Table D9: Agricultural Drift Cases Reported in California<sup>1</sup> as Associated With<sup>2</sup>
Pesticide Exposure, Summarized by the Activity of the Exposed Person
and by the Type of Application Equipment Used
2017

	Type of Activity <sup>4</sup>		
Type of Application Equipment Used <sup>3</sup>	Routine	Field Worker	Total
Air, Other or Unspecified	0	2	2
Fixed Wing Aircraft	15	1	16
Helicopter	2	12	14
Ground, Other or Unspecified	1	43	44
Ground Boom, Other or Unspecified	17	5	22
Ground, Boom Below/Behind	12	40	52
Airblast Sprayers	10	23	33
Shank Injection with Tarps	0	25	25
Back Pack Sprayer	0	5	5
Drip Irrigation Equipment	0	8	8
Unknown	0	1	1
TOTAL	57	165	222

1. Source: California Department of Pesticide Regulation, Pesticide Illness Surveillance Program.

**2. Associated With:** Includes cases classified as definitely, probably, or possibly related to pesticide exposure.

Definite: High degree of correlation between pattern of exposure and resulting

symptomatology. Requires both medical evidence (e.g., measured cholinesterase inhibition, positive allergy tests, characteristic signs observed by medical professional) and physical evidence of exposure (e.g., environmental and/or

biological samples, exposure history) to support the conclusions.

Probable: Relatively high degree of correlation exists between the pattern of exposure and the

resulting symptomatology. Either medical or physical evidence is inconclusive or

unavailable.

Possible: Health effects correspond generally to the reported exposure, but evidence is not

available to support a relationship.

**3. Type of Equipment Used**: Defines the type of application equipment regardless of who performed the application. If the type of equipment is not represented on the table, there were no cases involving that type of equipment for the year of the report.

Air, Other or Unspecified:

Aerial application equipment, other or unspecified. This includes two or more types of aerial application equipment and excludes fixed wing aircraft and helicopters.

Fixed Wing Aircraft:

Fixed wing aircraft.

Helicopter:

Helicopter.

Ground, Other Or Unspecified:

Ground application equipment, unknown or unspecified. This includes two or more

types of ground application.

Ground Boom, Below/Behind:

Ground application equipment with a spray boom located below or behind the

equipment operator with the spray nozzles pointed downward.

Ground Boom, Other or Unspecified: Ground application equipment with a spray boom. The following are excluded: 1) ground boom below/behind, 2) over-the-vine boom, and 3) electrostatic sprayer.

Airblast Sprayers: Ground application equipment with a pump that delivers spray into an air stream

created by a large fan at the back of the spray equipment.

Shank Injection With Tarps:

Ground application equipment that uses a shank or other piece of equipment to directly apply a pesticide into the soil. A tarp is placed over the soil to restrict the

pesticide to the application site.

Back Pack Sprayer: Compressed air sprayer where the tank is worn on the back of the applicator.

Drip Irrigation Equipment:

Chemigation through drip irrigation equipment.

Unknown: The type of application equipment is not known.

**4. Type of Activity:** Activity of the individual at the time of exposure.

Field Worker: Works in an agricultural field performing tasks such as advising, scouting,

harvesting, thinning, irrigating, driving tractor (except as part of an application), field packing, conducting cultural work in a greenhouse, etc. Researchers performing

similar tasks in an agricultural field are also included.

Routine: Combination of 3 Routine Activities:

- a. Routine Indoor: Conducts activities in an indoor environment with minimal expectation for exposure to pesticides. This includes people in offices and businesses, residential structures, etc. who are not handling pesticides.
- b. Routine Outdoor: Conducts activities in an outdoor environment with minimal expectation for exposure to pesticides. This excludes field workers in agricultural fields. This includes gardeners who are not handling pesticides.

c. Routine (Other/Unspecified): Conducts activities in an environment with minimal expectation for exposure to pesticides but is not adequately defined as indoor or outdoor. This includes individuals exposed to pesticides while inside a vehicle.

## Whom to Contact:

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## **About the Pesticide Illness Surveillance Program Data**

Pesticide-related illnesses have been tracked within the state of California for more than 50 years. The California Environmental Protection Agency, Department of Pesticide Regulation (DPR) maintains a surveillance program which records human health effects of pesticide exposure. The Pesticide Illness Surveillance Program (PISP) documents information on adverse effects from pesticide products, whether elicited by the active ingredients, inert ingredients, impurities, or breakdown products. This program maintains a database, which is utilized for evaluating the circumstances of pesticide exposures resulting in illness. This database is consulted regularly by staff who evaluate the effectiveness of the DPR pesticide safety programs and recommend changes when appropriate.