

ISSUE 2 DECEMBER 2023

# ANNUAL NEWSLETTER: PESTICIDE-RELATED ILLNESS IN CALIFORNIA

Office of Environmental Health Hazard Assessment

# **Pesticide-Related Illness Reporting**

In California, physicians and other licensed health care professionals must report any known or suspected case of pesticide illness or injury to the Local Health Officer (LHO) within 24 hours. All reported cases are investigated; therefore, the pesticide exposure does not need to be verified.

When calling California Poison Control System (CPCS), clinicians can report a case as well as seek advice on treatment and management.

#### 4 Ways to Report Pesticide Illness:









For work-related cases, in addition to the initial illness report, the Doctor's First Report of Occupational Injury or Illness (DFR) must be sent to both the employer or employer's insurer and the LHO.

## **New Clinician Resources**

#### Pesticide Exposure History Form

Use this form to better understand a patient's potential risks from pesticide exposure and to identify areas for intervention.

#### \*Pesticide Exposure Algorithm

Use this algorithm to determine what to do if a patient may be experiencing a pesticide-related illness.

#### California Medical Supervision Program One-Pager

Use this 1-page factsheet as a quick reference for the California Medical Supervision Program requirements.



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### **Farmworkers and Pregnancy -What Clinicians Need to Know**

Exposure to pesticides during pregnancy may lead to miscarriage, birth defects, premature birth, low birth weight, and adverse neurodevelopmental outcomes. Healthcare providers play a key role in helping pregnant patients understand the risks of pesticide exposure during and after pregnancy and ways to reduce their exposure. Clinicians can inform their patients about leave options and can provide recommendations for workplace accommodations.

#### **California State Disability Insurance**

The **State Disability Insurance (SDI)** program provides income replacement (70% of wages for low-paid workers) for up to 52 weeks to employees who are not working (or working less) due to a "disability." A patient is considered "disabled" if, in the opinion of the health care provider, it is not advisable for them to perform their regular or customary work.

When certifying a patient for leave under SDI, remember:

 It applies to patients if their job requirements pose a danger to their health or the health of their fetus, including exposure to pesticides.

- The certification can occur at any point during pregnancy to avoid prenatal exposure to pesticides or other job hazards.
- SDI is available to all pregnant farmworkers, regardless of immigration status.
- To use the suggested ICD-10 codes as appropriate.



#### Make sure to complete Box B18 on the SDI claim form!

And include a statement such as "direct daily exposure to toxic agents that can cause harm to the health of mother or fetus.'

#### **Accommodations**

California employers are required by law to provide reasonable accommodations for pregnant employees, including farmworkers. Healthcare Providers can write an effective work accommodation note by including the patient's condition, identifying and providing expected duration of their limitation(s), and including specific recommended accommodations.

Check out the Center for WorkLife Law's **Pregnant@Work** initiative to find resources on writing accommodation notes and more.

Questions?

Contact the Center for Worklife Law at the University of California: info@worklifelaw.org

We offer help in English, Spanish, and Mixteco. Leave us a voicemail!

Free legal helpline for Farmworkers: daraluz@worklifelaw.org or 415-581-8888

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# Highlights from The University of California Merced's Farmworker Health Study

Explore the
<u>Farmworker</u>
<u>Health Study</u>
Data Dashboard



There are approximately 500 to 800 thousand farmworkers in California, yet the last detailed study looking at their overall health was over 20 years ago. In 2021-2022, the University of California (UC) Merced conducted a *Farmworker Health Study* in order to obtain a comprehensive understanding of the current health status of agricultural workers in California.

Nearly 1250 farmworkers were surveyed between July 2021 and April 2022 across five California regions. The study looked at various health conditions, healthcare access and utilization, and numerous social determinants of health. The study population was largely Latinx (99%), foreign-born (91%), and low-income. This study can inform clinicians on their patients' health and drivers of health as well as future policy recommendations affecting California's farmworkers.

# Health and Healthcare Access

- Over a third of farmworkers rated their health as only fair or poor.
- About 42% had at least one chronic disease:

<u> </u>	Study Population	CA Average
Diabetes	19.6 %	10.8 %
Hypertension	า 18.6 %	27.6 %
Anxiety	9.8 %	19.1 %
Depression	8.0 %	7.2 %

- Nearly half reported being without health insurance in the last 12 months.
- Farmworker women reported higher rates of preterm delivery (14% vs 8.8%), low birth weight (15% vs 7%), and birth defects (5.4% vs 3%) compared to the state average.



## **Worker Safety**

- About 15% of farmworkers did not receive any heat illness training as mandated by law.
- Among farmworkers who applied pesticides, 3 in 4 had received training on the safe use of pesticides.
  - Of those, about 1 in 5 reported not understanding the training.
- Over 55% of farmworkers had to work when there was wildfire smoke in the air.
  - 1 in 6 had to work despite the smoke making it difficult to breath.
  - Less than 1 in 2 received masks from their employer.



# Social Determinants of Health

- Almost 90% had an adverse childhood experiences (ACE) score of at least 1 (average 2.7).
- Farmworkers experienced multiple housing issues: difficulty keeping a house cool (39%) or warm (36%), cockroaches (24%), rodents (17%), mold (14%), and water damage (13%).
- Nearly 45% reported either very low (20%) or low (23%) food security.



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**Pesticides to Know - Fumigants** 

In California, five of the top ten pesticides used in agriculture based on pounds applied are fumigants. Fumigants are a group of pesticides that achieve their pesticidal action in the gas or vapor state. They are used by licensed applicators for a variety of pests, including nematodes, fungi, bacteria, insects, and weeds. Certain fumigants are used for structural treatment (e.g., termites), such as sulfuryl fluoride. While other fumigants are used to prepare soil prior to planting (e.g., trees, vines, strawberries, carrots), such as 1,3-dicholorpropene, chloropicrin, metam-potassium and metam-sodium.

#### **Fumigant-Related Illness**

Fumigants are highly toxic pesticides and are rapidly absorbed across the pulmonary membranes, the gastrointestinal tract, and the skin. Exposure to fumigants can cause multiple acute symptoms, such as:



Respiratory tract irritation, including coughing, shortness of breath, chest thightness



Eye irritation



Skin irritation



Headache.



GI symptoms, including nausea, vomiting. abdominal pain

Chronic effects may include cancers, birth defects, adverse developmental outcomes, and chronic respiratory diseases.

#### **Diagnosis and Treatment**

In general, there are no diagnostic tests available for fumigant-related illnesses. An exposure history is key.

Treatment focuses on moving the patient to fresh air, thorough decontamination and supportive care as needed. Some fumigants do have specific recommended interventions.

Interested in scheduling a training on pesticide-related illnesses for your local health department or clinics? Contact: Alanna Bares, MD, MPH Public Health Medical Officer



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https://oehha.ca.gov/pesticides/health-education-resources

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