

Too Many Cooks in the Kitchen—How the Proposed Consolidation of the Overlapping Governmental Agencies Tasked with Pesticide Regulation is Deficient in Resolving Food-Safety Concerns

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ABSTRACT

Imagine ingesting chemicals every day—chemicals that are regulated and monitored by governmental bodies with missions not to protect human health but to encourage the growth of certain industries and the production of certain products. Imagine these chemicals are applied to our foods—staples in a presumably healthy diet including spinach, strawberries, tomatoes, and apples. Imagine these governmental bodies, those with missions that disregard the chemicals’ impact on human health, are not only regulating these chemicals based on a cost-benefit analysis and biased research but also are splitting the various responsibilities—a multi-agency process fraught with inconsistencies and ineffectiveness. These chemicals are pesticides, and these governmental bodies are the U.S. Department of Agriculture (USDA), the Food and Drug Administration (FDA), and the Environmental Protection Agency (EPA). Enter: the Food Safety Administration Act of 2022. While this bill tasks the newly formed Food Safety Administration with protecting public health by assigning the new agency FDA’s current task of enforcing pesticide residue tolerances, the bill ultimately fails to account for the regulation of pesticides delegated to EPA, as well as USDA’s role in monitoring various food products and its food-safety-centric National Organic Program. Therefore, this Note argues that, in order for the Food Safety Administration Act of 2022 to effectively address the current gaps in food-safety protection, it must address EPA’s and USDA’s current roles in the pesticide regulation process because, after all, pesticides are intrinsically laced within Americans’ everyday diets.

I. INTRODUCTION

Imagine ingesting chemicals every day—chemicals that are regulated and monitored by governmental bodies with missions not to protect human health but to

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encourage the growth of certain industries and the production of certain products.¹ Imagine these chemicals are applied to our foods—staples in a presumably healthy diet including spinach, strawberries, tomatoes, and apples.² Imagine these governmental bodies, those with missions that minimize the chemicals' impact on human health, are not only regulating these chemicals based on a cost-benefit analysis and biased research but also are splitting the various responsibilities—a multi-agency process fraught with inconsistencies and ineffectiveness.³ These chemicals are pesticides, and these governmental bodies are USDA, FDA, and EPA.⁴

Pesticides are agricultural chemicals used to “control pests such as insects, rodents, weeds, bacteria, mold[,] and fungus.”⁵ Flagged as “potentially toxic to humans” by the World Health Organization (WHO),⁶ pesticides have caused scientists, farmers, and consumers alike to question whether daily chemical consumption and exposure are leading to long-term effects and the overall rise in health issues across America.⁷ Given that nearly one billion pounds of pesticides are sprayed annually on many of America's most common fruits and vegetables, these chemicals make their way into our diets no matter how healthy we eat.⁸ In fact, over 90% of Americans have “pesticides or their byproducts in their bodies,” making regulation an inevitable part of the human health and food safety conversations.⁹ Meat, poultry, fish, dairy, and eggs, while not directly sprayed with pesticides, often have traces due to the animals' treated grain and feed.¹⁰ Even processed foods like cereals and table crackers are made

¹ See 7 U.S.C. § 2201 (describing USDA's original delegation “to procure, propagate, and distribute among the people new and valuable seeds and plants”); Richard A. Merrill & Jeffrey K. Francer, *Organizing Federal Food Safety Regulation*, 31 SETON HALL L. REV. 61, 79 (2000) (describing the predecessor to FDA's initial mission “to assist American food producers” as it fell within USDA); *The Origins of EPA*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/history/origins-epa> (June 24, 2022) (describing EPA's original mission “to protect the environment”).

² Claire Sissons, *Are Pesticides in Food Harmful?*, MED. NEWS TODAY (Jan. 6, 2020), <https://www.medicalnewstoday.com/articles/327414#which-foods-contain-the-most-pesticide-residue>.

³ Terence J. Centner, *Pesticide Registration Fails to Protect Human Health: Damages from Exposure to Glyphosate-Based Herbicides*, 36 J. ENV'T L. & LITIG. 69, 71–84 (2021); Merrill & Francer, *supra* note 1, at 67.

⁴ Merrill & Francer, *supra* note 1, at 67–70.

⁵ *Food and Pesticides*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/safepestcontrol/food-and-pesticides> (Apr. 12, 2022).

⁶ *Food Safety: Pesticide Residue*, WORLD HEALTH ORG. (May 16, 2016), <https://www.who.int/news-room/questions-and-answers/item/food-safety-pesticide-residue>.

⁷ Peter Boersma, Lindsey I. Black & Brian W. Ward, *Prevalence of Multiple Chronic Conditions Among US Adults, 2018*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Sept. 17, 2020), https://www.cdc.gov/pcd/issues/2020/20_0130.htm. 51.8% of U.S. adults “had been diagnosed with at least [one] of [ten] selected chronic conditions,” including “arthritis, cancer, chronic obstructive pulmonary disease, coronary heart disease, current asthma, diabetes, hepatitis, hypertension, stroke, and weak or failing kidneys.” *Id.* This study did not research or report the causes of the increase in these chronic illnesses. *Id.*

⁸ Ohio-Ky.-Ind. Water Science Center, *Pesticides*, U.S. GEOLOGICAL SURV. (Mar. 23, 2017), <https://www.usgs.gov/centers/ohio-kentucky-indiana-water-science-center/science/pesticides>; see also Sissons, *supra* note 2.

⁹ Liza Gross, *More Than 90 Percent of Americans Have Pesticides or Their Byproducts in Their Bodies*, THE NATION (Mar. 21, 2019), <https://www.thenation.com/article/archive/pesticides-farmworkers-agriculture/>.

¹⁰ *What You Need to Know About Pesticides*, UNLOCK FOOD, <https://www.unlockfood.ca/en/Articles/Food-technology/What-you-Need-to-Know-about-Pesticides.aspx> (last visited Jan. 3, 2023).

with grains that are treated with pesticides.¹¹ Glyphosate is the most commonly used pesticide in the world and tends to be the scapegoat when people call for pesticide regulation and bans.¹² Glyphosate's time in the news cycle—including headlines like “Can Eating Cheerios Cause Cancer?” and “Glyphosate in Cereal: Weed Killer for Breakfast?”—has caused many worldwide to fear and subsequently protest the use of glyphosate.¹³ While updated regulation is pending, glyphosate continues to be used on food products, causing many health-conscious consumers to manage and follow their own glyphosate-free diet, mainly consisting of organic foods.¹⁴

¹¹ *Id.*

¹² Centner, *supra* note 3, at 94.

¹³ James Roland, *Can Eating Cheerios Cause Cancer?*, HEALTHLINE (Feb. 5, 2021), <https://www.healthline.com/health/cancer/cheerios-cancer#cheerios-and-cancer>; The Schoolyard Team, *Glyphosate in Cereal: Weed Killer for Breakfast?*, SCHOOLYARD SNACKS (Aug. 26, 2019), <https://schoolyardsnacks.com/blogs/blog/glyphosate-in-cereal>; Aude Mazoue, *Thousands Gather in France, Worldwide for Annual March Against Monsanto*, FRANCE 24 (May 19, 2019), <https://www.france24.com/en/20190519-france-monsanto-bayer-world-wide-march-environment-planet-roundup-glyphosate>. While some protest the use of glyphosate, others protest its prohibition. For example, in *National Association of Wheat Growers v. Bonta*, the plaintiffs—“a coalition of agricultural producers and business entities that sell glyphosate-based herbicides”—opposed California Proposition 65’s warning requirement regarding their pesticide products. 85 F.4th 1263, 1266 (9th Cir. 2023). Upholding the district court’s decision, the Ninth Circuit granted the plaintiffs’ permanent injunction to enjoin the California Attorney General from requiring “certain businesses whose products expose consumers to glyphosate to provide a clear and reasonable warning to those consumers that glyphosate is a carcinogen.” *Id.* In doing so, the circuit court protected the plaintiffs’ First Amendment right “to be free from compelled speech.” *Id.* While an International Agency for Research on Cancer (IARC) 2015 study categorized glyphosate as “probably carcinogenic” to humans, EPA, California’s Office of Environmental Health Hazard Assessment, and other “international regulatory authorities and organizations disagree with [this] conclusion[.]” *Id.* at 1270. These conflicting views “on opposite sides of the scientific debate” ultimately led the Ninth Circuit to hold glyphosate’s carcinogenic status is not “purely factual and uncontroversial information”—a status which would exempt the government from intermediate-scrutiny requirements when compelling commercial speech. *Id.* at 1275–78 (quoting *Zauderer v. Off. of Disciplinary Couns. of Sup. Ct.*, 471 U.S. 626, 651 (1985)). Because the California Attorney General’s proposed language for warning labels failed to meet this “purely factual and uncontroversial” standard, intermediate scrutiny applied. *Id.* at 1282. Ultimately, the Ninth Circuit found “none of the proposed glyphosate [Proposition] 65 warnings [were] narrowly drawn to advancing California’s interest in protecting consumers from carcinogens, and California has less burdensome ways [including advertising campaigns] to convey its message than to compel [the p]laintiffs to convey it for them[.]” *Id.* at 1283. Thus, the court ruled the warnings regarding glyphosate were unconstitutional. *Id.*

¹⁴ See Başak Bartu, *How to Avoid Glyphosate in Food and Protect Yourself from Potential Damage*, CHE FOOD REVOLUTION, <https://chefoodrevolution.com/en/how-to-avoid-glyphosate-in-food/> (last visited Mar. 16, 2023) (offering tips on “how to avoid glyphosate in food as much as possible”); see also Hunter Rising, *How to Avoid Glyphosate Residue*, WIKIHOW, <https://www.wikihow.com/Avoid-Glyphosate-Residue> (July 30, 2024) (describing ways to “cut[] glyphosate from your diet” and “clean[] contaminated produce”); see also Catherine Roberts, *Reduce Your Exposure to Glyphosate by Eating Organic*, CONSUMER REPORTS (Aug. 11, 2020), <https://www.consumerreports.org/organic-foods/reduce-exposure-to-glyphosate-by-eating-organic/> (detailing why an organic diet reduces glyphosate levels). To aid concerned consumers, the Environmental Working Group (EWG) releases its annual “Shopper’s Guide to Pesticides in Produce,” including a “Dirty Dozen” list—detailing the twelve non-organic produce with the highest levels of pesticides—and a “Clean Fifteen” list—providing alternative, still non-organic, produce with the lowest amount of pesticides. Sandee LaMotte, *Blueberries Have Joined Green Beans in This Year’s Dirty Dozen List*, CNN HEALTH (Aug. 16, 2023, 3:13 PM), <https://www.cnn.com/2023/03/15/health/dirty-dozen-produce-pesticides-2023-wellness/index.html>. In writing this piece, the respective 2024 lists were released. The 2024 Dirty Dozen list included: (1) strawberries; (2) spinach; (3) kale, collard, and mustard greens; (4) grapes; (5) peaches; (6) pears; (7) nectarines; (8) apples; (9) bell and hot peppers; (10) cherries; (11) blueberries; and (12) green beans. *The 2024 Dirty Dozen*, EWG, <https://www.ewg.org/foodnews/dirty-dozen.php> (last visited Dec. 5, 2024). The 2024 Clean Fifteen list included: (1) avocados, (2) sweet corn, (3) pineapple, (4) onions, (5) papaya, (6) frozen sweet peas, (7) asparagus, (8) honeydew melon, (9) kiwi,

An organic diet is certified glyphosate-free;¹⁵ however, organic products can be up to 82% more expensive than their non-organic counterparts.¹⁶ In fact, as of 2016, only 6% of the U.S. population ate a mostly organic diet,¹⁷ although this number is rising as healthy diets and lifestyle choices trend on social media.¹⁸ And even with the most health-conscious consumer, we all have our cheat days. Regardless of your vice's flavor or price point, high-end and affordable restaurants alike save money buying non-organic products, turning a scheduled cheat treat into recurring pesticide exposure.¹⁹ The bottom line is that pesticides are inescapably a part of American citizens' diets, yet these ingested chemicals are omitted from nutrition facts, ingredient lists, and food labels.²⁰ These omissions are not an oversight. Instead, pesticides undergo a rigorous registration and approval process to be included in our diets—a process so rigorous it includes factors and considerations beyond food safety, like a

(10) cabbage, (11) mushrooms, (12) mangoes, (13) sweet potatoes, (14) watermelon, and (15) carrots. *The 2024 Clean Fifteen*, EWG, <https://www.ewg.org/foodnews/clean-fifteen.php> (last visited Dec. 5, 2024).

¹⁵ *Synthetic Substances in Crop Production*, AGRIC. MKTG. SERV. U.S. DEP'T OF AGRIC., <https://www.ams.usda.gov/grades-standards/synthetic-substances-crop-production> (last visited Feb. 23, 2024); see also *Organic Farming*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/agriculture/organic-farming> (Nov. 16, 2023).

¹⁶ Lindsay Boyers, *Is Eating Organic Food Better for You? And Why Is It More Expensive?*, GOODRX HEALTH, <https://www.goodrx.com/well-being/diet-nutrition/organic-food-worth-the-price> (Feb. 3, 2023).

¹⁷ *The New Food Fights: U.S. Public Divides Over Food Science*, PEW RSCH. CTR. (Dec. 1, 2016), <https://www.pewresearch.org/science/2016/12/01/the-new-food-fights/>.

¹⁸ John Anderer, *Popular Social Media Food Posts Can Influence People to Eat Healthy*, STUDY FINDS (Sept. 27, 2021), <https://studyfinds.org/social-media-posts-eat-healthy/>; see Dymond Green, *The Rise of the Organic Food Market*, CNBC (Sept. 22, 2021, 8:00 AM), <https://www.cnbc.com/2021/09/22/organic-food-sales-surged-in-2020-higher-demand-and-cheaper-costs.html> (reporting a Pew Research survey where 76% of people who buy organic foods do so for their health value, with “some health-conscious consumers gravitat[ing] toward organic over conventional products due to concerns about highly processed foods, artificial ingredients, as well as the effects of pesticides . . .”).

¹⁹ In a USDA study conducted by its Economic Research Service department, it investigated price premiums for organic foods, but the study only cataloged the food purchased by families from “grocery stores, club stores, mass merchandizers, super centers, convenience stores, health food stores, and other places where they purchase groceries.” Andrea Carlson, *Investigating Retail Price Premiums for Organic Foods*, ECON. RSCH. SERV. U.S. DEP'T OF AGRIC. (May 24, 2016), <https://www.ers.usda.gov/amber-waves/2016/may/investigating-retail-price-premiums-for-organic-foods/>. It did not include food bought and consumed at “restaurants, fast food establishments, pizza places, school cafeterias, movie theaters, sports arenas, or other places where food is prepared for them.” *Id.* This study acknowledges the impossible nature of tracking one's complete and comprehensive diet. *Id.* Furthermore, while organic produce is increasingly more common in foodservices, restaurants frequently misrepresent what is actually organic on their menu, the policing for which is left to consumers rather than USDA, which is responsible for the National Organic Program. Carol M. Bareuther, *Organic Produce Rising on Foodservice Menus*, PRODUCE BUS. (Aug. 27, 2019), <https://www.producebusiness.com/organic-produce-rising-on-foodservice-menus/>; *Restaurants Frequently Misrepresent What's Organic*, THE CORNUCOPIA INST. (Jan. 15, 2019), <https://www.comucopia.org/2019/01/restaurants-commonly-misrepresent-whats-organic-in-marketing/>; see *National Organic Program*, AGRIC. MKTG. SERV. U.S. DEP'T OF AGRIC., <https://www.ams.usda.gov/about-ams/programs-offices/national-organic-program> (last visited Jan. 3, 2023) (describing the qualifications for a product to receive the “USDA Organic Seal,” including being free from synthetic pesticides). This is a result of restaurants' exemption from organic certification. *Restaurants Frequently Misrepresent What's Organic*, THE CORNUCOPIA INST. (Jan. 15, 2019), <https://www.comucopia.org/2019/01/restaurants-commonly-misrepresent-whats-organic-in-marketing/>.

²⁰ *Pesticides: The Ingredient Left Off of Your Food Labels*, BABYLON MICRO-FARMS (Aug. 19, 2019), <https://babylonmicrofarms.com/pesticides-the-ingredient-left-off-of-your-food-labels/>.

cost-benefit analysis of economic, social, and environmental factors.²¹ If pesticides are so intrinsically laced within our diets, why is food safety not the utmost concern?²² And even more concerning: why is there not a consolidated governmental body tasked with ensuring food safety in America's current administrative law framework?

The governmental bodies that currently share pesticide-regulation duties include EPA, FDA, and USDA.²³ EPA regulates pesticides by setting allowable levels, or tolerance levels, used on food products; FDA and USDA then monitor these levels by checking various food products to ensure they are in compliance.²⁴ FDA monitors non-organic products, like fruits, vegetables, and grains,²⁵ and USDA monitors organic counterparts²⁶ as well as all meat,²⁷ poultry,²⁸ dairy, and eggs.²⁹ However, none of these agencies' sole mission is food safety.³⁰ Instead, USDA was created to aid the

²¹ Centner, *supra* note 3, at 71; *see also infra* text accompanying notes 179–185 (explaining EPA's use of a cost-benefit analysis and manufacturer-funded, biased research and its disregard of aggregate exposure; also explaining USDA and FDA's monitoring and enforcement of EPA's established tolerance levels).

²² While we are exposed to harmful pesticides through a variety of ways—the air, our water supply and food source, and even skin contact—a 2020 study which evaluated glyphosate levels in children and adults after a week of organic diet intervention concluded “diet is the primary source of glyphosate exposure for the general population and that controlling dietary input by shifting to an organic diet is a clear-cut approach to reducing exposure.” John Fagan, Larry Bohlen, Sharyle Patton & Kendra Klein, *Organic Diet Intervention Significantly Reduces Urinary Glyphosate Levels in U.S. Children and Adults*, 189 ENV'T RSCH. 1, 6 (2020), <https://www.sciencedirect.com/science/article/pii/S0013935120307933>; *see Pesticide Exposure*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/environmental-health-tracking/php/data-research/pesticide-exposure.html> (Dec. 5, 2023) (explaining how humans are exposed to pesticides). Therefore, this Note focuses exclusively on providing solutions to pesticide-regulation issues as they relate to food safety, but it does not discredit the fact that people are exposed to pesticides in a variety of ways.

²³ Merrill & Francer, *supra* note 1, at 67–70.

²⁴ *Id.* at 87–88.

²⁵ *Id.* at 90; *see* Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–99 (delegating enforcement duties to FDA).

²⁶ *Other Federal Agencies Regulating Pesticides*, NAT'L PESTICIDE INFO. CTR., <http://npic.orst.edu/reg/otherregfed.html> (last visited Jan. 4, 2023); *National Organic Program*, *supra* note 19.

²⁷ Merrill & Francer, *supra* note 1, at 90; *see* 21 U.S.C. §§ 601–95 (delegating enforcement duties to USDA).

²⁸ Merrill & Francer, *supra* note 1, at 90; *see* 21 U.S.C. §§ 451–71 (delegating enforcement duties to USDA).

²⁹ Merrill & Francer, *supra* note 1, at 92.

³⁰ *See supra* text accompanying note 1 (describing the industry-focused missions given to EPA, FDA, and USDA when they were created). It is important to note that these agencies are delegated food safety tasks; however, this is not their sole mission. FDA is currently delegated authority to prohibit the sale of adulterated foods and even “order a responsible party to recall an article of food where FDA determines that there is a reasonable probability that the article of food (other than infant formula) is adulterated[.]” Questions and Answers Regarding Mandatory Food Recalls; Draft Guidance for Industry, 80 Fed. Reg. 26269 (May 7, 2015), <https://www.federalregister.gov/documents/2015/05/07/2015-11009/questions-and-answers-regarding-mandatory-food-recalls-draft-guidance-for-industry>; *see infra* notes 98–99 and accompanying text (defining and describing adulterated foods). Similarly, USDA's Food Safety and Inspection Service prioritizes “food defense,” which “is the protection of food products from contamination or adulteration intended to cause public health harm or economic disruption.” *Food Defense*, FOOD SAFETY & INSPECTION SERV. U.S. DEP'T OF AGRIC., <https://www.fsis.usda.gov/food-safety/food-defense-and-emergency-response/food-defense> (July 31, 2023). However, pesticides are not categorized by USDA as contaminants “intended to cause public health harm or economic disruption;” thus, their consideration is

agricultural industry.³¹ Once a solution to food safety concerns, FDA was created, first as a branch of USDA and then formally removed to avoid the conflict of interest between its food safety focus and USDA's agriculture focus.³² As a result of budgetary and bandwidth constraints, however, FDA tends to prioritize "drugs and other medical products" over food regulation.³³ And, of course, EPA was created to protect the environment.³⁴ Food safety is a byproduct of these missions and these agencies have certainly increased their efforts over the years to ensure it,³⁵ albeit the existence of a conflict of interest between food safety efforts and the agencies' guiding missions.³⁶ However, given resource constraints and existing statutory delegations,³⁷ among other issues, none of these agencies are able to effectively prioritize food safety to properly protect public health. The bottom line: there is no federal agency with a food-safety focus. Enter: the Food Safety Administration. With bipartisan support, a food-safety-

further excluded from the food-safety conversations. *Id.* And to that end, pesticides have been deemed "safe" by EPA's licensing and tolerance level processes. Merrill & Francer, *supra* note 1, at 87–88. Further, these food-safety functions are certainly not the agency's sole purpose—their jobs have increasingly implicated various, sometimes competing, industries. See discussion *infra* Section II.B. Because the food-safety roles delegated to FDA, USDA, and EPA compete with each agency's industry-based mission, see *infra* note 36, and have become increasingly convoluted, there is bipartisan support for a consolidated Food Safety Administration. See *infra* notes 37–38 and accompanying text; see also discussion *infra* Section II.C.

³¹ See *infra* text accompanying note 96 (describing USDA's original task in disseminating agricultural-based information, as well as seeds and plants to American people). See also Merrill & Francer, *supra* note 1, at 78 (demonstrating federal food safety was neither explicitly delegated nor ensured, as USDA's "original legislation did not mention food safety, but [it] was the logical place to lodge responsibility when Congress decided that the federal government had a role in assuring the purity of food."). Because "[t]he job of assuring that food is safe . . . sometimes seemed an uncomfortable fit with [USDA's] primary mission of assisting and promoting U.S. agriculture[.] . . . FDA was removed from the Department of Agriculture" in the 1940s and with it food safety functions. *Id.*; see also discussion *infra* Section II.B.1.

³² Merrill & Francer, *supra* note 1, at 83.

³³ Helena Bottemiller Evich, *The FDA's Food Failure*, POLITICO (Apr. 8, 2022, 5:00 AM), <https://www.politico.com/interactives/2022/fda-fails-regulate-food-health-safety-hazards/> ("[R]egulating food is simply not a high priority at [FDA]."). Further compounding the issue, FDA fails to treat food and drugs as aids for human health, but rather as an industry. *Id.*

³⁴ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA).

³⁵ See *supra* text accompanying note 30.

³⁶ See Gabriela Steier, *Dead People Don't Eat: Food Governmentenomics and Conflicts-of-Interest in the USDA and FDA*, 7 J. OF ENV'T & PUB. HEALTH L. 1, 1 (2012). Commentary surrounding this conflict of interest is nothing new. Author Gabriela Steier opines, "FDA and USDA try to balance seemingly irreconcilable responsibilities: promoting agribusinesses and food production while protecting consumers from abuse by the same." *Id.* at 6. Both agencies' "public duties to protect consumers and public health clash[] with their fiduciary duties to promote American agriculture and, implicitly, Big Food's business." *Id.* at 7 (citing Kelly D. Brownell & Kenneth E. Warner, *The Perils of Ignoring History Big Tobacco Played Dirty and Millions Died. How Similar is Big Food?*, 87 MILBANK Q. 259, 276 (2009)) ("While working to promote healthy eating, the USDA at the same time has as its main objective the promotion of American agriculture (selling more food), so one goal typically prevails over the other when the two conflict.").

³⁷ See *infra* note 179 (discussing how regulatory agencies are required to conduct a cost-benefit analysis which can undervalue factors like human health); see also Centner, *supra* note 3, at 85–87 (discussing "the absence of consideration of the long-term exposure" of pesticides and how this failure "lead[s] to an underestimation of [health] damages").

focused agency has been proposed by congresspeople³⁸ and Presidents³⁹ in the past. The current proposition can be found in the Food Safety Administration Act of 2022, which would result in a split in the current FDA, turning FDA into the Federal Drug Administration (as opposed to the current Food and Drug Administration) and creating the new Food Safety Administration.⁴⁰ While this bill tasks the Food Safety Administration with “protect[ing] the public health”⁴¹ by assigning the new agency FDA’s current task of “enforcing pesticide residue tolerances,”⁴² the bill ultimately fails to account for the regulation of pesticides delegated to EPA,⁴³ as well as USDA’s role in monitoring various food products⁴⁴ and its National Organic Program.⁴⁵ Therefore, this Note argues that, in order for the Food Safety Administration Act of 2022 to effectively address the current gaps in food safety protection, it must address EPA and USDA’s current roles in the pesticide regulation process because, after all, pesticides are intrinsically laced within Americans’ everyday diets.

Part II will introduce the pesticide currently giving EPA, FDA, and USDA grief: glyphosate, as it has been linked to various health ailments despite its amelioration of agricultural advancements. Continuing with a breakdown of the current framework, Part II will also detail the origins and guiding principles of USDA, FDA, and EPA,

³⁸ See *infra* text accompanying note 152 (listing the years in which congresspeople have proposed a consolidated food safety agency bill). See, e.g., Safe Food Act of 2015, S.287, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/senate-bill/287> (proposing a consolidated Food Safety Administration in 2015); Safe Food Act of 2015, H.R.609, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/house-bill/609> (mirroring the aforementioned Senate bill in the House).

³⁹ See *infra* text accompanying notes 154–155 (detailing both President Obama’s and President Trump’s propositions for a consolidated food safety agency).

⁴⁰ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022); <https://www.congress.gov/bill/117th-congress/house-bill/8358/text> [hereinafter singularly referred to as the Food Safety Administration Act of 2022]. These two bills are companion bills with identical language introduced simultaneously on July 13, 2022, into the Senate and the House of Representatives. Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358. The Senate Bill was introduced by Senator Richard (Dick) Durbin (D–IL) with the Health, Education, Labor, and Pensions Committee, and the House Bill was introduced by Representative Rosa L. DeLauro (D–CT) with the Energy and Commerce Committee. Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

⁴¹ Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

⁴² Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

⁴³ Merrill & Francer, *supra* note 1, at 88 (citing 21 U.S.C. § 346); *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

⁴⁴ Merrill & Francer, *supra* note 1, at 90; see 21 U.S.C. §§ 601–95, 451–71 (delegating enforcement duties to USDA).

⁴⁵ *Other Federal Agencies Regulating Pesticides*, *supra* note 26. The National Organic Program was established by the Organic Foods Production Act of 1990 to regulate agricultural practices by requiring “[o]rganic producers [to] use natural processes and materials when developing farming systems—[which] contribute to soil, crop and livestock nutrition, pest and weed management, attainment of production goals, and conservation of biological diversity.” *Fact Sheet: Introduction to Organic Practices*, AGRIC. MKTG. SERV. U.S. DEP’T OF AGRIC., (Sept. 11, 2015), <https://www.ams.usda.gov/publications/content/fact-sheet-introduction-organic-practices>. As a result of its stringent requirements, the National Organic Program urges health-conscious consumers to look for the “USDA Organic Seal” to avoid synthetic substances and genetically engineered foods. *Id.* The National Organic Program has become the champion of human health within USDA. *Id.* See generally *National Organic Program*, *supra* note 19.

and how each became uniquely involved in pesticide regulation. Part II will conclude by detailing the proposed Food Safety Administration Act of 2022. Part III will then analyze why the delegation of pesticide regulation and tolerance-level monitoring to multiple agencies leads to ineffective results, and will analyze how the current proposed bill fails to address this problem, despite its essential nature to the food-safety conversation. Part IV proposes two solutions: first, key language can be added to the current proposed statute to reflect a more comprehensive approach to pesticide regulation; or second, the language already present can be utilized to encourage executive intervention to yield the same results. Part V will conclude this Note by summarizing the current inefficiencies in the pesticide-regulatory framework and highlighting how glyphosate's time in the news cycle is the perfect opportunity for the creation of a centralized agency to put food safety at the forefront of legislation.

II. BACKGROUND AND HISTORY

Pest control is nothing new;⁴⁶ however, the use of *synthetic* organic chemicals as pesticides rose in the 1930s and 1940s.⁴⁷ Dichlorodiphenyltrichloroethane (DDT) was “the first synthetic organic chemical[] to be used as an insecticide” and is “credited with saving thousands of lives during [World War II].”⁴⁸ But as the use of synthetic compounds grew, the need for regulation also increased. By the 1960s, DDT was criticized for its adverse effects on the environment and human health, but there really was no regulatory framework to address the issue.⁴⁹ The public's specific concern surrounding DDT—compounded with the public's other, general environmental concerns like air and water pollution—initiated President Nixon to form EPA in 1970.⁵⁰ Thus, “EPA's creation coincided with the culmination of the public debate over DDT[,]” and the agency's first, broad-sweeping regulatory action saw the banning of DDT and “serve[d] to enhance the activist image [the first administrator, William D. Ruckelshaus] sought to create for the agency.”⁵¹ DDT, like so many other pesticides, was an agricultural breakthrough turned public health concern.⁵² Today,

⁴⁶ The first documented use of pesticides dates back to 2500 B.C. when Mesopotamians dusted elemental sulfur and other mixtures on the plants. *The History of Pesticides, Part One*, TOTAL PEST SOLS. INC., <https://totalpestsolutionsfl.com/the-history-of-pesticides-part-one/> (last visited Jan. 4, 2023). It was not until the late 1800s that inorganic compounds and chemicals were used to control pests. *Id.* The use of these inorganic compounds and chemicals was not commonplace until the mid-1900s. *Id.*

⁴⁷ *Core Topic Briefs: History of Pesticides*, PA. ST. EXTENSION, <https://extension.psu.edu/core-topic-briefs-history-of-pesticides> (last visited Jan. 4, 2023).

⁴⁸ *Id.*

⁴⁹ Dennis C. Williams, *EPA's Formative Years, 1970–1973*, GUARDIAN, Sept. 1993, at 25.

⁵⁰ *The Origins of EPA*, *supra* note 1. It is important to note pesticides were regulated before the creation of EPA, with the first delegation of the task to USDA, because pesticides facilitate agricultural practices. See discussion *infra* Section II.B.2 (detailing how pesticide regulation has bounced from various agencies with differing missions). However, DDT galvanized the public, which in turn galvanized the President to create a comprehensive agency to focus on protecting the *environment* from harmful chemicals like pesticides. *The Origins of EPA*, *supra* note 1.

⁵¹ Williams, *supra* note 49, at 25, 27.

⁵² See, e.g., *Chlorpyrifos*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/ingredients-used-pesticide-products/chlorpyrifos> (Dec. 14, 2022) (detailing another harmful pesticide once used and now banned). After a fourteen-year litigation, the Ninth Circuit directed EPA to either “grant the petition [to revoke chlorpyrifos tolerances;] issue a final rule revoking the tolerances or modifying the tolerances if EPA could determine the tolerances were safe[;] and to modify or cancel food-use registrations for chlorpyrifos

glyphosate poses the same dilemma DDT did with the creation of EPA. Public outcry surrounding glyphosate's harmful qualities⁵³ is on the precipice of the possible creation of the new Food Safety Administration,⁵⁴ the genesis of which could prompt the banning of—or at least the more stringent regulation of—potentially harmful pesticides like glyphosate, all in the name of activism.

A. *Glyphosate: The Most Commonly Used Pesticide*

Glyphosate-based herbicides are both the most commonly *used* and, as a result, the most commonly *ingested* pesticide in the world.⁵⁵ In 1974, Monsanto, the leading corporation in agrochemical and agricultural biotechnology, began selling a glyphosate-based product (commercially known as “Roundup”) for herbicidal needs.⁵⁶ Roundup, like DDT, was a scientific breakthrough that allowed farmers and land managers to both kill weeds and speed up harvest operations while departing from dangerous natural pesticides.⁵⁷ But as a “non-selective herbicide,” glyphosate would kill all in its path, including the crop itself—until 1996 when “Roundup Ready,” or glyphosate-resistant, crops were approved for planting in the United States.⁵⁸ As a result, glyphosate could be used to kill plant-destroying viruses, insects, and weeds, without killing the actual crop.⁵⁹ Many diet staples are genetically engineered to be

under FIFRA.” *Id.* (citing *League of United Latin Am. Citizens v. Regan*, 996 F.3d 673 (9th Cir. 2021)). While EPA maintains that its established chlorpyrifos residue tolerance levels in food pose no risk, it concedes that aggregate exposure via drinking water “significantly adds to those risks.” *Chlorpyrifos*, U.S. ENV’T PROT. AGENCY, <https://www.epa.gov/ingredients-used-pesticide-products/chlorpyrifos> (Dec. 14, 2022). Therefore, EPA “revoke[d] all tolerances for chlorpyrifos,” satisfying its Ninth Circuit directive. *Id.* Other pesticides to garner public outcry include “aldrin, DDT, dieldrin, chlordane, carbofuran[,] and toxaphene.” Nathan Donley, *The USA Lags Behind Other Agricultural Nations in Banning Harmful Pesticides*, ENV’T HEALTH (June 7, 2019), <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-019-0488-0#citeas>. As of 2019, before the chlorpyrifos decision, EPA had unilaterally banned only five pesticides from use in the United States, whereas manufacturers have voluntarily removed around sixty, despite their contributions to the agricultural industry. *Id.*

⁵³ Jonathan Stempel, *U.S. EPA Ordered to Reassess Glyphosate’s Impact on Health, Environment*, REUTERS (June 17, 2022, 4:23 PM), <https://www.reuters.com/business/environment/us-agency-ordered-reassess-glyphosates-impact-health-environment-2022-06-17/>.

⁵⁴ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

⁵⁵ Centner, *supra* note 3, at 94. See Robin Mesnage & Michael N. Antoniou, *Facts and Fallacies in the Debate on Glyphosate Toxicity*, ENV’T HEALTH (Nov. 24, 2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5705608/#B3> (stating “the ubiquity of glyphosate in food, water, and air means that it is ingested on a frequent basis and regularly found in human urine at levels around [one to ten micrograms per liter]”).

⁵⁶ Charles M. Benbrook, *Trends in Glyphosate Herbicide Use in the United States and Globally*, 28 ENV’T. SCIS. EUR. 1, 1 (2016), <https://enveurope.springeropen.com/track/pdf/10.1186/s12302-016-0070-0>.

⁵⁷ *Id.*

⁵⁸ *Id.* Roundup Ready, or glyphosate-resistant, crops are a flavor of genetically modified organisms (commonly referred to as “GMOs”). *How GMO Crops Impact Our World*, U.S. FOOD & DRUG ADMIN. (Aug. 03, 2022), <https://www.fda.gov/food/agricultural-biotechnology/how-gmo-crops-impact-our-world>. GMOs have been referred to as “Frankenstein foods” because their genome has been chopped up, altered, and supplemented with other organisms’ genomes to create a more favorable byproduct, like the glyphosate-resistant qualities in Roundup Ready crops. Vasu Rustagi, *What is Frankenstein Food?*, TIMES INDIA (Mar. 17, 2007), <https://timesofindia.indiatimes.com/what-is-frankenstein-food/articleshow/1775269.cms>.

⁵⁹ *How GMO Crops Impact Our World*, *supra* note 58.

glyphosate resistant, including soybean, corn, and canola crops.⁶⁰ In turn, the use of genetic engineering has helped foods become more accessible and affordable for consumers.⁶¹ But this combined use of pesticide-resistant crops and pesticides “dramatically extend[ed] the time period during which glyphosate-based herbicides could be applied.”⁶² Now, the herbicide was not only sprayed on the weeds that were eventually discarded before human consumption, but also sprayed on the final product: the crops that were now conveniently pesticide resistant.⁶³ Thus, glyphosate exposure in humans greatly increased.⁶⁴ As of 2020, glyphosate use had risen almost fifteen-fold globally since the introduction of Roundup Ready crops in 1996.⁶⁵ While its initial use and benefits ameliorated agricultural practices and accessibility to food, increased use, as well as aggregate exposure—both first- and secondhand—have been linked to growing health concerns.

Commercial farmers and farmworkers, amateur gardeners, and school groundskeepers alike have all alleged firsthand exposure to Roundup’s main ingredient glyphosate to be the source of their cancer.⁶⁶ Cancer is both the most egregious and the most substantial health concern tied to glyphosate exposure, and, because of this strong causal link, over 100,000 lawsuits have been filed and subsequently settled by Monsanto—with 30,000 lawsuits still pending.⁶⁷ As of May 2022, Monsanto has agreed to pay around \$11 billion in settlements to the victims of this weedkiller, and as of 2023, Roundup’s new parent company, Bayer Monsanto, has agreed to replace “its glyphosate-based products in the U.S. [R]esidential Lawn & Garden market with new formulations that rely on alternative active ingredients . . . subject to a timely review by [EPA] and state counterparts.”⁶⁸ Even before Monsanto’s settlements and Roundup shelving, many communities banned the use of the herbicide to treat weeds in public parks.⁶⁹ However, firsthand exposure—from spraying Roundup to enjoying outside areas that have been treated—is only one way in which humans are exposed to glyphosate.

Secondhand exposure to glyphosate affects everyone, even if they have never owned or sprayed Roundup. While Bayer Monsanto banned glyphosate in its *residential* market,⁷⁰ the harmful pesticide is still used in the *commercial* agriculture

⁶⁰ Centner, *supra* note 3, at 96.

⁶¹ *How GMO Crops Impact Our World*, *supra* note 58.

⁶² Benbrook, *supra* note 56, at 2.

⁶³ *Id.*

⁶⁴ *Id.* See *supra* text accompanying notes 8–9.

⁶⁵ Benbrook, *supra* note 56, at 1.

⁶⁶ Mari Gaines, *Roundup Lawsuit Update*, FORBES ADVISOR, <https://www.forbes.com/advisor/legal/product-liability/roundup-lawsuit-update/> (Feb. 2, 2024, 9:43 AM) (describing non-Hodgkin’s lymphoma as the most common cancer to stem from glyphosate exposure).

⁶⁷ *Id.*

⁶⁸ *Id.* *Bayer Confirms End of Sale of Glyphosate-Based Herbicides for U.S. Lawn and Garden Market*, AGROPAGES (Aug. 2, 2021), <https://news.agropages.com/News/NewsDetail---39914.htm>.

⁶⁹ Richard J. Dolesh, *Weeding Through the Thorny Debate on Glyphosate*, NAT’L RECREATION & PARK ASS’N (Jan. 23, 2020), <https://www.nrpa.org/parks-recreation-magazine/2020/february/weeding-through-the-thorny-debate-on-glyphosate/> (“More than [fifty] U.S. cities and individual park systems . . . have banned or restricted the use of herbicides containing glyphosate.”).

⁷⁰ *Bayer Confirms End of Sale of Glyphosate-Based Herbicides*, *supra* note 68.

market, which supplies most Americans' food source.⁷¹ Most non-organic food products are sprayed with pesticides like glyphosate, leaving behind a residue that we ingest—a residue EPA approves in what it believes is a “tolerable” level.⁷² Because glyphosate functions as an antibiotic for agricultural purposes, it also acts as an antibiotic in the human gut and can inhibit the growth of beneficial bacteria.⁷³ Augmenting the development of resistant bacteria in the gut microbiome, glyphosate exposure has been linked to human gastrointestinal problems⁷⁴ and food intolerances.⁷⁵ Animal studies have also raised reproductive concerns, including decreased testosterone levels,⁷⁶ delayed puberty,⁷⁷ and abnormalities in testicular cellular structure in male rats as a result of low-level glyphosate exposure.⁷⁸ A similar group of studies conducted in female rats disclosed that low-level exposure to glyphosate

⁷¹ *Fast Facts About Agriculture & Food*, FARM BUREAU, <https://www.fb.org/newsroom/fast-facts> (last visited Mar. 15, 2023). Less than 2% of the U.S. population are “farm and ranch families” that engage in traditional farming. *Id.* Glyphosate and other pesticides were created as a response in part to the world's growing population, and with society's rejection of traditional farming and instead its reliance on the commercial agriculture market, the banning of glyphosate may have major impacts on the food chain. Muyesaier Tudi, Huada Daniel Ruan, Li Wang, Jia Lyu, Ross Sadler, Des Connell, Cordia Chu & Dung Tri Phung, *Agriculture Development, Pesticide Application and Its Impact on the Environment*, 18 INT'L J. OF ENV'T RSCH. & PUB. HEALTH, Jan. 27, 2021. Around one-third of agriculture products must be sprayed with pesticides to remain commercially available. *Id.* at 4. “Without the use of pesticides, there would be a 78% loss of fruit production, a 54% loss of vegetable production, and a 32% loss of cereal production.” *Id.* at 1. For reference, “[t]he global population is expected to increase by 2.2 billion by 2050, which means the world's farmers will have to grow about 70% more food than what is now produced.” *Fast Facts About Agriculture & Food*, FARM BUREAU, <https://www.fb.org/newsroom/fast-facts> (last visited Mar. 15, 2023).

⁷² *Fast Facts About Health Risks of Pesticides in Food*, CTR. FOR ECOGENETICS & ENV'T HEALTH (Jan. 2013), https://depts.washington.edu/ceeh/downloads/FF_Pesticides.pdf (explaining that eating is the most common way humans are exposed to pesticides).

⁷³ Michael J. Davoren & Robert H. Schiestl, *Glyphosate-Based Herbicides and Cancer Risk: A Post-IARC Decision Review of Potential Mechanisms, Policy and Avenues of Research*, 39 CARCINOGENESIS 1207, 1210 (2018). See also Jacqueline A. Barnett & Deanna L. Gibson, *Separating the Empirical Wheat from the Pseudoscientific Chaff: A Critical Review of the Literature Surrounding Glyphosate, Dysbiosis and Wheat-Sensitivity*, FRONTIERS MICROBIOLOGY (Sept. 25, 2020), <https://www.frontiersin.org/articles/10.3389/fmicb.2020.556729/full> (describing dysbiosis as the condition of an imbalanced human microbiome of gut flora and linking the condition to glyphosate exposure).

⁷⁴ See Barnett & Gibson, *supra* note 73 (listing inflammatory bowel disease and irritable bowel syndrome as gastrointestinal problems linked to glyphosate).

⁷⁵ A.H.C. Van Bruggen, M.M. He, K. Shin, V. Mai, K.C. Jeong, M.R. Finckh & J.G. Morris Jr., *Environmental and Health Effects of the Herbicide Glyphosate*, 616–17 SCI. TOTAL ENV'T 255, 264 (2018). See Anthony Samsel & Stephanie Seneff, *Glyphosate, Pathways to Modern Diseases II: Celiac Sprue and Gluten Intolerance*, NAT'L LIBR. MED. NAT'L CTR. FOR BIOTECHNOLOGY INFO. (Dec. 2013), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3945755/> (linking glyphosate to the celiac disease and gluten intolerance epidemic worldwide).

⁷⁶ Davoren & Schiestl, *supra* note 73, at 1210; Jessica Nardi, Patricia Bonamigo Moras, Carina Koeppe, Eliane Dallegrave, Mirna Bainy Leal & Luciana Grazziotin Rossato-Grando, *Prepubertal Subchronic Exposure to Soy Milk and Glyphosate Leads to Endocrine Disruption*, 100 FOOD & CHEM. TOXICOLOGY 247, 250 (2017).

⁷⁷ Davoren & Schiestl, *supra* note 73, at 1210; Nardi et al., *supra* note 76, at 250.

⁷⁸ George Anifandis, Katerina Katsanaki, Georgia Lagodoni, Christina Messina, Mara Simopoulou, Konstantinos Dafopoulos & Alexandros Daponte, *The Effect of Glyphosate on Human Sperm Motility and Sperm DNA Fragmentation*, 15 INT'L J. ENV'T. RSCH. & PUB. HEALTH 1, 2018, at 5; Folarin O. Owagboriaye, Gabriel A. Dedek, Kehinde O. Ademolu, Olarenwaju O. Olujimi, Joseph S. Ashidi & Aladesida A. Adeyinka, *Reproductive Toxicity of Roundup Herbicide Exposure in Male Albino Rat*, 69 EXPERIMENTAL & TOXICOLOGIC PATHOLOGY 461, 467 (2017).

yielded more pregnancy losses.⁷⁹ While human-based studies are not as easily conducted due to ethical reasons, one study found that glyphosate exerted negative effects on male sperm motility,⁸⁰ and another found the ingestion of drinking water with higher levels of glyphosate by women during pregnancy “correlated significantly with shortened pregnancy lengths.”⁸¹ Other, more general studies have linked glyphosate exposure to a host of inflammation-based issues, including organ damage, non-alcoholic fatty liver disease, rheumatoid arthritis, psoriasis, and multiple sclerosis, among others.⁸² Positively, however, a 2020 study found a one-week switch to an organic diet—food products of which are prohibited from being treated with glyphosate and other harmful pesticides per USDA⁸³—reduced an individual’s glyphosate body burden by 70%.⁸⁴

⁷⁹ Paola I. Ingaramo, Jorgelina Varayoud, María M Milesi, Marlise Guerrero Schimpf, Mónica Muñoz-de-Toro & Enrique H. Luque, *Effects of Neonatal Exposure to a Glyphosate-Based Herbicide on Female Rat Reproduction*, 152 REPRODUCTION 403, 413 (2016).

⁸⁰ Anifandis et al., *supra* note 78, at 6.

⁸¹ S. Parvez, R.R. Gerona, C. Proctor, M. Friesen, J.L. Ashby, J.L. Reiter, Z. Lui & P.D. Winchester, *Glyphosate Exposure in Pregnancy and Shortened Gestational Length: A Prospective Indiana Birth Cohort Study*, 17 ENV’T. HEALTH 1, 1 (2018).

⁸² A 2015 study found that chronically exposing rats to ultra-low doses of glyphosate in drinking water results in tissue and organ damage, including changes to gene expression within the liver and kidneys. *Chemical Alterations in the Body from Glyphosate-Based Herbicide During Perinatal Exposure Induce Chronic Liver Injury*, BEYOND PESTICIDES (Oct. 13, 2022), <https://beyondpesticides.org/dailynewsblog/2022/10/chemical-alterations-in-the-body-from-glyphosate-based-herbicide-during-perinatal-exposure-induces-chronic-liver-injury/>; Robin Mesnage, Matthew Arno, Manuela Costanzo, Manuela Malatesta, Gilles-Eric Seralini & Michael N. Antoniou, *Transcriptome Profile Analysis Reflects Rat Liver and Kidney Damage Following Chronic Ultra-Low Dose Roundup Exposure*, ENV’T HEALTH (Aug. 25, 2015), <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-015-0056-1>. A 2017 study, which also fed minuscule doses of glyphosate weed killer to rats, found an increased likelihood that exposed animals would develop non-alcoholic fatty liver disease. *Chemical Alterations in the Body from Glyphosate-Based Herbicide During Perinatal Exposure Induce Chronic Liver Injury*, BEYOND PESTICIDES (Oct. 13, 2022), <https://beyondpesticides.org/dailynewsblog/2022/10/chemical-alterations-in-the-body-from-glyphosate-based-herbicide-during-perinatal-exposure-induces-chronic-liver-injury/>; Robin Mesnage, George Renney, Gilles-Eric Seralini, Malcolm Ward & Michael N. Antoniou, *Multomics Reveal Non-Alcoholic Fatty Liver Disease in Rats Following Chronic Exposure to an Ultra-Low Dose of Roundup Herbicide*, SCI. REPS. (Jan. 9, 2017), <https://www.nature.com/articles/srep39328>. Research suggests glyphosate exposure increases proinflammatory cytokine proteins in the blood, especially TNFα. Richard Harth, *New Study Shows That Commonly Used Herbicide Crosses Blood-Brain Barrier*, ASU NEWS (July 28, 2022), <https://news.asu.edu/20220728-new-study-shows-commonly-used-agricultural-herbicide-crosses-bloodbrain-barrier>. Excessive iron accumulation in the body augments ROS availability and subsequent activation of proinflammatory enzymes in response. *Id.* The overexpression of these proinflammatory proteins has associations with cancer, rheumatoid arthritis, psoriasis, multiple sclerosis, and other diseases. *Id.*

⁸³ Wait, *Organic Farmers Use Pesticides?*, RODALE INST. (May 7, 2019), <https://rodaleinstitute.org/blog/wait-organic-farmers-use-pesticides/>; Miles McEvoy, *Organic 101: What the USDA Organic Label Means*, U.S. DEP’T OF AGRIC. (Mar. 22, 2012), <https://www.usda.gov/media/blog/2012/03/22/organic-101-what-usda-organic-label-means>.

⁸⁴ *Study Shows Organic Food Diet Reduces Residues of Glyphosate in Body*, BEYOND PESTICIDES (Aug. 13, 2020), <https://beyondpesticides.org/dailynewsblog/2020/08/study-shows-organic-food-diet-reduces-residues-of-glyphosate-in-body/>; Fagan et al., *supra* note 22, at 1. While this twelve-day study did not evaluate its participants’ health before and after implementing the organic diet to determine a correlation between pesticide exposure and health concerns, it cited a variety of sources that support the finding that organic diet intervention positively impacts human health:

Although much more needs to be learned regarding the health impacts associated with chronic dietary exposure to specific pesticides, longitudinal diet intervention studies have identified statistically significant improvements in health outcomes linked to diet

While WHO's categorization of glyphosate as a "probable human carcinogen" seemed to align with many of the aforementioned studies and concerns,⁸⁵ the European Food Safety Authority (EFSA) and EPA both concluded glyphosate is "not likely to be carcinogenic to humans."⁸⁶ EPA itself has a tumultuous history with pesticides, especially glyphosate, flipping between greenlighting the weed killer, to deeming it unsafe, to again claiming its established, allowable levels are safe.⁸⁷ EPA's current webpage on glyphosate maintains that there are "no risks of concern to human health from current uses of glyphosate[,] . . . no indication that children are more sensitive to glyphosate[,] . . . no evidence that glyphosate causes cancer in humans[, and] . . . no indication that glyphosate is an endocrine disruptor" based on its independent evaluation.⁸⁸ Proponents of the pesticide refute animal-tested studies, stating, "[a] typical amount of [pesticide] residue found on produce can be compared to a couple drops of water in an Olympic-sized swimming pool" and "[o]nly 2% of samples tested exceed the legal limits of pesticide residue found on produce, which still does not pose a safety issue."⁸⁹ However, these legal limits are set by EPA and enforced by FDA and USDA—agencies with competing missions which extend beyond food safety⁹⁰—which begs the question: is there a more appropriate federal agency to handle the entire regulatory process for pesticides, one that holds food safety as its primary goal?

modification. For instance, an investigation of nearly 70,000 adults reported that increased frequency of organic food consumption was correlated with reduced incidence of various types of cancer Other studies have reported decreased risk of diabetes . . . and improved fertility treatment outcomes . . . associated with higher frequency of organic food consumption.

Fagan et al., *supra* note 22, at 1 (first citing Julia Baudry, Karen E. Assmann, Mathilde Touvier, Benjamin Allès, Louise Seconda, Paule Latino-Martel, Khaled Ezzedine, Pilar Galan, Serge Hercberg, Denis Lairon & Emmanuelle Kesse-Guyot, *Association of Frequency of Organic Food Consumption with Cancer Risk*, 178 JAMA INTERNAL MED. 1597 (2018); then citing Yangbo Sun, Buyun Liu, Yang Du, Linda G Snetselaar, Qi Sun, Frank B. Hu & Wei Bao, *Inverse Association Between Organic Food Purchase and Diabetes Mellitus in US Adults*, 10 NUTRIENTS 1877 (2018); and then citing Yu-Han Chiu, Paige L. Williams, Matthew W. Gillman, Audrey J. Gaskins, Lidia Mínguez-Alarcón, Irene Souter, Thomas L. Toth, Jennifer B. Ford, Russ Hauser & Jorge E. Chavarro, *Association Between Pesticide Residue Intake from Consumption of Fruits and Vegetables and Pregnancy Outcomes Among Women Undergoing Infertility Treatment with Assisted Reproductive Technology*, 178 JAMA INTERNAL MED. 17 (2018)).

⁸⁵ *Research*, THE DETOX PROJECT, <https://detoxproject.org/glyphosate/> (last visited Jan. 3, 2023) (explaining WHO's cancer agency IARC found glyphosate to be a probable human carcinogen based on seventeen top cancer experts' views from a total of eleven countries); see *supra* text accompanying notes 66–82 (detailing the studies linking health issues, concerns, and ailments to glyphosate exposure).

⁸⁶ *Draft Human Health and Ecological Risk Assessment for Glyphosate*, U.S. ENV'T PROT. AGENCY (May 16, 2022), <https://www.epa.gov/ingredients-used-pesticide-products/draft-human-health-and-ecological-risk-assessments-glyphosate>. The European Food Safety Authority and the European Union Member States re-assessed glyphosate and concluded that "[it] is unlikely to pose a carcinogenic hazard to humans." *Glyphosate: EFSA Updates Toxicological Profile*, EUR. FOOD SAFETY AUTH. (Nov. 12, 2015), <https://www.efsa.europa.eu/en/press/news/151112>.

⁸⁷ *Glyphosate*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/ingredients-used-pesticide-products/glyphosate> (Sept. 23, 2022).

⁸⁸ *Id.*

⁸⁹ *Pesticides and Food Safety*, AVITA HEALTH SYS., <https://avitahealth.org/health-library/pesticides-and-food-safety/> (last visited Jan. 4, 2023).

⁹⁰ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA).

B. Food Safety: The Current Framework

Food safety practices have morphed throughout American history. The task of regulating food safety has been passed around and eventually split among various federal agencies with differing delegations from Congress.⁹¹ The primary federal agencies responsible for food safety today are USDA, FDA, and EPA.⁹² The origins of all three differ as their creations were in response to unique issues.⁹³ While these agencies have their own individual role in food safety, their responsibilities converge within an interesting intersection: pesticide regulation, with each agency addressing the problem from different perspectives that align with their respective guiding missions.⁹⁴

1. Origins: USDA, FDA, and EPA

The grandfather of federal food safety is USDA.⁹⁵ Created in 1862 to promote and assist agriculture in the United States, USDA was tasked with the dissemination of agricultural-based information to American people and “to procure, propagate, and distribute among the people new and valuable seeds and plants.”⁹⁶ While its initial statutory authority did not mention food safety, USDA was the obvious choice for this delegation of responsibility as America progressed and concerns about food purity grew.⁹⁷ By the 1880s, Congress passed a series of laws centered on the regulation of tainted food and drink—both imported and domestic.⁹⁸ Nearly thirty years after USDA was established in 1862, a Chemical Division of USDA was created to “enable the Secretary of Agriculture to extend and continue the investigation of ‘the adulteration of foods, drugs, and liquors.’”⁹⁹ This Chemical Division was deemed the Bureau of Chemistry (the Bureau)—the antecedent of today’s FDA—and it shared a mission with its parent, USDA: “to assist American food producers.”¹⁰⁰

This inherited delegation, however, failed to align with the Bureau’s scientific mission, leading to internal conflict. As an entity of USDA, the Bureau’s research had to promote American farming, but the zealous Dr. Harvey Wiley—Chief of the Bureau from 1883 until 1912—often ignored this assigned agricultural mission.¹⁰¹ However, the ever-looming USDA always prevailed. From 1907 to 1911, USDA “declined to

⁹¹ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA).

⁹² Merrill & Francer, *supra* note 1, at 67.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.* at 78.

⁹⁶ 7 U.S.C. § 2201.

⁹⁷ Merrill & Francer, *supra* note 1, at 78.

⁹⁸ *Id.* (citing STEPHEN WILSON, FOOD & DRUG REGULATION 10, 13–14 (1942)). Wilson’s book uses a statute that taxed margarine to regulate butter and cheese imitations as an example to demonstrate the legislature’s intent to protect farmers “as much as to protect consumers.” STEPHEN WILSON, FOOD & DRUG REGULATION 10, 13–14 (1942). Adulterated foods and drinks can be defined as “that [which are] generally, [sic.] impure, unsafe, or unwholesome.” *Adulterated Food Law and Legal Definition*, U.S. LEGAL, <https://definitions.uslegal.com/a/adulterated-food/> (last visited Jan. 4, 2023).

⁹⁹ Merrill & Francer, *supra* note 1, at 78 (citing WILSON, *supra* note 98, at 12).

¹⁰⁰ *Id.* at 79.

¹⁰¹ *Id.* at 79–80.

publish at least a dozen of the Bureau's scientific reports on such topics as the use of sulfur dioxide in fruits, corn syrup as a synonym for glucose, the use of glycerin in meat preparation, and the bacterial content of shell eggs."¹⁰² These scientific reports would hinder, rather than "assist[,] American food producers."¹⁰³

Despite this internal conflict, the Bureau remained under USDA for a time, but the need for food, as well as drug, safety increased.¹⁰⁴ In 1906, Congress passed the Pure Food and Drug Act (PFDA), establishing the Bureau's new, independent guiding principle: to protect Americans' health by "ensur[ing] the quality of its food, medicine, and cosmetics."¹⁰⁵ The Bureau's mission was often thwarted by political agendas,¹⁰⁶ and its research and PFDA-enforcement duties continued to diverge.¹⁰⁷ In 1927, Dr. Wiley's successor led the campaign to split the Bureau's research and enforcement responsibilities, renaming the Bureau to the Food, Drug, and Insecticide Administration (FDIA) and assigning it the PFDA-enforcement duties, while research was "transferred elsewhere in the department."¹⁰⁸ Three short years later, FDIA was *re*-renamed FDA—the Food and Drug Administration—and modern-day food and drug safety was born.¹⁰⁹ The Federal Food, Drug, and Cosmetic Act (FDCA) was subsequently passed in 1938, strengthening FDA's authority to regulate, thus leading to the inevitable separation of FDA and USDA due to their divergent delegations of authority.¹¹⁰ By 1940, FDA was officially removed from USDA, thus creating the first iteration of fragmentation in the field of federal food safety.¹¹¹ USDA retained meat and poultry inspection responsibilities, and the newly formed FDA retained non-meat

¹⁰² *Id.* at 80.

¹⁰³ *Id.* at 79.

¹⁰⁴ *Id.* at 79–80.

¹⁰⁵ *The Food and Drug Administration: The Continued History of Drug Advertising*, WEILL CORNELL MED. SAMUEL J. WOOD LIBR., <https://library.weill.cornell.edu/about-us/snake%C2%A0oil%C2%A0social%C2%A0media-drug-advertising-your-health/food-and-drug-administration-continued> (last visited Jan. 4, 2023). *Contra supra* text accompanying note 99 (describing the Bureau's role under USDA to investigate "the adulteration of foods, drugs, and liquors").

¹⁰⁶ Merrill & Francer, *supra* note 1, at 80. In 1908, when the Bureau threatened to ban President Roosevelt's beloved saccharin sweetener as an adulterant, the President used his influence to appoint saccharin's discoverer as chairman of the new Board of Consulting Scientific Experts. *Id.* The Board then "advised that saccharin was safe, and the [saccharin] industry engaged in heavy lobbying" resulting in USDA's "Secretary of Agriculture [keeping] the product on the market." *Id.* As the House committee later stated, "the administration of the [PFDA] began with a policy of compromise [with] the purveyors of our national food supplies." *Id.* (quoting Report of the House Committee on Expenditures in the Department of Agriculture).

¹⁰⁷ Merrill & Francer, *supra* note 1, at 80.

¹⁰⁸ John P. Swann, *FDA's Origin*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/about-fda/changes-science-law-and-regulatory-authorities/fdas-origin> (Feb. 1, 2018).

¹⁰⁹ *Id.* FDA remained under USDA until 1940 when it was reassigned to the new Federal Security Agency. *Id.* FDA has since lived within the Department of Health, Education, and Welfare (HEW) (from 1953–1968), the Public Health Service department within the HEW (from 1968–1980), and the Department of Health and Human Services, which replaced the HEW when "the education function was removed from HEW" (from 1980–current). *Id.*

¹¹⁰ *The Food and Drug Administration: The Continued History of Drug Advertising*, *supra* note 105; Merrill & Francer, *supra* note 1, at 81–83.

¹¹¹ Merrill & Francer, *supra* note 1, at 83–84.

food products, as well as drugs.¹¹² However, a major regulatory gap was looming, the filling of which was catalyzed by a cultural shift toward environmental awareness.

Another thirty years later, EPA was created in the 1970s in response to the “American conversation about protecting the environment,” which started in the 1960s.¹¹³ Among other events, U.S. space exploration led to a newfound collective appreciation of Earth as astronauts photographed the planet from space, highlighting its finite resources and resulting in a heightened urge to protect our planet.¹¹⁴ Concerns including air and water pollution, littered natural areas, pesticide regulation, and many others culminated in the creation of EPA—a “new” governmental agency that was the child of ten separate environmental programs once delegated to a variety of departments, including that of Interior, Agriculture, and Health, Education, and Welfare.¹¹⁵ According to the document entitled “Initial Organization of the EPA,” a Water Quality Office, Air Pollution Control Office, Pesticides Office, Radiation Office, Solid Wastes Office, and ten Regional Offices were established, highlighting the broad subject matter delegated to EPA.¹¹⁶

2. *Respective Pesticide Regulation: USDA, FDA, and EPA*

Pesticide regulation is a unique form of ensuring food safety. Because pesticides are used to facilitate agriculture, they fall within the chemical classification and are not *technically* a food product—even though they are ingested alongside many foods.¹¹⁷ The task of regulating these pesticides has bounced from various agencies with differing missions.¹¹⁸

The first federal pesticide law, the Insecticide Act, was passed by Congress in 1910 to regulate pesticide labeling.¹¹⁹ The then-Bureau of Chemistry both tested and set allowable pesticide residue levels for food.¹²⁰ As the Bureau was still a part of USDA in the early twentieth century, pesticide regulation heightened internal conflict within the agency.¹²¹ For example, the Bureau, acting in concern of public health safety,

¹¹² *Id.*

¹¹³ *The Origins of EPA*, *supra* note 1.

¹¹⁴ *Id.*

¹¹⁵ *Id.* See Reorganization Plan No. 3 of 1970, 35 Fed. Reg. 15623 (1970), *reprinted in* 42 U.S.C.A. § 4321 (West 1999), *and in* 84 Stat. 2086 (1970) (establishing EPA).

¹¹⁶ U.S. ENV'T PROT. AGENCY, ORDER 1110.2, INITIAL ORGANIZATION OF THE EPA (1970), <https://www.epa.gov/archive/epa/aboutepa/epa-order-11102-initial-organization-epa.html>.

¹¹⁷ See *supra* text accompanying note 55 (categorizing glyphosate as both the most commonly used and the most commonly ingested pesticide in the world).

¹¹⁸ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA).

¹¹⁹ Merrill & Francer, *supra* note 1, at 86; Act of Apr. 26, 1910, ch. 191, 36 Stat. 331.

¹²⁰ Merrill & Francer, *supra* note 1, at 86.

¹²¹ *Id.* at 86–87.

With numerous fruit growers completely unequipped for removing the spray residue, with the staff of [g]overnment inspectors available for fruit inspection far too small to exercise more than a fraction of the necessary supervision, and with [FDA], in its usual fashion far more concerned about the economic interests of the growers than about the health of the public, one must be blind to suppose that a large part of the supply of apples and pears and many other fruits and vegetables is not contaminated with far more arsenic than is legally permitted.

decreased permissible arsenic levels on exported apples, while the Secretary of Agriculture, acting on behalf of USDA, allowed domestic levels to be two and a half times higher in order to alleviate pressure from U.S. growers.¹²² By 1940, when FDA was formally removed from USDA, the Insecticide Act was left to be enforced by the latter, despite the Bureau's heavy involvement in pesticide regulation.¹²³ On the offset of the new food safety division, Congress replaced the outdated Insecticide Act with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in 1947, which continued to vest regulatory authority regarding pesticide distribution, sales, and usage in USDA.¹²⁴ However, the determination of allowable pesticide levels on foods was delegated to FDA via the aforementioned FDCA,¹²⁵ a poisonous substance act that originated in 1938, pre-split, and was amended in 1954 and 1958, post-split, to protect consumers from high, potentially poisonous levels of pesticides.¹²⁶

Because EPA's creation in 1970 was a response to public outcry over a plethora of environmental crises, including pesticide use, pesticide regulation was transferred from USDA to EPA, further tangling the web of agency overlap.¹²⁷ Simultaneously, FDA's former role to establish tolerance levels was bestowed on EPA, with FDA now overseeing the enforcement of EPA-established tolerances, in the form of testing.¹²⁸ However, it was not until the Food Quality Protection Act of 1996, a major FIFRA amendment, that the overlap between EPA's role under FIFRA and FDA's lingering role under the FDCA was addressed.¹²⁹ This 1996 amendment "established a new,

Id. (quoting ARTHUR KALLET & F.J. SCHLINK, 100,000,000 GUINEA PIGS: DANGERS IN EVERYDAY FOODS, DRUGS, AND COSMETICS 48 (1933)).

¹²² Merrill & Francer, *supra* note 1, at 87 (citing WILSON, *supra* note 98, at 63); see KALLET & SCHLINK, *supra* note 121, at 48–49) (stating "during the early part of the century, one-third of the Bureau's staff was involved in pesticide regulation").

¹²³ Merrill & Francer, *supra* note 1, at 86–87 (citing WILSON, *supra* note 98, at 64).

¹²⁴ *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA): Overview*, PACE UNIV. ELISABETH HAUB SCH. L., <https://libraryguides.law.pace.edu/c.php?g=892839&p=6420334> (June 30, 2022, 2:59 PM); Merrill & Francer, *supra* note 1, at 87.

¹²⁵ See *supra* text accompanying note 110 (detailing the Federal Food, Drug, and Cosmetic Act or the FDCA).

¹²⁶ CONG. RSCH. SERV., RL31921, PESTICIDE LAW: A SUMMARY OF THE STATUTES 4–5 (2012), <https://crsreports.congress.gov/product/pdf/RL/RL31921/19>. The 1954 amendment addressed pesticide residue tolerances in raw agricultural commodities, and the 1958 amendment addressed that in processed foods. *Id.*

¹²⁷ *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA): Overview*, *supra* note 124. The Federal Environmental Pesticide Control Act (FEPCA) was passed in 1972 to initiate this transfer. *Id.* In addition to this transfer of power, the FEPCA amended the FIFRA's purpose, focusing on curtailing pesticides' negative effects on the environment and public health. *Id.* Rachel Carson's 1962 *Silent Spring* was a catalyst for the agency's creation. *The Origins of EPA*, *supra* note 1. See generally RACHEL CARSON, *SILENT SPRING* (1962) (attacking the haphazard use of pesticides). See also *Silent Spring*, THE LIFE AND LEGACY OF RACHEL CARSON, <http://www.rachelcarson.org/SilentSpring.aspx> (last visited Jan. 4, 2023) (discussing Carson's suggestion for "a needed change in how democracies and liberal societies operated so that individuals and groups could question what their governments allowed others to put into the environment"); Williams, *supra* note 49, at 25 (detailing how EPA was created in response to public outcry over the use of the harmful pesticide DDT and its effect on the environment, including animals and wildlife, ecology, and humans: "EPA was born in the midst of the DDT storm").

¹²⁸ CONG. RSCH. SERV., *supra* note 126, at 5; *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹²⁹ CONG. RSCH. SERV., *supra* note 126, at 3, <https://crsreports.congress.gov/product/pdf/RL/RL31921/19>.

more stringent safety standard for pesticide residues on food, . . . directed EPA to reassess pesticides posing the greatest risk first, . . . mandated a periodic review of all registered pesticides at least once every [fifteen] years, and required coordination of regulations implementing FIFRA and FFDCA.”¹³⁰ Under the current framework, EPA is given sole authority to approve and register all pesticides distributed or sold in the United States.¹³¹ The FIFRA requires all pesticides to be registered if each performs its intended function without “unreasonable adverse effects on the environment.”¹³² The FIFRA identifies two risk categories when it defines “unreasonable adverse effects on the environment” to mean:

- (1) *any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or (2) a human dietary risk from residues that result from a use of a pesticide in or on any food inconsistent with the standard under section 408 of [the FDCA].*¹³³

While EPA uses both the FIFRA and the FDCA to establish allowable pesticide levels, FDA and USDA, as well as state agencies, work together to enforce EPA’s limits “prescribed for their respective product categories.”¹³⁴ FDA tests domestic and imported foods, except for meat and milk products which are delegated to USDA for testing.¹³⁵ Strangely enough, however, USDA “tests more produce than FDA.”¹³⁶ This may be a result of USDA’s role in spearheading the National Organic Program, which regulates organic food production, extending its reach beyond its non-organic meat and milk designation.¹³⁷ To summarize this confusing breakdown of responsibilities, EPA sets allowable levels of pesticides for non-organic food products,¹³⁸ with non-organic produce monitored by FDA¹³⁹ and non-organic meat and dairy monitored by USDA.¹⁴⁰ As the agency overseeing the National Organic Program, USDA monitors both organic produce and organic meat and dairy to ensure they are free from synthetic pesticides.¹⁴¹

¹³⁰ *Id.* Other notable FIFRA amendments include the Pesticide Registration Improvement Act (2007) and the Pesticide Registration Improvement Extension Act. *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA): Overview*, *supra* note 124. “FFDCA” is an alternative abbreviation for the Federal Food, Drug, and Cosmetic Act, abbreviated in this Note as the “FDCA.”

¹³¹ Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 note (Relationship to Other Federal Laws).

¹³² 7 U.S.C. § 136.

¹³³ 7 U.S.C. § 136 (bb) (emphasis added).

¹³⁴ Merrill & Francer, *supra* note 1, at 88 (2000) (citing 21 U.S.C. § 346); *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹³⁵ *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹³⁶ Gross, *supra* note 9.

¹³⁷ *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹³⁸ CONG. RSCH. SERV., *supra* note 126, at 5; *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹³⁹ CONG. RSCH. SERV., *supra* note 126, at 5; *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹⁴⁰ CONG. RSCH. SERV., *supra* note 126, at 5; *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹⁴¹ National Organic Program, *supra* note 19; McEvoy, *supra* note 83.

Throughout history, these three entities have maintained different missions, advanced different goals, and performed different functions. Agricultural advancements progressed quickly, leading to pesticide regulation falling under USDA's mission to facilitate farmers.¹⁴² Food safety remained in the background, with the creation of FDA under, and its eventual departure from, USDA.¹⁴³ Pesticides' categorization as a food contaminant allowed FDA to oversee regulation for a time, but commentators have criticized the agency's modern prioritization of drugs and medical products over the regulation of food.¹⁴⁴ Furthermore, the creation of EPA in response to public outcry caused pesticides' food safety element to be lumped into a greater concern for the environment as a whole.¹⁴⁵ EPA's creation and coinciding motivation to ban a harmful pesticide in response to public concern—while at the same time addressing ineffective protections of the environment—demonstrated the federal government's ability to consolidate an agency to “prioritize a salient issue of national importance.”¹⁴⁶ But while environmental protection interests implicate human health, a consolidated agency with the sole mission to protect and promote food safety could address the gaps in our current framework in regard to pesticide regulation.

C. *Proposed Bill: Food Safety Administration Act of 2022*

A consolidated agency to prioritize food safety is neither a new call nor a single-party issue.¹⁴⁷ The U.S. Government Accountability Office (GAO) has recommended consolidation several times before, including reporting on the successes of seven other countries' consolidated food safety agencies.¹⁴⁸ In 1997, Congress appropriated funds

¹⁴² Merrill & Francer, *supra* note 1, at 78.

¹⁴³ *Id.* at 83.

¹⁴⁴ *Evich*, *supra* note 33. Investigations have found the regulation of food is not a high priority for FDA, “where drugs and other medical products dominate, both in budget and bandwidth.” *Id.* Former FDA commissioners have acknowledged these failures, with Stephen Ostroff stating “[t]he food program is on the back burner. To me, that’s problem [number one].” *Id.*

¹⁴⁵ *See The Origins of EPA*, *supra* note 1.

¹⁴⁶ Emily M. Broad Leib & Margot J. Pollans, *The New Food Safety*, 107 CAL. L. REV. 1173, 1244 (2019).

¹⁴⁷ *See infra* text accompanying notes 154–155 (detailing both President Obama’s and President Trump’s propositions for a consolidated food safety agency).

¹⁴⁸ *See generally* U.S. GOV’T ACCOUNTABILITY OFF., GAO/T-RCED-94-223, A UNIFIED, RISK-BASED FOOD SAFETY SYSTEM NEEDED (1994), <https://www.gao.gov/assets/t-rced-94-223.pdf> (recommending consolidation in 1994); U.S. GOV’T ACCOUNTABILITY OFF., GAO/T-RCED-99-256, U.S. NEEDS A SINGLE AGENCY TO ADMINISTER A UNIFIED, RISK-BASED INSPECTION SYSTEM (1999), <https://www.gao.gov/assets/t-rced-99-256.pdf> (recommending consolidation in 1999); U.S. GOV’T ACCOUNTABILITY OFF., GAO-02-47T, FUNDAMENTAL CHANGES NEEDED TO ENSURE SAFE FOOD (2001), <https://www.gao.gov/assets/gao-02-47t.pdf> (recommending consolidation in 2001); U.S. GOV’T ACCOUNTABILITY OFF., GAO-04-588T, FUNDAMENTAL RESTRUCTURING IS NEEDED TO ADDRESS FRAGMENTATION AND OVERLAP (2004), <https://www.gao.gov/assets/gao-04-588t.pdf> (recommending consolidation in 2004); U.S. GOV’T ACCOUNTABILITY OFF., GAO-05-213, FEDERAL AGENCIES SHOULD PURSUE OPPORTUNITIES TO REDUCE OVERLAP AND BETTER LEVERAGE RESOURCES (2005), <https://www.gao.gov/assets/gao-05-213.pdf> (recommending consolidation in 2005); U.S. GOV’T ACCOUNTABILITY OFF., GAO-11-289, FOOD SAFETY WORKING GROUP IS A POSITIVE FIRST STEP BUT GOVERNMENTWIDE PLANNING IS NEEDED TO ADDRESS FRAGMENTATION (2011), <https://www.gao.gov/assets/gao-11-289.pdf> (recommending consolidation in 2011); U.S. GOV’T ACCOUNTABILITY OFF., GAO-17-74, A NATIONAL STRATEGY IS NEEDED TO ADDRESS FRAGMENTATION IN FEDERAL OVERSIGHT (2017), <https://www.gao.gov/assets/gao-17-74.pdf> (recommending consolidation in 2017). *See also* U.S. GOV’T ACCOUNTABILITY OFF., GAO-05-212, EXPERIENCES OF SEVEN COUNTRIES IN CONSOLIDATING THEIR FOOD SAFETY SYSTEMS (2005), <https://www.gao.gov/assets/gao-05-212.pdf> (reporting the experiences of

to the National Academy of Sciences (NAS) to examine what is needed for an effective food safety system, resulting in a panel that made various recommendations to improve the U.S.'s food safety system.¹⁴⁹ These recommendations included advising Congress to statutorily form “a unified and central framework for managing federal food safety programs, one that is headed by a single official and which has the responsibility and control of resources for all federal food safety activities, including outbreak management, standard[]setting, inspection, monitoring, surveillance, risk assessment, enforcement, research, and education.”¹⁵⁰ The NAS panel reasoned that the U.S. government should have “one central voice at the federal level which is responsible for food safety and has the resources to implement science-based policy in all federal activities related to food safety.”¹⁵¹

At the congressional level, Representative Rosa DeLauro (D-CT) and Senator Richard (Dick) Durbin (D-IL) have proposed legislation to consolidate food safety efforts into a new, focused federal governmental agency in 1999, 2004, 2005, 2007, and 2015¹⁵² to deal with the “[fifteen] different federal agencies that implement [thirty] different food-safety laws” by creating a new federal food safety agency that would combine FDA’s and USDA’s functions.¹⁵³ President Obama’s 2016 fiscal year budget proposed the same solution, but with a single agency under the Department of Health and Human Services.¹⁵⁴ Again in 2018, President Trump suggested the same type of new agency, this time deemed the Federal Food Safety Agency that would be housed within USDA.¹⁵⁵

Most recently, the same aforementioned congresspeople have reenergized this initiative, this time under the bill titled Food Safety Administration Act of 2022.¹⁵⁶ This act proposes the creation of the Food Safety Administration to take over all food

seven countries—including Canada, Denmark, Germany, Ireland, the Netherlands, New Zealand, and the United Kingdom—in consolidating their food safety systems).

¹⁴⁹ Merrill & Francer, *supra* note 1, at 122–23.

¹⁵⁰ *Id.* at 123. “While it stopped short of recommending a single food safety agency, the panel emphasized that a successful food safety system requires unified leadership under a single official who can direct all federal food safety efforts and deploy resources as risks to food require.” *Id.* (citing INST. OF MED. & NAT’L RSCH. COUNCIL, ENSURING SAFE FOOD FROM PRODUCTION TO CONSUMPTION 12 (1998)).

¹⁵¹ Merrill & Francer, *supra* note 1, at 122 (quoting INST. OF MED. & NAT’L RSCH. COUNCIL, *supra* note 150, at 7 (1998)).

¹⁵² Press Release, U.S. Rep. Rosa DeLauro, DeLauro, Durbin Introduce Legislation Establishing Single Food Agency (Jan. 28, 2015), <https://delauro.house.gov/media-center/press-releases/delauro-durbin-introduce-legislation-establishing-single-food-agency>.

¹⁵³ Josh Long, *Legislation Introduced in Congress to Create Consolidated Food-Safety Agency*, NATURAL PRODS. INSIDER (Jan. 29, 2015), <https://www.naturalproductsinsider.com/regulatory/legislation-introduced-congress-create-consolidated-food-safety-agency> (describing the motivation for the Safe Food Act of 2015).

¹⁵⁴ Lydia Zuraw, *Obama’s 2016 Budget: \$1.6 Billion for Food Safety, Single Food-Safety Agency*, FOOD SAFETY NEWS (Feb. 3, 2015), <http://www.foodsafetynews.com/2015/02/obama-2016-budget-includes-1-6-billion-for-food-safety/#.VVuHKRcmbW4>.

¹⁵⁵ U.S. Exec. Off. of the President of the U.S., *Delivering Government Solutions in the 21st Century: Reform Plan and Reorganization Recommendations* 32–33 (2018), <https://www.whitehouse.gov/wp-content/uploads/2018/06/Government-Reform-and-Reorg-Plan.pdf>.

¹⁵⁶ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

safety responsibilities currently overseen by FDA.¹⁵⁷ In a press release announcing the bill, Representative DeLauro stated, “Americans deserve to know the food on their plates is safe to eat.”¹⁵⁸ She continued by stating, “[f]ood safety is currently a second-class citizen at the [FDA] . . . Right now, there are no food policy experts in charge of food safety at . . . FDA.”¹⁵⁹ These congresspeople are galvanized primarily by product contamination leading to foodborne illnesses threatening the nation’s food supply, but also are galvanized by FDA’s “failure to properly recognize the dangers of prescription opioids [and] failure to protect children from e-cigarette products,” both of which highlight the agency’s “unwilling[ness] or [inability] to use their authority to protect Americans from preventable illness and death.”¹⁶⁰ If the current FDA cannot properly handle health issues resulting from the misuse of prescription drugs or other substances, it certainly does not have the bandwidth to properly handle those resulting from food—its other named responsibility. This bill would also rename the current FDA as the Federal Drug Administration and allow that agency to focus its efforts and funding on pharmaceuticals and medical devices.¹⁶¹

The statutory mandate that would guide this new agency is a mission “to protect the public health by ensuring the safety of food, preventing foodborne illness, maintaining safety reviews and reassessments of food additives, *enforcing pesticide residue tolerances*, [and] improving the surveillance of foodborne pathogens.”¹⁶² Buttressed by recent studies correlating pesticide exposure and ingestion with health issues,¹⁶³ this bill assigns FDA’s role to “monitor[] and enforce[] pesticide residue tolerances in or on foods” to the new Food Safety Administration.¹⁶⁴ However, there is still a major gap—failing to account for the respective roles of EPA and USDA in pesticide regulation—the result of which is still splintered responsibilities. Without addressing EPA’s role in establishing pesticide tolerance levels,¹⁶⁵ USDA’s National Organic

¹⁵⁷ Press Release, U.S. Sen. Dick Durbin, Durbin, Blumenthal, DeLauro Introduce Food Safety Administration Act (July 13, 2022), <https://www.durbin.senate.gov/newsroom/press-releases/durbin-blumenthal-de-lauro-introduce-food-safety-administration-act> [hereinafter Durbin, Blumenthal, DeLauro Introduce Food Safety Administration Act].

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358; Durbin, Blumenthal, DeLauro Introduce Food Safety Administration Act, *supra* note 157.

¹⁶² Food Safety Administration Act of 2022, S.4520 (emphasis added); Food Safety Administration Act of 2022, H.R. 8358 (emphasis added).

¹⁶³ See *supra* text accompanying notes 66–82 (detailing the studies linking health issues, concerns, and ailments to glyphosate exposure). See also *supra* text accompanying notes 67–68 (detailing the subsequent litigation and settlements to validate these health-issue theories).

¹⁶⁴ Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

¹⁶⁵ Merrill & Francer, *supra* note 1, at 88 (citing 21 U.S.C. § 346); *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

Program,¹⁶⁶ or USDA's non-organic meat and dairy pesticide monitoring initiative,¹⁶⁷ this 2022 proposed bill is deficient in confronting a major threat to food safety, pesticides, and will ultimately be ineffective in resolving human health issues, like those posed by glyphosate.

III. ANALYSIS

The current pesticide regulatory scheme constrains each agency (USDA, FDA, and EPA) to operate independently, leading to overlapping responsibilities and yielding ineffective practices and results.¹⁶⁸ Furthermore, none of these agencies are tasked with ensuring food safety or protecting human health.¹⁶⁹ Instead, these concerns are tangential focuses, leading to a disregard for food safety and human health. While the Food Safety Administration Act of 2022 is set to address this issue, it ultimately fails to completely address pesticide regulation as a whole, a topic that is integral to food safety.¹⁷⁰ If pesticide regulations are to be made with human health at the forefront of the decision-making process, the task must be delegated to a singular agency responsible for food safety, as opposed to the current framework which splits responsibilities among three agencies.

A. Ineffectiveness: Overlapping Agencies

It does not take a scientist to understand that overlapping responsibility is ineffectiveness at its finest. For the past four decades, GAO has included the "fragmented federal oversight of food safety in its 'High Risk List' of 'agencies . . . that are high risk due to their vulnerabilities to fraud, waste, abuse, and mismanagement, or are most in need of transformation.'"¹⁷¹ This "fragmented federal food safety oversight system . . . has caused inconsistent oversight, ineffective coordination, and inefficient use of resources."¹⁷² Just as this Note contends, GAO acknowledges "legislation is likely to be necessary in order to effectively address [the]

¹⁶⁶ *Other Federal Agencies Regulating Pesticides*, *supra* note 26. See generally *National Organic Program*, *supra* note 19 (describing the qualifications for a product to receive the "USDA Organic Seal," including being free from synthetic pesticides).

¹⁶⁷ Merrill & Francer, *supra* note 1, at 90; see 21 U.S.C. §§ 601–95, 451–71 (delegating enforcement duties to USDA).

¹⁶⁸ See discussion *supra* Section II.B.2 (attempting to untangle the respective pesticide-regulation duties of USDA, FDA, and EPA).

¹⁶⁹ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA). See *supra* text accompanying note 162 (discussing the new Food Safety Administration's mission "to protect the public health").

¹⁷⁰ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

¹⁷¹ Leib & Pollans, *supra* note 146, at 1243 (quoting U.S. GOV'T ACCOUNTABILITY OFF., GAO-17-317, HIGH-RISK SERIES: PROGRESS ON MANY HIGH-RISK AREAS, WHILE SUBSTANTIAL EFFORTS NEEDED ON OTHERS 389 (2017), <http://www.gao.gov/assets/690/682765.pdf>) (noting food safety has been on the High-Risk List since 2007).

¹⁷² U.S. GOV'T ACCOUNTABILITY OFF., GAO-17-317, HIGH-RISK SERIES: PROGRESS ON MANY HIGH-RISK AREAS, WHILE SUBSTANTIAL EFFORTS NEEDED ON OTHERS 389 (2017), <http://www.gao.gov/assets/690/682765.pdf>.

area” of federal oversight of food safety.¹⁷³ Many critics of the current system cite the ridiculous divide in responsibilities, including “FDA regulat[ing] frozen *cheese* pizza, but . . . USDA regulat[ing] frozen *pepperoni* pizza.”¹⁷⁴ Proponents of the current Food Safety Administration legislation use the decrease in FDA-conducted food facility inspections, which has fallen by almost 60%, to justify the creation of a new, more focused agency.¹⁷⁵ And as FDA focuses primarily on drugs and medical devices, food safety advocacy within the agency has dwindled.¹⁷⁶ Coupled with Congress’ heightened focus on “pharma and tobacco and other issues before FDA,” the agency’s decisions regarding food safety, or lack thereof, are rarely met by congressional scrutiny.¹⁷⁷

Regarding pesticides, EPA, FDA, and USDA’s roles are technically clear, albeit unnecessarily confusing. The ultimate power lies with EPA, which sets the allowable limits for pesticides;¹⁷⁸ however, the pesticide registration process itself is problematic. First, EPA implements a cost-benefit analysis, weighing a pesticide’s adverse effects on the environment, including human health, against the overall benefits of its use¹⁷⁹—a formula that seems inhumane in the face of human health

¹⁷³ *Id.*

¹⁷⁴ Leib & Pollans, *supra* note 146, at 1243 (emphasis added) (citing Lisa Heinzerling, *Divide and Confound: The Relationship Between Transparency, Public Health, and Regulatory Authority in the National Food System*, in *FOOD AND DRUG REGULATION IN AN ERA OF GLOBALIZED MARKETS* 125, 126 (Sam Halabi ed., 2015)).

¹⁷⁵ Todd Runestad, *Bills Would Relieve FDA of Supplements Oversight*, NATURAL PRODS. INSIDER (July 21, 2022), <https://www.naturalproductsinsider.com/regulatory/bills-would-relieve-fda-supplements-oversight>.

¹⁷⁶ Evich, *supra* note 33.

¹⁷⁷ *Id.* During his first term, a Trump-era reorganization of FDA’s food safety division “left the decision-making structure unclear. *Id.* A former senior FDA official stated, “[i]t’s a structure that’s designed to fail You couldn’t come up with a better way to keep the program from working well.” *Id.* It is unclear whether this power structure was still in place under the Biden Administration; however, it demonstrates how politicized agencies and their agendas can turn. *Id.*

¹⁷⁸ Merrill & Francer, *supra* note 1, at 88 (citing 21 U.S.C. § 346a); *Other Federal Agencies Regulating Pesticides*, *supra* note 26.

¹⁷⁹ Centner, *supra* note 3, at 71. A cost-benefit analysis is required for federal agencies with regulatory power. Robert W. Hahn & Cass R. Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis* (John M. Olin Program in L. and Econ., Working Paper No. 150, 2002), https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1009&context=law_and_economics (first citing Exec. Order No. 12,291, 3 C.F.R. 127 (1982) (requiring regulations to pass a cost-benefit test); then citing Exec. Order No. 12,498, 3 C.F.R. 323 (1986) (requiring agencies to submit an annual regulatory plan and to adhere to cost-benefit principles); and then citing Exec. Order No. 12,866, 3 C.F.R. 638 (1994) (requiring agencies to assess all costs and benefits of regulatory alternatives)). This Note does not propose to abolish the cost-benefit analysis associated with pesticide registration prescribed by FIFRA. See 7 U.S.C. § 136. It merely echoes other scholars’ sentiment that “FIFRA undervalues human health” in its overall analysis. Centner, *supra* note 3, at 123. Delegating this regulatory power to the proposed Food Safety Administration would possibly mitigate this issue because its focus is that of human health, rather than EPA’s environmental focus. While human health costs are not easily quantifiable, the Biden–Harris Administration addressed the importance of agencies considering non-monetary effects, even if difficult. Press Release, Off. of Mgmt. & Budget, Off. of the President, Biden–Harris Administration Releases Final Guidance to Improve Regulatory Analysis (Nov. 9, 2023), <https://www.whitehouse.gov/omb/briefing-room/2023/11/09/biden-harris-administration-releases-final-guidance-to-improve-regulatory-analysis/>. Under this Administration, the Office of Information and Regulatory Affairs updated “Circular A-4, the government-wide guidance on regulatory analysis[.]” to reemphasize the 1994 Executive Order, which detailed how agencies were to analyze the costs and benefits of regulatory alternatives: “agencies should assess ‘qualitative measures of cost and benefits that are difficult to quantify, but nevertheless essential to

issues. Furthermore, pesticides are originally registered based on manufacturer-funded, typically biased research that skews in favor of a pesticide categorized as an agricultural aid rather than a human harm.¹⁸⁰ Lastly, the tolerance level analysis disregards the culminating effect of exposure to multiple, potentially harmful pesticides.¹⁸¹ When viewed in a vacuum, each pesticide seems harmless, and aggregate exposure is disregarded.¹⁸² And when each agency is viewing each pesticide in a vacuum, the potential for “fraud, waste, abuse, and mismanagement” is ripe.¹⁸³ FDA and USDA, on the other hand, implement EPA’s rules, which seems counterintuitive considering how closely each agency’s mission is linked with food safety—ignoring FDA’s well-known disregard of its “Food” duties as prescribed in its name.¹⁸⁴ This fragmentation has caused many to demand the formation of a new food-focused federal agency, and the public outcry around glyphosate¹⁸⁵ is the perfect opportunity to garner support and congressional execution.

consider.” *Id.* (quoting Exec. Order No. 12866, 3 C.F.R. 638 (1994)). However, “despite this guidance, agencies have at times conflated what cannot be monetized with what is insignificant, speculative, or unimportant.” *Id.* The revised Circular A-4 clarifies “[e]ven when an agency cannot put a dollar value on dignity, it is still a real and important regulatory benefit.” *Id.* To consider these factors the revised Circular A-4 advises the following:

[A]gencies [should] include a summary table of all important non-monetized effects, and a brief description of why they are important. By advising agencies to present this in a prominent place, Circular A-4 can help ensure that policymakers and the public give appropriate consideration to important non-monetized effects. And the revised Circular A-4 provides much more guidance on how agencies can analyze the monetized and non-monetized effects of a regulation in a structured fashion.

Id.; see also OFF. OF MGMT. & BUDGET, EXEC. OFF. OF THE PRESIDENT, CIRCULAR NO. A-4 (2023) (detailing how to analyze monetized and non-monetized benefits and costs). Thus, this directive would be more appropriate to guide an agency like the Food Safety Administration as it could use its expertise to regulate pesticides with a keen focus on the safety of food—the primary source of [pesticide] exposure.” Fagan et al., *supra* note 22, at 6. See generally *supra* text accompanying note 22.

¹⁸⁰ Centner, *supra* note 3, at 78.

¹⁸¹ *Id.* at 87.

¹⁸² *Id.*

¹⁸³ U.S. GOV’T ACCOUNTABILITY OFF., GAO-17-317, PROGRESS ON MANY HIGH-RISK AREAS, WHILE SUBSTANTIAL EFFORTS NEEDED ON OTHERS 389 (2017), <http://www.gao.gov/assets/690/682765.pdf>.

¹⁸⁴ Evich, *supra* note 33. Reportedly, there is “a long[-]running joke among [FDA] officials: [t]he ‘F’ in FDA is silent.” *Id.*

¹⁸⁵ Shortly after EPA and EFSA’s parallel determinations—competing with that of WHO—regarding glyphosate’s safety in 2015, the media reported in 2017 that Roundup had been found in diet staples, including oatmeal and baby food. Carey Gillam, *FDA Tests Confirm Oatmeal, Baby Foods Contain Residues of Monsanto Weed Killer*, HUFFINGTON POST (Dec. 6, 2017), http://www.huffingtonpost.com/carey-gillam/fda-tests-confirm-oatmeal_b_12252824.html. This led to public outcry and countless petitions, particularly from parents who were scared to feed their babies harmful toxins and farmers who had first-hand exposure from spraying the pesticides. See generally *Support Bans Against Toxic Pesticides in the U.S.*, INTO WEEDS, <https://www.intotheweedsimpact.com/take-action-usa> (last visited Jan. 4, 2023) (petitioning for the bans of toxic pesticides in the United States). EWG stoked the flames of hysteria when it released its composite of independent-laboratory tests that found glyphosate to be present in forty-three out of forty-five most common breakfast cereals. Michael Grothaus, *Ingredient from Monsanto’s Cancer-Causing Weed Killer Found in Children’s Cereals*, FAST CO. (Aug. 15, 2018), <https://www.fastcompany.com/90219199/ingredient-from-monsantos-cancer-causing-weed-killer-found-in-childrens-cereals> (citing *Roundup for Breakfast, Part 2: In New Tests, Weed Killer Found in All Kids’ Cereals Sampled*, ENV’T WORKING GRP., <https://www.ewg.org/news-insights/news-release/2018/10/roundup-breakfast-part-2-new-tests-weed-killer-found-all-kids> (Oct. 24, 2018)).

USDA's National Organic Program also plays a lead role in food safety.¹⁸⁶ The responsibility for ensuring certified organic food is free from harmful synthetic pesticides should be given to an agency with a mission "to promote public health" rather than to one tasked to promote agriculture and facilitate farmers.¹⁸⁷ The benefits of organic certification are not for farmers; conversely, it can make their jobs more difficult as they have to obtain rigorous certification for their farm, maintain certain standards, and use alternative pest-control means, the results of which can yield lower crops and fewer profits.¹⁸⁸ While this program prioritizes human health, it either puts an economic burden on organic farmers willing to comply¹⁸⁹ or excludes conventional farmers, making USDA—and its guiding mission to help farmers—an unfit home for the National Organic Program.¹⁹⁰ Therefore, shifting the National Organic Program to the new Food Safety Administration would alleviate that conflict of interest for USDA and ensure that the National Organic Program is tailored to ameliorating human health. Housing USDA's National Organic Program,¹⁹¹ along with EPA's tolerance-setting power¹⁹² and FDA's and USDA's monitoring responsibilities,¹⁹³ under one food-safety-focused roof will in turn streamline the pesticide regulation process.

B. Proposed Bill's Gaps: Pesticide Regulation

The statutory mandate guiding the proposed Food Safety Administration is "to protect the public health."¹⁹⁴ The main focus is the impact on human health, rather than a product or industry—like food, agriculture, pharmaceutical, or even the environment—where human health is only tangentially implicated.¹⁹⁵ Because food safety affects every American, and because health should be the utmost concern for individuals and their governmental representatives, the call to form this new agency is

¹⁸⁶ *Other Federal Agencies Regulating Pesticides*, *supra* note 26. See generally *National Organic Program*, *supra* note 19 (describing the qualifications for a product to receive the "USDA Organic Seal," including being free from synthetic pesticides).

¹⁸⁷ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>; see 7 U.S.C. § 2201 (describing USDA's mission "to procure, propagate, and distribute among the people new and valuable seeds and plants").

¹⁸⁸ *Why is Organic Farming So Difficult?*, CORBIN HILL FOOD PROJECT (July 29, 2020), <https://corbinhill-foodproject.org/2020/07/29/2020-7-29-why-is-organic-farming-so-difficult/>.

¹⁸⁹ Meredith Rosenbluth, *5 Reasons Organic Food is More Expensive*, NAVITAS ORGANICS (Jan. 7, 2020), <https://navitasorganics.com/blogs/navitaslife/5-reasons-organic-food-is-more-expensive> ("To put it simply: it costs more to run an organic farm than a conventional one. From natural fertilizers to organic animal feed, the prices of materials used in organic farming far exceed the prices of synthetic, chemical[,] and GMO materials used on conventional farms.").

¹⁹⁰ See 7 U.S.C. § 2201 (describing USDA's mission "to procure, propagate, and distribute among the people new and valuable seeds and plants").

¹⁹¹ *National Organic Program*, *supra* note 19.

¹⁹² Merrill & Francer, *supra* note 1, at 87–88.

¹⁹³ *Id.*

¹⁹⁴ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

¹⁹⁵ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA).

a valiant one. However, the proposed bill fails to address the effects of the registration of harmful pesticides on human health head-on, presumably still punting the tolerance-level responsibility to EPA.¹⁹⁶ This bill also fails to mention USDA's current role in food safety.¹⁹⁷ While this law aims to consolidate fifteen agencies and over thirty laws that currently govern food safety,¹⁹⁸ it only mentions the reorganization of the current FDA, resulting in a new FDA, or Federal *Drug* Administration, and the new Food Safety Administration.¹⁹⁹ This bill is a step in the right direction for food safety. However, allowing EPA and USDA to continue their role in food safety only adds to the "fragmentation" detailed by GAO.²⁰⁰

To address this fragmentation of roles, GAO has consistently suggested the consolidation of federal food safety functions to reduce overlap.²⁰¹ While GAO reports are neither binding nor obligatory for Congress to follow, its extensive internal review process highlights the inefficiencies of Congress' functions and use of tax dollars and yields recommendations that are often implemented.²⁰² Despite GAO's success rate, the Food Safety Administration Act of 2022 fails to take its consolidation

¹⁹⁶ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

¹⁹⁷ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>. This bill states the new Food Safety Administration would "monitor[] and enforce[] . . . pesticide residue tolerances in or on foods," presumably still allowing EPA to establish tolerance levels. *Id.* USDA's National Organic Program and its role in monitoring and enforcing pesticide levels set by EPA for meat and dairy products are not mentioned in this bill; again, these duties would primarily remain with USDA as this bill only aims to detangle the Food and Drug aspects of FDA. *Id.* However, this bill's goal "to protect the public health" necessitates moving EPA's and USDA's jobs under the new Food Safety Administration. *Id.*

¹⁹⁸ Long, *supra* note 153.

¹⁹⁹ The new FDA would still "regulate drugs, cosmetics, devices, biological products, color additives, and tobacco," whereas the new Food Safety Administration would regulate the areas prescribed by the bill, including "ensuring the safety of food, preventing foodborne illness, maintaining safety reviews and reassessments of food additives, enforcing pesticide residue tolerances, [and] improving the surveillance of foodborne pathogens." Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²⁰⁰ See *supra* text accompanying notes 171–173 (describing the inefficiencies as a result of the governmental agencies overlapping in responsibilities).

²⁰¹ U.S. GOV'T ACCOUNTABILITY OFF., GAO-05-213, OVERSIGHT OF FOOD SAFETY ACTIVITIES: FEDERAL AGENCIES SHOULD PURSUE OPPORTUNITIES TO REDUCE OVERLAP AND BETTER LEVERAGE RESOURCES 3 (2005), <https://www.gao.gov/assets/gao-05-213.pdf>. See also U.S. GOV'T ACCOUNTABILITY OFF., GAO-04-588T, FEDERAL FOOD SAFETY AND SECURITY SYSTEM: FUNDAMENTAL RESTRUCTURING IS NEEDED TO ADDRESS FRAGMENTATION AND OVERLAP (2004), <https://www.gao.gov/assets/gao-04-588t.pdf> (recommending consolidation in 2004); U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-180, FEDERAL FOOD SAFETY OVERSIGHT: ADDITIONAL ACTIONS NEEDED TO IMPROVE PLANNING AND COLLABORATION (2014), <https://www.gao.gov/assets/gao-15-180.pdf> (recommending consolidation in 2014); U.S. GOV'T ACCOUNTABILITY OFF., GAO-17-74, FOOD SAFETY: A NATIONAL STRATEGY IS NEEDED TO ADDRESS FRAGMENTATION IN FEDERAL OVERSIGHT (2017), <https://www.gao.gov/assets/gao-17-74.pdf> (recommending consolidation in 2017).

²⁰² *Why Do GAO Recommendations Get Implemented?*, GAO: WATCHBLOG (May 9, 2014), <https://www.gao.gov/blog/2014/05/09/why-do-gao-recommendations-get-implemented>. See U.S. GOV'T ACCOUNTABILITY OFF., GAO-23-900398, PERFORMANCE AND ACCOUNTABILITY REPORT, FISCAL YEAR 2022 iv (2022), <https://www.gao.gov/assets/gao-23-900398.pdf> (reporting Congress' implementation rate of 77% of GAO's recommendations for the 2022 fiscal year).

recommendation.²⁰³ In the past, consolidation critics have responded to GAO's recommendation and have seen no need to streamline the process.²⁰⁴ In contrast, supporters believed that consolidation "would improve the effectiveness and efficiency of the system and ensure that food safety inspections are based on the best available science."²⁰⁵ Both "[p]roponents and opponents . . . cited several roadblocks to consolidation, including the need to maintain food security during any transition," leading GAO to recommend solutions beyond consolidation, including "tak[ing] practical steps to reduce overlap and duplication and thereby free resources for more effective oversight of food safety" within the current overlapping statutory framework.²⁰⁶ When the overlapping *pesticide* responsibilities were specifically evaluated, GAO reported that "EPA officials said that the overlap in data collection and analysis adds value [to the overall process] because USDA's data comes from a well-controlled survey of food samples taken at the wholesale level, and FDA's data helps fill in the gaps with samples of food at different points in the distribution chain."²⁰⁷ However, GAO maintains its recommendation of consolidation, buttressing its internal findings with the results of consolidated food safety systems in other countries.²⁰⁸ While the Food Safety Administration Act of 2022 aims to consolidate

²⁰³ U.S. GOV'T ACCOUNTABILITY OFF., GAO-05-213, OVERSIGHT OF FOOD SAFETY ACTIVITIES: FEDERAL AGENCIES SHOULD PURSUE OPPORTUNITIES TO REDUCE OVERLAP AND BETTER LEVERAGE RESOURCES 3 (2005), <https://www.gao.gov/assets/gao-05-213.pdf>. See also U.S. GOV'T ACCOUNTABILITY OFF., GAO-04-588T, FEDERAL FOOD SAFETY AND SECURITY SYSTEM: FUNDAMENTAL RESTRUCTURING IS NEEDED TO ADDRESS FRAGMENTATION AND OVERLAP (2004), <https://www.gao.gov/assets/gao-04-588t.pdf> (recommending consolidation in 2004); U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-180, FEDERAL FOOD SAFETY OVERSIGHT: ADDITIONAL ACTIONS NEEDED TO IMPROVE PLANNING AND COLLABORATION (2014), <https://www.gao.gov/assets/gao-15-180.pdf> (recommending consolidation in 2014); U.S. GOV'T ACCOUNTABILITY OFF., GAO-17-74, FOOD SAFETY: A NATIONAL STRATEGY IS NEEDED TO ADDRESS FRAGMENTATION IN FEDERAL OVERSIGHT (2017), <https://www.gao.gov/assets/gao-17-74.pdf> (recommending consolidation in 2017).

²⁰⁴ U.S. GOV'T ACCOUNTABILITY OFF., GAO-05-213, OVERSIGHT OF FOOD SAFETY ACTIVITIES: FEDERAL AGENCIES SHOULD PURSUE OPPORTUNITIES TO REDUCE OVERLAP AND BETTER LEVERAGE RESOURCES 7 (2005), <https://www.gao.gov/assets/gao-05-213.pdf>.

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 7, 40.

²⁰⁷ *Id.* at 22. But see U.S. GOV'T ACCOUNTABILITY OFF., GAO-05-212, FOOD SAFETY: EXPERIENCE OF SEVEN COUNTRIES IN CONSOLIDATING THEIR FOOD SAFETY SYSTEMS 5 (2005), <https://www.gao.gov/assets/gao-05-212.pdf> (providing as an example "the Netherlands officials [who] said that reduced duplication in food safety inspections would likely result in decreased food safety spending and that they anticipate savings from an expected 25[%] reduction in administrative and management personnel").

²⁰⁸ See U.S. GOV'T ACCOUNTABILITY OFF., GAO/RCED-99-80, FOOD SAFETY: EXPERIENCES OF FOUR COUNTRIES IN CONSOLIDATING THEIR FOOD SAFETY SYSTEMS (1999), <https://www.gao.gov/assets/rced-99-80.pdf> (analyzing the consolidated food safety systems in Canada, Denmark, Great Britain, and Ireland); U.S. GOV'T ACCOUNTABILITY OFF., GAO-05-212, FOOD SAFETY: EXPERIENCE OF SEVEN COUNTRIES IN CONSOLIDATING THEIR FOOD SAFETY SYSTEMS (2005), <https://www.gao.gov/assets/gao-05-212.pdf> (analyzing the consolidated food safety systems in Canada, Denmark, Germany, Ireland, the Netherlands, New Zealand, and the United Kingdom). "These improvements include less overlap in inspections, greater clarity in responsibilities, and more consistent or timely enforcement of food safety laws and regulations." *Id.* The seven countries reviewed were "high-income countries where consumers have very high expectations for food safety," despite all being "smaller than the United States." *Id.* These similarities, as well as the countries' success in consolidation, led GAO to conclude "that the countries' experiences in consolidating food safety systems can offer useful information to U.S. policymakers." *Id.*

food safety systems, it fails to include the full scope of pesticide regulation.²⁰⁹ Merely tasking the new Food Safety Administration to “enforc[e] pesticide residue tolerances,” this proposed bill perpetuates fragmentation and stops short of GAO’s full consolidation recommendation, rendering the proposed bill fundamentally flawed.²¹⁰ If EPA remains responsible for setting the allowable tolerance levels,²¹¹ and the new Food Safety Administration, along with USDA, remain the enforcement mechanisms for these levels,²¹² the pesticide regulation process will still be fragmented, ineffective, and indifferent to human health.

IV. PROPOSED SOLUTION

As demonstrated, implementing a new, consolidated agency that advocates for food safety gives human health a more prominent role in decision-making on Capitol Hill.²¹³ A Food Safety Administration would answer not to an industry, as we have seen with other, product-specific agencies,²¹⁴ but to the American people. While the current draft of this bill is headed in the right direction, it is deficient in handling pesticide regulation. Permitting EPA to continue setting allowable tolerance levels—a process governed by manufacturer-biased data and a cost-benefit analysis uninfluenced by any human health consideration²¹⁵—only continues the fragmentation problem.²¹⁶ While the regulation of pesticides is a multifaceted issue, affecting not only human health but also endangered species, air and water purity, and agricultural advancements, its potential impact on human health is serious, necessitating a more holistic approach.²¹⁷ Because EPA is given broad authority over a host of issues, its decision-making is affected by a wide variety of factors. This is evident by its tolerance-level decisions based on a host of factors beyond human health.²¹⁸ If the new Food Safety Administration were given this regulatory responsibility, tolerance levels, or even the use of harmful pesticides in general, could be greatly reduced, yielding effective change by an agency tasked with the protection of public health.²¹⁹

²⁰⁹ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²¹⁰ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²¹¹ Merrill & Francer, *supra* note 1, at 87–88.

²¹² *Id.*

²¹³ See *supra* text accompanying note 159 (describing the lack of food policy experts in charge at FDA).

²¹⁴ See *supra* text accompanying note 1 (describing the industry-focused missions of EPA, FDA, and USDA).

²¹⁵ Centner, *supra* note 3, at 71.

²¹⁶ See *supra* text accompanying notes 171–173 (describing the inefficiencies as a result of the governmental agencies overlapping in responsibilities).

²¹⁷ 7 U.S.C. § 136 note (Relationship to Other Federal Laws).

²¹⁸ See Centner, *supra* note 3, at 71 (discussing the cost-benefit analysis).

²¹⁹ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

Furthermore, while FDA's current role in food safety, and specifically pesticide-tolerance-level monitoring, is addressed in the bill, USDA's equally important role cannot be ignored.²²⁰ Food safety and human health is a long overlooked undercurrent to many federally regulated sectors that finally has been brought to the surface by this proposed bill. To address the problem holistically, create an effective federal food safety agency, and garner significant results, *all* food-related issues affecting human health—including harmful pesticides—must be delegated to the cohesive Food Safety Administration.

Two viable solutions could address this gap in the pending legislation. First, the proposed bill's language could be amended to specifically assign other agencies' roles in pesticide regulation to the new Food Safety Administration. Simply transferring FDA's responsibilities to the new Food Safety Administration does not address the current system's ineffectiveness because it perpetuates the splintering of tasks among the web of involved federal agencies. Second, in the alternative, the broad, catch-all phrase in the proposed bill's current language²²¹ could engage executive oversight to effectuate change. Similar to President Nixon's reaction to the culture shift toward a heightened concern for the environment,²²² the President could assign every phase of pesticide regulation to the new Food Safety Administration for an effective approach with a consolidated perspective. While this bill is still in its early stages, hopefully the cultural conversation highlighting pesticides' adverse effects on human health can initiate change and yield a more effective centralized federal agency tasked with the protection of human health.

A. Amending the Proposed Bill's Language: Consolidating Agencies Responsible for Pesticide Regulation

Mirroring previous, similar proposed bills,²²³ the Food Safety Administration Bill of 2022 is extremely comprehensive when it comes to federal food safety. Yet, unlike these previous legislative drafts, it fails to address all the pesticide-related responsibilities currently split between three agencies. Using the framework provided, the proposed 2022 legislation's language can be amended to address this gap. First, the pesticide-specific language could be amended to include "establishment," to transfer EPA's tolerance-setting regulatory role to the new Food Safety Administration.²²⁴ This edit would presumably transfer EPA's statutory authority—including the FIFRA and section 408 of the FDCA—to the new Food Safety

²²⁰ *Other Federal Agencies Regulating Pesticides*, *supra* note 26. See generally *National Organic Program*, *supra* note 19 (describing the qualifications for a product to receive the "USDA Organic Seal," including being free from synthetic pesticides).

²²¹ See *infra* text accompanying notes 240–248 (describing this catch-all language).

²²² See *supra* text accompanying note 50 (explaining how DDT and environmental awareness were the catalysts for President Nixon's creation of EPA).

²²³ See *supra* text accompanying note 152 (listing the years in which congresspeople have proposed a consolidated food safety agency bill).

²²⁴ See Food Safety Administration Act of 2022, S.4520, 117th Cong. § 101(b)(4)(F) (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57> (defining the duties of the new Food Safety Administration, which include "oversee[ing] . . . [the] monitoring and enforcement of pesticide residue tolerances in or on foods"); see also Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. § 101(b)(4)(F) (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text> (introducing an identical bill in the House of Representatives that mirrors the language of the aforementioned Senate bill).

Administration.²²⁵ However, because these statutes prescribe the methods and standards in which tolerance levels are established, the proposed Food Safety Administration Bill of 2022 would transfer only regulatory power.²²⁶ Subsequent legislation to address the problematic regulatory process²²⁷ would have to be passed to further promote public health. This would certainly be more attainable with the leader of the Food Safety Administration advocating to Congress with the singular mission of safeguarding human health.

Amending the language of the proposed statute to transfer USDA's role in food safety would also close the gaps of ineffectiveness, leading to a more cohesive approach and addressing GAO's fragmentation concern.²²⁸ This result can be achieved by specifically addressing USDA's role in pesticide regulation in the bill. A similar food safety bill was proposed in 2015, calling for the creation of the same Food Safety Administration, but its creation was not the result of a split FDA.²²⁹ This 2015 bill specifically called for the "consolidation of separate food safety and inspection services and agencies" and listed USDA's "Food Safety and Inspection Service" to be transferred to the new Food Safety Administration.²³⁰ This 2022 bill could specifically do the same, transferring the U.S. National Residue Program responsible for meat, poultry, and egg products to the new Food Safety Administration.²³¹ The 2015 bill also defines "food safety law" as "the provisions of the Federal Food, Drug, and Cosmetic Act . . . related to and requiring the safety, labeling, and inspection of . . . pesticide residues . . . ; the Poultry Products Inspection Act . . . ; the Federal Meat Inspection Act . . . ; [and] the Egg Products Inspection Act"²³²—all of which relate to USDA's role in the pesticide-regulation chain, with it monitoring EPA-established levels found on meat, poultry, dairy, and egg products.²³³ The proposed 2022 bill could do the same,

²²⁵ See CONG. RSCH. SERV., *supra* note 126, at 3 (describing the FIFRA and section 408 of the FDCA).

²²⁶ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²²⁷ See *supra* text accompanying notes 179–185 (explaining EPA's use of a cost-benefit analysis and manufacturer-funded, biased research, and its disregard of aggregate exposure; also explaining USDA and FDA's monitoring and enforcement of EPA's established tolerance levels).

²²⁸ See *supra* text accompanying notes 171–173 (echoing GAO's concerns regarding overlapping responsibilities).

²²⁹ Food Safety Act of 2015, S.287, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/senate-bill/287>; Food Safety Act of 2015, H.R.609, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/house-bill/609>.

²³⁰ Food Safety Act of 2015, S.287; Food Safety Act of 2015, H.R.609.

²³¹ FSIS Directive 10800.4, The National Residue Program Roles Functions and Responsibilities, Feb. 14, 2022, <https://www.fsis.usda.gov/policy/fsis-directives/10800.4>.

²³² Food Safety Act of 2015, S.287, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/senate-bill/287>; Food Safety Act of 2015, H.R.609, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/house-bill/609>. See generally Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–99 (requiring the safety, labeling, and inspection of pesticide residues, among other food, drug, and cosmetic regulations); Poultry Products Inspection Act, 21 U.S.C. §§ 451–73 (regulating the processing and distribution of poultry products); Federal Meat Inspection Act, 21 U.S.C. §§ 601–95 (regulating the processing and distribution of other meat products); Egg Products Inspection Act, 21 U.S.C. §§ 1031–56 (regulating the processing and distribution of eggs).

²³³ Merrill & Francer, *supra* note 1, at 90; see 21 U.S.C. §§ 601–95, 451–71 (delegating enforcement duties to USDA).

defining “food safety law” just as the aforementioned statutes did.²³⁴ Without addressing USDA’s current role in pesticide regulation, the bill perpetuates the current splintering, the continuation of which will never effectively advance human health interests.

While USDA’s pesticide residue level monitoring contributes to federal food safety, its National Organic Program—which certifies that labeled products are free from synthetic pesticides²³⁵—must be transferred to the new Food Safety Administration so the integrity of the program is maintained by a more appropriate agency. This National Organic Program, housed in USDA’s Agricultural Marketing Service department, could be specifically transferred by this bill.²³⁶ While neither the previous 2015 bill nor the current 2022 bill specifically name the National Organic Program, the Agricultural Marketing Service department, or its functions, the 2022 bill must do so in order to properly address all facets of food safety.²³⁷ To do so, this bill, like the proposed 2015 bill, could list “the part of the Agriculture Marketing Service department that administers [the National Organic Program] established under the [Organic Foods Production Act of 1990].”²³⁸ It could also define “food safety law” as “the provisions of the [Organic Foods Production Act of 1990]” to further solidify organic certification’s role in food safety.²³⁹

B. Using the Proposed Bill’s Existing Language: Executive Oversight

Alternatively, the bill includes a catch-all phrase when addressing the transfer of federal agencies to the new Food Safety Administration.²⁴⁰ Section 102, subsection (a) of the proposed bill transfers “all enforcement authorities with respect to food held by [FDA]” to the new Food Safety Administration.²⁴¹ It continues with subsection (b) by transferring the functions of “each [f]ederal agency, office, and center specified in

²³⁴ See Food Safety Act of 2015, S.287 Food Safety Act of 2015, H.R.609. See generally Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–99 (requiring the safety, labeling, and inspection of pesticide residues, among other food, drug, and cosmetic regulations); Poultry Products Inspection Act, 21 U.S.C. §§ 451–73 (regulating the processing and distribution of poultry products); Federal Meat Inspection Act, 21 U.S.C. §§ 601–95 (regulating the processing and distribution of other meat products); Egg Products Inspection Act, 21 U.S.C. §§ 1031–56 (regulating the processing and distribution of eggs).

²³⁵ See Merrill & Francer, *supra* note 1, at 90; see 21 U.S.C. §§ 601–95, 451–71 (delegating enforcement duties to USDA).

²³⁶ *National Organic Program*, *supra* note 19.

²³⁷ *Other Federal Agencies Regulating Pesticides*, *supra* note 26. See generally *National Organic Program*, *supra* note 19 (describing the qualifications for a product to receive the “USDA Organic Seal,” including being free from synthetic pesticides).

²³⁸ See, e.g., Food Safety Act of 2015, S.287 (proposing a consolidated Food Safety Administration in 2015); Food Safety Act of 2015, H.R.609.

²³⁹ This is the language of the 2015 Bill with the proposed language for the 2022 bill in brackets. Food Safety Act of 2015, S.287; Food Safety Act of 2015, H.R.609.

²⁴⁰ This is the language of the 2015 Bill with the proposed language for the 2022 bill in brackets. Food Safety Act of 2015, S.287; Food Safety Act of 2015, H.R.609.

²⁴¹ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²⁴² Food Safety Administration Act of 2022; Food Safety Administration Act of 2022, H.R. 8358.

subsection (c).²⁴² Specifically listing FDA’s Center for Food Safety and Applied Nutrition, the Office of Regulatory Affairs, the Center for Veterinary Medicine, and the Office of Food Policy and Response, this proposed bill clarifies its plans to consolidate the food functions of the current FDA into the new Food Safety Administration.²⁴³ However, it concludes this section by adding “. . . and such other offices, services, or agencies as the *President* designates by Executive order to carry out this Act” are transferrable to the new Food Safety Administration.²⁴⁴ Assuming this catch-all phrase passes constitutional muster,²⁴⁵ this language allows the President to transfer *any* “other offices, services, or agencies,” including those beyond the current FDA—like EPA or USDA—that share in the food-safety-certification and pesticide-regulation processes.²⁴⁶ The bill allows the President to transfer any function to the new Food Safety Administration as long as it “relate[s] to administration or enforcement of the food safety law.”²⁴⁷ Granting this broad discretion will allow a President interested in safeguarding our health to protect the American people from the hazards inherent in pesticide exposure and consumption—hazards demonstrated by glyphosate-focused studies.²⁴⁸

As of the writing of this Note, the exercise of executive power, or at least executive recommendation, looks promising. At the beginning of his presidency, President Biden “expressly required a renewed focus on public health,” stating “[i]t is, therefore, the policy of my Administration to listen to the science; to improve public health . . . to limit exposure to dangerous chemicals and pesticides.”²⁴⁹ And as of the 2024 reelection of President Trump and his appointment of Robert F. Kennedy Jr. (RFK Jr.) to lead the Department of Health and Human Services, “[t]he food industry braces” as the latter promises to ban or at least restrict the use of pesticides.²⁵⁰ Just as President

²⁴² Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

²⁴³ Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022).

²⁴⁴ Food Safety Administration Act of 2022, S.4520 (emphasis added); Food Safety Administration Act of 2022, H.R. 8358 (emphasis added).

²⁴⁵ *Nondelegation Doctrine*, BALLOTPEdia, https://ballotpedia.org/Nondelegation_dctrine#cite_ref-cornell_1-0 (last visited Mar. 17, 2023). According to the nondelegation doctrine, the legislative body is barred from delegating its lawmaking authority to the President. This doctrine is based on a strict interpretation of Article I of the U.S. Constitution and the separation of powers doctrine. See *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 487 (2001) (Thomas, J., dissenting) (opining that the Constitution prohibits the delegation of any of Congress’ legislative power to the executive).

²⁴⁶ Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

²⁴⁷ Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.

²⁴⁸ See *supra* text accompanying notes 66–82 (detailing the studies linking health issues, concerns, and ailments to glyphosate exposure).

²⁴⁹ Valerie J. Watnick, *The “Roundup” Controversy: Glyphosate Litigation, Non-Hodgkin’s Lymphoma, and Lessons for Toxics Regulation Going Forward*, 30 N.Y.U. Env’t. L.J. 1, 61 (citing Exec. Order No. 13,990, 86 Fed. Reg. 7037 (Jan. 25, 2021)).

²⁵⁰ Marcia Brown, Grace Yarrow & Brittany Gibson, *A World Without Seed Oils and Pesticides? The Food Industry Braces for RFK Jr. Era*, POLITICO (Oct. 31, 2024, 2:56 PM), <https://www.politico.com/news/2024/10/31/trump-rfk-food-pharma-00186513>; see also Nik Popli, *The Power RFK Jr. Would Have over Food*, TIME (Dec. 6, 2024, 10:22 AM), <https://time.com/7200323/rfk-jr-hhs-food-nutrition-health/> (describing RFK Jr.’s policies after President Trump’s reelection and RFK Jr.’s appointment were official).

Nixon was pressured by public outcry to create the strong, centralized EPA, which was tasked to protect the environment, the current negative political,²⁵¹ social,²⁵² and legal²⁵³ reaction to glyphosate and other “high-priority chemicals” provides a fitting opportunity for the creation of a human-health-focused federal agency.²⁵⁴ The President could use his executive power, as prescribed by this bill,²⁵⁵ to transfer EPA’s regulatory responsibility to the new Food Safety Administration, giving it the authority to set pesticide tolerance levels for the protection of human health.²⁵⁶ Furthermore, instead of splitting the establishment²⁵⁷ and monitoring²⁵⁸ responsibilities, the President could consolidate and delegate these tasks to the centralized Food Safety Administration. This new agency would establish allowable pesticide residue levels and monitor all foods that are sprayed, including the currently monitored FDA products,²⁵⁹ and USDA’s meat, dairy, and egg products²⁶⁰ as well as all of its organic products.²⁶¹ At the very least, the President could issue an executive communication highlighting the importance of consolidated food safety efforts to address the inefficiencies of the current pesticide-regulation scheme.²⁶² This presidential pressure would signal to the Speaker—who then in turn would signal to Congress—the importance of the issue and bring deserved attention to the Food Safety Administration Act of 2022.²⁶³

²⁵¹ See *supra* text accompanying notes 152–156 (discussing the political controversy surrounding glyphosate).

²⁵² See *supra* text accompanying notes 12–13 (discussing the social controversy surrounding glyphosate).

²⁵³ See *supra* text accompanying notes 67–68 (discussing the legal controversy surrounding glyphosate).

²⁵⁴ Watnick, *supra* note 249, at 61 (citing Exec. Order No. 13,990, 86 Fed. Reg. 7037 (Jan. 25, 2021)).

²⁵⁵ See *supra* text accompanying notes 248–251 (describing the 2022 bill’s delegation of power to the President).

²⁵⁶ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²⁵⁷ See *supra* text accompanying note 128 (detailing the establishment responsibility currently delegated to EPA).

²⁵⁸ See *supra* text accompanying notes 134–37 (detailing the monitoring responsibility currently delegated to FDA and USDA).

²⁵⁹ Merrill & Francer, *supra* note 1, at 90; see Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–99 (delegating enforcement and monitoring duties to FDA).

²⁶⁰ See *supra* text accompanying notes 27–29 (describing USDA’s delegated monitoring responsibilities).

²⁶¹ Merrill & Francer, *supra* note 1, at 90; see 21 U.S.C. §§ 601–95, 451–71 (delegating enforcement duties to USDA); *Other Federal Agencies Regulating Pesticides*, *supra* note 26. See generally *National Organic Program*, *supra* note 19 (describing the qualifications for a product to receive the “USDA Organic Seal,” including being free from synthetic pesticides).

²⁶² See *Presidential Communications*, LIBR. OF CONG., <https://guides.loc.gov/legislative-history/presidential-communications> (last visited Mar. 30, 2023) (defining executive communication).

²⁶³ 17 U.S. GOV’T PUBL’G OFF., DESCHLER-BROWN-JOHNSON PRECEDENTS 69, <https://www.govinfo.gov/content/pkg/GPO-HPREC-DESCHLERS-V17/html/GPO-HPREC-DESCHLERS-V17-3.htm> (last visited Mar. 30, 2023).

V. CONCLUSION

Ultimately, pesticide regulation is only a kernel (pun intended) of the overall food-safety conversation. However, the very existence of the pesticide regulation's convoluted process, which extends across three competing federal agencies, illustrates the major deficiencies in U.S. food safety regulation.²⁶⁴ The controversy surrounding glyphosate²⁶⁵—similar to the controversy surrounding DDT,²⁶⁶ chlorpyrifos,²⁶⁷ and so many other agricultural-feats-turned-public-health-concerns—justifies the creation of the Food Safety Administration. Assigning all steps in the pesticide regulation chain to a federal administrative agency with a delegation to protect human health will address the current ineffectiveness of the process.²⁶⁸ And glyphosate, capturing the cultural zeitgeist and mirroring the buzz surrounding DDT and EPA's inception, is the perfect first test for the new Food Safety Administration.²⁶⁹ If this agency were to reevaluate glyphosate's current tolerance levels from the perspective of protecting human health, or even issue a broad-sweeping ban like EPA did with DDT,²⁷⁰ the Food Safety Administration's commitment to public health would be established. The effectiveness of a streamlined effort, guided by a strong mission, would demonstrate the power of a centralized and simplified regulatory scheme—a lesson to federal administrative agencies in general. While USDA, FDA, and EPA all intrinsically have a role in protecting human health,²⁷¹ a new centralized agency would be better equipped to prioritize food safety. The failure to simplify the current pesticide regulatory scheme and include its multistep process under the new consolidated Food Safety Administration will result in a failure “to protect the public health.”²⁷²

²⁶⁴ See *supra* text accompanying notes 171–173 (describing the inefficiencies as a result of the governmental agencies overlapping in responsibilities).

²⁶⁵ See *supra* text accompanying notes 152–156 (discussing the political controversy surrounding glyphosate); see *supra* text accompanying notes 12–13 (discussing the social controversy surrounding glyphosate); see *supra* text accompanying notes 67–68 (discussing the legal controversy surrounding glyphosate).

²⁶⁶ See *supra* text accompanying notes 49–51 (detailing DDT's rise and fall in American agriculture).

²⁶⁷ See *supra* note 52 (explaining the rise and fall of chlorpyrifos).

²⁶⁸ Food Safety Administration Act of 2022, S.4520, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/4520/text?s=1&r=57>; Food Safety Administration Act of 2022, H.R. 8358, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/house-bill/8358/text>.

²⁶⁹ See *supra* text accompanying note 53 (explaining the public outcry around glyphosate).

²⁷⁰ See *supra* text accompanying note 51 (describing EPA's first broad-sweeping regulatory action as the banning of DDT).

²⁷¹ See discussion *supra* Section II.B.1 (detailing the agencies' roles in protecting human health); see discussion *supra* Section II.B.2 (detailing the agencies' roles in pesticide regulation).

²⁷² Food Safety Administration Act of 2022, S.4520; Food Safety Administration Act of 2022, H.R. 8358.