



Pesticide Illness Surveillance
Agricultural Drift Event Summaries (2014)

Event	Event Narrative	#	Active Ingredient(s)
140027	A 63-year-old male farmworker was tying apple tree branches for 4.5 hours while someone was airblast spraying the trees across the same field, which had scant foliage. He developed neurological and gastrointestinal symptoms. He went to the emergency department the following morning when his headache persisted.	1	Chlorpyrifos Mineral oil Aliphatic petroleum solve Sulfur Clofentezine
140031	A crew of 19 females and 1 male farmworker were tying cherry tree branches at the same time a neighboring pear tree orchard was sprayed with a tank mix from two tractor-pulled airblast sprayers. The workers were dispersed, and their distance from the edge of the pear orchard ranged from 30 to more than 350 feet. All 20 crew members reported symptoms during or immediately following the application. The crew leader called 911. All workers reported two or more symptoms consistent with those caused by the pesticides applied to the pear orchard. Emergency medical services personnel decontaminated five workers at the orchard and transported them to an emergency department. A total of 16 workers eventually sought medical care. Environmental samples and clothing from two workers were analyzed at WSDA labs. Several samples were found to be positive for active ingredients of the pesticides applied to the neighboring pear orchard.	20	Mineral oil Aliphatic petroleum solvent Phosphoric acid Novaluron Triflumizole Pyridaben
140032	A family of four was prepping to paint the exterior of their home when an airblast sprayer came towards them, spraying the apple orchard 15 feet away from their property. The licensed applicator didn't stop, even as the family saw him and rushed to get inside their vehicle. An 8-year-old boy and his 14-year-old sister reported upper respiratory and eye irritation and headache; their mother, age 40, reported the same. The 41-year-old father ran from the house to the car to deliver keys. He was asymptomatic. WSDA samples were positive for the insecticide.	3	Chlorpyrifos Mineral oil Aliphatic petroleum solvent

140033	Two adults reported symptoms after an air blast sprayer application of insecticide to an apple orchard adjacent to their residence drifted onto their property. One was at home for about a half hour during the application and experienced respiratory, ocular, neurological, and dermal symptoms that lasted about a day. He sought health care advice from his health care provider the same day. The other resident returned home after the application ended. She experienced respiratory and ocular symptoms that lasted about an hour, but did not seek health care. Both reported a pepper-like odor. The WSDA investigated. Residue samples collected from the garage windows closest to and adjacent to the orchard were positive for chlorpyrifos.	2	Chlorpyrifos Mineral oil Boron Zinc
140034	Six male farm workers ages 25 to 37 smelled and/or felt pesticide drift while they were taking a lunch break. A spray applicator from an orchard located just next to them was spraying lime sulfur. The applicator was approximately four rows away, approximately 150 feet away, from a narrow dirt road that divides both orchards. Some workers saw the spray moving towards their vehicles and to their direction. Four workers felt the spray on their faces. The workers developed a number of gastrointestinal, neurological, and ocular symptoms. One of the workers smelled the spray but was asymptomatic. None sought medical attention. WSDA samples tested positive for sulfur residues on their clothing, and other materials in both orchards.	3	Calcium polysulfide
140036	A 45-year-old female farmworker was pruning in a vineyard when she noticed air blast spraying in a distant orchard. She soon developed symptoms and moved to another area to work. She then noticed another air blast application. She could smell the pesticide. She reported vomiting, throat irritation and other symptoms and was taken to the hospital. Other workers were reportedly ill, but were not able to be contacted. WSDA investigated and found application records for an orchard approximately one mile away from the work area. Sixteen days had elapsed since application, so samples were not taken.	1	Chlorpyrifos Kerosene Mineral oil Sulfur
140043	A 47-year-old female farm worker was thinning apples trees at the same time a pesticide applicator, from the same farm, was applying sulfur with a plant growth regulator and three fertilizers. She developed a number of gastrointestinal, dermal, and neurological symptoms the same day. She sought medical attention. DOH collected the clothing she wore that day and her clothing had sulfur residues. The worker was drifted a second time while working in the same orchard nine days later. These incidents were referred to the Washington Department of Labor and Industries (L&I) for investigation.	1	Calcium chloride Sulfur Prohexadione calcium Cytokinin (as kinetin) Forchlorfenuron
140045	A 24-year-old male farmworker developed eye irritation when sulfur was applied on a windy day to apple trees on the same farm in which he was pruning. Attempts to interview the worker were unsuccessful.	1	Sodium 1-naphthaleneaceta Calcium polysulfide
140048	Four male workers, ages 23 to 48, were loading ladders onto a trailer on the side of a road. At the same time, an airblast sprayer was applying Lime-Sulfur Solution to thin the blossoms on the trees in a neighboring orchard. The applicator indicated that he saw the workers and was approximately 90 feet away from them. However, the workers stated the applicator was 15 meters (about 49 feet) away from them. The workers reported that they felt the pesticide on their skin and also breathed the spray. They described experiencing	4	Calcium polysulfide

	gastrointestinal, ocular, respiratory, and neurological symptoms right after being exposed. One sought medical attention the day of the incident and was also seen for medical follow-up four days later. The other three workers went to the orchard housing units where they showered, changed clothes, and returned to work.		
140049	A 37-year-old female home owner developed a brief altered taste in the mouth and gastrointestinal symptoms after she reported smelling a pesticide application. She was at home when she saw the applicator spraying a pear orchard in front of her home. She then ran to get her kids, who were playing in a sand box in the backyard, and brought them inside. The orchard is approximately 140 feet away from the front of her home. While picking up her kids, she smelled what she considered a strong toxic gas. She developed an immediate sour taste in the mouth and some gastrointestinal symptoms that lasted 15 minutes. WSDA sampled foliage and vegetation in front and back of the property and did not find the active ingredient of the fungicide and bactericide applied that day. WSDA decided to take no action on this event because samples were negative.	1	Oxytetracycline hydrochloride Propylene glycol
140051	Seven male telecommunication line installers, ages 21 to 34, were conducting their safety meeting adjacent to an apple orchard at the same time an applicator was applying lime sulfur by air blast sprayer. They were about 75 feet away from the applicator and a row of poplar trees divided the orchard from the location they were standing. The entire crew started to smell the rotten egg smell of sulfur and their supervisor decided to move away from the area. Some of the workers and their supervisor could smell the sulfur coming out of their clothes. All reported symptoms developing within 20 minutes after smelling the pesticide. They sought medical attention the same day at a hospital where they were decontaminated before being examined. Gastrointestinal, neurological, and ocular symptoms were reported. Samples collected by WSDA six days after exposure were positive for residues of sulfur close to areas the workers were gathered during the incident.	7	Calcium polysulfide
140052	A 47- and a 32-year-old female apple blossom thinner experienced drift exposure from an air blast sprayer. Both workers indicated they were 4 to 5 rows away from the application and both smelled the spray. DOH contacted the orchard owner and he recalled an incident where workers were close to the application. Both developed headache, dermal, and ocular symptoms. The 47-year-old sought medical attention two days later, but was not seen because the clinic she visited did not see state industrial insurance cases. The 32-year-old had symptoms for just one day and did not seek medical care. Clothing from the 47-year-old tested positive for sulfur residues. This complaint was investigated by L&I after a DOH referral. The L&I issued violations. L&I indicated that 19 other workers were deflowering at same time on the block the application of Lime Sulfur Solution was conducted. A similar drift event happened to the same worker group nine days earlier.	2	Calcium polysulfide

140053	A 36-year-old female farm worker was tying branches and leaves of newly planted trees at the same time a pesticide applicator was applying lime sulfur to a neighboring orchard. The worker reported smelling the odor for more than one hour and developed gastrointestinal and neurological symptoms at the work site. She was taken to an emergency department by a friend and was examined and discharged the same. She returned to work the next day. She was approximately 400 to 600 feet away from the application area. The foreman sent the crew home to make sure nobody else could get sick.	1	Calcium polysulfide
140054	A 25-year-old woman, her 16-month old daughter and 49-year-old mother (grandmother) were unloading groceries at the grandmother's home after shopping, when they noticed an airblast sprayer applying pesticides to the apple orchard next to their property. The applicator was approximately 165 feet away from a grass patch where the toddler was sitting. It appeared to them that the applicator was not going to stop spraying and the mother ran to pick-up her daughter to move her away from the potential drift. The mother reported that she smelled the spray as she picked up her daughter. All three of them developed temporary upper respiratory symptoms. They contacted WSDA and filed a complaint. WSDA collected samples around the home. A sample collected at the location where the toddler was sitting was positive for four active ingredients in the tank mix. Two active ingredients were found on the toddler's shirt.	3	Mancozeb Carbaryl Ethephon Emamectin benzoate Flutriafol
140059	A 53-year-old woman was tipping blossoms from apple trees when she heard tractors. She climbed her ladder and saw three tractors pulling air-blast sprayers, applying pesticide to trees in her block. She estimates that she was about 300 feet away from the closest one. Her supervisor reported it was about 100 rows away, which would be about 700 feet away. She could smell the pesticide and felt a breeze blow by her as a tractor passed. A moment later, both of her eyes began to burn. She stopped working and rinsed her face and eyes at the work-site. Her eyes were red and painful and vision blurry. The secretary of the farm drove her to a clinic and while there, health care providers rinsed her eyes again. On a follow-up interview, she said that her eye symptoms lasted about three months.	1	1-Naphthaleneacetamide Potassium 1-naphthalene Carbaryl Paraquat dichloride Prometon Benzyladenine Gibberellin A4
140088	A 38-year-old female reported ocular, respiratory, neurological, and dermal symptoms about four hours after a gardener sprayed trees at a neighboring Christmas Tree farm. The woman was on her porch getting ready to go to work at the time. She didn't smell or feel the spray and did not seek medical attention. Her symptoms lasted about six hours.	1	Trifluralin Chlorothalonil Benefin Triadimefon
140101	A 55-year-old male and a 57-year-old female developed neurological and respiratory health effects when they walked their dogs on a university campus. High winds drifted pesticides applied by ground application at a farm next to the campus. The male sought medical attention.	2	Quinalofop ethyl
140105	A 32-year-old female was holding her one-year-old son in their yard when she heard a helicopter overhead then felt mist. The helicopter flew over their home as it applied insecticide and fungicide to the adjacent strawberry acreage. The child's 34-year-old father called to his family to come inside, then stepped out	3	Fludioxonil Bifenthrin Cyprodinil

	briefly to see what was happening. The mother developed a headache and all three developed gastrointestinal symptoms. The family did not seek medical attention. WSDA samples taken were positive for the pesticides applied.		
140109	A 45-year-old female and her 51-year-old husband developed a number of symptoms after an insecticide and a fungicide drifted on their home. She smelled the spray while feeding her animals outside the home, one hour after the application. Her husband came home approximately six hours later and could also smell the spray. She developed respiratory, ocular, and gastrointestinal symptoms; and he developed respiratory, neurological and ocular. WSDA samples were positive for both pesticides inside the property. WSDA determined that the prevailing wind was from the orchard to the property.	2	Quinoxifen Propylene glycol Spinosad
140172	Forty-two female and 26 male farmworkers, including one woman who was pregnant, worked tying branches in an apple orchard. They reported hearing a plane flying overhead and smelled a strong noxious odor. The plane was spraying an insecticide with adjuvant to a potato field, located approximately 0.7 miles east of the apple orchard. Thirty two workers were in the rows closest to the potato field and the rest were further away. All but two of the workers reported experiencing more than one symptom. Ninety-three percent reported respiratory symptoms; 87 percent reported neurological symptoms; 56 percent reported gastro-intestinal symptoms and 37 percent reported eye symptoms. The number and severity of symptoms tended to increase the closer workers were to the application. Eight workers sought medical care. The pilot notified WSDA and samples were collected the same day and subsequent days. Workers' clothing and foliage samples not intended to be sprayed were positive for the insecticide.	66	Alcohols, C6, C8 & C10 lambda-Cyhalothrin
140195	A 21-year-old male truck driver was transporting apple bins to a packing house when he was exposed to a mist from a drench line, which is where trucks run under a station and the bins are showered with an anti-scalding solution. He came out of his truck and his eyes felt the mist. He developed immediate eye irritation. He did not wash, as he indicated the irritation dissipated in seconds. However, the next day he woke up with ocular discomfort. He sought medical treatment two day later.	1	Diphenylamine Pyrimethanil
140200	A tractor applied a fumigant by using a shank injection system to prepare soil for planting potatoes. The application occurred on a field neighboring a dry bean processing facility. Two male workers ages 37 and 41, and a 40-year-old female office manager at the facility reported smelling the product and developing a number of respiratory symptoms and a headache. Both male workers sought medical attention the same day and were seen for follow up eight days later. The office manager did not seek medical care. Washington State Department of Agriculture investigated the incident and determined there was an atmospheric inversion during the application, which may have contributed to the fumigant traveling to the facility. Treated soils were not properly sealed in accordance with label requirements.	3	Metam-sodium