Inspections (SPI) (in addition to WDO/SPI complaints about improper licenses or records). Two bee kills were reported for 2004.

Figure 3. WSDA Nature of Initial Complaints, 2004



Drift and Human Exposures

Of the 22 complaints about possible human exposure to pesticides, 13 were due to drift, 3 complaints involved a direct contact with the pesticide (generally through soil) and 6 complaints were about odor or vapor. Analyses were done to determine if the complaints about human exposure or drift were valid, regardless of whether they were the cause of a regulatory action. These analyses determined that:

- 42 of the 64 general drift complaints had residue detected off target
- 3 of the 22 human exposure complaints were direct exposure
- 11 of the 22 human exposure complaints were not related to any pesticide exposure
- 7 of the 22 human exposure complaints were due to drift and had residue detected off target
- 1 human exposure complaint was referred

In 2004, WSDA conducted an initial investigation of one complaint from a farm worker alleging pesticide exposure from residue. WSDA referred this case to L&I. L&I is the lead agency to investigate employee agricultural pesticide exposures alleged to be from their employment.

The alleged human exposures investigated by WSDA were primarily reported from neighbors or individuals who were in agricultural areas but not doing agricultural labor. These persons reported either drift or direct contact with pesticides.

Application Methods

In 2004, WSDA received 15 complaints about aerial applications, 1 chemigation complaint, 1 complaint about misuse of a fogger, 2 fumigation complaints, 94 complaints about ground applications, 70 complaints about items other than an application, and 17 complaints where the application method was undetermined or unknown.

Violations

Complaint investigations may result in the determination that a violation of state or federal laws or rules has occurred. During 2004, about 60% of WSDA complaint investigations resulted in some type of violation. Most violations are not severe in nature (see Table 14 on page 32) and most violators are 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
- Wood Destroying Organism (WDO): Incidents involving inspections on structures for fungi, insects, and conditions that lead to pests. No pesticide applications are made
- Structural Pest Inspections (SPI): A change in law established a separate definition for a license for this work. Replaces the previous WDO 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

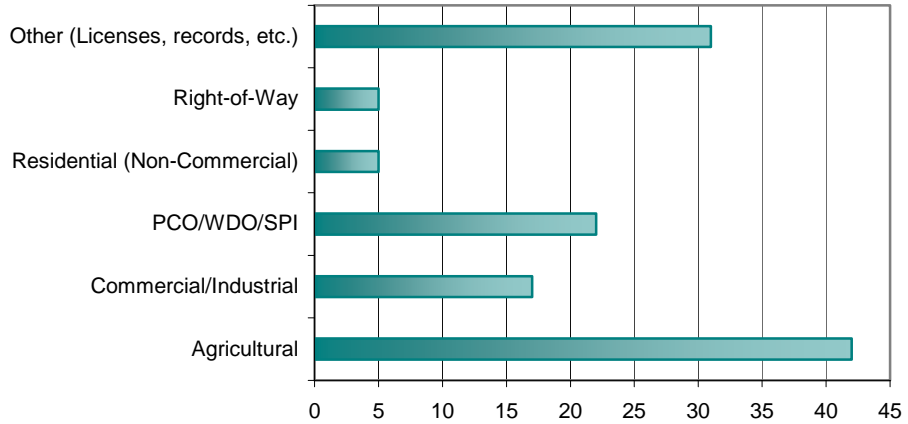
Table 11 shows the complaints with violations by type of activity from 2000 through 2004.

Table 11. WSDA Violations by Type of Activity, 2000 - 2004

Activity	2000	2001	2002	2003	2004
Agricultural	48	63	69	39	42
Commercial/Industrial	33	27	31	38	17
Pest Control Operator/ Wood Destroying Organism	14	28	16	33	22
Residential (non commercial)	11	11	13	7	5
Right-of-Way	8	8	3	5	5
Other (licenses, records, etc.)	7	15	37	29	31
Total Violations	121	152	169	151	122

Figure 4 identifies the violations by type of activity for 2004.

Figure 4. WSDA Violations by Type of Activity, 2004



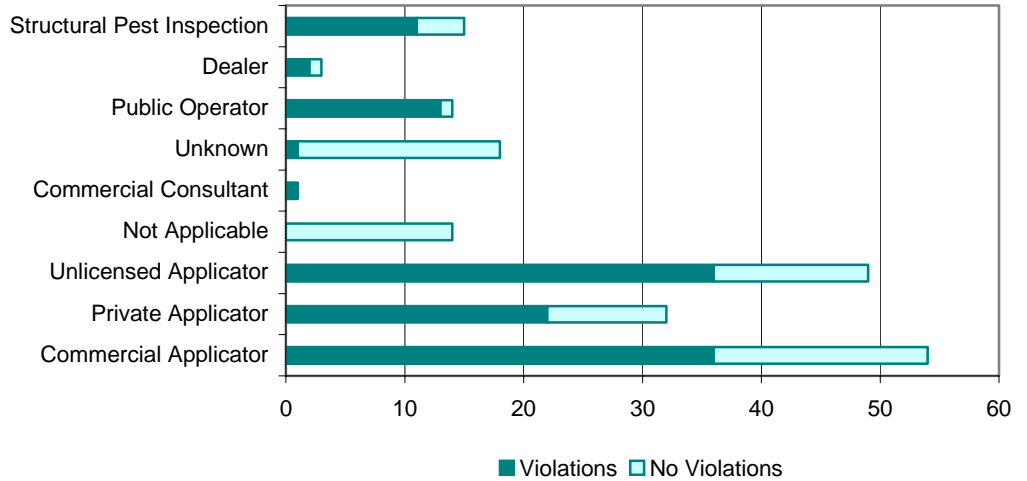
Violations alone do not give an accurate picture of pesticide exposures. For example, there can be instances where drift has occurred and no action can be taken, as the violator could not be proven. Sometimes the applicator has moved away, often out of state, and cannot be located. However, in general, violations give a good representative picture of the validity and severity of pesticides incidents.

Type of License in Complaints with Violations

In 2004, WSDA licensed approximately 5,100 commercial applicators and operators and over 12,000 private applicators. Although WSDA licenses fewer commercial 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. See Appendix D for information about WSDA license types.

In 2004, commercial applicators were involved in 54 complaints with 36 violations. Private applicators were involved in 31 complaints with 22 violations. Unlicensed applicators were involved in 49 complaints with 36 violations. Unlicensed applicators were primarily unlicensed people conducting structural pest inspections that should have been licensed (Figure 5).

Figure 5. WSDA Type of Licensee Involved in Cases With and Without Violations, 2004



Agricultural Complaints

In agriculture, most of the 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 complaints involved applications to apples, followed by applications to cherries and pears. The most frequent agricultural complaints in 2004 for a single crop were from applications to potatoes. Most of the complaints were about possible human exposure, followed closely by drift or direct exposure to vehicles (Table 12).

Table 12 summarizes the most frequent target and complaint sites for investigations in which citations were issued for agricultural violations for 2004.

Table 12. WSDA Agricultural Violations, 2004

Most Frequent Target Site*		Most Frequent Complaint Site**	
Potatoes	6	Person	8
Wheat	5	Car	5
Apples	5	Trees	4
Cherries	4	Potatoes	3
Pears	4	Bees	3
		Alfalfa	2
		Property	2
		Pears (including organic)	2

* Target site is the intended target for the pesticide.

** Complaint site is where the pesticide landed or the type of complaint filed.

Non-Agricultural Complaints

In 2004, the most frequent non-agricultural complaint concerned structural pest inspections. Generally, these complaints occur because inspectors fail to notice or report signs of infestation or wood rot rather than diagnosing problems that do not exist. The most frequent type of violation cited by WSDA was failure to keep accurate or adequate records (did not record conditions conducive to rot or the presence of insects) and failure to obtain the proper license type for the application being done.

The most common complaint about non-agricultural applications was from drift or direct applications to control weeds from an unlicensed applicator, usually a neighbor. The second most common complaint concerned misuse of products to control insects. Complaints about drift from commercial lawn care applications were significantly reduced from previous years.

Table 13 summarizes the most frequent target and complaint sites for investigations in which citations were issued for non-agricultural violations for 2004.

Table 13. WSDA Non-Agricultural Violations, 2004

Most Frequent Target Site*		Most Frequent Complaint Site**	
Weeds	8	Structural Pest Inspection	22
Insects	6	License	17
Property	3	Records	4
Right of Way	3	Backflow Device	3
Lawns	3		

* Target site is the intended target for the pesticide.

** Complaint site is where the pesticide landed or the type of complaint filed.

The distribution of complaints has been consistent over the years and points to the need for greater education of applicators, particularly in 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. The number of preventable violations points to the continuing need for a strong agency enforcement program. However, given that the estimated number of applications is in the hundreds of thousands, there are few serious offenses directed to the department.

Applicators must comply with all precautions and directions on the pesticide label. The following case illustrates problems that can occur when an applicator becomes careless.

A dog went into seizures and required veterinary care when it ingested a granular insecticide. A commercial applicator had used Talstar, a granular product containing bifenthrin to control beetles around a home. The dog's owner called WSDA and the investigator found granules of Talstar clumped around the site in a garden with strawberries, cucumbers and peppers, and in the dog's water dish, a wagon, and pottery dish. Water and dog vomit samples were positive for bifenthrin. The label requires: 1) application only with equipment that disperses the pellets in a uniform manner, 2) does not allow for the product to be used in a food garden, and 3) requires that pets and people be kept from the area after application. The applicator had applied the product carelessly using an empty pop can, had applied in the garden, and did not warn the dog's owner about contact. He was issued a Notice of Intent corrective action and fined for applying in a faulty, careless, and negligent manner.

Children

In 2004, children were involved directly or indirectly in 5 cases. DOH also investigated 4 of the cases. Two cases involved alleged illnesses that were probably from odor. No residues were identified on or near the children. One case involved a possible residue transferred by a parent from a wet railing to the child. No symptoms were observed in the child. One case concerned a possible Sudden Infant Death that occurred in 2003. The child died the day after the apartment was treated with an insect fogger. DOH asked WSDA to determine if the label had been followed and all precautions taken for ventilation after the use of the fogger. As the case occurred in 2003, WSDA could only review the records. No violations were noted and the official cause of death was listed as Sudden Infant Death. This case was described in detail in the DOH and WPC Sections of the *2004 Annual PIRT Report*. The fifth case, where DOH was not notified, was a complaint that notification had not been provided at a child care facility when a pesticide was used. The case concerned emergency use of a wasp spray. WSDA discussed the need for posting with the applicator.

Severity of Reported Complaints

The WSDA rates the severity of cases from 0 to 6 after completing the complaint investigation. See Table 14 for a detailed description of each rating. As in previous years, the majority of complaints were assigned a severity rating of 2 or less.

Five of the 8 cases with a severity rating of 4 were from herbicide drift to a susceptible or organic crop with large financial losses. Two of the applications were made to potatoes, 1 to peas, 1 to hay and 1 to control weeds in a right-of-way. One case was drift from an insecticide application to potatoes. The other 2 cases were injury from direct applications, 1 from an application to control weeds in a wetland, and the other for insect control that resulted in an animal illness.

Table 14. Severity Rating of WSDA Complaint Cases, 2000 - 2004

Rating	2000	2001	2002	2003	2004	Criteria
0	20 10%	23 10%	30 12%	22 10%	26 14.5%	Problem not due to pesticides and/or no cause determined; PCO/WDO inspection with no violations.
1	40 20%	71 31.5%	76 30%	51 23%	65 32.5%	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	89 45%	72 32%	114 45%	112 50%	83 41.5%	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; PCO/WDO faulty inspections; DOH classified "possible".
3	31 16%	35 15.5%	31 12%	22 10%	18 9%	Minor short-term health symptoms (rash, eye irritation, shortness of breath, dizzy, nausea, vomiting); bee kills less than 25 hives; minor fish kills; economic plant damage under \$1000; evidence of deliberate economic fraud; DOH classified "probable".
4	17 9%	20 9%	3 1%	13 6%	8 4%	Short-term veterinary or hospital care; bee kills over 25 hives; significant fish kills; significant economic plant damage (over \$1000); environmental damage; illness involving children; DOH classified "probable" .
5	2 1%	4 2%	1 0.4%	2 1%	0	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	199	225	255	222	200	

The following case example illustrates an agricultural violation with a severity rating of 4.

An aerial application of Monitor (methamidophos) and Comite (propagate) to potatoes drifted on alfalfa being grown for seed. Leaf cutter bees had been placed in the alfalfa field to provide for pollination. A temperature inversion was present at the time of application. Both the potato field and the alfalfa field slope down towards a common drainage ditch. There was a very slight breeze from the potato field towards the alfalfa field. Both the Monitor and the Comite labels have warnings against application when the wind favors off-target movement. In addition, the Monitor label states "Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area." Monitor is highly toxic to bees. The alfalfa grower incurred loss of nearly \$500,000 in lost seed production and over \$10,000 for the loss of bees. The applicator was issued a Notice of Intent and fined.

Type of Pesticide Involved

In 2004, herbicides were involved in 67 complaints and insecticides in 39 complaints. There were relatively fewer complaints about other pesticides such as fumigants (7), fungicides (3) and rodenticides (1). This may be because detrimental effects from herbicide and insecticide misuse are more obvious and because they are generally applied at a higher frequency, with more power equipment, and over larger areas.

Overall, complaints about applications in 2004 show a greater diversity of pesticides than in previous years. There were 2 complaints about azinphos-methyl drift and 2 complaints about endosulfan drift. The complaints on these products continue to decrease. Herbicide drift continues to constitute the greatest number of complaints. Fumigant complaints seem to be increasing in number although the complaints are usually only about odor rather than illness.

In 2004, 2 herbicides, glyphosate (19 complaints) and 2,4-D (14 complaints), were the most frequently reported active ingredients (Table 15). 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. Many complaints involved tank mixes of several products.

Complaints reported to WSDA should be regarded as indicators of potential problem areas and are not a definitive summary of all misapplications. For example, drift involving products such as sulfur and kaolin (clay) may occur more often than is reported. Such products are readily identifiable and people tend to 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.

Table 15. Active Ingredients Most Commonly Involved in Complaints, 2004

Active Ingredient	
Glyphosate	19
2,4-D	14
Chlorpyrifos	5
Dicamba	5
Metam-Sodium	4
Kaolin	3
MCPA	3
Oil	3
Permethrin	3
Sulfosulfuron	3

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.

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, as could happen if several applicators were involved in the same investigation, both types are listed.

Table 16. WSDA Agency Actions, 2000 - 2004

	2000	2001	2002	2003	2004
No action indicated	78	74	84	71	76
Verbal warning	1	3	6	3	1
Advisory letter/Warning letter	4	4	8	8	4
Notice of correction	96	111	127	116	98
Notice of intent/Administrative action	17	37	31	26	20
Referred	2	2	2	0	2
Stop sale	1				
Total actions	199	231	258	224	201

In 2004, the following corrective actions were taken: No Action Indicated (76), Verbal Warning (1), Advisory or warning letter (4), Notice of Correction (98), Notice of Intent (Fines, License Suspension) (20), and Referred (2) (Table 16). One case had more than one type of action (several applicators involved). See Appendix D for Enforcement Action definitions.

Other Agencies Involved

The WSDA works in cooperation with other state and local agencies in their particular area of responsibility and expertise. Agencies cooperate 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 2004, WSDA consulted with other state, federal and local agencies, including the police, in 45 investigations. The Departments of Health and Ecology and EPA were the most frequently consulted. One case was referred to the Yakama Nation and one case to L&I.

WSDA Prevention Activities 2004 and 2005

A one-time appropriation of \$200,000 from the L&I accident fund was approved in the 2004-2005 legislative session to enhance WSDA's farm worker education program. An advisory committee recommended that WSDA continue current efforts and expand efforts especially in hands-on education in the field. WSDA will use the funds to add staff, assist Washington State University with training and purchase equipment.

WSDA filed a CR 102 in 2005 for a notification process when Danger/Poison pesticides are applied by air, airblast equipment, over head chemigation or fumigation outside structures, near schools hospitals, nursing homes, and adult and child day care centers. Public hearings were held in November 2005 in Wenatchee, Yakima, and Olympia.

In addition to investigations of possible pesticide misuse, WSDA inspects marketplaces, importers, manufacturers, and other businesses using pesticides for compliance with state and federal laws and regulations; licenses pesticide applicators and conducts training on the WPS; administers a waste pesticide collection program; and addresses groundwater issues that involve pesticides. Details of these activities for 2004 are listed below:

Compliance

- Conducted 18 marketplace inspections to check for cancelled, suspended, and unregistered products; child-resistant packaging; etc.
- Conducted 84 agricultural use inspections to evaluate compliance with pesticide product labels, the WPS, equipment, licensing, etc.

- Conducted 16 dealer inspections to check for misbranded, cancelled, and restricted use sales of pesticide products, and to check for dealer licensing.
- Conducted 6 inspections at establishments that produce pesticides to check for labeling, disposal, record reporting and containment.
- Conducted numerous presentations at meetings held by growers, schools, labor groups and other organizations to discuss pesticide compliance and preventing incidents.

Registration Services

- Conducted environmental toxicology reviews of Special Local Need registrations, Section 18 emergency exemptions and experimental use permits for numerous active ingredients (e.g., diazinon, diflubenzuron, disulfoton, endosulfan, glyphosate, lambda-cyhalothrin, PCNB, phorate, propargite, propiconazole, triazamate, zeta-cypermethrin).
- Provided information to the Yakama Nation on special local need registrations issued by WSDA and Section 18 emergency exemptions requested by WSDA.
- Provided comments to the EPA regarding proposed revisions to the emergency exemption process.
- Participated in educational workshops regarding West Nile virus and compliance with state rules and regulations and proper application techniques. Prepared a publication on biopesticides registered for mosquito larvae control.
- Worked with the EPA and registrants to develop label statements for several active ingredients (e.g. novaluron, mesosulfuron, zinc phosphide) that will reduce the potential for adverse impacts on non-target organisms (e.g. bees, mammals, plants).
- Provided information to beekeepers on the legal use of pesticides to control mites in honey bee colonies.
- Developed recommendations to add 5 spray adjuvants that are slightly toxic or practically non-toxic to freshwater fish and aquatic invertebrates to Ecology's NPDES permit for aquatic noxious weed control.
- Provided comments to Ecology regarding spray adjuvant use in conjunction with *Bacillus thuringiensis kurstaki* (Btk) insecticides for control of gypsy moth.
- Conducted surface water pesticide monitoring activities in eastern and western Washington watersheds. The data was made available to EPA and National Oceanic and Atmospheric Administration Fisheries for their endangered species assessments.

- Provided EPA with crop and pesticide use information for their endangered species assessments.

Licensing and Farm worker Protection

- Developed and mailed the annual pesticide newsletter, *Pesticide Notes*, to all licensed applicators. The newsletter has information on preventing pesticide violations, new pesticide regulations and current pesticide problems. The July 2004 *Pesticide Notes* highlighted pesticide safety, emphasizing avoiding exposure to farmworkers and children.
- Continued hands-on Train-the-Trainer Spanish language pesticide worker safety programs.
- Continued outreach to Spanish speaking farmworkers on pesticide safety through radio programs, newsletters, training classes and presentations.
- Developed Spanish language training manuals and applicator exams.

Waste Pesticide Disposal

- Collected and disposed of 153,723 pounds of waste pesticide in 2004. Over the program's history, this is an average of 323 pounds per customer. Twenty-eight events were held.
- Identified contents of unknown containers suspected to be pesticides and disposed of them or recommended other disposal options.
- Worked on issues around pesticide container recycling.

Groundwater Protection

- Finished mapping project of groundwater depth (where known), soil types, and land use.
- Developed model for pesticide aquifer vulnerability map for Washington State. Started verification work.
- Participated in educational meetings on protecting groundwater from pesticides.

Ecology

Washington State Department of Ecology's summary of pesticide-related Spill Program complaints, Toxic Cleanup Program and Aquatic Pesticide Permits during 2004.

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 2004.

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. Summaries of the Spill Program pesticide-related complaints for 2004 are provided in Appendix C.

Table 17 lists the types of pesticide-related complaints received from 2000 to 2004. Complaints can involve more than one category of concern.

Table 17. Ecology Pesticide-Related Complaints, 2000 - 2004

Type of complaint*	2000	2001	2002	2003	2004
Pesticides threatening ground or surface water	20	11	23	13	10
Pesticide disposal or waste concern	14	14	12	12	6
Spills and fires	10	1	12	5	10
Unsafe pesticide storage or handling	13	6	11	10	3

* Complaints may involve more than one category.

There were 29 pesticide-related complaints involving threats to air, water, and/or soil in 2004. 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 27 (93%) of the 29 complaints in 2004. Ecology investigated 19 of the 29 complaints.

Of the 29 pesticide-related complaints received by Ecology during 2004:

- 8 occurred in the agricultural environment.
- 2 involved commercial or industrial activities.
- 8 were reported by private citizens.
- 2 stemmed from residential activities.
- 2 involved a combination of chemicals containing a pesticide.
- 3 resulted in potential exposure to humans.
- 6 required some form of cleanup or removal of materials.
- 4 were referred to the Toxics Cleanup Program.

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 2004, the Spill Program referred 6 complaints involving pesticides to Tribes, Department of Transportation, city and county public works departments and WSDA. Ecology immediately notified DOH of 3 incidents where humans were potentially exposed to pesticides. The following is an example of a referred complaint:

In April 2004, the local fire chief collected a sample of pellets spilled on the ground near Lake Roesiger in Snohomish County. The pellets covered an area about 40-feet long and 8-feet wide. The fire chief gave the sample to Ecology for technical assistance. Ecology conducted hazardous categorization within 24 hours after the event. Pesticide and cyanide tests were inconclusive. A second round of hazardous characterization tests two days later were lightly positive for pesticides, but with a lower ph, most likely due to oxidation over time. As run off into the lake from the suspected weed and feed product was likely, Ecology recommended that lake water not be used for drinking until the lake purged itself. The local health department notified the public and decided when it was safe to use lake water again.

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. Ecology placed 10 pesticide-contaminated sites on the cleanup list in 2004 (Appendix E). Two sites per county were added in Chelan and Pierce Counties and one each in Grant, Okanogan, Snohomish, Thurston, Whatcom, and Yakima Counties.

Of the 10 pesticide-contaminated sites identified in 2004, Ecology designated 9 sites as active and undergoing cleanup and 1 as a non-active (remediated) site that was cleaned up or required no further action.

There were a cumulative total of 183 pesticide-contaminated sites in 2004. Of those, 94 sites remained active in the cleanup process at year's end (Appendix E). The status for all sites for 2004 is summarized in Table 18.

Table 18. Status of Pesticide-Contaminated Sites Statewide, 2004

Pesticide-contaminated sites	2004
Sites undergoing cleanup at year's end	94
Sites with no further action needed	58
Sites awaiting further investigation	31
Cumulative pesticide-contaminated sites for the year	183

Water Quality Program: Aquatic Pesticide Permit

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. Aquatic pesticide use during the 2004 application season is reported in the following sections. This is the second year aquatic pesticide permit data were tabulated and analyzed for this purpose.

Nuisance Plant and Algae Control NPDES Permit

The Nuisance Plant and Algae Control General NPDES Permit is issued to homeowners and lake advocacy groups for products used to control algae blooms and invasive milfoil or native nuisance weeds in lakes and ponds. Products permitted in the past included: Diquat, Endothall, 2,4-D (BEE), 2,4-D (DMA), Fluridone and glyphosate. Data on nuisance plant and algae control NPDES permits issued in 2004 were not available in time for publication in this report.

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 by Ecology's Southwest Regional Office. It allows the use of carbaryl, an insecticide in the carbamate family, to control burrowing shrimp in oyster beds. This permit was issued in 2002 and expires January 1, 2006. Data on the amounts used in 2004 were not available in time for publication of this report.

Noxious Weed NPDES Permit

The Noxious Weed General NPDES Permit is issued to government agencies, homeowners, lake advocacy groups, and marinas to treat lakes, rivers, and estuarine environments for noxious, non-native plant species. The treated areas are located throughout Washington State. The permits are issued by WSDA in partnership with the Ecology. The product totals are listed in Table 19.

Table 19. Noxious Weed NPDES Permit, 2004

Product	Gallons	Pounds
Glyphosate	8,452.4	
Diquat	475.33	
2,4-D	1,637.5	2,550
Fluridone	1.5	2,474
Endothall	43.5	
Imazapyr	3,858.5	
Triclopyr TEA	1,319.5	
Total product applied	15,788	5,024

Fish Management NPDES Permit

The Fish Management NPDES Permit is issued to the Department of Fish and Wildlife for fish management in Washington lakes. Currently, Fish and Wildlife is allowed to use only the product rotenone for fish management. The 14 lakes in Table 20 were reported as treated during the spring and fall of 2004. All are in eastern Washington.

Table 20. Fish Management NPDES Permit, 2004

Water Body	Gallons	Pounds
Pillar Lake	0	880
Snipe Lake	2	440
Cattail Lake	2	550
Gadwall Lake	0	385
Poacher Lake	3	0
Lemna Lake	0	110
Shoveler Lake	10	220
Sago Lake	2	220
Hourglass Lake	0	165
Widgeon Lake	17	715
Upper Hampton Lake	15	1,595
Lower Hampton Lake	20	880
Hen Lake	15	0
Dabblers Lake	5	0
Total product (Rotenone) applied	91	6,160

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 2004 application season. The 16 districts include 81% of the total irrigated land in Washington. The product totals are listed in Table 21.

Table 21. Irrigation District NPDES Permit, 2004

Product	Gallons	Pounds
Xylene	16,025	
Chelated copper*	855.7	
Copper sulfate*		169,288
Acrolein	38,106.7	
Total product applied	54,987.4	169,288

* When chelated copper and copper sulfate are converted into elemental copper, the amount of copper applied equals 42,926 pounds.

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. Some groups apply for coverage directly through Ecology's regional offices. All groups are required to submit the previous year's pesticide use data by February first of the following year. Table 22 summarizes pesticide totals statewide from the 2004 application season.

Table 22. Mosquito General NPDES Permit, 2004

Product type	Gallons	Pounds
Bacillus thuringiensis israelensis (Bti) granular/briquettes		11,011.81
Bacillus thuringiensis israelensis (Bti) liquid	9,043.98	
Bacillus spaericus (H-5a5b)		1,455.11
Methoprene briquettes		3,135.02
Methoprene liquid	488.36	
Methoprene granular		143.95
Methoprene pellets	488.36	
Monomolecular film	58.89	
Paraffinic white mineral oil	127	
Total product applied	9,718.23	16,032.64

Surface Water Monitoring

The Departments of Ecology and Agriculture are conducting a 3-year monitoring study to characterize pesticide concentrations in salmonid-bearing streams during the typical pesticide-use season. A report is now available on the second year (2004) results at <http://www.ecy.wa.gov/biblio/0503025.html>.

Two index watersheds, representing urban and agricultural land-use patterns, were sampled from April through October 2004. Thornton Creek in the Cedar-Sammamish watershed was selected as the urban drainage. Spring Creek, Sulphur Creek Wasteway, and Marion Drain in the Lower Yakima watershed represented agricultural land-use patterns.

Concentrations of all pesticides were generally low and close to analytical detection limits. In the agricultural basin, 2,4-dichlorophenylacetic acid (2,4-D) was the most commonly detected pesticide. Dichlobenil was most commonly detected in the urban watershed. Five pesticides, azinphos-methyl, chlorpyrifos, diazinon, malathion, and 4,4'-DDE, were above the numeric component of various standards. A single detection of malathion (3.05 µg/L) approached the acute LC₅₀ for rainbow trout (4 µg/L) in the Marion Drain.

Health

Washington State Department of Health's summary of pesticide-related investigations during 2004.

Background

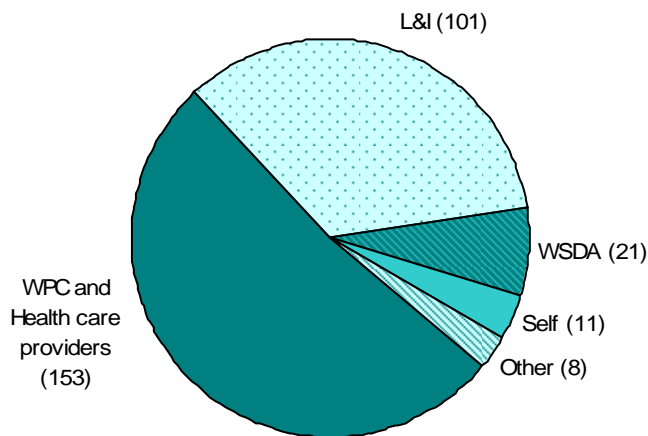
The Department of Health (DOH) Pesticide Program investigates reports of illness related to pesticide exposure. Data collected from the investigations are used to identify public health problems and develop strategies for prevention.

This DOH report on 2004 pesticide-related data describes sources of case reports, classification and severity of investigated cases, and the number and location of DOH investigations. Data on occupational cases, agricultural cases, and non-agricultural cases are presented. The section concludes with a description of DOH pesticide illness prevention activities.

Sources of Case Reports

DOH receives reports of suspected pesticide illness from numerous sources, including WPC, L&I Claims Administration Program, WSDA, health care providers, and others (Figure 6). More than one agency may report the same illness event. See Combined Agency Data on page 8 for a description of reporting requirements and patterns of referral between agencies.

Figure 6. Source of Case Reports, 2004



DOH reviews reports of suspected pesticide illness incidents and conducts preliminary interviews to determine if the 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 3 months
- the pesticide exposure occurred in Washington State
- the pesticide exposure was not an intentional suicide gesture

An incident may involve multiple cases (persons) who experience pesticide illness. The incidents investigated by DOH and found to be definitely, probably or possibly related to the pesticide exposure are briefly described by case number in Appendix C.

Increased Investigation of WPC cases - December 2004 through February 2005

Prior to the implementation of electronic reporting, WPC reporting criteria included symptomatic illness where the person had seen a health care provider or WPC had referred the person to a health care provider. DOH was interested in capturing and evaluating calls in which a health care provider was not initially involved, but the person later sought health care when the symptoms worsened. Electronic reporting provided an opportunity to expand reporting criteria to include these cases. From December 2004 through February 2005, DOH investigated symptomatic cases with no health care provider involvement. This contributed to increased numbers of cases opened for investigation during these months. Due to limited resources, DOH discontinued investigating cases in which health care providers were not involved beginning March 1, 2005. Details from these additional cases will be described in the 2006 PIRT report along with other analyses of 2005 data.

Classification of Investigated Cases

DOH Pesticide Program investigators interview individuals, obtain pesticide application records and medical records and, on occasion, conduct field visits. Data from investigations are used to classify how likely it is that the symptoms reported are related to a pesticide exposure. Case classification is determined through documentation of the exposure, documentation of the health effect, and evaluation of the causal relationship. DOH uses the NIOSH Case Classification System to distinguish between Definite, Probable, Possible, Suspicious, Insufficient Information, and Unlikely cases. Case classification criteria are listed in Appendix B. Minimal criteria for assignment to Definite, Probable, and Possible classifications are that reported symptoms are characteristic of known toxicological effects of the pesticide agent, and the temporal relationship between the exposure and symptoms is plausible. Further description of Definite, Probable, and Possible (DPP) cases is provided in Table 23.

Table 23. Classification Criteria of Definite, Probable, and Possible Pesticide Illness Cases

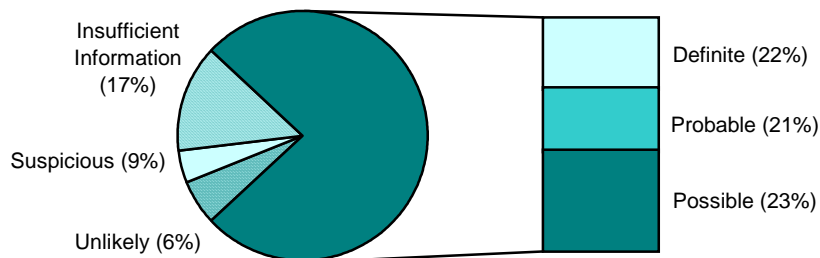
	Evidence of Exposure	Signs* and Symptoms**
Definite	Laboratory, clinical, or environmental evidence corroborates exposure, and →	Two or more post-exposure health effects (one a sign) or lab findings are reported by a licensed health care provider.
Probable	Laboratory clinical, or environmental evidence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

* Signs are objective evidence of illness and are observable on examination (e.g. low heart rate, cough, rash).

**Symptoms are subjective evidence of illness and are not observable on examination (e.g. headache, nausea, dizziness).

In 2004, 204 (76%) of the reported cases were determined to be definitely, probably, or possibly related to pesticide exposure. Figure 7 illustrates the classification of cases for 2004.

Figure 7. Classification of Cases 2004



The number of DPP cases for the years 2000 through 2004 is listed in Table 24.

Table 24. Definite, Probable, and Possible Case (DPP) Classification, 2000 - 2004

Classification	2000	2001	2002	2003	2004
Definite	32	21	50	69	63
Probable	85	51	60	53	55
Possible	86	48	64	62	86
Total DPP	203	120	174	184	204
Percent DPP	52%	48%	64%	67%	76%
All Cases Reported	388	250	270	275	269

Although the percentage of cases classified as DPP appears to have increased since year 2000, this is mostly an artifact of a change in how DOH tracks cases. Prior to 2002, cases that were investigated but found to be asymptomatic or unrelated were entered into the database and tracked. Beginning in 2002, these cases are no longer entered or tracked.

In 2004, 38 investigated cases were classified as insufficient information. These are cases in which only one symptom was reported, or DOH was unable to document the pesticide involved, or the patient couldn't be reached for an interview, or medical records were inconsistent with the patient's report of illness. The percentage of investigations classified as insufficient information has remained steady for the last four years.

In the following example, the case was coded insufficient information because the person's medical records did not support exposure to the product.

A woman hit the barn wall as she was backing her car out and broke 2 brown unlabeled bottles of strong smelling liquid. She got the liquid on her hands and sought medical care at an emergency room for neurological, dermal and respiratory symptoms. The case was classified as insufficient information as it was not verified that the contents of the bottles were pesticides.

Severity of Medical Outcome

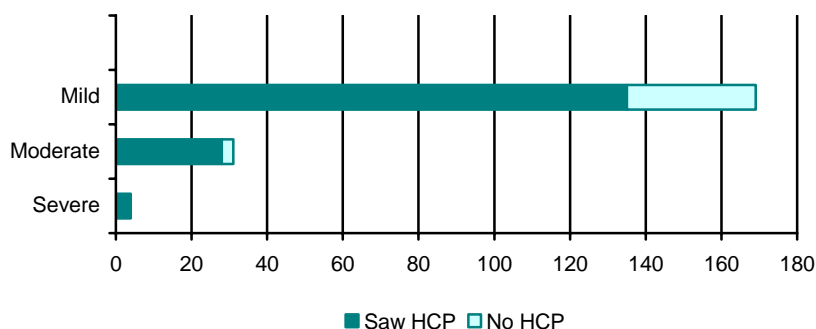
DOH uses the NIOSH Severity matrix for classifying signs and symptoms associated with pesticide cases (Appendix B). The low/mild category includes transient and spontaneously resolving symptoms such as nausea, vomiting, shortness of breath, headache, dizziness, and skin or eye irritation.

Even relatively pronounced symptoms such as profuse sweating, ataxia, peripheral neuropathy, eye pain, and difficulty breathing are classified as low/mild if a health care provider did not directly observe the symptoms. The moderate

category 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 and slurred speech, and respiratory depression.

In 2004, 173 (85%) of the 204 definite, probable, or possible DOH cases were classified as mild. Twenty-nine (14%) cases were classified as moderate and 2 (1%) cases were classified as severe (Figure 8). Of the 204 DPP cases in 2004, 170 (83%) sought medical care for their symptoms.

Figure 8. Severity of Medical Outcome, DPP Cases, 2004



The following two examples describe cases that DOH classified as moderate and severe.

Moderate case: A woman activated a flea fogger in the back of her two-door car and was unable to exit the car quickly when the seat stuck. She inhaled the product and developed acute respiratory symptoms. She was transported to the emergency room by ambulance. Medical examination documented vomiting, cough, wheezing and shortness of breath.

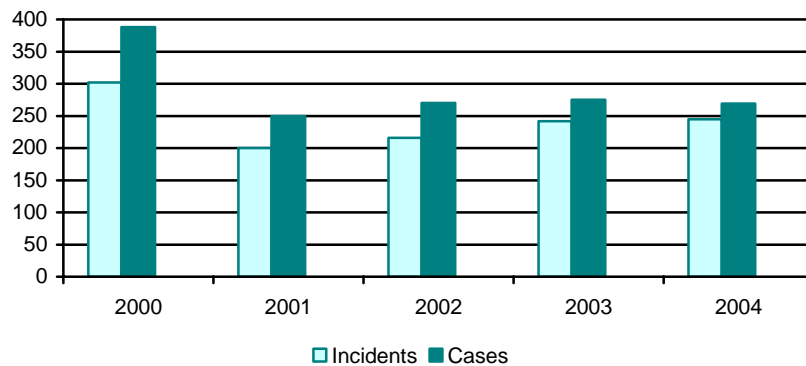
Severe case: A crop truck driver was near an application (to wheat) containing chlorpyrifos methyl. He went home and later that evening his wife drove him to the emergency room where he was treated for neurological, gastrointestinal and cardiovascular symptoms. He was given atropine, stabilized and admitted to the hospital for two days. The attending physician also reported that he could smell pesticide on the patient.

Number and Location of Investigated Cases

Number of Incidents

During 2004, the Pesticide Program investigated 245 reports of incidents involving 269 cases of pesticide illness (Figure 9).

Figure 9. DOH Reported Incidents and Cases, 2000 - 2004



Seasonality of Incidents

The majority of investigated pesticide incidents occurred in the six months between April and September. This included 79% of agriculture-related cases, and 67% of non-agriculture cases. This is consistent with previous years.

Number of Persons Involved

In 2004, there were 186 incidents involving 204 definite, probable, or possible cases. Of the 186 incidents, 173 (93%) involved 1 individual. Eleven incidents involved 2 persons. One incident involved 7 persons and one incident involved 4 persons. The incident involving 7 persons is described below.

An unlicensed school employee applied an herbicide using a tractor mounted boom sprayer to a school parking lot and sidewalk at 6:30 a.m. on a school day. Signs were not posted and there was no notification of the application. Seven students and faculty members became ill after smelling the vapors from the application. DOH determined that 5 of the illnesses were definitely, probably or possibly related to the exposure. Two students reported only one symptom and were classified as insufficient information. Students and employees were evacuated from the school. WSDA investigated the incident and found several violations including failure to post and notify and applying a pesticide with powered equipment without a pesticide applicator license.

Location

In 2004, 29 of the 39 counties in Washington had cases definitely, probably, or possibly related to pesticide exposure. Table 25 lists the 11 counties with the most reported cases. Of the 205 DPP cases, 159 (78%) came from these counties while 67% of the state population resides in these 11 counties.

Table 25. Counties with the Most Reported Cases*, 2004

County	Cases	Incidents
King	32	28
Yakima	23	21
Grant	19	17
Benton	16	11
Pierce	16	16
Snohomish	15	12
Thurston	9	8
Skagit	9	9
Chelan	8	7
Franklin	6	6
Clallam	6	6

* Limited to cases with illness classified by DOH as definitely, probably or possibly due to pesticide exposure.

About half of the 204 DPP cases occurred in western Washington (109) and half in eastern Washington (95). This is consistent with past years and reflects population density and location of labor-intensive crops.

Figure 10 shows the location of combined definite, probable, or possible cases for 2004.

Figure 10. Distribution of Cases by County, 2004

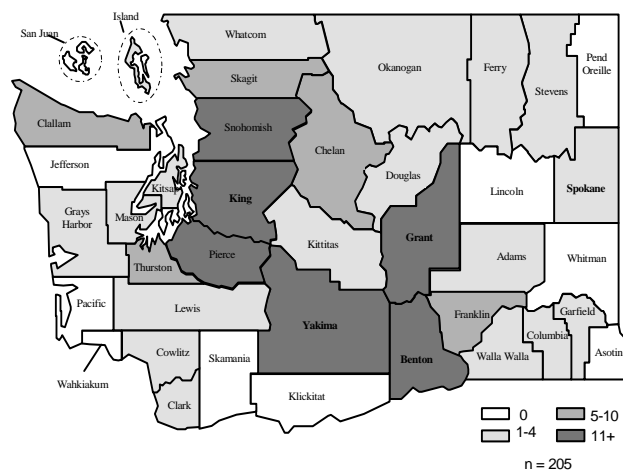


Table 26 displays the distribution of cases defined as definite, probable, or possible by agricultural and non-agricultural setting from 2000 through 2004.

Table 26. Annual Agricultural and Non-Agricultural Cases*, 2000 - 2004

Year	Agricultural	Non-Agricultural	Total Cases
2000	113	90	203
2001	58	62	120
2002	75	99	174
2003	73	111	184
2004	64	140	204

* Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

The decrease in agricultural cases since 2000 is primarily due to fewer reports of drift of agricultural pesticides to nearby homes. The number of occupational agricultural cases has not declined during this period. For non-agricultural cases, the increase since 2000 is due to increased reports of direct exposures to pesticides by the applicator, usually at their home. Typical exposures are spills and splashes while opening and pouring containers (contact) or wind blowing spray back onto the applicator (spray). Two types of exposures seem particularly problematic around the home: 1) eye exposures while spraying moss-out products overhead onto roofs and 2) skin and inhalation exposures to bee and wasp spray while spraying bee nests. Additional prevention education is needed to encourage carefulness and protective clothing for these applications.

Age and Gender

In 2004, males (73) reported more occupational exposures than females (17). Females (60) reported somewhat more non-occupation exposures than males (54) (Table 27).

There were 22 cases involving children 18 years of age or younger that were determined to be definitely, probably, or possibly related to pesticide exposure. Sixteen of the 22 children were at home at the time of their exposures. One 3-year-old child was in a church yard during an herbicide application. Three teenagers got mosquito repellent their eyes. One student felt ill after an herbicide application to the school parking lot. Three teenagers who were employed at the time of their exposures were working at a golf course, home supply store, and horse stable.

Table 27. Occupational and Non-Occupational Cases* by Age and Gender, 2004

Age	Occupational		Non-Occupational		Total
	Female	Male	Female	Male	
0-5			2	9	11
6-11			4	1	5
12-18		3	2	1	6
19-29	7	25	5	3	40
30-49	7	31	28	14	81
50+	3	14	19	26	62
Total	17	73	60	54	204

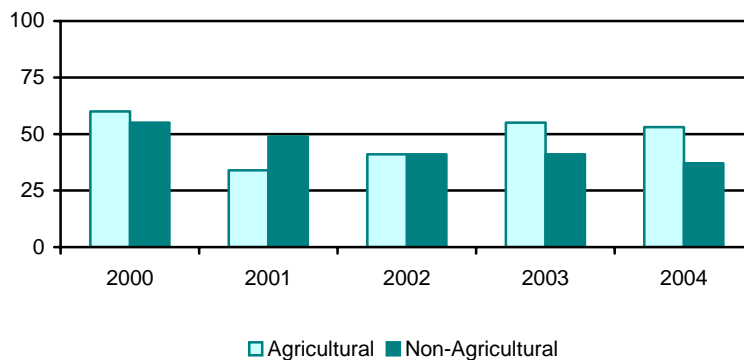
* Limited to cases with illness classified by DOH as definitely, probably or possibly due to pesticide exposure.

Occupational Cases of Pesticide-Related Illness

In 2004, 129 (48%) of all reported cases investigated by DOH involved a pesticide exposure on the job. Of these, 90 (70%) were classified as definite, probable, or possible cases. Fifty-three of the 90 DPP cases were agricultural workers and 37 were from other occupations.

Figure 11 shows DOH agricultural and non-agricultural occupational cases for the years, 2000 through 2004.

Figure 11. Agricultural and Non-Agricultural Occupational Cases, 2000 - 2004



Agricultural Pesticide Incidents

In 2004, DOH investigated 97 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 97 cases, DOH classified 64 as definite (15), probable (21), and possible (28). In 2004, the types of exposure were somewhat evenly distributed between drift, direct spray, contact from a spill or leaking equipment, and surface residues (Table 28). All of the agricultural, non-occupational exposures were to drifts.

Table 28. Agricultural Occupational and Non-Occupational Cases by Source, 2004*

Year	Occupational	Non-Occupational	Total
Drift	5	11	16
Spray	15	0	15
Contact	12	0	12
Surface residue	11	0	11
Indoor air	1	0	1
Unknown	6	0	6
Other	3	0	3
Total Cases	54	11	64

* Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

Pesticide drift was highlighted in the 2004 PIRT report as a continuing problem. Reported cases involving agricultural drift declined in 2004 (Table 29). It is too early to tell whether this trend is permanent. The annual number of drift cases tends to be variable since a single incident can sicken multiple people. Drift to workers generally involves farmworkers. Drift to non-workers generally involves people in their homes, driving on roads, in parks, etc.

Table 29. Agricultural Drift to Workers and Others, 2000 - 2004*

Year	Occupational	Non-Occupational	Total
2000	34	25	59
2001	14	13	27
2002	16	30	46
2003	12	12	24
2004	5	11	16
Total Cases	81	91	172

* Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

Pesticide Involved in DPP Agricultural Workers

In 2004, there were 53 workers with illness/injury classified as definitely, probably, or possibly related to pesticide exposure during agricultural activities. Thirty-six of the 53 agricultural workers were applying or mixing/loading, maintaining pesticide equipment, or transporting pesticides at the time of their exposure. Seventeen workers were exposed to pesticide drift or residues on leaves while thinning, pruning, handling nursery plants, or doing other agricultural work. One third of the 53 cases involved exposure to cholinesterase-inhibiting insecticides although in almost half of these cases another pesticide was also in the tank mix. Azinphos-methyl was involved in 6 cases. Chlorpyrifos was involved in 5 cases. Sulfur and calcium polysulfide (lime sulfur) were involved in 9 cases, again, often in tank mixes. Although use of pyrethroid insecticides is increasing in agriculture, only one occupational exposure to cypermethrin was detected in 2004. Table 30 shows the pesticide active ingredients for DPP cases involving agricultural workers.

Table 30. Pesticide Involved in DPP Cases Involving Agricultural Workers by Ingredient, 2004

Pesticide	Handlers	Other Workers
Cholinesterase Inhibitors		
Azinphos-methyl	2	1
Chlorpyrifos	2	1
Dimethoate	1	
Disulfoton	1	
Malathion		1
Combinations of pesticides with cholinesterase inhibitors	5	2
Other insecticides		
Acetamiprid	1	
Aluminum Phosphide	1	
Cypermethrin		1
Methyl Bromide/Chloropicrin		1
Moxidectin		1
Combinations of insecticides without cholinesterase inhibitors	4	
Herbicides		
2, 4-D	1	
Glyphosate (mostly as Roundup)	6	
Paraquat dichloride	3	
Quizalofop-ethyl		1
Herbicide combinations	2	
Fungicides		
Calcium polysulfide	1	2
Captan	1	
Chlorine	1	
Pentachloronitrobenzene (PCNB)		2
Sulfur	3	
Combinations of fungicides and growth regulators		3
Other		
Prohexadione calcium	1	
Kaolin		1
Totals	36	17

** Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

Cholinesterase-Inhibiting Insecticides

With the statewide implementation of cholinesterase monitoring by WISHA in January of 2004, there is continued interest in data specific to cholinesterase-inhibiting insecticides. Figure 12 presents pesticide illness/injury data among pesticide handlers for ten years (1995 through 2004) for these insecticides. Acute and dermal symptoms continue to be reported by handlers of cholinesterase-inhibiting insecticides. In 2004, there were 11 DPP cases; an increase over the previous two years. The numbers, however, are too small and variable to detect a reliable trend.

All but 1 of the 11 DPP cases sought health care in a hospital emergency room or clinic. This person received health care from his regular occupational health physician. Eight of the 11 cases occurred in tree fruit operations, mostly apples. The other 3 occurred at an onion farm, an unspecified farm, and an ornamental nursery. No cases involved aerial application. Most cases involved using (5) or cleaning/fixing (2) orchard ground sprayers.

Description of Cholinesterase Cases

There were 4 cases of applicators driving orchard airblast sprayers who stated that they wore the proper personal protective equipment, wore fit-tested respirators and who still had symptoms and/or significant cholinesterase inhibition. These workers told DOH in interviews that they sometimes still smell the chemicals through the cartridges and feel mist on their face when they turn the corner at the end of a row. One of these workers had 80% depression on his plasma cholinesterase activity. A fifth orchard airblast sprayer lost his positive pressure helmet when it caught on wires in the orchard and flipped off his head.

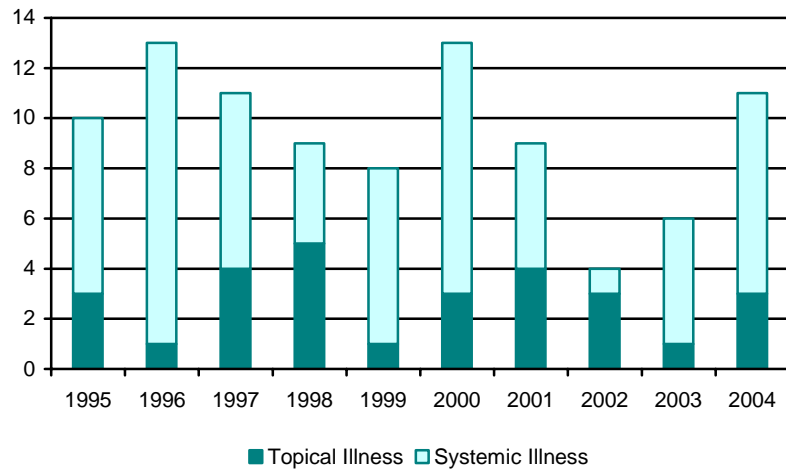
Two men were exposed while cleaning sprayer nozzles or fixing a sprayer. Cleaning and repairing contaminated equipment is considered "handling" and full pesticide handler's personal protective equipment is required. In both cases the mechanic only wore rubber gloves. One of these mechanics experienced systemic symptoms and at least a 23% depression in plasma cholinesterase. The other developed respiratory symptoms and contact dermatitis where pesticides from the sprayer hit his forearms.

There were 2 handlers who had exposures while transporting pesticide to the loading site or putting away a cleaned sprayer. Both were in the handling area but did not have on personal protective equipment because they had not yet started or had just finished their direct handling duties. Both were exposed to spray from other handlers in the area. Personal protective equipment should be worn at mixing and load sites and in areas where sprayers are being washed.

Six of the 11 handlers were enrolled in the cholinesterase monitoring program. Two had significant depressions detected (80% and 57%). Two had only baseline tests and were not tested again after their exposure. Two had no depression in tests done 10 days post-incident relative to their baselines although one had only dermal symptoms. Of the 5 handlers who were not

enrolled, 2 worked at nurseries, one in an apple orchard, one at an onion farm, and one at an unspecified farm. We do not know whether they had more than 30 hours of relevant handling in a 30-day period. Only one had cholinesterase testing following their exposure. In this case a depression was indicated: testing done one week after exposure was 23% lower in plasma cholinesterase activity than a test taken four weeks post-exposure.

Figure 12. Cases by Type of Illness and Injury* for Pesticide Handlers, 1995 - 2004**



* Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

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

Table 31 shows the number of agricultural workers with reports of illness associated with specific cholinesterase-inhibiting insecticides singularly or in tank mixed combinations with other pesticide products for 2000 through 2004.

Table 31. Illness Type* for Pesticide Handlers by Cholinesterase Inhibiting Pesticides, 2000 - 2004**

Pesticide	2000		2001		2002		2003		2004		Totals	
	S	T	S	T	S	T	S	T	S	T	S	T
Azinphos methyl	1	1					1		2		4	1
Chlorpyrifos	2								2		4	
Dimethoate			1							1	1	1
Disulfoton									1		1	
Ethoprop							1				1	
Combinations of cholinesterase inhibitors with other products	7	2	4	4	1	3	3	1	3	2	18	12
Totals	10	3	5	4	1	3	5	1	8	3	29	14

* Type of illness/injury: S = Systemic: Any health effects not limited to the skin and/or eye.
T = Topical: Health effects involving only the eyes and/or skin.

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

Agricultural Crops Involved

Table 32 shows the crop associated with the 64 DPP cases resulting from agricultural pesticide use in 2004. The crops involved were fruit (41) and field or vegetable (11). Seven exposures occurred at nurseries, 3 at livestock or dairies operations, and 2 involved forest lands or pasture. Four exposures were the result of malfunctioning equipment.

In 2004, 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 excellent communication with farm foreman and with neighboring farms to keep all workers clear of pesticide applications. The airblast sprayer commonly has no enclosed cab, as this 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. Thirty-three (80%) of the 41 cases in fruit production were agricultural workers. Twenty-four of these 33 workers were applying, mixing, or loading pesticides or were repairing pesticide equipment. Nine workers were pruning trees or thinning/picking fruit at the time of their exposure. Eleven cases were not working; they were exposed to pesticide drift in their homes.

Cases Resulting from Applications to Field Crops

In 2004, there were 10 incidents with 11 cases involving pesticide applications to field crops (Table 32). The field crops included hops, peas, potatoes, onions and

wheat. Eight of the 11 cases were agricultural workers and 6 of the 8 workers were handling pesticides at the time of exposure. The 3 non-occupational cases were exposed drift of pesticides applied to potatoes. The 3 were at home when exposed.

Table 32. Agricultural Cases* by Target and Activity, 2004

	Applying	Mix/load/ Repair	Routine Work	Outdoor Living	Indoor Living	Total
Fruit						
Apples	11	5	7	2		25
Cherries			1	3		4
Grapes	2	1				3
Nectarines			1			1
Peaches		1				1
Pears	1			1	2	4
Raspberries	1	1				2
Unknown fruit	1					1
Field and Vegetable Crops						
Hops	1	1				2
Peas			1			1
Potatoes	1			1	2	4
Onions		1	1			2
Wheat	2					2
Other Agricultural						
Dairies	1		1			2
Forest lands	1					1
Livestock			1			1
Nurseries	2	1	4			7
Pasture	1					1
Totals	25	11	17	7	4	64

* Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

Non-Agricultural Pesticide Incidents

Of the 269 cases investigated in 2004, 172 were associated with non-agricultural pesticide use. DOH determined 140 (70%) of these to be definitely, probably, or possibly related to pesticide exposure (Table 33). Non-agricultural incidents include pesticide applications or spills that occur at homes, commercial buildings, industrial sites, or on roadways. Of the 140 DPP non-agricultural exposures, 97 (69%) occurred at residential sites. Thirty-seven (26%) of the individuals were working at the time of exposure and 103 (74%) were not at work.

Table 33. Exposure Site for Non-Agricultural, Occupational and Non-Occupational Cases, 2004*

Exposure Site	Occupational	Non-Occupational
Residential building or grounds (home, apt)	8	89
Other institution (school, church, prison)	6	3
Office, retail or service businesses	11	5
Park, lake, golf course, camp grounds	2	2
Roads or vehicles	3	3
Industry, warehousing, other manufacturing	7	0
Area-wide mosquito application	0	1
Total non-agricultural pesticide use	37	103

* Limited to cases with illness classified by DOH as definitely, probably, or possibly due to pesticide exposure.

Non-Agricultural Occupational

In 2004, 37 non-agricultural cases occurred on-the-job; 28 were males and 9 were females. Fourteen of the 37 cases were handling pesticides at the time of exposure. The following example is a non-agricultural, occupational incident from 2004:

A lawn care technician pumped up a small hand-held spray applicator. The hose was not securely attached to the tank and popped off under pressure, spraying him in the face. He washed his eye and sought medical treatment.

Non-Agricultural Non-Occupational

In 2004, 103 exposures occurred where the person was not working and the release was not associated with agriculture. Nineteen were children and 84 were adults over the age of 18. Of the 84 adults, more were women (46) than men (38). Eighty-nine of the 103 non-occupational cases occurred in homes (Table 33).

The following is an example of a non-agricultural, non-occupational case classified as definitely related to the exposure:

A 72 year old male homeowner used his bare hands to apply a pesticide powder/paste to holes where bees were entering his log home. He mixed 5 pounds of 10% dust in water to form the paste. He also sprayed two cans of wasp spray on the holes. He wore no personal protective equipment in violation of the pesticide label. He sought medical care for moderate gastrointestinal and neurological symptoms.

Non-Agricultural Non-Occupational Exposures to Applications by Non-Professional and Professional Applicators

In 2004, 93 (90%) of the 103 non-agricultural, non-occupational DPP cases involved exposures to pesticide applications by non-professional applicators (unpaid individuals, co-workers, home-owners) (Table 34). Ten cases were exposed to applications by professional (paid) applicators.

The 93 non-professional applications involved pesticide treatments of:

- ornamental weeds, insects or snails (27)
- insects in the home (21)
- treatments to people or pets for fleas, lice, or biting insects (18)
- herbicides treatments moss or weeds (10) or
- accidental ingestion or release of pesticide products (17)

Of the 10 cases in which individuals were exposed to applications made by paid, professional applicators, 9 involved herbicide applications to moss or weeds and one involved an area-wide mosquito application (Table 34).

Table 34. Target Pest for Non-Agricultural, Non-Occupational Cases Exposed to Pesticide Applications by Professional* and Non-Professional Applicators, 2004**

	Professional Applications	Non-Professional Applications
Landscape/Garden Use		
Weeds and moss	4	18
Insects	0	8
Snails	0	1
Use In/Around Structures		
Insects (fleas, wasps, spiders, ants)	5	21
Moss/weeds	0	10
Applications to People/Pets		
Lice	0	6
Insect repellents	0	6
Applications to pets for fleas	0	6
Accidental release or ingestion	0	17
Area-wide		
Mosquitoes	1	0
Total	10	93

* 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.

Grandview Pesticide Fire

In 2005, DOH conducted a community-wide investigation following a pesticide warehouse fire in Grandview. Data from follow-up on cases during the investigation will not be entered in the DOH data system of pesticide-related events because environmental monitoring and biomonitoring were largely negative for pesticides. As there is much to learn from the incident, the DOH investigation is described below.

On Wednesday January 26, 2005, a warehouse at the Wilbur Ellis Facility in Grandview Washington caught fire. Over 200 pesticides, fertilizers and other agricultural products burned. People within one-half mile of the burning warehouse were evacuated from their homes. An estimated 300-400 residents and business owners were evacuated. A 13-mile section of State Highway 82 between Prosser and Sunnyside was closed by state patrol for more than 12 hours. Grandview's high school, middle school, and McClure Elementary School, all located approximately one mile south of the fire, turned off their ventilation systems and kept children inside. Shelters were set up by the American Red Cross for evacuated residents. The newspaper reported that 175 evacuated residents registered for shelter.

The response involved many parties including the: Grandview Police Department, 11 local fire departments, Washington State Patrol, Ecology, EPA, private contractors for Wilbur-Ellis, and local and state departments of health. The fire burned for two and a half days. People were allowed to return to their homes Friday evening after air sampling and swab sampling indicated the inhalation hazard had passed.

DOH played a supporting role by providing technical assistance to local health authorities and other state and local agencies. DOH also conducted pesticide-illness monitoring according to state law. During follow-up on possible pesticide-related illnesses, DOH identified multiple persons who sought health care for symptoms from inhaling smoke. DOH also tracked the results of medical monitoring of emergency responders.

Smoke-related Illnesses in the Surrounding Community

DOH identified 48 people who sought health care for symptoms associated with breathing smoke from the fire (Figure 13). There were an additional 5 people with complicated medical histories who were admitted to Prosser Hospital as a precaution and for nursing support until they could return to their normal residences. Four of these individuals were from a nursing care facility outside the half mile evacuation zone and one person was from an evacuated house.

DOH identified an additional 8 persons who reported symptoms but were not seen by health care providers (Figure 13). However, DOH cannot estimate the number of ill persons who did not seek health care in the local area. Smoke from burning buildings is known to cause eye and respiratory irritation and can

exacerbate asthma and other respiratory conditions. There were likely numerous people who experienced mild symptoms but did not seek health care.

Figure 13. People Reporting Symptoms and/or Receiving Medical Care

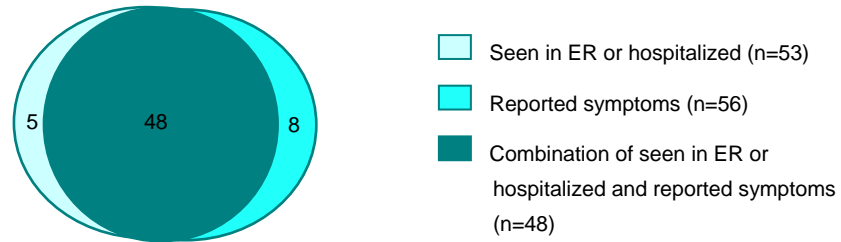


Table 35 shows the number of people reporting symptoms; 75% of the identified community members with symptoms reported respiratory symptoms. Most of the symptoms were mild to moderate and included coughing, burning in nose or throat. A subset also described some type of labored breathing. Many of these people had a history of asthma or other respiratory conditions.

Table 35. People Reporting Symptoms from the Grandview Fire

Symptom Type and Description	Reporting Symptom	Total Percentage
Respiratory irritation (cough, burning in nose/throat, sore throat)	40	71%
Labored breathing (wheezing, shortness of breath, chest tightness). All but 2 also reported respiratory irritation.	15	27%
Headache. Some headaches persisted for several days	35	63%
Nausea, vomiting or abdominal pain	32	57%
Dizziness, weakness or other systemic symptoms	19	34%
Eye irritation (watering or burning in eyes)	18	32%
Numbness or tingling in tongue or face	6	
Burning rash or urticaria on face or neck	5	

Follow-up of Emergency Responders

DOH efforts identified 67 emergency responders that either reported symptoms or received some type of occupational health monitoring. Several firefighters, state patrolmen, and spill response experts sought medical care for symptoms but most emergency responders reported no symptoms. All firefighters and many of the Grandview city employees involved in the response had basic blood tests plus a test for cholinesterase inhibition. The cholinesterase test was done to

detect over-exposure to the most acutely toxic pesticides that burned in the warehouse. All cholinesterase results were within normal limits.

Sampling for Pesticides in Air

Air samples for pesticide active ingredients conducted by the EPA and Washington State University were negative or detected pesticides only at concentrations well below the EPA levels of concern. However, pesticide sampling was initiated on the second day of the fire and may have missed pesticides present in the initial smoke. Swab samples for pesticide residues were also negative. This suggests that the fire did not result in widespread deposition of pesticide residues in the community.

Of course, smoke from burning buildings is irritating and toxic and may contain hazardous concentrations of carbon monoxide, hydrogen sulfide, hydrogen cyanide, nitrogen and sulfur oxides. Burning pesticides and fertilizers would contribute combustion byproducts to the smoke and result in higher levels of sulfur oxides, hydrogen sulfide, hydrogen chloride, and ammonia. Early reports of a strong sulfur-like smell in the smoke suggest that this was the case.

Highlights of DOH Prevention Activities 2005

Local, State and Federal Government

The DOH Pesticide Program provides technical assistance to state and local agencies on pesticide toxicology and human health. In 2005, assistance was provided to Department of Transportation (herbicide risk assessment review), Ecology (aquatic herbicide permits), WSDA (gypsy moth eradication projects in Silverdale and Seattle), and L&I (cholinesterase monitoring for farm workers). DOH also provided assistance to county health departments, including Yakima County (health advice for people living near a pesticide warehouse fire), King County (review of pesticide hazards at daycares), and Thurston County (toxicology support for pesticide reviews required by County policy).

DOH, with assistance from WSDA, conducted a presentation about the PIRT Panel and current pesticide issues to the State Senate Agricultural Committee. DOH prepared a briefing sheet for the State House Commerce and Labor Committee's agricultural safety and health tour in Yakima.

DOH forwarded pesticide illness monitoring data to NIOSH for compilation of national pesticide illness statistics, <http://www.cdc.gov/niosh/topics/pesticides/>.

In 2005, DOH sent the following product issues to EPA:

DOH Case 040222: An 18 year old worker experienced severe eye reaction after accidental splash of *Deep Woods Off for Sportsmen Insect Repellent IV* (EPA registration no. 4822-397). He rinsed his eye within five minutes and received medical attention within 20 minutes of exposure. He still sustained a corneal burn with almost total loss of corneal epithelium. His burn healed slowly over 14 days. There are many cases of eye exposure to other repellent formulations reported to DOH during mosquito

season. Most are managed at home and symptoms resolve quickly. DOH alerted EPA that this formula appears to be particularly harmful to eyes. DOH questioned whether this is a reasonably safe formulation for consumer use, especially given that many effective repellents in safer formulations are available.

DOH case 050182: A 56 year old female placed a new flea collar on her elderly cat before going to work. The flea collar was *Hartz Advanced Care 3 in 1 Control collar for Cat* (EPA Registration no. 2596-139). The product contains methoprene (1.02%), tetrachlorvinphos (14.55%), and undisclosed other ingredients (84.43%). The woman noted a strong odor in the house upon her return that evening. Both she and the cat had systemic symptoms consistent with organophosphate insecticide exposure. She removed the collar, opened windows and turned on fans. Symptoms resolved in two days. This case was unusual in that it is not normal to smell a strong odor with flea collars, or to experience symptoms after this type of use. DOH alerted EPA that this was a possible product defect and to look for similar cases involving this product.

DOH met with federal officials at EPA and Centers for Disease Control to present data and share health concerns about fumigant pesticides. DOH submitted written comments and state data to EPA during the public comment period for metam-sodium re-registration. Concerns raised by DOH, based on case investigation data, included 1) the glove recommendation on the metam-sodium label may need to be more specific, 2) the importance of considering the main breakdown product, methyl isothiocyanate (MITC), in the re-registration process, 3) regulation of metam sodium drift, 4) the importance of measuring MITC in air during enforcement investigations, and 5) the importance of modeling Washington's chemigation applications of metam-sodium in EPA's risk assessment of bystander exposures. DOH comments are included in Appendix G.

Licensed Pesticide Applicators

Staff conducted multiple presentations to educate licensed pesticide applicators on the prevention of pesticide-related illness. Presentations were conducted at professional meetings and at Washington State University and WSDA continuing education courses. Presentations were in English or Spanish and covered acute and chronic effects of pesticides, safety, and cholinesterase monitoring. DOH published an article on proper use of personal protective equipment in the WSDA newsletter which reaches 28,000 licensed pesticide applicators in the state, <http://agr.wa.gov/PestFert/Publications/docs/2005PesticideNotes.pdf>. DOH collaborated with partners to develop an educational video on proper decontamination for pesticide handlers. The video will be completed in 2006 and will be available in Spanish and English.

Farm Workers and General Agricultural Community

Staff members regularly attend and occasionally present at meetings of the Commission on Hispanic affairs. Our bilingual staff were guests of Spanish radio station KDNA in Yakima on three occasions. During the shows they spoke about pesticides and health issues and answered caller's questions. Staff conducted a presentation at the Migrant Stream Forum in San Diego and staffed a booth at the Latina Health Fair in Seattle. Staff participated in worker protection training conducted by WSDA and L&I, and met with farm worker advocates at the Northwest Justice Project and Columbia Legal Services. DOH Pesticide Program bilingual staff assisted other DOH programs in translating health educational recordings and materials into Spanish.

Outreach to Agricultural Growers Groups

DOH staff members maintain contact with agricultural grower groups at regular board meetings of the Pesticide Advisory Board, the Washington State Commission on Pesticide Registration and the Washington Friends of Farms and Forests. Staff presented information about emerging scientific evidence on long-term health effects of pesticide exposure to the Washington Friends of Farms and Forests annual legislative meeting.

Urban Consumer Education

DOH revised and expanded the Pesticide Program website with online resources for consumers, <http://www.doh.wa.gov/ehp/ts/pest/default.htm>, participates in the continuing development of the interagency website UPEST, <http://www.ecy.wa.gov/programs/swfa/upest/>. A new module that will help consumers control indoor home pests using Integrated Pest Management is under development for the UPEST website.

This year DOH focused on promoting Integrated Pest Management approaches to pest management in schools. Staff co-authored a report in the Journal of the American Medical Association on pesticide illness data in schools, <http://jama.ama-assn.org/cgi/content/short/294/4/455>, prepared state web pages on pesticide incidents in Washington schools, <http://devwww/ehp/ts/Pest/pest-school-wadata.htm>, organized presentations on Integrated Pest Management for schools, and revised the UPEST website that aids Washington schools in adopting Integrated Pest Management.

Health Care Providers

DOH launched a new web resource for health care providers on the revised and expanded Pesticide Program Web site. The new pages have details about how and why to report pesticide-related illnesses, what happens when a case is reported, how to identify the pesticide involved, taking an exposure history, resources for clinical management of pesticide-related illnesses, how to refer possible violations to state enforcement agencies, and downloadable fact sheets for patients on a number of safety topics.

Another main effort this year has been to organize and send case investigation findings to the treating health care provider and to send annual investigation summaries to local health officers. This is described in greater detail in the PIRT Panel Activities section on page 13.

DOH published a paper with the Federal Drug Administration, the Centers for Disease Control, and other states alerting health care providers and other public health officials about the acute hazards of lindane prescriptions for lice and scabies control, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5421a2.htm>.

Partnerships

Staff from the Pesticide Program participate on various Advisory Boards, Stakeholder Committees, and other organizations around the state:

- Catholic Rural Life "Protecting Our Future": a Pesticide Education Project
- Cholinesterase Monitoring Stakeholder Committee for L&I
- Food and Environmental Quality Laboratory, Washington State University
- Fred Hutchinson Cancer Research Center "For Healthy Kids", Governor's Pesticide Advisory Board
- Pacific Northwest Agricultural Safety and Health "Projecto Bienestar"
- Pesticide Incident Review and Tracking Panel (Chair)
- Spanish Public Radio KDNA (President, Community Advisory Board)
- Thurston County Vegetation Management Board
- Washington Friends of Farm and Forests (non-voting, advisory member)
- Washington State Commission on Pesticide Registration (non-voting member)

Labor and Industries

Washington State Department of Labor and Industries' summary of pesticide-related activity for 2004.

Background

Four divisions in the Department of Labor and Industries (L&I) are involved in pesticide-related activities: L&I Washington Industrial Safety and Health Act (WISHA) Services, L&I Specialty Compliance Services, L&I Field Services, and L&I Industrial Insurance Services.

- WISHA has a mandate to ensure workplace safety and health. WISHA Services create workplace safety and health regulations, provide stakeholder training and outreach, hold the Annual Governor's Safety Conference and Agricultural Safety Day, handle appeals of safety and health inspections, and generate the L&I section of the PIRT report.
- Employers can request no cost safety consultations from L&I Field Services. These consultations are confidential and will not be discussed in this report.
- The L&I Specialty Compliance program issues farm labor contractor licenses, enforces agricultural wages, breaks, rest periods, recordkeeping requirements, and prohibited jobs for teens.
- L&I Insurance Services may provide Risk Management and Loss Control assessments. The Safety & Health Assessment & Research for Prevention group may investigate pesticide-related issues. The Claims Program administers wage replacement and medical benefits through worker compensation to Washington workers who become ill or injured on the job.

The pesticide-related activities of WISHA Services and Industrial Insurance Services are included in this PIRT report.

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 hours employees spend handling toxicity category I or II organophosphate or N-methyl carbamate cholinesterase-inhibiting pesticides. Over-exposure to these pesticides results in depression in cholinesterase activity. Employers are required to offer 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. Workers receive baseline testing prior to use of covered pesticides and then blood cholinesterase levels are tested periodically during the application season.

Monitoring cholinesterase activity in the blood can detect cholinesterase depression prior to the onset of illness.

The changes for the 2005 season included:

- The health care provider sent the Cholinesterase Monitoring Handling Hours report to the Public Health Lab with the test requisition.
- The health care provider obtained written authorization from participating handlers to share test results with the employer.
- L&I Policy and Technical Services verified that physicians notified the employer of the worker with a cholinesterase depression to the exposure removal level and coordinated a schedule for follow-up monitoring of these handlers.
- Use of a 30-hour exposure threshold prompting employers to refer handlers for medical evaluation and testing.
- Dedication of a single research investigator from L&I to conduct worksite visits for cholinesterase depressions meeting criteria for a work practice evaluation or exposure removal.

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

Cholinesterase Monitoring Results for 2005

Based on the *Scientific Advisory Committee for Cholinesterase Monitoring, January 17, 2006, Final Report, Cholinesterase Monitoring of Pesticide Handlers in Agriculture: 2005*, 2263 workers participated in the cholinesterase monitoring program during 2005. A baseline test was performed for each enrolled worker. A total of 611 workers who had reached the pesticide-handling hour threshold for 30 hours in 30 consecutive days had subsequent periodic testing. Workplace evaluations were triggered for a total of 59 workers. The alerts indicated cholinesterase depression of more than 20% from baselines. Ten of these alerts were issued to workers with cholinesterase depressions requiring removal from further exposures to pesticides (depressions greater than 30% for RBC and 40% for serum). The data suggests that 9.6% of the 611 workers who had periodic testing had cholinesterase depression at the time of periodic testing during 2005.

Health care providers sent the pesticide handling-hours reports to the DOH Public Health Laboratory with each periodic test request. The laboratory forwarded the handling reports to L&I. Pesticide handling reports were submitted for 565 (92%) of the 611 pesticide handlers during the 2005 season. This is a substantial improvement from 2004 when approximately 70% of handling reports were submitted. No significant relationship was found for handling hours and RBC (red blood cell) cholinesterase. A small but significant relationship was found for serum (plasma) cholinesterase. On average, a 0.053% 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% serum cholinesterase depression for every 30 hours spent handling in the 30 days prior to testing; a very small decrease.

If L&I finds that a worker experienced symptoms that could be associated with the cholinesterase depression, the case is referred to DOH for investigation. L&I referred 2 cases to DOH during 2005. After investigation DOH determined that neither of the illnesses was associated with organophosphate or N-methyl carbamate exposure.

During 2004, L&I conducted *confidential consultations* with employers at more than 40 locations 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. L&I also conducted *research investigations* with employers to evaluate workplaces where employees had cholinesterase depressions compared to their baseline tests.

The preliminary results of cholinesterase monitoring for 2005 were compared to the results from 2004. The number of participants in 2005 was down somewhat from 2004 but the rate for persons getting follow-up testing was up 30 percent. Improvements in the cholinesterase monitoring program in 2005 included 1) lab baselines were done faster going down from 24 days to 1 or 2 days, 2) L&I notifications of depressions went from 7 days to 3 days, and 3) the amount of time between the notice of depression and initiation of an investigation went from 35 days to 9 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 initial analysis and recommendations based on 2004 data is available online at
<http://www.lni.wa.gov/Safety/Topics/AtoZ/Cholinesterase/files/final.pdf>.

The L&I Reports to the legislature are 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>.

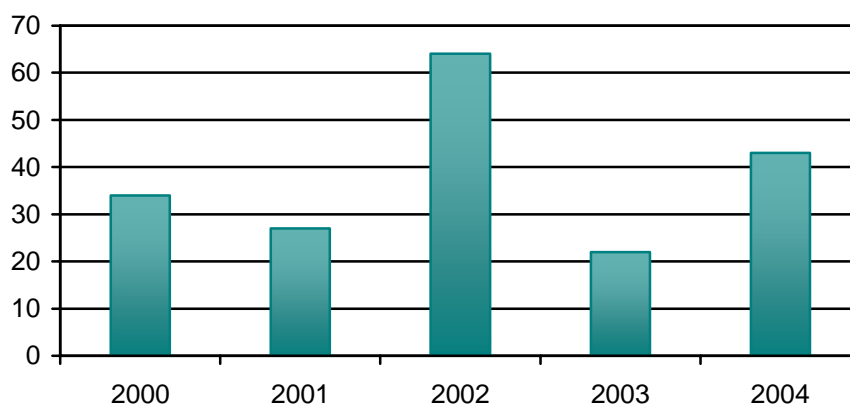
WISHA Services Division

To enforce safety and health in the workplace, L&I WISHA staff members may issue citations requiring employers to implement changes in the workplace. 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 be likely to 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.

This section summarizes the results of pesticide-related safety and health inspections conducted by L&I WISHA. A description of each of the inspections is provided in Appendix C. The number of pesticide-related inspections increased in 2004 (Figure 14). Of the 43 inspections, 34 (79%) were located in eastern Washington and 9 were located in western Washington.

Figure 14. WISHA Workplace Safety and Health Inspections, 2000 - 2004



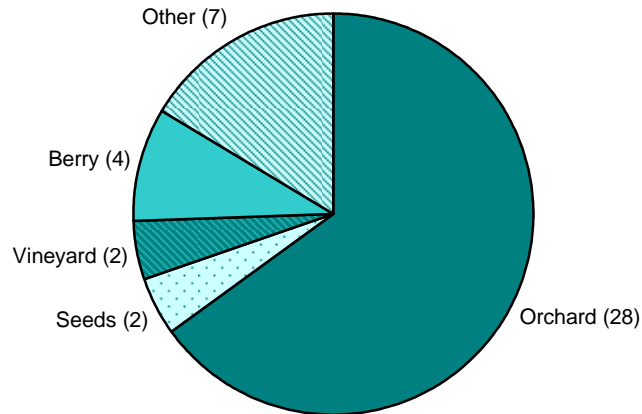
WISHA Inspections

Part of the increase in the number of WISHA pesticide-related inspections in 2004 was due to the L&I program targeting workplaces covered by the cholinesterase rule. L&I reviewed the hourly pesticide handling records and evaluated cholinesterase rule participation for 19 agricultural workplaces. This accounted for 44% of the 43 inspections in 2004.

Of the 43 pesticide-related WISHA inspections in 2004, 5 were the result of referrals from state agencies, health care providers and others. Six inspections were initiated in response to employee or employee representative complaints. Thirty were programmed inspections identified through the scheduling list and 2 were follow-up inspections.

All of the 2004 inspections occurred in agricultural environments. Figure 15 shows the inspections by type of work place. Twenty-eight (65%) of the inspections involved orchards. The “Other” workplace classification included one each of the following: cabbage farm, potato farm, onion processor, egg processing plant, livestock facility, dairy, and ornamental tree farm.

Figure 15. WISHA Inspections by Type of Workplace, 2004



WISHA Inspections Involving Violations

WISHA issues general and serious violations involving pesticides. L&I issued citations to the employer in 18 inspections. Several inspections resulted in both serious and general citations. Monetary penalties totaling \$6,090 were assessed for 17 serious citations from 8 inspections. General citations with no penalties were issued in 16 of the 43 inspections. No citations were issued to the employer in 25 inspections.

The following is an example of a WISHA inspection involving violations:

Employees were mixing, loading and applying pesticides including Lorsban 4E, Procure 50WS, Supreme oil c-c, or Guthion. After inspection, four general citations were issued to the employer for the following violations. The general citations did not involve monetary penalties.

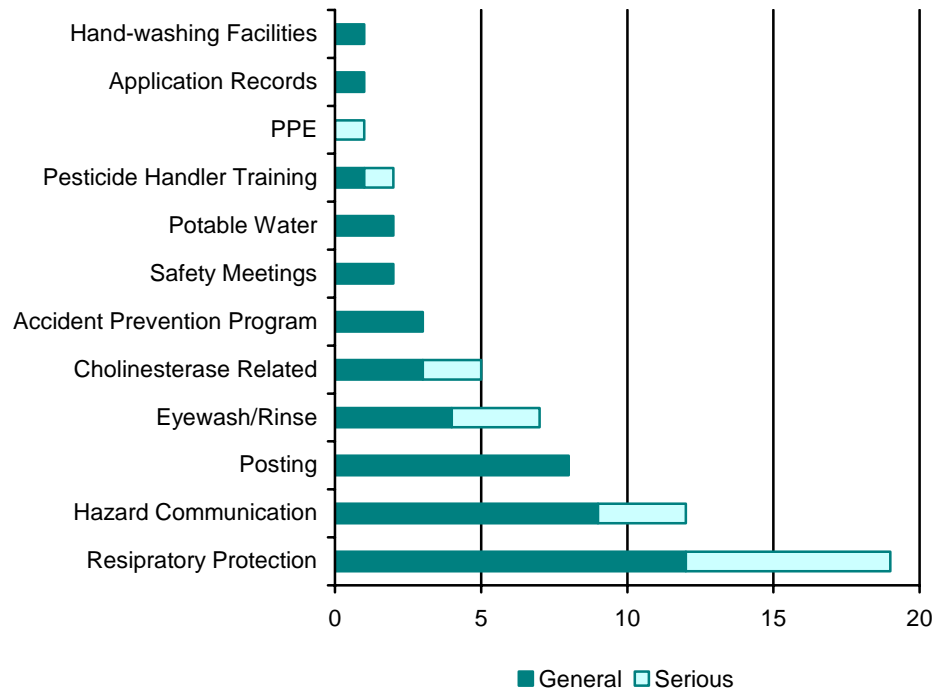
- 1) No eyewash capable of delivering at least 1.5 liters (0.4 gals.) of water per minute for fifteen minutes was available at the pesticide mixing and loading or handler decontamination sites although the label requires protective eyewear because of the potential for eye injury.
- 2) Ten applicators did not have a pint of water. If the pesticide labeling requires protective eyewear, as was the case with the pesticides used at the subject workplace, each handler shall have at least one pint of water immediately available on the vehicle or aircraft for emergency eye flushing.
- 3) Applicators were not using respirator canisters. The label for Guthion requires that applicators use a respirator canister approved for pesticides or an organic vapor cartridge / canister with any N, R, P or HE prefilter. Vapor and gas removing respirators do not provide protection against particulate contaminants and require a filter change-out schedule.
- 4) The employer did not display pesticide safety information and pesticides were applied within the last thirty days and handlers were on the establishment.

The most frequent type of serious and general WISHA violations cited in 2004 were:

- Respirator deficiencies including no respirator program, improper storage or cleaning of respirators, no medical evaluations of worker's ability to wear a respirator, no respirator fit-testing.
- Hazard communication deficiencies in safety programs including employee training and chemical labeling.
- Plumbed eyewash for a pesticide-mixing site or emergency pint of water for eye flushing was not provided.
- Cholinesterase Rule related including no cholinesterase monitoring program, no pesticide handling hours recorded, no training.
- Employee training about pesticides and their hazards.
- Deficiencies in appropriate personal protective equipment.
- Accident Prevention Program deficiencies.
- Not posting safety, emergency or pesticide spray information as required.
- No required safety meetings.
- No pesticide application records.
- No hand-washing facilities.

General and serious violations involving pesticides are categorized by type of violation in Figure 16.

Figure 16. WISHA General and Serious Violations Involving Pesticides, 2004



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 2004, the Claims Administration Program received 101 claims where the injury or illness initially appeared to be related to pesticide exposure (Table 36). The number of pesticide-related claims decreased by 17% from 2003.

L&I accepts or rejects a claim 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 to relate symptoms to the 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, but, 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 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 36. Status of L&I Claims Initially Related to Pesticides, 2000 - 2004

	2000	2001	2002	2003	2004
Medical Only Non-compensable	115	75	79	83	70
Time Loss/ Compensable	11	8	4	4	4
Rejected	52	45	26	45	26
Pending/Unknown	2	-	-	1	1
Kept on Salary	-	1	-	-	-
Total	180	129	109	133	101

Claims categorized as *Medical only* and *Time loss* are compensated as work-related injuries. Of the 101 claims in 2004, 74 (73.4%) were compensated by L&I as being work related injuries. L&I paid either time-loss or medical benefits for a total of \$39,448.06. In 2004, there were slightly fewer claims than in each of the previous four years.

As noted in the Rejected Claims definition above, most rejected claims were compensated for initial diagnostic and medical evaluations costs even if evidence was lacking to relate the symptoms to the work place.

L&I Claims Reported to Department of Health

L&I refers claims involving pesticides to DOH to investigate whether the illness is pesticide-related. A claim that is initially reported as pesticide-related could be accepted by L&I as work-related then DOH could investigate and classify it as unrelated to pesticide exposure.

L&I referred 101 claims to DOH to investigate during 2004 (Table 37). L&I assessed 74 of the 101 claims as work-related. Of the 74 claims that L&I assessed as valid work related injuries, DOH classified 53 (72%) as definitely, probably, or possibly related to pesticides (DPP). Based on the DOH criteria, the other 21 were classified as either: insufficient evidence to assess the link with pesticides, suspicious, or unlikely to be related to pesticide exposure. Of the 26 claims that L&I rejected, DOH classified 15 as DPP.

Table 37 illustrates the difference in evaluation criteria and perspective between the two agencies.

Table 37. Comparison of L&I Claims and DOH Classification Status, 2004

L&I Claim Determination	DOH Classification						Total
	Definite	Probable	Possible	Insuf Inf	Suspicious	Unlikely	
Medical Only/ Non-compensable	16	15	18	10	5	6	70
Time Loss/ Compensable	2	2	--	--	--	--	4
Rejected	3	4	8	7	1	3	26
Pending/Unknown	--	--	--	1	--	--	1
Kept on Salary	--	--	--	--	--	--	0
Total	21	21	26	18	6	9	101

Seventy-three of the 101 claims L&I referred to DOH for evaluation were agricultural. DOH classified 44 of the 73 as DPP. Of the 44 DPP agricultural workers, 26 claims involved workers in the fruit industry.

Agricultural case: An applicator sought medical care for dermal symptoms on both sides of his neck. He had been spraying several pesticide products on apples and cherries for several days prior to developing symptoms.

Non-agricultural case: Two carpenters were working underneath a wooden deck when it was sprayed with a pesticide from above. They inhaled the product and had dermal exposures.

The 23 DPP non-agricultural cases worked in a variety of professions including landscaping, construction, pest control, retail, teaching, 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 2004.

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

In 2004, WPC received 2,342 calls concerning human exposures to pesticides. Pesticide-related human exposure calls have been consistently about 3% of total human exposure calls to WPC (Table 38).

Table 38. WPC Human Exposure to Pesticide Calls, 2000 - 2004

Pesticide	2000	2001	2002	2003	2004
Fungicide	99	94	64	53	56
Herbicide	453	404	347	368	422
Fumigant	0	4	9	10	7
Insecticide	1,229	1,128	1,110	1,016	1,302
Insect repellent	101	89	96	156	155
Animal repellent	0	1	3	5	17
Moth repellent	50	53	40	30	39
Rodenticide	394	398	374	299	344
Total*	2,326	2,171	2,043	1,937	2,342
Percent of Total Human Exposure Calls	3.1%	3%	2.9%	2.9%	3.6%
Total WPC Human Exposure Calls**	74,808	71,675	70,298	65,857	67,517

* Includes human exposure calls that may or may not involve illness.

Does **not include information-only calls (no identifiable patient) or confirmed non-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 involve subsequent symptoms. Additional information about severity of human exposures is provided below. Calls for information that only concern pesticides are classified as 'No Identifiable Patient' and are not considered exposures. For example, a call to find out if using a pyrethrin-based ant killer in the home would be a risk to small children living there is classified as 'No Identifiable Patient'.

Between 2000 and 2003, the total number of calls to WPC regarding all human exposures, including pesticides, had been decreasing here as well as in other areas throughout the Pacific Northwest. In 2004, however, there was a slight (2.5%) increase in human exposure calls (Table 38). Pesticide exposures relative to total exposures rose slightly (0.7%) to 3.6% of the calls, whereas in 2003, pesticide exposures accounted for 2.9% of all exposure calls to WPC.

The increase in the number of calls concerning human exposure to insect repellents observed in 2003 continued in 2004. These calls should be monitored and used to develop education about insect repellent safety. The increase in calls may reflect increased use because of public concern about West Nile virus.

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 (WAC 246-100-101). Health care providers may report cases by calling the WPC. WPC helps manage the case and then forwards the information to DOH.

In 2004, WPC reported 305 human pesticide illness calls to DOH. The individuals either reported signs and/or symptoms of pesticide illness or experienced a pesticide exposure that could potentially result in development of symptoms. Of the 305 reports, 155 (51%) did not meet the DOH criteria for investigation because the exposure had not resulted in symptoms, was part of a suicide gesture, was unlikely related to the reported symptoms, occurred more than three months before the report, occurred out of state, or, in a few cases, the referral contained insufficient information for follow-up. DOH investigated 150 of the 305 WPC reports. After investigation, DOH determined that 128 illnesses were definitely (47), probably (28), or possibly (53) related to the pesticide exposure (Table 39). These 128 illnesses are included in the detailed analyses of definite, probable, and possible cases in the DOH Section of this report.

In December, 2004, DOH investigated a sample of the pesticide-related calls involving illness where the person had not sought medical care. Thirteen of the observed increase in DPP cases resulted from the sample.

Table 39. Pesticide-related Calls Reported to DOH by WPC, 2000 - 2004

Year	Reported to DOH	Investigated by DOH	DOH DPP (%*)
2000	204	113	70 (62%)
2001	152	68	30 (44%)
2002	199	106	73 (69%)
2003	258	122	88 (72%)
2004	305	150	128 (85%)

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

Of the 128 WPC calls that DOH determined to be illnesses definitely, probably or possibly related to pesticides in 2004, 88 involved residential exposures, 16 involved agricultural exposures, and 15 occurred in other public settings.

In 2004, there were 19 WPC calls involving children under the age of 19 that DOH determined were definitely, probably or possibly related to the pesticide exposure. Six of the children sprayed themselves in the face with aerosol pesticides. Four children had symptoms from exposure to lice treatment products; 3 of the exposures were from shampoo applications that got into the child's eyes and 1 child ingested the product. One child was exposed to a cat treated for fleas, and 1 infant was ill after being held by her grandmother who had used DEET.

A 9-year-old child took a sip of Round-up stored in a pop can. She reported burning in her mouth and gastrointestinal symptoms and was taken to the Emergency Room.

A 16-month-old child was found sucking on a bottle containing pyrethroid. He vomited several times and was taken to the Emergency Room.

Type of Pesticides Involved in WPC Human Exposure Calls

As in the past, more than half of the human exposure calls involved insecticides. Table 40 illustrates WPC exposure calls by pesticide type for different age groups for 2004. More than half (55%) of the pesticide calls were about insecticides (1,302).

In 2004, WPC received 422 calls about potential herbicide exposures. This was 18% of the 2,342 pesticide calls (Table 40). Twenty-six percent (111) of herbicide calls involved 2,4-D or other chlorophenoxy herbicides (i.e., MCPA, MCPP, and 2,4,5-T) and 32% (133) involved exposure to glyphosate (the active ingredient in Round-up).

Table 40. WPC Pesticide-Related Exposures By Age of Case, 2004

Pesticide Type	<6 Years	6-19 Years	>19 Years	Unk Age	Total Calls
Fungicide	10	4	40	2	56
Herbicide	103	44	274	1	422
Fumigant	1	0	6	0	7
Insecticide	372	159	760	11	1,302
Animal repellent	6	2	9	0	17
Insect repellent	92	40	23	0	155
Moth repellent	26	3	10	0	39
Rodenticide	253	23	66	2	344
Totals	863	275	1,188	16	2,342

Table 41 lists the types of insecticides involved in human exposure calls to WPC for 2000 through 2004. Because the product involved in an incident frequently involves more than one type of pesticide, the total number of insecticides does not represent individual exposures.

Table 41. WPC Type of Insecticide Involved in Human Exposure Calls, 2000 - 2004

Generic description	2000	2001	2002	2003	2004
Arsenic	10	3	6	8	5
Borates/Boric Acid	28	20	33	22	29
Carbamate only	29	35	46	37	60
Carbamate with other pesticides	11	6	9	19	27
Chlorinated hydrocarbon only	61	48	29	26	20
Chlorinated hydrocarbon with other insecticide	3	2	4	3	4
Metaldehyde	43	26	31	22	36
Organophosphate only	301	209	198	124	137
Organophosphate with carbamate	3	3	4	0	1
Organophosphate with chlorinated hydrocarbons	6	4	1	0	0
Organophosphate with other pesticide	36	26	36	28	45
Organophosphate/Carbamate/Chlorinated hydrocarbons	1	0	1	0	0
Piperonyl butoxide/Pyrethrins/Pyrethroids	304	432	418	405	529
Repellents (Insect)	101	89	96	156	155
Rotenone	1	1	2	1	3
Veterinary insecticide	135	74	6	6	11
Other	112	114	155	181	266
Unknown	142	123	128	128	124
Total	1,330	1,217	1,203	1,166	1,452

For 2004, 270 (19%) of the reported insecticides involved pesticides containing organophosphates (183) and carbamates (87).

Severity of Human Exposures to Pesticides

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

Minor Effect:	Symptoms are minimally bothersome and resolved 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 resulted 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 the 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 referred to DOH because the criteria for referral eliminate some calls. Further investigation may have determined that, while the case involved illness or injury, it was not pesticide-related. Table 42 shows the disposition of WPC calls by medical outcome.

In 2004, 47 (2%) of the human exposure calls involved moderate or major health effects.

Three percent (63) of the pesticide-related calls involved intentional exposure.

Table 42. WPC Human Exposure Calls by Medical Outcome/Disposition*, 2004

Follow-up	
No health effect	91
Minor health effect/outcome	171
Moderate health effect/outcome	44
Major health effect/outcome	3
Death	0
No Follow-up	
Nontoxic exposure	271
Minimal toxicity expected	1,458
Potentially toxic exposure**	42
Unrelated	262
Total	2,342

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

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

Appendix A

Pesticide Incident Reporting and Tracking (PIRT) Review Panel

Pesticide Hazards RCW 70.104.070-090

List of PIRT Panel Members

Pesticide Incident Definition

Agency Roles and Responsibilities

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.

Pesticide Incident Reporting and Tracking (PIRT)

Panel Representatives

Department of Health.....	Maryanne Guichard, Chair
Department of Health.....	Lucy Harter, Coordinator
Department of Agriculture	Ann Wick
Department of Ecology	Maria Victoria Peeler
Department of Fish and Wildlife	Vacant
Department of Health.....	Dorothy Tibbetts
Department of Labor and Industries	Gabrielle Toutonghi
Department of Natural Resources	Karen Ripley
General Public.....	Alice C. Larson, PhD
Practicing Toxicologist	Steven Gilbert, PhD, DABT
University of Washington	Matthew Keifer, MD, MPH
Washington Poison Center	William O. Robertson, MD
Washington State University.....	Allan Felsot, PhD

Pesticide Incident Reporting and Tracking (PIRT) Review Panel

Pesticide Incident Definition

A pesticide incident includes:

- Documented or suspected human cases of pesticide poisoning reported by health care providers as stated in WAC 246-100.
- 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

Contact: Dorothy Tibbetts, Manager
Pesticide and Surveillance Section
360.236.3361

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

The Washington State Department of Health (DOH) is responsible for carrying out rules and regulations adopted by the State Board of Health for the purposes of protecting and enhancing public health and welfare. 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; Chapter 70.105D RCW, Hazardous Management Act; Chapter 70.105D RCW, Model Toxics Control; 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, WAC 222. Section 38 of WAC 222 pertains 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

WAC 246-100-217 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

TABLE: 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
	Death	Severe or Life-threatening Signs	Pronounced or Prolonged Signs or Symptoms	Mild, transient, and spontaneously resolving symptoms
Gastrointestinal System		<ul style="list-style-type: none"> Massive hemorrhage/perforation of gut 	<ul style="list-style-type: none"> Diarrhea (G14, sign only) Melena (G17) Vomiting (G16, sign only) 	<ul style="list-style-type: none"> Abdominal pain, cramping (G11) Anorexia (G12) Constipation (G13) Diarrhea (G14, symptom) Nausea (G15) Vomiting (G16, symptom)
Respiratory System		<ul style="list-style-type: none"> Cyanosis (RESP 2) + Respiratory depression (RESP 7) Pulmonary edema (RESP6) Respiratory arrest 	<ul style="list-style-type: none"> Abnormal pulmonary x-ray Pleuritic chest pain/pain on deep breathing (RESP8) Respiratory depression (RESP7) Wheezing (RESP9) Dyspnea, shortness of breath (RESP4, sign only) 	<ul style="list-style-type: none"> Cough (RESP1) Upper respiratory pain, irritation (RESP3) Dyspnea, shortness of breath (RESP4, symptom)
Nervous System		<ul style="list-style-type: none"> Coma (NS3) Paralysis, generalized (NS10) Seizure (NS5, sign only) 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Hyperactivity (NS2) Headache (NS7) Profuse sweating (NS13) Dizziness (NS15) Ataxia (NS1, symptom) Peripheral neuropathy (NS11, symptom)

ORGAN SYSTEM	SEVERITY CATEGORY AND CODE			
	FATAL	HIGH	MODERATE	LOW
	1	2	3	4
	Death	Severe or Life-threatening Signs	Pronounced or Prolonged Signs or Symptoms	Mild, transient, and spontaneously resolving symptoms
Cardiovascular System		<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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) 	
Metabolism		<ul style="list-style-type: none"> Acid Base disturbance (pH< 7.15 or >7.7) 	<ul style="list-style-type: none"> Acid Base disturbance (pH = 7.15-7.24 or 7.60-7.69) Elevated anion gap (MISC4) 	<ul style="list-style-type: none"> Fever (MISC1)
Renal System		<ul style="list-style-type: none"> Anuria (GU2) Renal failure 	<ul style="list-style-type: none"> Hematuria (GU3) Oliguria (GU2) Proteinuria (GU4) 	<ul style="list-style-type: none"> Polyuria (GU1)
Muscular system		<ul style="list-style-type: none"> Muscle rigidity (NS9) + elevated urinary myoglobin + elevated creatinine 	<ul style="list-style-type: none"> Fasciculations (NS6) Muscle rigidity (NS9) Muscle weakness (NS8, sign only) 	<ul style="list-style-type: none"> Muscle weakness (NS8, symptom) Muscle pain (NS16)
Local effects on skin		<ul style="list-style-type: none"> Burns, second degree (involving >50% of body surface area) Burns, third degree (involving >2% of body surface area) 	<ul style="list-style-type: none"> Bullae (DERM1) Burns, second degree (involving <50% of body surface area) Burns, third degree (involving <2% of body surface area) 	<ul style="list-style-type: none"> Skin Edema/Swelling, Erythema, Rash, Irritation/Pain, Pruritis (DERM3 - 7) Hives/Urticaria
Local effects on eye		<ul style="list-style-type: none"> Corneal ulcer/perforation 	<ul style="list-style-type: none"> Corneal abrasion (EYE3) Ocular burn (EYE2) 	<ul style="list-style-type: none"> Lacrimation (EYE4) Mydriasis (EYE6) Miosis (EYE1) Ocular pain/irritation/inflammation (diagnosis of conjunctivitis) (EYE5)

ORGAN SYSTEM	SEVERITY CATEGORY AND CODE			
	FATAL	HIGH	MODERATE	LOW
	1	2	3	4
	Death	Severe or Life-threatening Signs	Pronounced or Prolonged Signs or Symptoms	Mild, transient, and spontaneously resolving symptoms
Other effects				<ul style="list-style-type: none"> • Fatigue (MISC5) • Malaise (MISC6)

Appendix C

Agency Data Summaries

Washington State Department of Agriculture

Washington State Department of Ecology, Spill Program

Washington State Department of Health

Washington State Department of Labor and Industries, WISHA

Agency Data Summary
Washington State Department of Agriculture

WSDA 2004 Case Data

<u>Case#</u> C001 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 3/3/2004	<u>Severity</u> 2	<u>Application Info</u>	Ground
<u>County</u> Benton	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> Yes		Non Ag
<u>Chemicals Involved:</u>	Herbicide pendimethalin		<u>Other Agencies</u> DOH, DOE	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds/students	

School employee applied to sidewalks/parking lot at high school prior to arrival of students. At least two sent to doctor, students sent home for day. DOE/runoff prevention response. / No contact proven, possible illness from vapor. Not licensed, no notification, landscape sign incomplete.

<u>Case#</u> C002 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 3/13/2004	<u>Severity</u> 2	<u>Application Info</u>	Ground
<u>County</u> Chelan	<u>Nature of Case</u> Drift to vehicles		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Ag
<u>Chemicals Involved:</u>	Insecticide Kaolin	Insecticide sulfur	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> pears/cars	

Car drifted on while passing orchard. Had to turn on windshield wipers. Washed car as they were not sure what the substance was. / Residue observed across road way and in right of way on opposite side of road. Verbal warning given to applicator previously for same type of incident.

<u>Case#</u> C003 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 3/22/2004	<u>Severity</u> 2	<u>Application Info</u>	Ground
<u>County</u> Chelan	<u>Nature of Case</u> Drift to property		<u>Response time</u> Same Day	<u>Children Involved?</u> No	air blast	Ag
<u>Chemicals Involved:</u>	Insecticide kaolin	Insecticide endosulfan	<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> orchard/yard	

Saw white powder on 20 x 20 area on far end of property. Daughter rides bike in area. / Applicator took numerous precautions to avoid drift (monitored, nozzle covers, buffer). Area affected small, minimal product.

<u>Case#</u> C004 2004	<u>Designation</u> Non-pesticide	<u>License</u> Private Applicator	<u>Date:</u> fall 2003	<u>Severity</u> 1	<u>Application Info</u>	NA
<u>County</u> Okanogan	<u>Nature of Case</u> Storage		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none	Ag
<u>Chemicals Involved:</u>	Insecticide oil		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> storage	

Pesticides left out in open near their property since last fall. / Thirty gallon oil drum found plus a few drops of adjuvant in a gallon jug. No violations. Encouraged applicator to move products to better storage. This was done.

<u>Case#</u> C005 2004	<u>Designation</u> Non-pesticide	<u>License</u> NA	<u>Date:</u> 6/25/1905	<u>Severity</u> 0	<u>Application Info</u>	NA
<u>County</u> Okanogan	<u>Nature of Case</u> Drift to trees		<u>Response time</u> One Day	<u>Children Involved?</u> No	none	Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> DOT, USFS	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> trees	

Trees being killed by pesticides. / No pesticides applied in area. Probable cause from deicer used on road.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> C006 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 4/4/2004	<u>Severity</u> 2	<u>Application Info</u>	Spill
<u>County</u> Chelan	<u>Nature of Case</u> Spill		<u>Response time</u> Same Day	<u>Children Involved?</u> No	mix/load	Ag
<u>Chemicals Involved:</u>	Insecticide Kaolin		<u>Other Agencies</u> DOE	<u>Final Action</u> Advisory Letter	<u>Target/Complaint Area</u> mix load spill	

DOE employee reported pesticide product on ground. Did not see any containment. Applicator exceeded limit for non-permanent mix/load site. Must move or add containment. Working with applicators to use BMPs and also possible Kaolin exemption for rule development.

<u>Case#</u> C007 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 4/8/2005	<u>Severity</u> 2	<u>Application Info</u>	Ground
<u>County</u> Chelan	<u>Nature of Case</u> Drift to vehicles/house		<u>Response time</u> Same Day	<u>Children Involved?</u> No	airblast & hand	Ag
<u>Chemicals Involved:</u>	Insecticide formetanate hydrochloride		<u>Other Agencies</u> DOH, DOE	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> orchard/car	

Applicator drifted second time on vehicles and house. / Confirmed. Person said she was ill from previous application but no complaint was filed.

<u>Case#</u> C008 2004	<u>Designation</u> Pesticide Application	<u>License</u> Dealer Manager	<u>Date:</u> 4/2/2004	<u>Severity</u> 3	<u>Application Info</u>	Ground
<u>County</u> Grant	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Ag
<u>Chemicals Involved:</u>	Fumigant metam sodium		<u>Other Agencies</u> DOH, DOE	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> spill	

Two irrigation district employees saw tanker truck dumping chemicals on canal bank. Walked area and smelled strong odor and had skin irritations. / Verified. Soil removed and disked into field.

<u>Case#</u> C009 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 4/13/2004	<u>Severity</u> 2	<u>Application Info</u>	Ground
<u>County</u> Douglas	<u>Nature of Case</u> Drift to property		<u>Response time</u> Same Day	<u>Children Involved?</u> No	prob airblast	Ag
<u>Chemicals Involved:</u>	Insecticide sulfur		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> apples/property, car	

Pickup and residence were drifted on from application to a neighboring orchard. / Samples collected were positive for sulfur. Neighbors communicating to resolve and prevent further incidents.

<u>Case#</u> C010 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 4/26/2004	<u>Severity</u> 1	<u>Application Info</u>	Ground
<u>County</u> Chelan	<u>Nature of Case</u> Drift to water		<u>Response time</u> Same Day	<u>Children Involved?</u> No	prob airblast	Ag
<u>Chemicals Involved:</u>	Insecticide thiamethoxan	Insecticide abamectin	<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> pears/water	

Caller said applicator drifting to creek on two occasions. / Products being used within buffer requirements both times. No violations. Records in order. Applicator taking care of boom spray direction, spraying only one side.

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WSDA 2004 Case Data

<u>Case#</u> C011 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> Spring 2004	<u>Severity</u> 1	<u>Application Info</u> Unknown
<u>County</u> Grant	<u>Nature of Case</u> Drift to apples		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> wheat/apples

Neighbor sprayed wheat. Damage to south 100 feet of orchard block. / Verified. Grower requested delay to see if trees would recover. Did not call or submit info.

<u>Case#</u> C012 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 5/7/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Okanogan	<u>Nature of Case</u> Water contamination		<u>Response time</u> 3 days	<u>Children Involved?</u> No	handgun, broadcast Non Ag
<u>Chemicals Involved:</u>	Herbicide diglicolamine	herbicide 2,4-D	<u>Other Agencies</u> None	<u>Final Action</u> Advisory Letter	<u>Target/Complaint Area</u> weeds/water

Complainant saw pesticide symptoms in weeds and thought someone had sprayed directly in water. / Weeds along seasonal stream showed symptoms. No lab detects.

<u>Case#</u> C013 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 5/18/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Chelan	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	power ground Non Ag
<u>Chemicals Involved:</u>	Unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> trees/yard

Application to neighbor's trees drifted onto complainant's yard plants. / Spray company contacted complainant and agreed future applications would be by injection. Complaint dropped.

<u>Case#</u> C014 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 6/1/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Douglas	<u>Nature of Case</u> Drift to vehicles/people		<u>Response time</u> Same Day	<u>Children Involved?</u> No	air blast Ag
<u>Chemicals Involved:</u>	Insecticide Azinphos methyl		<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> apples/cars

Two airblast applicators drifting over road and passing cars. / Verified. Drifted on person monitoring traffic and towards pond. Residue in all samples. Poor monitoring procedures.

<u>Case#</u> C015 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 5/7/2004	<u>Severity</u> 4	<u>Application Info</u> Unknown
<u>County</u> Grant	<u>Nature of Case</u> Drift on plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	herbicide MCPA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> peas/grapes

Damage to grapes after neighboring peas sprayed. / Verified, damages over \$1000 but no follow up was received from the grower on damages.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> C016 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 5/18/2004	<u>Severity</u> 4	<u>Application Info</u> Ground
<u>County</u> Okanogan	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	boom sprayer
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> hay/organic pears

Drift to organic orchard from triticale application. / Verified. Wind and temperature inversions.

<u>Case#</u> C017 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> Jun-04	<u>Severity</u> 4	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to crops		<u>Response time</u> 3 days	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	herbicide rimsulfuron		<u>Other Agencies</u> None	<u>Final Action</u> NOC/NOI	<u>Target/Complaint Area</u> potatoes/seed alfalfa

Damage to alfalfa from neighbor's application to potatoes. / Verified. Also a second application to onions drifted to potatoes. Grower wanted to assess separately for damages.

<u>Case#</u> C018 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> Jun-04	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> F&W	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> corn/willows

Willows and other vegetation along drain showing symptoms of herbicide exposure. Application to glyphosate-resistant corn moved through drainage to willows on public land.

<u>Case#</u> C019 2004	<u>Designation</u> Referred	<u>License</u> Private Applicator	<u>Date:</u> Jun-04	<u>Severity</u> 3	<u>Application Info</u> Unknown
<u>County</u> Grant	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	residue
<u>Chemicals Involved:</u>	referred referred		<u>Other Agencies</u> L&I	<u>Final Action</u> Referred	<u>Target/Complaint Area</u> apples/person

Developed rash on neck and arms after thinning apples covered in white dust. Swelling in arms. / Started investigation before noting it was an employer/employee case. Referred to L&I.

<u>Case#</u> C020 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 6/5/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	hand sprayer
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> DOH, DOE	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds/person, plants

Plants dying after neighbor sprayed. Can smell fumes and is chemically sensitive. / Homeowner applied product over rate, dumped excess material on tree, container placed in garbage, drifted to sensitive plants. Detects in all samples.

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WSDA 2004 Case Data

<u>Case#</u> C021 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/27/2004	<u>Severity</u> 4	<u>Application Info</u> Ground
<u>County</u> Chelan	<u>Nature of Case</u> Dog sick		<u>Response time</u> Same Day	<u>Children Involved?</u> No	hand Non Ag
<u>Chemicals Involved:</u>	Insecticide bifenthrin		<u>Other Agencies</u> EPA	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> insects/dog

Dog went into seizures after application of pesticide pellets. Applicator gave no warning about keeping dog away. / Material not distributed evenly, material in dog's water dish. No warning to keep dog away from area.

<u>Case#</u> C022 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 7/24/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	hand sprayer Non Ag
<u>Chemicals Involved:</u>	Insecticide toxaphene	methoxychlor	<u>Other Agencies</u> DOH	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> flies/human

Employer sprayed for flies. Sought medical treatment for eye problem. / Stock spray was used around deck for flies while people on break. Felt mist, eye irritation, lips tingling. Product not labeled for residential use, drift on persons. Old cancelled product.

<u>Case#</u> C023 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 8/9/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Okanogan	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	None none		<u>Other Agencies</u> DOH	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> apples/person

Aerial applicator sprayed orchards around office. Spray got into ventilation system and triggered asthma attack. / The only applicator in area was spraying wax for sunburn. Not a pesticide.

<u>Case#</u> C024 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 8/12/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Posting		<u>Response time</u> Same Day	<u>Children Involved?</u> yes	hand sprayer Non Ag
<u>Chemicals Involved:</u>	Insecticide permethrin		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> wasps

No notification at child care facility that had just been sprayed for wasps. / One nest had emergency treatment by commercial company. Daycare operator did not post site. Discussed need for posting.

<u>Case#</u> C025 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 8/18/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Snohomish	<u>Nature of Case</u> Posting		<u>Response time</u> Same Day	<u>Children Involved?</u> No	hand sprayer Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> weeds/posting

Application was made to a high school with no posting signs. / School said there was posting at entrance. Will do follow-up inspection.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> C026 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 5/7/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Chelan	<u>Nature of Case</u> License		<u>Response time</u> 19 days	<u>Children Involved?</u> No	hand sprayer Non Ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds

Person observed with containers, sprayers and flags on lawn care trailer. Not licensed as commercial applicator. / Verified. Warning given. Still not licensed.

<u>Case#</u> C027 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 8/27/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground sprayer Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> F&W, DOE	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> corn/trees

Application to neighbor's land drifted to willow trees along wind break and damaged them. / Glyphosate residue detected in willows. Applicator will replace if needed. Complaint withdrawn.

<u>Case#</u> C028 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 11/17/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Posting		<u>Response time</u> 4 days	<u>Children Involved?</u> No	hand sprayer Non Ag
<u>Chemicals Involved:</u>	Herbicides mscl		<u>Other Agencies</u> DSHS	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds

Parks Department not complying with posting regulations at daycares and summer school activities. / Complex program. Working on getting daycares into compliance.

<u>Case#</u> G001 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 3/23/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Posting		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Ag
<u>Chemicals Involved:</u>	Fumigant metam-sodium		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> field

Applicator not posting fields treated with metam-sodium. / Recent changes to label do not require posting.

<u>Case#</u> G002 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> 6/15/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to property		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Herbicide mscl		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> unknown

Application to control weeds drifting to neighboring property and damaging plants. / Miscellaneous pesticide residues found in garden plants but no source could be determined.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> G003 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 7/3/2004	<u>Severity</u> 2	<u>Application Info</u>	Air
<u>County</u> Adams	<u>Nature of Case</u> Drift to crop		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Ag
<u>Chemicals Involved:</u>	Herbicide paraquat		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds/corn	

Drift from aerial application to corn from onions. / Verified, also over spray on water.

<u>Case#</u> G004 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/17/2004	<u>Severity</u> 1	<u>Application Info</u>	Air
<u>County</u> Grant	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Ag
<u>Chemicals Involved:</u>	Insecticide methamidophos	copper	<u>Other Agencies</u> DOH	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> potatoes/people	

Aerial application to potatoes drifted to property and caused breathing problems and eye irritation as well as contaminating orchard and garden. / Findings did not support allegations. NOC on records and did not renew license.

<u>Case#</u> G005 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 6/15/2004	<u>Severity</u> 1	<u>Application Info</u>	Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground	Ag
<u>Chemicals Involved:</u>	Herbicide mscl		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> weeds/orchard	

Neighbor sprayed weed killer on vacant lot next to apple trees and damaged them. / Conflicting stories, and residues of four pesticides were detected in samples. Major symptoms were due to fire blight.

<u>Case#</u> G006 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/21/2004	<u>Severity</u> 3	<u>Application Info</u>	Air
<u>County</u> Grant	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Ag
<u>Chemicals Involved:</u>	Herbicide diquat		<u>Other Agencies</u> WSU	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> potatoes/orchard	

Drift from potato field sprayed with diquat. Leaves falling off fruit trees and spots on garden and ornamentals. / Verified, off label use, no records submitted.

<u>Case#</u> G007 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 7/31/2004	<u>Severity</u> 4	<u>Application Info</u>	Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to crops		<u>Response time</u> 5 days	<u>Children Involved?</u> No	ground	Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D	herbicide dicamba	<u>Other Agencies</u> DOE, Irrig	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> ditch/potatoes	

Potatoes next to irrigation district showing phenoxy symptoms. Bean fields in area with symptoms also. / Verified, no ROW on PO license

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WSDA 2004 Case Data

<u>Case#</u> G008 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 7/12/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Drift to crops		<u>Response time</u> 3 days	<u>Children Involved?</u> No	ground Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ditch/beans

Beans next to irrigation district showing phenoxy symptoms. / No source of residue found. Symptoms were mainly mite damage. Dropped complaint.

<u>Case#</u> G009 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 5/1/2004	<u>Severity</u> 3	<u>Application Info</u> Fumigation
<u>County</u> Grant	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	chemigation Ag
<u>Chemicals Involved:</u>	Fumigant metam sodium		<u>Other Agencies</u> DOH, DOE	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> preplant/person

Person walking through surface runoff got blister on foot. / Verified. Hole in boot. Surface runoff from metam sodium application confirmed, label violation, missing some of backflow prevention devices, operator unlicensed.

<u>Case#</u> G010 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 10/22/2004	<u>Severity</u> 2	<u>Application Info</u> Fumigation
<u>County</u> Walla Walla	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	chemigation Ag
<u>Chemicals Involved:</u>	Fumigant metam sodium		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> preplant

Unlicensed applicators injecting metam-sodium without supervision of commercial applicator. / Verified (same case as 9G)

<u>Case#</u> S001 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 4/17/2002	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Spokane	<u>Nature of Case</u> Faulty WDO		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> WDO

Incomplete pest inspection. Later found termite infestation and damage. / Could not determine if termites were present at time of inspection. Some earth to wood contacted noted, some missed. Report incomplete.

<u>Case#</u> S002 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 6/7/2003	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> Yes	fogger Non Ag
<u>Chemicals Involved:</u>	Insecticide tralomethrin		<u>Other Agencies</u> DOH	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> insects/person

Insect foggers used to treat apartment building suspected in death of ten-month old child. Incident occurred 10 months prior to complaint. / DOH requested investigation to see if any violations. Apartment owner vacated building, treated at labeled rate with foggers. Residents entered building several hours later and ventilated and then reentered several more hours later and cleaned. Child laid on blanket on floor of living room as it was vacuumed, found dead in morning. Medical examiner listed as Sudden Infant Death Syndrom. No violations of pesticide regs.

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WSDA 2004 Case Data

<u>Case#</u> S003 2004	<u>Designation</u> Non-pesticide	<u>License</u> Dealer Manager	<u>Date:</u> spring 2004	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> Garfield	<u>Nature of Case</u> Sale		<u>Response time</u> One Day	<u>Children Involved?</u> No	NA (repackaging) Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> EPA	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> packaging

Improper distribution of glyphosate into containers by dealer. / Repacking without proper agreements. Transferred from shuttles to containers.

<u>Case#</u> S004 2004	<u>Designation</u> Pesticide Application	<u>License</u> NA	<u>Date:</u> spring 2004	<u>Severity</u> 1	<u>Application Info</u> Unknown
<u>County</u> Walla Walla	<u>Nature of Case</u> Drift to crops		<u>Response time</u> One Day	<u>Children Involved?</u> No	unknown Ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> grapes

Herbicide drift to vineyard. / Damage to grapes could not be linked to any application.

<u>Case#</u> S005 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> 4/1/2004	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Spokane	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> WSU	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> tomatoes

Herbicide drift to 300 tomato plants. / Plants had residue of MCPA and glyphosate. No source found.

<u>Case#</u> S006 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 5/19/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Drift to property		<u>Response time</u> Same Day	<u>Children Involved?</u> No	truck Non Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds/ornamentals

Herbicide drift to fruit trees and blackberry vines in yard. Also horse pasture and horse. / Residue found off site.

<u>Case#</u> S007 2004	<u>Designation</u> Non-pesticide	<u>License</u> NA	<u>Date:</u> 5/1/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Spokane	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ornamentals

Claims damage to ornamentals by someone sneaking to her property at night and spraying herbicide on plants. / No evidence to support claim.

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WSDA 2004 Case Data

<u>Case#</u> S008 2004	<u>Designation</u> Non-pesticide	<u>License</u> NA	<u>Date:</u> spring 04	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Spokane	<u>Nature of Case</u> Animal death		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none Non Ag
<u>Chemicals</u> NA			<u>Other Agencies</u> Vet	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> cats
<u>Involved:</u> NA					

Claims cats poisoned by neighbor with rodenticides. / No evidence to support complaint. Stomach contents had barely detectable strychnine.

<u>Case#</u> S009 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 6/2/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Whitman	<u>Nature of Case</u> License		<u>Response time</u> One Day	<u>Children Involved?</u> No	ground (weeds) Non Ag
<u>Chemicals</u> Herbicide			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> weeds
<u>Involved:</u> mscl					

Pesticide applications by non-licensed individuals. / Applied to public property by WSU employee without PO license. Had PA license.

<u>Case#</u> S010 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> Spring 04	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Spokane	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA Non Ag
<u>Chemicals</u> NA			<u>Other Agencies</u> WSU	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ornamentals
<u>Involved:</u> NA					

Commercial herbicide application adjacent to arborvitae damaged 125 plants. / No evidence application injured plants. Probably cultural/bacterial disease.

<u>Case#</u> S011 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 6/8/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (mosquito) Non Ag
<u>Chemicals</u> Insecticide			<u>Other Agencies</u> DOH	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> mosquitoes/person
<u>Involved:</u> malathion					

Human exposure to mosquito application done by the city. / Exposure not confirmed. Product found off target, used contrary to label, not licensed for mosquito control.

<u>Case#</u> S012 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> Mar-04	<u>Severity</u> 1	<u>Application Info</u> Air
<u>County</u> Lincoln	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	air Ag
<u>Chemicals</u> Herbicide			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> grain/plants
<u>Involved:</u> sulfosufuron					

Damage to ornamental plants from aerial application to adjoining grain field. / No indication of drift. Symptoms consistent with disease, insects and climatic conditions.

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WSDA 2004 Case Data

<u>Case#</u> S013 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> Apr-04	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Adams	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground rig Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> wheat/trees

Damaged ornamentals from adjacent ground-rig application. / No residue, natural growth pattern.

<u>Case#</u> S014 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 4/22/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Ag
<u>Chemicals Involved:</u>	Herbicide bromoxinil	dicamba	<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> wheat/lentils

Drift from wheat to lentils. / No damage symptoms, no residue. Complaint withdrawn.

<u>Case#</u> S015 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 5/1/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Non Ag
<u>Chemicals Involved:</u>	Herbicide unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> weeds/notification

Making herbicide applications to mobile home park without posting, notification, license. Child has asthma and concerned about exposure. / No requirement for posting. Will work with mobile home manager about notification. Sent pesticide sensitive registration forms. No determination that applications were made.

<u>Case#</u> S016 2004	<u>Designation</u> Non-pesticide	<u>License</u> Dealer Manager	<u>Date:</u> 6/8/2004	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> Stevens	<u>Nature of Case</u> Distribution		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> Warning Letter	<u>Target/Complaint Area</u> improper distribution

Distribution of pesticides and fertilizers not registered in state. / Feed grade copper sulfate rebagged in small package as convenience. Sold as "fertilizer". Warning letter to grower for recommending off label use of a copper sulfate fungicide.

<u>Case#</u> S017 2004	<u>Designation</u> Pesticide Application	<u>License</u> NA	<u>Date:</u> 6/15/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> lawn

Has large dead spot in lawn and two dead ornamental plants. Has had commercial pesticide applications and a mowing service. / Glyphosate residue found and caused injury. Source could not be determined.

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WSDA 2004 Case Data

<u>Case#</u> S018 2004	<u>Designation</u> Non-pesticide	<u>License</u> NA	<u>Date:</u> 6/1/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Lincoln	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA Non Ag
<u>Chemicals Involved:</u>	Herbicide unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> plants

Drift from application to weeds at commercial grain elevator damaging trees and shrubs in yard. / No evidence of drift. Possibly cultural problem, low soil fertility.

<u>Case#</u> S019 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 6/16/2004	<u>Severity</u> 4	<u>Application Info</u> Ag
<u>County</u> Lincoln	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	air Ag
<u>Chemicals Involved:</u>	Herbicide trhifensulfuron	Herbicide rimsulfuron	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> potatoes/peas

Drift to 135 acres of peas being grown for seed. / Verified. Damage \$47K.

<u>Case#</u> S020 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 6/1/2004	<u>Severity</u> 3	<u>Application Info</u> Ag
<u>County</u> Lincoln	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	air Ag
<u>Chemicals Involved:</u>	Herbicide unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> wheat/garlic

Aerial herbicide drift to garlic. / Garlic field killed by aerial application. Grower reached settlement with applicator. Withdrew complaint.

<u>Case#</u> S021 2004	<u>Designation</u> unknown	<u>License</u> Unknown	<u>Date:</u> Spring 2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Adams	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Ag
<u>Chemicals Involved:</u>	Herbicide unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ROW/wheat

Alleged ROW drift of herbicide to winter wheat. / Damage to wheat seen along road but no cause determined. No residues detected.

<u>Case#</u> S022 2004	<u>Designation</u> unknown	<u>License</u> Unknown	<u>Date:</u> summer 2004	<u>Severity</u> 1	<u>Application Info</u> Unknown
<u>County</u> Whitman	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Four days	<u>Children Involved?</u> No	unknown Ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> grapes

Alleged drift to organic vegetables. / Damage to grape vines could not be linked to any pesticide applications.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> S023 2004	<u>Designation</u> unknown	<u>License</u> Unknown	<u>Date:</u> 6/26/1905	<u>Severity</u> 1	<u>Application Info</u> Unknown
<u>County</u> Adams	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> wheat/peas

Alleged drift to seed peas from application to wheat. / No evidence of drift. Multiple applications made in area.

<u>Case#</u> S024 2004	<u>Designation</u> NA	<u>License</u> NA	<u>Date:</u> Spring 2004	<u>Severity</u> 0	<u>Application Info</u> Unknown
<u>County</u> Spokane	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Non Ag
<u>Chemicals Involved:</u>	Herbicide clopyralid		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> trees

Herbicide injury to trees around nursing home. / Symptoms appear to be root uptake, not drift. Clopyralid detected in leaf samples, No source determined.

<u>Case#</u> S025 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 6/28/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Adams	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> Advisory Letter	<u>Target/Complaint Area</u> irrigation/potatoes

Alleged drift of herbicides onto potato field. / Verified. Probably came from irrigation district application. No complaint, just wants employees advised.

<u>Case#</u> S026 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 4/15/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate	Herbicide picloram	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> ROW/trees

ROW application by country damaged locust trees on his property. / Glyphosate residue found, no source determined. Off label use of picloram (near trees).

<u>Case#</u> S027 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 9/1/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> wheat/trees

Alleged pesticide drift during windy conditions. / Verified. Residue in trees.

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WSDA 2004 Case Data

<u>Case#</u> S028 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/16/2003	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> weeds/lilac

Application made by commercial lawn care company damaged lilacs growing along edge of treatment area. / No symptoms, occurred in 2003, no complaint until 2004

<u>Case#</u> S029 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 6/15/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Spokane	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Herbicide diuron	bromacil	<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> driveway/trees

Application to driveway made by friend damaged trees. / Complaint withdrawn.

<u>Case#</u> S030 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 12/9/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Spokane	<u>Nature of Case</u> Disposal		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> DOE	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> disposal

Improper container and equipment rinsing. / Rinsing of muddy fertilizer truck on pad. No violations. Check of records showed improper application of herbicide to hay, cited on inspection report.

<u>Case#</u> T001 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 1/4/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	fumigation (commercial) Non Ag
<u>Chemicals Involved:</u>	Fumigant methyl bromide		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> trailer

Alleges commercial applicator is fumigating truck trailers in a manner that endangers the public. / Verified. Applicator fumigating trailer in traffic area contrary to label.

<u>Case#</u> T002 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 1/23/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Animal death		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (residential) Non Ag
<u>Chemicals Involved:</u>	Insecticide carbaryl		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> crane fly/cat

Commercial application on neighbors lawn and small area of her lawn killed earthworms. Her cat died the next day. / No violations noted. No cause on cat death found.

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WSDA 2004 Case Data

<u>Case#</u> T003 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 4/11/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Skagit	<u>Nature of Case</u> Faulty SPI, license	Consultant	<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA (WDO) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> WDO

Faulty Structural Pest inspection Report and unlicensed inspector. / Failed to report beetles and rot. Did not diagram. Was licensed.

<u>Case#</u> T004 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 2/3/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> License fraud		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA (license) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> license

Operator provided a document to prove he had taken and passed the license exam. Document was falsified. / Verified. Also false billings for applications and falsified application records. Applied without a license.

<u>Case#</u> T005 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 2/11/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Records, license		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA (records) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> records, license

Business inspection showed failure to complete and retain records application records and WDO reports. Power apparatus was not licensed.

<u>Case#</u> T006 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 2/11/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Records, license		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA (records) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> records

Business inspection showed failure to make or keep WDO reports, provide records on approved forms, and failure to keep complete and accurate records.

<u>Case#</u> T007 2004	<u>Designation</u> NA	<u>License</u> SPI	<u>Date:</u> 6/16/2003	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Kitsap	<u>Nature of Case</u> Faulty SPI and report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA (report) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> faulty WDO

Faulty structural pest inspection and report. / Verified. Failed to report rot and conducive conditions, did not diagram.

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WSDA 2004 Case Data

<u>Case#</u> T008 2004	<u>Designation</u> NA	<u>License</u> SPI	<u>Date:</u> 4/11/2002	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Skagit	<u>Nature of Case</u> Report		<u>Response time</u> Five days	<u>Children Involved?</u> No	<u>NA (records)</u> Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> no report

Did not provide WDO report as requested for previous complaint.

<u>Case#</u> T009 2004	<u>Designation</u> NA	<u>License</u> SPI	<u>Date:</u> 2/27/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	<u>NA (records)</u> Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> no report

Did not provide report as requested for previous complaint.

<u>Case#</u> T010 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> year 2003	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Grays Harbor	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	<u>NA (residential)</u> Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> lawn

Said neighbor using a pesticide to kill his yard. / Neighbor-neighbor dispute. Alleged application occurred a year ago. Could not determine cause of lawn death. Did not seem to be caused by pesticides.

<u>Case#</u> T011 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 3/22/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	<u>ground (commercial)</u> Non Ag
<u>Chemicals Involved:</u> Insecticide fipronil			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> insects/house

PCO treated the wrong house. / Mix-up on house numbers. No evidence who had given the wrong number.

<u>Case#</u> T012 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 2/25/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Clark	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	<u>no (SPI)</u> Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license

No longer employed with company, therefore insurance is invalid, and company has no license. Advertising as inspector without license. / Verified

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WSDA 2004 Case Data

<u>Case#</u> T013 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 12/17/2003	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Faulty SPI and license		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> WDO

Faulty SPI and not licensed. / Verified. Failed to report rot, debris, earth to wood. Not properly licensed.

<u>Case#</u> T014 2004	<u>Designation</u> Non-pesticide	<u>License</u> SPI	<u>Date:</u> 5/12/2003	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> Faulty SPI and report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> WDO

Faulty SPI and report. / Not verified. Inspection was thorough and accurate. No violations.

<u>Case#</u> T015 2004	<u>Designation</u> Non-pesticide	<u>License</u> SPI	<u>Date:</u> 12/10/2003	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Kitsap	<u>Nature of Case</u> Faulty SPI and report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> WDO

Faulty SPI and report. / Verified. Failed to report rot, insects and debris. No diagram.

<u>Case#</u> T016 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 3/8/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> WDO

Advertising as a SPI without a license. / Verified.

<u>Case#</u> T017 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 3/8/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> WDO

Advertising as a SPI without a license. / Verified.

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WSDA 2004 Case Data

<u>Case#</u> T018 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 2/26/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Thurston	<u>Nature of Case</u> No backflow device		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (lumberyard) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lumber mill

Follow up inspection at lumber mill from previous secondary containment inspection. Did not have backflow device, did not inspect systems, no spill response plan.

<u>Case#</u> T019 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 2/27/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> No backflow device		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (lumberyard) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lumber mill

Follow up inspection at lumber mill from previous secondary containment inspection. Did not have backflow device, did not inspect systems, no spill response plan.

<u>Case#</u> T020 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 2/27/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> No backflow device		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (lumberyard) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lumber mill

Follow up inspection at lumber mill from previous secondary containment inspection. Did not have backflow device, did not inspect systems, no spill response plan.

<u>Case#</u> T021 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 4/21/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Thurston	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (trees) Ag
<u>Chemicals Involved:</u> Herbicide glyphosate	Herbicide oxyfluorfen		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> Christmas trees/trees

Application to Christmas trees damaged ornamental hedge. / No evidence application damaged trees. Applicator used product contrary to label, did not keep records, failed to train pesticide handler, did not post handler information.

<u>Case#</u> T022 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 3/15/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (residential) Non Ag
<u>Chemicals Involved:</u> Herbicide glyphosate			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lawn/bamboo

Application to neighbor's lawn drifted to grass and bamboo. / Verified. Damage minor.

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WSDA 2004 Case Data

<u>Case#</u> T023 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 4/29/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Grays Harbor	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> Yes	ground (comm/apts) Non Ag
<u>Chemicals Involved:</u>	Insecticide cyfluthrin		<u>Other Agencies</u> DOH	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> insects/child

Application to apartment left residue on railing. Father got wet hand from railing and picked up child. Taken to health center, worried about exposure. No symptoms. / Possible mist on rail but treatment was crack and crevice. PPE used, no posting required. No evidence on complaint. NOC on records and not taking precautions to keep children from area until dry.

<u>Case#</u> T024 2004	<u>Designation</u> Non-pesticide	<u>License</u> Residential	<u>Date:</u> 3/15/2004	<u>Severity</u> 0	<u>Application Info</u> Ground
<u>County</u> Clark	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (residential) Non Ag
<u>Chemicals Involved:</u>	Herbicide unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> plants

Said neighbor sprayed her plants with herbicide. / No evidence to support complaint.

<u>Case#</u> T025 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 4/7/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (license) Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license, records

Dealer inspection - no dealer endorsement on license, no current dealer manager, improper records for sales, offered for sale product not registered as pesticide (as a repellent).

<u>Case#</u> T026 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 4/27/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Thurston	<u>Nature of Case</u> License/Drift		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Insecticide carbaryl		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license, drift

Application to trees for tent caterpillars drifted across road. / Verified. Also company and employee were not licensed.

<u>Case#</u> T027 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 3/27/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Pierce	<u>Nature of Case</u> Ineffective product		<u>Response time</u> 6 days	<u>Children Involved?</u> No	ground (residential) Non Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> product

Company allegedly sold customer a product that did not work/ Purchased 2,4-D product. Wanted all vegetation gone. Should have purchased glyphosate.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T028 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 4/8/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (license) Non Ag
<u>Chemicals</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license, records
<u>Involved:</u> NA					

Dealer inspection - no dealer manager present, no complete sales records, improper storage of items for sale and offered non-registered pesticides.

<u>Case#</u> T029 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> unknown	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Thurston	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (residential) Non Ag
<u>Chemicals</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> tree
<u>Involved:</u> NA					

Neighbor damaged tree. / New asphalt probably cut off water to tree. Ground was compacted to lay asphalt. Also frost and insect damage.

<u>Case#</u> T030 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 5/10/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Notification		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (ROW) Non Ag
<u>Chemicals</u> Insecticide			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> notification
<u>Involved:</u> cyfluthrin					

On pesticide sensitive list. Was not notified. No health symptoms. / Commercial company spraying for tent caterpillars. Miscommunication on who was to notify people on list.

<u>Case#</u> T031 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 4/14/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Clark	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none (SPI) Non Ag
<u>Chemicals</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license
<u>Involved:</u> NA					

Unlicensed structural pest inspector. / Verified. Also no insurance and no inspection number on report.

<u>Case#</u> T032 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 4/8/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (dealer) Non Ag
<u>Chemicals</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> sale
<u>Involved:</u> NA					

Dealer inspection - dealer manager's license not needed. No proper sales records, offered for sale non registered pesticides, labels not intact, poor housekeeping, open containers, residue on outside of containers.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T033 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 4/9/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (dealer) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license

Dealer inspection - dealer manager's license not current, no dealer endorsement, no proper sales records, offered for sale non registered pesticides.

<u>Case#</u> T034 2004	<u>Designation</u> Non-pesticide	<u>License</u> SPI	<u>Date:</u> 1/24/2003	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Faulty SPI & report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> inspection

Faulty SPI and report. / Verified, failed to note insects, rot and earth to wood. No diagrams.

<u>Case#</u> T035 2004	<u>Designation</u> Non-pesticide	<u>License</u> SPI	<u>Date:</u> 12/31/2002	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Grays Harbor	<u>Nature of Case</u> Faulty SPI & report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> inspection

Faulty SPI and report. / Verified. Failed to note beetles, rot and earth to wood contact. No diagrams.

<u>Case#</u> T036 2004	<u>Designation</u> Non-pesticide	<u>License</u> NA	<u>Date:</u> 2/1/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Jefferson	<u>Nature of Case</u> Misuse		<u>Response time</u> One Day	<u>Children Involved?</u> No	no Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> tree dying

Alleges neighbor is killing his tree because it blocked the view. / No evidence of pesticides. Suspect tree's decline is due to stress.

<u>Case#</u> T037 2004	<u>Designation</u> Non-pesticide	<u>License</u> SPI	<u>Date:</u> 4/16/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> Faulty SPI & report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> inspection

Alleged faulty SPI and report. / Unsubstantiated. Inspection was complete and accurate.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T038 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 6/2/2004	<u>Severity</u> 4	<u>Application Info</u> Ground
<u>County</u> Grays Harbor	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (commercial) Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate	Herbicide sulfometuron methyl	<u>Other Agencies</u> DOT, DOE	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> weeds/water

Commercial applicator applying to DOT lands without permission. Applying to vegetation in standing water in a wetland. / Verified Damage to DOT vegetation \$11,933. Did not have proper endorsements, did not keep complete and accurate records.

<u>Case#</u> T039 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 5/13/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Snohomish	<u>Nature of Case</u> Direct application		<u>Response time</u> One Day	<u>Children Involved?</u> No	ground (comm/lawn) Non Ag
<u>Chemicals Involved:</u>	Insecticide pyrethrin	Insecticide thiophanate methyl	<u>Other Agencies</u> WSU	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ornamentals

Commercial spray company damaged her vegetation. / No evidence spray damaged vegetation. Glyphosate trace found but could not determine source.

<u>Case#</u> T040 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 12/4/2003	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license, inspection

Unlicensed SPI, no control number, advertising without valid license. / Verified. Also insurance problems.

<u>Case#</u> T041 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 6/7/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Records		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> records

Did not provide records to WSDA as requested from previous WDO investigation.

<u>Case#</u> T042 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 6/8/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (residential) Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> tree

Alleges that tree was sprayed without permission of owner. / Elm tree was dying from Dutch Elm Disease. No pesticides involved.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T043 2004	<u>Designation</u> Non-pesticide	<u>License</u> Unlicensed	<u>Date:</u> 6/28/2004	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (license) Non Ag
<u>Chemicals Involved:</u>	NA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license

Advertising as SPI without a valid license. / Verified

<u>Case#</u> T044 2004	<u>Designation</u> Non-pesticide	<u>License</u> NA	<u>Date:</u> 6/1/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> King	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> plants

County park has some trees and shrubs dying and thinks it may be caused by herbicide applied by a neighbor. / No pesticides involved. Poor cultural practices.

<u>Case#</u> T045 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 6/3/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Kitsap	<u>Nature of Case</u> Misuse		<u>Response time</u> 6 days	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	Rodenticide difethilone	Rodenticide bromobiphenyl	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> rodent bait

Rodenticide applied around home in improper manner. / Verified. Not in secure bait box. Records inadequate.

<u>Case#</u> T046 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 6/3/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Skagit	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Herbicide clomazone		<u>Other Agencies</u> Organic Program	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> cucumbers/organic potatoes

Drift to organic crop from neighbor's application. / No residue, no symptoms.

<u>Case#</u> T047 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 7/12/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Misuse/License		<u>Response time</u> One Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D	triclopyr	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> blackberries

Alleges that an unlicensed applicator sprayed some brush on his property. / Verified. Homeowner Association asked him to spray. The lot was thought to be vacant.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T048 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 7/1/2004	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> Records/Storage		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u> NA			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> records, storage

Inspection revealed faulty application records and storage. / Verified.

<u>Case#</u> T049 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/19/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Thurston	<u>Nature of Case</u> Apparatus plate		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (aquatic) Non Ag
<u>Chemicals Involved:</u> Herbicide tricopyr			<u>Other Agencies</u> DOE	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> aquatic weeds

Application to water. Applicator failed to display apparatus plate on boat. / Application made according to label, all other regs followed. On one occasion, applicator did not have apparatus plate on small boat.

<u>Case#</u> T050 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 7/19/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Thurston	<u>Nature of Case</u> Distribution		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (aquatic) Non Ag
<u>Chemicals Involved:</u> Herbicide tricopyr			<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> misbranded, license

Sticker with establishment number obscured EPA registration number (misbranded). Also needed a Commercial Consultant license and Dealer License.

<u>Case#</u> T051 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 7/8/2004	<u>Severity</u> 2	<u>Application Info</u> Air
<u>County</u> Grays Harbor	<u>Nature of Case</u> Water Contamination		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (forestry) Ag
<u>Chemicals Involved:</u> Herbicide glyphosate	Herbicide sulfometuron methyl		<u>Other Agencies</u> DNR	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> water contamination

Herbicide application to forest lands went into water. / Verified. Also incomplete records.

<u>Case#</u> T052 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 7/20/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Island	<u>Nature of Case</u> Labeled Containers		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (aquatic) Non Ag
<u>Chemicals Involved:</u> Herbicide glyphosate	Herbicide imazapyr		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> unlabeled containers

Did not label containers of pesticide mixture used for Spartina control application and reused pesticide containers to transport pesticide mixture.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u>	T053	2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Public Operator	<u>Date:</u>	7/20/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	Island		<u>Nature of Case</u>	Labeled Containers			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	yes (aquatic)	Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		Herbicide imazapyr				<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	unlabeled containers

Did not label containers of pesticide mixture with appropriate contents and cautions, used for Spartina control application.

<u>Case#</u>	T054	2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Public Operator	<u>Date:</u>	7/20/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	Island		<u>Nature of Case</u>	Labeled Containers			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	yes (aquatic)	Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		Herbicide imazapyr				<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	unlabeled containers

Did not label containers of pesticide mixture used for Spartina control application.

<u>Case#</u>	T055	2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Unlicensed	<u>Date:</u>	8/9/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	King		<u>Nature of Case</u>	Human Exposure			<u>Response time</u>	One Day	<u>Children Involved?</u>	No	ground (commercial)	Non Ag
<u>Chemicals Involved:</u>	Fungicide copper naph.						<u>Other Agencies</u>	DOH	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	roof/person

Neighbor ill after roof treatment application. / Odor problem only. Applicator unlicensed.

<u>Case#</u>	T056	2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Unlicensed	<u>Date:</u>	4/15/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	King		<u>Nature of Case</u>	Misuse			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	Non Ag	
<u>Chemicals Involved:</u>	Herbicide dicamba						<u>Other Agencies</u>	None	<u>Final Action</u>	NAI	<u>Target/Complaint Area</u>	hedge

Hedge died. Alleges neighbor killed it with herbicide. / Dicamba residue found in foliage but no evidence to show source.

<u>Case#</u>	T057	2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Unlicensed	<u>Date:</u>	4/15/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	King		<u>Nature of Case</u>	Misuse			<u>Response time</u>	6 days	<u>Children Involved?</u>	No	Non Ag	
<u>Chemicals Involved:</u>	Herbicide 2,4-D		Herbicide dicamba				<u>Other Agencies</u>	None	<u>Final Action</u>	NAI	<u>Target/Complaint Area</u>	plants

Said neighboring business killed vegetation on his property. / Residue of 2,4-d and dicamba found. Roofing company denied using any herbicides. No source determined.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T058 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 6/14/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	Insecticide permethrin		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> ants

Application in a closet for ants caused health problems. / Permethrin used by unlicensed contractor to control ants. No evidence of misuse, odor or residue. Possible odor of septic. Did not have required Commercial Applicator license for that application.

<u>Case#</u> T059 2004	<u>Designation</u> Non-pesticide	<u>License</u> Commercial	<u>Date:</u> 6/15/2004	<u>Severity</u> 0	<u>Application Info</u> no
<u>County</u> Pierce	<u>Nature of Case</u> Direct application		<u>Response time</u> One Day	<u>Children Involved?</u> No	no (residential) Non Ag
<u>Chemicals Involved:</u>	none none		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> trees

Alleges commercial applicator killed her willow trees. / Trees girdled from use of string trimmer. No pesticides involved.

<u>Case#</u> T060 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/22/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Notification		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (residential) Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lawn/notification

Alleges commercial applicator did not notify her about application next to residence, is on the pesticide sensitive register. / Verified.

<u>Case#</u> T061 2004	<u>Designation</u> NA	<u>License</u> SPI	<u>Date:</u> 6/16/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Grays Harbor	<u>Nature of Case</u> Faulty SPI & report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> SPI

Faulty SPI and report. / Failed to report rot fungus, termites, beetles and earth to wood contact. Did not diagram.

<u>Case#</u> T062 2004	<u>Designation</u> Non-Pesticide Application	<u>License</u> NA	<u>Date:</u> 8/22/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (residential) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> tree

Alleges neighbors poisoned her maple tree. / Holes in tree due to woodpecker. Mold caused by aphids. No pesticide use.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T063 2004	<u>Designation</u> NA	<u>License</u> NA	<u>Date:</u> 10/20/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Lewis	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> person

Strong odor of pesticides entering house and making her and her mother sick. / Odor was from gasoline leaking from a can on the porch. Not a pesticide problem.

<u>Case#</u> T064 2004	<u>Designation</u> Non-Pesticide Application	<u>License</u> SPI	<u>Date:</u> 6/8/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Clark	<u>Nature of Case</u> Faulty SPI & report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> SPI

Faulty SPI & report. / Failed to report ants, termites, fungus, debris and moisture.

<u>Case#</u> T065 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 10/7/2005	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Plant damage		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> plants

Commercial applicator treating neighbor's property damaged her property. Numerous allegations of harm to plants, shoes, batteries, car hoses etc. / No evidence to support claim.

<u>Case#</u> T066 2004	<u>Designation</u> NA	<u>License</u> NA	<u>Date:</u> 10/27/2005	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> Cat death		<u>Response time</u> One Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	none none		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> rodents/cat

Alleges rodent bait distributed in a manner that exposed domestic pets. Cat died from rodent bait. / Not substantiated. Any rodent bait placed was over two years ago by previous renters. Building deteriorating and full of garbage. No bait seen. Cause of cat's death undetermined.

<u>Case#</u> T067 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 10/11/2004	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> License, containers		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> distribution, license

Ag Use inspection found creosote oil without establishment number, and is not a registered product in WA. Did not have pesticide dealer license.

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WSDA 2004 Case Data

<u>Case#</u> T068 2004	<u>Designation</u> Non-Pesticide Application	<u>License</u> SPI	<u>Date:</u> 4/6/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Clark	<u>Nature of Case</u> Faulty pest inspection		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> faulty SPI

Faulty Structural Pest inspection and Report. / Failed to report fungus, earth to wood contact, debris .

<u>Case#</u> T069 2004	<u>Designation</u> Non-Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 11/1/2001	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Clallam	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (WDO) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> SPI License

Unlicensed Structural Pest inspector. Not licensed to do WDO inspections, did not put inspection control number on reports. Failed to produce proof of insurance.

<u>Case#</u> T070 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 11/29/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Clallam	<u>Nature of Case</u> Report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> report

Did not provide WDO report for inspection done on case 69T.

<u>Case#</u> T071 2004	<u>Designation</u> Non-Pesticide Application	<u>License</u> SPI	<u>Date:</u> 1/22/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> Faulty SPI & report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> report

Faulty SPI & WDO report. / Failed to report fungus, ants, earth to wood contact and moisture. Did not provide license number and inspection control number on report.

<u>Case#</u> T072 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 10/20/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> King	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (residential) Non Ag
<u>Chemicals Involved:</u>	Insecticide cyfluthrin		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> blueberries

Sprayed her blueberries without permission during commercial application at neighbors. / Property line dispute. Was given OK to spray by other neighbor. Lawn under berries was sprayed, not blueberries.

NAI = No Action Indicated NOC=Notice of Correction NOI=Notice of Intent ROW=Right of Way WDO=Wood Destroying Organism RUP=Restricted Use Pesticide

WSDA 2004 Case Data

<u>Case#</u> T073 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 10/14/2004	<u>Severity</u> 1	<u>Application Info</u>	Ground
<u>County</u> Kitsap	<u>Nature of Case</u> Records		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Non Ag
<u>Chemicals Involved:</u>	unknown unknown		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> apartments	

Failed to provide application records to WSDA on request. / Company did not provide evidence of license during condominium bid process. Complaint to WSDA. Did not provide application records to WSDA.

<u>Case#</u> T074 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 4/1/2004	<u>Severity</u> 1	<u>Application Info</u>	NA
<u>County</u> Out of State	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license	

Inspection of a wood preservative producer. Found adjuvant not registered in state. Company distributing is not licensed as WA dealer.

<u>Case#</u> T075 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 9/9/2004	<u>Severity</u> 1	<u>Application Info</u>	fogger
<u>County</u> Thurston	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	yes (restaurant)	Non Ag
<u>Chemicals Involved:</u>	Insecticide permethrin		<u>Other Agencies</u> DOH	<u>Final Action</u> Verbal Warning	<u>Target/Complaint Area</u> restaurant	

Employee used fogger labeled for homes and apartments in restaurant. / Verified. No reports of any illness or problems (DOH referral). Warned not to use this product in commercial setting.

<u>Case#</u> T076 2004	<u>Designation</u> NA	<u>License</u> SPI	<u>Date:</u> 10/30/2003	<u>Severity</u> 2	<u>Application Info</u>	NA
<u>County</u> Clallam	<u>Nature of Case</u> Report		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI)	Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> report	

Failed to provide WDO report to WSDA upon request. / Verified.

<u>Case#</u> T077 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 11/1/2004	<u>Severity</u> 0	<u>Application Info</u>	NA
<u>County</u> Pierce	<u>Nature of Case</u> Registration, license		<u>Response time</u> Same Day	<u>Children Involved?</u> No		Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> EPA	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> distribution, license	

Inspection at wood treating plant found unregistered adjuvant. Distributor was not licensed. / Distributor sold Boric Acid and had no knowledge of its use as pesticide/adjuvant.

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WSDA 2004 Case Data

<u>Case#</u> T078 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 5/31/2000	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Snohomish	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> SPI

Unlicensed structural pest inspector. / Inspection done in 2000 without proper license. Now has license.

<u>Case#</u> T079 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> 11/30/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Pierce	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	no (SPI) Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> SPI

Unlicensed structural pest inspector. / Not licensed to do WDO inspections. Failed to report conditions. No insurance.

<u>Case#</u> T080 2004	<u>Designation</u> NA	<u>License</u> NA	<u>Date:</u> 12/3/2004	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> Whatcom	<u>Nature of Case</u> Misuse of CCA wood		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> EPA	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> treated wood

Use of CCA treated wood in construction site. / Wood used was pre 2004 CCA treated. No violation.

<u>Case#</u> Y001 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 2/22/2004	<u>Severity</u> 1	<u>Application Info</u> Air
<u>County</u> Walla Walla	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Herbicide sulfosulfuron		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> license

Aerial application of a pesticide made by an unlicensed person working for an application business whose owner had not renewed the commercial applicator license. Records incomplete.

<u>Case#</u> Y002 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 3/14/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Benton	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Insecticide oil	Insecticide chlorpyrifos	<u>Other Agencies</u> DOH	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> cherries/person

Neighbor sprayed cherries and drifted to person, possibly water. Felt mist, became nauseous and skin burned. / Residue detected outside orchard but not on complainant's clothing or person. Person had showered.

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WSDA 2004 Case Data

<u>Case#</u>	Y003 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	3/17/2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Benton	<u>Nature of Case</u>	Drift - school playground			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No		Ag
<u>Chemicals Involved:</u>	Insecticide Chlorpyrifos	Insecticide Esfenvalerate	Insecticide Oil			<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	cherries/school

Orchard spray drifted to school playground. No reports of anyone exposed at this time. / Spraying in high wind. One grass sample tested positive. Other samples negative.

<u>Case#</u>	Y004 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	3/20/2004	<u>Severity</u>	3	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Human Exposure			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No		Ag
<u>Chemicals Involved:</u>	Insecticide chlorpyrifos					<u>Other Agencies</u>	DOH	<u>Final Action</u>	NOI	<u>Target/Complaint Area</u>	cherries/persons

Neighbor sprayed orchard, and complainant had guest who felt ill after being exposed to drift. / Residues detected, also records incomplete and infractor made recommendations contrary to label. Label violation.

<u>Case#</u>	Y005 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	3/19/2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Drift to crops			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No		Ag
<u>Chemicals Involved:</u>	Insecticide esfenvalerate	Insecticide sulfur	Insecticide oil			<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	pears/alfalfa, pasture

Application to pears drifted across alfalfa and pasture. / Residue found 100 feet into other property. Wind direction and speed favored drift. Additional chemical not indicated on records was found as residue.

<u>Case#</u>	Y006 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	3/22/2004	<u>Severity</u>	3	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Human Exposure			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground sprayer	Ag
<u>Chemicals Involved:</u>	Insecticide chlorpyrifos	Insecticide oil	Insecticide endosulfan			<u>Other Agencies</u>	DOH	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	apples/person

Application to apples drifted on a person and property. Felt mist and burning on skin and in nose. / Verified. Also record keeping violations.

<u>Case#</u>	Y007 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	3/24/2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Human Exposure			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground sprayer	Ag
<u>Chemicals Involved:</u>	Insecticide calcium polysulfide	Insecticide oil				<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	pears/person, dogs

Application of lime sulfur and oil to pears drifted on person, dogs and trailer. / No health symptoms. Shirt tested positive of sulfur. Records incomplete.

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WSDA 2004 Case Data

<u>Case#</u>	Y008 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Unknown	<u>Date:</u>	3/25/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	Walla Walla	<u>Nature of Case</u>	Human Exposure			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground	Ag
<u>Chemicals Involved:</u>	Unknown Unknown					<u>Other Agencies</u>	None	<u>Final Action</u>	NAI	<u>Target/Complaint Area</u>	orchard/person

Application to orchard drifted to neighboring business. Employee exposed. / Employee withdrew complaint and had employer handle the situation with the owner of orchard.

<u>Case#</u>	Y009 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Commercial	<u>Date:</u>	3/29/2004	<u>Severity</u>	2	<u>Application Info</u>	Air
<u>County</u>	Walla Walla	<u>Nature of Case</u>	Human Exposure			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	air	Ag
<u>Chemicals Involved:</u>	Herbicide MCPA	Herbicide clodinafop-propargyl				<u>Other Agencies</u>	DOH, FAA	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	wheat/person

Person exposed to aerial application to wheat while jogging. / Verified. Records deficient. Plane was an unlicensed apparatus. Not in full compliance with FAA rules.

<u>Case#</u>	Y010 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	4/2/2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Drift to property			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	Ag	
<u>Chemicals Involved:</u>	Fungicide fenarimol	Insecticide chlorpyrifos				<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	apples/property

Spraying in wind and drifted on house and lawn. / Verified.

<u>Case#</u>	Y011 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Private Applicator	<u>Date:</u>	4/8/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	Benton	<u>Nature of Case</u>	Drift to property			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground	Ag
<u>Chemicals Involved:</u>	Insecticide sulfur					<u>Other Agencies</u>	None	<u>Final Action</u>	NAI	<u>Target/Complaint Area</u>	apples/property

Alleged neighbor across road was spraying apples in wind and drifting to property. / No sulfur was detected off target. No violations noted.

<u>Case#</u>	Y012 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Commercial	<u>Date:</u>	4/12/2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Drift to property			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground	Non Ag
<u>Chemicals Involved:</u>	Insecticide dimethoate					<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	flies/property

Application to residence. Application to eaves dropped on picnic table, chairs, barbeque, hot tub and shoes. / Verified. Residue found. Did not have PCO Certification.

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WSDA 2004 Case Data

<u>Case#</u> Y013 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> 4/1/2004	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Ag
<u>Chemicals Involved:</u>	Herbicide sulfonyleurea		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> cherries

Cherries have sulfonyleurea symptoms. / Cherries appeared to have been exposed to sulfonyleurea two to three weeks earlier. Unknown source

<u>Case#</u> Y014 2004	<u>Designation</u> NA	<u>License</u> Unlicensed	<u>Date:</u> year 2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Yakima	<u>Nature of Case</u> License		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> NA

Company employees reporting truck with spray tanks doing lawn care jobs. Alleges they are not licensed. No record of company in WSDA files. / Not pesticide related. Equipment used to put out fires.

<u>Case#</u> Y015 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 4/19/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Benton	<u>Nature of Case</u> Bee Kill		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Ag
<u>Chemicals Involved:</u>	Fungicide triflumizole		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> apples/bees

Claims to have smelled chemical odor, and next evening saw their bees dying, 25 hives affected. / Residues found in dead bees. Applied to blooming plants. Product is toxic to bees for three hours. Records violations.

<u>Case#</u> Y016 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unlicensed	<u>Date:</u> 4/23/04	<u>Severity</u> 1	<u>Application Info</u> NA
<u>County</u> Yakima	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (ROW) Non Ag
<u>Chemicals Involved:</u>	Unknown Unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> weeds/property

Alleges someone made an herbicide application to her property without permission. / Alleged application was on easement. No further investigation conducted.

<u>Case#</u> Y017 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 4/29/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Kittitas	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground spray rig Ag
<u>Chemicals Involved:</u>	Herbicide 2,4-D		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> wheat/pears

Herbicide application to wheat drifted to pears, possibly apples. / Residue found on pears but not apples.

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WSDA 2004 Case Data

<u>Case#</u> Y018 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> May-04	<u>Severity</u> 1	<u>Application Info</u> Unknown
<u>County</u> Franklin	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> Yes	Ag
<u>Chemicals Involved:</u>	Unknown Unknown		<u>Other Agencies</u> DOH	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> potatoes/person

Alleging that drift from application causing irritated eyes and throats to complainant and daughter. / Probably odor from chemigation application to potatoes. Nearest application 5 miles away. Product has significant odor. No evidence of drift.

<u>Case#</u> Y019 2004	<u>Designation</u> unknown	<u>License</u> Unknown	<u>Date:</u> May-04	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Drift to ornamentals		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Non Ag
<u>Chemicals Involved:</u>	Unknown Unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ornamentals

Trees and ornamentals in yard dying. Alleges it is due to drift. / Symptoms typical of phenoxy herbicides. Not due to drift but carryover, direct application or close exposure. Owner claims no chemicals used. Can not determine source.

<u>Case#</u> Y020 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> Apr-04	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Franklin	<u>Nature of Case</u> Drift to Crops		<u>Response time</u> 18 days	<u>Children Involved?</u> No	ground ROW
<u>Chemicals Involved:</u>	Herbicide Unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ROW/wheat

Roadside spraying damaged wheat. / Wheat was growing in Right-of-Way. County working with growers to resolve. Complaint dropped.

<u>Case#</u> Y021 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> May 15-22, 2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Walla Walla	<u>Nature of Case</u> Drift to crops		<u>Response time</u> One day	<u>Children Involved?</u> No	ground (hand sprayer) Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> property/grapevine

Neighbor applying herbicide to weeds, drifted on grapes. / Verified. Drift or direct spray. Repeat offense.

<u>Case#</u> Y022 2004	<u>Designation</u> unknown	<u>License</u> Unknown	<u>Date:</u> Spring 2004	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	unknown Ag
<u>Chemicals Involved:</u>	Herbicide Unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> orchards

Fruit and leaves have spots. / Symptoms consistent with aerial drift or volatilization of herbicides. Unknown source.

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WSDA 2004 Case Data

<u>Case#</u> Y023 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> May-04	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Benton	<u>Nature of Case</u> Drift to vineyard		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Herbicide phenoxy		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> corn/vineyard

Phenoxy symptoms in vineyard. / Verified, herbicide application made next to vineyard.

<u>Case#</u> Y024 2004	<u>Designation</u> NA	<u>License</u> Private Applicator	<u>Date:</u> 6/4/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Yakima	<u>Nature of Case</u> Drift to property		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> apples/property

Application to apples drifted on his property. / Applied potassium salt. Not a pesticide.

<u>Case#</u> Y025 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> May-04	<u>Severity</u> 3	<u>Application Info</u> NA
<u>County</u> Grant	<u>Nature of Case</u> Contaminated product		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ROW
<u>Chemicals Involved:</u>	NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> weeds/grass

Believes misbranded or contaminated product damaged grass on ROW. / Not verified.

<u>Case#</u> Y026 2004	<u>Designation</u> unknown	<u>License</u> Unknown	<u>Date:</u> 6/11/2004	<u>Severity</u> 3	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Drift to crops		<u>Response time</u> 3 days	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Unknown Unknown		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> asparagus

Asparagus on packing line had red marks and speckling. / Symptoms of carfentrazone-ethyl herbicide. Source unknown. Culling loss about \$10,000.

<u>Case#</u> Y027 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 5/20/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Franklin	<u>Nature of Case</u> Drift to plants		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ROW
<u>Chemicals Involved:</u>	Herbicide dicamba	Herbicide 2,4-D	Herbicide glyphosate	<u>Other Agencies</u> Irrigation District	<u>Final Action</u> NOC
					<u>Target/Complaint Area</u> canal bank/plants

Application made to ditch bank and across road drifted to nearby home and damaged trees and ornamentals. / Verified. Also records incomplete.

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WSDA 2004 Case Data

<u>Case#</u> Y028 2004	<u>Designation</u> Non-Pesticide	<u>License</u> NA	<u>Date:</u> 5/25/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Klickitat	<u>Nature of Case</u> Drift to tree		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none ROW
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> ROW/cherry tree

Cherry tree with brown leaves. Thought to be caused by ROW spray. / Nutrition and drainage problems, not pesticide related. Last application on ROW was 2003.

<u>Case#</u> Y029 2004	<u>Designation</u> none	<u>License</u> NA	<u>Date:</u> 6/25/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Klickitat	<u>Nature of Case</u> Drift to cherries		<u>Response time</u> Same Day	<u>Children Involved?</u> No	none Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> cherry trees

Yellow and brown cherry leaves. / Not pesticide related. Nutrition and drainage problems, plus the application of calcium nitrate.

<u>Case#</u> Y030 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 6/19/2004	<u>Severity</u> 2	<u>Application Info</u> Air
<u>County</u> Yakima	<u>Nature of Case</u> Drift to plants, animals		<u>Response time</u> Same Day	<u>Children Involved?</u> No	helicopter Ag
<u>Chemicals Involved:</u>	Insecticide malathion		<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> pears, dogs, goats

Application made to cherries drifted on pears, goats and dogs. / Verified. Also records incomplete, sale to unlicensed person, off label use. NOCs also issued.

<u>Case#</u> Y031 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 6/23/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Benton	<u>Nature of Case</u> Drift to vehicle		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Insecticide Imidacloprid	Insecticide oil	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> cherries/car

Drifted on car from application to cherry orchard. Windows rolled up and no human exposure claimed. / Verified. Spots on vehicle and residue detected.

<u>Case#</u> Y032 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 6/29/2004	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Herbicide MCPA	Herbicide Bromoxynil	<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> misuse

Spraying phenoxy herbicides in temperatures above 85F. / Verified.

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WSDA 2004 Case Data

<u>Case#</u> Y033 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> 7/16/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Yakima	<u>Nature of Case</u> Direct application		<u>Response time</u> Two days	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> ROW/mailbox

Alleged the county sprayed mail and mailbox. Concerned about exposure. / Verified, residue detected.

<u>Case#</u> Y034 2004	<u>Designation</u> Non-Pesticide	<u>License</u> SPI	<u>Date:</u> 11/19/2001	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Walla Walla	<u>Nature of Case</u> Faulty WDO		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA NA		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> WDO inspection

Homeowner allegedly missed WDOs during inspection 3 years ago, resulting in bad inspection report now. Is selling house. / Complainant moved and did not file forms as requested so case was terminated.

<u>Case#</u> Y035 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> 7/26/2004	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Insecticide fenpropathrin		<u>Other Agencies</u> FDA/Oregon	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> currents

FDA found fenpropathrin on currents in OR. No tolerance for currents. Grower said WSU recommended. / Section 18 not requested as producer thought full registration was completed. Currents were placed in freezer pending tolerance level set by FDA.

<u>Case#</u> Y036 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/24/2004	<u>Severity</u> 4	<u>Application Info</u> Air
<u>County</u> Grant	<u>Nature of Case</u> Bee Kill		<u>Response time</u> Same Day	<u>Children Involved?</u> No	air Ag
<u>Chemicals Involved:</u>	Insecticide methamidophos	Insecticide propargite	<u>Other Agencies</u> None	<u>Final Action</u> NOI	<u>Target/Complaint Area</u> potatoes/bees

Leaf cutter bee kill. / Verified. Applied to alfalfa and drifted to leaf cutter bees pollinating field. Loss of \$50K in alfalfa seed, \$10K bees.

<u>Case#</u> Y037 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 7/29/2004	<u>Severity</u> 3	<u>Application Info</u> Ground
<u>County</u> Grant	<u>Nature of Case</u> Direct to tree		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground Non Ag
<u>Chemicals Involved:</u>	Herbicide mscl		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lawn/tree

Pine or Fir tree dying on lawn. Suspect Commercial application made to lawn. / At least two companies made applications and the homeowner also applied pesticides. A severe insect infestation was discovered in the tree. Recordkeeping and other violations were found.

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WSDA 2004 Case Data

<u>Case#</u> Y038 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 8/6/2004	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Yakima	<u>Nature of Case</u> Human Exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Insecticide Azinphos methyl	Insecticide B.t.	Insecticide Imidacloprid	<u>Other Agencies</u> DOH	<u>Final Action</u> NOC
				<u>Target/Complaint Area</u> orchard/person	

Pesticide application made to orchard drifted onto property. He felt sick and had headache. / Residues found from ingredients on orchard. Records also deficient.

<u>Case#</u> Y039 2004	<u>Designation</u> Unknown	<u>License</u> Unknown	<u>Date:</u> 8/19/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Walla Walla	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	Herbicide metribuzin		<u>Other Agencies</u> Sheriff	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> tree

Sheriff's office requested analysis of unknown substance placed around tree. Tree blocks view from neighbor. / Substance identified as an herbicide. Cleaned up site and turned case over to sheriff's office.

<u>Case#</u> Y040 2004	<u>Designation</u> Pesticide Application	<u>License</u> Public Operator	<u>Date:</u> Check 8/17/2003	<u>Severity</u> 2	<u>Application Info</u> Unknown
<u>County</u> Benton	<u>Nature of Case</u> Drift to fish		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	Insecticide pyrethrins		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> mosquitoes/fish

Mosquito application drifted to fish in holding tanks and killed 13 Koi about 24" long. / Water and fish disposed of, so unable to sample.

<u>Case#</u> Y041 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 8/4/2004	<u>Severity</u> 2	<u>Application Info</u> Air
<u>County</u> Columbia	<u>Nature of Case</u> Drift to trees		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Herbicide glyphosate	Herbicide 2,4-D	<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> fallow/trees

Aerial application to summer fallow drifted to trees and damaged. / Foliage samples tested positive. Applicator and homeowner came to agreement and homeowner withdrew complaint.

<u>Case#</u> Y042 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 8/20/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Benton	<u>Nature of Case</u> Animal exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	ground (comm/lawn) Non Ag
<u>Chemicals Involved:</u>	Insecticide bifenthrin		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> lawn/cat

Application to yard made cat ill. Vet said symptoms typical of pesticide poisoning. / No evidence to prove cat sick due to pesticides. Licensing and label violations.

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WSDA 2004 Case Data

<u>Case#</u> Y043 2004	<u>Designation</u> Pesticide Application	<u>License</u> Unknown	<u>Date:</u> 9/11/2004	<u>Severity</u> 1	<u>Application Info</u> Ground
<u>County</u> Yakima	<u>Nature of Case</u> Drift to crops		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Ag
<u>Chemicals Involved:</u>	Unknown Unknown		<u>Other Agencies</u> Yakama Nation	<u>Final Action</u> Referred	<u>Target/Complaint Area</u> apples/organic cherries

Drift to organic cherry orchard from apple orchard spray. / Case referred to Yakama Nation at request of EPA.

<u>Case#</u> Y044 2004	<u>Designation</u> Pesticide Application	<u>License</u> Commercial	<u>Date:</u> 9/21/2004	<u>Severity</u> 2	<u>Application Info</u> Ground
<u>County</u> Franklin	<u>Nature of Case</u> Direct application		<u>Response time</u> Same Day	<u>Children Involved?</u> No	chemigation Ag
<u>Chemicals Involved:</u>	Insecticide dithiocarbamate		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> potatoes/car

End gun oversprayed road and struck truck. Unattended fumigant application. Sprayed into pond. No human exposure claimed. / Verified. No damage. No exposure.

<u>Case#</u> Y045 2004	<u>Designation</u> NA	<u>License</u> Unknown	<u>Date:</u> 9/29/2004	<u>Severity</u> 0	<u>Application Info</u> NA
<u>County</u> Walla Walla	<u>Nature of Case</u> Misuse		<u>Response time</u> Same Day	<u>Children Involved?</u> No	Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> Sheriff	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> trees

Herbicide damage to cherry and poplar trees. Believed to be related to earlier case 39Y from 2004. Sheriff's office asked for help in analysis of soil. / No residue detected in soil.

<u>Case#</u> Y046 2004	<u>Designation</u> Non-Pesticide	<u>License</u> SPI	<u>Date:</u> 10/1/2004	<u>Severity</u> 2	<u>Application Info</u> NA
<u>County</u> Yakima	<u>Nature of Case</u> Faulty WDO		<u>Response time</u> Same Day	<u>Children Involved?</u> No	NA Non Ag
<u>Chemicals Involved:</u>	NA na		<u>Other Agencies</u> None	<u>Final Action</u> NOC	<u>Target/Complaint Area</u> SPI

WDO inspection did not identify pests. / Verified. Evidence of termite damage. Incomplete records.

<u>Case#</u> Y047 2004	<u>Designation</u> Pesticide Application	<u>License</u> Private Applicator	<u>Date:</u> 10/9/2004	<u>Severity</u> 1	<u>Application Info</u> Chemigation
<u>County</u> Franklin	<u>Nature of Case</u> Animal exposure		<u>Response time</u> Same Day	<u>Children Involved?</u> No	chemigation Ag
<u>Chemicals Involved:</u>	Fumigant vapam		<u>Other Agencies</u> None	<u>Final Action</u> NAI	<u>Target/Complaint Area</u> empty field

Circle next to her property was chemigating and she was worried about her horse. / No evidence any material went off target. Person on site while chemigating.

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WSDA 2004 Case Data

<u>Case#</u>	Y048 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Commercial	<u>Date:</u>	in 2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Walla Walla	<u>Nature of Case</u>	Drift on trees			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground	Non Ag
<u>Chemicals Involved:</u>	Herbicides mscl					<u>Other Agencies</u>	WSU	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	trees

Trees at Port have herbicide symptoms. Nearby grapes and other plants do not. / Foliage tested positive for herbicides used by commercial applicator near trees.

<u>Case#</u>	Y049 2004	<u>Designation</u>	NA	<u>License</u>	Unknown	<u>Date:</u>	5/1/2004	<u>Severity</u>	1	<u>Application Info</u>	Ground
<u>County</u>	Yakima	<u>Nature of Case</u>	Misuse			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	ground	Non Ag
<u>Chemicals Involved:</u>	Herbicide boron		chlorine			<u>Other Agencies</u>	None	<u>Final Action</u>	NAI	<u>Target/Complaint Area</u>	trees

Claims neighbor put white substance along trees to kill them. / Dieback seen in trees. May be due to excessive irrigation. Found Boron and Chlorine in white substance.

<u>Case#</u>	Y050 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Unlicensed	<u>Date:</u>	2003&2004	<u>Severity</u>	2	<u>Application Info</u>	Ground
<u>County</u>	Snohomish	<u>Nature of Case</u>	Misuse			<u>Response time</u>	23 days	<u>Children Involved?</u>	No	fumigation	Ag
<u>Chemicals Involved:</u>	Fumigant formic acid					<u>Other Agencies</u>	None	<u>Final Action</u>	NOC	<u>Target/Complaint Area</u>	mites/bees

Used formic acid, unregistered pesticide, on bee colonies for mite control in 2003 and 2004. Sold to second person. / Verified.

<u>Case#</u>	Y051 2004	<u>Designation</u>	Non-Pesticide	<u>License</u>	Unknown	<u>Date:</u>	11/9/2004	<u>Severity</u>	3	<u>Application Info</u>	NA
<u>County</u>	Columbia	<u>Nature of Case</u>	Disposal			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	Non Ag	
<u>Chemicals Involved:</u>	unknown unknown					<u>Other Agencies</u>	None	<u>Final Action</u>	NOI	<u>Target/Complaint Area</u>	soil/human exposure

Two county employees complained of headaches after starting to clear out culvert area. Nearby land owner alleged to have burn pit and dumped chemicals. / Farmer and employee burned plastic containers. Samples positive for all pesticides reportedly used by farmer in 2004.

<u>Case#</u>	Y052 2004	<u>Designation</u>	Pesticide Application	<u>License</u>	Commercial	<u>Date:</u>	12/12/2004	<u>Severity</u>	2	<u>Application Info</u>	Air
<u>County</u>	Walla Walla	<u>Nature of Case</u>	Drift on car			<u>Response time</u>	Same Day	<u>Children Involved?</u>	No	air	Ag
<u>Chemicals Involved:</u>	Herbicide sulfosulfuron					<u>Other Agencies</u>	None	<u>Final Action</u>	NOI	<u>Target/Complaint Area</u>	wheat/car

Drift on car from aerial application to winter wheat. / Verified. Pesticide application records were incomplete.

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Agency Data Summary
Washington State Department of Ecology, Spill Program

Washington State Department of Ecology, Spill Program

Department of Ecology Summary of Spill Program Pesticide-related Complaints - 2004								
City, ERTS#	Incident Date, Received Date	Medium, Waterway	Material, Quantity	Source	Cause	Impact	Action	Narrative
Adams								
Othello, 541219	6/3/04, 6/3/04	Soil	Pesticide, 90 gallons	Farm/agriculture	Accident – other	Soil contamination	Telephone Technical assistance	An orchard applicator was killed when he rolled his spray vehicle. The contents of the spray tank, azinphos methyl, leaked to the ground.
Benton								
Hanford, 539395	3/2/04, 3/2/04	Soil	Herbicide, 50 gallons	Commercial	Unknown	Soil contamination	No follow-up required	
Prosser, 539561	3/3/04, 3/3/04	Roadway- Paved	Herbicide, 15 gallons	Commercial	Human factor- unknown	Soil contamination	Field response- Investigation	Applicator over-sprayed onto school parking lot. Raining hard. Sorbents placed to prevent runoff into Yakima River. 15 students evacuated as a precaution.
Prosser, 539749	3/14/04, 3/22/04	Surface water-fresh, Spring	Pesticide	Farm/agriculture	Human factor- improper procedure	Water pollution	Referral	Caller reported that spray from neighbor's orchard drifted to creek. WSDA investigated. Vegetation and clothing samples were negative for chlorpyrifos.

**Department of Ecology
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City, ERTS#	Incident Date, Received Date	Medium, Waterway	Material, Quantity	Source	Cause	Impact	Action	Narrative
Chelan								
Wenatchee, 542626	4/13/04, 6/21/04	Soil	Pesticide	Commercial	Unknown	Soil contamination	TCP-Determination	Recommended that site receive Site Hazard Assessment. Soil samples showed lead or arsenic above MTCA Cleanup Levels. The site is covered with buildings or asphalt.
Chelan, 546811	12/28/04, 12/28/04	Soil	Pesticide	Commercial	Human factor- other	Soil contamination	TCP-Voluntary compliance	Report submitted through TCP Voluntary Cleanup Program for review.
Clark								
Battleground, 539920	3/29/04, 3/29/04	Storm drain pipe	Pesticide, 2 gallons	Motor vehicle	Accident – other	Water pollution	Telephone	Caller reported wet pavement that smelled like pesticide or diesel near ditches that discharge into Mill Creek. The product evaporated before reaching creek.
Douglas								
East Wenatchee, 540177	4/7/04, 4/7/04	Building-structure	Pesticide, 3 drums	Domestic	Unknown	Potential pollution-release	Telephone	Caller referred to WSDA for disposal options.
Ferry								
Inchelium, 541479	6/14/04, 6/14/04	Surface water-fresh	Herbicide	Commercial	Human factor-intentional	-	No follow-up required	

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City, ERTS#	Incident Date, Received Date	Medium, Waterway	Material, Quantity	Source	Cause	Impact	Action	Narrative
Grant								
Moses Lake, 539501	3/9/04, 3/9/04	Roadway-Paved	Herbicide, 200 gallons	Industrial facility	Leaking drum-container	-	Telephone-Technical assistance	Lasso herbicide spilled to asphalt and soil. Soil will be removed and farmed.
Grays Harbor								
Moclips, 540514	4/30/04, 4/30/04	Air	Pesticide	Commercial	Improper procedure	Human	No follow-up required	
Aberdeen, 541347	5/8/04, 6/9/04	Roadway-Paved	Insecticide, 20 gallons	Commercial	Accident-traffic	Soil contamination	Telephone	Pest Control truck involved in accident and spilled Temp WP Powder to roadway. No clean-up required as product diluted by rain.
King								
Kent, 538447	1/16/04, 1/16/04	Other	Pesticide	Illegal dump site	Dumping	Human	Telephone	Solid contents of abandoned tank analyzed. Tests indicated boron, chlorinated pesticide, or halogenated organic.
Pierce								
Eatonville, 544180	10/20/04, 10/20/04	Soil	Herbicide	Public agency	Dumping	Soil contamination	No follow-up required	
Snohomish								
Lynnwood, 540218	4/10/04, 4/10/04	Other-wetland	Herbicide, 3 gallons	Commercial	Unknown	Potential pollution-release	Telephone	Multiple jugs of liquid moss killer spilled inside retail building and ran outside onto parking area. Contractors hired to clean up spill.

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City, ERTS#	Incident Date, Received Date	Medium, Waterway	Material, Quantity	Source	Cause	Impact	Action	Narrative
Lake Roesiger, 540340	4/18/04, 4/18/04	Surface water-fresh, Lake Roesiger	Herbicide, 1 pound	Unknown	Human factor-intentional	Water pollution	Field response- Technical assistance	Hazcatted pellets found on ground near lake. Results barely negative for pesticide. Ecology recommended to health dept that people not drink lake water.
Everett, 541506	6/16/04, 6/16/04	Soil	Herbicide, 180 gallons	Equipment failure	Equipment failure	Soil contamination	Telephone	Crew spraying roadside when hose came off tank. Contaminated soil dug up and spread along the intended road.
Lake Stevens, 542006	7/7/04, 7/8/04	Soil	Herbicide, 100 gallons	Equipment failure	Equipment failure	Soil contamination	Telephone	
Marysville, 545501	8/18/04, 12/27/04	Soil	Pesticide	Other	Other	Unknown	Requested information	
Spokane								
Spokane, 540108	4/7/04, 4/7/04	Air	Herbicide	Burn - other	Human factor-improper procedure	Air pollution	No follow-up required	
Spokane, 540909	5/19/04, 5/19/04	Soil	Herbicide	Commercial	Human factor-intentional	Air pollution	No follow-up required	
Spokane, 543631	9/10/04, 9/10/04	Soil	Pesticide	-	Human factor-intentional	Natural resources damage	No follow-up required	
Olympia, 542376	7/23/04, 7/23/04	Soil	Herbicide	Domestic	Human factor-intentional	Potential pollution-release	No follow-up required	

**Department of Ecology
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Olympia, 543240	9/1/04	Soil	Pesticide	Commercial	Human factor-intentional	Soil contamination	TCP-No further action	Developer required to do level 1 assessment of site (former tree farm) prior to clearing and grading.
Whatcom								
Everson, 539708	3/18/04	Storm water retention pond, Swift Creek	Pesticide	Food manufacturer	Improper procedure	Unknown	No follow-up required	
Ferndale, 540905	5/19/04	Surface water- fresh, Agate Lake	Herbicide	Other	Unknown	Water pollution	Telephone	Communication between Lummi Tribe and Ecology concerning possible herbicide spraying on tribal land.
Bellingham, 541043	5/26/04, 5/26/04	Surface water-fresh, Anderson Creek	Herbicide	Domestic	Human factor- other	None	Field Response- Investigation	Land owners used herbicide in water course that drained to state salmon bearing waters. Owners agreed to use non-chemical vegetation control.
Lynden, 541190	6/2/04, 6/2/04	Surface water-fresh, Fishtrap Creek	Herbicide	Other	Human factor-other	Potential pollution-release	Telephone, Field response- Investigation	Licensed applicator sprayed insecticide/ fungicide to oak trees to treat scale. Over application ran into drains flowing to creek.
Yakima								
Sunnyside, 540455	4/23/04	Soil	Pesticide	Unknown	Human factor-unknown	Unknown	Telephone	WSDA picked up pesticides and dirt and disposed at collection event.

**Department of Ecology
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City, ERTS#	Incident Date, Received Date	Medium, Waterway	Material, Quantity	Source	Cause	Impact	Action	Narrative
Yakima, 542570	7/22/04, 7/22/04	Other	Pesticide, 35 container	Other	Human factor-unknown	Human	Field response- Investigation	Assisted in decontamination of musical instruments covered with a dust.
Yakima, 544695	11/10/04	Soil	Pesticide	Commercial	Unknown	Soil contamination	TCP- Determination	Received report from consulting company that soil samples contained arsenic, DDE and DDT.

Agency Data Summary
Washington State Department of Health

2004 Pesticide Incidents Annual Summary Report of Definite, Probable, and Possible Exposures

Case	Exposure Date	Incident Description
040002	01/09/2004	<p>A 19 y/o male was feeding cattle that had been treated topically with an antiparasitic chemical for worms. He touched the calves and noted a strong chemical smell. Shortly thereafter he developed dermal and other symptoms. He eventually sought medical care and several days later sought additional medical assistance at another hospital for persisting concerns.</p> <p>Multiple (product is classified as multiple classes): Moxidectin 1 Possible Severity: Low/Mild</p>
040003	01/13/2004	<p>A 24 y/o male maintenance worker treated ants on an apartment building roof with a hand pump sprayer. He wore latex gloves but removed them when it was too difficult to handle his equipment. He developed respiratory symptoms and a headache within 10 minutes. He sought medical care and was observed to have dermal symptoms.</p> <p>Unknown: Malathion (ANSI) 1 Possible Severity: Low/Mild</p>
040005	02/11/2004	<p>A 9 y/o female thought she was spraying a room deodorant. The product was an insecticide fogger and she was sprayed in the face. She experienced respiratory, ocular and neurological symptoms. She was taken to the local ER.</p> <p>Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Possible Severity: Low/Mild</p>
040006	02/21/2004	<p>A 56 y/o male was applying moss killer when the nozzle became plugged. He unscrewed the nozzle tip while it was under pressure and was sprayed in the face. He was not wearing eye protection. He flushed his eyes and called 911. The EMTs flushed his eyes again and he went to local ER for check up. Two days later he went to a specialist for follow-up.</p> <p>Herbicide/algicide: Ferric sulfate 1 Definite Severity: Low/Mild</p>
040007	02/21/2004	<p>A 46 y/o male was splashed in the face and eye when the container came loose from the hose-end applicator and fell to the ground. He flushed his eyes immediately and sought medical care.</p> <p>Herbicide/algicide: Ferric sulfate 1 Definite Severity: Low/Mild</p>
040008	02/20/2004	<p>A 44 y/o male dairy food worker was eating lunch when he noticed that a pesticide fogger had been set off 20-30 feet away. He began to cough, experienced gastrointestinal symptoms, and sought medical care. He was treated, released, and returned to work.</p> <p>Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Definite Severity: Low/Mild</p>
040011	03/03/2004	<p>An unlicensed school employee applied an herbicide using a tractor mounted boom sprayer to a school parking lot and sidewalk at 6:30 AM on a school day. Signs were not posted and there was no notification of the application. Seven students and faculty members became ill after smelling the vapors. DOH classified five of the illnesses as DPP. Students and employees were evacuated from the school.</p> <p>Herbicide/algicide: Pendimethalin (ANSI) 5 Probable Severity: (5) Low/Mild 2 Insufficient Information</p>

2004 Pesticide Incidents Annual Summary Report of Definite, Probable, and Possible Exposures

Case	Exposure Date	Incident Description
040012	03/06/2004	A 36 y/o male applied a fertilizer with moss control to his lawn. He later pressure washed the product off his driveway and some spray came back into his eyes. He washed but had minor eye irritation and called 911. EMTs flushed his eyes. Herbicide/algicide: Ferrous sulfate monohydrate 1 Possible Severity: Low/Mild
040014	03/10/2004	A 74 y/o female sprayed herself while applying aerosol insecticide to her bedding and clothing. She awoke the next day with nausea and vomiting and was taken by her caregiver to see her health care provider. An interview was not conducted. Insecticide (excluding solely IGR and fumigants): Piperonyl butoxide; Allethrin, d-; Phenothrin, D- 1 Possible Severity: Low/Mild
040015	03/13/2004	An 83 y/o male applied a moss control product with a hose end applicator. While unloosening the container it dropped from his hand splashing the contents upward. He wore eye glasses but some of the product got in his eye. He showered immediately and sought medical attention for eye irritation. Herbicide/algicide: Ferric sulfate 1 Definite Severity: Moderate
040017	03/17/2004	A 73 y/o male fell in a garage and pulled down a shelf of containers. He lost consciousness and was found by a broken container of product that was identified by the EMTs as a cancelled insecticide. He was taken to the ER, a CT scan was negative but he was transferred to another hospital. Unknown: Malathion (ANSI) 1 Possible Severity: Low/Mild
040018	03/15/2004	A 64 y/o female, in her yard, was drifted when her neighbor sprayed fruit trees. She felt and smelled the spray. She had respiratory and dermal symptoms. She called WPC and later went to a walk-in-clinic. Fungicide: Calcium polysulfide 1 Possible Severity: Low/Mild
040019	03/20/2004	A 47 y/o female got herbicide in her eye while applying to her driveway. She was not wearing eye protection. She was treated for ocular symptoms. Herbicide/algicide: Sodium metaborate (NaBO ₂); Sodium chlorate 1 Definite Severity: Low/Mild
040021	03/24/2004	A 6 y/o boy had dermal symptoms after spraying himself in the face with a flea spray. His mother washed him and then called 911 and the local fire dept. EMTs examined the boy and felt he did not need further medical attention. Symptoms resolved. Insecticide (excluding solely IGR and fumigants): Tetrachlorvinphos 1 Possible Severity: Low/Mild
040026	03/17/2004	A 26 y/o male forklift driver was relocating bags/boxes of product. He reported being exposed to dust and shortly afterwards experienced respiratory symptoms. Two days post exposure he had symptoms; when symptoms didn't resolve by seven days post exposure his supervisor took him to a medical facility. He reported wearing all required PPE while moving the product. Fungicide: Captan (ANSI) 1 Probable Severity: Low/Mild

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Case	Exposure Date	Incident Description
040028	04/03/2004	A 57 y/o male sprayed weeds with an herbicide and later developed right eye irritation. The next day he sought medical attention and was treated. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; Dimethylamine 2-(2-methyl-4-chlorophenoxy) propionate 1 Definite Severity: Low/Mild
040029	04/01/2004	A 3 y/o boy found an aerosol insecticide while playing in his grandmother's backyard. He discharged the can into his face/eyes. His grandmother washed his face with water and called WPC. As advised she attempted to flush his eyes with milk and water, but took child to the ER because of ocular and dermal symptoms. Insecticide (excluding solely IGR and fumigants): Mint Oil 1 Definite Severity: Low/Mild
040030	04/02/2004	A 63 y/o self-employed male received an ocular chemical exposure while applying to wheat seed. He was not wearing PPE, except his regular glasses. He sought treatment for ocular symptoms to his eye. Fungicide: Thiram; Tebuconazole Insecticide (excluding solely IGR and fumigants): lindane 1 Definite Severity: Low/Mild
040031	04/01/2004	A 45 y/o male orchard foreman developed ocular symptoms after the pressure valve on a speed sprayer broke while he was repairing the valve. He was not wearing PPE. He washed his eye and sought medical care. Insecticide and fungicide (1 and 4): Calcium polysulfide 1 Definite Severity: Low/Mild
040032	04/10/2004	A 66 y/o male sprayed his ornamental cherry trees to control caterpillars. A gust of wind blew the spray in his face. He wore no eye protection and label did not call for it. He had immediate ocular irritation and went to the urgent care clinic. Insecticide (excluding solely IGR and fumigants): Malathion (ANSI) 1 Probable Severity: Low/Mild
040033	04/10/2004	A 9 y/o female was taken to the ER by her mother after she accidentally drank a small amount of an herbicide that had been placed in an empty pop can. Child had gastrointestinal symptoms. She was evaluated and released the same day. Herbicide/algicide: Glyphosate, isopropylamine salt; Diquat dibromide 1 Possible Severity: Low/Mild
040034	03/23/2004	A 23 y/o male applicator reported he finished spraying and cleaned his sprayer. When he drove by another applicator who was washing his equipment the patient felt the spray coming off the other sprayer and onto his face. He flushed his eyes, but sought medical care the next day for continuing symptoms. Fungicide: Triflumizole Insecticide (excluding solely IGR and fumigants): Mineral oil - includes paraffin oil from 063503 Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Probable Severity: Low/Mild

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Case	Exposure Date	Incident Description
040036	03/22/2004	A 45 y/o male was pruning apples when he was drifted. He developed dermal and GI symptoms. Spray records show that an application was made that day. He sought medical care the next day. His diagnosis was allergic urticaria. The sulfur product he was exposed to does not usually cause allergic reaction. Insecticide (excluding solely IGR and fumigants): Mineral oil - includes paraffin oil from 063503 Insecticide and fungicide (1 and 4): Calcium polysulfide 1 Possible Severity: Low/Mild
040037	04/12/2004	A 46 y/o male purchased bags of granular lawn insecticide that were moist, possibly from morning dew. An hour later he felt sensitivity around his eyes and his face tingled. Five hours after initially handling the bags he sought medical care. Insecticide (excluding solely IGR and fumigants): Lambda-cyhalothrin 1 Probable Severity: Low/Mild
040038	04/14/2004	A 40 y/o female purchased two pesticide products and walked to her car. She reached into the plastic bag to obtain the receipt, and came into contact with one of the products, an herbicide. She reported immediate burning sensation, went back to store and washed her hands. Shortly thereafter she applied an over the counter benadryl ointment but went to ER the next day for continuing symptoms. Herbicide/algicide: Glyphosate, isopropylamine salt; Oxyfluorfen (ANSI) 1 Probable Severity: Moderate
040040	04/10/2004	A 53 y/o male applied a moss control product using a backpack sprayer. After 1.5 hours he noticed a burning sensation on his back. He took off the backpack sprayer and noticed it had been leaking. He called WPC and showered. Two days later he sought medical care for continuing dermal symptoms. Herbicide/algicide: Zinc chloride 1 Definite Severity: Moderate
040041	03/24/2004	A 31 y/o male applicator hit his neck and head against wires used to hold the tree branches. His positive air pressure helmet came off and he inhaled the spray he was applying. Fungicide: Fenarimol (ANSI) Insecticide (excluding solely IGR and fumigants): Clofentezine (ANSI) Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Probable Severity: Low/Mild
040042	03/23/2004	A 26 y/o male unlicensed applicator applied around an apartment complex. He was not using goggles or a respirator. He became ill, sought medical care and was diagnosed with acute anaphylaxis, angioedema and an allergic reaction. The medical staff could smell the spray on his skin. Herbicide/algicide: Dicamba, dimethylamine salt; 2,4-D, Dimethylamine Salt; MCPP, Dimethylamine Salt 1 Possible Severity: Moderate

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Case	Exposure Date	Incident Description
040044	03/13/2004	A 35 y/o male applicator developed GI and neurological symptoms while he was spraying. He was wearing a face mask and had been fit tested. However, when he turned his head around when making turns to check the sprayer he would smell the spray. Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- Unknown: Petroleum distillate, oils, solvent, or hydrocarbons; also paraffinic hydrocarbons, aliphatic hydrocarbons, paraffinic oil 1 Possible Severity: Low/Mild
040046	03/20/2004	A 45 y/o male farm manager/applicator developed urticaria in areas exposed while spraying. He had had similar symptoms previously. Insecticide (excluding solely IGR and fumigants): Mineral oil - includes paraffin oil from 063503 Insecticide and fungicide (1 and 4): Kaolin 1 Possible Severity: Low/Mild
040047	04/24/2004	A 39 y/o female developed ocular symptoms after applying an herbicide to dandelions. She was not wearing eye protection. Her symptoms persisted for several hours so she sought medical attention the same day. Unknown: Glyphosate, isopropylamine salt 1 Probable Severity: Low/Mild
040048	04/24/2004	A 3 y/o male child developed dermal symptoms after being in a church yard while the grass was cut and a spot treatment for weeds was made. The child reportedly followed the applicator around the yard. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild
040051	03/22/2004	A 51 y/o female complained of symptoms that she associated with a spray drift from a neighbor's apple orchard. The complainant was in her yard and reported she could taste, smell and feel the spray. No medical care was sought. WSDA investigated. Insecticide (excluding solely IGR and fumigants): Insecticide and fungicide (1 and 4): Calcium polysulfide Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Probable Severity: Low/Mild
040052	03/20/2004	A 75 y/o male and 67 y/o female complained of mild illnesses after drift from an adjacent orchard application. A third person was asymptomatic and DOH was unable to interview two others that were also present. No medical care was sought. WSDA environmental residue samples were positive. Insecticide (excluding solely IGR and fumigants): Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 2 Probable Severity: (2) Low/Mild

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Case	Exposure Date	Incident Description
040053	04/10/2004	A 33 y/o male applicator sought medical care for dermal symptoms on both sides of his neck. He had been spraying several products on apples and cherries for several days prior to developing symptoms. Insecticide (excluding solely IGR and fumigants): Endosulfan (ANSI) Insecticide and fungicide (1 and 4): Sulfur 1 Definite Severity: Low/Mild
040054	03/14/2004	A 44 y/o male was drifted by neighbor's application to cherries. He became ill after feeling the mist while playing with his dogs in the back yard. No medical care sought. WSDA environmental samples were negative for residues. Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Possible Severity: Moderate
040057	04/09/2004	A 33 y/o male developed ocular symptoms after applying pesticides and fertilizers in a tank mix. He was wearing eye protection, but when he would turn his head the spray entered through openings on side of goggles. He sought medical attention three days later. Fungicide: Unknown formula Insecticide and fungicide (1 and 4): Sulfur 1 Probable Severity: Low/Mild
040058	04/13/2004	A 46 y/o male lawn care technician pumped up a small hand-held sprayer for application. The hose was not securely attached to the tank and popped off under pressure, spraying the technician in the face and right eye. He washed the eye and sought medical attention. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Definite Severity: Low/Mild
040061	05/01/2004	A 43 y/o farmer/licensed applicator was injecting soil around the base of locust trees to treat aphids. He had removed his goggles. When the equipment malfunctioned, he was squirted in the eye. He flushed his eye, took a shower and went to the ER. Insecticide (excluding solely IGR and fumigants): Dimethoate (ANSI) 1 Definite Severity: Low/Mild
040062	05/06/2004	Two millwrights working outside (53 y/o male and 54 y/o female) reported symptoms after smelling strong odors from nearby ground application. Both were evaluated at workplace clinic and released. The area where they were working had also been sprayed the day before. Herbicide/algicide: Dicamba, dimethylamine salt; Diflufenzopyr, Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt 2 Possible Severity: (2) Low/Mild
040063	05/03/2004	A 48 y/o female home owner was cleaning out her pantry closet where a No-Pest strip had been placed 3 days before for meal moths. She experienced respiratory and dermal symptoms and the next morning went to the ER. She sought further care from her primary physician 3 days later. Insecticide (excluding solely IGR and fumigants): Dichlorvos 1 Possible Severity: Low/Mild

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Case	Exposure Date	Incident Description
040065	04/05/2004	A 33 y/o male applicator was splashed on the left hand while loading his sprayer. He sought medical care for dermal symptoms 10 days post exposure. Insecticide and fungicide (1 and 4): Calcium polysulfide, Sulfur 1 Possible Severity: Low/Mild
040066	05/10/2004	A 38 y/o male farm worker entered an onion field to change the irrigation pipes. The area had recently been sprayed and he developed neurological and gastrointestinal symptoms. His employer took him to a health care provider and he was told he could return to work the next day. Insecticide (excluding solely IGR and fumigants): Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Probable Severity: Low/Mild
040068	04/14/2004	A 30 y/o male tree pruner developed neurological symptoms after entering a sprayed apple orchard within the 48 hour restricted entry interval. He sought medical care. Insecticide and fungicide (1 and 4): Calcium polysulfide 1 Probable Severity: Low/Mild
040069	04/23/2004	A 74 y/o male worker noticed a chemical smell within 30 minutes of entering office. A co-worker had used an aerosol pesticide. He worked at his desk for an additional 15 minutes before feeling slightly ill with neurological and respiratory symptoms. A co-worker drove him home. Later a family member took him to a clinic for medical attention. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI); Imiprothrin 1 Probable Severity: Low/Mild
040070	05/08/2004	A 66 y/o female and 70 y/o male developed respiratory symptoms after spraying their yard with a garden insecticide. Female's symptoms persisted and she sought medical care. Insecticide (excluding solely IGR and fumigants): Acephate (ANSI) 1 Probable Severity: Moderate 1 Possible Severity: Low/Mild
040071	05/14/2004	A 72 y/o old male homeowner used his bare hands to apply a pesticide paste to holes where bees were entering his log home. He mixed 5 pounds of 10% dust in water to form the paste. He also sprayed 2 cans of wasp spray on the holes. He wore no PPE. He sought medical care for gastrointestinal and neurological symptoms. Insecticide (excluding solely IGR and fumigants): Tetramethrin (ANSI); Phenothrin, D- Unknown: Carbaryl (ANSI) 1 Definite Severity: Moderate
040072	05/12/2004	A 25 y/o male nurseryman applied a granular systemic insecticide on roses. He applied for about 1 hour, wearing gloves and dusk mask but reported having respiratory symptoms and sought medical care when symptoms did not resolve after two days. Insecticide (excluding solely IGR and fumigants): Disulfoton 1 Possible Severity: Low/Mild

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Case	Exposure Date	Incident Description
040073	05/17/2004	<p>A 47 y/o male resident had an eye exposure while applying an aerosol wasp spray. He irrigated his eye several times during the evening. He sought medical care the next day when the discomfort persisted. Unable to contact patient for interview.</p> <p>Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI)</p> <p>1 Possible Severity: Low/Mild</p>
040074	05/12/2004	<p>A 51 y/o male applied herbicide without any PPE and did not shower the day of the application. Beginning the next day he developed dermal symptoms on his wrists. He sought treatment four days later when symptoms did not resolve.</p> <p>Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt</p> <p>1 Definite Severity: Low/Mild</p>
040075	05/20/2004	<p>A 57 y/o male developed neurological, ocular and respiratory symptoms after inhaling fumes while placing fumigant tablets in gopher holes. He sought medical care at local ER.</p> <p>Fumigant: Aluminum phosphide</p> <p>1 Probable Severity: Moderate</p>
040076	05/15/2004	<p>A 29 y/o female and other females were changing the sprinkler system in an apple orchard where an application was made the day before. Re-entry period was 14 days. The workers had no PPE. The employee developed neurological and gastrointestinal symptoms that resulted in her seeking care 5 days later.</p> <p>Fungicide: Triflumizole</p> <p>Insecticide (excluding solely IGR and fumigants): Azinphos-Methyl</p> <p>1 Probable Severity: Moderate</p>
040078	03/12/2004	<p>A 43 y/o female teacher was on break outside when an herbicide application was taking place. She smelled the chemical and she relocated. She began coughing. When her coughing continued for about 3 hours she sought medical care.</p> <p>Herbicide/algicide: Glyphosate, isopropylamine salt</p> <p>Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Oryzalin (ANSI)</p> <p>1 Probable Severity: Low/Mild</p>
040080	04/12/2004	<p>A 35 y/o male farm worker developed symptoms after removing nozzles and washing filters in bucket of water. He was wearing borrowed rubber gloves but chemicals from nozzles hit his forearms. He sought medical treatment 8 days later.</p> <p>Insecticide and other: Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O-</p> <p>1 Probable Severity: Low/Mild</p>
040081	05/25/2004	<p>A 65 y/o female applied granular slug bait using her hands. She wore rubber gloves. She reported breathing some of the dust and contacting her facial area while attempting to brush her hair from her face. Shortly after she reported tingling and numbness around the facial area. When the reaction continued for a couple of hours she sought medical care.</p> <p>Insecticide and other: Metaldehyde; Carbaryl (ANSI)</p> <p>1 Probable Severity: Low/Mild</p>

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Case	Exposure Date	Incident Description
040082	05/25/2004	A 23 y/o female employee for retail business was exposed to leaking container of mole repellent when sorting returned items. She had exposure to both hands. She immediately experienced burning and irritation on her hands. Two hours later she sought medical care for relief of symptoms. Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Castor oil 1 Definite Severity: Low/Mild
040083	05/25/2004	A 5 y/o boy had accidental eye exposure to an insect repellent while playing at neighbor's yard. After complaints of mild ocular symptoms the child was taken by his mother for medical evaluation. Insect repellent: Diethyl-meta-toluamide and other isomers, N,N- 1 Possible Severity: Low/Mil
040084	05/26/2004	A 22 y/o female apple thinner was exposed to spray residues at work. She and 7 co-workers were thinning and she became ill. It was unknown if anyone else experienced symptoms. Insecticide (excluding solely IGR and fumigants): Phosmet, Mineral oil - includes paraffin oil from 063503 1 Probable Severity: Moderate
040086	04/01/2004	A 57 y/o male applicator took his gloves off and scratched his ear. He then developed dermal and neurological symptoms. He sought medical care 15 days later for malaise and weakness. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild
040089	05/19/2004	A 28 y/o male was thinning nectarine trees and developed dermal symptoms. The trees were sprayed 48 hours before he entered and the REI was observed. He missed 12 days of work. Fungicide: Myclobutanil (ANSI) Insecticide and fungicide (1 and 4): Sulfur, Calcium polysulfide 1 Probable Severity: High/Severe
040090	05/14/2004	A 23 y/o male applicator had been spraying for approximately 30 days when he became ill with numerous symptoms. He reported wearing PPE. He sought medical care with onset of symptoms. Insecticide (excluding solely IGR and fumigants): Imidacloprid, Azinphos-Methyl Insecticide and fungicide (1 and 4): Sulfur 1 Probable Severity: Moderate
040091	05/13/2004	A 33 y/o female soils technician developed respiratory, dermal and ocular symptoms after she entered a field that was recently sprayed. She was not wearing any PPE. She sought medical care 1 day later. Herbicide/algicide: Quizalofop-ethyl 1 Possible Severity: Low/Mild
040093	06/01/2004	A 40 y/o female applied a granular insecticide to her lawn using a hand-held spreader. A gust of wind blew product into her eye. She was not wearing eye protection nor was it required by the label. She showered and sought medical care when irritation persisted. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI) 1 Definite Severity: Low/Mild

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Case	Exposure Date	Incident Description
040094	05/21/2004	<p>A 36 y/o male nurseryman sprayed weeds with a back pack sprayer at his work place. Shortly after completing the application he experienced a nose bleed which he felt was related to his spraying. He did not wear any respiratory protection. One day later he sought medical care for continuing symptoms. He has a history of nose bleeds.</p> <p>Unknown: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild</p>
040095	04/16/2004	<p>A 39 y/o applicator was tested numerous times and showed reduction in plasma cholinesterase values. He did not report symptoms to the attending physician. However, he mentioned having intermittent headaches to DOH employees. Spray records indicate he had sprayed a carbamate. His plasma cholinesterase kept diminishing until the end of the month even without exposure.</p> <p>Insecticide and other: Carbaryl (ANSI) Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Potassium 1-naphthaleneacetate 1 Probable Severity: Low/Mild</p>
040096	05/15/2004	<p>A 33 y/o male applicator developed ocular symptoms after spraying. He sought medical treatment 11 days later. He indicated he was wearing eye protection, but it was not fitted properly and a liquid could run from the forehead to the eyes.</p> <p>Insecticide (excluding solely IGR and fumigants): Acetamiprid 1 Possible Severity: Low/Mild</p>
040097	06/04/2004	<p>A 34 y/o male applicator developed ocular symptoms after he was exposed to few drops of an herbicide tank mix when unplugging the spray nozzles. He sought medical treatment the same day. He was not wearing eye protection as required by the product label.</p> <p>Herbicide/algicide: Glyphosate, isopropylamine salt 1 Probable Severity: Low/Mild</p>
040099	06/08/2004	<p>A 50 y/o female reported neurological and respiratory symptoms after her home was drifted upon by a nearby mosquito fogging. Her home was not part of the target area. WSDA samples from her residence taken 16 days after the application were positive for malathion. She could smell the product and sought medical treatment two days later when symptoms did not resolve.</p> <p>Insecticide (excluding solely IGR and fumigants): Malathion (ANSI), Malathion (ANSI) 1 Probable Severity: Low/Mild</p>
040102	06/10/2004	<p>A 51 y/o female picked up a container of insecticide and lost her grip, dropped the container, and contents splashed into her left eye. She experienced slight ocular symptoms and irrigated her eye. She called WPC and sought medical treatment.</p> <p>Insecticide (excluding solely IGR and fumigants): Deltamethrin 1 Possible Severity: Low/Mild</p>
040103	05/06/2004	<p>A 21 y/o male applying an herbicide developed dermal symptoms. His backpack sprayer leaked from the bottom onto his buttocks. He said the back pack was defective. He sought medical care after five days due to continuing symptoms.</p> <p>Herbicide/algicide: Paraquat dichloride 1 Probable Severity: Low/Mild</p>

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Case	Exposure Date	Incident Description
040105	05/17/2004	<p>A 28 y/o male farm worker went to a physician and 2 weeks later to an optometrist with complaint of chemicals in his eyes. Patient had been spraying for 10 days and was properly protected. The exposure may have occurred when the wind gusted and product came in around side of goggles.</p> <p>Fungicide: Triflumizole Insecticide (excluding solely IGR and fumigants): Spinosad (proposed common name for FactorA+FactorD) (110003+110004), Mineral oil - includes paraffin oil from 063503, Imidacloprid</p> <p>1 Definite Severity: Low/Mid</p>
040106	06/12/2004	<p>A 41 y/o female was working in her yard and occasionally spraying for insects. Perspiration ran into her eye. She wiped her eyes with her gloved hands, probably transferring chemical to her eyes. She reported immediate burning and quickly washed out her eyes. Symptoms persisted and she sought medical care.</p> <p>Insecticide (excluding solely IGR and fumigants): Esfenvalerate; Prallethrin</p> <p>1 Definite Severity: Low/Mild</p>
040107	06/11/2004	<p>An adult male was around a moss control product and "got a small round piece in his eye." He rinsed his eyes for 10 minutes. His eyes were irritated and burning so his supervisor called WPC. He was advised to seek medical attention by WPC because of inability to open eye. Unable to verify medical treatment or locate individual for follow-up.</p> <p>Unknown: Zinc</p> <p>1 Possible Severity: Low/Mild</p>
040108	06/14/2004	<p>A 25 y/o male was landscaping for his employer. He was wearing personal protective equipment including eye protectors but the herbicide got in his right eye. He irrigated the eye and sought medical care. He was seen twice for corneal irritation.</p> <p>Herbicide/algicide: Glyphosate, isopropylamine salt</p> <p>1 Definite Severity: Low/Mild</p>
040109	06/02/2004	<p>A 69 y/o man applied an herbicide over 2 days. He wore the same pair of pants both days. He developed neurological, gastrointestinal and dermal symptoms. He was taken by ambulance to the hospital. He later said that he thought that his symptoms may have been caused by the fire retardant on his lawn chair.</p> <p>Unknown: 2,4-dichlorophenoxyacetic acid</p> <p>1 Possible Severity: Low/Mild</p>
040111	06/13/2004	<p>A 27 y/o female with a history of cardiac and respiratory problems set off a fogger, left the house, and returned to rescue her pets. She then had significant respiratory symptoms and called the WPC and went to the hospital. She could not be located for follow-up.</p> <p>Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide; Methoprene, S-; N-octylbicycloheptene dicarboximide</p> <p>1 Probable Severity: Moderate</p>
040113	06/13/2004	<p>A 41 y/o female was on the roof of her home hosing off moss that had been treated two weeks earlier. While doing this a piece of debris flew up into her eyes resulting in ocular symptoms. When symptoms persisted into the evening she decided to seek medical attention around 3:00 AM.</p> <p>Herbicide/algicide: Zinc</p> <p>1 Definite Severity: Moderate</p>

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Case	Exposure Date	Incident Description
040115	05/15/2004	<p>A 52 y/o male farm worker applied herbicides to raspberries and blackberries for 3 days without symptoms. He then developed respiratory symptoms and his employer provide he and his co-workers with PPE. His co-worker felt better but he continued feeling badly. His symptoms improved after three weeks. However, he continued to have some respiratory symptoms and sought medical care.</p> <p>Unknown: Glyphosate, isopropylamine salt, Triclopyr, Paraquat dichloride 1 Possible Severity: Low/Mild</p>
040117	06/18/2004	<p>A 69 y/o female home owner applied a ready-to-use herbicide to weeds along her driveway. Wind blew the spray into her face. She was wearing glasses but immediately went in, washed off. Because she has had eye surgery and has concerns for her eyes she went to the clinic with mild ocular symptoms within 30 minutes after exposure.</p> <p>Unknown: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild</p>
040118	03/15/2004	<p>A 49 y/o female and 51 y/o male developed respiratory and ocular irritation after an application was conducted on pears next to their property. They reported seeing the drift and one individual sought medical care 3 days after the exposure. WSDA investigated.</p> <p>Herbicide and Fungicide (03 & 04): Copper hydroxide Insecticide and fungicide (1 and 4): Kaolin 2 Possible Severity: (2) Low/Mild</p>
040120	06/23/2004	<p>A 37 y/o female took her son to the doctor. The provider observed that the mother had dermal and ocular symptoms. She reported that she and others were assigned to follow behind the application and thin the trees. A WISHA inspection was conducted but did not make a determination on compliance with REI.</p> <p>Insecticide and fungicide (1 and 4): Kaolin 1 Definite Severity: Low/Mild</p>
040121	06/23/2004	<p>The mother of an 18 m/o boy got lice shampoo in the child's eyes and the child also ingested some of the bath water. The mother used a large syringe to flush the child's eyes. After an hour the boy began to cry and kept his eyes closed. He was taken for medical care and diagnosed with chemical conjunctivitis.</p> <p>Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide 1 Definite Severity: Low/Mild</p>
040122	06/24/2004	<p>A 60 y/o male set off two indoor foggers on the first floor of him home. After discharging the foggers he walked around the home for 2-3 minutes. He began coughing and experiencing other symptoms. He showered and was still concerned with the coughing so went to the walk-in-clinic.</p> <p>Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Definite Severity: Low/Mild</p>
040123	06/26/2004	<p>A 40 y/o female was exposed while spraying a wasp nest on her house with a pressurized aerosol container. As she sprayed the aerosol came back into her face. She immediately experienced neurological, respiratory and dermal symptoms. 911 was called and she was transported by EMTs to local ER.</p> <p>Insecticide (excluding solely IGR and fumigants): Tetramethrin (ANSI); Phenothrin, D- 1 Definite Severity: Low/Mild</p>

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Case	Exposure Date	Incident Description
040124	06/25/2004	A 25 y/o male employee applicator reported systemic symptoms when he inhaled fumes from an outdoor fogger. He sought medical care the same day. Insecticide and other: Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Probable Severity: Low/Mild
040127	06/05/2004	A 29 y/o male farm worker reported possible exposure to residues when he was hauling lugs into the orchard for cherry harvesters. He got dust from the trees in both eyes and sought medical care for ocular and dermal symptoms. Application was made 3 days before he became ill. Insecticide (excluding solely IGR and fumigants): Malathion (ANSI) 1 Definite Severity: Low/Mild
040128	06/12/2004	A 23 y/o female developed gastrointestinal and neurological symptoms after she was exposed by application nearby. She did not wash after the exposure and symptoms began in about 15 minutes. She sought medical care two days later for continuing symptoms. Insecticide and other: Azinphos-Methyl 1 Possible Severity: Low/Mild
040129	06/12/2004	A 47 y/o male applicator had an ocular exposure while pouring product into the spray tank. An unexpected gust of wind blew the product into his eyes. He developed immediate symptoms and sought medical care later in the day. He had safety goggles but was not wearing them at time of exposure. Insecticide and fungicide (1 and 4): Sulfur 1 Definite Severity: Low/Mild
040130	06/07/2004	A 23 y/o applied a tank mix of herbicides around dairy building and did not wear eye protection. He felt the mist and developed ocular symptoms. He also had observed welding activity without eye protection. He sought medical care the next day. Herbicide/algicide: Glyphosate, isopropylamine salt, Dimethylamine 2,4-dichlorophenoxyacetate 1 Possible Severity: Low/Mild
040133	06/10/2004	Two males ages 33 and 29 were working in a nursery when an application was made nearby. They smelled the chemical and both developed neurological symptoms. Additionally, one had respiratory and the other gastrointestinal symptoms. One person sought medical care. Fungicide: Pentachloronitrobenzene 2 Possible Severity: (2) Low/Mild
040134	06/25/2004	A 16 y/o male developed neurological, dermal, respiratory and gastrointestinal symptoms after an herbicide leaked from backpack sprayer onto his back. He did not wash his back until 6 hrs post exposure. He neither wore nor was given any PPE. He did not seek medical care until four days after onset of symptoms. Unknown: 2,4-dichlorophenoxyacetic acid 1 Definite Severity: Moderate
040135	06/28/2004	A 23 y/o applicator sought medical care for dermal symptoms that developed while spraying apples. The case could not be reached for follow-up. Insecticide (excluding solely IGR and fumigants): Azinphos-Methyl, Acetamiprid 1 Definite Severity: Low/Mild

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Case	Exposure Date	Incident Description
040137	06/30/2004	<p>A 63 y/o female who worked in her yard occasionally applied a systemic insecticide. She wore a long sleeved shirt and gloves as required by the label. The gloves were chemically resistant on the palm and had absorbent cotton on the backs. On the third day after applying she noticed a rash on her arms and on her neck. Four days later she sought medical treatment.</p> <p>Insecticide and other: Acephate (ANSI) 1 Probable Severity: Low/Mild</p>
040138	07/06/2004	<p>A 16 y/o girl at a youth camp applied an insect repellent and later rubbed her eye without washing her hands. The eye became irritated. She showered 10-20 minutes. The next day both eyes were irritated and the girl was taken to a clinic for medical attention.</p> <p>Insect repellent: Diethyl-meta-toluamide and other isomers, N,N- 1 Definite Severity: Low/Mild</p>
040139	06/16/2004	<p>A 30 y/o male construction worker used a spray for wasps. He was standing four feet away from the target. He reported no direct contact with the spray and did not wash his face after application. He later developed itching around his neck and was directed to seek medical care. He sought medical care after work.</p> <p>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) 1 Definite Severity: Low/Mild</p>
040144	07/06/2004	<p>A 75 y/o male was pouring an herbicide concentrate into a funnel to mix with water. The wind blew some of the concentrate into his mouth. He immediately washed out his mouth. The next day his tongue, uvula, and lips were irritated. He sought medical attention.</p> <p>Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate; Dicamba, dimethylamine salt; Dimethylamine 2-(2-methyl-4-chlorophenoxy)propionate 1 Definite Severity: Low/Mild</p>
040147	07/12/2004	<p>A 61 y/o male home owner filled a pump sprayer to spray moss and the clamp holding the hose failed. The spray hit his face, arms and hands. He immediately washed but did not flush his eyes. That evening his vision was blurry and he sought medical care. He had not read the label that indicated that exposure could cause irreversible eye damage.</p> <p>Herbicide/algicide: Ferric sulfate 1 Definite Severity: Low/Mild</p>
040148	07/12/2004	<p>A mother and 16 y/o son had prepared a mixture of moss killer and bleach to brush on exterior walls of their mobile home. The youth removed his goggles as he carried the mixture in a bucket, but then tripped and spilled the mixture. It splashed into his eye. He was treated for a chemical burn and lost a week of work.</p> <p>Herbicide/algicide: Zinc Unknown: sodium hypochlorite 1 Definite Severity: Moderate</p>
040159	06/04/2004	<p>A 50 y/o unlicensed male applying to a potato field under windy conditions and the spray hit his face. He was not wearing any PPE nor does label require it. He sought medical care for dermal and ocular symptoms.</p> <p>Unknown: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild</p>

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Case	Exposure Date	Incident Description
040160	05/25/2004	A 53 y/o male office worker reported ocular symptoms after a co-worker applied an insecticide inside the work area. He was seen twice for symptoms. The diagnosis on the last visit was "toxic conjunctivitis". Baits are now used for ant problems in the office. Insecticide (excluding solely IGR and fumigants): Bifenthrin (ANSI) 1 Possible Severity: Low/Mild
040162	06/28/2004	A 27 y/o male unlicensed groundskeeper at a RV park/sport camp developed ocular symptoms after he opened a valve on the sprayer and the herbicide splashed in his eyes. He was not wearing eye protection and the label does not require it. He sought medical care the same day. Unknown: Glyphosate, isopropylamine salt 1 Definite Severity: Low/Mild
040164	07/13/2004	A 43 y/o male mechanic for a nursery was repairing a ground sprayer over a two day period. He could smell pesticides and wore rubber gloves. He developed neurological and gastrointestinal symptoms and sought medical care two days after symptoms began. Insecticide (excluding solely IGR and fumigants): Azinphos-Methyl 1 Possible Severity: Low/Mild
040165	07/17/2004	A 59 y/o male working with airport security opened a bag of swimming pool algicide. He got the product on his hands and transferred it to his face and eyes. He may have inhaled some of the product as he had respiratory, dermal, ocular and neurological symptoms. He was taken by ambulance to an ER Disinfectant/broad spectrum for water sanitation: Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride) 1 Definite Severity: Low/Mild
040169	07/17/2004	A 73 y/o female and 72/y/o male developed ocular, neurological and respiratory symptoms after an aerial application was made approx. 1 mile from their home to a potato field. They could smell the pesticide and sought medical care the next day. Residue samples collected by WSDA two days post application at the couple's home were negative for methamidophos. They did not test for sulfur or copper hydroxide. Fungicide: Sulfur, Copper hydroxide Insecticide (excluding solely IGR and fumigants): Methamidophos (ANSI) 2 Possible Severity: (2) Low/Mild
040171	07/21/2004	A 25 y/o female applicator, under supervision, was applying an herbicide with an injector gun to knotweed on a river bank when she accidentally stabbed her arm. She developed dermal symptoms and sought medical care. Although she did not inject product the needle may have been contaminated with product. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild
040173	07/21/2004	A 29 y/o female was using an aerosol wasp spray when a gust of wind blew the spray into her left eye. There was immediate discomfort. She washed the eye for about 5 minutes, but irritation continued and she called WPC. She sought medical care the next day. Insecticide (excluding solely IGR and fumigants): Tralomethrin (ANSI); Prallethrin 1 Definite Severity: Low/Mild

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Case	Exposure Date	Incident Description
040174	07/23/2004	<p>A 43 y/o female was applying an herbicide and was sprayed in the right eye from a cracked nozzle assembly. She washed with running water for 10-15 minutes and still developed ocular pain. She sought medical attention the same day.</p> <p>Unknown: Glyphosate, isopropylamine salt 1 Probable Severity: Moderate</p>
040175	05/25/2004	<p>An 11 m/o male developed a rash and other symptoms after an unlicensed PCO make a crack and crevice treatment and discharged a bug bomb in the apartment. The child lay on the carpet a few hours after the apartment was treated. The child was initially seen in the ER five days post application and four times at the clinic for continuing symptoms.</p> <p>Insecticide (excluding solely IGR and fumigants): Cyfluthrin 1 Possible Severity: Low/Mild</p>
040176	07/25/2004	<p>A 75 y/o male set off six aerosol foggers in his home to control bees. During the application a fogger released its contents into his face. Coughing he stumbled out of he home and collapsed in his yard. Neighbors called 911 and he was taken to an ER.</p> <p>Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Probable Severity: Low/Mild</p>
040177	07/24/2004	<p>A 36 y/o female was exposed to a cancelled product containing an organochlorine insecticide meant to be used on livestock. She developed ocular and neurological symptoms. She smelled the product and felt it on her face and hands. Samples taken by WSDA were positive. She continued to not feel well one month after the exposure.</p> <p>Insecticide (excluding solely IGR and fumigants): Methoxychlor; Aromatic petroleum derivative solvent; Toxaphene 1 Probable Severity: Moderate</p>
040178	07/24/2004	<p>A 45 y/o male developed mild symptoms shortly after applying product in his home to kill roaches. He went to the local hospital, was treated and released.</p> <p>Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI) 1 Possible Severity: Low/Mild</p>
040184	07/23/2004	<p>A 56 y/o male's left eye was visually non-functional. His right eye felt dry. He accidentally applies drops of an insecticide repellent to his good eye. He immediately had symptoms, irrigated the eye, and later sought emergency medical care.</p> <p>Unknown: Diethyl-meta-toluamide and other isomers, N,N- 1 Definite Severity: Moderate</p>
040186	07/21/2004	<p>A 46 y/o chemically sensitive disabled female and a 51 y/o male developed neurological, ocular and respiratory symptoms after a road-side application had been made about one mile away. They could smell the chemicals and both sought medical care.</p> <p>Herbicide/algicide: Glyphosate, isopropylamine salt, Dimethylamine 2,4-dichlorophenoxyacetate, Dicamba, diglycoamine salt 1 Possible Severity: Low/Mild 1 Insufficient Information</p>

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040187	07/23/2004	<p>A 19 y/o male was filling his spray tank when the product splashed into his left eye. He was not wearing eye protection. He reported immediate ocular symptoms but did not seek medical care until 3 days later when symptoms did not resolve.</p> <p>Herbicide/algicide: Paraquat dichloride 1 Definite Severity: Low/Mild</p>
040188	07/13/2004	<p>A 27 y/o male lawn care worker was filling his backpack sprayer with an herbicide when the mixture splashed up into his right eye. He immediately washed it out for about 10 minutes. Still painful and sensitive to light the next day he sought medical care. He had not worn protective eye care. PPE for eyes not required by the label. Employer provided goggles but case did not use them.</p> <p>Herbicide/algicide: 1 Definite Severity: Low/Mild</p>
040191	07/30/2004	<p>A 50 y/o female was camping when a cousin/co-camper sprayed her with insect repellent thinking it was a spray mister filled with water. She didn't wash her face or eyes until the next day when she sought medical care for ocular symptoms.</p> <p>Insect repellent: Diethyl-meta-toluamide and other isomers, N,N- 1 Definite Severity: Low/Mild</p>
040192	07/30/2004	<p>A 52 y/o truck driver was near an application containing chlorpyrifos methyl. The application was to a mound of wheat prior to storage. He developed neurologic, gastrointestinal and cardiovascular symptoms and was transported to the emergency room later that evening by his wife. He was given atropine, stabilized, and admitted for two days.</p> <p>Insecticide (excluding solely IGR and fumigants): Chlorpyrifos-methyl (ANSI) 1 Definite Severity: High/Severe</p>
040193	07/30/2004	<p>A 37 y/o window cleaner was splashed in the eye with wood shake treatment. He was not available for follow-up. Medical record indicates his eyes were flushed at the exposure site and he was taken by ambulance to an urgent care clinic for treatment.</p> <p>Insecticide and fungicide (1 and 4): Copper naphthenate 1 Definite Severity: Low/Mild</p>
040197	07/13/2004	<p>A 47 y/o male applicator was applying when the wind came up and blew spray into his eyes. He wore full PPE. The patient received treatment for chemical irritation of his eyes.</p> <p>Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Prohexadione calcium 1 Definite Severity: Low/Mild</p>
040200	08/02/2004	<p>A 45 y/o female believed she had evacuated her animals from her home prior to setting off four 6oz. Foggers. She realized one of her cats was still in the home and went back in to retrieve the cat. She experienced respiratory symptoms and was taken to the ER.</p> <p>Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Possible Severity: Low/Mild</p>

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Case	Exposure Date	Incident Description
040201	08/05/2004	<p>A 28 y/o female sprayed the interior of her home for spiders and ants. She got some of the product on her hands although she was wearing gloves. She developed dermal and respiratory symptoms. Medical care was sought the same day.</p> <p>Unknown: Pyrethrins, Piperonyl butoxide, Permethrin, mixed cis,trans (ANSI) 1 Possible Severity: Low/Mild</p>
040202	08/06/2004	<p>An 86 y/o male used a hose-end applicator to spray to his roof for moss control. He was not wearing goggles and the spray blew back into his left eye. He irrigated his eye and sought medical care.</p> <p>Herbicide/algicide: Zinc chloride 1 Possible Severity: Low/Mild</p>
040204	05/20/2004	<p>A 31 y/o male pesticide loader inhaled vapors that drifted from nearby application. He felt ill that evening and called his foreman. He came and took him to the ER. He had neurological and gastrointestinal symptoms. He was not wearing any PPE.</p> <p>Insecticide and other: Azinphos-Methyl 1 Possible Severity: Low/Mild</p>
040208	08/12/2004	<p>A 26 y/o female customer was shopping in a home improvement store when a store employee tried to help her reach a product on a shelf. The cap was loose and the contents spilled into her face, mouth and eyes. She was immediately washed off and was taken in for attention. She had eye irritation.</p> <p>Insecticide (excluding solely IGR and fumigants): Diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, O,O- 1 Probable Severity: Low/Mild</p>
040209	08/12/2004	<p>A 35 y/o employee at a nursery cut the plastic tarp covering a field fumigation to allow the gas to dissipate. The fumigant entered his leather boot. He took a shower but developed symptoms and called the WPC.</p> <p>Unknown: Methyl bromide, Chloropicrin 1 Possible Severity: Low/Mild</p>
040210	07/22/2004	<p>A 43 y/o male applicator was pouring product into a bucket of water prior to loading the spray tank when the mixture splashed into his eye. He had eye protection with him but he was not wearing it. He had immediate ocular symptoms and sought medical care</p> <p>Herbicide/algicide: Paraquat dichloride 1 Definite Severity: Low/Mild</p>
040211	04/02/2004	<p>Two male irrigation district workers (41 and 63 y/o) developed symptoms when they walked in an area where a fumigant had been dumped. They did not seek medical treatment. WSDA tests were positive for residues of the product.</p> <p>Fumigant: Metam-sodium 2 Probable Severity: (2) Low/Mild</p>
040213	08/18/2004	<p>A 63 y/o male home owner had dermal and ocular symptoms after spraying an herbicide on his driveway. He said the hose connection was loose and product leaked onto his hands. It was hot and he wiped his face with his hands while spraying. He sought medical care for his symptoms.</p> <p>Unknown: Glyphosate, isopropylamine salt 1 Definite Severity: Low/Mild</p>

2004 Pesticide Incidents

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Case	Exposure Date	Incident Description
040215	08/24/2004	A 31 y/o female accidentally sprayed product in her eye while applying to her cat. She had ocular symptoms and sought medical care. Insecticide (excluding solely IGR and fumigants): Fipronil 1 Possible Severity: Low/Mild
040221	08/22/2004	A 57 y/o female shampooed twice with a pediculicide and on the second time some of the product went into her eye. She developed ocular symptoms and sought medical care. Unknown: Permethrin, mixed cis,trans (ANSI) 1 Probable Severity: Low/Mild
040222	08/25/2004	An 18 y/o male fence builder accidentally sprayed himself directly in the eye as he was going to apply the repellent to his arm. He developed severe pain and chemical burn in the left eye. He sought medical care almost daily for 10 days while the eye healed. Insect repellent: Diethyl-meta-toluamide and other isomers, N,N- 1 Definite Severity: Moderate
040224	08/28/2004	A 52 y/o female placed the product on the washer and vibration shook it off and it broke on floor. Multiple efforts were made to clean up the spill and in the process a drop splashed into her eye. She sought medical care for ocular symptoms. Fungicide: Chlorothalonil (ANSI) 1 Definite Severity: Low/Mild
040225	08/31/2004	A 44 y/o female homeowner sprayed in her rose garden. There was no wind and then a gust blew into her face and she breathed in the product. She immediately became symptomatic, was put in shower by her husband, became worse and was taken for emergency care. The case has hx of asthma and the label apparently had cautionary comments for people with that condition. Unknown: Glyphosate, isopropylamine salt 1 Probable Severity: Low/Mild
040229	08/28/2004	An 81 y/o female was drifted upon in her garden when her son made an application to an adjacent pear orchard. She developed dermal and respiratory symptoms. She initially was taken to her primary provider and 5 days later she taken to the ER for continuing symptoms. Unknown: Ziram, 1-Naphthaleneacetic Acid, Potassium Salt 1 Probable Severity: Low/Mild
040232	08/04/2004	A 29 y/o male licensed pesticide applicator reported an occupational exposure at his workplace. The patient presented to the clinic complaining of respiratory problems. He sprayed chemicals on peaches trees for 5 days prior to his illness. The injury occurred while he was fixing broken pipes that distribute herbicide. He did not wear PPE. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild
040235	09/16/2004	A 54 y/o female developed systemic symptoms 3 hours after spilling insecticide on her hand during mixing. She did not wash it off for approximately 15-30 minutes. She wore no PPE while applying to her yard. She sought medical care one day later. Symptoms resolved over 1-2 weeks. Insecticide (excluding solely IGR and fumigants): Malathion (ANSI) 1 Possible Severity: Low/Mild

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Case	Exposure Date	Incident Description
040236	09/07/2004	A 45 year old female developed acute respiratory distress after starting a flea fogger in the back seat of her 2-door car. She had trouble exiting immediately and breathed in the aerosol. She was treated on scene by paramedics and transported to ER. Her symptoms resolved with treatment. Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI) 1 Definite Severity: Moderate
040239	09/09/2004	A 41 year old husband and 35 year old wife were seated about 35 feet from a room in a restaurant being fogged for gnats. The entrance to the room was sealed with plastic and tape. They smelled a chemical and left the restaurant within 15 minutes without ordering food. They later reported eye irritation and headache. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 2 Possible Severity: (2) Low/Mild
040241	08/21/2004	A 40 y/o male PCO was spraying the perimeter of a house when the nozzle malfunctioned and sprayed his skin. He was wearing all required PPE but spray came in under his safety glasses. He flushed his eyes but still had ocular symptoms, and went to the clinic. Insecticide (excluding solely IGR and fumigants): Cyfluthrin 1 Definite Severity: Low/Mild
040242	08/30/2004	A 33 y/o female health clinic worker had an asthmatic reaction to insecticide residue in the office. The janitor had sprayed for spiders while she was gone for lunch. When she returned she experienced coughing and other respiratory effects. She was treated at her clinic work place. Insecticide (excluding solely IGR and fumigants): Piperonyl butoxide; Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Definite Severity: Moderate
040243	08/17/2004	A 23 y/o male employee was washing chemicals with a water hose. The chemicals were left over spills, drips and splashes from a wood treatment facility. He had neurological and respiratory symptoms and sought medical care one week later when repeated exposures to chemical vapors caused similar symptoms. Insecticide and fungicide (1 and 4): Copper Ethanolamine Complexes, mixed 1 Possible Severity: Low/Mild
040244	09/14/2004	Two carpenters, a father and son ages 54 and 20, were working beneath a wooden deck when it was sprayed from above. They inhaled the product and had dermal exposures. They went to a medical facility and on arrival they had no objective symptoms. Several unsuccessful efforts were made to contact them. Insecticide (excluding solely IGR and fumigants): Bifenthrin (ANSI) 2 Possible Severity: (2) Low/Mild
040245	09/15/2004	A 2y/o boy was taken to the ER, to his primary HCP and then to a specialist after continuing eye irritation. This followed a lice shampoo application that got into his eyes. Unknown: Pyrethrins, Piperonyl butoxide 1 Probable Severity: Low/Mild

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Case	Exposure Date	Incident Description
040247	09/20/2004	A 43 y/o female applied a dog flea and tick repellent to her back. She developed dermal symptoms. She contacted WPC for advice. The symptoms disappeared after she showered. Insecticide and other: Tetrachlorvinphos 1 Possible Severity: Low/Mild
040248	09/18/2004	A 49 y/o female forgot to remove the cap of a flea insecticide container and squeezed it with considerable force rupturing the container and squirting the product in her eye. She immediately washed out the eye. Pain and irritation increased so she sought medical attention. Insecticide (excluding solely IGR and fumigants): Imidacloprid 1 Definite Severity: Low/Mild
040249	09/19/2004	A 22 y/o male developed OP symptoms after he accidentally ingested about 6 oz. of diluted malathion solution. He had been using the chemical in his yard and left some in a milk jug. The next day, he poured the contents in a coffee cup and drank it. He sought medical attention 15 minutes later. He was treated at an emergency room. Lab evidence confirmed the exposure. Insecticide (excluding solely IGR and fumigants): Malathion (ANSI) 1 Definite Severity: Moderate
040250	08/10/2004	New home owners contracted to have their shake roof cleaned and treated to extend the roof life. The chemical treatment volatilized and the owners and two next door neighbors sought medical attention. The hot summer weather caused the chemical odor to linger for several weeks. Many members of the residential community made comments about the offensive and irritating odor. Insecticide and fungicide (1 and 4): Copper naphthenate 1 Definite Severity: Moderate 3 Possible Severity: (3) Low/Mild
040251	09/25/2004	A 36 y/o female sprayed an aerosol spray on spider webs around her home. The spray bounced off the exterior walls and into her eyes. She was wearing glasses but they provided no protection. She attempted to flush her eyes and called WPC. As she was having difficulty opening her eyes for more flushing, she went to an ER for treatment. Insecticide (excluding solely IGR and fumigants): Lambda-cyhalothrin 1 Definite Severity: Low/Mild
040252	08/24/2004	An 18 y/o male was weeding at a community club and golf course when co-workers sprayed him with aerosol insect repellent and accidentally sprayed him in the face/eyes. He immediately flushed his eyes for 15 minutes. The irritation resolved fairly quickly but he was taken to a clinic for attention. Insect repellent: Diethyl-meta-toluamide and other isomers, N,N- 1 Possible Severity: Low/Mild
040254	08/12/2004	A PCO treated offices for fleas after work hours with an aerosol insecticide. The carpets were then vacuumed and the office was locked. The next morning about 15 staff smelled the pesticide and some felt ill. A 49 y/o female had respiratory and neurological symptoms and sought medical care. Large fans were brought in and additional cleaning was provided. Insecticide and other: Permethrin, mixed cis,trans (ANSI); Methoprene, S- 1 Probable Severity: Low/Mild

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Case	Exposure Date	Incident Description
040255	09/06/2004	A 23 y/o male landscaper assistant applied a weed control product with a hand sprayer at a High School. He didn't recall significant contact with the chemical. However, that evening he developed dermal symptoms on his extremities. The next day he sought medical treatment for an apparent allergic reaction. Herbicide/algicide: Glyphosate, isopropylamine salt 1 Possible Severity: Low/Mild
040256	09/26/2004	A 61 year old male inhaled and swallowed spray while spraying his fruit trees. He developed throat irritation and lost sleep. He sought medical attention 14 hours later. He refused to provide additional information to the DOH investigator. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Rotenone; Cube Resins other than rotenone 1 Possible Severity: Low/Mild
040257	09/25/2004	A 56 y/o female and her 78 y/o mother apartments were treated for fleas. They left for 4 hours as requested. The next day the daughter and mother reported dermal symptoms. Only the daughter sought medical care. Insect Growth Regulator (IGR): Tetramethrin (ANSI); Phenothrin, D-; Pyriproxyfen Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI); Methoprene, S- 2 Possible Severity: (2) Low/Mild
040258	03/21/2004	A 39 year old female was drifted from a spray application to a neighboring apple orchard while working in her garden. She felt and smelled the mist. She developed gastrointestinal, dermal and neurological symptoms but did not seek medical care. Herbicide/algicide: Dicamba, sodium salt 1 Possible Severity: Low/Mild
040260	10/05/2004	A 7 y/o girl developed neurological and dermal symptoms after her hair was washed with lice shampoo. Her father said that her hair may not have been properly rinsed after the shampoo was applied. She developed symptoms approximately 18 hours later and was taken for medical care. Insecticide (excluding solely IGR and fumigants): 1 Probable Severity: Low/Mild
040263	09/19/2004	A 27 y/o female farm worker had a dermal allergic reaction while picking apples. She sought medical treatment one day later. Her employer indicated that the orchard had been sprayed with pesticide 4 days before she entered. The re-entry intervals were observed but she still developed symptoms characteristic with one of the pesticides in the formulations. Multiple (product is classified as multiple classes ...): Thiram Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Potassium 1-naphthaleneacetate 1 Probable Severity: Low/Mild
040265	09/14/2004	A 23 y/o female nursery employee developed generalized rash on her body. The patient was sorting plants in an area treated with pesticide the day before. She sought medical treatment for allergic dermatitis. Disinfectant/broad spectrum for water sanitation: Mancozeb Other (Includes biological controls, plant growth regulators, antibiotics, etc.): Paclobutrazol (ANSI) 1 Probable

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Case	Exposure Date	Incident Description
040266	06/05/2004	A 47 y/o female developed ocular symptoms and general discomfort after her neighbor applied an exorbitant amount of herbicide on their mutual property line. The neighbor had been ordered by the local Weed Control Board to eradicate weeds in her yard. The application was so concentrated that some of the herbicide moved to the patient's property. WSDA samples were positive for excessive amounts of herbicide. Herbicide/algicide: Dimethylamine 2,4-dichlorophenoxyacetate 1 Probable Severity: Low/Mild
040268	10/13/2004	A 44 y/o male set off an aerosol fogger in his home and accidentally got some of the spray in his eye. He washed his eye, continued to have irritation, called poison control and went for medical care. Insecticide: Flea fogger, unknown brand 1 Definite Severity: Low/Mild
040271	10/21/2004	A 19 y/o male set off 3 foggers in his home. He thought that the foggers were not working and went back into the house. He inhaled the chemical vapors and went to the ER with systemic symptoms. Educational material was provided. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI); Tetramethrin (ANSI) 1 Possible Severity: Moderate
040272	10/31/2004	A 37 y/o old female set off 4 foggers in the morning on the 2nd floor of her home. That evening she set off 3 additional foggers on the 1st floor and went upstairs. She returned multiple times to disconnect her smoke alarm. She had respiratory & neurological symptoms and called the EMTs. She was evaluated and not referred for treatment but the EMTs opened the windows on the 2nd floor where her children were sleeping. Insecticide (excluding solely IGR and fumigants): Permethrin, mixed cis,trans (ANSI) 1 Possible Severity: Low/Mild
040273	11/03/2004	A 3 y/o boy was discovered in home bath room with a bottle of lindane shampoo. He was spitting and had lindane on his face. Parents washed him and induced emesis x2 but the child had a seizure about an hour after exposure. Child was observed in ER and discharged. Unknown: lindane 1 Probable Severity: Moderate
040274	11/06/2004	A 39 y/o female was poured a moss control product from a large container into a hand sprayer. The sprayer wouldn't work so she poured the contents back into a bucket. She soaked a rag and wiped the house deck structure with it. She wore no eye protection and some chemical flew up into her eye. She rinsed the eye, later called WPC and then sought treatment at an ER. Herbicide/algicide: Zinc chloride 1 Definite Severity: Low/Mild
040275	11/07/2004	A 43 y/o mother brought a stuffed animal close to her face to smell it after her daughter had just dusted it with tick and flea powder. She inhaled the powder. She went home, called the ER and went in for treatment as she was having anxiety and difficulty breathing. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Piperonyl butoxide 1 Possible Severity: Low/Mild

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Case	Exposure Date	Incident Description
040276	10/21/2004	<p>A 24 y/o male PCO applied an insecticide on the ceiling of a house. He wore safety glasses, but the spray from his back pack sprayer came in behind his glasses and got in his eyes. He immediately washed his eyes for 15 minutes and then sought medical treatment.</p> <p>Insecticide (excluding solely IGR and fumigants): Pyrethrins; Octyl bicycloheptene dicarboximide, N-; Piperonyl butoxide</p> <p>1 Definite Severity: Low/Mild</p>
040278	11/09/2004	<p>A 49 y/o male was working on the roof following a moss control application. He believes he picked up some chemical granules on his hands and rubbed his eyes. His eyes were irritated. He washed his eyes and was taken for medical attention.</p> <p>Herbicide/algicide: Zinc sulfate monohydrate</p> <p>1 Definite Severity: Low/Mild</p>
040281	11/05/2004	<p>A 51 y/o male applied 7-10 cans of aerosol flea spray to control a cat flea problem. He had pre-existing sores on his legs, couldn't wear socks, and walked through the pesticide treated carpet in his home. He reacted and three days later went to the hospital. He was admitted for 9 days. Pesticide exposure appeared to cause dermal symptoms and pre-existing medical problems led to hospitalization.</p> <p>Insecticide (excluding solely IGR and fumigants): Pyrethrins; Octyl bicycloheptene dicarboximide, N-; Piperonyl butoxide; Tetramethrin (ANSI)</p> <p>1 Definite Severity: Moderate</p>
040282	11/09/2004	<p>Two adult male county workers became ill from a strong pesticide smell that came from soil while digging out a drainage ditch at the end of a culvert. One worker sought medical care. Numerous pesticides were detected in soil samples taken from the area by WSDA.</p> <p>Unknown: Metsulfuron-methyl, Sulfometuron methyl, Sulfur, Glyphosate, isopropylamine salt, Metribuzin</p> <p>1 Definite Severity: Moderate 1 Insufficient Information</p>
040283	11/16/2004	<p>A 25 y/o male entered a room two minutes after it was treated with a fogger and immediately experienced systemic symptoms.</p> <p>Insecticide (excluding solely IGR and fumigants): Cypermethrin (ANSI)</p> <p>1 Possible Severity: Low/Mild</p>
040284	11/17/2004	<p>A 55 y/o male had ocular symptoms after using a prescribed crème for scabies. He was using it for lice and accidentally rubbed some into his eyes. EMTs were called and he was seen at an ER.</p> <p>Unknown: Permethrin, mixed cis,trans (ANSI)</p> <p>1 Probable Severity: Low/Mild</p>
040287	11/01/2004	<p>A 67 y/o male vineyard worker presented to the ER complaining of systemic symptoms. He had been picking up spent chlorine canisters. The chlorine was put into the drip irrigation system to control algae in the drip lines.</p> <p>Unknown: Chlorine</p> <p>1 Possible Severity: Low/mild</p>

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Case	Exposure Date	Incident Description
040288	11/25/2004	A 31 y/o male swallowed herbicide while siphoning herbicide from one container to another. He was evaluated at an ER for cardiac, gastrointestinal and respiratory symptoms and admitted for 3 days. He had also reported at least one other accidental ingestion exposure a month previous, resulting in trips to the ER. Herbicide/algicide: Paraquat dichloride 1 Probable Severity: Moderate
040289	11/25/2004	A 16 m/o boy was found with the product and apparently was trying to suck the bottle. After 20 minutes he vomited 2-3 times and was taken to the hospital. An unknown amount was ingested. Insecticide (excluding solely IGR and fumigants): Bifenthrin (ANSI) 1 Possible Severity: Low/Mild
040292	11/27/2004	A 57 year old male homeowner used a push type spreader to apply a granular moss control product. He wore a half face respirator although it is not required by the product label. He developed respiratory problems and believes that he breathed product dust because of a poor respirator fit. After 9 days he had little improvement but did not seek medical care. Herbicide/algicide: Ferrous sulfate monohydrate; Calcium sulfate 1 Possible Severity: Low/Mild
040293	12/01/2004	A 46 y/o male applied a moss control product on his lawn. He used a hose-end sprayer and wore no PPE eye protection. He splashed the contents in his eyes when he unscrewed the container off the end of the hose. He immediately washed his eyes per label, called WPC. He did not seek medical assistance. Herbicide/algicide: Zinc chloride 1 Probable Severity: Low/Mild
040294	12/05/2004	A 38 y/o female's hand burned after applying a flea and tick spray from a squeeze tube to her cat. She also developed a rash where she touched her chest. By the next morning her symptoms had resolved and she did not seek medical attention. Insecticide (excluding solely IGR and fumigants): Phenothrin, D- 1 Possible Severity: Low/Mild
040295	12/10/2004	An 11 y/o girl helping her sister treat their cat for fleas had eye symptoms when the cat jumped into the girl's arms. Her eyes were irrigated, but symptoms persisted and parents called WPC. Insecticide (excluding solely IGR and fumigants): Imidacloprid 1 Possible Severity: Low/Mild
040296	12/11/2004	A 26 y/o female applied a flea insecticide to her cat and shortly afterward the cat brushed against the owner's eye. She felt immediate eye irritation. Her husband washed her eye and called WPC. She did not seek further medical help. Insecticide (excluding solely IGR and fumigants): Imidacloprid 1 Possible Severity: Low/Mild

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Case	Exposure Date	Incident Description
040297	12/13/2004	An 18 m/o sprayed himself in the face and eyes with a flea insecticide sold only through licensed veterinarians. He had ocular and dermal symptoms. His parent called the WPC for guidance. His condition did not worsen and they did not seek medical care. Insecticide and other: Pyrethrins; Dipropyl isocinchomeronate; Octyl bicycloheptene dicarboximide, N-; Piperonyl butoxide 1 Possible Severity: Low/Mild
040298	10/05/2004	A 48 y/o male walked through his property after it had overflowed with run off from an adjacent potato field chemigation application. One of his irrigation boots had a hole. His foot received a chemical burn and he also had eye irritation. WSDA samples were positive for residues from the chemigation application. Fumigant: Potassium N-methylthiocarbamate 1 Definite Severity: Moderate
040300	12/19/2004	A 36 y/o female set off a fogger in her 32 y/o male friend's apartment. She was not aware that he was home asleep. She left but forgot her keys and on returning she knocked over the fogger and was inside about 5 minutes. Both of them had headache and respiratory symptoms. They called the Poison Center for advice. Insecticide (excluding solely IGR and fumigants): Pyrethrins; Octyl bicycloheptene dicarboximide, N-; Permethrin, mixed cis,trans (ANSI) 2 Possible Severity: (2) Low/Mild
040301	12/21/2004	A 42 y/o male vegetation management employee for a utility company climbed a tree that had been sprayed to trim branches. Later he developed ocular symptoms and went to the employee health clinic. Herbicide/algicide: Butoxyethyl triclopyr 1 Probable Severity: Low/Mild
040302	12/20/2004	A 68 y/o male used an aerosol insecticide to control roaches in his motor home. He applied the product for 4-5 minutes. He noticed that he had a sore throat when he went to bed that night. The next day he felt better but his wife called WPC to make sure he would be ok. Insecticide (excluding solely IGR and fumigants): Esfenvalerate 1 Possible Severity: Low/Mild
040304	12/27/2004	A 2 y/o girl sprayed herself in the face with a can of flea and tick spray left on the kitchen counter. Her mother found the crying child with the can in her hand. She immediately washed the child and called WPC. She washed the child again. After a nap, the child felt fine. Insecticide and other: Tetrachlorvinphos 1 Possible Severity: Low/Mild
040305	12/27/2004	A 9 y/o boy "playfully" released an insect fogger in his home. Two adults were present at the time. A 40 y/o female reported upper respiratory symptoms. She called WPC for advice and did not seek other medical care. Insecticide (excluding solely IGR and fumigants): Piperonyl butoxide; Allethrin, d-; Phenothrin, D- 1 Possible Severity: Low/Mild

Agency Data Summary

Washington State Department of Labor and Industries, WISHA

Washington State Department of Labor and Industries, WISHA

Washington State Department of Labor and Industries, Summary of WISHA Pesticide-related Investigations, 2004								
City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
Warden Grant 307191882	Raxil XT, Dividend, Extreme, Apron XL, Lindane 30	2 / 2	Seed			1/8/2004 1/8/2004	Serious citation: No hazard communication program General citation: Accident prevention program not effective Penalties assessed \$100.00	Programmed
Brewster Okanogan 308241223	Organophosphate, N-methyl carbamate	14 / 200	Apple Orchard			12/2/2004 12/14/2004	No citations issued No penalties assessed	Programmed
Brewster Okanogan 308241231	Diazinon 50W, Sevin 4F, azinphos methyl, Dimethoate	15 / 15	Apple Orchard			12/2/2004 12/16/2004	No citations issued No penalties assessed	Programmed
Brewster Okanogan 308184159	Pesticides	6 / 6	Apple Orchard			11/19/2004 12/6/2004	No citations issued No penalties assessed	Programmed
Yakima Yakima 308241637	Diazinon 50W, Carbaryl 4L, Sevin 4F, azinphos methyl, Dimethoate	50 / 50	Apple Orchard			12/2/2004 12/2/2004	No citations issued No penalties assessed	Programmed
Zillah Yakima 308410513	Sevin 4F, Carzol SP, Lorsban	5	Orchard packing			12/6/2004 12/6/2004	No citations issued No penalties assessed	Programmed
Othello Franklin 308410539	Sevin 4F, Rally 40W, Success, Amid-Thin W, Gramoxone max, Carzol SP, dormant oil, zeta-zinc, Lorsban, Round-up	4 / 4	Apple Orchard			12/6/2004 12/6/2004	No citations issued No penalties assessed	Programmed

**Washington State Department of Labor and Industries,
Summary of WISHA Pesticide-related Investigations, 2004**

City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
Wapato Yakima 308410588	Sevin 4F, Guthion 50 WSP, Carzol SP, Intrepid 50WP, Lorsban 4E	3 / 200	Apple orchard			12/7/2004 12/7/2004	No citations issued No penalties assessed	Programmed
Othello Franklin 308410935	Guthion (azinphos methyl 50W)	13 / 250	Apple orchard			11/29/2004 11/29/2004	No citations issued No penalties assessed	Programmed
Wapato Yakima 308411784	Organophosphate, N-methyl carbamate	50 / 210	Apple orchard			12/3/2004 12/3/2004	No citations issued No penalties assessed	Programmed
Pateros Okanogan 308426139	Dimethoate 400, Sevin 4F, Guthion 50WP, Lorsban 4E, Carzol SP	26 / 26	Apple orchard			12/8/2004 12/9/2004	No citations issued No penalties assessed	Programmed
Zillah Yakima 308426329	Organophosphate, N-methyl carbamate	10 / 200	Orchard, Packing plant			12/10/2004 12/10/2004	No citations issued No penalties assessed	Programmed
Naches Yakima 308426808	Lorsban, Carzol SP, azinphos methyl	30 / 100	Apple, pear orchard			12/14/2004 12/14/2004	No citations issued No penalties assessed	Programmed
Yakima Yakima 308438399	Lorsban 4E, Agrimek 15EC, Sevin	4 / 4	Orchard			12/8/2004 12/8/2004	No citations issued No penalties assessed	Programmed
Yakima Yakima 308439066	Organophosphate, N-methyl carbamate	5 / 130	Orchard, Packing plant			12/20/2004 12/20/2004	No citations issued No penalties assessed	Programmed
Prosser Benton 308439389	Lorsban, azinphos methyl	50 / 50	Orchard			12/20/2004 12/21/2004	No citations issued No penalties assessed	Programmed
Outlook Yakima 308440114	Supracide 2E, Lorsban 4E, Guthion, Imidan 70W	5 / 5	Orchard, -			12/16/2004 12/16/2004	No citations issued No penalties assessed	Programmed

**Washington State Department of Labor and Industries,
Summary of WISHA Pesticide-related Investigations, 2004**

City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
Oroville Okanogan 308184738	Organophosphates, N-methyl carbamate	6 / 200	Apple orchard, Packing plant			11/23/2004 12/16/2004	General citation: Not keeping handling hours for class 1 & 2 OP and N-methyl carbamates. No penalties assessed	Programmed
Mattawa Grant 307196725	Pesticides	26 / 32	Agriculture			1/14/2004 2/2/2004	General citation: No hazard communication program. No penalties assessed	Programmed
Okanogan Okanogan 307198838	Kopertox (fungicide)	2 / 2	Livestock			2/10/2004 2/10/2004	Serious citation: No hazard communication program. General citations: No accident prevention program, no documentation of safety meetings. Penalties assessed \$100.00	Programmed
Mattawa Grant 307198853	Fungicides, insecticides, pesticides	10 / 10	Potato farm			2/6/2004 2/9/2004	Serious citation: No hazard communication program. Penalties assessed \$500.00	Programmed
Lynden Whatcom 307440933	Nu-Cop 50DF (cupric hydroxide)	1 / 1	Blueberry farm			3/10/2004 3/11/2004	No citations issued No penalties assessed	Programmed
Lynden Whatcom 307477562	Pesticides	5 / 5	Apple orchards			3/17/2004	No citations issued No penalties assessed	Programmed
Spokane Spokane 307616425	Captan, Zindane, Allegiance	37 / 37	Seeds	Chemical Spill		4/7/2004 5/17/2004	General citation: No employee training on hazard communication program. No penalties assessed	Complaint
Mount Vernon Skagit 307619577	Esfenvalerate Captan 50	1 / 10	Berry farm			4/12/2004 4/12/2004	No citations issued No penalties assessed	Programmed

**Washington State Department of Labor and Industries,
Summary of WISHA Pesticide-related Investigations, 2004**

City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
Mount Vernon Skagit 307642470	Mocap	9 / 9	Potatoes berries			6/8/2004 6/8/2004	No citations issued No penalties assessed	Programmed
Mount Vernon Skagit 307620047	Pesticides	4 / 4	Berries			4/22/2004 4/22/2004	No citations issued No penalties assessed	Follow-up
Sunnyside Yakima 307620724	Success (spinosad), Manzate 75DF (ethylene bisdithiocarbamate)	45 / 45	Apple Orchard			4/27/2004 4/27/2004	General citations: Information about pesticide spraying not posted, no medical evaluation for respirator, no pint eye flush No penalties assessed	Complaint
Richland Franklin 307638882	Guthion (azinphos methyl 50W) Lorsban 4E Procure 50WS Supreme oil c-c	10 / 10	Apple Orchard			6/17/2004 6/28/2004	General citations: Information about pesticide spraying not posted, no respirator change-out schedule, no respirator fit-tests, no pint eye flush, no eyewash No penalties assessed	Complaint
Burlington Skagit 307646141	Pesticides	2 / 60	Egg processing			6/10/2004	General citations: No monthly Safety meetings, no MSDS Index or chemical inventory, no annual training on respirator use, pesticide application recordkeeping not kept as required. No penalties assessed	Programmed
Othello Franklin 307646232	Pesticides	57 / 57	Apple Orchard		DOH	6/15/2004 9/29/2004	General citation: No change out schedule for respirator cartridges or canisters. No penalties assessed	Referral
Snohomish Snohomish 307856252	LI 700, Kocide, Crossbow, Wilbur Ellis R11	13 / 13	Ornamental tree farm			6/16/2004 8/4/2004	Serious citation: No eyewash available Penalties assessed \$100.00	Programmed

**Washington State Department of Labor and Industries,
Summary of WISHA Pesticide-related Investigations, 2004**

City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
Mattawa Grant 307857227	Guthion (azinphos methyl 50W)	19 / 250	Apple Orchard	Exposure to Guthion residue spraying and thinning	WSDA	7/7/2004 10/14/2004	General citation: No pesticide safety poster within 30 days of application. Message: Ensure eyewash and eye flush are available.	Referral
Marysville Snohomish 307858514	Copper sulfate	2 / 2	Dairy farm			7/14/2004 7/14/2004	Serious citation: Emergency eyewash not available. General citations: No written hazard communication program, no chemical inventory, no MSDS's available for chemicals, no hazard communication training. Penalties assessed \$150.00	Programmed
Quincy Grant 307863431	Lorsban 4E SG	2 / 3	Orchard		WSDA	8/18/2004 9/7/2004	Serious citations: Employees not wearing PPE required by the label, no pesticide handler training, no Cholinesterase medical monitoring program for handlers, no training on cholinesterase inhibiting pesticides, no respirator fit-test, medical exam and training not provided. General citations: pesticide poster not displayed at mixing station, emergency medical information not displayed at mixing loading station, handling hours records not kept, no written respirator program, no emergency eyewash at mixing station. Penalties assessed \$2,750.00	Referral

**Washington State Department of Labor and Industries,
Summary of WISHA Pesticide-related Investigations, 2004**

City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
Orting Pierce 307863548	Lorsban 4E, Tenkoz Trifluralin 4, Thionex 50W, Endosulfan 3EC	26 / 26	Cabbage farm			8/5/2004 10/6/2004	Serious citations: no emergency eyewash at mixing station, no written respirator program, no respirator fit-test, no effective respirator training. General citations: no medical exam before respirator use, respirators not clean, respirator improperly stored, 4 grouped citations for sub-standard housing, potable drinking water not ensured, screening on windows and doors, only one toilet and sink provided for 26 people, no pesticide handler training, pesticide poster not displayed at mixing station, pesticide safety information not posted after application, emergency medical information not displayed at mixing loading station, pesticide handling hours records not kept, no Hazard communication program. Penalties assessed \$2,150.00	Referral
Cowiche Yakima 307877506	Chlorpyrifos 4E	10 / 200	Apple orchard	Spraying pesticides	DOH	8/18/2004 9/16/2004	General citations: No medical evaluations, no fit-tests for respirator use. No penalties assessed	Referral
Sunnyside Yakima 308078054	Pesticides	10 / 10	Apple orchard			11/18/2004 12/28/2004	No citations issued No penalties assessed	Complaint
Naches Yakima 308241611	Organophosphate, N-methyl carbamate	22 / 22	Apple orchard			11/26/2004 11/26/2004	No citations issued No penalties assessed	Programmed

**Washington State Department of Labor and Industries,
Summary of WISHA Pesticide-related Investigations, 2004**

City, County, Inspection #	Pesticides Involved	Employees Covered by inspection/Total Employees	Type of Business	How Exposed	Other Agencies Involved	Inspection Dates (Opened) (Closed)	Citations/Costs	Type of Inspection
White Swan Yakima 307846337	Surround WP	3 / 125	Apple orchard			6/23/2004 6/23/2004	Serious citation: No respirator fit-tests. Message to employer: Observe the REI after pesticide application. Penalties assessed \$240.00	Programmed
Quincy Grant 307417204	Pesticides and herbicides	3 / 3	Apple orchard			3/15/2004 3/30/2004	General citations: No accident prevention program, no required L&I posters, safety meetings not held monthly, potable drinking water not provided by employer, no hand washing facilities near portable toilet. No Penalties assessed	Complaint
Sunnyside Yakima 307620328	Pesticides	45 / 45	Fruit orchards, Packing			4/27/2004	No citations issued No penalties assessed	Complaint
Zillah Yakima 307480020	Rubigan EC, Omite-30WS Oxycom, Respond plus	2 / 2	Vineyard			3/12/2004 3/12/2004	No citations issued No penalties assessed	Follow-up

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 or 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

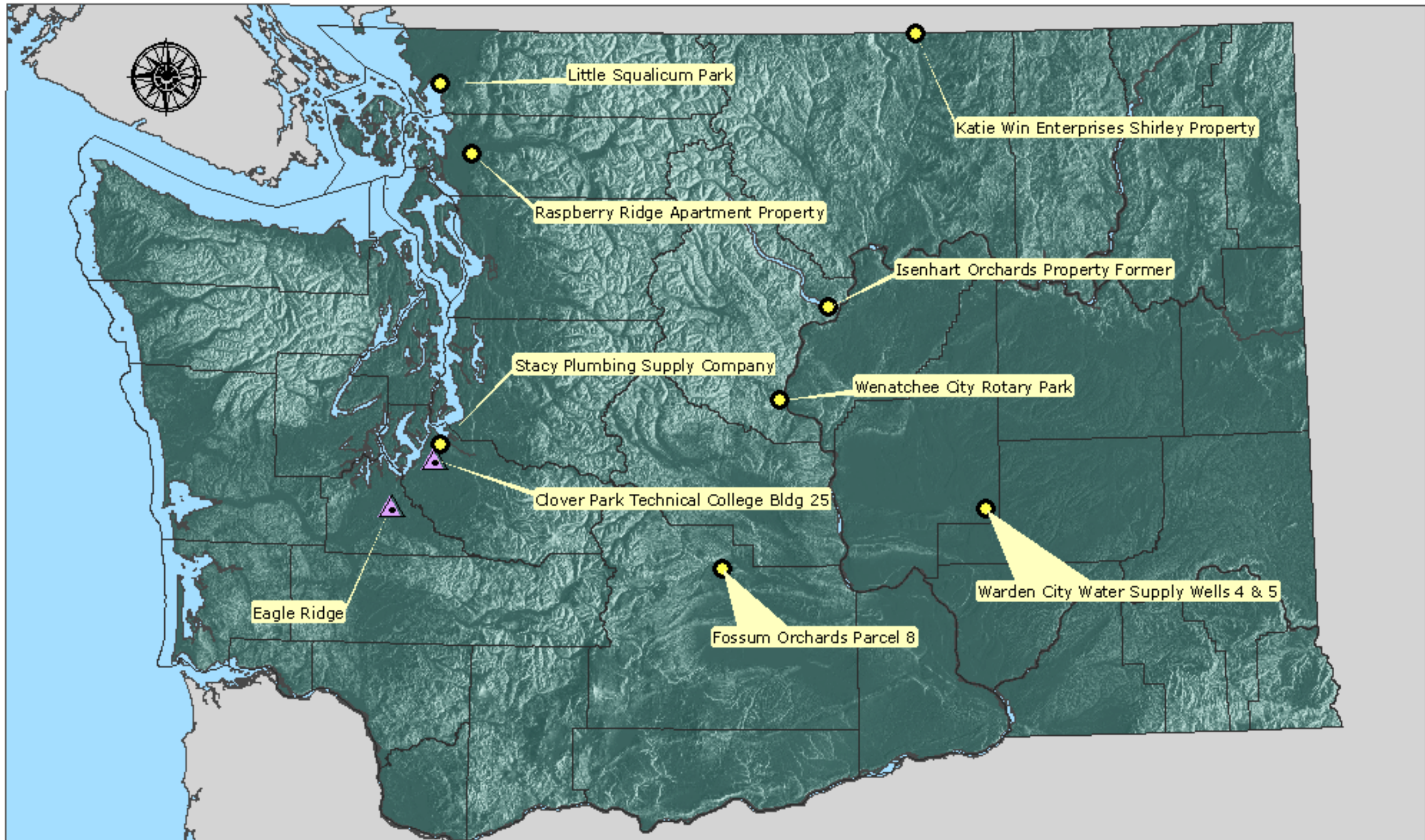
WSDA Enforcement Action Definitions

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

Washington State Department of Ecology, Maps

Pesticide Contaminated Sites Added in 2004 (10)



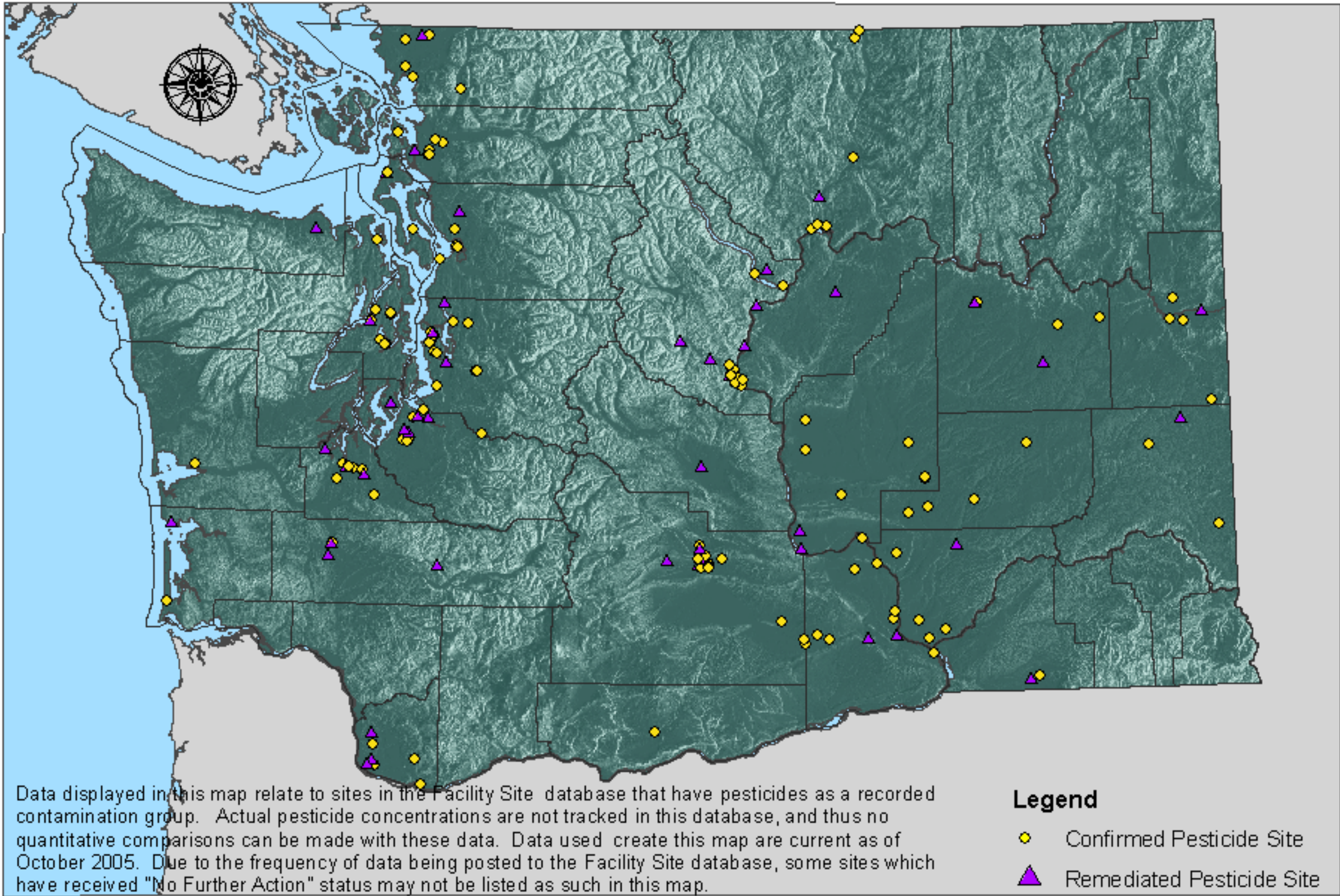
Data displayed in this map relate to sites in the Facility Site database that have pesticides as a recorded contamination group. Actual pesticide concentrations are not tracked in this database, and thus no quantitative comparisons can be made with these data. Data used to create this map are current as of October 2005. 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.

Legend

- Confirmed
- ▲ Remediated

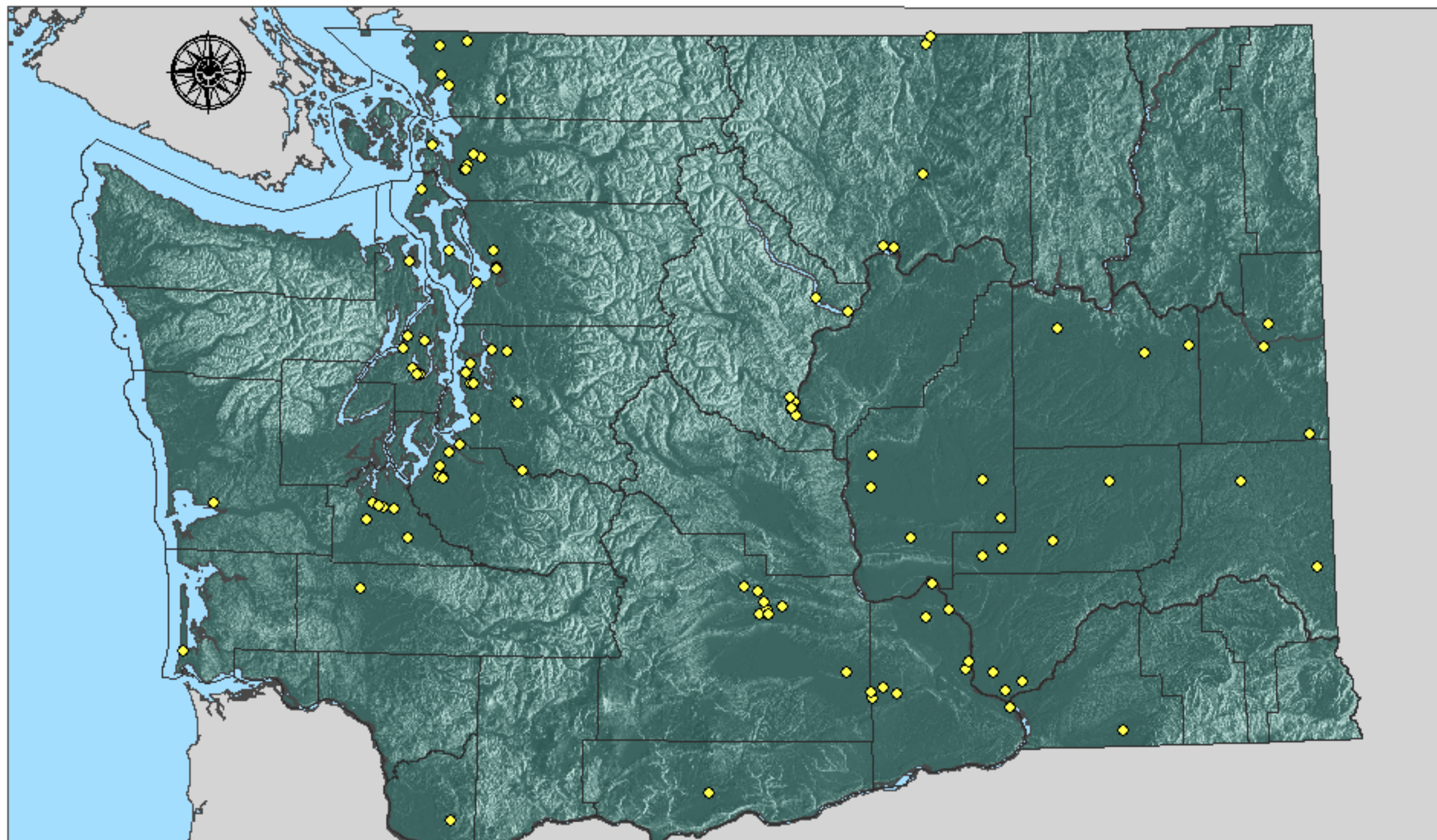
Pesticide Contaminated Sites (183) Through 2004

Washington Department of Ecology
Toxics Cleanup Program



Active Pesticide Contaminated Sites (125) Through 2004

Washington Department of Ecology
Toxics Cleanup Program



Data displayed in this map relate to sites in the Facility Site database that have pesticides as a recorded contamination group. 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 October 2005. 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.

Legend

- ◆ Confirmed Pesticide Site

Appendix F

PIRT Letter to WSDA



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY
7171 Cleanwater Lane, Building 4 — P.O. Box 47825— Olympia, Washington 98504-7825
TDD Relay Service (800) 833-6388

November 10, 2005

Dannie McQueen
Washington State Department of Agriculture
Post Office Box 42560
Olympia, Washington 98504-2560

MODIFICATION OF THE GENERAL PESTICIDE RULES, WAC 16-228

Dear Ms. McQueen:

The Washington State Pesticide Incident Report and Tracking Review (PIRT) panel recommends adoption of the proposed modification to the General Pesticide Rules, WAC 16-228. The proposed changes require notification of the application of pesticides via aerial, airblast, fumigation (outside) or overhead chemigation applications when the application site and the property boundaries touch and the application is within one half mile of schools, hospitals, nursing homes, adult and child day care centers.

The PIRT panel recognizes that pesticide drift is a potentially serious route of exposure to pesticides. Pre-notification of schools, daycares, and hospitals will increase their awareness of highly toxic pesticides used nearby, facilitate feedback to the growers about the timing of planned applications, and will expedite protective actions if drift occurs. While the proposed modifications to the General Pesticide Rules do not restrict applications of pesticides near sensitive sites or otherwise prevent drift, they are an important and welcome change.

We also note that others could benefit from notifications including: adjacent homes, assisted living facilities, senior centers, preschools, private schools, community pools, parks, dialysis centers and medical clinics.

This recommendation was supported by a vote of the PIRT panel members in November 2005.

Sincerely,

Maryanne Guichard
Chair, PIRT Panel
Signed on behalf of the PIRT panel

Appendix G

DOH Comments on Metam-sodium



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
 OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY
 7171 Cleanwater Lane, Building 4 — P.O. Box 47825— Olympia, Washington 98504-7825
 TDD Relay Service (800) 833-6388

October 20, 2005

Office of Pesticide Programs
 U.S. Environmental Protection Agency
 Ariel Rios Building
 1200 Pennsylvania Ave, NW
 Washington D.C. 20460-0001

Attention: Docket ID number OPP-2005-0125

RE: Public comments for the metam-sodium docket

Washington State Department of Health conducts illness surveillance on pesticide-related illnesses. State law requires primary physicians to report suspected and known cases of pesticide-related illness. We also receive referrals from the Washington Poison Center, other state and local agencies, and individuals. Since 1990, our program has investigated over 5,000 reported cases of possible pesticide illnesses/injuries. Not all cases were considered related to pesticides upon investigation. Data from investigations are published annually and used by state agencies and community groups to guide prevention efforts. Details about data collection methods and incident data are available at our website <http://www.doh.wa.gov/ehp/ts/PEST.HTM>.

Fumigant products have long been of concern to DOH staff. Although the proportion of cases involving fumigants is not large (4 percent in a recent 5 year period), fumigant-related illnesses can be severe, long-lasting, and can involve large numbers of people.

WDOH Pesticide Illness Surveillance Data, 2000-2004

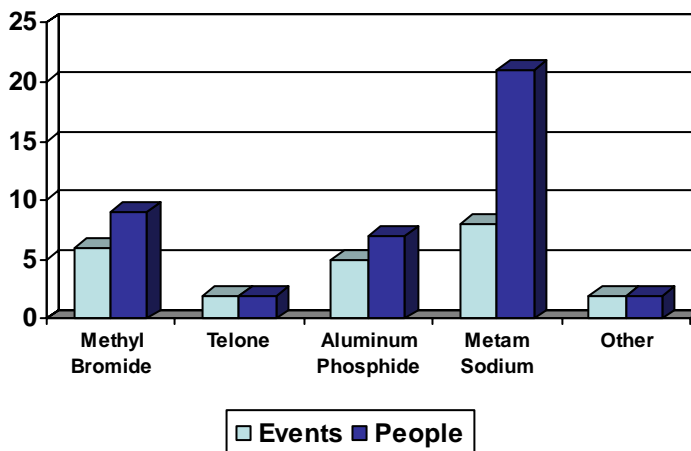


Figure 1 shows the specific fumigant involved in 41 fumigant cases¹ investigated in 2000-2004 in WA.

¹ 41 cases of illness or injury considered definitely, probably or possibly related to fumigant exposure. The 41 people were involved in 23 separate events.

Metam-sodium is the fumigant most frequently involved in reported cases. WA State does not have pesticide-use reporting so we are unable to calculate the risk of illness per application for separate fumigant products. Metam-sodium may be reported more because it is used more than other fumigants.

Our program has compiled two reviews of metam-sodium cases. The first was published in the journal *Clinical Toxicology*² and summarized all fumigant cases from 1992-1996. The second summarized cases 1994-2001 and was sent to the Health Effects Division, Office of Pesticide Programs, EPA in November 2003 at the start of metam-sodium's re-registration process. This second review is attached for your convenience. For this comment period, we updated the case review with a spread sheet of 12 metam-sodium events involving 34 people investigated 2000-2004. Investigation of metam-sodium cases in WA reveals that there are worker protection issues as well as community drift issues with this fumigant.

Occupational Exposures:

A review of our documented illnesses involving metam-sodium fumigation shows that exposures to pesticide handlers fell into four categories:

- The worker did not understand the hazards of the product,
- the worker did not have adequate respiratory protection,
- the worker was over-exposed because of equipment failure,
- the worker was over-exposed despite following label directions.

Several cases occurred when a pesticide handler drenched their clothing or leather boots with metam-sodium, and continued working. They did not understand they were at risk for skin burns. They also must also know how to decontaminate. For instance, one worker tried to decontaminate his drenched leather boots with water. This allowed the rapid conversion of metam-sodium to the fumigant, MITC, and led to first and second degree burns on both feet.

Respirators are required and normally worn by metam-sodium handlers. Unfortunately, workers have become ill when these respirators were not fit-tested to ensure an adequate seal of the face. Another worker was in an enclosed cab but smelled the chemical. Investigation revealed that the cab had only a simple air filter. Employers must ensure that respirators are fit-tested and worn properly. Handlers need to be aware that if they smell the product they must stop and check their respirator.

Several incidents occurred when hoses burst. Workers must wear goggles and skin protection when working around pressurized equipment. Accidental exposure during these incidents caused eye injury and burns to the face.

² Burgess, JL; Morrissey B; Keifer, KC; and Robertson, WO (2000) Fumigant-related illnesses: Washington State's five-year experience. *Clinical Toxicology* 38(1) 7-14.

Several cases of illness occurred despite apparent compliance with the label. The first two may reflect dermal sensitization to MITC. EPA should consider that some MITC may be produced during the application and that their glove recommendation for handlers should protect against metam-sodium and MITC. If a specific glove type is necessary, the label should provide the more specific glove recommendation.

940576 – Applicator had eye irritation and skin burns after his shift checking the pumping station during metam-sodium chemigation of a potato circle. Applicator noted that he wears rubber gloves but has similar reaction every year he conducts fumigation.

010201 – Applicator had dermal symptoms, wheezing and eye irritation after 4 days of soil fumigation with PPE. DOH Investigation could not confirm that all PPE was worn properly but no violations were identified.

020005 – Handler finished his night shift monitoring a chemigation and fell asleep in private truck parked 100 ft from the field. He awoke to a strong smell and suffered respiratory symptoms for 6-8 weeks. There was no inversion at the start or during the application; however, an early morning inversion developed holding the fumigant close to the ground.

Community exposures

Strong smelling volatiles from metam-sodium soil fumigations can drift to surrounding communities during or after the application and cause irritant symptoms. There is some evidence from CA incidents that persistent respiratory effects are also possible following community exposures³. In WA, most drift exposures involving metam-sodium are from chemigation methods.

Cases reported to WDOH generally do not involve direct drift of chemigation water. This doesn't mean this type of exposure is not occurring; only that acute illnesses are not resulting or if they are, are not being reported. In fact, there are many anecdotal stories of receiving a free "car wash" when the overhead sprinklers of a central pivot system spray onto the road.

Metam-sodium drift incidents reported to WDOH usually involve drift of methyl isothiocyanate (MITC) and other volatiles after completion of the application. The largest incident reported in WA involved drift from a crop circle to an industrial facility where 17 employees were sent home. Nine employees participated in the WDOH investigation and were considered probable or possible cases. This case occurred when a weather inversion developed in the early morning hours and volatiles from the recently chemigated field drifted to a neighboring building. Another case involved police officers making a routine traffic stop next to a field being chemigated. They did not feel spray or mist but they did report a strong smell and subsequent symptoms.

Office of Pesticide Programs

U.S. Environmental Protection Agency

October 20, 2005

Page 4

Issues:

Definition of drift. It is important that the EPA definition of metam-sodium drift includes drift of MITC volatiles leaving the site after fumigation. Drift of MITC volatiles must be regulated and violations enforceable.

³ CDPR (2002) Evaluation of methyl isothiocyanate as a toxic air contaminant, Part C – Human Health Assessment. Prepared by the Medical Toxicology Branch, DPR, California EPA TAC-202-01C August 26, 2002.

Measuring exposure to MITC during illness incidents. MITC is a gas and is present in air. Presently WSDA, the main agency enforcing EPA rules against pesticide drift, does not have air sampling equipment. This means that when an incident occurs, they must document the drift with visual observations and other methods. Air sampling would allow for better investigation of drift complaints. It would also aid in the human health investigations.

Investigating and mitigating community inhalation hazard. DOH is concerned with reported air monitoring data from CA⁴. These data show that air levels of MITC in agricultural communities exceeded levels of human health concern. Lee et al. (2002) reported that exposure estimates for MITC exceeded health-based reference values for 50 percent of the population in the monitored areas. This report from the California Department of Health Services, ranked MITC as one of the top pesticide air pollutants in CA⁴. Washington growers tend to use chemigation methods rather than shank injection. Chemigation is associated with more off-gassing of MITC⁵. Washington State does not currently conduct community air monitoring to pesticides and therefore can not evaluate whether similar exceedences are occurring in WA.

We encourage EPA to assess and mitigate potential inhalation hazard in communities living near fumigated fields. We urge EPA to collect and use data from Washington rather than rely solely on Florida or CA data. Washington State is second to CA in the amount of metam-sodium applied annually. WA air data will ensure that fumigation practices, soil type, and weather patterns unique to WA are included in the model and that WA residents are protected by EPA risk assessments.

Thank you for the opportunity to comment.

Barbara Morrissey, MS
 Toxicologist,
 Pesticide Program: Illness Monitoring and Prevention

Illness/injury incidents involving metam-sodium, 2000- 2004, Washington

Brief summary of pesticide illness investigations conducted by the Washington Department of Health, Pesticide Program For definitions of DOH determinations go to: <http://www.doh.wa.gov/ehp/ts/Pest/pest-illness-investigation.htm#Howclassifycases>

DOH#	Mo/Year (exposure)	County	Product	DOH determination	Narrative
000186	May 2000	Yakima	Vapam	Probable	A 33 year old worker was applying Vapam to hops by hand-held gun attached to truck mounted tank. He was wearing leather boots and no chemical resistant PPE. He splashed liquid on boots and continued working. He developed contact dermatitis on his feet and sought medical care.

⁴ Lee S et al. (2002) Community exposures to airborne agricultural pesticides in California: Ranking of inhalation risks. *Environmental Health Perspectives* 110 (12): 1175-1184.

⁵ Sullivan DA et al. (2004) Control of off-gassing rates of methyl isothiocyanate from the application of metam-sodium by chemigation and shank injection. *Atmospheric Environment* 38:2257-2470.

000308	November 2000	Franklin	Vapam HL	8 Probable 1 Possible	At least nine employees of an industrial facility complained of symptoms after three crop circles adjacent to their building were chemigated. Symptoms included nausea, headache, and burning in eyes and throat. Two employees sought health care.
010208	October 2001	Grant	Metam CLR 42%	2 Possible	Two male police officers developed ocular and respiratory symptoms after parking next to potato circle that was being chemigated. Officers were parked on side on main highway for 30 minutes during a routine traffic stop. Both sought medical care. Two other officers also had symptoms but could not be reached for interview.
010201	November 2001	Grant	Metam-sodium (could not confirm exact product name)	Probable	A 19 y/o male applicator reported he had been applying a soil fumigant for several days. He developed respiratory, ocular, and dermal symptoms and sought medical treatment two days later when symptoms did not resolve.
020005	2002		Sectagon 42	Probable	A 24 year old licensed applicator and chemigation specialist developed respiratory problems after monitoring a chemigation for 17 hours. He wore PPE during his shift but fell asleep in his truck 100 ft from the field after his shift. An inversion developed and he awoke to strong fumes in the truck. Symptoms continued for 6-8 weeks.
020236	September 2002	Franklin	Sectagon 42	Suspicious	A 34 year old female grape harvester became ill while harvesting grapes. Patient claims respiratory distress may be from an application 1/4 to 1/2 mile away. A soil fumigant was being applied to a potatoes crop circle by chemigation.
030271	October 2003	Franklin	Sectagon 42	Definite	A 41 year old male working for a chemical distributor spilled fumigant onto his boots when transferring the product to a field tank. He rinsed with water which activated the product and caused burns to both feet. He sought medical care for dermal symptoms.
030280	October 2003	Grant	Vapam HL Soil Fumigant	4 Possible	A family, ages 63, 29, 23 yrs, and 11 mos. developed respiratory symptoms after they smelled vapors from a potato chemigation with metam-sodium. Field was 250 ft from the house. One person sought medical care. WSDA surface wipe samples on the complainant's property were negative for deposited residues.

040211	April 2004	Grant	Metam CLR 42%	2 Probable	Two male irrigation district workers (41 and 63 y/o) developed respiratory symptoms when they walked in an area where a fumigant was being illegally dumped. They did not seek medical treatment. WSDA tests were positive for residues of the product. Dumping was investigated by WSDA.
040223	August 2004	Walla Walla	Vapam (specific product not confirmed)	Insufficient	A 36 year old female went to the ER for dermal symptoms. Apparently patient had obtained the pesticide from a neighbor and was using it for weed control when she spilled it on herself. Unable to verify details with patient.
040277	October 2004	Franklin	Vapam HL Soil Fumigant	Insufficient	On 10/01/04, a 49 year old male delivery driver for chemicals went to the hospital for a dermal reaction on his hands. He had been handling a fumigant and wearing rubber gloves. The worker believes it is allergic reaction to the rubber gloves. Patient was discharged with treatment for contact dermatitis.