SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Allen, Chair
2021 - 2022 Regular

Bill No:	AB 1787		
Author:	Quirk		
Version:	2/24/2022	**Hearing Date:**	6/1/2022
Urgency:	No	**Fiscal:**	Yes
Consultant:	Gabrielle Meindl		

SUBJECT: Pesticide testing

DIGEST: Extends the sunset on the data reporting and medical supervisor registration requirements of the agricultural pesticide worker protection program known as the California Medical Supervision Program (Program), and requires laboratories to submit additional information to the State to help identify workers, and medical supervisors of workers, in the Program.

ANALYSIS:

Existing law:

1) Requires each employer who has an employee who regularly handles Toxicity Category 1 or 2 organophosphate or carbamate pesticides (OP/CB pesticides) to contract with a physician to provide medical supervision of the employee. (California Code of Regulations (CCR), Title 3, § 6728 (b))

2) Delineates the employer's responsibilities for medical supervision for employees who regularly handle OP/CB pesticides, including requiring baseline cholinesterase tests and follow-up tests after the employee has handled OP/CB pesticides, as specified. Requires the employer to follow the recommendations of the medical supervisor concerning matters of occupational health. (CCR, Title 3, § 6728 (c))

3) Requires an employer to investigate the work practices and remove an employee from exposure to OP/CB pesticides if the employee's cholinesterase level falls below specified baseline values. (CCR, Title 3, § 6728 (d - e))

4) Requires any physician and surgeon who knows, or has reasonable cause to believe, that a patient is suffering from pesticide poisoning or any disease or condition caused by a pesticide to promptly report that fact to the local health officer. (Health and Safety Code (HSC) § 105200)

5) Requires an employer, in order to satisfy his or her responsibilities for medical supervision of his or her employees who regularly handle OP/CB pesticides, to

contract with a medical supervisor registered with the Office of Environmental Health Hazard Assessment (OEHHA). (HSC § 105206 (a))

6) Requires a laboratory that performs tests ordered by a medical supervisor to report specified information, including cholinesterase test results, to DPR, which then shares this information with OEHHA and the State Department of Public Health (DPH). (HSC § 105206 (b))

7) Requires OEHHA to establish a procedure for registering and deregistering medical supervisors for the purposes of outreach and training and authorizes OEHHA to establish reasonable requirements for performance. (HSC § 105206 (f))

8) Requires OEHHA to review the cholinesterase test results submitted as part of the Program. Authorizes OEHHA to provide an appropriate medical or toxicological consultation to the medical supervisor, and, in consultation with DPR and the local health officer, to provide medical and toxicological consultation, as appropriate, to the county agricultural commissioner to address medical issues related to the investigation of cholinesterase inhibitor-related illness. (HSC § 105206 (f))

9) Requires DPR and OEHHA to prepare and publicly post an update on the effectiveness of the Program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention by January 1, 2021. (HSC § 105206 (g))

10) Sunsets the data reporting and medical supervisor registration provisions of the Program on January 1, 2023. (HSC § 105206 (h))

This bill:

1) Adds the following information to that which a testing laboratory must report, as part of the Program, to the Department of Pesticide Regulation (DPR):

    a) The unique identifier of the person tested, including both of the following:

        i) The health care facility-assigned patient identification number; and,

        ii) The member identification, group number, and medical group name, or the provider group to which the tested person belongs.

    b) The National Provider Identifier (NPI).

    c) The accession number of the specimen.

2) Extends the sunset on the data reporting and medical supervisor registration requirements of the Program from January 1, 2023, to January 1, 2027.

3) Makes other technical and clarifying changes to statute related to the data reporting and medical supervisor registration requirements of the Program.

Background

1) *Organophosphate and carbamate (OP/CB) pesticide exposure.* According to DPR, OPs and CBs work as pesticides by inhibiting the nerve enzyme cholinesterase, which breaks down the neurotransmitter acetylcholine, leading to the death of an insect. OPs and CBs can also affect humans by inhibiting cholinesterase. High exposure to OPs/CBs can cause a variety of acute symptoms of neurological poisoning in exposed people, including blurred vision, diarrhea, increased respiratory secretions, tremors, seizures, loss of consciousness, and death. The acute symptoms of OP/CB overexposure can sometimes mimic other illnesses, and people can be sub-clinically affected without showing major acute symptoms. Due to the potential for sub-clinical effects or misdiagnosis of the acute effects, tests for cholinesterase depression are essential for identifying potential overexposure.

2) *Toxicity Category 1 and 2 OP/CB pesticides.* The United States Environmental Protection Agency (US EPA) determines pesticide toxicity categories based on the effects of consumption of, inhalation of, or dermal contact with a pesticide. The degree of toxicity determines which precautions and signal word must appear on the pesticide label. Toxicity Category 1 pesticides are highly toxic and are required to prominently display the signal word "DANGER" on product labels. Toxicity Category 2 pesticides are moderately toxic and are required to prominently display the signal word "WARNING" on product labels.

   While the use of Toxicity Category 1 and 2 OP/CB pesticides in California has declined 89% since 1995, growers still applied an average of 2 million pounds per year of these cholinesterase-inhibiting pesticides from 2011 to 2019. Employers of handlers of Toxicity Category 1 and 2 OP/CB pesticides are required to monitor their employees' cholinesterase under the Program.

3) *The California Medical Supervision Program (Program)*. Established in 1974, the Program is intended to protect pesticide workers who regularly mix, load, or apply Toxicity Category I and 2 OP/CB pesticides. Under the Program, employers must contract with a licensed physician as a "medical supervisor" to test the blood cholinesterase level of workers who regularly handle these

pesticides. To monitor each employee, the medical supervisor establishes baseline values of cholinesterase during non-exposure periods, and then periodically measures cholinesterase activity levels while the worker handles OPs/CBs. If the employee's cholinesterase is depressed below certain levels, the employer must take immediate specified actions, such as promptly retesting the employee, evaluating the employee's work practices, or immediately removing the employee from further exposure, in order to prevent excessive pesticide exposure and pesticide-related illness.

Agricultural worker cholinesterase test results are transmitted to DPR, and OEHHA registers and provides outreach and consultation to the medical supervisors overseeing the workers' cases. These reporting and registration requirements sunset on January 1, 2023.

AB 1787 extends the sunset on the reporting and registration requirements to January 1, 2027, to allow the State to continue to evaluate and manage the Program.

4) *2022 Program analysis*: On January 26, 2022, DPR and OEHHA released a report on the effectiveness of the Program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention. According to the report, the Program still appears effective in protecting agricultural workers handling cholinesterase-inhibiting pesticides. However, the utility of the data analysis continues to be hampered by the inclusion of tens of thousands of cholinesterase test records from individuals who are not in the Program (e.g. those who are tested for other medical reasons, such as pre-operative tests, liver disease, etc.). Additionally, an analysis of cholinesterase data received by DPR from 2011 to 2019 showed that a large proportion of the cholinesterase test reports did not include the purpose of the test, and usually did not include the ordering physician's information or the patient's correct name. Consequently, it is resource intensive for DPR and OEHHA to not only identify workers under the Program, but to subsequently follow up with the reporting laboratory or ordering physician to reconcile data discrepancies.

   To address these data quality concerns, the report recommended amending HSC § 105206 to request additional data elements from reporting laboratories to better identify workers and ordering physicians. According to DPR and OEHHA, while laboratories already submit other personal information, such as the patient's name, date of birth, and test results, the data submitted is currently not adequate to identify all workers and medical supervisors under the Program, thus rendering DPR unable to fully evaluate whether the program is truly effective at protecting agricultural workers.

AB 1787, as recommended in the 2022 report, requires reporting laboratories to submit additional identifying information for the patient and medical supervisor to better identify, track, and protect the health of workers in the Program. The bill requires laboratories to also submit the health care facility-assigned patient identification number and the member identification, group number, and medical group name, or the provider group to which the person tested belongs, to help identify the employee tested and to connect the employee to their employer. The bill also requires laboratories to submit the accession number of the specimen, which will help DPR determine the number of tests ordered by the provider. Finally, the bill's requirement for laboratories to submit the National Provider Identifier (NPI), along with the medical group name or the provider group, could help DPR and OEHHA identify the medical supervisor.

While DPR and OEHHA report that some laboratories already report all of the information required by the bill, requiring this data in statute would likely lead to more consistent reporting across all laboratories. Further, the NPI, patient identification, and accession number can be verified against national databases, making it easier to determine the actual count of employees under the Program, the count of medical supervisors responsible for monitoring workers' cholinesterase levels in a given period, and the number of tests ordered by a medical supervisor.

Comments

1) *Purpose of Bill.* According to the author, "The California Medical Supervision Program (Program) is designed to protect workers who regularly mix, load, or apply Toxicity Category I and 2 organophosphate and carbamate pesticides (OPs/CBs), which are highly toxic pesticides that inhibit the essential nerve enzyme, cholinesterase. Under the Program, employers must contract with a medical supervisor to monitor their workers by testing workers' blood cholinesterase activity levels. If cholinesterase levels decline over time, it indicates overexposure to OP/CB pesticides. In this case, employers must take action, such as removing the employee from further exposure, to prevent pesticide-related illness. In order for the State to ensure that the Program is effectively protecting workers, testing laboratories transmit agricultural worker cholinesterase test results to DPR, and OEHHA registers and provides outreach and consultation to the medical supervisors overseeing the workers' cases. These reporting and registration requirements sunset on January 1, 2023.

"AB 1787 extends the sunset on the reporting and registration requirements to January 1, 2027, so that the State can continue to effectively evaluate and

manage the Program. Additionally, the bill requires reporting laboratories to submit specific identifying information on the patient and medical supervisor to DPR so the State can better identify, track, and protect the health of workers in the Program."

Related/Prior Legislation

AB 3220 (ESTM Committee, Chapter 296, Statutes of 2020) extended the sunset, from January 1, 2021, to January 1, 2023, on the data reporting and medical supervisor registration provisions of the Program.

AB 2892 (ESTM Committee, Chapter 475, Statutes of 2016) updated and enhanced the Program by extending the sunset on the requirement for laboratories to transmit cholinesterase test results to the State; requiring OEHHA to register medical supervisors; requiring medical supervisors to report depressions in cholinesterase levels as a pesticide illness; and, requiring DPR and OEHHA to prepare and publicly post an update on the effectiveness of the medical supervision program and the utility of laboratory-based reporting of cholinesterase testing for illness surveillance and prevention.

AB 1963 (Nava, Chapter 369, Statutes of 2010) required clinical laboratories that perform cholinesterase testing for the purpose of determining workers' pesticide exposure to electronically report test results to DPR.

SOURCE: Department of Pesticide Regulation

SUPPORT:

American Federation of State, County and Municipal Employees (AFSCME), Afl-cio
California Rural Legal Assistance Foundation (crla Foundation)
Californians for Pesticide Reform (CPR)
Environmental Working Group (EWG)
Natural Resources Defense Council (NRDC)
Pesticide Action Network (PAN)
Sierra Club California
Sustainable Agriculture Education (SAGE)

OPPOSITION:

None received

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