2000 - 2001 Annual Report

## **Pesticide Incident Reporting and Tracking** (**PIRT**) **Review Panel**

April 2002

(Includes Agency Data for 1995-1999)



Environmental Health Programs DOH 334-293 April 2002 2000 - 2001 Annual Report

## **Pesticide Incident Reporting and Tracking (PIRT) Review Panel**

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

April 2002



Environmental Health Programs Office of Environmental Health and Safety P.O. Box 47825 Olympia, Washington 98504-7825

Contact: Lynden Baum, Manager Pesticide and Surveillance Section Toll Free: 1-877-485-7316 Email: www.doh.wa/gov/pesticidecontact

## Page Contents

- 1 **Executive Summary**
- 3 Introduction
- 4 Actions on 2000 Recommendations of the PIRT Review Panel
- 5 Recommendations to the PIRT Review Panel and involved Agencies'
- 5 PIRT Activities
- 7 1999 Agency Summaries of Pesticide Incidents
- 8 Washington State Department of Agriculture
- 15 Department of Ecology
- 15 Department of Fish and Wildlife
- 16 Department of Health
- 27 Department of Labor and Industries
- 33 Washington Poison Center

## Appendices

- A Pesticide Incident Reporting and Tracking (PIRT) Review Panel:
  - RCW 70.104.070-090
  - List of PIRT Panel Members
  - Pesticide Incident Definition
  - Agency Roles and Responsibilities
  - Agency Response Time Mandates
- B PIRT Agendas
- DOH Relationship Classifications
  - DOH Severity Index
- D Agency Data Summaries:
  - Washington State Department of Agriculture
  - Department of Health
  - Department of Labor and Industries
- E WSDA Pesticide License Types

## **Executive Summary**

This is the tenth annual report of the Pesticide Incident Reporting and Tracking Review Panel (PIRT Review Panel). It describes the activities of the panel for the year 2000 and presents and evaluates pesticide incidents reported to four state agencies: Washington State Departments of Agriculture (WSDA), Ecology, Health (DOH), Labor and Industries (L&I), plus the Washington Poison Center (WPC) in 1999. At the request of the PIRT Review Panel this report includes data and inferences from a five-year analysis of pesticide incidents reported for the years 1995-1999.

In accordance with the PIRT Review Panel's legislative mission, response times were tracked for complaints filed with DOH, L&I and WSDA. The agencies are meeting their mandates by responding to most human health cases within 24 hours.

The following summarizes key points identified from the analysis of pesticide incident data.

## Washington State Department of Agriculture (WSDA)

For the years 1995-1999 WSDA investigated 1,110 pesticide-related complaints. Over the five years, the annual number of complaints reported and investigated decreased but the number of violations resulting from those complaints remained relatively constant. Approximately half of all complaints reported to WSDA resulted in one or more violations. The greatest number of cases with violations occurred in the agricultural environment and involved commercial applicators. Drift and human exposure continue to be the primary reasons for pesticide-related complaints. Eighty percent of WSDA complaints investigated since 1996 were rated as two or less on a severity scale of zero to six. In 1999 WSDA investigated 192 complaints. The most serious complaints involved bee kills, animal poisoning, plant damage and human exposure.

## Washington State Department of Ecology

For the years 1995-1999 Ecology investigated 170 incidents involving pesticides. Counties reporting the most complaints were Yakima and King. The majority of these complaints involved spills or other accidental releases to the environment.

## Washington State Department of Health (DOH)

From 1995 through 1999, DOH investigated 1,818 pesticide incidents involving 2,246 individuals. Approximately half of the individuals were classified as having pesticide-related symptoms. These cases were determined to be definitely, probably or possibly related to the pesticide exposure. Ninety-seven percent were classified as having a medical outcome of mild or moderate severity. Approximately half of the cases occurred in the agricultural environment. The majority of agricultural cases occurred in the production of tree fruit. Eye irritation was the most frequently (55%) reported health complaint. Most occupational incidents resulted from applicator exposure or pesticide drift. Occupational non-agricultural cases occurred primarily in office buildings and were of mild severity with eye irritation the most prevalent symptom reported. Non-occupational cases occurred most frequently in and around the home. The number of incidents reported to DOH since 1995 decreased. However, the number of individual cases determined to be pesticide related remained approximately the same, except for a decrease in 1999. In 1999, DOH investigated 271 incidents involving 332 individuals, and 140 of these were pesticide related.

### Washington State Department of Labor and Industries (L&I)

From 1995 through 1999, L&I conducted 156 pesticide-related safety and health investigations and 1,154 worker claims involving pesticides were referred to DOH for investigation. While the number of health and safety investigations remained approximately the same over the five-year period, the number of pesticide-related claims decreased by 25 percent. The greatest number (70%) of agricultural pesticide-related claims result from work in the tree fruit industry. In the non-agricultural environment the greatest number of pesticide-related claims came from the office environment.

From 1995 through 1999, fifty-four percent of the pesticide-related claims were confirmed by a health care provider. Since 1996, there has been an increase in the percentage of accepted pesticide-related claims. L&I pays the initial diagnostic and evaluation costs of worker compensation claims regardless of the final decision. In 1999, L&I conducted 37 pesticide-related investigations and 12 of these had serious violations.

### Washington Poison Center (WPC)

In 1999, the WPC responded to 2,523 calls involving pesticide exposures. This reflects approximately 2 percent of the total number of calls received by WPC. Since 1995, there has been a 25 percent reduction in the number of pesticide-related calls and a 54 percent decrease in the number of calls with moderate or major health effects. Insecticides continue to be the type of pesticide most frequently involved (64%).

## Introduction

The PIRT Review Panel was created by RCW 70.104.090 (Appendix A). Its membership consists of representatives of six state agencies, the University of Washington, Washington State University, the Washington Poison Center (WPC), a practicing toxicologist and a member of the public.

By statute, the PIRT Review Panel is mandated to perform the following activities with regard to pesticide-related incidents that have suspected health or environmental effects:

- Centralize the receipt of information regarding pesticide complaints and their investigations and monitor timeliness of agencies' response to complainants.
- Identify inadequacies in pesticide regulations that result in insufficient protection of public health.
- Submit an annual report summarizing pesticide incidents to the legislature.

Each agency conducts pesticide incident investigations in accordance with its specific statutory responsibilities (Appendix A) and reports findings to the PIRT Review Panel for evaluation and inclusion in the annual report. The PIRT Review Panel has no regulatory authority but acts in an oversight capacity to the six agencies and makes recommendations to the agencies, to the legislature or to the federal Environmental Protection Agency.

This report describes activities of the PIRT Review Panel and its recommendations for 2002. It also contains a review of the WSDA, DOH, Ecology, and L&I pesticide-related complaints and the WPC calls for 1999, and provides analyses of each agency's incident data from 1995 through 1999. Each agency review describes the most frequent causes of reported pesticide exposure and identifies risk factors for consideration by training and education programs.

## Activities of the Pesticide Incident Reporting and Tracking Review Panel

The PIRT Review Panel met seven times in 2000 and 10 times in 2001. The panel monitored each agency's response time to calls on complaints, monitored actions stemming from recommendations made in the prior PIRT Review Panel Annual Report, analyzed incident data to identify trends and patterns of problems related to pesticides, and responded to requests for special activities from the members.

## **Response Times**

RCW 70.104.080 specifically directs the PIRT Review Panel to monitor agency response time to pesticide-related complaints. Response time is defined as the interval between initial receipt of a complaint and an agency's first response to the complainant. The first notification is usually by telephone, followed by a personal contact. In 1999, WSDA responded to 94 percent of all complaints within 24 hours; DOH responded to 95 percent of complaints within 48 hours; and, L&I responded to the majority of complaints within 30 days. The three agencies have different mandates for response times (Appendix A).

## Actions on 2000 Recommendations of the PIRT Review Panel:

- Prepare a five-year analysis of incident data. Action: The five-year (1995-1999) data analysis of reported pesticide incidents is included in this report. The number of reported pesticide incidents appears to be declining, however the number of incidents resulting in a WSDA "violation" and the number of incidents determined to be actually pesticide related by DOH has remained relatively constant over the five years. Overall, the severity of clinical symptoms remained of mild to moderate severity.
- Identify risk factors for the agencies to incorporate into their training and education programs.

Action: The PIRT Review Panel identified risk factors from the five-year incident data analysis. The factor "off target drift" continues to be a primary source of exposure. Eye irritation from occupational exposure is the most commonly reported health complaint.

- Review agency data for active ingredients involved in pesticide incidents. Action: The panel reviewed data for active ingredients involved in incidents. No clear pattern could be established from incidents resulting in the more severe human incidents. Over the 5 years, the pesticides most frequently involved in incidents investigated by WSDA were: 2,4-D, Dicamba, Glyphosate, Azinphos-methyl, and Diazinon.
- Review a sample of pesticide labels involved in incidents to determine if instructions were adequate to have prevented the accident had they been used according to the label. Action: The PIRT Review Panel reviewed WSDA and DOH cases occurring in commercial establishments. A review of seven WSDA cases found that adverse outcomes generally occurred for applications made when people were present. Label messages were ambiguous and did not clearly advise that persons other than the applicator were to 'vacate the premise'. DOH had reports of 88 incidents that occurred in commercial establishments. The DOH review of the product labels was inconclusive because the incidents involved many different products, exposure scenarios were diverse, and the data system could not provide the specificity needed to address if directions on the label were followed correctly. The panel continues to address the issue.
- Prepare revisions to RCW 70.104.070-090 to more accurately address pesticide issues of concern to the public, and to reflect activities of the PIRT Review Panel.
   Action: The panel reviewed the PIRT Panel statute, RCW 70.104.070-090 and noted where revisions were needed. The panel will draft proposed revisions for introduction to a future legislative session.
- Identify agency activities regarding urban pesticide use.
  Action: This was an agenda item at several PIRT meetings in 2000 and 2001. Information was shared and communication increased between the agencies. The panel will carry this recommendation into next year's work plan.

## Recommendations to the PIRT Review Panel and the involved Agencies' staff:

- Further assess the 5-year incident data and identify possible prevention measures.
- Each agency improve its process and timeline for submitting analyses of incident data for the PIRT Review Panel annual report.
- Each agency continue its appraisal of pesticide use outcomes in urban areas.
- The PIRT Review Panel and the agencies seek how to capture better information about why the incident actually occurred.
- Both PIRT Review Panel and the agencies direct additional attention to the adequacy of the product label wording.
- Prepare draft legislation to modify RCW 70.104

## **Other Activities of the PIRT Review Panel**

## Pesticide Use Reporting-Other States' Experiences

On October 20, 2000 the PIRT Review Panel held a joint meeting with the WSDA Pesticide Advisory Board in Lacey, WA. At that meeting representatives from Oregon and California briefed the attendees on the status of pesticide use reporting for their states. California has had an extensive use reporting system since 1990. Information collected includes: location, date, crop, pesticide, strength and application rate, and applicator. The data are used widely to estimate exposure rates. Oregon's program is being developed with the goal of implementation by 2002.

## Gypsy Moth Eradication-Use of Btk

In May 2000, WSDA contracted for the aerial application of Foray 48B to 725 acres of residential Seattle to prevent infestation of the Asian gypsy moth (AGM). Foray 48B, which contains *Bacillus thuringiensis kurstaki* (Btk), a naturally occurring agent of disease in caterpillars, was applied in the neighborhoods of Ballard and Magnolia. Simultaneously, DOH surveillance yielded reports of 59 persons in 50 households with at least one health "symptom" occurring after aerial spraying. Fourteen individuals from eight households sought some type of health care. The most frequent health complaints were: cough, headache, trouble breathing, sore throat, nasal congestion, and irritated eyes. The estimated population in the spray area was 6,600. Foray 48B was also used in ground applications to control European gypsy moth in Covington and Marysville. In May 2001, ground applications were made to a 29-acre site in Vader, WA for European Gypsy moth. No complaints were reported. It was recommended that future WSDA programs continue wide and early notification and provide public access to scientific documentation.

## National Evaluation of the Worker Protection Standard (WPS) Worker Training

Alice Larson briefed the Panel on the EPA evaluation of the effectiveness of the WPS as a means to reduce the risk of pesticide poisoning and injury among workers and pesticide handlers. The process involves representatives from farmworkers, growers, state agencies and federal representatives, etc. Preliminary findings cover whether training is happening, barriers to the training, how to make the training more effective, and effective training verification systems.

Table 1 summarizes 1999 pesticide-related incidents for each agency submitting data, and data from the Washington Poison Center. The incident data from each agency are described and evaluated in the following sections. Individual incident descriptions are found in Appendix D. Because of specific statutory responsibilities, incidents may be reported and investigated by more than one agency.

Department of Agriculture: 192 complaints.			
Complaints Violations <b>Location of complaint</b> : Eastern Washington Western Washington	<b>192</b> 101 <b>192</b> 151 41	<ul> <li>Violations by Type of Activity</li> <li>Agriculture</li> <li>Commercial/industrial</li> <li>PCO/WDO</li> <li>Residential (homeowner)</li> <li>ROW</li> <li>Other (license/records)</li> </ul>	<b>101</b> 50 19 11 10 1 10
<ul> <li>Enforcement Actions</li> <li>No Action Indicated</li> <li>Notice of correction</li> <li>Notice of Intent/Admin action</li> <li>Technical assistance/verbal warning</li> <li>Advisory letter/Warning letter</li> <li>Referred</li> </ul>	<b>192</b> 91 64 20 5 10 2	<ul> <li>License Involved with Violations</li> <li>Commercial</li> <li>Private Applicator</li> <li>Unlicensed</li> <li>Public operator</li> <li>Commercial Consultant</li> <li>Other</li> </ul>	<b>101</b> 50 25 13 6 6 1
Department of Health: 271 incidents involving	332 indiv	idual cases.	
<ul> <li>Type of Incident</li> <li>Agriculture</li> <li>Residential</li> <li>Commercial/industrial</li> <li>Other</li> <li>Childhood Cases ≤ 18 years old</li> <li>Definite, probable, or possible</li> </ul>	<b>271</b> 155 57 25 34 <b>44</b> 14	Relationship to Exposure for casesDefinite26UnrelatedProbable53AsymptomaticPossible61UnknownUnlikely66Definite, Probable, or Possible CasesNon agriculturalAgriculture	<b>332</b> 35 27 64 <b>140</b> 72 68
Department of Labor & Industries: 37 Industri Safety and Health Act (WISHA) complaints	rial	Department of Labor & Industries: 183 wo compensation claims.	rker
<ul> <li>Pesticide Related Inspections <ul> <li>Citations</li> </ul> </li> <li>Type of Business <ul> <li>Orchard</li> <li>Vegetable crops/berries</li> <li>Other (e.g., bulb warehouse, hops, golf courses)</li> </ul> </li> </ul>	<b>37</b> 30 16 7 5	<ul> <li>Worker Compensation Claims</li> <li>Agriculture</li> <li>Non Agriculture</li> <li>Benefits</li> <li>Accepted</li> </ul>	<b>183</b> 130 53 118
<ul> <li>Greenhouses/nurseries         <ul> <li>Hay fumigation</li> <li>Structural pest</li> </ul> </li> <li>Washington Poison Center: 2,523 calls</li> </ul>	5 2 2	<ul><li>Rejected</li><li>Claim pending</li><li>Kept on Salary</li></ul>	63 1 1

## Table 1 1999 Agency Summaries of Pesticide Incidents

## Washington State Department of Agriculture

#### 1995-1999 Summary

From 1995 though 1999, the Washington State Department of Agriculture (WSDA) investigated 1,110 reported complaints involving pesticide use, sales, distribution, applicator licensing, and building structure inspections for Wood Destroying Organisms (WDO). Forty-seven percent (518) resulted in violations of WSDA rules and regulations (Table 2). During this time period WSDA saw a 26 percent reduction in the number of complaints reported.

### 1999 WSDA Complaint Investigations

In 1999, WSDA investigated 192 complaints (6 percent reduction from 1998) and 101 (53%) resulted in one or more violations. After investigation, it was found that 162 (84%) involved pesticide applications and 83 (51%) of these resulted in violation, and 30 (16%) were complaints such as licensing that were unrelated to actual pesticide applications with 18 (60%) of these resulting in violation.

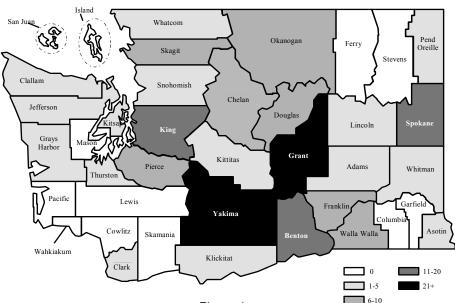
WSDA is required to respond to cases of human exposure within 24 hours of receipt. Investigation begins on non-human exposure cases as soon as resources allow, generally within 2-3 days. In 1999, WSDA responded to 94 percent of all complaints within 24 hours. All human exposure responses were made within 24 hours except for one case where the wrong contact information was provided.

#### Location

One hundred fifty-one (79%) of the 1999 complaints occurred in eastern Washington; 41 (21%) were from western Washington. The ten counties reporting the most complaints were: Grant (29), Yakima (26), Spokane (18), Benton (17), King (14), Chelan (9), Pierce (8), Walla Walla (8), Franklin (7) and Okanogan (7).

Table 2	WSDA Complaints					
and Violations						

Year	Total Complaints	Violations Found
1995	259	87 (34%)
1996	251	104 (41%)
1997	204	110 (54%)
1998	204	116 (57%)
1999	192	101 (53%)



#### 1999 WSDA Complaints by County

Figure 1

From 1995-1999, the counties with the most complaint investigations were Yakima (128), Spokane (119), Grant (111), King (92), Benton (50), Pierce (50), Skagit (39), Snohomish (21), and Chelan (19.)

Table 9 WODA Counties with the most complaint investigations 1990 – 1995									
1995		1996		1997		1998		1999	
Spokane	37	Spokane	26	Grant	24	Yakima	28	Grant	29
Yakima	27	King	25	Yakima	22	Grant	26	Yakima	26
King	19	Yakima	25	King	20	Spokane	20	Spokane	18
Skagit	17	Grant	16	Spokane	18	King	14	Benton	17
Grant	16	Whatcom	14	Pierce	13	Benton	13	King	14
Pierce	16	Pierce	13	Benton	10	Chelan	10	Chelan	9
Benton	14	Skagit	13	Skagit	9	Okanogan	10	Pierce	8
Snohomish	12	Clark	11	Snohomish	9	Whitman	10	Walla Walla	8
Walla Walla	12	Benton	10	Okanogan	8				

## Table 3 WSDA Counties with the most complaint investigations 1995 – 1999

## Type of Activity Involved in Complaints

Table 4 below shows the type of activities involved in the complaints that resulted in violations from 1995 to 1999. The following WSDA definitions apply to type of complaint.

- Agricultural: Incidents occur in an agricultural environment such as farming, forestry, greenhouses, or Christmas tree farming.
- **Commercial/industrial:** Incidents by licensed operators 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 pest conditions. 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: WSDA code for undefined use and includes licensing, storage, registration, records, and similar actions.

Table 4 1995 – 1999	WSDA	violat	ions b	у гуре	OT ACT	ivity
Activity	1995	1996	1997	1998	1999	Total
Agricultural	26	29	40	54	50	199 (38%)
Commercial/Industrial	24	27	22	22	19	114 (22%)
PCO/WDO*	28	20	24	8	11	91 (18%)
Residential (non commercial)	3	9	8	7	10	37 (7%)
Right-of Way**	**	3	10	12	1	26 (5%)
Other (licenses, records, etc.)	6	16	6	13	10	51 (10%)
Total Violations	87	104	110	116	101	518

Table 4 1995 – 1999 WSDA Violations by Type of A
--

\*In 1996, Wood Destroying Organisms were included with Pest Control Operators. \*\* Prior to 1996, right-of-ways were included with commercial/industrial. When violations are evaluated by type of license involved for the five-year period, commercial applicators accounted for 270 (52%) of the violations, private applicators accounted for 94 (18%), public operators accounted for 33 (6%), commercial consultant accounted for 17 (3%), unlicensed accounted for 92 (18%), and other accounted for 12 (2%) (Table 5). (See Appendix E for definition of license types).

	1995	1996	1997	1998	1999	Total
Commercial (application for fee)	51	61	57	51	50	270 (52%)
Private applicator (application to own property)	12	12	15	30	25	94 (18%)
Public operator (application to public property)	4	2	10	11	6	33 (6%)
Unlicensed (general use, homeowner)	16	25	22	16	13	92 (18%)
Commercial Consultant	4	4	3	-	6	17 (3%)
Other	-	-	3	8	1	12 (2%)
Total complaints with violations	87	104	110	116	101	518

### Table 5 Type of License Involved in Cases with Violations

The 1999 data are consistent with prior years and reflect a continued increase in violations by commercial applicators and a decrease in violations by individual users holding private applicator licenses. It may indicate that more applications are being made by commercial applicators and fewer by non-commercial individuals as equipment and application techniques become increasingly more sophisticated and expensive and active ingredients more restricted in use.

In 1999, WSDA issued a total of 22,546 licenses. Over 50 percent of these were Private Applicator licenses (11,853) followed by Commercial and Public Operator licenses.

## Nature of Pesticide Complaint

Table 6 shows the type of complaints for 1995-1999. Drift exposure continues to be an area of concern with complaints resulting from pesticides allegedly moving off target. In 1999, 64 complaints involved drift, followed by human exposure (31), misuse (20), direct exposure (19), bee kills (14), Pest Control Operator/ Wood Destroying Organism (PCO/WDO) (11), records/license (5), disposal (5) and other (23).

Table 6 Type of Complaint 1995 – 1999							
Type of Complaint	1995	1996	1997	1998	1999	Total	
Drift	64	75	50	62	64	315	
Human exposure*			42	52	31	125	
WDO Inspection	30	32	23	10	11	106	
Direct	115	90	21	13	19	258	
License	21	19	14	12	5	71	
Misuse*			16	19	20	55	
Animal/bird kill*			10	7	0	17	
Bee kill*			8	12	14	34	
Water contamination*			6	4	0	10	
Disposal	6	6	3	2	5	22	
Other	23	29	11	11	23	97	
Total	259	251	204	204	192	1,110	

 Table 6
 Type of Complaint 1995 – 1999

\*Categories not specified prior to 1997

Drift and human exposure were the primary reasons for pesticide related complaints and illustrate the need for applicators to be consistently aware of the importance of not letting an application drift. Bee kills also generate a significant number of complaint investigations. Both drift and bee kill complaints may not be resolved, as the responsible applicator can be difficult to identify. In agriculture, pesticides applied to orchards, particularly apples, were most frequently involved in incidents that resulted in violation. A rising number of investigations concern drift to organic crops, with two cases in 1999 resulting in violation. This presents an interesting regulatory question as both the target crop and the organic crop may be on the label as approved for the type of produce, but the organic crop loses certification and therefore market value as organic if pesticide residues are present.

For non-agricultural applications, drift from lawn care companies and complaints about Wood Destroying Organism inspections generated the most complaints resulting in violations. For these cases, the complaints were about drift on the same type of site or about fraudulent inspections. Human exposure for non-agricultural applications was not as big an issue as for agricultural applications although they were still among the more frequent complaints.

Table 7 summarizes the cases WSDA cited for violation. Human exposure, animal exposure, bee kills and plant damage continue to generate complaints to the department. Many of these complaints remain unresolved, as the source of the pesticide application is unknown.

In 1999, WSDA was involved in ten cases concerning children. These were jointly investigated by DOH.

Agriculture		Non Agriculture		
Target Site				
Apples	12	Trees/Lawns/Ornamentals	16	
Cherries	5	Wood Destroying Organisms	11	
Wheat	4	Mosquitoes	4	
Seed Alfalfa	4			
Unspecified orchard	3			
Pears	3			
Potatoes	3			
Complaint Site				
Human Exposure	14	Trees/Lawns/Ornamentals	12	
Bees	6	Wood Destroying Organisms	10	
Vehicles	4	Property	4	
Grapes	4	Human Exposure	3	
Organic Crops	2	Vehicles	2	
Seed Alfalfa	2	Vegetable Gardens	2	

## Table 7 WSDA Comparison of the Most FrequentTarget and Complaint Sites 1999

## Severity of Reported Complaints

WSDA began rating severity of complaints in 1996. In 1999, the majority (78%) of complaints investigated by WSDA had a severity rating scale of two or less (Table 8). From 1996, the number of complaints rated between 1 and 6 remained relatively constant, however, the number of complaints rated "0" decreased over the four years. This indicates that the recently reported complaints were more likely to result in findings of violation.

Rating	1996	1997	1998	1999	Criteria
0	64	28	31	13	Problem not due to pesticides and/or no cause determined; PCO/WDO inspection with no violations.
1	71	67	62	65	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 "unknown."
2	79	64	70	72	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	22	30	31	24	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	11	8	9	15	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	4	7	1	3	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 Total	0	0 204	0 204	0 192	Human death due to pesticides.
Total	251	204	204	192	

## Table 8 Severity Rating of WSDA Complaint Cases 1996 – 1999

## WSDA 1999 Cases With Severity Rating of 4 or 5

In 1999, 15 cases investigated by WSDA were classified with a severity rate of '4'. One involved animals, nine involved bee kills, four were for plant injury and one was for a human exposure that resulted in hospitalization. Three WSDA investigations of animal deaths were classified with the severity rating of '5'.

## **Animal Deaths or Poisonings**

Three cases involving animals (two dogs died and one recovered) were due to poisoning with strychnine. The dogs were poisoned while on their owner's property. No source for the strychnine was determined for any of the cases. WSDA made a Stop/Sale order of strychnine at a local feed store where the store was unaware that strychnine even in Home & Garden packages is a restricted-use pesticide.

The third animal death was a hunting dog that died after coming in contact with phorate, a highly toxic insecticide, apparently in water from an irrigation ditch overflow-pond. The dog went into the water to retrieve ducks that had been shot. The dog's owners also reported feeling ill that evening. They had contact with the dog while trying to revive it and later in moving the animal. The incident was reported to WSDA approximately one month after it occurred and no source for the phorate could be determined. Phorate could have been used on sugar beets in the area but a records check could not determine a source and an analysis of the pond water after one month was negative. Analysis of the contents of the dog's stomach was positive for phorate.

WSDA could not take enforcement action on these four cases, as no responsible party could be determined.

### Bee Kills

In 1999, WSDA responded to nine cases of bee kills rated "4" for more than 25 hives lost. No action was taken on four of these cases, as no source for the insecticide residues could be determined; four cases were given a Notice of Correction (NOC), and one a Notice of Intent (NOI). The NOCs were issued for: failure to keep complete records; drift off site during application; and application made when bees were foraging (label violation). A NOI was issued for applying pesticide after 8 A.M. (WSDA rule - bees are foraging). The pesticides involved were primarily carbaryl and azinphos methyl.

### **Plant Injury**

Four cases involved injury to plants valued in excess of \$1000 and were rated "4". WSDA issued a NOC, two NOIs and no action was taken on one. The NOC was issued when Timothy hay was damaged after a dealer and consultant gave a wrong recommendation. The two cases given NOIs resulted in fines and license suspensions. One involved a lawn application of diazinon that drifted to a neighbor's organic garden. Diazinon residue was detected on the vegetables in the garden. The other case involved use of MCPA and glyphosate around ornamental plantings. MCPA was used over the recommended application rate and, contrary to label recommendations, was used within the drip line of the trees.

The Department took no action on one case involving contamination of sulfur with paraquat. Approximately six acres of grapes were sprayed with a sulfur/paraquat mixture. The sulfur source did not contain paraquat and deliberate contamination was suspected. Both products were available at the site, but it was unlikely that the applicator confused the containers when mixing. The case was referred to the police.

#### **Human Exposure**

One case was rated "4" for a human exposure. The applicator was given a Notice of Intent with a subsequent \$900 fine and a ten-day license suspension. This action was taken for making numerous applications without a pesticide applicator's license and for improper records. The applicator sprayed baythroid and acephate (insecticides) on the exterior and interior of a building used as a health care facility. The building was sprayed in the evening. Thirteen employees reported feeling ill when they came to work in the morning. One was hospitalized.

## **Type of Pesticide Involved**

In 1999, herbicides were involved in 69 complaints and insecticides in 67 complaints. Other products such as fungicides, disinfectants and rodenticides were involved less frequently. Many cases involved tank mixes of several products. The pesticides most frequently reported in complaints were 2,4-D, Glyphosate, Azinphos-methyl and Chlorpyrifos. These are commonly used products.

#### **Enforcement actions**

In 1999, the following corrective actions were taken: Notice of Correction (64), Notice of Intent/Fines/License Suspensions (20), Advisory Letter (10), Warning Letter (5), Referred to Other Agency (2), and No Action Indicated (91). On November 19, 2001, WSDA announced that it had issued civil penalties totaling \$6,050 against eight pesticide applicators and suspended seven pesticide applicator licenses for a total of 105 days.

	1995*	1996	1997	1998	1999
No Action Indicated	128	150	93	87	91
Technical Assistance		1	1	1	
Verbal Warning		14	11	5	5
Advisory letter/Warning letter		2	16	12	10
Notice of Correction		67	63	68	64
Notice of Intent /Administrative Action	131	15	18	30	20
Referred		2	2	1	2
Total Investigations	259	251	204	204	192

### Table 9 1995 – 1999 WSDA Agency Actions

\*Complete corrective action information for 1995 was not available. Warning letters and Notice of Intent were counted together prior to Revised Notice of Compliance Rules in 1995.

#### **Other Agencies Involved**

In 1999, WSDA consulted with other state, federal and local agencies, WSU and local authorities on 93 occasions. These included DOH (39), Ecology (18) and the EPA (7).

## Department of Ecology Five-Year Summary (1995-1999)

The Department of Ecology (Ecology) investigates complaints involving pesticide-related threats to air, water or soil. Other pesticide-related activities at Ecology focus on the prevention of releases, such as supporting the reduction of household pesticide use, improved storage and waste management of pesticides, environmental monitoring for pesticides in fish, sediments, soils, and ground water, and helping schools consider integrated pest management (IPM) strategies.

From 1995 through 1999, Ecology investigated 170 incidents involving pesticide releases. Ecology's Regional offices documented the following incidents: Eastern (50), Central (38), Southwest (54) and Northwest (28). Eastern Washington counties had the most incidents. Yakima reported 30 incidents, King (16), Spokane (14), Clark (13), Garfield (13), Grant (12), Pierce (11), and Thurston (11). Okanogan, Grays Harbor and Mason Counties each reported eight incidents. Snohomish and Franklin Counties had seven incidents, while the rest of the counties had four or less documented incidents. Examples of complaints reported to and investigated by Ecology include: spills or accidents occurring during transportation of product or waste, complaints about roadside herbicide spray applications and applications of pesticides at or near schools. Approximately 65 percent of the incidents were referred to the WSDA and less than 10 percent were referred to DOH.

## Department of Fish and Wildlife

The Department of Fish and Wildlife is mandated to preserve, protect and perpetuate fish and wildlife. Complaints involving kills of fish or wildlife are received primarily by the agency's Oil Spill Response Team (Spill Team). These reports usually come through Department of Community, Trade and Economic Development, Emergency Management Division (EMD), but can also be from private citizens. Overwhelmingly, the reports involve contaminants other than pesticides, or are brought about by natural die-offs or low dissolved oxygen levels in marine or fresh water. The EMD reports are given to Ecology.

## **Department of Health**

For more than a decade the Department of Health (DOH) has investigated suspected pesticiderelated illnesses. Health care providers are required to report incidents of illness associated with pesticide exposure. This report provides an analysis of the circumstances surrounding the exposure and resulting health effects of pesticide-related illnesses investigated by DOH from January 1, 1995 through December 31, 1999. During this time, DOH investigated 1,818 incidents involving 2,246 individuals for pesticide illness (Table 10). After investigation, 1,011 (45%) of individual cases were found to be related to the pesticide exposure and were classified as definite, probable, or possible (DPP). See Appendix C for Classification definitions.

	Investigated by DOH 1995 – 1999								
Year	Number of Incidents	Number of individuals involved	Number of definite, probable or possible Cases						
1995	396	500	213						
1996	398	500	233						
1997	363	439	212						
1998	390	475	213						
1999	271	332	140						
Total	1,818	2,246	1,011						

## Table 10 Annual number of pesticide incidents investigated by DOH 1995 – 1999

Table 11 shows the number of definite, probable or possible cases investigated in agricultural and non-agricultural settings from 1995 through 1999.

# Table 11 Annual NumberAgricultural and Non-Agriculturaldefinite, probable, or possible cases 1995 – 1999

Year	Agricultural	Non-Agricultural	Total Cases*
1995	90	123	213
1996	97	136	233
1997	92	120	212
1998	102	111	213
1999	68	72	140
Total	449	562	1,011

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

## Agricultural Pesticide Incidents 1995-1999

## Overview

From 1995 through 1999, DOH received reports of 1,162 individuals with suspected pesticiderelated illness occurring in the agricultural environment (992 occupational and 170 nonoccupational). These incidents occurred when the pesticide application was intended for an agricultural commodity including fruit, field crops, greenhouse, nursery, bulb farms, shellfish, and forest operations. DOH classified 449 as definite (98), probable (98) and possible (242).

DOH received the 449 agricultural pesticide-related cases from L&I (211), WPC (119), WSDA (70) from other sources (49). In addition:

- Seventy-eight percent of cases were male.
- Most (82%) received medical care for their illness: 204 at emergency rooms, 54 at physicians' offices, and 110 at walk-in clinics. Two were hospitalized. Eighty did not seek medical care.
- Eighty-four percent resulted from occupational exposure.
- Ninety percent of the workers were ages 18 to 49.

	Non-occupational cases* by age and sex									
Age	Occup	ational	Non-occu	Non-occupational						
Aye	Female	Male	Female	Male	Total					
0 - 5	0	0	1	4	5					
6 -11	0	0	2	6	8					
12-17	0	1	1	2	4					
18-29	27	132	3	1	163					
30-49	33	146	13	12	204					
50+	7	30	10	18	65					
Total	67	309	30	43	449					

## Table 12 Agricultural Occupational and<br/>Non-occupational cases\* by age and sex

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

The cases occurred in 28 of the 39 counties of Washington. The majority (88%) occurred in eastern Washington (Table 13). Most were from Yakima County (132), followed by Grant (62), Chelan (34), Franklin (34) and Okanogan (30).

#### Table 13 Agricultural Occupational and Non-occupational cases\* by Location, Eastern or Western Washington 1995 – 1999

	Occupational Non-occupational Tot					
East	334	59	393			
West	42	14	56			
	376	73	449			

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

The three principal types of exposure were:

- applicator/mixer/loader exposure,
- exposure to off target drift of pesticides, and
- exposure to pesticide residues.

## Pesticide exposure to applicator/mixer/loader

The largest number of pesticide-related cases occurred among individuals applying, mixing or loading pesticides (Table 14). DOH received 319 reports of suspected, pesticide-related illness involving applicators, mixers and loaders and 173 (54%) of these were considered definite, probable or possible cases. They included ground applications (122), miscellaneous uses (26), and mixing or loading (25). Of these cases, 103 (60%), occurred in the tree fruit industry, 46 (27%) occurred in field crops, and 24 (14%) occurred in other agricultural commodity groups.

Source/Activity	Occupational	Non- occupational	Total					
Applicator/mixer/loader	173	0	173					
Drift	95	56	151					
Residues	74	7	81					
Clean/fixing	10	0	10					
Fumigation field	4	1	5					
Accident	14	3	17					
Other	6	6	12					
	376	73	449					

 Table 14 Agricultural Occupational and Non-occupational

 Cases by Source/Activity 1995 – 1999

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

The following examples illustrate the pathways of exposure among pesticide applicators, mixers and loaders:

- Pesticide drifted under shirt collar onto neck during application.
- Applicator did not wear Personal Protective Equipment (PPE) when spraying.
- Applicator took off his PPE after spraying and had an asthma attack.
- Safety goggles were in poor condition.
- Applicator Wore PPE but removed goggles and rubbed eyes.
- Pesticide splashed in eye while spraying.
- Case used work shirt to wipe sweat from head causing skin irritation.
- Unlicensed applicator not wearing PPE developed conjunctivitis.
- Applicator developed severe skin burn to his foot by not wearing rubber boots.
- Applicator wore respirator but no goggles when applying to a grain bin. Developed severe eye irritation.

## Exposure to off target pesticide drift

From 1995 through 1999, 151 definite, probable or possible cases of agricultural pesticide illness were due to exposure to pesticide drift. Of these, 95 were occupational with 49 in fruit production, 40 in field crops, 4 in nursery and greenhouses, and 2 in livestock. Of the 56 non-occupational drift cases, 32 resulted from applications made to fruit, 14 to row crops, 7 to berries, and 3 to forests. The 95 occupational drift cases were classified as definite (14), probable (25), and possible (56).

The severity of symptoms reported by the 95 occupational drift cases was mild (39 (41%)), moderate (49 (52%)), and severe (7 (7%)). This compares to mild (63%), moderate (33%), and severe (4%) for all occupational agricultural cases. Descriptions of the seven severe drift cases follow:

- An aerial application to a potato field drifted onto three farmworkers who were tying apple trees. All three became ill.
- Two of seven apple orchard thinners developed severe symptoms following exposure to pesticide drift from an application to another orchard.
- An irrigation technician was exposed to pesticide drift from an aerial application. He was treated for organophosphate poisoning.
- Two field workers inadvertently walked into a field during an application. They were not wearing PPE. One became ill.

## Exposure to pesticide residues

From 1995 through 1999, there were 81 agricultural cases (classified definite, probable or possible) resulting from exposure to pesticide residues; 74 of the 81 were work-related. These occurred in the production of fruit (56), field crops (5), vegetables (4), nursery or greenhouses (11) and other (5).

Occupational exposure to pesticide residues was the most (394) frequently reported cause of agricultural pesticide illness, but only 19 percent of these illnesses were classified as definite, probable or possible. Ninety-eight percent of all occupational residue-caused cases sought medical attention and 61 percent of these were classified by DOH as unlikely or unknown. Although pesticide residue may be present hours to days after an application and can be in the air, soil, dust, or on vegetation, it may also be that the illness resulted from irritation by the foliage or branches, or was not work-related. The most common complaint of individuals exposed to residues is of a dermal and respiratory nature with the majority (78%) classified as mild to moderate severity. It is difficult for the health care provider to associate these mild to moderate symptoms with pesticide residues. For most cases prescriptive or over-the-counter medications will alleviate symptoms, but it often remains unclear as to whether the reported illness was pesticide-related or due to something else.

The following are examples of illnesses reported from exposure to pesticide residues *(examples are from all reported cases, not just definite, probable or possible cases):* 

- Farmworker thinning pear trees developed a rash and itching.
- Farmworker thinning apple trees developed shortness of breath and wheezing. Spray records showed last application was four days before symptoms.
- Farmworker covering apples with paper bags developed extensive hives.
- Nursery worker mowed lawn 24 hours after herbicide application. The re-entry interval (REI) was 48 hours.
- Farmworker drove through an apple orchard within the REI.
- Apple thinner became ill and saw a doctor eight days after symptoms began. Spray records showed a pesticide application was made 48 hours earlier.
- Farmworker working on a tractor reported symptoms possibly related to exposure from entering a hop field sprayed two hours before with a miticide. He was not wearing PPE, the REI had not expired, and he did not see the warning signs.

## Symptoms and Severity Associated with Agricultural Pesticide Cases

Table 15 shows the health complaints reported by type of exposure or activity and whether the incident occurred occupationally. Individuals often report more than one health complaint and all are included in this table. The most frequently (55%) reported health complaint among occupational definite, probable or possible cases was eye irritation. Eye irritation was reported in 64 percent of the applicator/mixer/loader cases and 80 percent of the cases involving cleaning or fixing equipment.

Systemic effects (headache, nausea, dizziness, etc.) was the second most frequently reported category of illness. Systemic effects were reported in 52 percent of the occupational cases and 68 percent of non-occupational cases. Respiratory effects were reported in 46 percent of drift cases and skin problems were associated with 51 percent of residue cases.

Agricultural Occupational and Non-Occupational Cases 1995 – 1999										
	Ey	ye	Syst	emic	Sk	in	Resp	iratory	Ot	her
Exposure	Occ	Non-	Occ	Non-	Occ	Non-	Occ	Non-	Occ	Non-
Activity/Source***		000		occ		occ		occ		occ
Applicator/Mixer/loader	110	0	74	0	77	1	39	0	34	0
Drift	43	33	78	41	25	9	44	29	8	7
Residue	33	0	34	4	38	3	27	2	10	4
Clean/fix	8	0	3	0	2	0	1	0	0	0
Other/unknown	11	4	7	5	2	6	6	0	1	3
	205	37	196	50	144	19	117	31	53	14

## Table 15 Symptoms\* by Exposure Activity/Source for Agricultural Occupational and Non-occupational Cases 1995 – 1999\*\*

\* Individuals frequently report more than one symptom.

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

\*\*\* Refer to Table 14 for total number of cases by exposure activity/source.

The majority of agricultural cases (67%) had mild medical outcomes (Table 16). Thirty percent (133) experienced moderate symptoms and three percent had severe symptoms. All agricultural cases classified as severe were occupational: orchard workers (6), field workers (6), ornamental tree applicator (1), and irrigation technician (1). Seven exposures resulted from drift, five from inadequate personal protection during application, mixing or loading, one from residue exposure while thinning, and one from walking into a field during an application.

## Table 16 Agricultural Case Severity Classification1995 – 1999\*

	02 Mild	03 Moderate	04 Severe	Total
1995	32	54	4	90
1996	68	28	1	97
1997	72	18	2	92
1998	71	25	6	102
1999	59	8	1	68
	302	133	14	449

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

## **Agricultural Crops Involved**

The 450 agricultural definite, probable or possible cases resulted from pesticide applications to fruit (263), field crops (108), nursery/greenhouses (29), berries (10), vegetables (8), livestock (6), forest (6), fire/flood/disaster (5), tree farms (2), and unknown (13).

## **Cases resulting from applications to fruit**

The greatest number (263) of pesticide illnesses in agriculture occurred in the production of tree fruit with the majority (221) occurring occupationally. Pesticide activities of these cases were:

- 104 were applications (primarily ground applications), mixing and loading,
- 80 cases were attributed to drift,
- 56 field residues,
- 23 other.

The majority of cases occurred in the production of apples. Other tree fruits included pears, cherries, and apricots. Cases were classified mild (64%), moderate (34%) and severe (2%). Three of the severe cases related to drift, two to ground applications and one to residues.

Dy /	by Activity/Source associated with Fruit Froduction 1995 – 1999									
Activity/	Occupational - Se		Severity Non-occ		cupational -	Severity				
Source	02	03	04	02	03	04	Total			
	mild	moderate	severe	mild	moderate	severe				
Applicator/	71	29	2	1	1	0	104			
mixer/loader										
Drift	23	22	3	28	4	0	80			
Residue	37	15	1	2	1	0	56			
Accident	4	2	0	3	0	0	9			
Other	6	6	0	1	1	0	14			
	141	74	6	35	7	0	263			

 Table 17 Agricultural Occupational and Non-occupational severity

 by Activity/Source associated with Fruit Production 1995 – 1999\*

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

## **Cases resulting from applications to field crops**

One hundred and eight cases were due to pesticide application to field crops and 94 of the 108 were occupational. Field crops include wheat, barley, potatoes, beans, hops, hay, lentils, sugar beets, etc. Pesticide drift was the activity most frequently associated with pesticide illness, followed by the activities of applicators/mixer/loaders, residues, and accidents. Most (94%) of the cases occurring among field crop workers had mild or moderate symptoms. Six reported symptoms of greater severity. All 14 of the non-occupational cases related to field crops resulted from drift and most (13) had mild symptoms. The most frequently (81%) reported routes of exposure for occupational field crop cases were dermal and inhalation. Sixteen individuals reported eye exposure.

Field Crop cases by Seventy 1995 – 1999									
	Occu	pational Se	verity	Non-oc	cupational \$	Severity			
Activity/ Source	02 Mild	03 Moderate	04 Severe	02 Mild	03 Moderate	04 Severe	Total		
Drift	13	23	4	13	1	0	54		
Applicator/ mixer/loader	34	10	2	0	0	0	46		
Residue	3	2	0	0	0	0	5		
Accident	2	1	0	0	0	0	3		
	52	36	6	13	1	0	108		

## Table 18 Agricultural Occupational and Non-occupationalField Crop cases by Severity 1995 – 1999\*

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

## Cases occurring in nurseries or greenhouses

From 1995 through 1999, 25 occupational incidents involving 29 cases (16 male and 13 female) occurred in nurseries or greenhouses. The majority (80%) occurred in Western Washington, with Skagit (5) and Snohomish (5) counties having the most cases.

Cases occurring in greenhouses and nurseries were due to exposure to residues (11), applications (7), drift (4), mixing or loading (3), cleaning or fixing equipment (2) and other (2). The majority of cases reported mild (79%) symptoms, 17 percent reported moderate symptoms, and one case reported severe symptoms. Like other agricultural cases, the routes of exposure were eye (9), inhalation (7), dermal (1), and ingestion (1). The remaining cases were combinations of exposure routes.

## Non-Agricultural Pesticide Incidents 1995 – 1999

## Overview

From 1995 through 1999, DOH received reports of 1080 individuals with suspected pesticiderelated illness occurring in the non-agricultural environment (482 occupational and 598 nonoccupational). Examples of non-agricultural reports are illnesses resulting from pesticide applications in office buildings, homes, industrial site, parks and landscaping. DOH classified 561 cases as definite (78), probable (213) and possible (270).

## Occupational

Approximately half (482) of the non-agricultural pesticide-related reports occurred on-the-job. DOH classified 291cases as pesticide-related, definite (40), probable (129) or possible (122). The following further describes these pesticide-related cases:

- 150 males and 141 females.
- One was 17 years old at the time of the incident.
- Sources of reports were: L&I (138), WPC (79), local health departments (28), health care provider (8), and others (38).
- 251(86%) individuals obtained medical care for their pesticide illness; 141 (56%) went to emergency rooms, 72 (29%) to physicians' offices, and 38 (15%) went to walk-in clinics. Two received advice from WPC and 37 did not seek medical care.
- The 291 cases occurred in 30 of the 39 counties of Washington State.

- Twice as many cases occurred in western Washington (198 (68%)) as in eastern Washington (93 (32%)).
- Forty- four percent occurred in the three counties of the Puget Sound region, King (69), Pierce (33), and Snohomish (25).
- In eastern Washington, the counties with the most cases were Yakima (24), Spokane (20), Grant (14) and Benton (13).

The most common sites for non-agricultural occupational pesticide illness were office buildings (132 (45%)), with approximately half resulting from commercial (69) applications and half non-commercial (63) applications (Table 19). Homes were the second-most frequently reported site. Cases in the home resulted from both commercial (39) and non-commercial (19) applications.

Site	Commercial application	Non Commercial Application	No application –indirect exposure	Total
Office buildings	69	63		132
Home/apartments	39	19		58
Industrial sites		20		20
Park/golf courses		7		7
Veterinary		4		4
Other			70	70
	108	113	70	291

## Table 19 Site of Non-Agricultural Occupational Cases\* by Commercial or Non-Commercial application

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

Examples of "no application indirect exposure" include: waste collection worker exposed to a spill, thrift shop worker exposed to a spill, and a pesticide spill in a freight carrier. Of the 132 cases occurring in offices, 78 (59%) involved exposure to pesticide residues (Table 20). These cases resulted from indirect exposure to residues from pesticide applications made hours before the workspace was re-entered. Thirty-one (23%) cases in offices involved direct applications.

Fifty-eight occupational cases occurred in homes or apartments with 35 of these occurring during applications. Sixteen cases involved residue or drift exposure. Occupational cases (19) also occurred in the home when the application was made by a non-licensed individual (homeowner) and a worker such as a plumber or builder was exposed to pesticides at the residence.

	by Type of Pesticide Application and Exposure										
	Office			Home	Other	Total					
	Commercial	Non-Commercial	Commercial	Non-Commercial	Other	TOtal					
Residue	46	32	5	4	45	132					
Application	9	22	24	11	23	89					
Drift	11	5	6	1	5	28					
Other	3	4	4	3	28	42					
Total	69	63	39	19	101	291					

Table 20 Location of Occupational Cases\* by Type of Pesticide Application and Exposure

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

Occupationally, males (60) were more likely to be involved in incidents from pesticide applications and females (66) from pesticide residue or drift. Inhalation was the most frequently reported route of exposure and occurred in 216 cases (74%). Other routes of exposure in pesticide illnesses were dermal, ocular and ingestion; 207 (71%) had one route of exposure and 83 (29%) had multiple routes of exposure.

### **Severity and Symptoms**

The majority of cases, 235 (81%) was considered to have a mild medical outcome (Table 21). These cases frequently presented with eye irritation, headache, shortness of breath, cough and nausea. Fifty-five (19%) had moderate symptoms and one was severe. The pesticide exposure activities related to these cases were applications (22), cleaning/fixing (3), drift (6), residue (14), accident (8) and other (3). The severe case involved a licensed applicator that inadvertently allowed his gloves to become saturated with insecticide.

Case Classification by Severity								
Severity Definite Probable Possible Total								
Mild	31	104	100	235				
Moderate	9	24	22	55				
Severe	0	1	0	1				
	40	129	122	291				

## Table 21 Non-Agricultural Occupational

## **Non-Occupational**

From 1995 through 1999, 598 individuals were involved in pesticide-related non-agricultural and non-occupational incidents. Of these, 270 cases were classified definite (38), probable (84) or possible (148). In addition:

- More women 132 (65%) than men 71 (35%) over the age of 17 were involved in pesticide illness.
- Sixty-seven (25%) cases involved children less than 18 years of age.
- Among childhood cases aged 11 through 17, twice as many were males (9) as females (5), but in the younger ages (less than age 11) gender was not a factor.
- Most of these cases came from King (54), Pierce (31), and Snohomish (22) counties in western Washington, and Spokane (25), Yakima (20) and Benton (15) counties in eastern Washington.
- The majority of non-occupational cases (223 (83%)) occurred in homes or apartments (Table 22).

Location	Residue	Drift	Applications	Other	Total			
Home								
Commercial	38	8	2	3	51			
Non-Commercial	20	11	101	40	172			
Office								
Commercial	2	1	2	0	5			
Non-Commercial	1	0	0	1	2			
Industrial Site	0	7	2	0	9			
Unknown/Other	6	1	0	24	31			
Total	67	28	107	68	270			

Table 22 Source of pesticide exposure by location of non-agricultural and non-occupational cases\*

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

#### **Route of Exposure**

Most of the non-agricultural and non-occupational pesticide cases involved the individual making the application, either through exposure to the application (109 (40%)), or to residues (67 (25%)). Inhalation exposure was most frequently reported (173 (64%)).

#### Severity and Symptoms

Most (210 or 78%) of the cases were considered to have a mild medical outcome (Table 23). The five definite-severe and probable-severe cases occurred at home and involved three children and two adults. The activities associated with these exposures were two applications, a spill, an accident and ingestion of pesticide by a toddler.

Table 23 Non-Agricultural and Non-Occupational	
cases* by severity of symptoms	

Severity	Definite	Probable	Possible	Total
Mild	27	64	119	210
Moderate	7	19	25	51
Severe	4	1	4	9
	38	84	148	270

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

## SUMMARY OF 1995-1999 FINDINGS:

From 1995 through 1999, the Washington State Department of Health investigated 1,163 cases of pesticide illness in the **agricultural** environment. The following were found:

- 450 cases were classified as definite, probable or possible.
- 84% of cases were occupational.
- 97% reported mild or moderate symptoms (most frequently reported health complaints were eye irritation and systemic effects).
- Most incidents resulted from exposure during applications, pesticide drift or exposure to residues.
- The three most common locations of incidents were production of tree fruit (263), field crops (108) and nursery/greenhouses (29).

From 1995 through 1999, the Washington State Department of Health investigated 1,080 cases of pesticide illness in the **non-agricultural** environment. The following were found:

- 561 cases were classified as definite, probable or possible.
- 52% of cases were occupational.
- The three most common locations of non-agricultural and occupational cases were office buildings (132), homes (58) and industrial sites (20).
- 99% of individuals were found to have mild or moderate symptoms.
- The most frequently reported health complaints were eye irritation and systemic effects.
- Most cases resulted from exposure to pesticide residues, applications or drift.
- Inhalation was the most frequent route of exposure.
- 48% of cases were **non-occupational**.
- 83% occurred in and around the home.
- 97% reported mild or moderate symptoms (9 severe).

## Department of Labor and Industries (L&I)

L&I responds to concerns from workers about pesticide exposure through two divisions: the Washington Industrial Safety and Health Act (WISHA) Services Division, and the Insurance Services Division, (Claims Administration). From 1995 through 1999, L&I WISHA conducted 156 pesticide-related health and safety workplace inspections, and Claims Administration received 1,154 claims relating to pesticide illness. In 1999, WISHA conducted 37 pesticide-related health and safety workplace inspections. Claims Administration received 183 claims relating to pesticide exposure. All of these were forwarded to DOH for investigation.

## Health and Safety Investigations

Table 24 shows inspection location (Eastern vs. Western Washington), the number of inspections conducted and the total number and percent resulting in violation citations for the five-year period 1995-1999.

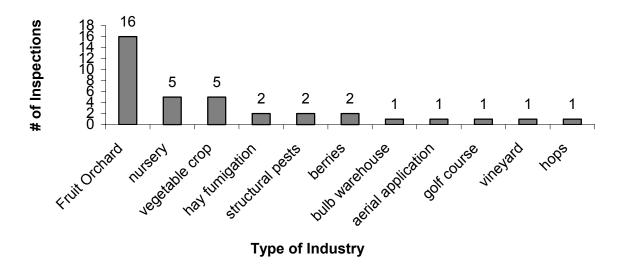
	Eastern Washington	Western Washington	Total Inspections	Inspections Resulting in Violations	% Inspections Resulting in Violations
1995	12	12	24	21	88%
1996	15	24	39	30	77%
1997	11	9	20	18	90%
1998	25	11	36	30	83%
1999	27	10	37	30	81%
Total	90	66	156	129	83%

Table 24 1995 – 1999 Pesticide-related WISHA inspections

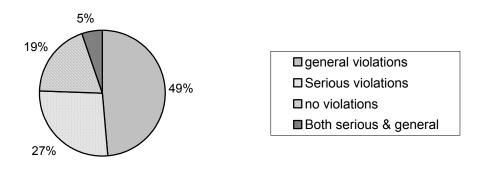
WISHA Services Division inspections are initiated several ways: a scheduling system, complaints, referrals or observations as inspectors travel through their area. In 1999, twenty-seven pesticide-related inspections were conducted in Eastern Washington and 10 in Western Washington. The inspections were conducted in both agricultural and non-agricultural settings.

In 1999, sixteen inspections were initiated through the scheduling method. The remaining inspections were responses to complaints (11), referrals from other agencies (9) and inspector observation (1). Fruit orchards were the most frequent type of business inspected with sixteen inspections, followed by five inspections each for nurseries and vegetable crops, two for berries and one vineyard. Two inspections involved hay fumigation. Structural pesticide businesses were involved in two inspections. The rest had a single inspection for business type (bulb warehouse, hops, golf course, and an aerial applicator).

WISHA Pesticide Related Inspections - 37



A WISHA inspection may result in violations. Violations fall into two categories: serious or general. Serious implies a potential for death or serious physical harm from illness or a major injury and will have a monetary penalty. General violations are cited when a hazardous condition cannot reasonably be predicted to cause death or serious physical harm but has a direct relationship to employee safety and health. There is no monetary penalty for general violations. General violations are often used for written program deficiencies that could potentially lead to an injury or illness.

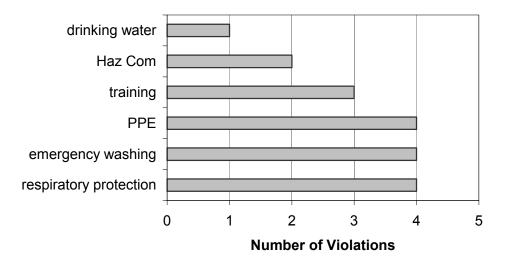


#### 1999 WISHA Inspections Violations - 37 inspections

Twelve serious violations were identified in 37 pesticide-related inspections. Of these, six inspections had multiple serious violations and six had one serious violation. Penalties ranged from \$160 - \$4,000 per violation and totaled \$17,560. One inspection had a repeat serious violation resulting in a fine of \$4,000.

Circumstances that resulted in serious violations were deficiencies in respiratory protection (4 violations), personal protective equipment (4 violations), emergency eyewash and washing capabilities (4 violations), training (3 violations), hazard communication and labeling (2 violations), and lack of drinking water (1 violation).

## **Total Serious Violations Issued**



The following general violations were issued:

- Inaccurate spray records (5 sites)
- No posting of information (3 sites)
- Respiratory protection deficiencies (2 sites)
- Hazard communication deficiencies (2 sites)
- Failure to make notification of an illness incident (2 sites)
- Inappropriate or lack of personal protective equipment (1 site)
- Deficiencies related to re-entry intervals (1 site)
- Lack of eyewash (1site)
- Failure to remove signs (1 site)
- No first aid card (1 site)

### **Claims Administration**

The Claims Administration program processes worker claims initiated for on-the-job injuries and illnesses. Pesticide claims are referred to DOH for further investigation.

In 1999, DOH investigated 183 claims from L&I because of alleged pesticide exposures. DOH classified 130 (71%) of these claimants as working in agriculture and 53 (29%) in a non-agricultural setting. Forty-eight percent (88) of the claims involved workers in the fruit industry; 14 percent (25) in field crops. Table 25 lists claims by business type. DOH classified the severity of the claims: no symptoms (18), mild (139), moderate (25) and severe (1).

Table 25 1999 Loi Pesticide-Related Claimants by Business Type								
Agricultural	1996	1997	1998	1999				
Fruit	116	129	134	88				
Field crops	20	23	44	25				
Vegetables	11	-	3	4				
Nursery/greenhouse	8	6	16	7				
Berries	4	-	2	2				
Christmas trees/Forest	4	2	-	1				
Other/Unknown	4	6	4	3				
Total Agricultural	167 (75%)	166 (71%)	203 (75%)	130 (71%)				
Non Agricultural								
Landscape/PCO	4	5	8	5				
Maintenance/mgrs	7	9	7	3				
Food service	4	3	-	4				
Laboratory/Health Care	-	-	4	2				
Office	6	23	5	8				
Laborer	-	-	-	8				
Landscape/groundskeeper	6	6	-	8				
Security Guard	-	3	-	-				
Re-packaging pesticides	8	-	-	-				
Retail Store	4	6	15	2				
Forklift operator	-	-	2	1				
Sanitation/Road crew	-	-	4	2				
Other	16	14	21	10				
Total Non-Agricultural	55 (25%)	69 (29%)	66 (25%)	53 (29%)				
Total L&I Claims Investigated by DOH	222	235	269	183				

Table 25 1999 L&I Pesticide-Related Claimants by Business Type<sup>\*</sup>

### **Claims status:**

Table 26 shows the numbers of pesticide-related claims for 1995-1999 adjudicated in accordance with the following definitions:

- Allowed: 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. The claim is allowed and medical evaluation and any follow-up medical care/treatment is paid. The employee misses less than three days of work. These lost workdays are not reimbursed to the employee.
- **Rejected:** Initial diagnostic and evaluation medical costs are covered but the claim is rejected because objective evidence is lacking to relate the symptoms to the workplace exposure. Claims can be rejected because: the worker reports no symptoms; the symptoms have resolved by the time the evaluation is obtained; there is no objective evidence of injury; or, exposure cannot be confirmed or documented. A rejected status prevents the worker from re-opening a claim based on original symptoms. Initial medical visits are usually paid.
- **Compensable/Time Loss:** A worker has an allowable claim and misses more than three days of work immediately following an injury on the job. The worker is paid a portion of salary while unable to work. All related medical costs are covered. In 1999 11 workers received time loss compensation; 7 were employed in agriculture.
- 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. In 1999 one non-agricultural worker was kept on salary.

Claim Type	19	95	19	96	19	97	19	98	19	99
Allowed	134	55%	97	44%	108	46%	155	58%	107	59%
Compensable/Time loss	9	4%	8	4%	14	6%	11	4%	11	6%
Kept of Salary	1	-	1	-	-	-	1	-	1	-
Rejected	98	40%	111	50%	101	43%	100	37%	63	34%
Pending/Unknown	3	1%	5	2%	12	5%	2	1%	1	-
Total	24	45	22	22	23	35	26	<b>59</b>	18	33

Table 26 Pesticide-Related Claim Status 1995 – 1999

In 1999, L&I paid out a total of \$48,935.01 for pesticide-related claims.

## L&I Observations

Over the last five years, the number of WISHA safety and health inspections have varied. For 1998 and 1999, inspections were similar (36 & 37 respectively) and resulted in the same percent of inspections with violations. In 1999, insecticides were the pesticides most frequently identified during the inspections conducted. Over two-thirds of the 37 inspections documented one or more violations. The violations cited continue to occur in similar areas: hazard communication, respiratory protection, PPE, eyewash, etc.

The Environmental Protection Agency (EPA) has begun a national assessment of the Worker Protection Standard (WPS) in an attempt to address trends nationwide. WISHA is participating in the discussion along with grower organizations and employee advocates. A final meeting on the subject is scheduled to occur in Washington DC, 2002.

In 1999, there was a 32 percent reduction in pesticide-related workers' compensation claims. Since 1996, there has been a steady increase in the percentage of pesticide-related claims allowed. In 1996, there was an all-time high rejection rate of 50 percent; in 1999 34 percent were rejected. A very small percent of pesticide-related claims result in time loss.

## **Washington Poison Center**

In 1999, the Washington Poison Center (WPC) received 133,240 calls. Of these, 2,523 were calls related to human pesticide exposure and accounted for two percent of the total calls received statewide by WPC (Table 27). As in previous years, the vast majority (93%) of pesticide-related calls to WPC involved accidental exposure. Informational calls are not tallied as part of the human exposure calls.

From 1990 to 1999 there was a 50 percent reduction in calls related to pesticide exposure to the Poison Center (5,231 pesticide-related calls in 1990 to 2,523 in 1999). Many factors including increased education, growth of information available on the internet, awareness of risks, and elimination of more toxic pesticides appear to explain this decrease. Table 27 shows the number of pesticide-related calls to WPC from 1995-1999 by pesticide type.

				5 1000 1	000
Pesticide	1995	1996	1997	1998	1999
Fungicide	104	120	88	72	61
Herbicide	531	441	482	485	425
Insecticide	2,173	1,992	2,103	1,886	1,562
Moth Repellent	89	66	77	65	76
Rodenticide	478	473	477	478	399
Total Pesticide	3,375	3,092	3,227	3,002	2,523
% of Total WPC Calls	2%	2%	2%	2%	2%
Total WPC Calls*	135,621	132,649	134,213	134,60	133,24

 Table 27
 WPC Human Pesticide Exposure Calls 1995 – 1999

\*Includes human and animal exposures, confirmed non-exposures, and informational calls.

Insecticides are the type of pesticide most frequently involved in calls. Table 28 lists the types of insecticides involved in calls to WPC, 1995 - 1999.

	Number of Calls				
Insecticides Generic Code/Description		1996	1997	1998	1999
Arsenic	5	7	5	5	10
Borates/Boric Acid	38	27	32	32	20
Carbamate Only	104	61	91	64	65
Carbamate with other pesticides	51	24	15	8	18
Chlorinated Hydrocarbon only	125	125	130	104	72
Chlorinated Hydrocarbon with other	3	8	3	6	3
Metaldehyde	67	76	80	48	36
Organophosphate only	450	360	395	372	267
Organophosphate with carbamate	29	15	17	14	11
Organophosphate with chlorinated hydrocarbons	16	9	4	12	3
Organophosphate with other pesticide	46	44	32	35	33
Organophosphate/carbamate/chlorinated hydrocarbons	0	0	1	2	0
Piperonyl butoxide only	3	5	3	1	2
Piperonyl butoxide/pyrethrins	282	323	306	266	239
Pyrethrins only	249	253	267	262	235
Repellants (insect)	169	144	154	130	107
Rotenone	6	3	5	2	3
Veterinary insecticide	200	179	277	215	194
Other	112	128	89	92	69
Unknown	217	200	197	216	174
Total	2,173	1,992	2,103	1,886	1,562

Table 28 1995 – 1999 WPC Type of Insecticide involved in Poisoning Call

In Washington State pesticide poisonings are a reportable condition (WAC 246-100-217). Health care providers can report to DOH or through the WPC. WPC forwards to DOH all calls regarding patients exposed to pesticides seen by any health care provider. Also, if WPC refers a caller to a health care provider that call is forwarded to DOH.

In 1999, DOH received 149 referrals from WPC where there were reported signs and/or symptoms of pesticide illness, or cases of probable pesticide exposure that were followed for development of symptoms. Of these, 78 did not meet the DOH criteria for investigation in that exposure occurred more than 3 months ago, no exposure-health effect relationship was present, or there was insufficient information to substantiate the pesticide exposure. DOH classified the remaining 71 incidents involving 83 individuals: definite (12), probable (12), possible (13), unlikely (23), unrelated (2), unknown (15), and asymptomatic (6) (pesticide exposure was confirmed but the individual exhibited no symptoms). The majority of these cases had mild or no symptoms (69 (83%)), 10 had moderate symptoms (12%), and 4 had severe symptoms (3%).

Forty-one percent of the WPC pesticide calls in 1999 involved children less than six years of age. Table 29 illustrates WPC calls by pesticide type for the different age groups. Insecticides continued to be the type of pesticide most frequently involved (62%). This distribution is consistent with prior years.

	e 29 1999 WFC Human Festicide Exposure cans by Age				
Pesticide Type	Less than 6 years old	6-19 years old	Total Human Exposure Calls		
Fungicides	16	9	61		
Herbicides	122	65	425		
Insecticides	566	266	1,562		
Moth Repellents	33	11	76		
Rodenticides	304	33	399		
Total	1,041	384	2,523		

Table 29 1999 WPC Human Pesticide Exposure Calls by Age

In 1999, three percent of the WPC pesticide calls involved intentional exposures. Fourteen percent of all calls resulted in some form of management in a health care facility and two percent of all calls reported a moderate or more severe illness from the event. Table 30 shows the decrease in numbers and severity of pesticide exposure calls to WPC for advice and management from 1995 through 1999.

Table 30 WPC Human Pesticide Exposure Calls 1995-1999 by	/
Types of Exposure and Health Outcome	

	1995	1996	1997	1998	1999	Change 1995-1999
Type of exposure						
Accidental	3122	2866	2969	2813	2346	-25%
Intentional	106	89	109	79	73	-31%
Managed in Health Care Facility*	582	522	549	542	350	-40%
Health Effect*						
- Minor Effect	343	345	279	242	171	-50%
- Moderate Effect	104	86	84	54	40	
- Major Effect	5	0	2	3	10	54%
- Death	0	1	0	0	0	
Total Pesticide Calls	3,375	3,092	3,227	3,002	2,523	-25%

\* Cases classified as "Managed in Health Care Facility" and "Health Effect" may include intentional cases.

# Appendix A

Pesticide Incident Reporting and Tracking (PIRT) Review Panel:

- RCW 70.104.070-090
- List of PIRT Panel Members
- Pesticide Incident Definition
- Agency Roles and Responsibilities
  Agency Response Time Mandates

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 <u>RCW 15.58.942</u>.

#### 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 laborintensive 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) Review Panel Members

Maryanne Guichard, ChairPesticide Incident Reporting and Tracking Review PanelDepartment of Health7171 Cleanwater Lane, Bldg. 4 (ZIP: 98501)P.O. Box 47825Olympia, WA 98504-7825p: (360) 236-3391f: (360) 236-2257	Jane C. Lee, MPH, Coordinator Pesticide Incident Reporting and Tracking Review Panel Department of Health 7171 Cleanwater Lane, Bldg. 4 (ZIP: 98501) P.O. Box 47825 Olympia, WA 98504-7825 p: (253) 395-5427 f: (425) 453-1340
e-mail: maryanne.guichard@.doh.wa.gov	e-mail: jane.lee@doh.wa.gov
Lynden Baum, Manager Pesticide and Surveillance Section DOH - Office of Toxic Substances 7171 Cleanwater Lane, Bldg. 4 (ZIP: 98501) P.O. Box 47825 Olympia, WA 98504-7825 p: (360) 236-3361 f: (360) 236-2257 e-mail: lynden.baum@doh.wa.gov	Janet Kurina Department of Labor and Industries P.O. Box 44610 Olympia, WA 98504-4610 MS: 4610f: (360) 902-4613 f: (360) 902-5478 kuri235@Ini.wa.gov
Lucio G. Costa, Ph.D. Department of Environmental Health University of Washington 4225 Roosevelt #100 Seattle, WA 98105 p: (206) 543-2831 f: (206) 685-4696 e-mail: lgcosta@u.washington.edu MS: 354695	John Ridgway/Maria Victoria Peeler Department of Ecology PO Box 47659 Olympia, WA 98504-7659 MS: 47600 p: (360) 407-6713/407-6704 f: (360) 407-6715 email: jrid461@ecy.wa.gov/peel461@ecy.wa.gov
Allan Felsot, Ph.D. Food and Environmental Quality Lab Washington State University-Tri Cities 100 Sprout Road Richland, WA 99352 p: (509) 372-7365 f: (509) 372-7460 e-mail: afelsot@tricity.wsu.edu	William O. Robertson, MDMedical Director, Washington Poison Center155 NE 100th Street, 400Seattle, WA 98125-8012p: (206) 517-2356f: (206) 526-8490email: robertso@wapc.org
Matthew Keifer, MD, MPH Department of Environmental Health School of Public Health and Community Medicine University of Washington Box 357234 Seattle, WA 98195 MS: 357234 p: (206) 616-1452 f: (206) 616-2687 o mail: mkoifor@u washington edu	John Carleton Department of Fish and Wildlife 600 Capitol Way N Olympia, WA 98501-1091 MS: 43200 p: (360) 902-2622 f: (360) 902-2946
e-mail: mkeifer@u.washington.edu <b>Alice Larson, Ph.D.</b> Work Group on Pesticide Health & Safety P.O. Box 801 Vashon Island, WA 98070	e-mail: carlejpc@dfw.wa.gov <b>Ann Wick, Program Manager</b> Program Development WSDA - Pesticide Management Division P.O. Box 42589 Olympia, WA 98504-2589 MS: 42589
p: (206) 463-9000 f: (206) 463-9400 e-mail: las@wolfenet.com	p: (360) 902-2051 f: (360) 902-2093 e-mail: awick@agr.wa.gov
	1

#### 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 <u>review</u> 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 <u>resolution</u> 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: Lynden Baum, 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.

#### **Department of Health**

The 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's Pesticide and Surveillance Section set forth in RCW 70.104.030 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.

#### Department of Ecology

The 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.

#### **Department of Labor and Industries**

The 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.

#### Department of Natural Resources

The 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.

#### **Department of Health**

WAC 246-100-217 directs the 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.

#### Labor and Industries

The 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.

April 6, 1998

# Appendix B

PIRT Agendas

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday February 17, 2000 Room S-4

# 10:00 am to 12:00 pm

10:00	Welcome Agenda Overview Review November and December 1999 Meeting Overview	M. Guichard
10:05	Legislative Update	M. Guichard
10:20	<ul> <li>PIRT Panel Activities</li> <li>Report on action items</li> <li>2000 Panel Work Plan</li> <li>Legislative motion made by Bill Robertson</li> </ul>	M. Guichard
	<ul><li>Update on 5 Year data analysis</li><li>Update of 1999 Annual Report</li></ul>	Jane Lee
10:45	Present data on incidents occurring in commercial establishments, the products involved and whether the label instructions were adequate. (#3 of the 2000 Recommendations)	Ann Wick Lynden Baum
11:20	Identify specific pesticide products and their active ingredients involved in incidents for further evaluation. (#2 of the 2000 Recommendations)	All
11:40	Public Comment	
11:50	<ul><li>Other Business</li><li>Next meeting agenda items</li></ul>	
12:00	Adjourn	

# PESTICIDE INCIDENT REPORTING AND TRACKING REVIEW PANEL

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday April 20, 2000 Room S-4

# 10:00 am to 12:00 pm

10:00	Welcome Agenda Overview	M. Guichard
	Review February Meeting Summary	
10:10	Idaho applicator fatality – case study	Jim Baker (by phone)
10:30	<ul><li>PIRT Panel Activities</li><li>Report on action items</li><li>Legislative Update</li></ul>	M. Guichard
	1999 Draft Annual Report	Jane Lee
11:00	Discussion of additional PIRT Tasks – Pesticide Use Reporting	M. Guichard
11:15	Follow-up – DOH review of incidents occurring in commercial establishments	Lynden Baum
11:30	RCW 70.104.070-090 revisions	M. Guichard
11:40	<ul><li>Other Business</li><li>Next meeting agenda items</li><li>DOH Grant proposal to NIOSH</li></ul>	Lynden Baum
11:45	Public Comment	
12:00	Adjourn	

# P esticide Incident R eporting and T racking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday May 18, 2000 Room Q-20

# 10:00 am to 12:00 pm

10:00	Welcome Agenda Overview Review April Meeting Summary	M. Guichard
10:10	<ul> <li>PIRT Panel Activities</li> <li>Report on action items</li> <li>Legislative Update</li> <li>1999 Draft Annual Report</li> <li>Review PIRT's workplan</li> </ul>	M. Guichard Jane Lee
10:30	<ul> <li>Pesticide Use Reporting</li> <li>Outline of issues</li> <li>What's happening in California and Oregon</li> <li>What role does PIRT want?</li> </ul>	M. Guichard Allan Felsot
11:40	<ul> <li>Other Business</li> <li>Next meeting agenda items</li> <li>EPA Press release 60 day comment period on indoor residential insecticide product labeling</li> <li>Update on Asian Gypsy Moth control</li> </ul>	Lynden Baum
11:45	Public Comment	
12:00	Adjourn	

# P esticide Incident R eporting and T racking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday June 15, 2000 Room S-4

# 1:00 pm to 3:00 pm (Please note new time)

1:00	Welcome Agenda Overview Review May Meeting Summary	Maryanne Guichard
1:10	<ul><li>PIRT Panel Activities</li><li>Report on action items</li><li>1999 Draft Annual Report</li></ul>	Maryanne Guichard
1:35	Pesticide Use Reporting Plan joint meeting with the Pesticide Advisory Board November 2000	Maryanne Guichard
2:35	<ul><li>Other Business</li><li>Next meeting agenda items</li><li>Summary of Asian Gypsy Moth control 2000</li></ul>	Lynden Baum
2:50	Public Comment:	
3:00	Adjourn	

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday July 20, 2000 Room S-4

# 1:00 pm to 3:00 pm

1:00	Welcome Agenda Overview Review June Meeting Summary	Maryanne Guichard
1:10	<ul> <li>PIRT Panel Activities</li> <li>Report on action items</li> <li>Update on 1999 Report</li> <li>2000 Legislative Summary</li> </ul>	Jane Lee
1:20	<ul> <li>Pesticide Use Reporting - Joint meeting with the Pesticide Advisory Board , October 20, 0000</li> <li>Location</li> <li>Speakers</li> <li>Format</li> </ul>	Maryanne Guichard
2:00	Review a sample of 1999 incidents WSDA Ecology L&I DOH	Ann Wick John Ridgway Arlene Stebbins Lynden Baum
2:40	<ul><li>Other Business</li><li>Next meeting agenda items</li></ul>	Lynden Baum
2:50	Public Comment	
3:00	Adjourn	

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday November 16, 2000 Room S-4

# 1:30 pm to 3:30 pm

1:30	Welcome Agenda Overview Review October Joint Meeting Summary	Maryanne Guichard
1:45	<ul> <li>PIRT Panel Activities</li> <li>Report on action items</li> <li>2000 Draft Legislative Summary</li> </ul>	
2:20	Pesticide Use Reporting Wrap-up discussion of the October 20 <sup>th</sup> joint meeting with the Pesticide Advisory Board	Maryanne Guichard
3:00	<ul> <li>Other Business</li> <li>Next meeting agenda items</li> <li>IPM in School, draft legislation</li> <li>AGM follow up</li> </ul>	Ann Wick Lynden Baum
3:20	Public Comment:	
3:30	Adjourn	

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday January 18, 2001 Room S-4

# 1:30 pm to 3:30 pm

1:30	Welcome Agenda Overview Review November Meeting Summary	Maryanne Guichard
1:45	<ul><li>PIRT Panel Activities</li><li>Report on action items</li><li>2000 PIRT Legislative Summary</li></ul>	Lynden Baum
2:00	Update on Worker Protection Standards (WPS) Assessment	Alice Larson
2:15	2001 Annual PIRT Report and Five Year Data Analysis	Jane Lee
2:45	National Evaluation of WPS Training	Alice Larson
3:10	<ul><li>Other Business</li><li>Next meeting agenda items</li></ul>	
3:20	Public Comment:	
3:30	Adjourn	

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday, April 19, 2001 Room S 4

# 9:30 am to 11:30 pm

#### AGENDA

9:30	Welcome Agenda Overview Review February Meeting Summary	Maryanne Guichard
9:40	<ul><li>PIRT Panel Activities</li><li>Report on action items</li><li>Legislative Update</li></ul>	
9:50	Update from the "Pacific Northwest Agricultural Safety and Health Center", UW Update from the "Center for Child Environmental Health Risks Research", UW	Matt Keifer Rich Fenske
10:50	Other Business <ul> <li>Recent Oregon Court Decision</li> </ul>	
11:10	Public Comment:	

11:30 Adjourn

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday May 17, 2001 Room S-4

# 1:30 pm to 3:00 pm

1:30	Welcome Agenda Overview Review February Meeting Summary	Jane Lee
1:40	<ul> <li>PIRT Panel Activities</li> <li>Report on action items</li> <li>Legislative Update Substitute Senate Bill 5533 "Schools Posting Bill"</li> </ul>	Ann Wick
2:00	Recent 9 <sup>th</sup> Circuit Court decision regarding aquatic pesticide use	Ann Wick
2:15	WSDA Program Proposal "Aquatic pesticides and salmon"	Ann Wick
2:30	Other Business	
2:45	Public Comment	
3:00	Adjourn	

# PESTICIDE INCIDENT REPORTING AND TRACKING REVIEW PANEL

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street SEATTLE, WASHINGTON

Thursday June 21, 2001 Room Q-20

# 10:00 am to 12:00 pm (Please note new time)

#### AGENDA

10:00	Welcome Agenda Overview Review May Meeting Summary	Maryanne Guichard
10:15	<b>PIRT Panel Activities</b> Report on action items	
10:30	Update from the "Pacific Northwest Agricultural Safety and Health Center", UW	Matt Keifer
	Update from the "Center for Child Environmental Health Risks Research", UW	Rich Fenske
11:30	<ul> <li>Other Business</li> <li>Next meeting Wednesday July 18, 2001 in Yakima with the Pesticide Advisory Board</li> </ul>	
11:45	Public Comment:	
12:00	Adjourn	

### WASHINGTON STATE DEPARTMENT OF AGRICULTURE

#### Pesticide Advisory Board Meeting July 18, 2001, 10:00 a.m. Yakima, WA

•	Opening Comments	Chairman Goodwin
•	PIRT Panel Update	Maryanne Guichard
•	NPDES Permits	Kathleen Emmett
•	Pesticide Advisory Board Charter	Chairman Goodwin
•	Two-Year Pesticide Registration Ad Hoc Committee	Ted Maxwell
•	Direct Supervision Proposal/Status	Cliff Weed
•	Monitoring Cholinesterase Baseline for Farm Workers	Dan Ford
•	Program Updates	
	o Compliance	Cliff Weed
	o Program Development	Ann Wick
	o Registration	Ted Maxwell
•	Other Business/Adjourn	Chairman Goodwin

# Pesticide Incident Reporting and Tracking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday September 20, 2001 Room S-4

# 10:00 am to 12:00 pm

10:00	Welcome Agenda Overview Review June Meeting Summary	Maryanne Guichard
10:15	PIRT Panel Activities Report on action items Renew membership 5 Year Data Review WSU Articles 2000 Annual Report 1999 Report Recommendations	Jane Lee
10:30	<ul> <li>Pesticide Advisory Board Meetings Update</li> <li>Migrant Farmworker Forum August 8, 2001 Yakima</li> <li>WSDA Participation in an EPA Pilot Program to Track Cases</li> <li>DOH-NIOSH Project</li> <li>DOH - New Data System</li> <li>West Nile Virus-Update</li> <li>Citrus Longhorn Beetle - Update</li> <li>Gypsy Moth - Update</li> <li>Assessment of WPS</li> </ul>	Ann Wick Lynden Baum Alice Larson
11:15	Agency Updates	
11:30	Other Business	
11:45	Public Comment	
12:00	Adjourn	

# $Pesticide \ Incident \ Reporting \ \text{and} \ Tracking \ Review \ Panel$

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday October 18, 2001 Room S-4

# 10:00 am to 12:00 pm

#### AGENDA

10:00	Welcome Agenda Overview Review September Meeting Summary	Maryanne Guichard
10:15	Agenda items held over from the September 20, 2001 PIRT meeting	
	<ul> <li>WSDA Participation in an EPA Pilot Program to Track Cases</li> <li>DOH-NIOSH Project/DOH - New Data System</li> <li>Assessment of WPS</li> </ul>	Ann Wick Lynden Baum Alice Larson
11:15	PIRT Panel Activities Report on action items Draft 2000 Annual Report	
11:30	Agency updates	
11:40	Other Business	
11:45	Public Comment:	

12:00 Adjourn

### P esticide Incident R eporting and T racking Review Panel

STATE PUBLIC HEALTH LAB 1610 NE 150<sup>th</sup> Street Seattle, Washington

Thursday December 20, 2001 Room S-4

### 10:00 am to 12:00 pm

#### AGENDA

10:00 Welcome Agenda Overview Review October and November Meeting Summaries Maryanne Guichard

- 10:15 **PIRT Panel Activities** Draft 2000-2001 Annual Report
- 11:00 Update on the EPA Assessment of the Worker Protection Standards Alice Larson
- 11:35 Agency updates
- 11:45 Other Business
- 11:50 Public Comment:
- 12:00 Adjourn

# Appendix C

- DOH Relationship Classifications
  DOH Severity Index



#### STATE OF WASHINGTON

DEPARTMENT OF HEALTH

ENVIRONMENTAL HEALTH AND SAFETY 7171 Cleanwater Lane, Building 4 • PO Box 47825• Olympia, Washington 98504-7825 TDD Relay Service: 1-800-833-6388

#### **PESTICIDE INCIDENT SUMMARY REPORT**

#### **RELATIONSHIP CLASSIFICATIONS**

**DEFINITE:** High degree of correlation between pattern of exposure and resulting symptomology. Requires in most cases both medical evidence (Cholinesterase, serum or urinary metabolites, allergy tests, etc.) and physical evidence (foliar samples, work history, spill noticeable on clothing, etc.) to support the conclusions.

**PROBABLE:** Relatively high degree of correlation exists between the pattern of exposure and the illness/injury experienced. Medical and/or physical evidence unavailable or inconclusive.

**POSSIBLE:** Some degree of correlation evident. Work history and/or application history ambiguous.

**UNLIKELY:** A correlation cannot be ruled out absolutely. Work history and/or application history ambiguous.

UNRELATED: Definite evidence of cause other than pesticide exposure.

**ASYMPTOMATIC:** Exposure occurred, but did not result in illness/injury.

**INDIRECT:** Pesticide exposure is not responsible, but pesticide regulation contributed in some way, (e.g., heat stress while wearing chemical resistant clothing).

**UNKNOWN:** There is insufficient information available to be able to classify in one of the above categories.



# STATE OF WASHINGTON

#### ENVIRONMENTAL HEALTH AND SAFETY 7171 Cleanwater Lane, Building 4 • PO Box 47825• Olympia, Washington 98504-7825 TDD Relay Service: 1-800-833-6388

#### SEVERITY INDEX FOR PESTICIDE-RELATED CASES

- 01 No symptoms developed or if they did, a cause other than pesticides was identified.
- **02** (mild) Patient experienced mild, temporary symptoms. If medical care was sought, treatment was limited to decontamination and minor pain relief.

Patient experienced temporary or mild topical irritation.

**03** (moderate) Patient suffered moderate systemic symptoms. Patient may have been seen in an Emergency Room, admitted for observation, or not admitted.

Patient suffered moderately painful, itchy, or otherwise irritating topical symptoms.

**04** (severe) Patient suffered systemic symptoms and received aggressive treatment procedures or hospitalization. All symptoms resolved.

Patient suffered severe topical (eye and/or skin) burn, ulceration, or irritation that resulted in medical treatment.

**05** (severe) Patient suffered systemic symptoms and received aggressive treatment procedures or hospitalization for 24 hours or more. At the time case was closed, symptoms had not resolved completely.

Patient suffered severe topical (eye and/or skin) burn, ulceration, or irritation that resulted in medical treatment. Permanent damage resulted.

06 Death occurred.

Revised April 6, 1998 Contact: Lynden Baum (360) 236-3360

# Appendix D

Agency Data Summaries:

- Washington State Department of Agriculture
- Department of Health
  Department of Labor and Industries

Washington State Department of Agriculture

CASE # 1C 1999	Designation Pesticio	de Involved License	unknown	Date of Incident	1/20/1999	<u>Severity</u> 4	Application Method Ground
	Nature of Case Dogs p	oisoned		Response Time	7 days	Children Involved? No	Application Type Unknown
County OKANOGAN	Chemicals or other Materials Involved:		Other Agencies Involved:		Final Action	Target/Complaint Area	
	RODENTICIDE			Poli	се	NAI	Dogs
Summary / Findings	Strychnine						

Referring party discovered two dogs over the January 16-17 weekend that exhibited symptoms of strychnine poisoning. He checked with local feed and supply to see if they were aware of the new law restricting strychnine sales only to those who have RUP licenses. The feed store was unaware of the law.

University of Idaho lab assessed dogs' stomach contents positive for strychnine. The source of the poisoning could not be determined. A local dealer had restricted use pesticides on sale and no one in the store had a dealers license.

CASE # 2C 1999	Designation Violation	on <u>License</u> commercial applicator	Date of Incident 3/5/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Drift		Response Time same day	Children Involved? No	Application Type Non Ag
County DOUGLAS	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE	None	NOC	Ornamentals/Property, dog
Summary / Findings	Malathion	Horticultural Oil			

Ornamental application allegedly drifted onto complainant's yard and dog.

Alleged infractor applied oil and malathion with equipment that was not licensed with the WSDA. The sprayer was not equipped with any pressure gages. The WSDA lab found malathion residues on the dog blanket and on the vegetation surrounding the blanket. The alleged infractor indicated on the application record that he stopped spraying because the wind was too gusty.

CASE # 3C 1999	Designation Violation	n <u>License</u>	private applicator	Date of Incident 3/19/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Drift			Response Time same day	Children Involved? Yes	Application Type Ag
County CHELAN	Chemica	Is or other Materials In	volved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	FUNGICIDE	INSECTICIDE	DOH	NOI	Pears/Car
Summary / Findings	Endosulfan	Sulfur	Chlorpyrifos			

Human health. Complainant alleges that the alleged infractor sprayed her car with an air-blast sprayer. Upon nearing the sprayer, she thought the applicator saw her, yet deliberately kept his sprayer on. She said the spray drifted on her car & she smelled it while she rolled up the car window s. Her daughter (2yrs) & nephew (3yrs) were with her. Her daughter has a heart condition and she is worried about the effects to her health.

Lab samples from vehicle are positive; other evidence suggest that the complainant's claim of drift onto her vehicle are valid. Alleged infractor was also working with an expired license.

CASE # 4C 1999	Designation Pestici	de Involved <u>License</u> u	Inlicensed	Date of Incident	3/24/1999	<u>Severity</u> 2	Application Method Air
	Nature of Case License	e		Response Time	same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agenci	es Involved:	Final Action	Target/Complaint Area	
	HERBICIDE	HERBICIDE		EP	A	NAI	Spill
Summary / Findings	2,4-D	Dicamba					

Suspected use of pesticides by an unlicensed aerial applicator. During routine surveillance for aerial applications, a potential spill of a phenoxy-type herbicide was observed in the immediate vicinity of an unlicensed, aerial applicator's equipment.

The alleged infractor stated that he would not be spraying pesticides in Washington in 1999. The WSDA lab detected herbicide residues in the spray tank of alleged infractor's aircraft; herbicide residues in a soil sample collected from the mixing/loading area where aircraft is parked. He and another person failed to submit records.

CASE # 5C 1999	Designation Violation	License private applicator	Date of Incident 3/31/1999	Severity 2	Application Method Ground
	Nature of Case Drift		Response Time same day	Children Involved? No	Application Type Ag
County DOUGLAS	County DOUGLAS Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	FUNGICIDE		None	NOC	Apples/House
Summary / Findings	Sulfur				

Alleged drift from an orchard on west side of house. Airblast sprayer using oil & sulfur.

Alleged infractor applied lime and sulfur to orchard adjacent to complainant's residence. WSDA lab found sulfur in every sample taken from complainant's residence. Alleged infractor did not provide all of the required information concerning pesticide applications on the application record.

CASE # 6C	1999	Designation Violation	on <u>Licen</u>	se private applicator	Date of Incident	4/1/1999	Severity 2	Application Method Ground
		Nature of Case Humar	n Exposure		Response Time	same day	Children Involved? Yes	Application Type Ag
County DOUGLAS		Chemicals or other Materials Involved:			Other Agenci	es Involved:	Final Action	Target/Complaint Area
		INSECTICIDE	INSECTICIDE	INSECTICIDE	DO	н	NOI	Apples/People
Summary / Findi	nas	Chlorpyrifos	Fenarimol	Oil				

Complainant states that an air blast sprayer, while spraying the block of trees behind their subdivision, sprayed him and his wife in his back yard. Complainant said it might have also sprayed two neighbor children who were walking across the street from their home who had to cover their heads.

The WSDA laboratory found detectable quantities of chlorpyrifos on all nine samples submitted. The lab also found detectable quantities of fenarimol in two samples. The alleged infractor said that they had applied pesticide to the orchard bordering the complainant's property on that day.

CASE # 7C 1999	Designation Incident License n/a	Date of Incident 12	2/31/1996 <u>Severity</u> 1	Application Method NA
	Nature of Case Employer Retaliation	<u>Response Time</u> sa	ame day Children Involved? No	Application Type Ag
County ADAMS	Chemicals or other Materials Invo	Ived: Other Agencies	Involved: Final Action	Target/Complaint Area
	NA	EPA, DOH, L8	I, DOE Referred	Fired by employer
Summary / Findings	NA			

Referring party was fired from alleged infractor's firm. Complainant said the firing was because he had refused to spray during windy conditions.

Investigator spoke with complainant about allegations that he made and referred information to appropriate agencies. The complainant claimed he was fired because he had refused to spray during windy conditions.

CASE # 8C 1999	Designation Violation	License private applicator	Date of Incident 4/24/1999	Severity 2	Application Method Ground
	Nature of Case Human Exposit	Ire	Response Time same day	Children Involved? No	Application Type Ag
County CHELAN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	BACTERICIDE		DOH	NOC	Pears/People
Summary / Findings	Oxytetracycline				

An applicator allegedly drifted a pesticide from an adjoining pear orchard onto complainant and his son while they were sitting in their back yard. When complainant asked the applicator what he was spraying, he was mistakenly told it was a fungicide. it was later found the applicator was spraying a bactericide.

WSDA lab found detectable quantities of oxytetracycline on the north side of complainant's back yard, on his patio table, and in the alcove in the backyard where complainant said he was standing during the episode. Lab samples were "none detected" on complainant's socks, sliding glass doors and SE corner of backyard alcove. Alleged infractor was spraying near the property line.

CASE # 9C 1	1999	Designation Violation	<b><u>License</u></b> private applicator	Date of Incident 5/1/1999	<u>Severity</u> 2	Application Method Ground
		Nature of Case Human	Exposure	Response Time same day	Children Involved? No	Application Type Ag
County OKANOG	GAN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
		GROWTH REG		DOH	NAI	Apples/people
Summary / Findin	as	gibberillins				

An applicator allegedly drifted from an apple orchard onto the damaged parties sometime before noon on 5/1/99 while they were working outside around complainant's pigpen. He said that the wind was gusting at 50 mph with sustained winds of 10-20 mph, and thought that the applicator shouldn't be spraying in such strong wind. He said he felt "hyper," the feeling hit fast like when you have too much caffeine. He did not feel mist or smell odor outside.

Lab unable to analyze for material sprayed by alleged infractor on his orchard at the time of complaint. Insufficient evidence to take an action.

<u>CASE #</u> 10C 1999	Designation Violation		Date of Incident 5/5/1999 Response Time same day	Severity 2 Children Involved? Yes	Application Method Air Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	HERBICIDE	EPA, DOH	NAI	Wheat/people
Summary / Findings	MCPA	2,4-D			

Complaint of aerial applicator drifting onto complainant, his wife, daughter, niece and 19 other children and adults and while they were picking camas roots near Almira. Complainant's daughter & niece were taken to the doctor that evening with severe abdominal cramps. Complainant described the airplane that sprayed them.

The WSDA lab found pesticide residues in the wheat and vegetation samples collected from the approximate positions of the people in the sagebrush scrub. The lab also found residues in one item of clothing from a single person. One person failed to submit records in response to an official record request.

CASE # 11C 1999	Designation Violation	n <u>License</u> unknown	Date of Incident 5/10/1999	<u>Severity</u> 4	Application Method Unknown
	Nature of Case Bee Kil	l	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE	None	NOC	Bees/Unknown
Summary / Findings	Carbaryl				

Bee kill. An unknown applicator allegedly sprayed or drifted a pesticide onto an area where the complainants bees were foraging. The complainant had 46 hives affected with what he calls a moderate kill of about 80 percent. Complainant had 46 hives.

The bees were foraging in non-crop areas. WSDA found carbaryl in the bees. Three different orchards within 5 miles of the hives applied carbaryl at this time. Unable to determine source.

CASE # 12C 1999	Designation Incident License unknown	Date of Incident 5/10/1999	<u>Severity</u> 1	Application Method Unknown
	Nature of Case Bee Kill	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	UNKNOWN	None	NAI	Bees/Unknown
Summary / Findings	Unknown			

Bee kill. Unknown applicator allegedly sprayed or drifted onto an are where the damaged party's bees were foraging. Damaged party had 110-120 hives affected with what the referring party calls a moderate kill of about 80 percent.

No pesticide residues were detected in the bees. Carbaryl was detected in nearby orchards, no non-crop areas were sampled. Some submitted records were incomplete.

CASE # 13C 1999	Designation Inciden	t <u>License</u> unknown	Date of Incident 5/10/1999	<u>Severity</u> 1	Application Method Unknown
	Nature of Case Bee Kil	I	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE	None	NOC	Bees/Unknown
Summary / Findings	Carbaryl				

Bee kill. An unknown applicator allegedly sprayed or drifted onto an area where the damaged party's bees were foraging. The site is near the location where another incident was reported. The referring party said that there were more than 50 other hives affected with a moderate kill of about 80%.

A trace of carbaryl was detected in the bees. Carbaryl was applied in nearby orchards but no noncrop areas were sampled; complainant says bees were foraging in non-crop areas at time of incident.

CASE # 14C 1999	Designation Pesticide Involved	License private applicator	Date of Incident 5/19/1999	Severity 2	Application Method Ground
	Nature of Case Human Exposure		Response Time same day	Children Involved? No	Application Type Ag
County DOUGLAS	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH, Food Safety	NAI	Apples/Person
Summary / Findings	Azinphos Methyl				

Alleged infractor sprayed or drifted a pesticide onto the complainant from an orchard on the west side of the road as the complainant was driving his motorcycle. The complainant suffered an irritation on his face that he believes is due to being drenched by the pesticide. The complainant went to a walk-in health clinic to have the irritation on his face treated.

The complainant could not pinpoint exactly where he was sprayed. Two potential sources for the overspray but could not determine which was the source.

CASE # 15C 1999	Designation Incident	<u>License</u> n/a	Date of Incident 4/1/1999	Severity 0	Application Method NA
	Nature of Case Animal Ex	xposure	Response Time One day	Children Involved? No	Application Type Ag
County GRANT	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE		WSU	NAI	Horses
Summary / Findings	None				

Alleged exposure of horses to unknown substance (suspected pesticide) leading to blindness.

The WSDA lab found no pesticide residues in hay and water samples collected from the site. The vet told the complainant that something was wrong with the muscle around the horse's eye.

<u>CASE #</u> 16C 1999	Designation Violation	License private applicator	Date of Incident 5/24/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Human Exp	osure	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	NOC	Apples/Person
Summary / Findings	imidacloprid				

Alleged exposure to orchard spray while riding bicycle.

Complainant alleged that he and other employees and residents of two adjacent orchards (with one owner) were drifted on by an airblast sprayer operated by the alleged infractor. The WSDA laboratory did not detect the pesticide on vegetation downwind of the application. The records requested by WSDA were not provided by the alleged infractor.

CASE # 17C 1999	Designation Incident License unlicensed	Date of Incident 5/24/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Human Exposure	Response Time same day	Children Involved? No	Application Type Non Ag
County GRANT	County GRANT Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	NONE	DOH	NAI	Lawn/Person
Summary / Findings	None			

Alleged exposure to substance in lawn causing a burning sensation.

Complainant alleged that due to a neighbor's pesticide applications to his lawn around the end of may, he was getting a burning sensation on his hands and feet when he worked in his own yard. Alleged infractor claims that he did not make any pesticide applications in 1999. The WSDA lab did not detect any pesticides in the vegetation and soil samples collected from the complainant's yard.

CASE # 18C 1999	Designation Violation	on <u>License</u> private applicator	Date of Incident 6/3/1999	Severity 2	Application Method Ground
	Nature of Case Drift to	organics	Response Time same day	Children Involved? No	Application Type Ag
County OKANOGAN	Chemica	als or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE	None	NOC	Apples/Organic pears
Summary / Findings	Azinphos Methyl	Imidicloprid			

The complainant said the neighboring orchardist to the north drifted guthion onto his organic pear orchard. Complainant said alleged infractor had also drifted onto his orchard workers about two months ago. He confronted the alleged infractor about the most recent drift & was told that alleged infractor was not going to change his lifestyle and method of farming just because the complainant had gone organic.

Alleged infractor indicated in his records and statement that he was spraying azinphos methyl 50-W soluble and imidicloprid in the orchard bordering the complainant's on the north side. The WSDA lab found detectable quantities of azinphos methyl in samples extracted from complainant's property as far in as 120 feet south of alleged infractor's orchard.

CASE # 19C 1999	Designation Pesticide Involved License privat	e applicator Date of Incident 5/2/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Animal Death	Response Time same day	Children Involved? No	Application Type Ag
County OKANOGAN	Chemicals or other Materials Involve	d: Other Agencies Involved:	Final Action	Target/Complaint Area
	RODENTICIDE	None	NAI	Cherries/Dog
Summary / Findings	Unknown			

The complainant claims numerous birds and her dog died following a pesticide application in an orchard. She was told that a "knock down" spray with some fertilizer added to it was used. Her dog died of severe internal bleeding. She said the orchard vegetation turned white and there was a white film on her grass after the application. She feels her pasture is still affected from it leeching.

Investigators looked at the site and could not see any plants that had any pesticide symptoms. After discussion with her and her husband we found that her husband had placed some rodent bait in the area (causes severe bleeding when ingested). The alleged infractor's records indicated that he had not applied any rodenticides. Unable to prove allegations.

CASE # 20C 1999	Designation Violation	License private applicator	Date of Incident 6/9/1999	<u>Severity</u> 4	Application Method Unknown
	Nature of Case Bee Kill		Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Bees/Unknown
Summary / Findings	Azinphos Methyl				

Bee kill. An unknown applicator allegedly sprayed or drifted onto an area where the complainant's bees were foraging. According to the complainant he had 150 colonies at this site.

Complainant's bees were foraging in noncrop areas. Samples of bees contained residues of azinphos methyl. Three orchards in which azinphos methyl was applied were in range of the foraging bees. Two persons making applications allowed drift off-site and off-property to non-crop areas where bees were foraging. One person's records were incomplete.

CASE # 21C 1999	<b>Designation</b> Violatio	n <u>License</u> commercial applicator	Date of Incident 4/27/1999	<u>Severity</u> 4	Application Method Ground
	Nature of Case Direct		Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	HERBICIDE	DOE	NOC	Timothy hay
Summary / Findings	MCPA	Dicamba			

Complainant hired alleged infractor to spray his hay last fall & this spring with 2,4-D & Banvel. The stands have been in 3-4 yrs & averaged 4 ton/ac 1st cutting. After being sprayed the hay is twisted, yellow and may make 1 1/2 ton/ac. New seedlings where spray skipped, are normal. Approximately 1300 acres are affected.

Rhomene MCPA amine herbicide was used and is not labeled for use on Timothy. Opinions of experts and consultants differed on whether or not herbicides injured the Timothy. Opinions also differed on whether or not the crop was at the correct stage of growth for MCPA and Dicamba applications.

CASE # 22C 1999	Designation Violation	on <u>License</u>	private applicator	Date of Incident	6/11/1999	Severity 2	Application Method Ground
	Nature of Case Humar	Exposure		Response Time	same day	Children Involved? No	Application Type Ag
County DOUGLAS	Chemicals or other Materials Involved:			Other Agenci	es Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE	INSECTICIDE	DO	Н	Administrative Action	Cherries/Person
Summary / Findings	Azinphos Methyl	Sulfur	Mycobutanil				

An applicator allegedly drifted a pesticide from a cherry orchard onto complainant while she was working in her front yard.

DOH classified the relationship of the pesticide exposure to the symptoms expressed as "probable". The alleged infractor sprayed in his orchard about 85' west of the episode site from 9:00 am to 12:00 pm on 6-11-99. The WSDA lab found detectable quantities of azinphos methyl and sulfur at site of exposure.

CASE # 23C 1999	Designation Pestic	de Involved Licer	ise public operator	Date of Incident 6/14/	/1999 <u>Severity</u> 2	2 Application Method Ground
	Nature of Case Trees	Dying		Response Time same	e day Children Involved?	No <u>Application Type</u> ROW
County OKANOGAN	nty OKANOGAN Chemicals or other Materials Involved:		Other Agencies Inv	volved: Final Action	Target/Complaint Area	
	HERBICIDE	HERBICIDE	HERBICIDE	DOT	NAI	Trees
Summary / Findings	2,4-D	Diuron	bromacil			

Alleged trees dying along highway. Several trees in front of complainant's motel. Several died last year and more are dying this year.

WSDA lab found detectable quantities of 2,4-D and MCPA. Alleged infractor records indicate that these items were sprayed in the area in question. The complainant claims that she witnessed the alleged infractors spraying the limbs of her pine trees in 1997, the trees had died by 1999. Could not prove cause

CASE # 24C 1999	Designation Pesticide In		ommercial applicator	Date of Incident	6/22/1999	<u>Severity</u> 1	Application Method Air
	Nature of Case Drift to orga	anics		Response Time	same day	Children Involved? No	Application Type Ag
County CHELAN	Chemicals or other Materials Involved:			Other Agenci	es Involved:	Final Action	Target/Complaint Area
	INSECTICIDE			Nor	ne	NAI	Cherries/Organic apples,
Summary / Findings	malathion						nectarines

Complainant was working in his organic apple block when he noticed a helicopter spraying a cherry orchard to the west. He claims winds were gusting (15-mph) and sustained at over 5 mph. He believes that the application drifted onto his organic apples and nectarines.

WSDA lab found detectable quantities of Malathion in samples from organic apple orchard and neighboring targeted orchard. Complainant turned out not to have been the lessee of the orchard that the complaint involved. The lessee chose not to press the complaint. Case closed.

CASE # 25C 1999	Designation Violation	License commercial applicator	Date of Incident 6/17/1999	Severity 2	Application Method Ground
	Nature of Case Direct		Response Time same day	Children Involved? No	Application Type Non Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE HERBI	CIDE	None	NOC	Parking lot/Car
Summary / Findings	Glyphosate Diuron				

Vehicle owned by complainant and parked in the Fire District parking lot was allegedly sprayed by alleged infractor during an application to the parking lot of the fire district.

The WSDA lab found residues of glyphosate on complainant's truck. Alleged infractor claimed that sprayer equipment malfunctioned and sprayed complainant's truck. the application record from the alleged infractor was not on an official or approved WSDA form.

CASE # 26C 1999	Designation Violation	on <u>License</u> p	public operator	Date of Incident Response Time	6/1/1999 same day	Severity 3 Children Involved? No	Application Method Ground Application Type Non Ag
County OKANOGAN	Chemicals or other Materials Involved:		Other Agencie	es Involved:	Final Action	Target/Complaint Area	
	HERBICIDE	HERBICIDE		Nor	ne	NOC	ROW/Trees, water
Summary / Findings	2,4-D	Dicamba					

Complainant said there were three locations where he believed the alleged infractor was spraying illegally over water. He also believes they were killing pine trees along two state routes due to their spray program.

Alleged infractor was driving a truck mounted sprayer that applied 2,4-D and Dicamba near a culvert. WSDA lab found detectable quantities of 2,4-D and Dicamba in samples taken from shrubs that overhang the water on both banks of a creek. Records were submitted on a non-approved computer program.

CASE # 27C 1999	Designation Pesticide Involv	red <u>License</u> unknown	Date of Incident 6/10/1999	<u>Severity</u> 4	Application Method Unknown
	Nature of Case Bee Kill		Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NAI	Bees
Summary / Findings	Azinphos Methyl				

Bee kill. An unknown applicator allegedly sprayed or drifted a pesticide onto an area where the complainant's bees were foraging. The complainant said he had 42-44 colonies at the site.

The WSDA lab found azinphos methyl in the damaged party bees. No vegetation samples were obtained from non-crop areas adjacent to any of the several orchards near the bees. The source of the azinphos methyl cannot be determined. Incomplete records were provided to WSDA by one person.

CASE # 28C 1999	Designation Violation Nature of Case Drift	License private applicator	Date of Incident 7/2/1999 Response Time same day	Severity 2 Children Involved? No	Application Method Ground Application Type Ag
County CHELAN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	NOI	Cherries/Cherries
Summary / Findings	Azinphos Methyl				

Alleged drift from neighboring orchard spray application onto complainant's cherry trees. Possible contamination of fruit beyond residue tolerances.

WSDA lab found detectable quantities of azinphos methyl in the complainant's orchard, on the window of a newly constructed house east of alleged infractor's target, and on complainant's t-shirt and cherry fruit from complainant's orchard. The residue was 1.2 ppm on the cherry fruit. EPA allows 2 ppm.

CASE # 29C 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 7/1/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Water Contamination	Response Time same day	Children Involved? No	Application Type Non Ag
County GRANT	County GRANT Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	INSECTICIDE	Food Safety, DOE, DOH	NAI	Mosquitoes/Water
Summary / Findings	Methoprene			

Alleged spraying of pesticide on organically certified fish hatchery. Alleges that the headwaters of a creek that feeds the hatchery was sprayed.

The alleged infractor stated that he applied pesticides to a pond and the tail waters of the hatchery. An oily sheen was seen on the fish-rearing ponds after the spraying and also fish mortality increased about one to two hours after the spraying. WSDA lab found no residues in the samples collected. The total solution volume applied was one gallon/acre.

CASE # 30C 1999	Designation Pesticion	de Involved <u>License</u> public operator	Date of Incident 7/15/1999 Response Time same day	Severity 2 Children Involved? No	Application Method Air Application Type Non Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		Food Safety, DOE, DOH	NAI	Mosquitoes/property
Summary / Findings	Methoprene				

Alleged aerial application directly onto property by alleged infractor.

Complainants stated that they saw the airplane spray the southern portion of their property and the "bureau pond" in the northwest corner of the property. Applicator said that he did not spray or fly over complainant's property on that date. He also said that he did spray the "bureau pond". Part of that pond is on the complainant's property.

CASE # 31C 1999	Designation Violation	on <u>License</u> commercial applicator	Date of Incident 7/18/1999	Severity 1	Application Method Air
	Nature of Case License	e	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemica	als or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE	None	NOC	Seed Alfalfa
Summary / Findings	Primicarb	Chlorothalonil			

Complaint that alleged infractor, who is an unlicensed employee of a company, made an aerial application of an insecticide onto seed alfalfa owned by another party.

One alleged infractor (boss) ordered unlicensed person to apply the pesticides. Records supplied by alleged infractors were incomplete.

CASE # 32C 1999	Designation Pesticide Involved License private applicator	Date of Incident 7/19/1999	Severity 1	Application Method Ground
	Nature of Case Drift	Response Time same day	Children Involved? No	Application Type Ag
County CHELAN	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	NAI	Apples/Yard
Summary / Findings	Azinphos Methyl			

Alleged drift from neighboring orchard spray application onto complainant's back yard.

Complainant said that an unknown applicator drifted pesticides from the orchard behind her house onto her back yard on 7-19-99 at around 10:30 am. She did not have pesticide related symptoms. Complainant requested that the investigation not be pursued. WSDA closed the case.

CASE # 33C 1999	Designation Violation	License public operator	Date of Incident 7/22/1999	<u>Severity</u> 2	Application Method Air
	Nature of Case Direct		Response Time same day	Children Involved? No	Application Type Non Ag
County GRANT	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH, F&W, DOE	NOC	Mosquitoes/property
Summary / Findings	Methoprene				

Alleged aerial application directly onto complainant's property by alleged infractor.

Alleged infractor said that he sprayed a pond on the complainant's property on a later date than claimed by the complainant. He said that he did not spray on the earlier date.

CASE # 34C 1999	Designation Violation	n <u>License</u> commercial appli	cator Date of Incident 7/14/1999	<u>Severity</u> 4	Application Method Air
	Nature of Case Bee Ki	l	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	INSECTICIDE INSECTICIDE	None	NOC	Seed Alfalfa, Potatoes/Bees
Summary / Findings	Methamidophos	Chlorothalonil Dimethoate			

Bee kill - an unknown applicator allegedly sprayed or drifted a pesticide onto an area where the complainant's bees were foraging. According to complainant, he had 150 colonies at this site.

The WSDA lab found some of the same pesticides that were applied to nearby fields by the alleged infractors in the bees and vegetation around the hives. All of the five carbaryl applications made by one alleged infractor's records did not include the EPA product registration number.

CASE # 35C 1999	Designation Pestici	de Involved <u>License</u> unknown	Date of Incident 7/16/1	1999 <u>Severity</u> 2	Application Method Air
	Nature of Case Deliber	ate Contamination	Response Time same	day Children Involved? No	Application Type Ag
County ADAMS	Chemicals or other Materials Involved:		Other Agencies Invo	lved: Final Action	Target/Complaint Area
	HERBICIDE	HERBICIDE	None	NAI	Potatoes
Summary / Findings	Glyphosate	2,4-D			

Complainant alleges that somebody put an herbicide in his spray tank that injured the damaged party's potatoes. Complainant was spraying damaged party's potatoes with monitor and foliar nutrients. He alleges that the herbicide was added while the plane & mixer were unattended at the warden airport during a break in spraying due to thunderstorms.

The WSDA lab found glyphosate and 2,4-D residues in potatoes foliage and tubers where the injury was observed and where the injury was not observed. The lab did not detect phenoxy acid herbicides in the Monitor 4 used by the complainant. It could not be determined if the injury symptoms were caused by pesticides.

CASE # 36C 1999	Designation Violation	License private applicator	Date of Incident 7/30/1999	Severity 2	Application Method Ground
	Nature of Case Drift		Response Time same day	Children Involved? No	Application Type Ag
County CHELAN	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Apples/Yard
Summary / Findings	Azinphos Methyl				

Alleged drift from neighboring orchard spray application onto complainant's back yard.

WSDA lab found detectable quantities of azinphos methyl in complainant's backyard and on his back windows and lawn. The alleged infractor indicated in his records that he was spraying in his orchard that borders the complainant's house on the west side.

<u>CASE #</u> 37C 1999	Designation Violation License private applicator	Date of Incident 8/10/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Drift	Response Time same day	Children Involved? No	Application Type Ag
County CHELAN	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	NOI	Pears/Dog
Summary / Findings	Azinphos Methyl			

Alleged drift onto property and complainant's dogs from application of pesticides onto neighbor's pear orchard.

WSDA lab found azinphos methyl on the complainant's car, dog kennel and vegetation in her garden, but did not find any on her house.

CASE # 38C 1999	Designation Violation	License public operator	Date of Incident 8/16/1999 Response Time same day	Severity 2 Children Involved? No	Application Method Air Application Type Non Ag
County GRANT	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Mosquitoes/Car
Summary / Findings	Methoprene				

Allegations that a plane from the alleged infractor sprayed the complainant's car as he was driving south on the highway.

The WSDA lab found a trace of Methoprene in swabs of the complainant's windshield. The alleged infractor was spraying the area during the time the complainant was driving through the area.

CASE # 39C 1999	Designation Violation	on <u>License</u> commercial applicator	Date of Incident 3/1/1999	Severity 1	Application Method Ground
	Nature of Case Misuse	2	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemica	als or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	HERBICIDE	None	NOC	Asparagus
Summary / Findings	Diuron	Linuron			

Alleged that 518 acres of asparagus, belonging to the complainant, were injured by herbicides applied by the alleged infractor. The herbicides were applied in a split application in the spring of 1999. The injury symptoms were first observed in mid-July.

All four herbicides were used in a manner inconsistent with label specifications by alleged infractors. Incomplete records were provided to WSDA, which were not on official WSDA forms, and one alleged infractor is not listed with WSDA as a commercial operator for the firm involved.

CASE # 40C 1999	Designation Violation	License public operator	Date of Incident 8/5/1999	Severity 3	Application Method Air
	Nature of Case Human Expos	sure	Response Time same day	Children Involved? No	Application Type Non Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH, DOE	NOC	Mosquitoes/People
Summary / Findings	Methoprene				

Human exposure. Allegation that a plane from the alleged infractor firm sprayed 3 employees in the field working on a purple loosestrife control project.

Two of the three damaged parties report that they were being sickened by the spray. The alleged infractor said that he saw the vehicle belonging to the three damaged parties, but that he did not see the people.

CASE # 41C 1999	Designation Viola	tion <u>License</u>	commercial applicator	Date of Incident	8/20/1999	Severity 3	Application Method Air
	Nature of Case Hum	an Exposure		Response Time	same day	Children Involved? Yes	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agenci	es Involved:	Final Action	Target/Complaint Area	
	INSECTICIDE	INSECTICIDE	INSECTICIDE	DO	H	NOC	Potatoes/People
Summary / Findings	Sulfur	Methamidophos	Chlorothalonil				

Aerial applicator spraying potatoes is alleged to have drifted onto property of complainant. "Fumes" are making complainant sick (he was not there during application). His sister and her baby as well as his mother were there during the application. Both the sister and mother complained of head aches and nausea.

The WSDA lab found sulfur, methamidophos, and chlorothalonil residues in samples collected from the complainant's residence. The alleged infractor applied these ingredients to the potato fields. The application records were not on official WSDA record forms. The application records were missing concentration and maps.

CASE # 42C 1999	Designation Pesticide Involved License commercial applic		Severity 2	Application Method Air
	Nature of Case Bee Kill	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDES	None	NAI	Unknown/Bees
Summary / Findings	Carbofuran			

Bee kill - complainant is claiming his bees are dying due to exposure to a pesticide from an unknown source. He claims moderate kill damage, and said he has about 200 colonies at this location.

No pesticides were detected in the bees or in foliage close to colonies. The alleged infractors made several different pesticide applications near the bees. The application records and residue analyses do not indicate that pesticides were responsible for the bee mortality. One alleged infractor applied carbaryl during a time when bees would be foraging. Records are missing EPA registration number.

CASE # 43C 199	<b>Designation</b> Pesticion	de Involved License commercial applicate	or Date of Incident 8/13/1999	<u>Severity</u> 1	Application Method Air
	Nature of Case Bee Kil	1	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemica	als or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDES		None	NAI	Unknown/Bees
Summary / Findings	Carbofuran				

Bee kill - complainant claims that is bees are dying due to exposure to a pesticide from an unknown source. The complainant said he has about 30 colonies at this location.

No pesticides were detected in the bees or in foliage close to the colonies. Alleged infractors made several different pesticide applications near the bees. The application records and residue analysis do not indicate that pesticides were responsible for the bee mortality. One alleged infractor applied Carbaryl during a time when bees would be foraging. Some records missing EPA registration number.

CASE # 44C 1999	Designation Violation	License commercial applicator	Date of Incident 8/26/1999	Severity 2	Application Method Air
	Nature of Case Human Exposu	re	Response Time same day	Children Involved? Yes	Application Type Non Ag
County CHELAN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH, DOE	NOC	Mosquitoes/Person
Summary / Findings	Malathion				

Human exposure. Alleged drift from a helicopter onto 15 yr old complainant while he was outside. Helicopter made 4 - 5 passes over complainant's house & yard while spraying for mosquito abatement. Complainant said he saw the pesticide coming down on him while the helicopter flew directly over his head. He smelled a strong odor, but by the time the pesticide reached the ground he did not feel it.

Permission was not given to alleged infractors to spray complainant's property. Possible overspray onto streams in the area. Items are missing from application records. Licensing endorsements for this type of spray missing from applicator's licenses.

CASE # 45C 1999	Designation Violation	License commercial applicator	Date of Incident 9/1/1999	Severity 2	Application Method Air
	Nature of Case Human Ex	posure	Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE H	ERBICIDE	DOH	Administrative Action	Seed alfalfa/Person
Summary / Findings	Paraquat Di	iquat			

Complainant alleges he was sprayed by an airplane applying dessicant to a seed alfalfa field. He was setting irrigation tubes in his corn field across the road from the application.

Complainant and his corn were drifted on during an application of Paraquat and Diquat by alleged infractor to seed alfalfa. WSDA lab found diquat on complainant's hat and diquat and paraquat on his corn. Alleged infractor applied pesticide at a higher than label rate. Records have missing and incorrect information.

CASE # 46C 1999	Designation Pesticide Involved	License commercial applicator	Date of Incident 7/9/1999	Severity 2	Application Method Ground
	Nature of Case Drift		Response Time same day	Children Involved? No	Application Type ROW
County GRANT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDES		None	NAI	ROW/Potatoes
Summary / Findings	Miscellaneous				

Referring party contacted WSDA on behalf of damaged party. Damaged party alleges that herbicides applied to roadside right-of-way by alleged infractor firm drifted onto his potatoes.

Damaged party's potatoes had symptoms of phenoxy herbicide injury. The WSDA lab found only Dichlorprop in samples from the field. Alleged infractor said they have never used Dichlorprop. Can't determine the source.

CASE # 47C 1999	Designation Pesticide Involved License unknown	Date of Incident 12/31/1998	Severity 3	Application Method Unknown
	Nature of Case Deliberate Misuse	Response Time same day	Children Involved? No	Application Type Non Ag
County CHELAN	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	DOE	NAI	Trees
Summary / Findings	Glyphosate			

Alleged intentional killing of complainant's poplar trees with a pesticide by neighbors. Complaint that the trees are dying abnormally and never reach a year of age without dying or yellowing. Workers had noticed a black substance on the ground & the trunks of many of the trees. He suspects they are killing trees because they told his worker not to plant the trees in that location, so their view wouldn't be obscured.

WSDA laboratory found detectable quantities of glyphosate residues in the soil and on the leaves of some of the poplar trees. Complainant withdrew his complaint on 11/12/99. WSDA stopped the investigation at that time. No further attempts were made to identify an infractor.

CASE # 48C 1999	Designation Violation Lice	ense private applicator	Date of Incident 6/1/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Direct		Response Time same day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materi	als Involved:	Other Agencies Involved	I: Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Seed Alfalfa
Summary / Findings	Miscellaneous				

Complainant alleges that 67 acres of his seed alfalfa were injured by herbicide applications made by alleged infractor.

Alleged infractor made off-label recommendations for three products applied to the complainant's seed alfalfa. Problems developed from the recommendations. Records were not on approved forms.

CASE # 49C 1999	Designation Violation	License commercial applicator	Date of Incident 11/5/1999	Severity 3	Application Method Air
	Nature of Case Drift		Response Time one day	Children Involved? No	Application Type Ag
County GRANT	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDES		DOE, F&W	NOI	Weeds/Trees
Summary / Findings	Miscellaneous				

Complainant alleges that the aerial applicator applied herbicides for purple loosestrife in a careless manner resulting in damage to trees and other non-target vegetation.

Alleged infractor failed to clean his tank between applications resulting in off-label applications of herbicides. The WSDA lab found residues in aquatic sites of herbicides not labeled for aquatic sites; it could not be determined whether herbicides were applied to surface water. The DOE/WSDA Water Quality Permit was violated by Dept. of Fish and Wildlife. Failure to provide records for all applications.

CASE # 50C 1999	Designation Violation	License commercial applicator	Date of Incident 11/22/1999	<u>Severity</u> 2	Application Method Disposal
	Nature of Case Disposal		Response Time same day	Children Involved? No	Application Type Non Ag
County DOUGLAS	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		DOE	NOI	Disposal
Summary / Findings	Trifluralin				

The alleged infractor was pressure washing a truck mounted pesticide tank in the front of his house & releasing it to the side of the road. Yellow water was going down the side of the road & he was trying to control the run off by damming it up. A call by DOE to the alleged infractor indicated this is how he normally cleans out his tank. Sometimes he drains it into his flower beds.

Alleged infractor stated that he normally drains his tanks into the ditch along the side of the street in front of his house and that on 11-22-99 he allowed wash material to run over the gravel area to the street where it created a puddle. The WSDA laboratory found detectable quantities of trifluralin in the samples.

CASE # 51C 1999	Designation Violation	License commercial applicator	Date of Incident 8/31/1999	Severity 3	Application Method Ground
	Nature of Case Misuse		Response Time same day	Children Involved? No	Application Type Ag
County OKANOGAN	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		US Forest Service	NOC	Weeds
Summary / Findings	Glyphosate				

Complainant called about an alleged label violation by the alleged infractor. He said the applicator was not required use a surfactant as the label required. The application killed 80% of the native plants, but eliminated only 50% of the Knapweed. He said the application left the riparian stream banks unvegetated and susceptible to re-infestation along with increasing erosion and stream sedimentation.

The label requires the use of a nonionic surfactant in hand held equipment. The alleged infractor used a hand-held pump sprayer to spray glyphosate on the majority of the riparian area application sites. He did not add a surfactant because it was not addressed in the project's environmental assessment.

<u>CASE #</u> 1G 1999	Designation Incident License n.	a Date of Incident 5/	1/1999 <u>Severity</u> 0	Application Method NA
	Nature of Case Direct	Response Time Sa	ame Day Children Involved? No	Application Type Ag
County GRANT	Chemicals or other Materials Inv	olved: Other Agencies I	Involved: Final Action	Target/Complaint Area
	NONE	None	NAI	Alfalfa hay
Summary / Findings	None			

Somewhere in first week of May, something affected approximately 1/4 of the circle of 4 year old alfalfa hay. The complainant pulls water out of a drain ditch to irrigate. Also frost damage to area alfalfa fields may be the agent. Unknown source or product.

Problem was diagnosed as frost damage.

CASE # 1S 1999	Designation Incident License n	a Date of Incident 3/2/199	9 <u>Severity</u> 0	Application Method NA
	Nature of Case Animal poisoning	Response Time Same D	Day <u>Children Involved?</u> No	Application Type Non Ag
County SPOKANE	Chemicals or other Materials Inv	olved: Other Agencies Involv	ved: Final Action	Target/Complaint Area
	NONE	None	NAI	Attempt to poison animals
Summary / Findings	None			

Approximately six pounds of clams, sausage, & rotten hamburger were found on property. Complainant is concerned that it may be poisoned. He has a dog & cats.

WSDA Lab tested sample of meat for strychnine and organophosphate pesticides but neither were detected.

<u>CASE #</u> 2S 1999	Designation Incident Nature of Case Direct	<u>License</u> n/a	Date of Incident 3/18/1999 Response Time Same Day	Severity 0 Children Involved? No	Application Method NA Application Type Non Ag
County SPOKANE	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE		None	NAI	Shrubs
Summary / Findings	None				

Complainant feels a neighbor damaged a shrub on her property with pesticides.

No pesticide damage symptoms were noted. Damage apparently caused by freezing-winter injury and fungal leaf-spot.

CASE # 3S 1999	Designation Pesticide Involved License unknown	Date of Incident 3/19/1999	Severity 5	Application Method Unknown
	Nature of Case Animal poisoning	Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	RODENTICIDE	Animal Control	NAI	Dogs
Summary / Findings	Strychnine			

At least 5 dogs have died in airway heights since the weekend. The dogs all exhibited gagging and convulsions prior to death. Complainant obtained sample of stomach contents from one dog and put it in freezer.

WSDA lab detected strychnine in vomit sample from dog. Unable to locate source of poisoning.

CASE # 4S 1999	Designation Violation	License commercial applicator	Date of Incident 3/21/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? Yes	Application Type Ag
County WHITMAN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	NOC	Ornamentals/Property
Summary / Findings	Lindane				

Alleged drift of pesticide mixture onto complainants property. No notification provided to complainants as per WSDA Pesticide Sensitive Register. No posting. Complainant's daughter possibly affected.

Pesticide products did not drift off of target site. Alleged infractor did not provide prior notification of an application to a person on the pesticide sensitive registry. Alleged infractors did not place appropriate posting at the application site. An alleged infractor was not property attired with the necessary personal protective equipment.

CASE # 5S 1999	Designation Pesti	cide Involved License	public operator	Date of Incident	3/2/1998	<u>Severity</u> 1	Application Method Ground
	Nature of Case Direct	t		Response Time	One Day	Children Involved? No	Application Type ROW
County ADAMS	Chemicals or other Materials Involved:		Other Agenci	es Involved:	Final Action	Target/Complaint Area	
	HERBICIDE	HERBICIDE		Noi	ne	NAI	ROW/Trees
Summary / Findings	Bromacil	Diuron					

Residual applied on 3/2/98 ran off and damaged some crop. Alleged infractor resolved the issue. Now, in 1999, a row of evergreens along side damaged party's home are dying.

Observed several affected trees in damaged party's windbreak. Foliage samples found none detected for pesticides used. Trace of one pesticide found in right-of-way, No pesticides found outside right-of-way. Affected trees were located within 30' of right of way.

CASE # 6S 1999	Designation Pesticide Involv	d License commercial applicator	Date of Incident 4/	/14/1999	Severity 1	Application Method Air
	Nature of Case Direct		Response Time Sa	ame Day	Children Involved? No	Application Type Ag
County WHITMAN	Chemicals or other Materials Involved:		Other Agencies I	Involved:	Final Action	Target/Complaint Area
	HERBICIDE		DOH		NAI	Wheat/Person, horse
Summary / Findings	2,4-D					

Human exposure and drift. Alleged over- spray while riding horses.

Evidence obtained indicated no pesticide drift off of the target site and that the complainants were not affected by pesticide drift.

CASE # 7S 1999	Designation Pesticide Involved License un	known Date of Incident 4/4/19	999 <u>Severity</u> 5	Application Method Unknown
	Nature of Case Animal poisoning	Response Time Same	e Day Children Involved? No	Application Type Non Ag
County SPOKANE Chemicals or other Materials Inv		lved: Other Agencies Invo	olved: Final Action	Target/Complaint Area
	RODENTICIDE	None	NAI	Dogs
Summary / Findings	Strychnine			

Pita bread filled with green grain was thrown into a fenced backyard. Two nine-month old Rottweiler pups ate it and died. Strychnine treated grain is suspected.

Complainant asked that WSDA run the bait for strychnine. WSDA lab detected strychnine in the bait. WSDA unable to determine source. Local authorities investigating.

<u>CASE #</u> 8S 1999	Designation Violation	License unlicensed	Date of Incident4/19/1999Response TimeOne Day	Severity 3 Children Involved? No	Application Method Ground Application Type Non Ag
County LINCOLN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	Advisory Letter	Gravel/Lawn, shrubs
Summary / Findings	Dichlorobenil				

Neighbor's son may have made an herbicide application that has run off-site across the complainant's property affecting lawn and shrubs.

Casaron product used by alleged infractor was also found on adjacent property owned by the complainant. Alleged infractor replaced the complainant's affected soil and ornamental plants during 1999 after the detection was made.

CASE # 9S 1999	Designation Violation	License unknown	Date of Incident 11/30/1998	<u>Severity</u> 1	Application Method Unknown
	Nature of Case Direct		Response Time Same Day	Children Involved? No	Application Type Non Ag
County LINCOLN	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	Verbal Warning	Pine trees
Summary / Findings	Glyphosate				

Complainant concerned about damage exhibited by several Austrian pines located on his vacation property. Is concerned that neighbor might be responsible for it.

No detectable phenoxy or glyphosate reside found in soil or foliage samples. Trace of glyphosate in metabolite found in soil samples collected from right of way. Most affected trees found in right of way. A state RUP sale was made to an unlicensed individual.

<u>CASE #</u> 10S 1999	Designation Incident	License n/a	Date of Incident 4/27/1999	Severity 0	Application Method NA
<u></u> 100 1333			Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	UNKNOWN		Animal Control	NAI	Cats and Dog
Summary / Findings	Unknown				

They have lost 3 animals in the last 6 weeks; 2 cats and 1 dog. Complainant believes they were poisoned. Her husband got a sample of green pellets in meat substance from the neighbors yard and they would like it analyzed.

WSDA lab was unable to identify the bait after several analyses. WSDA is closing case and turning evidence over to County Animal Control for possible prosecution.

CASE # 11S 1999	Designation Violation	n <u>License</u> commercial applicator	Date of Incident 5/14/1999	Severity 1	Application Method Unknown
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemical	s or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE		WSU	Advisory Letter	Airstrip/Iris
Summary / Findings	None				

The landlord is concerned that the alleged infractor damaged a commercial planting of iris when they sprayed at the airstrip near the iris field. The tenant farmer and landlord have also used herbicides.

Iris symptoms were not indicative of herbicide injury. Weeds growing near iris were healthy and all applicators left a buffer around planting. WSDA lab did not detect pesticide residues in iris samples. Disease symptoms were noted. Alleged infractors had minor record keeping problems.

CASE # 12S 1999	Designation Violation	License commercial applicator	Date of Incident 4/1/1999	Severity 0	Application Method Ground
	Nature of Case Direct		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE		None	Advisory Letter	Ornamentals/Ornamentals
Summary / Findings	None				

Approximately 400 shrubs at an apartment complex are dying. Damage has appeared since late April.

No pesticide connection to dying shrubs. Two applicators submitted incomplete records.

<u>CASE #</u> 13S 1999	Designation Incident License n/a	Date of Incident 6/2/1999	Severity 0	Application Method NA
	Nature of Case Direct	Response Time Same Day	Children Involved? No	Application Type Ag
County SPOKANE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE	WSU	NAI	Tomatoes
Summary / Findings	None			

Approximately 250 tomato plants curling and dying after being transplanted into purchased soil. County Extension agent feels damage may be from herbicide residue.

Site observations confirmed symptoms consistent with damage from a hormone type herbicide. Observations from surrounding area could not locate a source for possible drift. Lab did not detect pesticides in samples taken.

<u>CASE #</u> 14S 1999	Designation Violatio	n <u>License</u> commercial applicator	Date of Incident5/11/1999Response TimeSame Day	<u>Severity</u> 3 Children Involved? No	Application Method Ground Application Type Non Ag
County SPOKANE	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	HERBICIDE	None	Advisory Letter	Ornamentals/Trees
Summary / Findings	Clopyralid	Triclopyr			

Four trees allegedly damaged by ornamental herbicide application. Also possible lawn damage.

Symptoms on all four trees were consistent with damage caused by a hormone type herbicide such as confront. Evidence indicated root uptake rather than drift. The confront label had no warnings about root uptake unless roots were directly sprayed and no warnings of plant sensitivity. Alleged infractor applied confront slightly over label rate. Records were missing end time.

CASE #	15S 1999	Designation Inciden	t <u>License</u> commercial applicator	Date of Incident 5/1/1999	Severity 1	Application Method Ground
		Nature of Case License	2	Response Time Same Day	Children Involved? No	Application Type Non Ag
County	SPOKANE	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
		NA		None	NAI	Ornamentals
Summary	/ Findings	NA				

Alleged infractor allegedly operating without a valid commercial applicator for a period of time in May, 1999.

Alleged infractor did not have an officially designated commercial applicator license from May 1, 1999 to May 28, 1999.

CASE # 16S 1999	Designation Violation	License commercial applicator	Date of Incident 6/9/1999	Severity 2	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Ornamentals/yard
Summary / Findings	Chloropyrifos				

Alleged infractor drifted onto complainant's property while making an application to an adjacent yard.

Treatment conducted in accordance with label requirements. Lab found chlorpyrifos in 3 of 3 samples on complainant's property. Pesticide application records were missing complete start and finish times.

CASE # 17S 1999	Designation Incident License n/a	Date of Incident 12/31/1998	Severity 0	Application Method NA
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE	None	NAI	Shrubs
Summary / Findings	None			

A hedge of 30 year old lilacs started dying in July, 1998 and have progressively gotten worse. There is a 1-1 1/2 foot dead area in neighbor's yard next to the lilacs. The complainant feels that the neighbor used an herbicide that is killing the plants.

While observations found a variety of symptomology, it was difficult to determine what specifically has impacted the lilac hedge due to it's age, maintenance, and number of lawn care companies conducting treatments with different products over the years. The laboratory did not detect prometon, imazapyr, phenoxy, or glyphosate in the submitted samples.

<u>CASE #</u> 18S 1999	Designation Violation	License commercial applicator	Date of Incident 6/13/1999 Response Time Same Day	Severity 3 Children Involved? No	Application Method Air Application Type Ag
County LINCOLN	Chemicals o	r other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Wheat/Organic alfalfa
Summary / Findings	2,4-D				

Alleged pesticide application on wheat drifted onto organic alfalfa.

Pesticide residue was detected in both the target site and the adjacent portion of the affected alfalfa field.

CASE # 19S 1999	Designation Violation License n/a	Date of Incident 4/20/	/1999 <u>Severity</u> 1	Application Method NA
	Nature of Case Stolen exam	Response Time 15 da	ays <u>Children Involved?</u> No	Application Type Non Ag
County ASOTIN	Chemicals or other Materials Involu-	ed: Other Agencies Invo	olved: Final Action	Target/Complaint Area
	NA	None	Advisory Letter	Exam material
Summary / Findings	NA			

Alleged improper possession of exam material.

Alleged infractor admitted having the study material, given to him by co-workers prior to taking the WSDA exams in Yakima. Alleged infractor said he didn't know that the study material was gleaned from old WSDA exams and that it had been brought to his office from Idaho by an ex-employee. An inspection of the company's study material collection did not reveal any additional suspect material.

CASE # 20S 1999	Designation Pesticide Involved License public operator	Date of Incident 4/12/1999	Severity 2	Application Method Ground
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Ag
County ADAMS	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None	NAI	ROW/Canola
Summary / Findings	Sulfonylurea			

Alleged right-of-way application drifted onto Canola.

Affected winter canola damage symptomology indicates a possible exposure to a sulfonylurea herbicide. More than one application of the herbicide in the immediate vicinity of the affected winter canola in 1999 makes it impossible to determine fault. Lab results were inconclusive, (no detects).

CASE # 21S 1999	Designation Violation Licens	e commercial applicator	Date of Incident	11/30/1998	<u>Severity</u> 1	Application Method Ground
	Nature of Case Direct		Response Time	Same Day	Children Involved? No	Application Type Non Ag
County ASOTIN	Chemicals or other Materials Involved:		Other Agencie	es Involved:	Final Action	Target/Complaint Area
	HERBICIDE		Nor	ie	NOC	Tree/Tree
Summary / Findings	Triclopyr					

One approximately 80 ft. maple tree showing symptoms allegedly caused by tree removal and stump treatment.

No detectable triclopyr or phenoxy residue was detected in any soil or foliage samples. A trace of glyphosate and its metabolite were found in the soil sample collected from beneath the affected tree in an area where complainant treated his lawn. Neither the operator nor the worker was validly licensed in 1997.

<u>CASE #</u> 22S 1999	Designation Violation	License private applicator	Date of Incident 7/1/1999	Severity 2	Application Method Unknown
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County LINCOLN	Chemicals of	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Unknown/Grapes
Summary / Findings	Unknown				

Alleged phenoxy symptoms on 24 acres of wine grapes.

No detectable residue, other than the oryzalin applied by complainant's son was found in foliage samples collected from within the vineyards. Symptoms could not be linked to any particular pesticide. Records for complainant's son (applicator) indicate that he applied Surflan A-S at an excessive rate on four separate dates.

CASE # 23S 1999	Designation Pesticid	e Involved License unknown	Date of Incident 3/31/1999	Severity 2	Application Method Unknown
	Nature of Case Drift		Response Time One Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDES		EPA, DOH, DOE	NAI	Well water
Summary / Findings	Miscellaneous				

Alleged contaminated well water causing injury to plants.

Pesticide residues were found in the complainant's and two other families" well water. No definite source for these pesticide residues could be determined. Investigation referred DOH and EPA.

<u>CASE #</u> 24S 1999	Designation Violation	License commercial applicator	Date of Incident 7/17/1999	<u>Severity</u> 2	Application Method Air
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County SPOKANE	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Lentils/Pasture
Summary / Findings	Dimethoate				

Alleged aerial application overspray onto nearby property, cattle, horses and pasture.

Label of Dimethoate 4 EC warns to not conduct aerial applications when weather conditions favor drift of spray from treated areas. WSDA laboratory detected Dimethoate in three of three submitted foliage samples (2 on complainant's property) and a trace of dimethoate was also detected in the sample collected from an abandoned car on complainant's property.

CASE # 25S 1999	Designation Pesticide Involved License unknown	Date of Incident 7/18/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Direct	Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Dunty         SPOKANE         Chemicals or other Materials         Involved:		Final Action	Target/Complaint Area
	HERBICIDE	Sheriff Dept.	NAI	Lawn
Summary / Findings	Glyphosate			

Complainant contacted WSDA as someone vandalized her yard, possibly with pesticides. She was out of town for a few days and upon her return, discovered a 6" wide trail through her lawn that is dying. Two planters also have yellow plants that may have been damaged. Sheriff's office is investigating.

WSDA lab detected glyphoste in samples taken from the damaged area of the lawn and from damaged plants in planters. Lab sample results were sent to the complainant and to the sheriff's office as documentation for their case investigation

CASE # 26S 1999	Designation Violation	License public operator	Date of Incident 7/30/1999	Severity 2	Application Method NA
	Nature of Case Storage		Response Time Same Day	Children Involved? No	Application Type Non Ag
County PEND	Chemicals or o	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
OREILLE	HERBICIDE		None	Advisory Letter	Soil/Storage
Summary / Findings	Picloram				

Improperly stored Tordon 22K may have leaked into soil. There are two 2.5 gallon containers which have been there for several years.

Observed two 2.5 gallon containers on their sides. One was cracked and empty, perhaps leaking product onto property. The other container was sound with 1/4 gallon of dried residue inside. Complainant evicted from property, owner will tend to affected site. Current owner of property does not know where product came from.

CASE # 27	7S 1999	Designation Pesticide Involve	ed License commercial applicator	Date of Incident 7/13/1999	Severity 1	Application Method Ground
		Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County PEND		Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
OREILLE	REILLE	HERBICIDE		DOH, DOE	NAI	Lake/Yard
Summary /	Findings	2,4-D				

Neighboring lake treated for Millfoil. Complainant noticed symptoms on garden plants 9 days later. Their well is used for drinking and irrigation.

No detectable 2,4-D residue was found in tap water samples from the complainant's residence, garden foliage or garden soil. 2,4-D residue was detected in water collected from the lake. Garden foliage and soil show glyphosate residue. Complainants had used glyphosate in 1999.

CASE # 28S 1999	Designation Violation	License commercial applicator	Date of Incident 8/3/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals of	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	Verbal	ROW/Unknown
Summary / Findings	2,4-D				

Operating without a valid commercial applicator license.

Alleged infractors operating without a valid commercial applicator license.

CASE # 29S 1999	Designation Incident License none	Date of Incident 8/12/1999	<u>Severity</u> 1	Application Method NA
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Ag
County ADAMS	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE	None	NAI	Potatoes
Summary / Findings	None			

Alleged herbicide (phenoxy) symptoms on two potato circles, 120 acres each (Russett Burbank).

No pesticide residues were found to affect the potato samples. Foliar symptoms were minor and inconclusive regarding a possible causal agent.

<u>CASE #</u> 30S 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 6/21/1999	Severity 2	Application Method Ground
	Nature of Case Direct	Response Time Same Day	Children Involved? No	Application Type Non Ag
County SPOKANE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None	NAI	Tree/Ornamentals
Summary / Findings	Picloram			

Alleged damage occurred to ornamental plants and trees after an insecticide application.

Complainant had applied picloram several years previous to control knapweed uphill from the site of the damaged plants. Independent lab samples showed picloram in soil from the site. Trees on site died from winter injury, annuals and perennials were exhibiting picloram symptoms. Damage most likely from picloram movement over time.

CASE #	31S	1999	Designation Violation	n <u>License</u> commercial applicator	Date of Incident 9/1/1999	Severity 2	Application Method Ground
			Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
<b>County</b>	SPOKA	NE	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
			INSECTICIDE		DOH	NOC	Tree/Person, property
Summary	y/ Find	ings	Chlorpyrifos				

Alleged drift/overspray by alleged infractor while spraying a tall tree next to complainant's property. Complaint of drift onto complainants yard, rabbit hutch, organic garden and self. She felt a mist with no reaction.

Pesticide product did drift off of the application target site. Chlorpyrifos residues were found on all samples collected.

<u>CASE #</u> 32S 1999	Designation Pesticide Involved License u	Inknown Date of Incident	10/10/1999 Severity	5 Application Method Unknown
	Nature of Case Animal Poisoning	Response Time	One Day Children Involved?	No Application Type Ag
County GRANT	Chemicals or other Materials Inv	volved: Other Agencie	es Involved: Final Action	Target/Complaint Area
	INSECTICIDE	EPA, DOH, D	OE, F&W, NAI	Dog
Summary / Findings	Phorate			

The damaged party was hunting at a pond. The hunting party shot at some ducks that landed in the pond. A dog went in the water to retrieve the ducks & came out covered in "black goo." After licking itself clean, the dog foamed at the mouth and died 20 minutes later. The next day, all four hunters were hospitalized with gastrointestinal symptoms. Necropsy conducted on dog revealed phorate in stomach contents at 160 ppm.

Unable to find a source for the phorate that killed the dog.

<u>CASE #</u> 1T 1999	Designation Violation	License commercial applicator	Date of Incident 9/29/1998	<u>Severity</u> 2	Application Method NA
	Nature of Case WDO		Response Time Same Day	Children Involved? No	Application Type WDO
County GRAYS	Chemicals o	r other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
HARBOR	NA		None	NOC	False WDO
Summary / Findings	NA				

False WDO report.

The alleged infractor failed to conduct a thorough and accurate structural pest inspection. He failed to report signs of and damage by, deathwatch beetles and buprestid beetles in walls, subflooring, and supporting timbers. His pesticide application records were incomplete and he was uninsured when the application was made.

CASE # 2T	1999	Designation Violation	n <u>License</u> commercial applicator	Date of Incident 2/20/1999	<u>Severity</u> 1	Application Method Ground
		Notification Notification	tion	Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING		Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
		INSECTICIDE		None	NOC	Lawn/Notification
Summary / Find	ings	Chlorpyrifos				

Pesticide sensitive individual was not notified when alleged infractor sprayed the neighbor's adjacent property.

Alleged infractor attempted telephone notification. The phone number he used was old and disconnected. The new Pesticide Sensitive Register had the updated information, which he had received, but had not updated his records for this contact. His records showed the wrong product name was being used in reference to the EPA registration number for Dursban.

CASE # 3T 1999	Designation Pesticide Involved Licens	unlicensed Date of Incident	3/12/1999 <u>Severity</u> 1	Application Method Ground
	Nature of Case Misuse	Response Time	Two days Children Involved? No	Application Type Non Ag
County KING	Chemicals or other Materials	Involved: Other Agencie	es Involved: Final Action	Target/Complaint Area
	HERBICIDE	Nor	ne NAI	Lawn/Lawn
Summary / Findings	Glyphosate			

Complainant alleges that neighbor made an un-requested herbicide application to the back yard of her property.

Residue analysis revealed 0.44 ppm glyphosate on the grass closest to the house and 1.5 ppm glyphosate on the grass farthest from the house. No phenoxy residue was found. Alleged infractors stated that they had not made any spray applications in 1999. Unable to determine another source.

CASE # 4T 1999	Designation Violation	License commercial applicator	Date of Incident 4/2/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING	Chemicals or	Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	INSECTICIDE		None	Advisory Letter	Ornamentals/Vegetables
Summary / Findings	Lindane				

Complainant alleged that pesticide application from neighbors property drifted onto her property.

WSDA lab did not detect any Lindane in vegetation sample taken from the complainant's property. Alleged infractor had misinterpreted the requirements for PPE to be for only agricultural applications and so, was not wearing the proper PPE.

CASE # 5T 1999	Designation Pesticide Involved License public operator	Date of Incident 4/12/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Human Exposure	Response Time One Day	Children Involved? No	Application Type Ag
County THURSTON	County THURSTON Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	HERBICIDE	DOH	NAI	Conifers/Person
Summary / Findings	Oxyfluorfen			

Alleged drift of a pesticide from neighboring property.

Given the distance between the site of application and where the claimant was located, the prevailing wind direction and the toxicological review of the chemical, it is highly unlikely that the symptoms could be attributed to a pesticide drift.

<u>CASE #</u> 6T 1999	Designation Violation License	commercial consultant	Date of Incident 9/12/1997	Severity 2	Application Method NA
	Nature of Case WDO		Response Time Same Day	Children Involved? No	Application Type WDO
County PIERCE	Chemicals or other Materials	Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE		None	NOC	False WDO-rot present
Summary / Findings	None				

Alleged false WDO report.

The alleged infractor failed to conduct a thorough and accurate structural pest inspection. He failed to report signs of and damage by, rot fungus, deathwatch beetles and dampwood termites in a rim joist and adjacent floor joists. He also failed to report cellulose debris and earth to wood contact in a crawl space. He signed a WDO report stating that neither WDO's, their signs, nor conducive conditions were present.

CASE # 7T 1999	Designation Violation	License unlicensed	Date of Incident 5/18/1999	Severity 3	Application Method Ground
	Nature of Case Misuse		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SNOHOMISH	Chemicals or oth	er Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Scotch Broom/Plantings
Summary / Findings	Glyphosate				

Complainant alleges that the alleged infractor made an unauthorized application of herbicide within a freeway right-of-way.

The alleged infractors applied in an unauthorized manner.

CASE # 8T 199	Designation Violation	on <u>License</u> commercial applicator	Date of Incident 5/19/1999	Severity 2	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING	Chemica	als or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Fruit trees/Yard
Summary / Findings	Diazinon	Triclopyr			

Homeowner claims that the alleged infractor was applying pesticides to the neighbor's fruit trees and the spray drifted into her yard.

Laboratory results from samples taken from the complainant's garden showed 0.61 ppm Diazinon. She had not used pesticides in her garden.

CASE # 9T 1999	Designation Pesticion	de Involved <u>License</u> unlicensed	Date of Incident 5/16/1999	Severity 0	Application Method Ground
	Nature of Case Misuse		Response Time Same Day	Children Involved? No	Application Type Non Ag
County PIERCE	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NAI	Maple tree
Summary / Findings	2,4-D				

Complainant alleges that neighbor purposefully sprayed a maple tree on her property without her permission or consent.

Damage to ornamentals was pesticide related. Unable to determine source or pesticide.

<u>CASE #</u> 10T 1999	Designation Pesticion Nature of Case Notifica		commercial applicator	Date of Incident Response Time		<u>Severity</u> 1 Children Involved? No	Application Method Ground Application Type Non Ag
<u>County</u> KING	Chemicals or other Materials Involved:		Other Agenci	es Involved:	Final Action	Target/Complaint Area	
	NA			Noi	ne	NAI	Notification
Summary / Findings	NA	Triclopyr					

Complainant is on the pesticide sensitive list and alleges the alleged infractor failed to notify her before spraying her neighbors yard.

The alleged infractors records show and they claim that they notified the complainant about the spray application. The complainant claims that she was not notified and is on the pesticide sensitive register. Unable to arbitrate.

CASE # 11T 1999	<b>Designation</b> Violatio	n <u>License</u> unlicensed	Date of Incident 5/23/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time six days	Children Involved? Yes	Application Type Non Ag
County CLARK	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		DOH	Verbal Warning	Pasture/Yard
Summary / Findings	2,4-D				

Complainant alleges that neighbor was spraying her adjoining pasture and some of the spray drifted over onto her backyard damaging plants and possibly setting off an asthmatic reaction with her daughter.

The investigator found phenoxy-type injury to vegetation in the field sprayed by the alleged infractor and found the same contorted growth on some of the blackberries & herbaceous weeds growing on the complainant's property. Lab results were positive on samples. The investigator requested the infractor be more careful with future applications. Infractor agreed.

CASE # 12T 1999			9/8/1998 <u>Severity</u> 2	Application Method NA
	Nature of Case WDO	Response Time	Same Day Children Involved? No	Application Type WDO
County KITSAP	Chemicals or other Materials In	volved: Other Agencie	s Involved: Final Action	Target/Complaint Area
	NA	Non	e NOC	WDO
Summary / Findings	NA			

False WDO report.

The alleged infractor failed to conduct a thorough and accurate inspection. He failed to report signs of and damage by, rot fungus, carpenter ants, and dampwood termites in an attached deck at this residence he was not properly licensed by the WSDA when he conducted his wdo inspection.

CASE # 13T 1999	Designation Pesticide In	volved <u>License</u> unlicensed	Date of Incident 5/1/1999	Severity 3	Application Method Ground
	Nature of Case Misuse		Response Time One Day	Children Involved? No	Application Type Non Ag
County KING	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		Police	NAI	Trees
Summary / Findings	Garlon				

The damaged party alleges that the alleged infractor intentionally tried to kill several trees that were on city property with a pesticide that was injected into holes drilled into the base of the trees.

Holes drilled into various trees on city property. WSDA collected samples and provided results to police department.

<u>CASE #</u> 14T 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 3/31/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Non Ag
County PIERCE Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None	NAI	Roadside/Pasture
Summary / Findings	Miscellaneous			

County roadside spray washed into pasture.

Soil samples are negative. There was a general appearance that material that affected pasture grass came from road side, except that some affected areas were above the road side.

CASE # 15T 1999	Designation Violation License com	nmercial consulatant Date of Incident	5/11/1999 <u>Severity</u> 2	Application Method NA
	Nature of Case WDO	Response Time	Same Day Children Involved? No	Application Type WDO
County PIERCE	Chemicals or other Materials Involu-	lved: Other Agencies	Involved: Final Action	Target/Complaint Area
	NA	None	NOI	WDO
Summary / Findings	NA			

False WDO report.

Alleged infractor failed to conduct a thorough and accurate inspection at a home. He failed to report signs of and damage by subterranean termites, rot fungus, and dampwood termites around the periphery of the structure. He failed to note signs of excessive moisture and cellulose debris in the crawl space. He also did not provide his inspection records to WSDA in a timely manner.

<u>CASE #</u> 16T 1999	<b>Designation</b> Violation	License commercial applicator	Date of Incident 8/13/1998	Severity 2	Application Method Ground
	Nature of Case WDO		Response Time Same Day	Children Involved? No	Application Type WDO
County GRAYS	Chemicals o	r other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
HARBOR	NA		None	NOC	WDO
Summary / Findings	NA				

False wdo report.

Investigation found alleged infractor not licensed at time of inspection and that his records were incomplete.

CASE # 17T 1999	Designation License unlicensed	Date of Incident 7/14/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	Advisory Letter	Ornamentals
Summary / Findings	NA			

Report of someone spraying in high winds at shopping center.

Alleged infractor had his employee apply a mixture of simple green and water to control aphids on ornamentals (product not labeled as pesticide). Alleged infractor and employee are not licensed to apply pesticides.

<u>CASE #</u> 18T 1999	Designation Violation License unlicensed	Date of Incident 6/30/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Misuse	Response Time One Day	Children Involved? No	Application Type Non Ag
County CLARK	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA	None	Advisory Letter	Ornamentals
Summary / Findings	NA			

In early June, her neighbor (alleged infractor) sprayed the fence line bordering the property with an herbicide.

A few berry bushes on the complainants side of the wire field fence were dead but most of the bushes were very healthy. No other plants near the fence line showed any indication of drift. The alleged infractors were not keeping spray application records.

<u>CASE #</u> 19T 1999	Designation Violation Licens	commercial consultant	Date of Incident 4/2/19	999 <u>Severity</u> 2	Application Method NA
	Nature of Case WDO		Response Time Same	Day Children Involved? No	Application Type WDO
County KING	Chemicals or other Materials	Involved:	Other Agencies Invo	olved: Final Action	Target/Complaint Area
	NA		None	NOC	WDO
Summary / Findings	NA				

False WDO report.

The alleged infractor failed to conduct a thorough and accurate inspection of the complainant's home. He failed to report the presence of rot fungus and signs of carpenter ants and dampwood termites. He did not report earth to wood contact or areas of damage in a diagram. He also was not licensed at the time he conducted the inspection.

CASE # 20T 1999		unlicensed Date of Incident	8/5/1999 <u>Severity</u> 1	Application Method Ground
	Nature of Case Misuse	Response Time	Same Day Children Involved? No	Application Type Non Ag
County KING	Chemicals or other Materials	Involved: Other Agencie	es Involved: Final Action	Target/Complaint Area
	FUNGICIDE	EPA, I	DOH Advisory Letter	Roof
Summary / Findings	Copper Napthenate			

Three of complainant's neighbors had their roofs treated with Shakelast. Complainant says the product still has an odor, and he wants the EPA to ban this product.

Alleged infractor is not licensed and applied a dilute mixture of Shakelast on 3 roofs adjacent to the property of the complainant. The copper naphthenate is furning off of the roofs especially on hot days. No symptoms were reported and neither the complainant nor his family have seen a doctor. The complainant requests that the product be banned. A memo was sent to EPA reporting his request.

CASE # 21T 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 7/8/1999	Severity 1	Application Method Ground
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Non Ag
County PIERCE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None		Roadside
Summary / Findings	Clopyralid			

Alleged pesticide application made by county contractor drifted onto property.

Two teams of employees made applications near the complainant's property. There were no physical indications of drift on that property. Samples analyzed by WSDA did not detect clopyralid. All application records submitted by alleged infractor had some incorrect data. One alleged infractor did not have a license, and one did not have the correct category on license for right-of-way applications.

CASE # 22T 1999	Designation         Pesticide Involved         License         private applicator           Nature of Case         Human Exposure	Date of Incident7/28/1999Response Time6 days	<u>Severity</u> 1 Children Involved? No	Application Method Ground Application Type Ag
County SNOHOMISH	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	FUMIGANT	DOH	NAI	Greenhouse/Person
Summary / Findings	Dithocarbamates			

Human exposure. Alleged human exposure by a greenhouse worker.

Medical records reviewed by DOH do not indicate exposure.

CASE # 23T 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 8/23/1999	Severity 1	Application Method Ground
	Nature of Case Human Exposure	Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	NAI	Ornamentals/Person
Summary / Findings	Pyrethrins			

Human exposure. Damaged party was working in a yard, alleges that the spray application from next door landed in the area that she was working in.

Conflicting testimony about location of participants. Sample results of Rhododendron leaves in reported area were negative. None detected pyrethrins. Sample results of scarf worn at the time were also "none detected."

CASE # 24T 1999	Designation Pesticide Involved License private applicator	Date of Incident 9/17/1999	Severity 1	Application Method Air
	Nature of Case Misuse	Response Time Same Day	Children Involved? No	Application Type Ag
County JEFFERSON	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None	NAI	forestry
Summary / Findings	Miscellaneous			

Alleged misapplication of pesticide, trespass, failure to post warning signs and indirect adverse impacts to vegetation.

Unable to substantiate allegations made by complainant.

Friday, May 10, 2002

CASE # 25T 1999	Designation Pesticide Involved License public operator	Date of Incident 9/16/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Human Exposure	Response Time Same Day	Children Involved? No	Application Type ROW
County CLALLAM	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	DOH	NAI	ROW/Person
Summary / Findings	2,4-D Dicamba			

Alleged misapplication of pesticide during a roadside right-of-way application including application into water and human health exposure.

According to interviews, records, field observations and the assessment by the Dept. of Health, there was not sufficient evidence to substantiate the allegation that a direct exposure of herbicide occurred and there was no evidence to substantiate the allegation that there was a direct or indirect application into ocean waters.

CASE # 26T 1999	Designation Violation	License commercial applicator	Date of Incident 7/12/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Misuse		Response Time One Day	Children Involved? No	Application Type Non Ag
County PIERCE	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	House/Interior
Summary / Findings	Cyfluthrin				

Misapplication of a pesticide.

The alleged infractor misapplied cyfluthrin through exterior walls into the living space of the complainant's home. Instead of remaining in the wall void, it passed through into two bedrooms, closets, bathroom, kitchen and living room.

CASE # 27T 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 10/12/1999	Severity 1	Application Method Ground
	Nature of Case Misuse	Response Time One Day	Children Involved? No	Application Type Non Ag
County SNOHOMISH	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None	NAI	Ornamentals
Summary / Findings	Glyphosate			

Complainant alleges employees of alleged infractor applied herbicides in a manner that caused injury to ornamental trees.

According to interviews and records, there is cause to believe that the alleged infractors failed to post herbicide spray warning signs on the complex and failed to maintain proper spray application records.

CASE # 28T	1999	Designation Violatio	n <u>License</u> commercial applicator	Date of Incident 9/24/1999	<u>Severity</u> 4	Application Method Ground
		Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING		Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
		INSECTICIDE		None	NOI	Lawn/Garden
Summary / Find	ings	Diazinon				

Alleged that professional pesticide application at neighbor's property drifted onto his garden.

Sample results positive.

CASE # 29T 1999	Designation Violation License commercial applicator	Date of Incident 9/12/1997	<u>Severity</u> 2	Application Method NA
	Nature of Case WDO	Response Time Same Day	Children Involved? No	Application Type WDO
County OKANOGAN	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA	None	NOC	WDO
Summary / Findings	NA			

False WDO report.

Alleged infractors failed to conduct a thorough and accurate inspection. They failed to report the presence of rot fungus, earth to wood contact, inaccessible areas within the residence and failed to indicate these conditions in a diagram. These failures, most likely, precipitated an infestation of subterranean termites, violating RCW 15.58.150(2)(e).

<u>CASE #</u> 30T 1999	Designation Violation License commercial applicator	Date of Incident 8/28/1995	<u>Severity</u> 2	Application Method NA
	Nature of Case WDO	Response Time Same Day	Children Involved? No	Application Type WDO
County THURSTON	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA	None	NOC	WDO
Summary / Findings	NA			

False WDO report.

The alleged infractor failed to conduct a thorough and accurate inspection. He did not report presence of anobiid beetles, rot fungus, and damage by these WDO's. He also failed to report inadequate clearance, earth to wood contact and cellulose debris in the crawl space. He signed a final WDO report signifying that no WDO's, their signs, or conducive conditions were present.

CASE # 31T 1999	Designation Violation	n <u>License</u> commercial consultant	Date of Incident 9/25/1999	Severity 2	Application Method NA
	Nature of Case WDO		Response Time Same Day	Children Involved? No	Application Type WDO
County PIERCE	Chemical	s or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA		None	NOC	WDO
Summary / Findings	NA				

False WDO report.

The alleged infractor failed to conduct a thorough and accurate inspection. He failed to completely inspect the substructure and report the presence of and damage by rot fungus. He failed to report inadequate clearances and cellulose debris in the crawl space and clearly show these conditions in a site diagram.

CASE # 32T 1999	Designation Violation	License commercial applicator	Date of Incident 9/8/1999	Severity 2	Application Method NA
	Nature of Case Record rec	quest	Response Time Same Day	Children Involved? No	Application Type WDO
County SKAGIT Chemicals or other Materials Involved:		or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA		None	NOC	Records request
Summary / Findings	NA				

Non-compliance with pesticide application record request.

The alleged infractor failed to respond to several requests by WSDA investigators for his application records.

CASE # 1V 1	1999	Designation Violation	License commercial consultant	Date of Incident 5/28/1998	<u>Severity</u> 2	Application Method NA
		Nature of Case WDO		Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING		Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
		NA		None	NOC	WDO
Summary / Finding	as	NA				

Structural inspector allegedly missed rotted deck. WDO.

A final home inspection and WDO report by the alleged infractor failed to report a thoroughly rotted front deck. Additionally, the diagram furnished was illegible and did not denote the presence or absence (inaccessible area) of WDO's.

CASE # 2V 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 12/8/1998	<u>Severity</u> 1	Application Method Ground
	Nature of Case Drift	Response Time two days	Children Involved? No	Application Type Non Ag
County KING	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	NAI	Ornamentals
Summary / Findings	Diazinon			

Complainant is concerned about the apparent lack of concern over drift and absent PPE. Public relations problem with applicators over use of Diazinon.

Interview with witness indicates that the incident did occur as the complainant described. Further investigation disclosed gross discrepancies between witness, alleged infractor and operators responsible.

CASE #	3V	1999	<b>Designation</b> Violation	n <u>License</u> commercial applicator	Date of Incident 11/17/1998	Severity 1	Application Method Ground
			Nature of Case Drift		Response Time 13 days	Children Involved? No	Application Type ROW
<u>County</u>	KITSA	Р	Chemica	s or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
			HERBICIDE		None	Verbal Warning	ROW/Runoff
Summar	y/ Find	dings	Garlon				

Alleged run-off of dye and/or pesticide from power company right-of-way application.

Run-off was red dye marking trees treated with garlon. All materials applied legally. Any testing was done previous to WSDA contact and is satisfactory to complainant's. Applicator advised to give warning before applying near residences on BPA right-of-way.

CASE # 4V 1999	Designation Pesticide Involved License n/a	Date of Incident 3/28/1999	Severity 1	Application Method NA
	Nature of Case Disposal	Response Time Same Day	Children Involved? No	Application Type Non Ag
County SKAGIT	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	MISC.	None	NAI	Disposal issue
Summary / Findings	Miscellaneous			

Concern over years of accumulation of pesticide from alleged infractor airport and garbage collection site. Also concern about no secondary containment at crop dusting facility at old airport. All of this drainage district drains into Padilla Bay Reserve.

Six samples were collected at regular intervals along the drainage system. Detected amounts of pesticides were normal for an agricultural area as exists where samples were collected. Only trace amounts of organophosphate were detected and no carbamates were detected.

CASE # 5V 1999	Designation Pesticide In	nvolved <u>License</u> commercial applicator	Date of Incident 5/1/1999	Severity 1	Application Method Ground
	Nature of Case Misuse		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SKAGIT	SKAGIT Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NAI	Weeds
Summary / Findings	2,4-D				

Complainant feels that her neighbor did an improper application within proximity of her home.

The alleged infractor's application was completely legal.

<u>CASE #</u> 6V 1999	Designation Incident Nature of Case Storage	License private commercial	Date of Incident 5/20/1999 Response Time Same Day	<u>Severity</u> 1 Children Involved? No	Application Method NA Application Type Non Ag
County SKAGIT	GIT Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	MISCELLANEOUS		L&I	NAI	Storage and Records
Summary / Findings	Miscellaneous				

Hazardous storage of pesticides, no record keeping.

Non-ag use inspection of facility found fertilizer and pesticide storage completely unsatisfactory. There were no records being kept. Technical assistance was offered and an NOC was sent in conjunction with the use inspection and a DOC was returned by the alleged infractor, now in compliance.

CASE # 7V 1999	Designation Violation	License commercial applicator	Date of Incident 7/13/1999	Severity 2	Application Method NA
	Nature of Case Disposal		Response Time Same Day	Children Involved? No	Application Type Non Ag
County SKAGIT	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	FUNGICIDE		EPA, DOE	NOC	Disposal issue
Summary / Findings	Thiram				

Complaint about dumping of a pesticide.

The infractor admitted dumping the fungicide. He said that he misunderstood the disposal requirement. The disposal techniques that he has knowledge of are far outdated.

<u>CASE #</u> 8V 1999	Designation Incident Nature of Case WDO	License commercial consultant	Date of Incident 6/1/1999 Response Time Same Day	<u>Severity</u> 0 Children Involved? No	Application Method NA Application Type WDO
County SKAGIT	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA		None	NAI	WDO
Summary / Findings	NA				

Alleged faulty WDO inspection and report.

This complaint was a misunderstanding between concerned parties. The house is now repaired to bank financing standards and has been approved by the inspector.

<u>CASE #</u> 9V 1999	Designation Pesticide Involve	d <u>License</u> commercial applicator	Date of Incident 7/23/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County KING	Chemicals or othe	Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	INSECTICIDE		None	NAI	Ornamentals/Ornamentals
Summary / Findings	Miscellaneous				

Drift from application made to neighbor's property.

Sample results were negative for drift.

CASE # 1Y 1999	Designation Incident	License commercial applicator	Date of Incident 1/26/1999	Severity 1	Application Method Ground
	Nature of Case Misuse		Response Time Same Day	Children Involved? No	Application Type Non Ag
County BENTON	Chemicals or o	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NA		None	NAI	Lawn
Summary / Findings	NA				

Complainant claims alleged infractor made an unauthorized weed & feed application to his lawn. Service told complainant the application was a result of a computer error and told WSDA that service continues year to year unless discontinued.

The complainant noticed a commercial application had been made to his lawn, but he did not order an application. The lawn care company called the following day and stated they had made a mistake by making the application.

CASE #	2Y	1999	Designation Pesticide Involved License	dealer manager	Date of Incident	1/28/1999	Severity 0	Application Method Ground
			Nature of Case Misuse		Response Time	7 days	Children Involved? No	Application Type Ag
<u>County</u>	MULTI	PLE	Chemicals or other Materials In	volved:	Other Agencie	s Involved:	Final Action	Target/Complaint Area
			DISINFECTANT		Idah	0	NAI	Potatoes
Summar	y/ Find	ings	CIO2					

WSDA received a fax from complainant stating he had been informed that applications of anthium AGP were being made to stored potatoes in Washington. WSDA does not have a section 18 allowing this application.

No sales or use of Anthium AGP could be documented in Washington.

CASE # 3Y 1999	Designation Incident License n/a	Date of Incident 3/11/1999	<u>Severity</u> 1	Application Method NA
	Nature of Case Drift	Response Time One Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or other Materials Invo	ved: Other Agencies Involved:	Final Action	Target/Complaint Area
	NA	DOE	NAI	Orchards
Summary / Findings	NA Sulfur			

Aggrieved party sent letter to DOE asking for information regarding the rules & regulations for orchard spray & weed killer, spraying in the wind & spraying on the weekends. They are concerned about danger to themselves and their animals due to drift onto their property by spray from a tractor.

Referred by Dept. of Ecology. Complainant's are seeking information on rules and regulations of orchard spraying and weed killers and answers to some specific questions. Questions were answered and information was mailed to them, including how to file a formal complaint and investigative response time.

CASE # 4Y 1999	Designation Pesticide Involve	d License private applicator	Date of Incident 2/28/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or oth	er Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	FUNGICIDES		None	NAI	Orchard/Vehicle
Summary / Findings	Copper				

Aggrieved party was concerned about spray mist coming out on the road and getting on her vehicle. She did not want to file a complaint but did want someone to contact the sprayer and let them know of her concern.

Complainant did not want to file a complaint when asked by WSDA to contact person responsible for spraying. Contact was made. No further action required at this time.

<u>CASE #</u> 5Y 1999	Designation Pesticide Involved License private applicator	Date of Incident 3/8/1999	Severity 1	Application Method Ground
	Nature of Case Human Exposure	Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE INSECTICIDE	DOH, L&I	NAI	Cherries/Person
Summary / Findings	Chlorpyrifos			

Damaged party was pruning grapes and he was allegedly drifted on by a ground application from the adjacent field (nursery) about 200 feet away from him. He immediately became ill.

On 3/24/99, DOH referred a complaint to WSDA alleging that a worker in a grape vineyard became ill following a spray application in the nursery next to the vineyard. No evidence was found to show physical drift came in contact with the worker.

CASE # 6Y 1999	Designation Violation	License private applicator	Date of Incident 3/25/1999	Severity 2	Application Method Ground
	Nature of Case Drift to organics	3	Response Time One Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or ot	her Materials_Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		WSDA Organic Program	NOC	Apples/Organic orchard
Summary / Findings	Chlorpyrifos				

Complainant claims that his neighbor allegedly drifted onto his orchard. Complainant has an organic orchard and is concerned about losing his organic certification.

Spray from an application to an apple orchard drifted to the neighboring organic orchard, contaminating this organic orchard. A grass foliage sample taken from around the trees in the organic orchard tested positive for chlorpyrifos. Record keeping violations found.

CASE # 7Y 19	999 Desig	gnation Violation	License	unlicensed/commercial	Date of Incident	3/26/1999	Severity	3	Application Method Ground
	Nature (	of Case Human Exposure	9		Response Time	Same Day	Children Involved?	No	Application Type Non Ag
County BENTON		Chemicals or othe	er Materials II	nvolved:	Other Agenci	ies Involved:	Final Action		Target/Complaint Area
	INSECTI	CIDE			DOH	, L&I	NOC		Roaches/Human exposure
Summary / Finding	S Chlorpyrit	fos							

Human health. Alleged infractor sprayed to control roaches. Complainant called Olympia office to see if alleged infractor was licensed. Olympia office told her the license was expired. They sprayed around kitchen cupboards. She has broken out in a rash and is going to see the doctor.

The applicator did not have a current license or current insurance certificate at the time of the application. Record problems.

CASE # 8Y 1999	Designation Pesticide Involved License dealer	Date of Incident 2/25/1999	<u>Severity</u> 2	Application Method NA
	Nature of Case Unlabeled tank	Response Time One Day	Children Involved? No	Application Type Ag
County OUT OF STATE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	Oregon	Referred	Unlabeled tank sold
Summary / Findings	Oil			

Complainant works for Oregon Dept. of Agriculture and had investigated a case where he found a bulk tank of spray oil that was not labeled. In checking the paper work he found the invoice was from alleged infractor. He referred the information to WSDA and asked that we follow-up on it.

WSDA found that the shipment of Volk supreme spray oil (unlabeled) was delivered to the Hood River address by drop shipment while load was on the way to the alleged infractor from a company in California. The complainant decided to refer the case to EPA to handle because California is not in EPA Region 10.

<u>CASE #</u> 9Y 1999	Designation Violation	License private applicator	Date of Incident 4/2/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Direct		Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or	r other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Apples/Vehicle
Summary / Findings	Chlorpyrifos				

Complainant was traveling on a road and saw the plume from an orchard sprayer. As he got closer he flashed his lights and honked his horn so the sprayer would stop but they didn't. The complainant stopped but the sprayer kept coming & sprayed him. He said his windows were up but it looked like a car wash.

Spray from a pesticide application to an apple orchard came in contact with a pickup driving on a county road adjacent to the orchard. A swab sample from the pickup's spare tire tested positive for chlorpyrifos.

CASE # 10Y 1999	Designation Incident Licer	nse unknown	Date of Incident	12/31/1998	Severity 0	Application Method NA
	Nature of Case Misuse		Response Time	Same Day C	hildren Involved? No	Application Type Ag
County FRANKLIN	Chemicals or other Materia	Is Involved:	Other Agenci	es Involved:	Final Action	Target/Complaint Area
	UNKNOWN		Noi	ne	NAI	Wheat
Summary / Findings	Unknown					

Dead area in triticale. Suspect carryover herbicide.

Unable to determine cause of dead area. Too much time had elapsed to conduct residue analysis.

<u>CASE #</u> 11Y 1999	Designation Violation	License private applicator	Date of Incident 4/5/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? Yes	Application Type Ag
County YAKIMA	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NOC	Apples/Auto
Summary / Findings	Chlorpyrifos				

Complainant said wind was blowing spray across road even though sprayers had turned off the apparatus and were turning at the end of rows. Two sprayer blasts hit her vehicle. Three sprayers were working in the orchard. No human exposure reported. Three children were on board.

Complainant said wind was blowing spray across the road even though sprayers had turned off the apparatus and were turning at the end of rows. Two sprayer blasts hit her vehicle. Three sprayers were working in the orchard. No human exposure reported. Three children and a toddler were on board.

CASE # 12Y 1999	<b>Designation</b> Violation	License private applicator	Date of Incident 4/10/1999	Severity 2	Application Method Ground
	Nature of Case Human Exposure		Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	Administrative Action	Apples/Person
Summary / Findings	Chlorpyrifos				

The damaged party was working in the complainant's yard while an adjacent orchard was being sprayed. Complainant said the wind was blowing excessively & the spray blew onto their property. The damaged party was sprayed as was the complainant. Complainant contacted the Yakima County Sheriff Dept. & the WSDA Olympia office.

Spray from an application to an apple orchard penetrated an arborvitae hedge atop a brick wall separating the orchard and a home, exposing a yard worker to chlorpyrifos and dormant oil. Pants worn by the yardworker at the time of the exposure tested positive for chlorpyrifos.

<u>CASE #</u> 13Y 1999	Designation Violation	License commercial applicator	Date of Incident 4/12/1999	Severity 2	Application Method Air
	Nature of Case Drift		Response Time Same Day	Children Involved? Yes	Application Type Ag
County FRANKLIN	Chemicals or othe	er Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Wheat/Auto
Summary / Findings	2,4-D				

The complainant alleged that an airplane sprayed his car. The applicator turned on the spray boom while crossing over the road entering the field. The complainant did not claim human exposure. He was upset that the applicator did not alter his approach. Two children, male age 11 & female age 6 were in the car. No health problems reported. Follow-up 4-13-99. No one reporting health effects.

Sample analysis was positive for the herbicide residue on the complainant's automobile. All statements and the applicator's records are consistent in identifying the site of the incident.

CASE # 14Y 1999	Designation Pesticide Involved	License private applicator	Date of Incident 4/6/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? Yes	Application Type Ag
County YAKIMA	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NAI	Orchard/Daycare
Summary / Findings	Chlorpyrifos				

Complainant lives next to a 3 year old orchard and is tired of the odor & drift from the adjacent orchard. She has a daycare. Orchard was planted 6 years after complainant moved to the site.

WSDA residue analysis was negative. Investigator performed technical assistance, discussing application techniques, weather, temperature inversions and notification with the alleged infractor. WSDA also offered to both parties to be present at the time of the next application.

CASE # 15Y 1999	Designation Pesticide Involved License public operator	Date of Incident 4/12/1999	Severity 1	Application Method NA
	Nature of Case Disposal	Response Time Same Day	Children Involved? No	Application Type Non Ag
County FRANKLIN	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	MISC.	DOE	NAI	Disposal
Summary / Findings	Miscellaneous			

Report that city is dumping waste products into an open dry well. Waste products include motor oil, anti-freeze and hydrochloric acid. The well is reported not to have a drain and the waste products seep into the ground. The complainant reported this practice is on going.

Case was referred to Dept. of Ecology. Complainant reported on 5-2-99 that his boss pumped out the dry well and plugged the drain.

CASE # 16Y 1999	<b>Designation</b> Violation	License public operator	Date of Incident 4/12/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Misuse		Response Time Same Day	Children Involved? No	Application Type Non Ag
County FRANKLIN	Chemicals of	r other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		DOE	NOC	Use of diesel as herbicide
Summary / Findings	Diesel				

Complainant stated city park employees were given work orders to spray diesel on the foul lines to kill grass of the recreational fields.

WSDA found and sampled a backpack sprayer at alleged infractor facility containing diesel. Same sprayer used to spray the park. No record found for the application. reviewing records found problem with wrong label being used (ag not ornamental). Operators were not carrying labels and MSDS's with them into the field.

CASE # 17Y 1999	Designation Violation License private applicator	Date of Incident 4/23/1999	Severity 2	Application Method Ground
	Nature of Case Human Exposure	Response Time 3 days	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	PLANT REGULATOR	DOH	NOC	Apples/Person
Summary / Findings	Tetraoxosulfate			

Complainant alleges that employees of an orchard were spraying and sprayed his family and his property.

Spray from a pesticide application to an apple orchard drifted off-target and exposed three people working on the exterior of a house located adjacent to the orchard. No samples were taken because the orchard owner provided false information about the product being used.

CASE # 18Y 1999	Designation Pesticide Involved License public operator	Date of Incident 4/30/1999	Severity 1	Application Method Ground
	Nature of Case Disposal	Response Time Same Day	Children Involved? No	Application Type Non Ag
County YAKIMA	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	None	NAI	Weeds/Disposal
Summary / Findings	2,4-D			

Report of four masked men dumping chemicals from a red truck in the West Valley area of Yakima

Alleged infractor performing legal pesticide application to star thistle.

<u>CASE #</u> 19Y 1999	Designation Violation	License private applicator	Date of Incident 5/3/1999	Severity 3	Application Method Ground
		have block and a large base de	Response Time Same Day	Children Involved? No	Application Type Ag
<u>County</u> YAKIMA		her Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	PLANT REGULATOR		None	NOC	Apples
Summary / Findings	Ammonium Thiosulfate				

Referring party called WSDA to tell of someone spraying in high winds. He did not want to file a complaint; he just wanted them to quit spraying. Investigator spoke with spray operator at site, explaining the wind was too high to apply spray and asked what he was spraying. The operator said he was spraying apples for thinning. It was explained to him that the product was not being applied according to the label. The operator quit spraying.

An application of ATS was made to an apple orchard for the purpose of blossom thinning in a high wind. The application records were not filled out properly.

CASE # 20Y 1999	Designation Pesticide Involved License commercial a	pplicator Date of Incident 4/23/1999	Severity 1	Application Method Air
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Ag
County WALLA	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
WALLA	HERBICIDES	Oregon	NAI	Wheat/Peas
Summary / Findings	Miscellaneous			

Alleged infractor's plane allegedly was leaking as it flew from the airport to an application site to make an application on wheat. A witness (Oregon farmer) supposedly saw the plane between 10 am & noon as it was traveling between airport and the site and it was leaking. The Oregon Dept. of Agriculture has initiated an investigation. Complainant claims they have a pea field that was drifted onto by this airplane causing damage to their peas.

A roadside right of way herbicide application was made adjacent to a pea field and an airplane flew over the field leaking herbicides on its way back to the airport to be fixed. Peas in the field showed herbicide damage symptoms. All foliage and soil samples tested negative for the herbicides used.

<u>CASE #</u> 21Y 1999	Designation Pesticid	e Involved <u>License</u> unkno	wn Date of Incident	5/12/1999	<u>Severity</u> 4	Application Method Unknown
	Nature of Case Bee Kill		Response Time	Same Day C	hildren Involved? No	Application Type Ag
County YAKIMA	Chemicals or other Materials Involved:		d: Other Agenci	es Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		No	ne	NAI	Bees
Summary / Findings	Carbaryl					

Bee kill. Five sites of ten hives (50 total) were placed in an apple orchard two weeks previous to complaint. The complainant removed the hives on 5-12-99 and found up to 2000 dead bees in front of each hive. The dead bee sample condition was "too aged and dry" to be a good sample.

Bee keeper requests that this bee kill be recorded. Lab analysis detected Carbaryl.

CASE # 22Y 1999	Designation Pesticide Involved License unknown	Date of Incident 5/14/1999	Severity 3	Application Method Unknown
	Nature of Case Bee Kill	Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	NAI	Bees
Summary / Findings	Carbaryl			

Bee kill. Referring party moved 4 bee hives on the morning of 5-14-99. He found dead bees at the hives and collected samples to turn in to WSDA. Site was visited with referring party the same day. There were few dead bees at the site.

Lab analysis detected trace amounts of Carbaryl in dead bee sample. Unable to determine source.

<u>CASE #</u> 23Y 1999	Designation Pesticide Nature of Case Bee Kill	Involved <u>License</u> unknown	Date of Incident5/14/1999Response TimeSame Day	<u>Severity</u> 4 <u>Children Involved?</u> No	Application Method Unknown Application Type Ag
County YAKIMA	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NAI	Bees
Summary / Findings	Carbaryl				

Bee kill. Complainant removed 12 hives from orchard. A 300 ml sample of dead bees was collected by the investigator, including one queen bee.

Laboratory results showed trace amount of Carbaryl in sample of dead bees.

CASE # 24Y 1999	Designation Violation License private applicator	Date of Incident 5/14/1999	<u>Severity</u> 4	Application Method Ground
	Nature of Case Bee Kill	Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	None	Administrative Action	Cherries, apples/Bees
Summary / Findings	Carbaryl			

Bee kill. Complainant inspected his 192 colonies at 9 am on 5/14 and observed a moderate bee kill. The hives were placed in the orchard 4/10 & he last inspected the hives on 5/12. The cherry trees were done and the apples nearly done, but there were dandelions in all the orchards.

A bee kill occurred in 192 hives in an apple and cherry orchard in Yakima County. Lab analysis detected trace amounts of carbaryl in the bee sample. An adjacent apple grower had not complied with bee protection requirements on the Carbaryl label for fruit thinning.

CASE # 25Y 1999	Designation Pesticide Involved License unknown	Date of Incident 5/18/1999	<u>Severity</u> 4	Application Method Unknown
	Nature of Case Bee Kill	Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	unty YAKIMA Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	INSECTICIDE	None	NAI	Bees
Summary / Findings	Carbaryl			

Alleged bee kill on complainant's property in Yakima county. Some of the 131 hives at this location have dead bees in front of the hives that appear to be freshly killed (no signs of decay.) Examination of the frames of some of the hives show that there is a break in the brood cycle of 0-5 days.

Laboratory results of sampled bees detected trace amounts of carbaryl. The source of the pesticides was undetermined.

CASE # 2	26Y 1999	Designation Violation	h License private applicator	Date of Incident 5/18/1999	Severity 4	Application Method Ground
		Nature of Case Bee Kill		Response Time Same Day	Children Involved? No	Application Type Ag
County Y	AKIMA	Chemical	s or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
		INSECTICIDE		None	NOC	Orchard/Bees
Summary /	/ Findings	Carbaryl				

Complainant removed bee hives from ranch in am on 5/19. He saw dead bees & contacted WSDA to ask that a bee kill be documented. samples & photos were taken. Dandelion & syringa were in bloom at site. Investigator returned to site in afternoon and saw spraying about 10m east of bee kill. Empty pesticide containers indicated product used. A hive one mile west of kill site had no visible kill.

Bee keeper reported a bee kill, found while removing his hives from an apple orchard. A grower in the same area was found using Carbaryl 4L contrary to the Section 3 label directions. Alleged infractors records were not completed according to state pesticide law.

<u>CASE #</u> 27Y 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 4/23/1999	<u>Severity</u> 1	Application Method Air
	Nature of Case Drift	Response Time Same Day	Children Involved? No	Application Type Ag
County WALLA			Final Action	Target/Complaint Area
WALLA	HERBICIDES	Oregon	NAI	Wheat/Peas
Summary / Findings	Miscellaneous			

Alleged infractor's plane allegedly was leaking peak as it flew back to airport after making an application to wheat. An observer stated he saw the airplane between 10 am and noon as it was making the application and traveled back to the airport and it was leaking. Oregon Dept. of Agriculture initiated an investigation. Complainant and damaged parties claim they have a pea field that was drifted onto, causing damage.

A roadside right-of-way herbicide application was made adjacent to a pea filed and an applicator's airplane flew over the field leaking herbicide on it's way back to the airport to be fixed. The complainant also made an application to winter wheat in an adjacent field. Peas in the field showed herbicide damage symptoms but all foliage and soil samples tested negative for the herbicides used.

CASE # 28Y 1999	Designation Violation	n <u>License</u> commercial/private applicator	Date of Incident2/28/1999Response TimeSame Day	Severity 3 Children Involved? No	Application Method Air Application Type Ag
County WALLA	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
WALLA	HERBICIDES		None	NOC	Wheat/Peas
Summary / Findings	Miscellaneous				

Has 110 acres of peas allegedly damaged by pesticides. Suspects an application was made to his adjacent wheat field by alleged infractor. Experts feel damage is from sulfonylurea herbicide. Complainant also sprayed some of adjacent wheat field with a ground sprayer where the wheat borders the peas.

Two ground herbicide applications were made to winter wheat adjacent to a pea field and two aerial applications were made to parts of the winter wheat field. Drift from the aerial applications damaged the peas. The second ground application was made after the low volatile restricted use herbicide cut-off date. Records incomplete. Nozzle pressure exceeded rule allowance.

CASE # 29Y 1999	Designation Pesticion	de Involved <u>License</u> u	unknown	Date of Incident	5/27/1999	Severity 2	Application Method Unknown
	Nature of Case Drift			Response Time	2 days	Children Involved? No	Application Type Ag
County BENTON	Chemicals or other Materials Involved:		volved:	Other Agenci	es Involved:	Final Action	Target/Complaint Area
	HERBICIDE	HERBICIDE		Noi	ne	NAI	Grapes
Summary / Findings	Unknown	diuron					

Complainant suspects possible pesticide drift to grapes. Grapes are showing slight chlorosis, mottling of leaves, and epinasty. Some varieties show more symptoms than others, with one year old Port variety showing symptoms the most. Other varieties are eight to nine years old. Complainant thinks source of pesticide(s) is the horse heaven hills.

Grapevines in two vineyards appeared to have phenoxy type herbicide damage symptoms. Foliage samples tested negative for phenoxy scan and Dicamba. A source for potential damaging phenoxy type or Dicamba herbicides could not be determined.

CASE # 30Y 1999	Designation Pesticide Invol	red License commercial applicator	Date of Incident 3/18/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type ROW
County FRANKLIN	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NAI	ROW/Alfalfa
Summary / Findings	Imazapyr				

Alleged infractor sprayed and possibly drifted spray into newly seeded alfalfa field and it is dying.

Water from complainant's and neighbors' center pivots washed pesticides from a roadside right-of-way application. The application was made correctly and on target.

<u>CASE #</u> 31Y 1999	Designation Violation Nature of Case Drift	License unlicensed	Date of Incident5/25/1999Response TimeSame Day	Severity 3 Children Involved? No	Application Method Ground Application Type Non Ag
County YAKIMA	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Weeds/Peaches
Summary / Findings	Phenoxy				

Neighbor sprayed weeds about ten days ago and now complainant has several small peach trees dying. He suspects drift from his neighbor's spraying. Complainant indicated that there is an ongoing lawsuit between the two neighbors but did not say what the suit was regarding.

Phenoxy symptoms were found on the peach trees.

CASE # 32Y 1999	<b>Designation</b> Violation	License private applicator	Date of Incident 6/9/1999	Severity 2	Application Method Ground
	Nature of Case Human Exp	osure	Response Time Same Day	Children Involved? No	Application Type Ag
County BENTON	Chemicals o	Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	INSECTICIDE		DOH	NOC	Cherries/Person
Summary / Findings	Azinphos Methyl				

Was in back yard & neighbor was spraying cherry orchard & drifted onto property & onto his person. He now feels sick & may go to doctor. He did go to a doctor who sent him to the emergency room of local hospital. He was diagnosed with organophosphate poisoning.

Allegedly exposed to spray drift from a cherry orchard application. Complainant went to hospital and was treated and released. DOH was notified. Four samples were collected including the complainant's shirt. Two of the four samples were found to contain azinphos methyl. The shirt and a swab sample from deck shows no chemical detected.

<u>CASE #</u> 33Y 1999	Designation Violation	License commercial applicator	Date of Incident 6/9/1999	Severity 2	Application Method Air
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County BENTON	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE HERBICIDE		None	NOC	Cherries/Person
Summary / Findings	Malathion				

Complaint of drift from a helicopter that was making an application to a cherry orchard. no claim of human exposure. Complained of odor in house and drift to a parked automobile.

Residue analysis was positive for Malathion from a swab sample taken from complainant's vehicle. Alleged infractor made an aerial application of Malathion to a cherry orchard west of complainant's house.

CASE # 34Y 1999	Designation Violation	License commercial applicator	Date of Incident 5/21/1999	Severity 3	Application Method Air
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County KLICKITAT	Chemicals or ot	her Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	Administrative Action	Barley/Ornamentals
Summary / Findings	2,4-D				

Complainant suspects damage to his ornamentals caused by drift from an application to a nearby barley field.

Alleged infractor drifted off target causing damage to complainant's garden and ornamentals. Two eyewitness accounts match the work order submitted. There was a drift pattern from the field to the complainant's yard and garden. Symptoms were typical drift symptoms for the herbicides applied.

<u>CASE #</u> 35Y 1999	Designation Pesticide Involved License unknown			ate of Incident	5/27/1999	Severity 2	Application Method Unknown
	Nature of Case Drift			<u>Response Time</u>	Same Day	Children Involved? No	Application Type Ag
County KLICKITAT	Chemicals or other Materials Involved:			Other Agencie	s Involved:	Final Action	Target/Complaint Area
	HERBICIDES	HERBICIDES HERBICIDE		Non	e	NAI	Unknown/Grapes
Summary / Findings	2,4-D	2,4-D					

Phenoxy type symptoms observed in a vineyard.

The phenoxy exposure was isolated to the complainant's vineyard as opposed to an area wide symptom. Possible drift from application made by complainant.

CASE # 36Y 1999	<b>Designation</b> Violatio	n <u>License</u> commercial applicator	Date of Incident 9/1/1998	Severity 3	Application Method Air
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County WALLA	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
WALLA	HERBICIDE	INSECTICIDE	None	NOC	Wheat/Trees
Summary / Findings	Glyphosate				

Complainant alleges drift from an aerial application last year of pesticides to wheat fields next to his home, onto his property, killing one of his locust trees. The complainant said trees had been sprayed in the past and come out of it, but this time a tree died. The damage was not apparent this year until the trees grew leaves.

An aerial application of restricted use herbicides was made to fallow fields in violation of the county rules. Tithe complainant used one of the herbicides in an application to his yard. The aerial application damaged all the trees on the edge of town. A foliage sample from the complainant's yard tested positive for the herbicide used both by him and the aerial applicator.

<u>CASE #</u> 37Y 1999	Designation Violation Nature of Case Human Exposure	License commercial applicator	Date of Incident         6/15/1999           Response Time         Same Day	Severity 4 Children Involved? No	Application Method Ground Application Type Non Ag
County YAKIMA	Chemicals or othe	r Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	Administrative Action	Building/Persons
Summary / Findings					

Summary / Findings

A PCO sprayed the outside and inside of a building to control bugs and now several people are experiencing headaches, nausea and burning eyes. One person fainted. Two people went to the hospital in Toppenish.

PCO sprayed the outside and inside of building to control bugs. The next morning several people experienced headaches, nausea, and burning of eyes. One person fainted and two people went to the hospital. PCO's license was expired at the time of the application.

CASE # 38Y 1999	Designation Pesticide	Involved License u	unknown	Date of Incident	6/17/1999	Severity 2	Application Method Unknown
	Nature of Case Drift			Response Time	Same Day	Children Involved? No	Application Type Ag
County FRANKLIN	Chemicals	or other Materials Inv	volved:	Other Agenci	<u>es Involved:</u>	Final Action	Target/Complaint Area
	HERBICIDE			Nor	ne	NAI	Unknown/Grapes
Summary / Findings	2,4-D						

Complainant is ranch manager of a vineyard for the damaged party. He says the grapes in the vineyard, located in northern Franklin county, show phenoxy damage symptoms. He wants the damaged documented.

Grapevines appeared to have phenoxy type herbicide damage symptoms. A definitive source of potential damaging phenoxy type herbicides was not determined.

<u>CASE #</u> 39Y 1999	Designation Pestici	de Involved <u>License</u> unknow			<u>Severity</u> 2	Application Method Unknown
	Nature of Case Drift		Response	Time Same Day	Children Involved? No	Application Type Ag
County BENTON	ITON Chemicals or other Materials Involved:		Other	Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE	INSECTICIDE		None	NAI	Unknown/Grapes
Summary / Findings	2,4-D					

Alleged drift on grapes from an application made last year. Symptoms are heavy and match a drift pattern.

Grapes did exhibit phenoxy symptoms in a typical drift pattern and symptoms were typical of carryover. Unable to determine source of spray damage.

CASE # 40Y 1999	Designation Violation	License unlicensed	Date of Incident 6/23/1999	Severity 3	Application Method Ground
	Nature of Case Human Expos	ure	Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or o	ther Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	Administrative Action	Apples/Person
Summary / Findings	Azinphos Methyl				

Complainant and wife were working in backyard while adjacent orchard was being sprayed. Complainant's wife said spray drifted onto backyard so they went in to clean up & have lunch. They later saw tractor drift on their property while turning. They state that the wind was 10-15 mph from the south. They did not feel spray but could taste it in mouth. Samples of clothing and foliage were taken.

The complainant's were exposed to guthion pesticide drift from an adjacent apple orchard while they were in their back yard. The clothing and foliage samples collected indicated positive residue for guthion. The couple did not seek medical attention.

<u>CASE #</u> 41Y 1999	Designation Violation	License unknown	Date of Incident 6/15/1999	<u>Severity</u> 2	Application Method Unknown
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County BENTON	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Unknown/Grapes
Summary / Findings	2,4-D				

Thirty six acres of wine grapes showing 2,4-D damage on upper leaves. Believed to have happened around bloom time (7-10 days ago). Complainant said the direction appeared to be from southwest. Does not know of any applications around the immediate area.

Alleged phenoxy symptoms on vineyard from two probable sources. Phenoxy symptoms were observed on the vines as well as other symptoms. No drift pattern found. Source of exposure not determined. Lawn care company used two products not labeled for roadside applications.

CASE # 42Y 1999	Designation Pesticide Inv	volved <u>License</u> unlicensed	Date of Incident 6/28/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County WALLA	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
WALLA	HERBICIDE		None	NAI	Trees
Summary / Findings	Glyphosate				

Home owner complaint of dead and dying Lombardy poplar trees. Complainant suspects pesticides.

The WSDA laboratory analysis of samples reveals evidence of glyphosate. The source is undetermined. Trees also show damage from improper planting.

<u>CASE #</u> 43Y 1999	Designation Pesticid	Inknown	Date of Incident Response Time	6/30/1999 Same Day	<u>Severity</u> 2 Children Involved? No	Application Method Unknown Application Type Ag	
County KLICKITAT	Chemicals or other Materials Involved:			Other Agenci	es Involved:	Final Action	Target/Complaint Area
	HERBICIDE			Noi	ne	NAI	Unknown/Grapes
Summary / Findings	2,4-D						

Vineyard owners reported that the grapes were showing signs of pesticide damage. The owners noticed an airplane spraying across the river in Oregon on top of the cliffs, but symptoms on the grapes were already apparent at that time.

Unable to locate source of pesticide damage to grapes.

<u>CASE #</u> 44Y 1999	Designation Pesticide Involved	License commercial applicator	Date of Incident 7/8/1999	Severity 2	Application Method Air
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or othe	r Materials_Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		WSDA Organic Program	NAI	Cherries/Organic Cherries
Summary / Findings	Malathion				

Alleged drift of malathion from neighbor's cherry orchard to his organic cherry orchard. this is the first year that the orchard was certified, so he has been in the program for 3 years.

Nine samples taken by organic division. All nine are positive for Malathion, all nine below the 5% tolerance level. Malathion is labeled for use on conventionally grown cherries.

<u>CASE #</u> 45Y 1999	Designation Violation Nature of Case Human Exposure	License commercial applicator	Date of Incident 7/8/1999 Response Time Same Day	Severity 3 Children Involved? Yes	Application Method Air Application Type Ag
County BENTON	Chemicals or othe	er Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		DOH	NOI	Cherries/Persons
Summary / Findings	Malathion				

While spraying a cherry orchard, the helicopter pilot drifted spray onto an adjacent property exposing two adults and three children to spray. Notified DOH.

The laboratory analysis was positive for Malathion residue on clothing and the foliage samples. The complainants did not seek medical attention. The alleged infractor did not have a current pesticide license.

CASE # 46Y 1999	Designation Pestici	de Involved License	private applicator	Date of Incident	7/15/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Human	n Exposure		Response Time	Same Day	Children Involved? No	Application Type Ag
County BENTON	Chemicals or other Materials Involved:			Other Agenci	es Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	HERBICIDE		DC	)E	NAI	Orchard/Person
Summary / Findings	Azinphos Methyl	2,4-D					

Complainant said that as she drives to work past this orchard that she can smell a chemical odor and she is very sensitive to chemicals. On incident date she did smell the odor and she was concerned about the spraying because she said that her daughter has seen sprayers (in the past) in this orchard and witnessed the spray mist drifting out onto Interstate-82. she did not see any sprayers but could only smell the odor.

Unable to prove spray drift.

CASE # 47Y 1999	Designation Pesticide Involved License unknown	Date of Incident 7/12/1999	Severity 1	Application Method Unknown
	Nature of Case Misuse	Response Time Same Day	Children Involved? No	Application Type Ag
County MULTIPLE	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	FUNGICIDES	None	NAI	Hops
Summary / Findings				

Two calls from the same anonymous caller alleging hop growers were applying Funginex through the drip irrigation system and applying 2,4-D with the burn back. Yakima and Benton counties.

The timing of the application that was suggested by the anonymous complainant does not seem logical for the use of the product. Funginex has no known systemic effect and the timing of the application would be too late to have an effect on the mildew. The use of 2,4-D with the burn back for a hormonal effect would be risky to the health of the hop plant.

<u>CASE #</u> 48Y 1999	Designation Pesticion	de Involved License	unknown	Date of Incident	7/22/1999	<u>Severity</u> 4	Application Method Ground
	Nature of Case Contan	ninated Product		Response Time	Same Day	Children Involved? No	Application Type Ag
County BENTON	Chemicals or other Materials Involved:		Other Agencie	s Involved:	Final Action	Target/Complaint Area	
	HERBICIDE			Sheri	iff	NAI	Grapes
Summary / Findings	Paraquat						

Suspect sulfur used on grapes may be contaminated. Sever leaf burn and spotting observed after an application.

Complainant was also the applicator. Evidence gathered supports suspected sabotage. Investigator recommended that incident should be reported to the local sheriff.

<u>CASE #</u> 49Y 1999	Designation Pesticid	·	private applicator	Date of Incident	7/26/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Human	Exposure		Response Time	Same Day	Children Involved? No	Application Type Ag
County YAKIMA	County YAKIMA Chemicals or other Materials Involved:		volved:	Other Agencie	es Involved:	Final Action	Target/Complaint Area
	INSECTICIDE			Nor	ne	NAI	Apples/Person
Summary / Findings	Parathion						

Complaint about workers in orchard while sprayers are operating.

The investigation showed that the orchard was divided into blocks and that no human exposure occurred.

CASE # 50Y 1999	Designation Incident Licens	e private applicator	Date of Incident 6/28/19	999 <u>Severity</u> 1	Application Method Ground
	Nature of Case Human Exposure		Response Time Same	Day Children Involved? No	Application Type Non Ag
County BENTON	Chemicals or other Materials	Involved:	Other Agencies Invol	Ived: Final Action	Target/Complaint Area
	NONE		DOH	NAI	Grapes/Garden
Summary / Findings	None				

Human health. Damaged party claims they were having health problems after their neighbor sprayed in the vineyard next to their house. The spraying was done about four weeks ago. They were also concerned about some trees and their garden that are located next to the vineyard. He said they appear to be dying.

WSDA found that no health problems were experienced and that the plants had insects and disease. The neighbor had sprayed to control weeds.

CASE # 51Y 1999	Designation         Pesticide Involved         License         private           Nature of Case         Human Exposure	pplicator Date of Incident 7/27/1999 Response Time Same Day	Severity 2 Children Involved? No	Application Method Ground Application Type Non Ag
County YAKIMA	County YAKIMA Chemicals or other Materials Involved:		Final Action	Target/Complaint Area
	INSECTICIDE	None	NAI	Pears/Person
Summary / Findings	Azinphos Methyl			

Complainant was golfing when spray drifted across the course from an application to an adjoining orchard. She could smell and see the drift but did not feel any spray. No health issues other than sneezing at the time of exposure.

Citizen playing golf concerned about pesticide smell or drift from adjacent orchard, but did not want it pursued. She only wanted to know what product was sprayed and wanted someone to suggest to applicators that more care be used when applying in the future.

<u>CASE #</u> 52Y 1999	Designation Incident License n/a	Date of Incident 7/23/1999	Severity 1	Application Method NA
	Nature of Case Human Exposure	Response Time 3 days	Children Involved? No	Application Type Non Ag
County BENTON	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	NONE	DOH	NAI	Human Exposure
Summary / Findings	None			

Twenty two employees of a company were drifted on by an aerial application while working outside of the building. The 22 workers complained of symptoms requiring medical evaluation.

The referral by DOH that 22 workers were drifted on by an aerial application of a herbicide was not accurate information. Two workers in the area about 1/4 mile from the application site smelled an odor. The application was made correctly and roads into the spray area were blocked off and a point person was at the application site.

<u>CASE #</u> 53Y 1999	Designation Violation	License commercial applicator	Date of Incident 7/23/1999	<u>Severity</u> 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County BENTON	Chemicals or o	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NOC	Ornamentals
Summary / Findings	Pendimethalin				

Large limbs in tree are dying.

Large limbs in trees are dying. The symptoms are related to the herbicide application made in 1998, case 40Y-98.

CASE #	54Y	1999	Designation Incident	t <u>License</u> co	commercial applicator	Date of Incident	7/12/1999	Severity 1	Application Method NA
			Nature of Case Contain	er Disposal		Response Time	Same Day	Children Involved? No	Application Type Non Ag
<u>County</u>	YAKIMA	<b>\</b>	Chemica	Is or other Materials Inv	/olved:	Other Agenci	<u>es Involved:</u>	Final Action	Target/Complaint Area
			CONTAINERS			Cou	nty	NAI	Burning of containers
Summary	v/ Findir	nas	Miscellaneous						

Plastic pesticide containers were being burned. this has been a routine practice. Complainant is tired of the smoke.

Anonymous complaint that plastic containers were burned at 5:30 pm 7-12-99. This has been a routine practice. Regional clean air authority assessed a \$3,000 fine and conditions for settling the complaint.

<u>CASE #</u> 55Y 1999	Designation         Violation         License           Nature of Case         Drift		/31/1999 <u>Severity</u> 2 ame Day Children Involved? No	Application Method Ground Application Type Non Ag
County BENTON	Chemicals or other Materials In		<u> </u>	Target/Complaint Area
	HERBICIDE	None	Verbal Warning	Lawn/Grapes
Summary / Findings	2,4-D			

Neighbor applied 2,4-D to yard & surrounding area and it drifted to his grapes, causing damage for the second year in a row. Complainant wants to document this occurrence and have someone speak with his neighbor concerning this situation.

A roadside sterilant application, two herbicide applications in a vineyard, and two herbicide applications to a barrow pit resulted in phenoxy type herbicide damage to the vineyard. Only one of the applications to the barrow pit was of a phenoxy-type herbicide.

CASE # 56Y 1999	Designation Pesticide Inv	volved <u>License</u> private applicator	Date of Incident 8/6/1999	<u>Severity</u> 2	Application Method Ground
	Nature of Case Human Expo	osure	Response Time Same Day	Children Involved? No	Application Type Ag
County YAKIMA	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NAI	Apples/Persons
Summary / Findings	Azinphos Methyl				

Human health. Homeowner complained about pesticide drift from an orchard across the street. The orchard is sprayed between 2 and 3 am. She was awakened by the smell of pesticides through the open windows. They could see clouds of pesticide mist. Homeowner states she had headaches and was sick to her stomach, but she did not feel the mist at the window.

Pesticides appear to be applied according to label. Alleged infractor has agreed to notify complainants when a spray application is planned so that they can close their windows against the odor. All are satisfied.

<u>CASE #</u> 57Y 1999	Designation Violation Nature of Case Drift	License commercial applicator	Date of Incident         8/30/1999           Response Time         Same Day	Severity 3 Children Involved? No	Application Method Unknown Application Type Ag
County FRANKLIN	Chemicals	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	Administrative Action	Potatoes/Alfalfa
Summary / Findings	Paraquat				

Complaint of spots on alfalfa. They think it could be desiccant spots from potato field to the north of them. He first noticed spots on 8/30/99 am.

Spots were noticed on alfalfa. The damaged party believes that it could be desiccant spots from potato field to the north of the field. Diquat residue was detected by lab analysis.

CASE # 58Y 1999	Designation Violation	License unlicensed	Date of Incident 9/3/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? Yes	Application Type Ag
County YAKIMA	Chemicals of	or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	UNKNOWN		None	NOC	Runoff from orchard
Summary / Findings	Unknown				

Complaint that neighbor sprays orchard and then waters, so pesticides run off onto property. His kids play in the mud and he is concerned about their health. A sheriff is investigating the complaint.

Two samples were taken and analyzed for op pesticides but none were detected. Neighbor has not complied with WSDA record request.

CASE # 59Y 1999	Designation Incident	License unknown	Date of Incident 8/19/1999	Severity 2	Application Method Unknown
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag
County BENTON	Chemicals or	other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	HERBICIDE		None	NAI	Peaches
Summary / Findings	Unknown				

Leaf drop occurring in the Ryanson peaches. Leaves falling off the south side of the trees that are located near the canyon. Observed August 19 and 20, 1999.

Unable to determine cause of the symptoms.

CASE # 60Y 1999	Designation Violatio	Designation         Violation         License         commercial applicator         Date of Incident         9/9/1999		<u>Severity</u> 2	Application Method Air	
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Ag	
County KLICKITAT	Chemica	Is or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area	
	HERBICIDE	HERBICIDE	None	Administrative Action	Grass seed/Grapes	
Summary / Findings	Glyphosate	Glyphosate				

Alleged infractor was making a post-planting pre-emergence aerial application of glyphosate to a grass seed field. The complainant claims the wind was blowing and the spray drifted to his 140 acre vineyard.

A post planting pre-emergence aerial application resulted in the off-target movement of glyphosate to a vineyard. It was recommended as a use and this is not allowed by label. A weed foliage sample and a grape foliage sample tested positive for glyphosate, establishing a gradient from the grass seed field to the vineyard.

CASE # 61Y 1999	Designation         Violation         License         comm           Nature of Case         Drift         Drift<		commercial applicator	Date of Incident Response Time		Severity 3 Children Involved? No	Application Method Air Application Type Ag	
County WALLA	Chemicals or other Materials Involved:			Other Agenci	,	Final Action	Target/Complaint Area	
WALLA	HERBICIDE	ERBICIDE INSECTICIDE		Oregon		NOC	Fallow/Grapes	
Summary / Findings	2,4-D	Carbaryl						

Damaged party's vineyards are in an area surrounded by wheat farms. Complainants say their grapevines show damage from 2,4-D.

Both an aerial and a ground application of the same herbicide were made near two vineyards. Both vineyards showed herbicide damage symptoms. Both vineyards used another herbicide with one of the same active ingredients. One alleged infractor had record keeping violations.

CASE # 62Y 1999	Designation Pesticide Involved	License commercial applicator	Date of Incident 9/2/1999	Severity 1	Application Method Ground
	Nature of Case Drift		Response Time Same Day	Children Involved? No	Application Type Non Ag
County KITTITAS	Chemicals or other	Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE		None	NAI	Ornamentals/Property
Summary / Findings	Dicofol				

Alleged infractor came to spray apartments next to where the complainant was working. He became obnoxious and refused to tell her what he was spraying. Complainant said that she saw the mist come over onto her property. She could smell the spray, so she stayed inside and called police.

Advanced notice of the spraying was not given or required. The lab results were negative for pesticide residue.

<u>CASE #</u> 63Y 1999	Designation Violation	License private/commercial/com	Date of Incident 9/21/1999	<u>Severity</u> 2	Application Method Air	
	Nature of Case Drift	mercial consultant	Response Time Same Day	Children Involved? No	Application Type Ag	
County WALLA	Chemicals or other Mat	terials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area	
WALLA	HERBICIDES		None	NOC	Wheat, barley/Grapes	
Summary / Findings	Miscellaneous					

Complainant has nine acres of grapevines he planted this year & his neighbor has eight acres that were planted this year. Both vineyards have what appears to be 2,4-D damage. The complainant wants someone to look at his grapes and determine if the damage is from 2,4-D and where it could have come from.

Two different applicators made three applications of different herbicides adjacent to and close to a vineyard. Grapevines in the vineyard showed herbicide damage symptoms and tested positive for one of the active ingredients in one of the herbicides. Record keeping, licensing, and off-label recommendation and application violations were found.

<u>CASE #</u> 64Y 1999	Designation Incident License n/a	Date of Incident 10/1/1999	Severity 0	Application Method Air	
	Nature of Case Human Exposure	Response Time Same Day	Children Involved? No	Application Type Non Ag	
County KITTITAS	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area	
	NONE	None	NAI	Unknown/Person	
Summary / Findings	None				

An Ellensburg contractor reported that four of his workers were drifted upon while working on his home. The workers did not see any spray equipment on the low flying wing aircraft. The mist stayed in the air for about 10 minutes and had a strong smell, like slag burning. "The workers didn't feel the mist, but complained of headaches & upset stomachs. They didn't seek medical attention.

Unable to locate airplane responsible for the drift.

<u>CASE #</u> 65Y 1999	Designation Violation	License commercial applicator	Date of Incident 5/31/1999 Response Time Same Day	Severity 4 Children Involved? No	Application Method Ground Application Type Non Ag
County BENTON	Chemicals or other Materials Involved:		Other Agencies Involved:	Final Action	Target/Complaint Area
Summary / Findings	HERBICIDE MCPA		None	Administrative Action	Ornamentals

Ornamental trees were damaged by herbicide applied by a commercial landscape company. Complainant was not happy with weed control from first application and ordered a second application that occurred four months ago. WSU diagnosed herbicide injury and referred complainant to WSDA.

A commercial operator made four separate and distinct herbicide applications, using three different herbicides to a grass lawn, and a bark-covered ornamental planter area in a customer's back yard. Deciduous and conifer trees were severely damaged and killed, apparently from root uptake of the herbicide(s). Foliage samples tested positive for one of the herbicides used.

CASE # 66Y 1999	Designation Pesticide Involved License commercial applicator	Date of Incident 6/30/1999	Severity 3	Application Method Air
	Nature of Case Misuse, Recommendation	Response Time Same Day	Children Involved? No	Application Type Ag
County FRANKLIN	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area
	INSECTICIDE	Food Safety	NAI	Potatoes
Summary / Findings	Carboxalate			

Grower wrote a recommendation to apply an unregistered pesticide on his potato crop. Dealer's consultant also wrote a recommendation to apply the unregistered pesticide on the grower's potato crop. Dealer delivered both recommendations and pesticide to commercial applicator. Commercial applicator applied a portion of the pesticide before realizing the mistake.

Commercial applicator applied a portion of pesticide to a crop contrary to label recommendations but in accordance with recommendations made by a dealer's consultant, and then realized the error.

<u>CASE #</u> 67Y 1999	Designation Violation License unlicensed	Date of Incident 10/24/1999	Severity 1 Children Involved? No	Application Method Ground	
	Nature of Case Unlicensed	Response Time Same Day	Application Type Non Ag		
County BENTON	Chemicals or other Materials Involved:	Other Agencies Involved:	Final Action	Target/Complaint Area	
	MISC.	None	NOC	Ornamentals	
Summary / Findings	Miscellaneous				

Tells customers he can apply stuff that takes a special license to buy & that he can take care of their pest problems. He has made 4-6 applications of fertilizer, insecticide, herbicide, etc. to complainant's property. Has also treated neighbor's yard. He pokes holes around trees & shrubs & then gets a milk jug full of liquid & pours it around the trees. There has been some injury to trees on the complainant's property.

Alleged infractor has applied chemicals to the property of the complainant without being licensed by the WSDA as a commercial applicator.

**Department of Health** 

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990002	12/17/98	L&I	A ceiling gave away under an electrician working in an attic. A half gallon container of pesticide stored in the attic fell through spilling on floor below. There was noticeable odor and the electrician became ill. <i>Insecticide/Acaricide - Dimethoate</i>	2	2				
990004	2/3/99	L&I	Adult male applicator sprayed a mixture of fertilizer and insecticide on a residential lawn. The spray gun popped off the hose and sprayed his eyes, causing irritation.Fungicide - Ferrous Sulfate Insecticide/Acaricide - Chlorpyrifos	2	2				
990007	2/21/99	WPC	Ten year-old male and his eleven year-old sister, developed symptoms following exposure from repeated applications of over the counter "Lice shampoo" and sprays <i>Insecticide/Acaricide - Resmethrin</i>	3 (2)	2 (2)				
990009	1/21/99	L&I	Adult male maintenance worker received an eye exposure when the hose came off the pressurized tank containing a mossicide, splashing chemical in his face. <i>Other - Sodium Hypochlorite</i>	1	2				

\* Incidents involving multiple individuals the classification and severity is indicated for all individuals.

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990010	2/28/99	WPC	Adult male applicator loaded a sprayer with herbicide, not wearing eye protection, and developed eye irritation when a splash of product came in contact with his eyes.	3	2				
			Herbicide - Paraquat						
990011	3/8/99	WPC	Adult male farmworker was pruning grape vines and was drifted on by a ground application to an adjacent nursery 200 ft. away.	2	3				
			Insecticide/Acaricide - Chlorpyrifos						
990013	2/25/99	L&I	Adult female, plant care technician, reported a burning rash on her hands, arms and forearms while working amongst plants previously treated with an insecticide.	2	2				
			Insecticide/Acaricide - Methyl Carbamate						
990019	3/8/99	Individual	Adult female called DOH complaining of an illness believed to be from her neighbor applying a herbicide to her property. WSDA confirmed presence of herbicide.	3	2				
			Herbicide - Glyphosate						
990021	3/26/99	WSDA	Following a professional pest control application within her home, an adult female reported dermal symptoms.	2	2				
			Insecticide/Acaricide - Chlorpyrifos						

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990023	4/1/99	L&I	Adult male applicator, wearing required PPE, felt spray contact his neck during an application. Four days later he was seen for a rash.Insecticide/Acaricide - Mineral Oil	2	2				
990024	3/20/99	L&I	Immediately following a pesticide application, the adult male applicator         developed eye irritation and sought treatment. He was not wearing any         eye protection.         Insecticide/Acaricide - Endosulfan         Fungicide - Sulfur	2	2				
990025	3/22/99	L&I	Four male applicators, not wearing adequate PPE, reported smelling the pesticide applied and developed several related symptoms. <i>Insecticide/Acaricide - Chlorpyrifos, Mineral Oil</i>	3 (4)	2 (4)				
990028	3/28/99	L&I	Adult male applicator developed eye irritation and facial sensitivity after spraying a corrosive pesticide. He was wearing PPE, however, some facial areas were unprotected.         Insecticide/Fungicide - Calcium Polysulfides	1	3				
990030	3/24/99	L&I	Adult male applicator developed symptoms after spraying pesticides.         Windy conditions caused the pesticide mist to contact him while spraying.         Insecticide/Acaricide - Chlorpyrifos         Fungicide - Fenarimol	3	2				

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990033	4/19/99	WPC	Adult male, freight employee, reported symptoms while unloading a trailer full of pesticides. He was not wearing protective equipment and breathed residues from the pallets being unloaded.	3	3				
			Nematicide - Ethoprop						
990034	4/10/99	WSDA	Adult female and male were drifted on by a ground insecticide	1	3				
			application made on adjacent apple orchard. Both were working in their backyard during the application. WSDA lab confirmed presence of insecticide.	6	1				
			Insecticide/Acaricide - Chlorpyrifos						
990036	4/5/99	L&I	Adult male orchard worker became ill while pruning his apple trees. He had sprayed the trees three days earlier with insecticide. Insecticide/Acaricide - Chlorpyrifos	3	2				
990037	4/16/99	L&I	Adult male farmworker developed illness after eating lunch without washing his hands. He was driving stakes into the ground to spread trees and handled grass treated with a herbicide. <i>Herbicide - Paraquat Dibromide</i>	3	2				
990039	4/23/99	WPC	After picking up 20 pounds of treated seed potatoes that had spilled onto the ground, an adult male developed respiratory problems and numbness to his extremities. He was not wearing PPE. <i>Insecticide/Acaricide - Phorate</i>	2	4				

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990040	4/24/99	WPC	A retired male applied an insecticide to his shrubs and the wind blew the spray into his face. Immediately, he experienced symptoms, he showered, and went to an immediate care center. <i>Insecticide/Acaricide - Dimethoate</i>	3	2					
990041	4/26/99	WPC	An adult male was applying a herbicide with a ground rig when a hose ruptured and drenched his body. He was not wearing proper eye protection and developed several symptoms. <i>Herbicide - 2,4-D, Amine</i>	2	2					
990042	4/24/99	WSDA	Standing 30 feet away from a pesticide applicator, an adult male felt a heavy mist and tasted the pesticide chemical. He reported several symptoms believed to be related to the exposure. <i>Anti-Bacterial - Oxytetracycline</i>	3	2					
990047	5/1/99	WPC	A retired male developed skin irritation after spraying his lawn with herbicides. Spray soaked through his gloves and clothing. <i>Herbicide - 2,4-D, Mecoprop (MCPP)</i>	2	2					
990050	3/29/99	Individual	Adult male developed a problem with his eyes and skin after spraying an insecticide. He felt the spray in his eyes and on his face. He was wearing eye protection, but indicated it did not protect him from drift. <i>Insecticide/Fungicide - Calcium Polysulfides</i>	2	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990051	4/28/99	WPC	Adult male applied a fungicide and growth regulator mixture to an orchard. He reported smelling chemicals previously applied, and later developed symptoms thought to be related.Growth Regulator - Insect Pheromone Mixture, Gibberellins Fungicide - Sulfur	3	3				
990055	5/10/99	WPC	Eighteen month-old ingested an unknown amount of insect repellent. There was a chemical odor on her breath and some had spilled on her arm and legs. She was taken to the ER and treated with AC. <i>Repellent - Diethyltoluamide</i>	1	2				
990056	5/10/99	WPC	Adult male licensed applicator treated blackberries with herbicide for a property management company. His backpack sprayer leaked soaking his back. He went home, showered, changed clothes and went back to work. Dermal effects resulted. Herbicide - 2,4-D (ester), Triclopyr	2	2				
990058	4/24/99	L&I	Adult male sprayed a herbicide about his garden plot. The spray filterclogged, then cleared, drenching his clothes. Although he wore PPE, hedeveloped symptoms thought to be related.Herbicide - Paraquat Dichloride	3	2				

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990059	4/22/99	L&I	Adult male sprayed a pesticide mixture for 2 hours. He wore all requiredPPE, however, he indicated possible contact with the spray.Fungicide - Myclobutanil, SulfurInsecticide/Acaricide - Oxamyl	3	2				
990062	4/16/99	L&I	Adult male chemical applicator, wearing required PPE, developed a rash on his chest and neck. He had applied a dust formulation of a fungicide on seed potatoes. <i>Fungicide - Thiophanate-methyl</i>	3	2				
990063	5/19/99	WPC	The hose attached to a spray tank ruptured and sprayed the adult male applicator in the face. He immediately sought treatment for irritated eyes and nasal congestion. <i>Herbicide - Paraquat</i>	1	2				
990068	4/27/99	L&I	Adult male developed eye irritation and edema after getting herbicide mist in his left eye. He may have increased his exposure when he used his shirt to wipe his eye. <i>Herbicide - Glyphosate</i>	2	2				
990069	5/19/99	WSDA	Two hours after being drifted on by an insecticide, an adult male developed symptoms that required medical attention.Insecticide/Acaricide - Carbaryl	3	2				

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990071	5/24/99	WPC	Teenage male was sprayed in the face with a paint that contained an insecticide. He developed symptoms that resolved quickly. When he arrived for medical attention, he was asymptomatic.	3	2				
			Insecticide/Acaricide - Diazinon						
990072	5/24/99	НСР	Health effects were reported by an adult male, following his entry into an area that had been treated with a herbicide and hour earlier.	3	2				
			Herbicide - Chlorsulfuron						
990074	6/2/99	WPC	Adult male orchard applicator was exposed to pesticides while calibrating the sprayer nozzles. Though he was wearing goggles, a drop of chemical got into his eye.	1	2				
			Herbicide - Glyphosate, Oxyfluorofen, Adjuvant and Ammonia sulfate						
990075	5/13/99	L&I	Adult male city employee reported health effects he believes resulted from dermal contact while reading a label on a leaking pesticide container.	3	3				
			Herbicide - Bensulide						
990076	5/15/99	L&I	Adult male applicator received an exposure while spraying herbicides. He was wearing sunglasses instead of approved PPE. Wind blew and spray went into his eyes.	1	2				
			Herbicide - 2,4-D, Glyphosate						

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990080	4/16/99	L&I	Adult male city employee applied a herbicide to a camping area. He did not wear PPE, rubbed his eyes while spraying, and later developed eye irritation.	3	2				
990081	5/8/99	L&I	Herbicide - Glyphosate         Adult male developed eye irritation after an exposure to an undiluted herbicide that contacted his left eye. He decontaminated and sought medical assistance.         We deted on the developed eye irritation after an exposure to an undiluted herbicide that contacted his left eye. He decontaminated and sought medical assistance.	2	2				
990082	5/10/99	L&I	Herbicide - Alachlor         Adult male office worker reported symptoms thought to be a result of chemicals applied in his office. Some of the chemicals were from resins/epoxys as well as pesticides.	3	2				
990088	6/6/99	WPC	Insecticide/Acaricide - Permethrin, Piperonyl Butoxide, PyrethrinsAdult male visited his mother's home and mowed the lawn. The adjacentright-of-way had been sprayed with a herbicide and two hours later, hereported difficulty breathing. He was treated for an asthma attack.Herbicide - 2,4-D, Triclopyr	3	2				
990089	5/21/99	L&I	Two female office employees developed allergic type symptoms two hours after arriving at their work place. The office had been treated for mites by a commercial applicator.         Insecticide/Acaricide - Lambda-cyhalothrin, Chlorpyrifos, Pyrethrins, Mgk-264, Piperonyl Butoxide	3	2				

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990091	5/13/99	L&I	Adult male went to the ER with health complaints and stated his symptoms occurred when he entered a storage area and smelled pesticides being stored there. <i>Multiple pesticides</i>	3	3					
990094	6/9/99	WPC	Adult male accidentally drank herbicide from an unmarked glass bottle and developed symptoms thought to be related. <i>Herbicide - Glyphosate</i>	2	2					
990095	6/9/99	WSDA	At home on his deck, an adult male was drifted on by a neighbor spraying his cherry orchard. He reported feeling the spray on his face and arms. He became ill and was seen at the hospital ER <i>Insecticide/Acaricide - Azinphos-methyl</i> <i>Fungicide - Myclobutanil</i> <i>Other - Aliphatic Polycarboxylate</i>	3	3					
990096	5/23/99	WSDA	Nine year-old female was outside playing when a neighbors' herbicide application drifted onto her property. The girl reportedly began feeling ill the same evening. <i>Herbicide - 2,4-D, Triclopyr</i>	3	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990097	6/11/99	WSDA	Adult female developed eye irritation after she was exposed to pesticidedrift from a cherry orchard. She was standing approximately 150 feetaway from the orchard during the application.Insecticide/Acaricide - Azinphos-methyl	2	2					
			Fungicide - Myclobutanil, Sulfur							
990100	5/26/99	L&I	Wearing complete PPE, an adult male, spray applicator (blast sprayer), developed eye and skin irritation following the pesticide application <i>Insecticide/Acaricide - Carbaryl</i>	2	2					
990101	6/1/99	L&I	Insecticide/Acuricide - Carbaryl         Not wearing eye protection while spraying an insecticide may have contributed to eye irritation reported by this adult male applicator. After 3 hours, he sought medical treatment.         Insecticide/Acaricide - Carbaryl         Growth Regulator - 1-naphthaleneacetic Acid	2	2					
990104	6/15/99	WPC	Adult female applied a herbicide which was in a container attached to her water hose. She experienced the wind blowing the spray back into her face. She rinsed her eyes and went for treatment.         Herbicide - Glyphosate	1	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990105	6/15/99	LHD	Thirteen health care workers developed health effects after an application of an insecticide was made inside and outside their office facility. All workers smelled pesticide odor. Most developed headaches. Two sought medical treatment. <i>Insecticide/Acaricide - Cyfluthrin</i>	1 2 (11) 6	3 2 (11) 1					
990106	6/2/99	L&I	Adult male orchard worker developed eye irritation after tying mating disruption strips to tree branches. He was not wearing gloves and said dust from the strips fell in his face and in his eyes.         Growth Regulator - Insect Pheromone Mixture	1	2					
990109	6/18/99	Individual	Adult female homeowner reported mild illness following a PCO insecticide application to control carpenter ants. No contact with residues took place and proper re-entry was observed. <i>Insecticide/Acaricide - Bifenthrin</i>	3	2					
990110	4/22/99	L&I	Adult male, orchard foreman, developed eye irritation resulting from wearing personal eyewear instead of approved PPE. <i>Fungicide - Myclobutanil</i>	1	2					
990113	6/23/99	WSDA	An elderly female and her husband were drifted on by a ground application of pesticide to an adjacent apple orchard, while working in their backyard. Both had mild symptoms but did not seek care. Clothing and foliage samples were positive for pesticides. <i>Insecticide - Azinphosmethyl and Imidacloprid</i>	2 (2)	2 (2)					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990119	6/15/99	L&I	Adult male irrigation technician developed health effects while working in an apple orchard and two blueberry fields. These areas had been sprayed with an insecticide/fungicide mix. <i>Insecticide/Acaricide - Esfenvalerate</i> <i>Fungicide - Iprodione</i>	3	2					
990122	5/6/99	L&I	Adult male applicator was wearing PPE, however, his face and neck were exposed to the pesticide he had applied. He developed skin irritation. <i>Growth Regulator - 1-naphthaleneacetic Acid</i>	2	2					
990124	6/3/99	L&I	Adult male farmworker presented to the ER complaining of a nose irritation. He had been spraying wearing an approved respirator, but he removed it to scratch his nose. He was not wearing gloves. <i>Herbicide - Glyphosate</i>	3	2					
990125	6/18/99	WPC	Adult male PCO mixed a tank of pesticide and removed his goggles, rubbing his eyes with his gloves. Product entered his eye and he immediately developed eye irritation. <i>Insecticide/Acaricide - Lambda-cyhalothrin</i>	1	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990133	7/8/99	WSDA	A family of five developed health effects following an application of an insecticide adjacent to their property. They reported feeling and smelling the pesticide. They washed 30 minutes later and did not seek medical treatment. <i>Insecticide/Acaricide - Malathion</i>	2 (5)	2 (5)				
990135	4/26/99	L&I	Adult female, stocker in a retail nursery, developed contact dermatitis on both hands. The exposure is thought to have occurred from handling and stocking pesticide containers.         Insecticide/Acaricide	3	2				
990141	6/25/99	L&I	Adult male farmworker was thinning apple trees and rubbed his eyes. Presents to ER with ocular symptoms of three day duration. <i>Insecticide/Acaricide - Phosmet</i>	3	2				
990142	7/15/99	НСР	Adult female chemist developed mild health effects when the mechanical ventilation system in the lab malfunctioned, causing a pesticide exposure under a chemical hood. Pesticide - Multiple products and solvents over time	3	2				
990147	7/13/99	L&I	Adult male farmworker dug daffodils out of a field that had been sprayed earlier with a fungicide. Dirt blew into his eyes and caused them to water and burn from the irritation.         Fungicide - Chlorothalonil	3	2				

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents								
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity				
990148	6/3/99	L&I	Adult female landscape supervisor was exposed to a herbicide when the hose disconnected from her spray gun handle, and sprayed her eyes. She was decontaminated and taken for treatment.	1	2				
l			Herbicide - Glyphosate						
990151	6/8/99	L&I	Adult male applicator developed skin irritation on his neck. Although he was wearing PPE, his neck was unprotected.	3	2				
			Insecticide/Acaricide - Petroleum Oil, Bacillus Thuringiensis, Var. K						
990153	6/8/99	L&I	Adult female orchard worker reported health effects, thought to have come from thinning apple trees, previously treated with pesticides.	3	2				
			Insecticide/Acaricide - Azinphos-methyl, Malathion, Methoxychlor						
990158	7/25/99	WPC	Adult male agricultural worker reported dermatitis resulting from working in a vineyard. Exposure may have occurred when he went to use the bathroom, not washing his hands before doing so.	1	2				
			Herbicide - Paraquat Dichloride						
990173	8/4/99	WPC	Not wearing eye protection while preparing a herbicide mixture, an adult pesticide applicator developed eye irritation after the chemical contacted his eyes.		2				
			Herbicide - Glyphosate						

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990175	8/7/99	WPC	Two individuals holding a garage sale were exposed to pesticide drift from an application to a nearby potato field. Both parties reported symptoms being almost immediate.	2 (2)	2 (2)					
			Fungicide - Mancozeb							
			Insecticide/Acaricide - Methamidophos							
990177	8/8/99	WPC	Fourteen month-old female developed eye irritation when her parents shampooed her hair with lice shampoo.	1	2					
			Insecticide/Acaricide - Permethrin							
990180	7/26/99	L&I	Adult female developed dermal symptoms after working in an onion field. She sought medical care and was diagnosed with chemical sensitivity.	2	2					
			Insecticide/acaricide - Lambda Cyhalothrin Fungicide - Mancozeb							
990184	7/24/99	L&I	Adult female, working as a nursing supervisor in a clinic, reported a reaction to an insecticide application which was made outside and inside her building.	3	2					
			Insecticide/Acaricide - Diazinon							
990185	7/23/99	L&I	Adult male warehouse-man sprayed pesticides into a grain bin. Spray splashed back into his face. Within 20 minutes he developed facial and ocular irritation.	1	2					
			Insecticide/Acaricide - Cyfluthrin							

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents										
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity						
990186	7/24/99	L&I	Adult female garden center employee was exposed while cleaning up a broken/spilled insecticide container. Symptoms were brief and resolved rapidly.	3	2						
990187	7/13/99	WSDA	Insecticide/Acaricide - Endosulfan         Adult male complained of feeling ill due to the smell associated with the application of a wood shingle fungicide treatment.         Europicide       Compare Manhath mate	3	2						
990191	7/27/99	L&I	Fungicide - Copper Naphthenate         Adult male agricultural applicator experienced dermal and ocular symptoms after spraying pesticides. He wore full PPE but believes exposure occurred when he took his gloves off and scratched his face.         Europicide       Trifleerretwohin)	1	2						
990193	7/16/99	L&I	Fungicide - Trifloxystrobin)         Two male orchard workers developed skin irritation with rashes while working in a cherry orchard. Exposure is thought to be associated with the dusty pesticide residue on the trees.         Insecticide/Acaricide - Pyrethrins, Rotenone	3 (2)	2 (2)						
990195	6/19/99	L&I	Adult female counselor in a drug rehab center reported a skin reaction after working in an area where an application for flea control had been earlier applied. <i>Insecticide/Acaricide - Orthoboric Acid</i>	2	2						

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents										
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity						
990200	8/21/99	WPC	Elderly adult male sprayed an insecticide at his residence. Three hours later, he developed a rash on his upper torso, then sought medical attention.	1	2						
990203	8/20/99	WSDA	Insecticide/Acaricide - Acephate, Fenbutatin-oxide         Adult female and her elderly mother developed symptoms following an aerial fungicide application.         Fungicide - Sulfur	3 (2)	2 (2)						
990205	7/22/99	L&I	Adult female, a temporary laborer, was exposed to an insecticide wasp & hornet spray. Within 30 minutes, she developed symptoms related to the exposure.         Insecticide/Acaricide - Tertamerthrin, Phenothrin	2	2						
990207	7/28/99	L&I	Adult female developed dermal reaction after handling a powder formulation of a fungicide. The powder was very fine, blowing on her while she was loading a sprayer.         Fungicide - Chlorothalonil, Mefenoxam	2	2						
990210	7/28/99	L&I	Adult male, grain elevator worker, sprayed a pesticide and it got into his eyes causing irritation. He was treated for chemical conjunctivitis.         Insecticide/Acaricide - Cyflluthrin	1	2						

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents										
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity						
990211	8/6/99	L&I	Adult male irrigator went to a clinic due to respiratory symptoms and nausea after entering orchard, without PPE, to check the water pumps. The orchard had been sprayed the day earlier.	2	2						
990216	8/31/99	WSDA	Insecticide/Acaricide - Azinphos-methyl         Adult male irrigator developed dermal symptoms after being drifted on by an aerial application of herbicide to an adjacent alfalfa field.         Herbicide - Paraquat	1	2						
990217	8/20/99	L&I	Adult farmworker went to a hospital ER with ocular symptoms. He sprayed a herbicide while riding in a closed cab tractor wearing required PPE.	1	2						
990218	8/10/99	L&I	Herbicide - Paraquat         A janitorial crew was exposed while cleaning in an office building during a pesticide application. Two women developed symptoms.         Insecticide/Acaricide - Deltamethrin, Pyrethrins         Growth Regulator - Pyriproxyfen	2 (2)	2 (2)						
990224	9/20/99	WPC	Adult female was sprayed while standing in front of her husband who was applying an insecticide in their kitchen. She almost immediately developed bronchial irritation and sought medical care two days later when symptoms did not resolve. <i>Insecticide/Acaricide - Chlorpyrifos</i>	2	3						

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	urce         Incident Description Pesticide Type – Active Ingredient         Fi							
990225	8/13/99	L&I	Adult female telecommunication employee became ill when a co-worker applied an aerosol insect spray to her workspace.Insecticide/Acaricide - Propoxur, Pyrethrins	3	2					
990228	9/10/99	WPC	Elderly adult female applied a lice shampoo to her hair. She got some in her eye, which became irritated. The discomfort continued and she sought medical attention.         Insecticide/Acaricide - Pyrethrins, Piperonyl Butoxide	1	2					
990236	9/20/99	WPC	Adult male poured moss killer from one container to another when it splashed into his left eye. Immediately, his eye had a burning sensation. He flushed his eye and sought treatment.Herbicide - Ferrous Sulfate Monohydrate	1	2					
990244	9/24/99	WPC	Adult male stated his neighbor sprayed insecticide into his yard and within 20 minutes, caused him to suffer health effects.         Insecticide/Acaricide - Diazinon	3	3					
990246	9/26/99	WPC	Adult female made an aerosol application of an insecticide to control ants. While applying, she accidentally got some of the chemical into her eyes, causing irritation.Insecticide/Acaricide - Chlorpyrifos	2	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990247	9/24/99	WPC	Adult male farmworker became symptomatic after he stepped into a hole containing insecticide and water. He rinsed off his foot and leg with water and changed his pants. He developed chemical dermatitis.	1	3					
990249	9/10/99	L&I	Insecticide/Acaricide - Dichlorvos         Adult male developed respiratory difficulty following an insecticide         application conducted 15 to 20 feet away. He did not recall feeling or         smelling the spray.         Insecticide/Acaricide - Permethrin, Tetramethrin	3	3					
990250	10/4/99	WPC	Adult female sprayed her roses and afterward developed eye irritation.         The next morning, her eyes were swollen and red.         Fungicide - Triforine	3	2					
990252	10/1/99	LHD	This       This         Three workers became ill after smelling a pesticide application for fleas in the building in which they worked. Only two workers felt comfortable being interviewed. Eye and respiratory effects were reported.         Insecticide/Acaricide - Pyrethrins, Esfenvalerate, Chlorpyrifos, D-trans Allethrin, Mgk-264	2 (2)	2 (2)					
990253	10/10/99	WPC	Adult female sprayed her home siding and developed health effects when         the pesticide spray blew into her face. She flushed her eyes for 15         minutes and sought treatment.         Herbicide - Zinc Chloride         Fungicide - Myclobutanil         Insecticide/Acaricide - Permethrin	2	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990257	10/11/99	WPC	Adult female set off three indoor foggers for spider control. One foggerwent off in her face when she removed it. Her 13 year-old daughter wasalso exposed. Both had ocular and respiratory symptoms.Insecticide/Acaricide - Cypermethrin	3 (2)	2 (2)					
990259	9/29/99	L&I	Adult female landscaper smelled chemical odor coming from a lawn recently treated with a herbicide. She reported developing health effects.         Herbicide - 2,4-D, Dicamba, Mecoprop (MCPP)	3	2					
990260	9/17/99	L&I	Sixteen year-old male apple picker developed respiratory symptoms while picking apples. Application records indicate fungicide was applied nine days before the incident. <i>Fungicide - Thiram</i>	3	2					
990261	10/25/99	L&I	Adult male laboratory technician applied an algicide to an incubation bath. A splash contacted his right eye and he felt immediate pain.         Suffering a slight burn, he sought treatment.         Algicide - alkydimethyl benzyl ammonium chloride	1	2					
990266	10/10/99	WPC	An elderly female became symptomatic after shampooing with a lice shampoo and applying insecticide inside their home. <i>Insecticide/Acaricide - Pyrethrum, Cyclopropanecarboxylate,</i> <i>Permethrin, Piperonyl Butoxide, Pyrethrins</i>	2	2					

	1999 Annual Summary Report of Definite, Probable, and Possible Pesticide Incidents									
Case Number	Exposure Date	Source	Incident Description Pesticide Type – Active Ingredient	Findings	Severity					
990272	10/13/99	L&I	Adult male reported symptoms believed to be related to an outside pesticide application, while he was inside his office. <i>Herbicide - Pendimethalin</i>	3	3					
990281	11/12/99	L&I	Adult male thrift store employee picked up an aerosol can which had a leak. By handling the can and touching his face, his eyes were exposed.         Insecticide/Acaricide - unknown 'bug bomb'	3	2					
990283	10/10/99	LHD	Three hunters complained of illness after handling a dog that was believed poisoned with an organophosphate insecticide. <i>Insecticide/Acaricide - Diazinon</i>	3 (3)	3 (1) 2 (2)					
990285	9/20/99	L&I	Adult male PCO technician made an indoor insecticide application using a hand sprayer for crack/crevice treatment. He believes his exposure occurred through physical contact with insecticide on his hands.Insecticide/Acaricide - Deltamethrin	2	2					

**Department of Labor and Industries** 

					1999				
City, County, Inspection #	Pesticides involved	Number of employees exposed	Type of business	How exposed	Other Agencies Involved	Incident Date	First Report	Citations	Type of Inspection
Mt. Vernon Skagit 302183611	Captan	2	Berry Farm	Application	None	NA	NA	Serious: \$600 Respiratory protection program not in effect	Unprogrammed Inspection
Bellingham Whatcom 115204489	Carbamate	2	Nursery greenhouse	Application None	None	NA	NA	Repeat Serious: \$4000 Respiratory Protection selection, Serious: \$4000 respiratory protection fit testing, medical evaluation, training	Programmed Inspection
Basin City Franklin 302217971	None mentioned	14	Fruit orchard	Not specified	None	NA	7/21/99	Serious: \$160 No drinking water cups Other allegations unfounded	Complaint: No restrooms, water, Not informed of pesticides
Pasco Franklin 302217724	Malathion	80	Fruit orchard	Not specified	None	NA	NA	No Violations	Programmed Inspection
Yakima Yakima 302195706	None mentioned	15	Nursery	NA	None	NA	4/23/99	No violation: Complaint allegations unfounded by interview and observation	<u>Complaint</u> : Mixing chemicals w/o gloves No eye protection Drinking vessel contaminated with chemicals
Othello Adams 302169073	Guthion	1	Fruit orchard	In filed before REI	DOH	6/29/99	NA	<b>General</b> : not wearing water proof gloves; Illness unfounded, suspected flu	<u>Referral</u> : DOH 8-19-99 Ill after working in field

City, County, Inspection #	Pesticides involved	Number of employees exposed	Type of business	How exposed	Other Agencies Involved	Incident Date	First Report	Citations	Type of Inspection			
Puyallup Pierce 115286411	Various herbicides and growth regulators	1	Bulb Farm	Application	WSDA	NA	1/12/99	General: Improper Respirator No posting of REI signs Lack of training Not following label instructions Serious safety violations including failure to abate	Complaint: No hazard communication No MSDS No protective equipment Chemicals dripping on employees			
Mattawa Grant 302217690	Various plus carbaryl	1	Fruit orchard	Application	WSDA	4/22/99	NA	General: Not posting spray records	Referral: WSDA, 5/21/99 Contact dermatitis after spraying			
Royal City Grant 302215744	Lorsban	2	Fruit and Vegetables	Handling	DOH referral	3/23/99	NA	Serious: \$300 Lack of handler training No decontamination supplies No washing facilities No emergency eyewash No posting of pesticide application information	Referral: DOH 4/7/99 Handler had exposure to eyes to unknown pesticide, and again had exposure on a later date			
Yakima Yakima 302196381	None mentioned	NA	Fruit Orchard	Pesticides are locked up	None	NA	2/11/99	No Violation	Complaint: No restroom			
Yakima Yakima 302217377	None mentioned	NA	Fruit Orchard	Pesticides locked up	None	NA	NA	No Violation	Programmed Inspection			
Zillah Yakima 302216353	None mentioned		Fruit Orchard	NA Spray records present, Cabs and masks used	None	NA	NA	No Violation	Programmed Inspection			

					1999				
City, County, Inspection #	Pesticides involved	Number of employees exposed	Type of business	How exposed	Other Agencies Involved	Incident Date	First Report	Citations	Type of Inspection
Richland Benton 302215850	Lorsban	4	Fruit Orchard	Handling	DOH referral	3/22/99	NA	<b>General</b> : Failure to notify illness incident All PPE use was appropriate	Referral: 4/8/99 Four applicators developed headaches, fever, muscle pains and weakness
Naches Yakima 302900188	None mentioned	NA	Fruit Orchard	Pesticides in locked building	None	NA	NA	General: No first aider	Programmed Inspection
Mattawa Grant 302217500	No pesticide evidence found	NA No spraying had occurred	Fruit Orchard	NA	None	NA	NA	No Violations	<u>Referral</u> : Drift from adjacent field
Ellensburg Kittitas 302195466	Hydrogen phosphide gas	2	Hay Processing	Fumigation	None	NA	NA	General: Protect workers from exposure to chemical agents	Programmed Inspection
Sunnyside Yakima 302216650*	Lorsban Dormat spray	1	Vineyard	Drift	WSDA DOH	3/8/99	Undated	No pesticide violations General Safety violations	Complaint: Drift from adjacent field
Sunnyside Yakima 302218037*	Lorsban	0	Nursery	NA	WSDA DOH	3/8/99	Undated	No Violations	Complaint: Drift from this field to adjacent field
Wenatchee Chelan 302217419	Propicanozole	2	Hop farm	Not specified	None	NA	NA	<b>General</b> : No eyewash bottle for handler	Programmed Inspection
Quincy Grant 302183710	Organo- phosphate Cyhalothrin	1	Aerial applicator	Mixing	None	NA	NA	Serious: \$480 Failure to wear proper personal protective equipment	Programmed Inspection

1999											
City, County, Inspection #	Pesticides involved	Number of employees exposed	Type of business	How exposed	Other Agencies Involved	Incident Date	First Report	Citations	Type of Inspection		
Lind Adams 302215710	Organo- phosphate	2	Potato Farm	Handling product with applied pesticide	DOH	4/17 to 2/3/99	NA	Serious: Penalties \$1660 no potable water, no water soap, or towels for washing, inadequate protective equipment, not providing/reading label, no training, no respirator supplied General: failure to notify L&I of incident Lack of pesticide poster	Referral: 4/28/99 Worker became ill while loading seeds		
Mt. Vernon Skagit 302183678	Dicamba (Benzoicacid) herbicide	1	Golf course	Application	WSDA Referral	NA	NA	<b>General</b> : No respirator program	Referral: WSDA 6/28/99 Potential accident and health hazards		
Othello Adams 302217658	Paraquat Surfactant penetrant Glyphosate Endosulflan	5	Fruit orchard	Not specified	NA	NA	4/26/99	<b>General</b> : No posting of pesticide information in centralized area	Complaint: No protection when spraying No water near by for washing or showers		
Othello Adams 115296188	Sulfur solution	4	Fruit Orchard	Drift/applic ation	NA	3/29/99	NA	Serious: \$1230 Lack of Washington facilities Lack of Hazard communication No emergency eye wash Lack of training	<u>Referral</u> : 6/18/99 Inadequate eyewear		
Bellingham Whatcom 302183744	Daminozide Uniconazole	2	Wholesale nursery	Residues	NA	7/28/99	7/29/99	Serious: \$2980 Inappropriate PPE Labeling information not read Lack of MSDSs Entry before REI	Complaint: Asked to enter building before REI had past		

1799											
City, County, Inspection #	Pesticides involved	Number of employees exposed	Type of business	How exposed	Other Agencies Involved	Incident Date	First Report	Citations	Type of Inspection		
Mt. Vernon Skagit 302183579	Imidacloprid (chloronicotinyl)	3	Potato	Dermal Contact	NA	NA	NA	Serious: \$450 No gloves No washing water/towels Safety related: \$600	Programmed Inspection		
Walla Walla Walla Walla	None mentioned	No exposure	Asparagus	NA Spraying stated but done by employer. No employee present	NA	NA	NA	General: field sanitation Not pesticide related	Programmed Inspection		
Orondo Douglas 302900402 601123511	Malathion	65	Fruit Orchard	No information	NA	NA	NA	General: No posting of spray records for last 30 days	Programmed Inspection		
Mattawa Grant 302195896	None mentioned	10	Fruit Orchard		NA	NA	NA	General: Incomplete spraying records	Programmed Inspection		
Ridgefield Cowlitz 302190897	Acephate	48	Berry Farm	Not specified No application	NA	NA	7/7/99	General: Hazard communication Lack of accident prevention plan	Complaint: Lack of sanitation		
Quincy Grant 302215959	Not specified	20	Fruit Orchard	No exposure	NA	NA	NA	General: Spray signs not removed	Programmed		
Olympia Thurston 302212782	Benomtle, Propoxur Permethrin Diazinon Diflubenzuron	9	Mushroom grower	Application	NA	NA	6/28/99	Serious: \$800 Respiratory protection General: safety and confined space Complaint unfounded	Complaint: Entry before re- entry interval		

					1999				
City, County, Inspection #	Pesticides involved	Number of employees exposed	Type of business	How exposed	Other Agencies Involved	Incident Date	First Report	Citations	Type of Inspection
East Wenatchee Douglas 302196165	None listed	7	Greenhouse	Not specified		NA	NA	General: No pesticide log No hazard communication Other safety program violations	Programmed
Mattawa Grant 115296121	Paraquat Pendimethalin	110	Fruit Orchard	No exposure	Referred by DOH	5/24/99	NA	General: Pesticide information not posted Appropriate protection was used - respirators not required	<u>Referral</u> : 5/25/99 Applicator developed symptoms Respirator not fit tested May not be a licensed applicator
East Wenatchee Douglas 11207825	Dursban	2	Structural Pesticide	Applying	NA	NA	NA	Serious: \$160 Lack of PPE General for other safety violations	Programmed
Ellensburg Kittitas 115301368	Hydrogen phosphide gas	2	Hay processing/ shipping	Fumigation	NA	NA	NA	Serious: \$800 Lack of monitoring before entry General	Programmed
Shelton Mason 115285843	Temphos Bendiocarb sulfuryl fluoride	2	Structural Pesticide	Fumigation	NA	NA	Not listed	<b>General</b> : Lack of annual respirator training	Complaint: undated

### Appendix E

WSDA Pesticide License Types

#### **WSDA PESTICIDE LICENSE TYPES**

License Type	<b>Definition</b> 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 Applicator						
Commercial Operator	A person employed by a WSDA-licensed commercial applicator to apply pesticides to the land of another. This land can either be publicly or privately owned.					
Commercial Pest Control Consultant*	A person who sells or offers pesticides for sale at other than the licensed pesticide dealer outlet from which they are employed. In addition, commercial consultants may offer or supply technical advice or make recommendations to the users of non-home and garden pesticides. They may also perform wood destroying organism inspections. Licensed and employed commercial applicators and commercial operators may act as commercial consultants without acquiring the consultant's license.					
Dealer Manager*	A person who supervises the distribution of pesticides (other than home and garden products) from a licensed pesticide dealer outlet.					
Private Applicator	A person who applies or supervises the application of a "Restricted Use" pesticide on land owned or rented by him or his employer for the purpose of producing an agricultural commodity.					
Private Commercial Applicator	A person who applies of supervises the use of a "Restricted Use" pesticide on land owned or rented by him or his employer for purposes other than the production of an agricultural commodity.					
Public Operator	A person who, while acting as an employee of a governmental agency, applies restricted use pesticides by any means or general use pesticides by power equipment on public or private property. Public operators may act as public consultants. (Public operators licensed only in the Public Health category are exempt from the fee.)					
Public Pest Control Consultant*	A person who, while acting as an employee of a governmental agency, offers or supplies technical advice, supervision, aid, or makes recommendations to the user of pesticides other than home and garden products. Public Consultants may not act as public operators without the operator's license.					
Demonstration and Research Applicator	A person who applies or supervises the use of any experimental or restricted use pesticide to small experimental plots at no charge. (Public employees performing research applications fall under the licensing requirements of the public operator.)					

\*License does not allow the holder to use or supervise the use of a restricted use pesticide. Refer to other types for appropriate license.