

Chlorpyrifos Lawsuits, EPA Ban Signal Risk For Cos.

By **Jason Meyer and Austin Elig** (August 26, 2021)

Pesticide applicators and operators of public water systems should take note that litigation regarding the pesticide chlorpyrifos is on the rise. Individual lawsuits on behalf of minors who were exposed to chlorpyrifos during gestation and childhood began to be filed in 2020.

The California Superior Court for Fresno County has granted class action status to two cases, *Miriam De Santana v. Corteva Inc.*, filed in May, and *Librada Mendoza v. Corteva Inc.*, filed in July. And more recent filings appear to be headed for class certification as well.

While litigation involving chlorpyrifos is in its early stages, with relatively few lawsuits filed to date, the numbers could swell to rival the 125,000 suits filed by plaintiffs claiming damages caused by their exposure to the weed killer Roundup.

Background on Chlorpyrifos

Chlorpyrifos is a broad-spectrum organophosphate insecticide, widely used in food crop agriculture in close to 100 countries. It was patented in 1966.

In 2001, most residential uses of chlorpyrifos were banned, but until this month, it remained one of the most widely used insecticides for agricultural purposes.[1] In 2002, the U.S. Environmental Protection Agency made label changes to chlorpyrifos products, requiring increased use of personal protective equipment to mitigate risk to farm workers.[2]

In 2011, the EPA set the acceptable daily dose of chlorpyrifos for the general population at 0.3 micrograms per kilogram of body weight per day. That same year, the EPA estimated that people consume 0.009 micrograms of chlorpyrifos per kilogram of their body weight per day directly from food residue.[3]

In 2015, the EPA first proposed to revoke all tolerances for chlorpyrifos.[4] While the EPA affirmed its proposal in 2016 upon reassessing its testing methodology, it reversed its proposal in 2017.[5]

A federal appellate court recently ruled that the EPA must modify its rules on chlorpyrifos, or ban it entirely, by Aug. 20.[6] As of Aug. 18, the EPA has revoked all tolerances for chlorpyrifos, effectively banning it for all uses within the next six months.[7]

Specific states, as well as Canada, have also seen a trend of increasing restrictions on chlorpyrifos use in recent years. Chlorpyrifos was not included in California's Proposition 65 list until 2017.[8] But possession and use of chlorpyrifos in California was effectively banned as of the end of 2020, after the California Department of Pesticide Regulation canceled its registration for sales in the state.[9]

In Hawaii, a 2018 law will ban products containing chlorpyrifos starting in 2023.[10] In July, the state of New York banned all possession and use of chlorpyrifos.[11]



Jason Meyer



Austin Elig

Meanwhile, the Canadian federal health regulator, Health Canada, is phasing out chlorpyrifos for all uses, including a ban on its sale effective December 2022, and a ban on use effective December 2023.[12] Health Canada is currently under legal pressure to speed up its three-year phaseout.[13]

Plaintiffs' Claims

The current chlorpyrifos lawsuits, filed in the counties of Fresno, Tulare, Kings and Monterey, have been brought by parents who are suing on behalf of their children to recover for their children's alleged exposure to chlorpyrifos-containing pesticide products over the past two decades during gestation and infancy, and continuing through the present.[14]

The defendants include the manufacturers of chlorpyrifos, but also include entities that applied chlorpyrifos to fields near the plaintiffs' residences or drinking water sources (applicator defendants) and entities that managed the public water systems from which the plaintiffs drew water allegedly contaminated with chlorpyrifos (municipal defendants).

The plaintiffs also claim their children were exposed through some parents' work as field hands or pesticide applicators. The EPA allowed aerial spray application of chlorpyrifos throughout the period of the plaintiffs' exposures, albeit with increasing restrictions in 2012 and 2014.[15]

The plaintiffs allege the chemicals caused developmental delays in their children, as well as ADHD, seizures, autism, vision problems, oppositional defiant disorder and anxiety. Although studies have linked chlorpyrifos to ADHD, autism, cognitive impairments and seizures in children — including studies in top academic journals relied on by the EPA in its 2016 reassessment — the science is not conclusive.[16]

At least one study has found no association between organophosphate pesticides, such as chlorpyrifos, and behavioral impairment in children.[17] Although the EPA found sufficient evidence that chlorpyrifos can have neurodevelopmental effects on children even at low levels, it admitted that uncertainties remain, including uncertainty as to the dose-response relationship for neurodevelopmental effects in humans.[18]

While vision problems have been reported in conjunction with chlorpyrifos use, these studies are often insufficient in sample size or unable to rule out other pesticides as the cause.[19] The symptoms pled by the plaintiffs are not unique to chlorpyrifos exposure, and could be due to other factors.

The plaintiffs are seeking to recover past and future medical costs, pain and suffering damages, loss of future earning capacity damages, loss of parental consortium and punitive damages. Some of the plaintiffs are also seeking to recover remediation costs for mitigating the presence of chlorpyrifos from their residences, following claims that traces of chlorpyrifos have been found on teddy bears in some plaintiffs' homes.

The plaintiffs have asserted various theories of liability, including negligence and strict product liability for failure to warn and for design defect on the part of the manufacturers of chlorpyrifos, as well as strict liability for manufacturing defect on the part of the municipal defendants, for their alleged failure to exercise sufficient care in providing the water to the plaintiffs, and supplying purportedly contaminated water.

The plaintiffs assert negligence on the part of the applicator defendants, based on the applicators' specific methods of applying the chlorpyrifos. The plaintiffs in two of the cases also claim nuisance and trespass for causing chlorpyrifos to be present in their respective residences.

While the litigation to date appears limited to agricultural areas in California, it would not be surprising to see this litigation proliferated across the country by plaintiffs claiming there is no safe level of exposure, especially for children.

Roundup was the world's most popular weed killer, prior to giving rise to a \$10 billion settlement following the filing of many lawsuits.[20] Similarly, chlorpyrifos was one of the most widely used organophosphate pesticides in the U.S. as of a 2002 EPA report.[21]

Broad regions of agricultural and formerly agricultural land have potentially been exposed to chlorpyrifos. This potential exposure includes many areas of historically heavy use throughout the country beyond California's Central Valley, including large areas of Oregon, Washington, North and South Dakota, Minnesota, Iowa, Missouri, Kansas, Oklahoma, Texas, Colorado, Illinois, Indiana, Ohio and the East Coast states from Florida through New York.[22]

These regions encompass millions of households. The potential claims could be tolled for a significant period, given the current lack of discovery of any alleged illnesses that may be claimed to have been caused by exposure to chlorpyrifos, and given that many potential plaintiffs have not yet reached the age of majority.

The EPA's upcoming comments may bring further negative publicity to chlorpyrifos and associated litigation. The current chlorpyrifos plaintiffs are also represented in part by leading pesticide litigators, requiring applicators and water systems to engage in early strategy on how to defend the expected claims, in conjunction with the recent ban by the EPA.

Jason F. Meyer is a partner and Austin S. Elig is an associate at Gordon Rees Scully Mansukhani LLP.

The opinions expressed are those of the author(s) and do not necessarily reflect the views of the firm, its clients or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] "Ninth Circuit Orders Ban on Chlorpyrifos," The National Law Review, Oct. 26, 2018, <https://www.natlawreview.com/article/ninth-circuit-orders-ban-chlorpyrifos>.

[2] EPA, "Chlorpyrifos," <https://www.epa.gov/ingredients-used-pesticide-products/chlorpyrifos#safe%20use>.

[3] Dr. Aliva Patnaik and Maminee Panda, "Effects of Pesticide, Chlorpyrifos on an Anecic Earthworm *Lampito Mauritii*," International Journal of Agriculture, Environment and Bioresearch Vol. 3, No. 01, 2018, https://ijaeb.org/uploads2018/AEB_03_138.pdf.

[4] "Chlorpyrifos Tolerance Revocations: A Proposed Rule by the Environmental Protection Agency," EPA, Nov. 6,

2015, <https://www.federalregister.gov/documents/2015/11/06/2015-28083/chlorpyrifos-tolerance-revocations>.

[5] Vanessa Schipani, "The Facts on Chlorpyrifos," FactCheck.org, April 27, 2017, <https://www.factcheck.org/2017/04/the-facts-on-chlorpyrifos/>; "U.S. EPA denies petition to ban pesticide chlorpyrifos", Reuters, March 29, 2017, <https://www.reuters.com/article/us-usa-pesticide-epa-idUSKBN17039F>.

[6] Nydia Gutiérrez, "New York Bans Brain-damaging Pesticide Chlorpyrifos," Earthjustice, July 22, 2021, <https://earthjustice.org/news/press/2021/new-york-bans-brain-damaging-pesticide-chlorpyrifos>.

[7] "Industry Uncertainty Follows EPA's Chlorpyrifos-in-Food Ban," Bloomberg Law, Aug. 20, 2021, <https://news.bloomberglaw.com/product-liability-and-toxics-law/industry-uncertainty-follows-epas-chlorpyrifos-in-food-ban>.

[8] "Chemicals Considered or Listed Under Proposition 65 — Chlorpyrifos," California Office of Environmental Health Hazard Assessment, accessed July 27, 2021, <https://oehha.ca.gov/proposition-65/chemicals/chlorpyrifos>.

[9] "Chlorpyrifos Cancellation," California Department of Pesticide Regulation, accessed July 27, 2021, <https://www.cdpr.ca.gov/docs/chlorpyrifos/index.htm>.

[10] "New Requirements Under Act 45," State of Hawaii Plant Industry Division, Dec. 28, 2018, Plant Industry Division | New Requirements Under Act 45 (hawaii.gov).

[11] Nydia Gutiérrez, "New York Bans Brain-damaging Pesticide Chlorpyrifos," Earthjustice, Jul. 22, 2021, <https://earthjustice.org/news/press/2021/new-york-bans-brain-damaging-pesticide-chlorpyrifos>.

[12] Nazanin Meshkat, "NGOs call on Health Canada to expedite ban on chlorpyrifos," The Globe and Mail, July 26, 2021.

[13] Id.

[14] The cases include *Avila v. Corteva Inc. et al.* (Case No. 20C-0311), *Calderon v. Corteva Inc. et al.* (Case No. 20C-0250), *Santana v. Corteva Inc. et al.* (Case No. 21CECG01398), *Mendoza v. Corteva Inc. et al.* (no case number on complaint), *Castillo v. Corteva Inc. et al.* (Case No. VCU287746), *Garcia v. Corteva Inc.* (no case number on complaint), *Jurado-Martinez v. Corteva Inc.* (no case number on complaint), *Lopez v. Corteva Inc.* (no case number on complaint), *Mares v. Corteva Inc.*, (no case number on complaint), *Mendiola-Salazar v. Corteva Inc.* (no case number on complaint) and *Isarraraz v. Corteva Inc.* (no case number on complaint).

[15] EPA, "Chlorpyrifos," accessed July 27, 2021, <https://www.epa.gov/ingredients-used-pesticide-products/chlorpyrifos#safe%20use>.

[16] David Trilling, "A controversial insecticide and its effect on brain development: Research and resources," The Journalist's Resource, April 7, 2017, <https://journalistsresource.org/environment/chlorpyrifos-insecticide-brain-development-children-epa/>; "Chlorpyrifos Technical Fact Sheet," National Pesticide Information Center, <http://npic.orst.edu/factsheets/archive/chlorptech.html#references>.

[17] Youssef Oulhote and Maryse F. Bouchard, "Urinary Metabolites of Organophosphate and Pyrethroid Pesticides and Behavioral Problems in Canadian Children," *Environmental Health Perspectives*, Jan. 1, 2013, <https://ehp.niehs.nih.gov/doi/10.1289/ehp.1306667>.

[18] Wade Britton, Danette Drew, Elizabeth Holman, PhD, et al., "Chlorpyrifos: Revised Human Health Risk Assessment for Registration Review," EPA, Nov. 3, 2016, <https://www.regulations.gov/document/EPA-HQ-OPP-2015-0653-0454>.

[19] "Chlorpyrifos Technical Fact Sheet," National Pesticide Information Center, <http://npic.orst.edu/factsheets/archive/chlorptech.html#references>; Morufu Olalekan Raimi, "Self-reported Symptoms on Farmers Health and Commonly Used Pesticides Related to Exposure in Kura, Kano State, Nigeria," *Annals of Community Medicine & Public Health*. 1(1): 1002, Jan. 7, 2021.

[20] Jacob Bunge and Ruth Bender, "Roundup, the World's Best-Selling Weedkiller, Faces a Legal Reckoning," *The Wall Street Journal*, <https://www.wsj.com/articles/roundup-the-weedkiller-that-changed-farming-faces-a-reckoning-11554735900>; Curtis Lee, "\$10B Roundup Settlement Covers Current and Future Claims," *AllLaw*, accessed July 29, 2021, <https://www.alllaw.com/glyphosate-roundup-claims/10b-roundup-settlement-covers-current-and-future-claims.html>.

[21] Xindi Hu, "The Most Widely Used Pesticide, One Year Later," Harvard GSAS Science Policy Group, April 17, 2018, <https://projects.iq.harvard.edu/sciencepolicy/blog/most-widely-used-pesticide-one-year-later>.

[22] "Estimated Annual Agricultural Pesticide Use - Pesticide Use Maps - Chlorpyrifos - 2011," U.S. Geological Survey, accessed July 29, 2021, https://water.usgs.gov/nawqa/pnsp/usage/maps/show_map.php?year=2011&map=C HLORPYRIFOS&hilo=L&disp=Chlorpyrifos.