Table C7: Summary of Cases Reported in California<sup>1</sup> Associated With<sup>2</sup> Pesticide Exposure, Summarized by Occupational Status and by Location of the Incident 2020

	Occupational Exposures <sup>4</sup>		Non- Occupational Exposures <sup>4</sup>		Total	
Incident Setting <sup>3</sup>	Definite/ Probable	Possible	Definite/ Probable	Possible	Definite/ Probable	Possible
Farm	43	10	0	0	43	10
Nursery	2	0	0	0	2	0
Forest	1	0	0	0	1	0
Livestock Production Facility	3	0	0	0	3	0
Crop/Livestock Processing Facility	109	1	0	0	109	1
Food Processing Facility	9	0	0	0	9	0
Animal Premise (Veterinary Hospital, Kennels, not Livestock)	4	0	0	0	4	0
Residential	22	0	459	53	482	53
Residential Institution	4	0	2	0	6	0
School	16	4	1	0	17	4
Prison	8	1	2	0	10	1
Hospital/Medical	20	2	0	0	20	2
Pesticide Manufacturing Facility	1	0	0	0	1	0
Industrial or Other Manufacturing Facility	6	1	0	0	6	1
Office/Business	15	2	0	0	15	2
Retail Establishment	15	1	2	0	17	1
Service Establishment	32	4	7	0	39	5
Wholesale Establishment	3	1	0	0	3	1
Road/Rail Or Utility Right Of Way	5	0	10	2	15	2
Park	4	0	0	0	4	0
Other	6	1	0	0	6	1
Unknown	15	2	0	3	16	5
TOTAL <sup>5</sup>	343	30	483	58	828	89

- 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 Definite or Probable relationship.

**3. Incident Setting:** Location where the incident occurred. The location may not coincide with the application site.

Farm: Areas where agricultural crops are grown. This excludes the following: 1) nurseries

and greenhouses which are classified under Nursery; 2) livestock and poultry farms;

and 3) forestry operations.

Nursery: Facilities (including greenhouses) growing and selling plants, bulbs, seeds, etc. This

includes the production of seedlings for transplanting into agricultural fields or forests.

Forest: Establishment engaged in the operation of timber tracts, tree farms, reforestation

projects and other forest related activities.

Livestock Production Facility: Ranches, dairies, feedlots, egg production facilities, hatcheries, and other

establishments involved in keeping, grazing, or feeding livestock or poultry for the sale

of them or their products. This includes veterinary services provided for livestock.

Crop/ Livestock Processing

Facility:

Facilities involved in packing, manufacturing, or processing foods or beverages for

human consumption and feed products for animals and fowl.

Food Processing Facility A commercial operation that manufactures, packages, labels or stores food for human consumption, and provides food for sale or distribution to other business entities such as food processing plants or food establishments. This includes centralized kitchens

that make meals for distribution.

Animal Premise (Veterinary Hospital, Kennels, Not Livestock): Veterinary services, animal kennels, animal control facilities, dog grooming facilities,

and other services provided for companion animals. This excludes livestock.

Residential:

Combination of 3 residential settings:

- a. Single Family Home: The house and other structures on property intended for use by a single family. This includes swimming pools and landscaped areas on the property.
- b. Multi-Unit Housing: Apartments and multi-plexes and other buildings on property. This includes swimming pools and landscaped areas on the property.
- c. Residence (Other or Unspecified): Human habitation of unknown type, or of a type not adequately described as single family home, multi-unit housing, labor housing, or residential institution.

Residential Institution:

Dormitories, nursing homes, homeless shelters, and similar facilities.

School:

Establishments that provide academic or technical instruction. This includes daycare centers.

Prison:

Establishments for the confinement and correction of offenders as ordered by courts of law. This includes California youth authority facilities.

Hospital/ Medical: Establishments that provide medical, surgical, and other health services to people. This includes offices and clinics of doctors and dentists, hospitals, medical and dental laboratories, kidney dialysis centers, and other health related facilities.

Pesticide Manufacturing Facility: Facilities engaged in manufacture and/or formulation of pesticides.

Industrial Or Other Manufacturing Facility: Facilities involved in the mechanical or chemical transformations of materials or substances into new products. This excludes: 1) facilities engaged in manufacture or formulation of pesticides; and 2) facilities engaged in treatment of wood to protect against pest damage.

Office/ Business: Commercial establishments including public and private business offices. This excludes retail establishments and service establishments.

Retail Establishment:

Businesses engaged in selling merchandise for personal or household consumption and providing services related to the products. This excludes restaurants which are classified under service establishment.

Service Establishment: Establishments engaged in providing services to individuals, businesses, and government. This includes restaurants, hotels, fitness facilities, etc. This excludes medical service establishments.

Wholesale Establishment:

Establishments primarily engaged in the warehousing and direct distribution of merchandise to retail establishments or other wholesale establishments. This includes warehousing operations that ship directly to the public.

Road/Rail Or Utility Right Of Way: Roads, rails or utilities, and adjacent right-of-way areas. This includes aqueducts, manholes, landscaped median strips, and vehicles moving along roadways.

Park: An area of public land set aside for recreation. This includes public swimming pool

facilities. This excludes private recreational facilities such as amusement parks, physical fitness facilities, etc. which are classified under Service Establishment.

Other: Location of exposure occurred at a site not adequately described in any other incident

setting category. This includes, but is not limited to, telephone poles, fences, water

supply systems, and wastewater treatment plants.

Unknown: The location of the incident is unknown.

**4. Occupational or Non-Occupational:** The relationship between the illness/injury and the individual's work.

Occupational: Work related. The individual was on the job at the time of the incident. This includes

both paid employees and volunteers working in similar capacity to paid employees.

Non- Not work related. The individual was not on the job at the time of the incident. This

Occupational: category includes individuals on the way to or from work (e.g., before the start of the

workday, after the end of the workday).

**5.** Totals include three additional cases for which the activity could not be determined as occupational or non-occupational.

## 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.