

California May Be Next to Ban Dangerous Chlorpyrifos

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Editor's Note: Since the publication of this story, [California has placed a ban on the use of chlorpyrifos](#). The ban will likely take up to two years to go into full effect. California is now the third state (following Hawai'i and [New York](#)) to approve bans. In early 2020, Corteva, the largest manufacturer of chlorpyrifos, [announced it would stop producing the chemical](#) in response to falling demand brought on by health concerns and an uncertain regulatory future. Smaller manufacturers will continue to produce products with chlorpyrifos.

If a recently-introduced bill passes, children living in California may have a permanent reprieve from exposure to the highly toxic pesticide, chlorpyrifos. California State Senator, Maria Elena Durazo, introduced “[Protect Children from Brain-Damaging Chlorpyrifos Act of 2019](#)” in response to EPA’s decision to delay action on this toxic pesticide until 2022. Senator Durazo’s bill prohibits the use of pesticide products containing chlorpyrifos, a pesticide known to have horrific impacts on children’s brain development. Current [exposure levels](#) to this developmental neurotoxicant, by children ages one to two, exceed the US Environmental Protection Agency’s (EPA) own allowable threshold — by a staggering 140 times. Yet, despite this finding and reams of scientific, [peer-reviewed studies](#) on the pesticide’s horrific impacts on children’s health, EPA deferred action.

Even at low levels of exposure by [women during pregnancy](#), chlorpyrifos has been shown to alter brain functions and impair the learning ability of children into adulthood. Researchers at Columbia University have demonstrated that the presence of [chlorpyrifos in the umbilical cord](#) of developing fetuses is correlated with a decrease in psychomotor and mental development in three-year-olds. At [high levels of childhood exposure](#), chlorpyrifos has been found to cause attention deficit, hyperactivity, slow cognitive development, a significant reduction in IQ scores and a host of other neurodevelopment problems. Children who live near farm fields experience the highest risks and impacts. A University of California Davis [study](#) found that women who resided within a mile of farms where chlorpyrifos and other organophosphate pesticides were applied had a 60 percent higher chance of giving birth to children with autism spectrum disorder.

History of Chlorpyrifos

First formulated by Dow Chemical Company for use as a nerve gas during World War II, EPA registered the chlorinated organophosphate as a crop pesticide in 1965. As was the case with other wartime chemicals, chlorpyrifos was rebranded and formulated as a broad-spectrum

pesticide. It kills insects by attacking their nervous system, leading to eventual paralysis and death. The peacetime use of wartime chemicals like chlorpyrifos helped bolster a burgeoning agrochemical and home bug spray industry in the 1950s and 60s. Catchy marketing slogans like “a good bug is a dead bug,” espoused by happy [cartoon characters](#) in newspaper, radio and television ads, lured farmers and consumers into buying the new “miracle” pesticide that they were assured was safe for agricultural and home use. **Your Pesticides Primer**



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How is Chlorpyrifos Used Today?

Corn growers are the [biggest user](#) of chlorpyrifos. Large quantities are also applied to soybeans, animal feed crops, fruit and nut trees, brussel sprouts, broccoli, cauliflower and a host of other row crops. Foods with the highest chlorpyrifos residues include bell peppers, nectarines, peaches, hot peppers and snap peas. Other uses include its application on [golf courses](#), utility poles, in greenhouses, and in household roach and ant bait traps.

Exposure to chlorpyrifos is near-ubiquitous, with levels far surpassing those considered safe for people of all ages. According to [EPA](#), not only do expected residues on food crops exceed the Federal Food, Drug and Cosmetic Act’s safety standards, but also the majority of drinking water contaminated by chlorpyrifos “continues to exceed safe levels.” In fact, the agency has categorically stated that there is [no safe use](#) of the pesticide.

Push to have Chlorpyrifos Banned

For decades, scientists, doctors, farmworker advocates and public interest groups have called for EPA to withdraw approval of chlorpyrifos, with limited success. As early as 2007, the Natural Resources Defense Council and Pesticide Action Network petitioned EPA to revoke the registration of chlorpyrifos in light of its wide range of documented health effects, but to no avail. In 2000, EPA asked chlorpyrifos manufacturers to *voluntarily* eliminate home, lawn and garden uses while retaining all commercial applications. Most home uses were eliminated, with the notable exception of [household pest baits and traps](#).

In the ensuing five years, a growing body of medical evidence brought to light the dire consequences of chlorpyrifos exposure. And, the pesticide was on its way out after EPA's own scientists proposed a prohibition of its use on food crops in 2015. But in 2017, the agency [rejected its staff's proposal](#) claiming that chlorpyrifos was "crucial" to "ensure and abundant and affordable food supply for this nation and the world." EPA called for more study on the "unresolved science" and vowed to take no action before 2022.

Outraged by the agency's unfounded reversal of the ban proposal, environmental, social justice and farm labor groups filed a lawsuit in 2018 challenging EPA to maintain the ban. Siding with the plaintiffs in the case, the [judge ordered](#) EPA to "revoke all tolerances and cancel all registrations for chlorpyrifos within 60 days." At the behest of EPA's new Administrator, Andrew Wheeler, who maintains that more research is needed, all sides will be back in court in 2019 to again argue the case.

Hawai'i Becomes First State to Ban Chlorpyrifos

Without federal protections and, realizing that even the hefty weight of scientific evidence was not enough to convince the EPA Administrator to prohibit chlorpyrifos, residents in Hawai'i joined together to pass their own statewide ban in 2018. With the unanimous passage of the bill, Hawai'i became the first state in the country to outright ban the highly toxic pesticide, which begins in 2019. The new law also requires a tiny 100-foot buffer zone between pesticide applications and schools, when they are in session. As is the case with the passage of any laws, this one required some compromise. Many [Hawai'ians](#), lament that their buffer zone falls woefully short of California's government-mandated quarter-mile pesticide exclusion zone around schools. Even so, in both states, a compromise was struck that allows pesticide applications near schools on weekends, which could still endanger attendees during sporting events and other weekend outdoor community activities at schools.

Other states such as New Jersey and Maryland have unsuccessfully tried to follow suit. It has been an uphill battle given the enormous economic power and influence wielded by the agrochemical industry. Still, as Hawai'i has demonstrated, [communities that work together with legislators](#) and public health, environmental and social justice advocates can effect change. What is at stake is nothing short of our collective long-term health and the health of our children.