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# Protecting Farmers' Livelihoods in the Face of 'Forever Chemicals'

*Congress must act now to protect consumers and farmers from harmful 'forever chemicals.'*

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## What are 'Forever Chemicals'?

'Forever chemicals' is a term used to describe per- and polyfluoroalkyl substances (PFAS), which break down very slowly over time. They are present in many industrial and consumer products like firefighting foam and food packaging. As a result, these chemicals can also be found in drinking water and soil that has been contaminated by a nearby or upstream source, like a PFAS manufacturing plant.

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## Why are people concerned about PFAS?

PFAS have been found to adversely affect human health. Peer reviewed research has shown a number of adverse effects to human health from high levels of exposure. PFAS are linked to a variety of health problems including kidney and testicular cancer, immune system damage, and high cholesterol. PFAS can damage internal organs, including the liver, kidney, pancreas, and thyroid. PFAS exposures during pregnancy and childhood may permanently impair development. Research is ongoing and

other harms may come to light. The U.S. Environmental Protection Agency's recent determination for PFAS in drinking water indicates that **no amount of PFAS ingestion is safe.**

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## How do PFAS connect to agriculture?

PFAS most commonly reach farmland from sewage 'sludge,' which is commonly used to fertilize soil, including the land used to grow crops and forage for livestock. Sludge is also sometimes referred to as "biosolids" or "residuals," and is the solid material left after wastewater is treated. PFAS can also seep into agricultural soil and irrigation water through releases at nearby manufacturing or military facilities.

Plants and animals take up PFAS chemicals from contaminated soil or water. This includes milk and meat from cows raised on PFAS-affected farms. The majority of people's exposure to PFAS is through the food they eat, and people who eat food from highly impacted farms have even greater exposures.

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## Why are PFAS a major issue for some farmers?

Many farmers may not be aware that their land is polluted with these harmful chemicals. Choosing to test their soil or products poses a risk to farmers' livelihoods because should they find PFAS present, they may have to abandon production on their farms, or at the very least, drastically change the way they work the land. However, avoiding testing potentially contaminated land only exacerbates the problem of PFAS in our food supply. Farmers in most places are not given resources for testing and, more importantly, have no clear path for remediation if their farms are found to be contaminated. To make matters worse, some small farmers frequently consume the products they grow themselves on PFAS-contaminated soil, increasing their PFAS exposure and causing health problems for themselves and their families.

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## How can the 2023 Farm Bill address the problem?

The 2023 farm bill presents an opportunity to address PFAS by providing support for farmers who, through no fault of their own, may be working PFAS-contaminated farms. The 2023 farm bill could establish a fund for farmers who incur expenses because they need to decommission their farms, establish a new livelihood (like using their land for agrovoltatics or carbon sequestration), or need medical monitoring and treatment because of their own PFAS exposure. The farm bill could also provide funding for incentives and technical support so more farmers take steps to discover their farms' PFAS status.

The [Relief for Farmers Hit with PFAS Act](#) was introduced by members of Congress from Maine and includes many of these elements. Although some have raised concerns about the limited definition of PFAS in the text, if the proposals were incorporated into the 2023 farm bill, it would provide an important foundation for long-term support for PFAS-impacted farmers and protection of the nation's food supply. The bill would establish grants for states to use to support farmers who lose income or need to transition away from farming and farmers who need health support because of PFAS, as well as for testing and research.

The 2023 farm bill could also build upon [recent efforts](#) by the U.S. Department of Agriculture (USDA) to address

## Case Study: PFAS in Maine

Not by choice but by circumstance, [Maine](#) has been leading the way on addressing the impact of PFAS on agriculture. In 2019, [Maine began testing cow's milk](#) for PFOS (a type of PFAS) because sludge had historically been applied to Maine's dairy farms. While most of the milk supply has been deemed safe, several dairies were found to have unacceptably high levels of PFOS. Because of these findings, Maine expanded its testing and screening to other farms where sludge or other residuals had been applied. To date, 700 sites have been deemed to be at high risk for contamination. Fortunately, Maine, its farmers, and communities are actively learning about and responding to the threat of PFAS contamination. However, while Maine is a leader in addressing PFAS, it does not mean that [Maine farmers](#) no longer need support, both for their livelihoods and health, and that of their families.

this pressing issue. For example, USDA has led research on PFAS remediation and provided funding for further research to a public university in New York State. USDA's Natural Resource Conservation Service (NRCS) is also providing some supplemental testing as part of its Conservation Evaluation and Monitoring Activities.

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## Conclusion

We now know that no level of PFAS exposure is safe, and yet, America's farmers shoulder an enormous burden because their work to feed our country has exposed them to this pervasive and long-lasting chemical. While the federal government begins to regulate—and perhaps one day outright ban—this harmful class of chemicals, more must be done to protect people's livelihoods and health from the threat of PFAS contamination. Because food is a major pathway of exposure for most people, Congress and the Biden administration should act urgently to address the issue of PFAS on farmland, including by providing incentives for testing and support for farmers whose land is affected.

To learn more, visit [sierraclub.org/toxics/pfas](https://sierraclub.org/toxics/pfas)

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