

Are Buffer Zones Protection from Pesticide Drift

I'm trying to push my state officials to enact buffer zones around toxic pesticide use for areas like schools, hospitals, and neighborhoods. Can you tell me what a safe distance from pesticide spray would be? I've seen a lot of different numbers around the web, but none seem like a sure thing.

L., Raleigh, NC

L.,

Unfortunately, the answer to your question in many states and communities has been based more on politics and current economic dependency than what the science shows. A study by Texas A&M University finds that pesticides can volatilize into a gaseous state and be transported rapidly over long distances through wind and rain. A U.S. Geological Survey report reached similar conclusions, finding, "After they are applied, many pesticides volatilize into the lower atmosphere, a process that can continue for days, weeks, or months after the application, depending on the compound. In addition, pesticides can become airborne attached to wind-blown dust." The Childhood Autism Risks from Genetics and the Environment (CHARGE) study at the University of California, Davis finds that pregnant women who live within one mile of agricultural fields treated with insecticides are more likely to have their child develop autism. For women who live less than one mile from crops sprayed with organophosphate insecticides during their pregnancy, researchers found the likelihood of their child being diagnosed with autism increased 60%.

Based on that data, we can say that in order to protect children and other sensitive sites, buffer zones should be at least one mile or more depending on local conditions. But, chemical-intensive farms resist the adoption of buffer zones and leverage their political connections to limit these protections as much as possible. In Kaua'i County, Hawaii, as a result of rampant poisoning through pesticide drift, large demonstrations fought for and achieved modest buffer zones up to 500 feet around sensitive sites like schools and hospitals, only to have them reversed after a pesticide industry lawsuit. Pressure mounted on the state legislature, which enacted 100 foot buffers around schools, but only for the most highly toxic pesticides on the market. Advocates in California pushed for one mile buffer zones around school sites, but the state only went as far as a quarter mile, and only during school hours. In France, mayors in several localities began implementing 500-foot buffer zones after resident complaints. The pesticide industry complained about the impact on business, and French President Emmanuel Macron enacted countrywide buffers of 50 feet around residential sites in order to head off additional local restrictions. Advocates rightly say these restrictions are meaningless. "It must be an April Fools [joke]," said Yann Arthus-Bertrand, president of the advocacy group Good Planet. "I can't believe that lobbyists have more weight



than public health concerns. It's insulting for people who have been fighting for so long against the use of pesticides."

The fight for buffer zones and the elimination of pesticide use around sensitive areas is a critical part of the movement for a pesticide-free future. The pesticide industry fights hard against these proposals because it sees them as the proverbial camel's nose under the tent. In a broader sense, the industry understands that crops can be grown without their toxic products, and buffer zones for health and environmental protection address externalities or costs that are now borne by victims and the larger society. As advocates who fight for the strongest proposals, we continue to change the calculus for policy makers by telling the stories of individuals affected by drift, causing health, environmental, or property damage. Please keep us apprised of your progress and do not hesitate to contact us for technical information and strategies to fight back against pesticide industry disinformation.

SHARE WITH US!

Beyond Pesticides welcomes your questions, comments, and concerns. Have something you'd like to share or ask us? We'd like to know! If we think something might be particularly useful for others, we will print your comments in this section. Mail will be edited for length and clarity, and we will not publish your contact information. There are many ways you can contact us: Send us an email at info@beyondpesticides.org, give us a call at 202-543-5450, or send questions and comments to: 701 E Street SE, Washington, DC 20003.

What Pesticides Are Most Concerning?

There are a lot of pesticides in the news right now—glyphosate, chlorpyrifos, neonicotinoids, and atrazine. Which of these chemicals is your organization particularly focused on getting rid of?

Alexandra, Ithaca, NY

Alexandra,

The short answer is all of the above. Many folks will remember back when Rachel Carson wrote *Silent Spring* that the focus was on eliminating use of DDT. But, Ms. Carson's critique was not limited to one specific pesticide or chemical class. Her book elevated the scientific literature on the danger of DDT. However, she took pains to highlight the wide range of daily chemical insults that people experience without their consent. "Yet new and more deadly chemicals are added to the list each year and new uses are devised so that contact with these materials has become practically worldwide," Ms. Carson wrote in *Silent Spring*. In this context, it is simply not an effective long-term and sustainable strategy to ban one chemical after another.

We rid ourselves of DDT, and eventually nearly all chemicals in its class of organochlorines (pesticides including chlordane, aldrin, endrin and dieldrin). But, organophosphates (pesticides including malathion, chlorpyrifos, diazinon, parathion, and hundreds) were developed as "regrettable substitutions." As independent science accumulated on these chemicals after they were already in wide use, many have been banned or restricted. The pesticide industry, in fact, uses this process to argue the need to keep its highly toxic chemicals on the market, invoking a false fear that farmers, landscapers, or building managers will have to use more of a different toxic chemical, or that their livelihood will be destroyed without the ability to use the pesticide subject to the ban or restriction. The chemical industry prepares for these minor disruptions in the market—synthetic pyrethroids and neonicotinoids were poised and ready to replace the organophosphate insecticides.

The pesticide industry is prepared for the individual chemical focus, one after another—playing a game of "whack-a-mole" that perpetuates toxic chemical-laden and dependent systems, and continually growing profits for its shareholders.

While we at Beyond Pesticides do support pesticide bans on the chemicals you mention, we are determined to fight for structural change to our country's approach to pest management on farms, lawns, landscapes, gardens, and in buildings.

Readers of this journal are familiar with our persistent call for a broadscale transition to organic agriculture and land management. The need for this movement is rooted in the understanding that removing one hazardous active ingredient from the market is going to leave thousands still in use and incentivize new ones. Instead, we advance both policies and practices that embrace a "systems approach"

to soil and building management, which eliminates toxic pesticide use, prevents pest problems, and contributes to addressing dramatic threats associated with disease and illness, the climate crisis, and biodiversity decline.

The success of organic farming, a \$50 billion industry with use of only organic-compatible products approved through a board of independent stakeholders, the National Organic Standards Board, shows that the path forward does not rely on the chemical industry's next toxic chemical as a substitute for the one just banned.

FROM THE WEB

Excerpt from Beyond Pesticides Action of the Week (11/25/2019): Ask Congress to demand an Investigation into EPA's Dismissal of Science. Continuing its marathon of deregulation to benefit the chemical industry, the Trump administration's Environmental Protection Agency (EPA) announced its proposal to increase the amount of the weed killer atrazine allowed in U.S. waterways by 50% during the chemical's registration review—a stark reversal of previous proposals to significantly reduce atrazine levels in the environment.

Beedy comments: EPA was set up to regulate toxics, including pesticides, which are basically biocides. We depend on our ecosystem and the living creatures that compose it, including ourselves. EPA must be allowed to do its job according to scientific understanding, not fettered by corporate power of the industries that produce the toxic substances. Our current administration has no understanding of how life works, only of how money might be made, regardless of the future. Let EPA do its work. Fetter the industry.

Sandy comments: It is unbelievable that this government would do this to us knowing that the science proves the harm it is sure to do. Congress must be held accountable!

Excerpt from Beyond Pesticides Daily News Blog (12/19/2019): Environmental Group Sues to Ban Rodenticides that Threaten Endangered Species in California. Identifying ongoing risk to endangered species, the environmental group Center for Biological Diversity (CBD) announced an intent to sue California pesticide regulators to cancel the registration of four rodenticides in California.

Matt comments via Facebook: The amount of times mountain lions have died in Santa Monica Mountains National Recreation Area has usually been because of these poisons.

Babette comments via Facebook: Enough with the killer pesticides; start thinking about our wildlife and how important they are to this planet! Humans are never excused from killing the living, so stop killing everything in sight!