A BRIEF HISTORY OF PESTICIDE LEGISLATION

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Every year, pesticides kill 67 million birds and millions of plants, yet their detrimental effects are often ignored. While maintaining pest-free crops is appealing, everything else around them is often permanently damaged. The harmfulness of pesticides is not news, and governments have tried to intervene ever since Swedish chemist Carl Scheele developed "Paris Green" in 1775. A toxic, arsenic-based green paint pigment, it was distributed worldwide and used as the world's first pesticide. After over a century of destructive use, California legislators passed the first anti-pesticide law in 1901, which limited the use of the substance on crops and subjected it to inspection before distribution. However, a dizzying array of toxic substances have been developed since then, and regulation is struggling to keep up.

Arguably the most notorious chemical ever conceived was dichloro diphenyl trichloroethane (DDT), which was developed in 1874 and aimed to help combat malaria, typhus, and other insect-borne diseases. Environmentally devastating, DDT is toxic to humans and animals while being non-biodegradable and largely insoluble, making its ecosystemic damage irreversible when used. Fortunately, in 1962, Rachel Carson's *Silent Spring* exposed the environmental massacre that DDT usage caused and led to its permanent ban.

Nevertheless, toxically synthetic chemicals were still on the rise. The US government acted swiftly in 1959 by requiring all pesticides to be registered. Eleven years later, Congress formed the Environmental Protection Agency (EPA), and the California legislature passed the California Environmental Quality Act (CEQA), both of which mandated agencies to disclose environmental damage publicly. Furthermore, the Federal Environmental Pesticides Control Act, passed in 1972, created a set of criteria for pesticide manufacturers to fulfill to prove relative environmental friendliness.

Currently, the EPA regulates pesticide use in two significant and frequently amended statutes: the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 1947) and the Federal Food, Drug and Cosmetic Act (FFDCA, 1938). The FIFRA requires that all commercial pesticides be licensed by the EPA and demands that the EPA forcefully regulate public and environmental health issues caused by pesticides. On the other hand, the FFDCA gives the FDA the authority to screen foods, drugs, and cosmetics to ensure consumer safety and health. In light of the hundreds of pesticides still on the market and polluting water sources, habitats, and foods, US Senator Cory Booker introduced the Protect America's Children from Toxic Pesticides Act (PACTPA) in November 2021. This legislation aimed at protecting farm workers by ending the use of more than 100 environmental poisons. "No parent should worry that hugging their children after a long day of work could expose them to brain-harming chemicals," said Teresa Romero, president of the United Farm Workers of America. Specifically, the act would ban neurological disorder-inducing organophosphate insecticides, pollinator-killing neonicotinoid insecticides, and the widely used herbicide, paraquat. The law would also allow citizens more autonomy by enabling individual citizens to petition the EPA and closing dangerous loopholes within the agency. Additionally, it would provide protection for frontline communities, require employers of farmworkers to report all pesticide-caused injuries, and direct the EPA to review pesticide injury reports and to work with manufacturers

to develop better labeling. The act also requires all label instructions to be written in Spanish and other languages commonly used in the US.

Due to legislative gridlocks and polarization in Congress, Booker's bill has yet to pass in the Senate. However, local community and state governments could incorporate some elements of PACTPA to start creating healthier pesticide practices. On the national level, PACTPA lays a solid framework for feasible next steps toward removing certain toxic chemicals from the environment and should hopefully spark some congressional discussion soon. Because of other more salient concerns (including non-pesticide climate change policy), a substantial piece of legislation regulating pesticides would likely struggle to gain steam. Regardless, there are ways individuals can help bring any issue to the attention of lawmakers. An effective means to spotlight a pressing issue to local legislators is to send out a communication voicing your opinion. Local representatives will be compelled to respond if enough constituents express concern through letters or emails. Making yourself known to representatives is the single best way to influence policy in your community besides serving in government yourself.

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