May 8, 2025

EWG Comments to California Department of Pesticide Regulation on the Process to Identify Priority Pesticides

Background

As part of the Sustainable Pest Management Roadmap, adopted in California, the workgroup set the goal that by 2050 California has eliminated the use of Priority Pesticides, in order to "eliminate the adverse human health and environmental impacts associated with pesticide use".[1]

Decades of research on the health effects associated with pesticide use have already identified pesticides and groups of pesticides that pose severe human health risks, especially in agricultural communities in California, and for children. Such health impacts include increased risk of cancer[2,3,4], respiratory harm[5], adverse birth and reproductive effects[6], and Parkinson's disease[7] as well as other harms to the nervous system[8,9].

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[1] Members of the Sustainable Pest Management Work Group and Urban Subgroup. Accelerating Sustainable Pest Management: A Roadmap For California. January 2023. Available at: https://www.cdpr.ca.gov/wp-content/uploads/2024/10/spm_roadmap.pdf

[2] Omidakhsh N, Heck JE, Cockburn M, Ling C, Hershman JM, Harari A. Thyroid Cancer and Pesticide Use in a Central California Agricultural Area: A Case Control Study. J Clin Endocrinol Metab. 2022 Aug 18;107(9):e3574-e3582. doi: 10.1210/clinem/dgac413. PMID: 35881539.

[3] Park AS, Ritz B, Yu F, Cockburn M, Heck JE. Prenatal pesticide exposure and childhood leukemia - A California statewide case-control study. Int J Hyg Environ Health. 2020 May;226:113486. doi: 10.1016/j.ijheh.2020.113486. Epub 2020 Feb 19. PMID: 32087503; PMCID: PMC7174091.

[4] Lombardi C, Thompson S, Ritz B, Cockburn M, Heck JE. Residential proximity to pesticide application as a risk factor for childhood central nervous system tumors. Environ Res. 2021 Jun;197:111078. doi: 10.1016/j.envres.2021.111078. Epub 2021 Mar 31. PMID: 33798513; PMCID: PMC8212567.

[5] Ornelas Van Horne Y, Johnston JE, Barahona DD, Razafy M, Kamai EM, Ruiz BC, Eckel SP, Bejarano E, Olmedo L, Farzan SF. Exposure to agricultural pesticides and wheezing among 5-12-year-old children in the Imperial Valley, CA, USA. Environ Epidemiol. 2024 Aug 19;8(5):e325. doi: 10.1097/EE9.0000000000000325. PMID: 39165346; PMCID: PMC11335338.

[6] Larsen AE, Gaines SD, Deschênes O. Agricultural pesticide use and adverse birth outcomes in the San Joaquin Valley of California. Nat Commun. 2017 Aug 29;8(1):302. doi: 10.1038/s41467-017-00349-2. PMID: 28851866; PMCID: PMC5575123.

[7] Paul KC, Cockburn M, Gong Y, Bronstein J, Ritz B. Agricultural paraquat dichloride use and Parkinson's disease in California's Central Valley. Int J Epidemiol. 2024 Feb 1;53(1):dyae004. doi: 10.1093/ije/dyae004. PMID: 38309714; PMCID: PMC11491592.

[8] Gunier RB, Bradman A, Harley KG, Kogut K, Eskenazi B. Prenatal Residential Proximity to Agricultural Pesticide Use and IQ in 7-Year-Old Children. Environ Health Perspect. 2017 May 25;125(5):057002. doi: 10.1289/EHP504. PMID: 28557711; PMCID: PMC5644974.

[9] Rowe C, Gunier R, Bradman A, Harley KG, Kogut K, Parra K, Eskenazi B. Residential proximity to organophosphate and carbamate pesticide use during pregnancy, poverty during childhood, and cognitive

Additionally, as documented in a peer reviewed study published last year in the Environment: Science and Policy for Sustainable Development journal on Pesticide Use and Civil Rights in Central California, personal testimony and lived experience of farmworkers and agriculture communities in California demonstrates the long-lasting harmful impacts of pesticide use, and lack of adequate action by state regulators to fully protect public health.[10]

Overall, DPR must focus efforts on providing support to transition away from harmful pesticides and to a sustainable pest management system throughout the state.

Pesticide Prioritization Process and Advisory Committee

EWG offers the following comments on DPR's prioritization process and advisory committee.

- DPR should utilize existing resources and hazard assessments in identifying priority pesticides. For example, as part of CalEnviroScreen, the Office of Environmental Health Hazard Assessment, or OEHHA, includes a list of 132 pesticides due to health hazards and likelihood of exposure as measured by pesticide volatility. This list includes extremely hazardous pesticides like several neurotoxic organophosphates. Additionally, considering pesticide use as it overlaps with other environment health stressors as reported in CalEnviroScreen can help identify areas at greatest risk of health effects and in greatest need of action[11]. This can enable DPR to focus more efforts on supporting transitions away from these chemicals, rather than on reconfirming harm.

- While some priority pesticides may already be subject to some regulations specifying restricted use such as the highly toxic fumigant 1,3-dichloropropene, as well as pesticides that are currently in the process of reevaluation such as paraquat and chloropicrin, swift action is needed to address the health risks posed by these high use, highly toxic pesticides.

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functioning in 10-year-old children. Environ Res. 2016 Oct;150:128-137. doi: 10.1016/j.envres.2016.05.048. Epub 2016 Jun 6. PMID: 27281690; PMCID: PMC5207345.

[10] Macey, G., Farrell, C., Anderson, K., Garcia, A., Martinez, Y., Sellen, J., Temkin A., Weller, M. (2024). Pesticide Use and Civil Rights in Central California: Slow Violence and the State. Environment: Science and Policy for Sustainable Development, 66(6), 6–24. https://doi.org/10.1080/00139157.2024.2394005

[11] Zeise L. and Blumenfeld, J. Office of Environmental Health Hazard Assessment. CalEnviroScreen 4.0. October 2021. Available at:https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf

- Active ingredients that are members of a pesticide class, share a similar structure, or similar toxicity, should be prioritized and assessed cumulatively in order to make the greatest advancements in public health protection.

- Public health protection should be prioritized over availability of alternatives and economic considerations and impacts of phasing out the most harmful pesticides. Additionally, non-chemical alternatives and agricultural practices to support pest prevention must be prioritized and strongly considered to uphold the goals and principles of implementing sustainable pest management.

- The advisory committee must not include individuals with economic conflicts of interests, such that they benefit from the sale and use of pesticides. Additionally, specific expertise regarding environmental epidemiology, endocrine disruption, and developmental neurotoxicity should be included in areas of expertise within the Human Health Toxicology expertise of the advisory committee.

We look forward to working with the Department of Pesticide Regulations on identifying Priority Pesticides to protect the health of Californians and appreciate the opportunity to comment.

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