

Part 3: What Can We Do?

As this report has detailed, companies like Bayer, and the pesticide industry broadly, spend millions every year on a range of tactics to mislead the public about its products and its sector. Like the tactics of the tobacco and fossil fuel industries, the methods Monsanto and Bayer used to protect glyphosate are designed to thwart transparency, public scrutiny, independent scientific examination, and regulatory oversight. These tactics are also used to distract the public and policymakers from grappling with the systemic changes needed to address the impacts of glyphosate, and pesticides more generally, on ecosystems and public health.

In this final section, we offer six suggestions for policy makers, media outlets, academics, and others to counteract industry spin tactics like those described in this report. We see the following recommendations as just some of the steps necessary as part of a multifaceted effort that is urgently needed to rein in the disinformation spread by the pesticide industry to influence public policies and mislead the public. We offer these not as an exhaustive set of recommendations, but as examples of actions needed to curtail industry influence

1. Understand and Expose the Strategies

This report adds to a growing body of research and reporting on pesticide industry disinformation tactics and, more broadly, to a literature and social science field that reveals how polluting industries manufacture ignorance and doubt and influence popular understanding and public policy around critical health issues. A key to upending the narrative hold of these companies is to understand their PR strategies and expose them. Doing so helps to inoculate the public and policymakers from their persuasive power. As Louis Brandeis said in Harper's magazine in 1913, "Sunlight is said to be the best of disinfectants."

Internal corporate documents have made clear how long the fossil fuel industry knew about the dangers of the climate crisis and how long the tobacco industry knew about the deadliness of cigarettes. In recent years, massive public action campaigns have focused on teaching this history. As the #ExxonKnew campaign states: "Exxon knew about climate change half a century ago. They deceived the public, misled their shareholders, and robbed humanity of a generation's worth of time to reverse climate change."

From the internal Monsanto and Bayer documents shared in this case study, it's clear the company was aware that glyphosate herbicide formulations posed a risk to human health and ecosystems and yet worked to suppress evidence about these threats. Beyond the Monsanto/Bayer case, there is a robust literature showing how pesticide companies have also known about the human health and environmental impacts of other pesticides — including paraquat, atrazine, chlorpyrifos, neonicotinoids and organophosphates — yet have long worked to suppress or deny the science. We believe it's crucial for the public and policymakers to understand that the pesticide industry has known about these threats for decades, but like the tobacco and fossil fuel industries, purposefully pushed disinformation and doubt, leading to immeasurable harm, illness, and biodiversity loss. These same companies are now marketing themselves — and their current business models — as [solutions to climate change](#), claiming they will engineer more sustainable methods as they push to expand fossil-fuel intensive industrial farming reliant on synthetic nitrogen fertilizers, one of the top climate-polluting industrial chemicals. The pesticide industry's claims must be scrutinized and challenged, for they risk, alongside other industry disinformation, robbing us of crucial time to deploy real solutions for reversing climate change.

Reports like this and other efforts by the media and research institutions are key to exposing these disinformation campaigns and their real-world impacts. To name just a few examples of this growing body of evidence, exposés on pesticide industry PR and influence campaigns can be found in [Lee Fang's investigation](#) of neonicotinoids; [Sharon Lerner's](#) and [Stéphane Horel's](#) reporting on paraquat; and extensive [reporting by Carey Gillam](#) on Bayer/Monsanto and glyphosate-based herbicides. We hope this report will play a role in this effort and will add to this growing body of evidence and public understanding of the extent and impact of pesticide industry spin techniques.

2. Protect the Integrity of Scientific Journals

As we discussed in Tactic 1, shaping the scientific literature is a key industry disinformation tactic. Ghostwriting or otherwise covertly influencing journal content is one powerful tool to do so. To maintain the integrity of peer-reviewed journals, it's critical to limit the publication of scientific articles by authors with conflicts of interest or, at the very least, clearly divulge those conflicts when they occur. Unfortunately, this transparency is still not consistent. Just to give one example, four out of five authors of a [2018 paper](#) in the peer-reviewed journal Food and Chemical Toxicology that [significantly downplayed](#) the dietary risk of eating foods with pesticide residues noted their employment by Bayer, but they did not declare this affiliation as a conflict of interest.

Like other scientific journals, Food and Chemical Toxicology has clear guidelines for its authorship: "All financial relationships with any entities that could be viewed as relevant to the general area of the submitted manuscript" should be declared along with "Any other relationships or affiliations that may be perceived by readers to have influenced, or give the appearance of potentially influencing, what you wrote in the submitted work." This paper is an example of how, even with strong policies, enforcement and oversight is needed. Furthermore, some corporate agreements with researchers include provisions that enable the funding company to prevent the publication of unfavorable research, as U.S. Right to Know's Gary Ruskin and co-authors document in a

2019 Journal of Public Health Policy [article](#) about Coca-Cola. Ruskin and colleagues recommend that to further protect the integrity of peer-reviewed journals, in addition to conflict of interest and funding disclosures, journals should also require authors to include their research agreements as appendices to papers when they are published.

3. Uphold Strong Journalistic Standards for Disclosing Conflicts of Interest and Vetting Sources

It is imperative that media outlets also uphold strong standards for revealing conflicts of interest among sources, both those quoted on the record and those used on background. The Society of Professional Journalists, a membership organization of more than 6,000 journalists, has a comprehensive [code of ethics](#), which includes: "Identify sources clearly. The public is entitled to as much information as possible to judge the reliability and motivations of sources." Many reporters do just that: they vet whether to report on studies or quote so-called experts with conflicts of interest if the integrity of the science or source could be questionable. They do things like follow the money behind the funding of think tanks housed at academic institutions. This report includes many examples of journalists doing just such digging to expose these funding streams. Unfortunately, thorough vetting isn't ubiquitous, and when a media outlet fails to do this robust source excavation, or when a news outlet relies on or reports information from an astroturf group or front group without disclosing their conflicts of interests, the media can end up being a pawn in an industry public relations campaign.

As one example of an effort to hold media accountable, in 2017, two dozen public interest groups [wrote to USA Today](#) editors raising concerns that the paper was publishing science columns by members of the American Council on Science and Health (ACSH) without identifying that group as a corporate front group with a history of spinning science for corporate benefactors. (As we described earlier, internal documents establish that Monsanto paid ACSH in 2015 to help defend glyphosate.) USA Today editors declined to take action; for years afterward, the paper's opinion section board of contributors included Alex

Berezow, ACSH's vice president of scientific communications, without full disclosure about Berezow's affiliation with a corporate front group. Berezow left the USA Today board (and ACSH) in June 2022, but still describes himself in his Twitter bio as a "contributor" to USA Today — an affiliation that helps legitimize industry-affiliated spin. Although the pressure from public interest groups did not yield results in this case, it is important to document this type of corporate influence of a media outlet, and to notify editors and apply pressure when they fail to properly identify corporate-funded groups and writers.

4. Challenge and Expose Corporate Influence at Universities

Partnering with universities and academics is a well understood PR tactic of health-harming industries. A "public relations masterstroke" of tobacco industry PR was direct funding to universities, writes the historian Alan Brandt; "offering funds directly to university-based scientists would enlist their support and dependence. Moreover, it would have the added benefit of making academic institutions 'partners' with the tobacco industry in its moment of crisis." Fossil fuel companies, too, "pour money into prestigious universities," according to a 2022 [investigation by the BMJ](#), in an attempt "to weaken messages on climate change, capture academia and protect their interests." The BMJ also describes a growing student movement to end fossil fuel funding on campuses across the country. Pesticide and food industry funding at universities also deserves scrutiny. As we describe in this report, the pesticide industry relies heavily on universities and professors to assist with their product defense campaigns, and public universities, professors and researchers depend on funding from large multinational food and chemical companies. This dependence shapes research agendas and communications and messaging in ways that often benefit corporate profits at the expense of public health.

But there is much students on campus can do to challenge this, and it starts with asking questions and doing research. There are many resources for students to raise questions on their campuses. U.S. Right to Know, for

example, has a toolkit for students on how to [uncover the influence of the food and pesticide industries on campus](#). The toolkit explains how to use Freedom of Information laws and other strategies to uncover corporate influence within universities, what questions to ask, and other strategies for leading campaigns for transparency on campuses.

Nationally, stronger transparency laws are needed. The Physician Payment Sunshine Act, passed in 2013, requires drug and medical product manufacturers to disclose payments and other items of value given to physicians and teaching hospitals, with data disclosed on a [public website](#). A similar requirement should be put in place for universities, university departments and foundations, and professors to disclose funding or gifts they receive from food and pesticide companies.

5. Hold Public Relations Professionals Accountable

As we describe in Tactic 3, the PR agencies Monsanto and Bayer employed to lead their glyphosate and GMO-defense efforts — including FleishmanHillard, Ketchum, and FTI Consulting—have histories of using underhanded tactics to defend Big Tobacco and Big Oil interests. These PR agencies can also be held to account for their role in pesticide disinformation. In November 2020, Duncan Meisel and Jamie Henn launched the [Clean Creatives campaign](#), housed within the nonprofit Fossil Free Media. The campaign calls on PR firms and ad agency executives to "divest" from fossil fuel contracts and "pledge to only work with businesses who support climate solutions." As the campaign's founders write: "Unless the entire ecosystem of agencies, creatives, and clients take action to address the growing harm of fossil fuel disinformation, the expansive relationship between PR and ad firms and fossil fuels will grow once more. Individuals and companies in every part of the advertising ecosystem have a role to play." There is a parallel with PR firms and ad agencies working for pesticide companies and promoting pesticide products. Those agencies and professionals should be called on to make a similar commitment not to work for pesticide companies.

6. Support Independent Investigative Journalism

Independent investigative journalism is critical for a functioning democracy — journalism that exposes corporate and government wrongdoing, fraud, lies, deceit, crimes, and the multi-faceted disinformation tactics these entities use to control the narrative about crucial health and environmental issues. Yet, investigative journalism — long-considered democracy’s fourth estate for its role in holding those in power to account—is eroding. Without a strong independent media sector, the public and elected officials are even more vulnerable to the covert communications tactics the pesticide industry is using to shape public opinion.

As the public relations industry booms and media institutions around the country are impacted by consolidation and a changing media landscape journalism has suffered. Since 2008, employment in U.S. newsrooms plummeted 26 percent, a [2021 Pew study](#) found. By 2018, there were 6 public relations professionals for every journalist, up from

5 two years before. Several new nonprofit newsrooms, some quoted in this report, including ProPublica, The Intercept, and U.S. Right to Know, have helped to fill this void, but there is more need than ever to support reliable investigative reporting to expose industry spin. Supporting investment in independent media and nonprofit investigative research groups will be critical to fight this disinformation.

As we finish this report, lawsuits against Bayer from people alleging their cancers were caused by the company’s glyphosate products continue to wind through the courts. It’s likely that, as a result of these cases, even more evidence will emerge about the company and industry’s attempts to shape public opinion about glyphosate. Additionally, as the EU considers reauthorizing the chemical in 2023, we expect to see new waves of industry product-defense messaging. In this context, we recommend these strategies as just some of the steps needed to help take on industry disinformation and empower policymakers to better regulate not only glyphosate, but other toxic pesticides as well.

