



Pesticide Illness Surveillance  
 Agricultural Drift Event Summaries (2015)

Event	Event Narrative	#	Pesticide Product(s) (EPA Reg. #)	Active Ingredient(s)
150020	Two females and a male teacher ages 29 to 34 developed gastrointestinal and respiratory symptoms after pesticide applications to an apple orchard bordering the school district property were conducted with nine tractors using air-blasters. The application consisted of chlorpyrifos with mineral oil and two fertilizers in a tank mix. The orchard is located north-northwest of the school track grounds and high school parking lots. All three teachers reported being on school grounds outside when they smelled a chemical odor and two of them said that they could taste it. None sought medical attention and their symptoms dissipated within 24 hours. The applications closest to the school grounds occurred approximately five hours before teachers detected the odor. The applicators continued spraying blocks north, farther away from the school property after odor was detected. WSDA samples tested positive in areas close to the track field near to where two of the teachers were. Wind direction and speed at the time of application were conducive to atmospheric inversion.	3	PN ALL SEASON SPRAY OIL (002935-00546) LORSBAN ADVANCED (062719-00591)	Chlorpyrifos Mineral oil - includes paraffin oil from 063503 Aliphatic petroleum solvent
150021	A 44-year-old male farm worker was assigned to clean-up tasks in a section of apple orchard. The area he was supposed to work in was a block away from an area being sprayed by air-blast sprayer with a tank mix of two insecticides. The worker inadvertently crossed the block that was being sprayed and according to a witness, he was 100 to 140 feet way from the applicator. He felt the spray on his face and eyes. He did not decontaminate right after he was exposed, he continued working. He changed his clothes at home after work. He developed respiratory and dermal symptoms that evening and sought medical treatment the next day. On interview, he expressed concern that his 2 daughters were exposed to residues that he may have unwittingly transferred to them from work.	1	ERASER (062719-00220) APOLLO SC OVICIDE/MITICIDE (066222-00047)	Chlorpyrifos Clofentezine
150026	A 29-year-old female farmworker entered an apple field to tie branches. She smelled a strong odor inside the field and found out the field was just sprayed two hours earlier with a sulfur fungicide. She started developing gastrointestinal, neurological and dermal symptoms 20 minutes after she	1	LIME-SULFUR SOLUTION (066196-00002)	Calcium polysulfide

	entered the field. The restricted entry interval (REI) for this product is 48 hours. She wore none of the PPE required by the label. This case was referred to the Department of Labor and Industries (L&I) for investigation.			
50028	A 43-year-old female farm worker was digging holes in a hops field with 3 other workers. An application of fungicide by air blast sprayer began at 9am in the adjacent apple orchard. Two hours later the sprayer was closer and the wind had picked up. She felt the spray on her face and developed skin, eye and respiratory symptoms. She sought medical attention. The incident took place on tribal lands outside of WSDA jurisdiction.	1	DUPONT FONTELIS FUNGICIDE (000352-00834) MANZATE 200 DF FUNGICIDE (001812-00414)	Mancozeb Penthiopyrad
150030	An air-blast spray application was conducted approximately 100 feet away from a single family home. A 60-year-old grandmother was outside at the time and reports seeing the mist move toward her home from the application. She says that she could smell and taste the chemical and that she developed headache, dermal, gastrointestinal and ocular symptoms. Her 16-year-old grandson was also outside, working on a car. He reports headache and ocular symptoms. The case was reported to WSDA and they collected environmental samples 4 days after the incident. Those sample results were negative. The chemical used has high volatility as it is labeled as a combustible liquid under the Safety Data Sheet (SDS).	2	TYPY PLANT GROWTH REGULATOR (055146-00078)	Benzyladenine Gibberellin A4 mixt. with Gibberellin A7
150033	A 42-year-old female experienced oral and inhalation exposure to pesticides while driving on a public road. She reported that she saw the plane flying over a field of winter wheat while she was driving to school, but there was no time to roll-up windows of her car. She smelled the spray and tasted a chemical taste in her mouth. She immediately began coughing and drove to a friend's house to rinse out her mouth and gargle. Within 2 hours of exposure, she experienced upper respiratory and ear symptoms, then subsequently loss of voice. Voice and ear symptoms lasted for 2.5 weeks. This case was referred to WSDA and they found samples taken inside of her car, were positive for herbicide consistent with the aerial application.	1	T-SQUARE HERBICIDE (000352-00611) Insist 90 (002935- 07001) 2,4-D LV 6 (042750-00020)	Acetic acid, (2,4- dichlorophenoxy)- 2-ethylhexyl ester Thifensulfuron methyl Tribenuron-methyl
150034	A 32-year-old woman was at work thinning flowers from apple trees as an airblast application of insecticide passed about 3 rows away from her within the same orchard. She reports that she smelled the spray and breathed it as she continued to work her regular shift. She wore no respiratory or ocular PPE. She reports experiencing immediate onset of upper respiratory and ocular irritation, and then headache that she believes were caused by the spray. She reported the exposure to her supervisor 2 days later and sought medical care at a clinic 1 day after that. Patient is a Spanish speaker and medical notes from that visit did not reflect that an occupational or chemical exposure assessment was attempted. She was prescribed antibiotic and anti-inflammatory medications. She was seen again, 3 days later at a hospital ED, for unimproved symptoms. Physicians at that visit, considered it more likely than not that exposure to pesticides at work contributed to her symptoms. Symptoms had improved but not fully resolved on follow-up medical visit 16 days post-exposure.	1	ASSAIL 70 WP INSECTICIDE (008033-00023)	Acetamiprid
150037	A 29-year-old woman was at work in a grape vineyard while an airblast spray application took place in an alfalfa field across the road about 50 yards from where she stood. She moved to get out of	1	POAST (007969- 00058)	Dimethylamine 4-(2,4- dichlorophenoxy)butyrate

	the line of the spray as it went by but as she did she felt moisture on her face and smelled the spray. She experienced immediate onset of tingling skin on her face and lips, and subsequent gastrointestinal, dermal, upper-respiratory and neurological symptoms. She sought health care that afternoon and was seen on follow-up visit for continuing symptoms twice. Physician required five days off work and advised her to wear PPE face shield and eye protection (though she is not an applicator.) Washington State Department of Labor and Industries (L&I) and WSDA investigated.		BUTYRAC 200 BROADLEAF HERBICIDE (042750-00038)	Sethoxydim
150038	A 42-year-old male farm worker was planting small apple trees in an orchard when he smelled a rotten-egg odor and saw an air-blaster spraying what he estimated to be 75-100 feet from where he worked. He developed upper respiratory and gastrointestinal symptoms, but continued to work for four hours more. He tried to cover his face with handkerchief and still could smell the product. He sought medical care that evening. He asked management for the name of the product and was not provided with one. The incident was referred to L&I who investigated and found the employer not in compliance with Hazard Communication Standards.	1	LIME-SULFUR SOLUTION (061842-00030)	Calcium polysulfide
150054	Two male farm workers ages 24 and 50 developed dermal and neurological symptoms after exposure to pesticide drift from an air-blast application. A neighboring orchard was spraying a tank mix with two insecticides and a fungicide as they were working with trellising poles. They saw the plum of spray move toward them. One of the workers was closer to the neighboring orchard and the other was about 150 feet away from him. Both report that they felt the mist and breathed the spray. They washed and decontaminated 10 minutes later. They sought medical treatment the same day. WSDA samples of the foliage were positive for pesticide residues. A flagger driving through the area, reports that he saw one of the workers trying to stop the application.	2	ULTOR (000264- 01065) DUPONT FONTELIS FUNGICIDE (000352-00834) OMNI SUPREME SPRAY (005905- 00368)	Mineral oil - includes paraffin oil from 063503 Aliphatic petroleum solvent Penthiopyrad Spirotetramat
150056	Thirty people were thinning grapevines throughout a vineyard when a ground rig began spraying a fungicide mixed with a sulfur-containing phosphoric acid adjuvant nearby. Twelve of the thirty workers were interviewed. Workers reported that the rig was spraying less than 200 feet away and five of the workers interviewed smelled the chemicals and developed neurological and gastrointestinal symptoms. A 42-year-old female developed dizziness, vomiting and fainted on the field before 10am. Workers were told to move to an area further away from the spray rig before first responders arrived. A 28-year-old female began vomiting and had other symptoms. A 39-year-old male reported upper respiratory and gastrointestinal symptoms. Three workers sought medical attention. Labor and Industries conducted a partial inspection one month after the incident. No penalty was assessed.	5	VIVANDO FUNGICIDE (007969-00284)	METRAFENONE Phosphoric acid Zinc sulfate
150092	Twelve people employed by a labor contractor to weed an organic carrot field arrived at their worksite to begin work when pesticides were applied aerially to a potato circle adjacent to their worksite. Records indicate that the early morning application to two potato circles adjacent to the carrot field lasted over an hour. The pilot notified the manager of the carrot field before the application but the manager failed to notify the labor contractor. The workers noted a strong odor as the plane sprayed. Three females ages 35- 58 and five males ages 25-60 reported respiratory and neurological symptoms. The crew leader reportedly had no Worker Protection Standard training and recalled passing DANGER signs at the potato circle on the way to the worksite. The	7	DUPONT ASANA XL INSECTICIDE (000352-00515) MANZATE PRO- STICK FUNGICIDE (070506-00234)	Mancozeb Esfenvalerate

	crew leader contacted the labor company's supervisory staff in California for direction and reports that they said to wait. After waiting over ½ hour, the crew moved a short distance to another field. Most of the workers left and did not resume work that day. Four workers sought medical care. WSDA samples for pesticide drift to clothing and vehicles were positive.			
150101	An oats farmer decided to treat 23 acres of oats with a product containing a chlorinated phenoxyacid and an organochloride herbicide in formulation. The application was made with a ground sprayer neighboring to 2 properties located just approximately at 100 feet away from the field. A female age 59 and a male age 60 residents of both properties smelled the product and developed a number of respiratory symptoms approximately 12 hours after the application. They sought medical 7 and 8 days respectively at different health care facilities. They were both discharged the same day and we not give follow up appointments. The product is a restricted use pesticide (RUP). WSDA determined there were no visual signs of drift to the neighboring properties. However, the applicator mixed more than the permitted limit volume per tank load for this restricted use pesticide (RUP).	2	NUFARM KAMBA MASTER HERBICIDE (071368-00034)	Dicamba Dimethylamine 2 4-dichlorophenoxyacetate
150117	A 34-year old male apple tree pruner developed a number of respiratory symptoms after he had been exposed numerous times at an apple orchard. He would not feel the spray but would see the mist moving toward him and breathe the spray. He sought medical treatment after he could not breathe at night and was transported to the ED via ambulance and hospitalized overnight. His employer provided spray records for the days when the alleged exposure took place. The employer sprayed the orchard with an air-blast application of a tank-mix containing an insecticide; a fungicide and a plant growth regulator were with a fertilizer and adjuvant. After review of the information provided by the employer and a video of a previous exposure by the worker, it was determine that his symptoms were probably the result of this last drift exposure. This case was referred to L&I DOSH for inspection.	1	PROCURE 480SC (000400-00518) NOVAGIB 10L (062097-00007) DELEGATE WG INSECTICIDE (062719-00541)	XDE - 175-J XDE - 175-L Gibberellin A4 mixt. with Gibberellin A7 Triflumizole Propylene glycol
150120	Four residents of a small town developed a number of respiratory, ocular and neurological symptoms after an aerial licensed pesticide applicator sprayed a field with an insecticide and a fungicide. During the application the pilot noted that the wind conditions were stale and decided to stop the application. Two females ages 60 and 77; and 2 males ages 36 and 56 smelled the spray. One female sought medical attention one week later and a 36-year-old male complained of persistent respiratory symptoms after the exposure. WSDA investigated this incident and collected samples 3 days after the application. All foliar samples tested positive for the active ingredients of the insecticide and fungicide at 4 different locations away from the application area up to a distance of 635 feet way from the field. The labels of both products require the applications not to be conducted during temperature inversion or stable atmospheric condition. There was very little wind during the application.	4	LORSBAN-4E (062719-00220) SHAR-GUARD (083529-00022)	Chlorpyrifos ropiconazole
150129	An aerial applicator flying a helicopter applied an insecticide to a cherry field adjacent to farm workers who were picking cherries for different employer. Four male cherry pickers ages 20 to 45 smelled the pesticide and reported some ocular and upper respiratory symptoms. Two of the farm workers developed only 1 symptom and the other 2 reported more than one. None of them sought medical treatment. Foliar samples collected by WSDA tested positive for residues of the active	2	FYFANON ULV AG (067760-00035)	Malathion

	ingredient in areas the workers reported breathing the spray. WSDA determined that the aerial applicator was not licensed to conduct aerial pesticide applications.			
150139	A 25-year-old female farm worker was harvesting cherries with other workers when she noticed an odor from an airblast application to an adjacent organic apple orchard. She initially developed respiratory symptoms and later gastrointestinal symptoms. She sought medical care two days later with continuing symptoms.	1		Fish oil (Chemical ID 122401) botanical
150144	Two female apple orchard farm workers ages 24 and 45 felt spray mist on their faces from an air-blast application conducted 25 feet away from them. They breathed the odor for approximately 20 minutes and developed gastrointestinal, respiratory and neurological symptoms. They were removed from the field 1 hour later and taken to the main office of the orchard. Their symptoms persisted and they were transported to the ED 4 hours after exposure. They did not decontaminate in the field or at the main office and were decontaminated after they arrived at the hospital. One of the products applied (pyridaben) was involved in a drift incident that involved 20 workers the previous year and the constellation of symptoms experienced by the workers were similar in both incidents. WA-DOH has provided case data for pyridaben involved cases to CDC-NIOSH.	2	SANMITE MITICIDE/INSECTI CIDE (007969- 00106) ONAGER 1E (010163-00277)	Hexythiazox Pyridaben
150146	Two adult male crop management company workers reported being exposed to spray drift from an aerial application of insecticide and fungicide to a potato field. The workers had been about a mile away during the application and returned closer to the treated area about 6 hours after application to retrieve their vehicle that was parked on a public road adjacent to the treated field. Both workers detected an odor and one reported sensing a chemical taste in his mouth and experiencing upper respiratory symptoms within 15 minutes of returning to the vehicle. The other worker was asymptomatic. Both workers were driven to an area hospital later that day as a precaution. WSDA investigated though no samples from inside or around the truck were collected	1	ATHENA INSECTICIDE (000279-03356) HM-0413A (005905-00580) EQUUS 720 SST (066222-00154)	Chlorothalonil Triclopyr Abamectin Bifenthrin
150153	A 37-year-old female farmworker was tying apple trees with 4-6 other workers when she inhaled fungicide drift from an aerial application to potatoes adjacent to the apple orchard. The apple orchard employer was contacted and though he did not want to file a complaint with WSDA, he provided contact information to DOH to pursue application records. The injured worker could not be contacted for interview. Medical records indicate that she obtained care for gastrointestinal symptoms and wheezing and that she commented that other workers on her crew also had gastrointestinal health effects.	1	None	Mancozeb Zinc sulfate
150157	A 44-year-old male farm worker parked his wheat loading truck in an area approximately a half-mile away from a wheat field that was being sprayed. The application was conducted with a 60 foot boom sprayer on a wheat field. According to the worker, he inhaled vapors from the application at least three times for half-hour each time, and developed dermal and upper respiratory irritation. He did not seek medical care for these symptoms and he reports that they improved after showering that day at his home. WSDA collected environmental samples that were positive for active ingredients in areas adjacent to the field but not where the truck had been parked.	1	AIM EC (000279- 03241) GLYPHOSATE 41% PLUS (042750- 00061) BASE CAMP AMINE 4 (071368- 00001)	Dimethylamine 2 4-dichlorophenoxyacetate Glyphosate- isopropylammonium Carfentrazone-ethyl Aluminum sulfate Naphthalene
150160	A 40-year-old female farm worker in a field of small drafted apple trees developed respiratory and gastrointestinal symptoms after respiratory exposure from a tank mix of biological insecticides. She	1	SUPREME OIL (002935-00405)	Bacillus thuringiensis subsp. kurstaki

	was working when a pesticide applicator spraying with an air-blaster passed approximately 100 feet away from her. She reported inhaling the spray and developing immediate symptoms. She sought medical care the same day at a local ED and was seen again at a clinic 6 days later. This case was referred to L&I for compliance inspection.		CYD-X PLUS (070051-00112) DIPEL DF DRY FLOWABLE BIOLOGICAL INSECTICIDE (073049-00039)	Bacillus thuringiensis Subsp. Kurstaki Strain ABTS-351 Mineral oil - includes paraffin oil from 063503 Codling moth granulosis virus
150179	A 22-year-old male developed ocular and dermal symptoms after he was exposed to pesticide drift while driving his car on a public road. An air blast sprayer was applying pesticide to a hop field about 25 feet from the road. The driver's window was down and he felt the spray on his face before he could close his window. He decontaminated with water quickly and developed ocular symptoms and skin irritation. The next day his eye was swollen shut and his sinuses were plugged. He asked the farmer for the name of the product and was told that it was Pristine. He contacted the Poison Center for information. He told DOH that he could not afford to seek medical treatment and that his symptoms improved in about 3 days on their own. He did not want to refer the incident to an enforcement agency for investigation.	1	PRISTINE FUNGICIDE (007969-00199)	Pyraclostrobin boscalid
150200	A 64-year-old male irrigator was working in an apple orchard when he felt mist on his face and eyes and smelled a pesticide aroma that he identified as coming from a helicopter applying pesticide to the orchard about 50 feet away from him. He had a chemical resistant suit and still experienced respiratory, dermal, and ocular exposure. He washed his face and eyes with irrigation water from a canal, as no water was available close to him for decontamination. He sought medical treatment the same day. He reports that he was not informed of the aerial application before he entered the orchard block and if he had known that the application was going to take place he would have not gone in. He did not want to make a formal complaint against his employer or the aerial applicator.	1	AF-701 (071297- 00017)	Cyclopropene 1-methyl-
150210	Two male residents, aged 52 and 73, developed symptoms shortly after a helicopter application to a cherry orchard located about 500 feet and 1,000 feet from their respective properties. They were both outside on their back porches at the time. Both report noticing a sweet odor shortly after the helicopter passed. One of them experienced neurologic, ocular and upper respiratory symptoms. The other experienced primarily neurological symptoms. Symptoms lasted about an hour and neither of them sought medical attention. WSDA collected environmental samples 3 days after the application and determined that inversion weather conditions existed at the time.	2	None	Malathion
150225	A 42-year-old male farm worker was feeding cattle at a feedlot when an aerial applicator flew over him and sprayed the wheat field located next to the feedlot. He did not feel the spray however, he smelled the product. He developed numbness in his tongue and upper respiratory irritation within 2 hours of exposure. He continued working and decontaminated at home after work. He was asked by his supervisor to seek medical attention and he did a day later. He did not miss any days from his work.	1	WARRIOR II WITH ZEON TECHNOLOGY (000100-01295)	lambda-Cyhalothrin