



Mission to Dismantle EPA Programs Continues with Resignation of Administrator Pruitt

Scott Pruitt's resignation as Administrator of the U.S. Environmental Protection Agency (EPA) took effect in July under a cloud of ethics investigations and alleged collusion with industry to systematically undermine, dismantle, and reverse critical protections for air, water, and workers. Andrew Wheeler will take the helm as Acting Administrator after serving as Deputy Administrator, a position that required Senate confirmation. Mr. Wheeler, a lawyer who worked in the toxics office at EPA under Presidents George H.W. Bush and Bill Clinton, as an aide to U.S. Senator Jim Inhofe (R-OK)—denier of climate change—and the Senate Committee on Environment and Public Works (EPW), and as a lobbyist for the coal and

chemical industry. He told the *Washington Post*: "[I] would say that the agenda for the agency was set out by President Trump. And Administrator Pruitt has been working to implement that. I will try to work to implement the president's agenda as well. ... [W]e're implementing what the president has laid out for the agency."

What's in a Pesticide Product Matters

Two studies add to the body of science identifying serious deficiencies in health assessments of toxic chemical exposure. One study,

appearing in the *Federation of American Societies for Experimental Biology Journal* in April 2018, tackles the role of chemical pesticide exposures in the risk of developing Parkinson's Disease. The other, published earlier this year in the journal *Food and Chemical Toxicology*, assesses potential negative health outcomes of long-term,

More Bad News on Glyphosate/Roundup

In the wake of U.S. Department of Justice (DOJ) approval of the buyout of Monsanto by Bayer, the new mega-corporation—now the world's largest agrochemical and seed company—announced that it will drop the "Monsanto" name. Meanwhile, the news for the new company regarding its Roundup/glyphosate products is bad on several fronts.

In April, an Appellate Court in California upheld the State of California's listing of glyphosate as a probable carcinogen under the state's Proposition 65 (Prop 65), rejecting Monsanto's challenge. The state will not only move ahead with warning labels on products that contain glyphosate, but also prohibit discharge of the pesticide into public waterways.

In a case filed under the District of Columbia's Consumer Protection Procedures Act, a U.S. District judge ruled that Beyond Pesticides and the Organic Consumers Association presented enough evidence to support their contention that Monsanto's labeling of its flagship weedkiller, Roundup, misleads consumers by labeling it as "target[ing] an enzyme found in plants but not in people or pets." The enzyme targeted by glyphosate attacks beneficial bacteria essential to human health, adversely affecting the gut biome and contributing to a range of diseases.

About 200 members of a French beekeeping cooperative sued Bayer—on the same day the giant chemical company's

acquisition of Monsanto was finalized—after discovering that their honey was contaminated with glyphosate, a known endocrine disruptor and probable human carcinogen. Meanwhile, researchers have found adverse health effects at glyphosate levels below those regulators deem "safe" or acceptable. These results represent the first phase of the Global Glyphosate Study based at the Ramazzini Institute in Bologna, Italy.

According to a study published in March in *Environmental Health*, women with high levels of glyphosate in their bodies are more likely to have shorter pregnancies, which can lead to children with reduced learning and brain development. Granola, cereals, and wheat crackers all contain "a fair amount" of glyphosate, according to internal emails from the Food and Drug Administration (FDA). FDA now says it will be conducting tests for glyphosate in food.

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low-dose exposure to real-life chemical mixtures, rather than single chemical exposures typically used in laboratory testing. These studies underscore the need to consider synergistic and low-dose exposures in the development of genuinely protective public health and environmental regulations.

A *Frontiers in Public Health* review finds that there is no scientific basis for regulations that distinguish “other/inert” and “active” ingredients when assessing pesticide product safety. Active ingredients are specifically included in products to attack the target pest, while “inert” or “other” ingredients typically make up the majority of the formulation (liquid, dust, granule, sticking agent, or surfactant) and can be as or more toxic than the active ingredients. Only “active” ingredients undergo a full risk assessment before being sold to the public.

Declining Biodiversity Adversely Affects Human Health

Children who live in “green” neighborhoods have reduced risk of developing asthma, based on a longitudinal study with New Zealand subjects. The authors say results “suggest that exposure to greenness and vegetation diversity may be protective of asthma.”

Meanwhile, biodiversity is declining, at a disastrous rate. A Inter-governmental Science-Policy Platform on Biodiversity and Ecosystem Services report shows that unsustainable exploitation of natural resources worldwide has reached critical proportions, threatening the food and water security of an estimated 3.2 billion people. The annual count of Monarch butterflies overwintering in Mexico shows declines from last year’s numbers—a 15 percent decrease—according to figures from an official Mexican government count in the winter of 2017. Two recent studies show staggering declines in bird populations throughout the nation.

Proposed Labeling for Genetically Engineered Food: Misleading and Discriminatory

As the deadline approaches for regulations on labeling genetically engineered (GE or GMO—genetically modified organism) food, the U.S. Department of Agriculture (USDA) has proposed a rule that it previously characterized as discriminatory: It allows GE information to be conveyed by QR codes, which requires a cell phone (with camera function) and a reliable broadband connection, and allows GE food to be identified as “bioengineered” or by a smiley-face symbol containing the letters “BE.” It does not cover highly processed GE foods, like vegetable oils or sugar, and does not include newer genetic engineering techniques, such as CRISPR (a gene editing tool).

Beyond Pesticides and other groups have called on USDA to require labeling with only well-established terms, such as GE or GMO, not allow use of the term “bioengineered,” and drop the blatantly biased “smiley face” sun.



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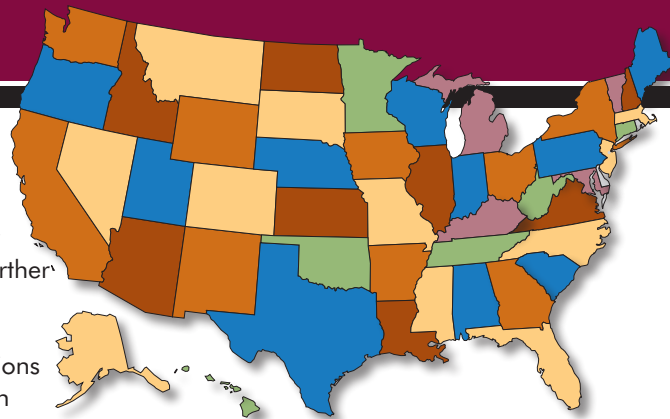
Fighting to Protect Farmworker Children

In response to a U.S. Environmental Protection Agency (EPA) rollback in its plans to improve protection of farmworker children, lawmakers, states, and public interest groups are fighting back. At issue are two EPA proposals that undermine Agricultural Worker Protection Standards (AWPS) and the Certification of Pesticide Applicators (CPA) rules put in place during the Obama Administration to update agricultural worker protection standards—including expanded training, prohibition of allowing children under 18 to apply highly toxic restricted use pesticides, new no-entry application-exclusion zones, improved record keeping, providing farmworkers a designated representative to request pesticide records, and other safety improvements.

In March, 28 U.S. Senators urged the preservation of the rules. Later that month, the U.S. District Court for the Northern District of California ruled that EPA illegally delayed implementation of key pesticide rules that in part prevent minors from working with the most dangerous pesticides—which EPA said could prevent some 1,000 acute poisonings every year.

States and non-profits launched new lawsuits in late May against EPA for its continued attack against farmworker health and safety. Two separate lawsuits, one filed by attorneys general in the states of California, Maryland, and New York, and another by health and justice advocates represented by Earthjustice and Farmworker Justice.

These lawsuits focus on EPA’s continued delay of the mandatory training requirement for farmworkers, which details pesticide safety for workers and steps that can be taken to reduce exposure to their children and loved ones after working all day in a contaminated field.



Tightening Restrictions on Bee-Toxic and Synthetic Pesticides Worldwide

Canada. Health Canada is proposing to phase out a number of uses of neonicotinoid insecticides in order to mitigate risks to pollinators. The agency has completed its review of clothianidin and thiamethoxam—two neonicotinoids that have been linked to pollinator decline—and finds risks of concern for bees. These measures do not go as far as those recently adopted in the European Union, but go further than label restrictions issued by EPA. Health Canada concluded its pollinator re-evaluation for clothianidin and thiamethoxam after examining hundreds of laboratory and outdoor field studies. The agency finds that uses of these neonicotinoids have “varying degrees of effects on bees,” and that some uses “may pose a risk of concern to bees.” Instead of a complete ban of the neonicotinoids, however, the agency is proposing mitigation measures to minimize potential exposure to bees, which includes the phase-out of many uses and certain additional product label restrictions.

European Union. In April, European Union (EU) member states backed a proposal to further restrict uses of neonicotinoids, finding the pesticides’ outdoor uses harm bees. These restrictions go beyond those already put in place in 2013, and ban outdoor uses of clothianidin, imidacloprid, and thiamethoxam. Uses will only be allowed in permanent greenhouses where contact with bees is not expected. The General Court of the European Union (GCEU) upheld the EU action in response to a challenge by multinational seed and chemical companies, Syngenta and Bayer—manufacturers of the neonics in question, that argue bees are not harmed if farmers follow label instructions. The court ruled in favor of taking precautionary action.

Washington State. The Washington State Department of Ecology denied a permit to spray Willapa Bay and Grays Harbor with imidacloprid to kill native burrowing shrimp in beds of commercial Japanese oysters after it determined “environmental harm from this neonicotinoid pesticide would be too great.” Concerned residents and environmental advocates opposed to the proposed

use cite harm to aquatic life, including fish habitat, and long-term ecological damage.

Scientists Advocate Action, California. A group of 56 scientists studying the effects of neonicotinoids sent a letter to California’s Department of Pesticide Regulation (DPR) highlighting the threat neonicotinoids pose to the health of California’s waterways and urging that steps be taken to reduce neonicotinoid contamination of the state’s streams and rivers. According to the letter, neonicotinoids are already found in California waterways at levels that exceed the freshwater invertebrate aquatic life benchmarks and could harm or kill many sensitive aquatic invertebrate species. Similarly, neonicotinoids are pervasive throughout the Great Lakes, and federal assessments confirm high risks to aquatic species. Imidacloprid samples in California from 2010–2015 show that 42% of detections exceed the acute invertebrate benchmark and all of the detections exceed the chronic invertebrate benchmark. In certain regions of the state, particularly agricultural areas, the imidacloprid benchmark for acute effects is more frequently exceeded. The scientists note these chemicals can “have consequences for broader ecosystems. Declines in aquatic invertebrates put other species at risk, particularly insectivorous fish, amphibians, and birds. Changes in aquatic invertebrate communities resulting from exposure to insecticides can also affect ecosystem functions, potentially leading to increased methane production or upsurges in pest species like mosquitoes.”

Switzerland to Vote on Banning Synthetic Pesticides. After more than 100,000 Swiss citizens signed a petition

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calling for a ban on pesticides, Switzerland will soon have to vote on a complete ban on the use of synthetic pesticides. The ban would apply to farmers, industries, and imported goods, and advocates hope other EU nations will follow. Switzerland, home of the world's largest pesticide manufacturer, Syngenta, has been engaged in the debate raging across the EU about the future use of pesticides. Recently, the EU reapproved glyphosate (Roundup) after months of deadlock, while certain countries, including France, have indicated that it will ban the chemical within three years. If successful, the Swiss initiative will make it the first country in Europe and the second in the world, after Bhutan, to ban all synthetic pesticides.

Connecticut Bans Pesticide Mistors

The Connecticut state legislature voted to ban the use of residential pesticide misting systems. (These are devices that are typically placed outdoors and spray insecticides—mostly in an attempt to control mosquitoes.) This is the latest move by a state legislature that has also recently banned the use of bee-toxic neonicotinoids and stopped the use of hazardous lawn care pesticides on public playgrounds. The vote was unanimous in the state Senate, and won by a count of 132–17 in the state House of Representatives. The chemicals employed in these machines are often synthetic pyrethroids, which have been linked to a range of human health effects, from early puberty in boys, to behavioral disorders, learning problems, ADHD, and certain cancers.

Maine Rejects Preemption of Local Authority to Restrict Pesticides

An industry-backed attempt to enact pesticide preemption in the state of Maine is officially over after the legislation was voted down by a 9–2 margin

in April. The bill, introduced by state Senator Tom Saviello (R-Wilton), resembled a similar bill that failed in the same legislative committee in 2017. With an ever-increasing number of communities in Maine stepping up to protect their residents and unique local environments from pesticide contamination, the repeated introduction of preemption legislation means that health advocates and forward-thinking communities must continue to remain vigilant, and ready to fight to maintain their right to home rule. LD 1853 would have taken away the rights of Maine municipalities to enact policies that apply to private property. The U.S. House of Representatives passed a provision in its Farm Bill, not in the Senate bill, to preempt local authority nationwide. At this writing, the issue is in conference committee.

Hawai'i Becomes First State to Ban Chlorpyrifos

In June, Hawai'i Governor David Ige signed legislation to ban the dangerous neurotoxic pesticide chlorpyrifos. The statewide prohibition, which will take effect in January 2019, received unanimous support from lawmakers on both sides of the aisle. This legislative action marks the first time that any state in the country has passed an outright ban of the highly toxic organophosphate pesticide. While multiple scientific studies have determined that chlorpyrifos damages fetal brains and produces cognitive and behavioral dysfunctions, particularly in utero and in children, EPA retracted the federal ban, and states have been slow to institute a complete prohibition, due to its widespread use in agriculture. Lawmakers in New Jersey and Maryland have recently tried unsuccessfully to pass similar bans. Hawai'i's bill contains a caveat that allows the state's Department of Agriculture (DOA) to grant special permits for companies that argue that they need more time to phase-out chlorpyrifos, but the exemption will end at the close of 2022.



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U.S. Wildlife Refuges Contaminated with Toxic Pesticides

According to the report *No Refuge*, published in May by the Center for Biological Diversity, hundreds of thousands of pounds of pesticides are sprayed on lands that are designated as refuges for wildlife and protected under U.S. law. Approximately 490,000 pounds of pesticides were sprayed on crops grown in national wildlife refuges in 2016 alone. The nation's 562 national wildlife refuges play a critical role in protecting fish, plants, and other wildlife. They include forests, wetlands, and waterways vital to thousands of species of plants and animals, including 280 that are protected under the *Endangered Species Act*. However, private chemical-intensive commercial farming of crops, such as corn, soybeans, and sorghum, has become common on refuge lands, with the increasing use of highly toxic pesticides that threaten the long-term health of sensitive habitats and the creatures who depend on them. Pesticide use in these sensitive areas poses risks to pollinators, aquatic organisms, migratory birds, and other wildlife that need protection. The report analyzes pesticide use on national wildlife refuges using records obtained through a *Freedom of Information Act* request. The report finds that in 2016 more than 270,000 acres of refuge lands were sprayed with pesticides for agricultural purposes. Bee-toxic neonicotinoid insecticides were banned on refuges in 2016.

California Failing to Protect At-Risk Communities

A report by California Environmental Justice Alliance (CEJA), which assesses state agencies on eight environmental justice principles, finds California's Department of Pesticide Regulation (DPR) is falling short in protecting vulnerable communities in the state, especially low-income and communities of color. The poor showing by DPR comes as agency reports show that the state's pesticide use has increased to 209 million pounds of pesticide active ingredients in 2016, nearing record highs. CEJA's 2017 Environmental Justice Agency Assessment provides full assessments of nine key agencies in the state, giving DPR poor grades for its persistent failure to prioritize community health over industry profits. The report concludes, "[M]any state agencies still make decisions that actively harm [communities of color]."

Monsanto Weedkiller Banned by Two States

In a stark departure from inadequate EPA restrictions, both Arkansas and Missouri in early July issued statewide bans on the sale and use of the Monsanto weedkiller dicamba by farmers. Crop damage is associated with the pesticide's drift off treated fields onto crops not genetically engineered to be tolerant of the herbicide. On July 7, the Arkansas Agriculture Department announced this emergency 120-day ban, which raised civil penalties for misuse of the toxic herbicide from \$1,000 to a maximum of \$25,000. The same day, the Missouri Department of Agriculture announced a temporary Stop Sale, Use or Removal Order on all dicamba products in the state labeled for agricultural use. Dicamba has been linked to damage of the kidney and liver, neurotoxicity, and developmental impacts. However, it is the chemical's strong propensity to volatilize small particles of the herbicide into the air and drift far off-site that is

driving the bans. Sensitive crop species can be damaged by dicamba at levels in the parts per million.

As of July 7, nearly 600 complaints of dicamba damage have been filed by Arkansas farmers in 23 different counties. In Missouri, as of July 3, there are 123 cases of dicamba injury complaints under investigation and, according to the Missouri Soybean Association, "More than 200,000 Missouri soybean acres currently show signs of suspected dicamba damage." According to the University of Missouri, there are "600 cases being investigated by the state departments of agriculture and approximately 1.1 million acres of soybean estimated with dicamba injury by university weed scientists [in 14 states]."

A lawsuit filed by a Kansas farmer in July claims that Monsanto knew its new dicamba-formulated product would harm non-target crops, but marketed and sold it anyway, damaging thousands of acres. The plaintiff, 4-R Farms based in Corning Kansas, lost over 200 acres of soybeans.

Federal Indictment in Virgin Islands Poisoning

In a case that appalled the nation, the U.S. Justice Department finally in early April secured an indictment against an applicator who illegally applied a fumigant at a U.S. Virgin Island resort, causing devastating and long-term health effects to a family on vacation. Terminex has already been fined and paid a multi-million dollar settlement to the poisoned family. Jose Rivera, 59, was indicted by a federal grand jury for violating the *Federal Insecticide, Fungicide, and Rodenticide Act* (FIFRA). According to the indictment, Mr. Rivera illegally applied fumigants containing methyl bromide in multiple residential locations in the U.S. Virgin Islands, including the condominium resort complex in St. John, where the family of four fell seriously ill in March 2015.



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