Threats to Safety: Major Flaws in USDA, FDA, and EPA Regulatory Oversight

Authored by: Seth R. Ferreira, MPH, CPH, CHES

Last Updated: May 09, 2016



11 Threats to Safety

Many *genetically engineered organisms* (*GEOs*) and *synthetic pesticides* (*SPs*) currently banned in other developed nations (e.g., E.U., New Zealand, Japan) currently threaten the health of those in the United States commonly due to the following factors:

- 1. Overburdened: The USDA, FDA, and EPA regulatory agencies are underfunded and overburdened with the increasing challenge of regulating and combating the biotech, chemical, and drug industries' often nocuous affects (both domestic and imported) on both humans and the environment across America. Few SPs and GEOs in our food-supply have been tested for their endocrine (hormone) disruptive effects, their long-term chronic exposure effects (i.e., beyond 3 years), and their additive or synergistic effects (multiple-exposure interactions) on human health. [1,3,9,11,15,17,23,26]
- **2. Conflict of Interest:** These regulatory agencies are partially managed by former executives of major chemical, biotech, and drug companies. A common explanation by government proponents is that the pool of qualified individuals for these government positions is sparse so it's difficult to control for "conflict of interest." Also, those who manage these government regulatory agencies are appointed and not elected. These circumstances have opened the door to poor regulatory oversight due to bias in the governmental regulatory process geared more toward profitable biotech, chemical, and drug industries putting public health at risk. [14,22]
- **3. Super PACs:** Corporations help fund *Political Action Committee (PAC)* campaigns for politicians during election cycles to help elect those politicians who support their corporate agendas. Wealthy chemical, biotech, and drug companies with unlimited capital have enormous policy influence through these Super PACs in the United States because of their significant impact on politicians due to massive independent campaign contributions promoting their candidate of choice. This ultimately corrupts the regulatory agencies' ability for impartial regulation due to corporate Super PAC members who donate millions toward political campaigns. [4,18,25]
- **4. Corporate Science:** Multi-billion dollar biotech, chemical, and drug corporations have access to enormous funding streams with researchers beholden to their products, corporate salaries, and university grants (practicing what is called "corporate science") to try to discredit the impartial research and/or researchers themselves. For example, impartial scientific scholars often report adverse health-effects of long-term "legal limit" synthetic pesticide exposure. Full burden-of-proof lies upon this same unbiased yet underfunded grassroots scientific community with little to no help from government regulatory agencies while often under attack by "corporate science."
- **5. Blinded by Profit:** It's common to see biotech, chemical, and drug corporations protect profits by attacking impartial scientific discovery. When tens of billions of dollars of corporate-profits are at stake (and underfunded impartial scientific discovery stands in the way), the

impartial research and the researchers themselves often fall under attack by "corporate scientists." This puts the public's health at a major disadvantage. It exposes our population to a highly risky situation likely allowing poorly-tested chemicals, GEOs, and drugs on the market while opening the door toward regulatory partiality, corruption, and even bribery between corporations and government regulators. [5-7,13,18,23]

- **6. Inept Precautionary Standards:** We have not yet adopted the "If in doubt, throw it out" mentality when the health of our entire population is at stake due to genetically modified organisms (GEO) and synthetic chemical contamination. We continually allow harmful SPs and GEOs into our food-supply through decades of scientific, legal, political, and economic debate and deliberation while human health is at stake. The promotion of chemical, GEO, and pharmaceutical development and corporate legal-rights are often upheld while losing sight of impartial scientific precautionary standards (threat of risk) highly guarded by scientists and many government regulatory protection agencies around the globe. [1,12,19,23]
- 7. Risk/Reward Strategy: Large multi-billion dollar biotech, chemical, and drug companies leverage their financial power to promote their high-risk products through a "too big to fail" mentality. This almost always puts profits before public safety by weighing financial-reward against health-risks. It appears government often "naïvely" overlooks this common corporate profit-strategy when allowing companies to self-regulate through product self-testing and supplying that data for their own regulatory standards (extremely dangerous). [12,14,22]
- **8. Self-Regulatory Research:** Our government's regulatory agencies grant complete power to the large biotech, chemical, and drug corporations (in good faith) hoping they will be honest in their research. This process opens doors to the high likelihood of data manipulation and even data falsification. Those (too big to fail) multinational corporations with massive financial motivation (billions of dollars) carry out their own approval research to provide evidence of the safety of their own products. The government regulatory agencies base their findings upon this research to then create many of the current safety standards and guidelines we experience today (a highly flawed, dangerous, and unscientific method). [8,12]
- **9. Proprietary (ownership) Laws:** These laws protect the "big business" biotech, chemical, and drug patents before protecting the health of its citizens. This is done by restricting access to proprietary biotech, chemical, and drug studies from the independent scientific community which greatly hinders transparency and improved long-term safety regulation during the active patent time-period (active 20 years from filing date). [8]
- **10. Too Wealthy to Fail:** We live in a culture that gives massive power to big business. This incredible wealth allows corporations to continually manipulate the justice system in their favor while using loopholes, financial settlements, and mere fines to their benefit. This further promotes the "too big to fail" mentality of almost all major corporations. [6,13,15,21]
- 11. Contaminated Imports: Within poverty-stricken regions of the world, often governed by extremely corrupt regulatory bodies, contaminated chemical-laden foods are very common. On average, just over 1.5 billion pounds of food and beverage are imported into the United States each day. Of which, few are actually able to be thoroughly tested by the U.S. regulatory bodies for contamination. [1,10,24]

Conclusion

Almost all GEOs and synthetic chemicals released into the environment will have some artificial impact on human health and the environment (great or small). To compound the problem, most

are difficult to control, track, and observe—especially those that are non-point source pollutants (i.e., inability to pinpoint physical source of pollution) like SPs and GEOs. The only method for accurately tracking the long-term impact of all GEOs and chemicals is through hundreds of thousands of ongoing active prospective research studies tracking their interactions with humans, animals, microorganisms, and other reactive chemicals, drugs, organic compounds, and pollutants from their origins. This will allow scientists to effectively understand how these GEOs and chemicals interact and affect humans, animals, plants, and microorganism species within their respective environments. This is quite difficult within any regulatory agency in our country considering the level of resources required. Because the U.S. regulatory agencies are largely reactionary, with a terrible track-record toward the primary prevention of chronic diseases, dire health consequences have already forced the U.S. to reallocate massive portions of gross domestic product (GDP) toward secondary and tertiary preventive measures that fund enormous disease-treatment initiatives (e.g., autism, cancer, heart disease, Alzheimer's, depression etc.). A world-wide growing body of scientific evidence documenting the dangers of the lack of regulation of synthetic chemicals and GEOs suggest U.S. health problems will only drastically worsen over the years to come. The final option would be completely halting the production of synthetic chemicals for agricultural and other uses and the cultivation of GEO crops until effective surveillance and precautionary regulations are in place to ensure 100% safety. [1,2,15]

It's unfortunate that these U.S. agencies seemingly "allow" possible harmful chemicals and GEOs into our food-supply and environment without thoughtfully taking into consideration the worldwide scientific community's ongoing input and consensus. The U.S. government agencies' inability to effectively understand the health-implications of many synthetic chemicals and GEOs is devastating. Their inability to successfully protect the U.S. citizens from chemical and biotech companies supports the fact that we cannot sanction the use of any synthetic chemical or GEO in our food-supply and, for the most part, in our environment until their applications are proven 100% safe. Most frighteningly, there currently are no standards to allow government regulators the ability to clearly understand the dangers of how GEOs, synthetic chemicals, and drugs interact together within our environment and, ultimately, how their interactions affect human health. This is truly unacceptable. Finally, there are too many unknown factors associated with most synthetic chemicals and GEOs to continue gambling with our health. Our true dilemma is how to effectively manage synthetic chemicals and GEOs with the .1% knowledge we've already gathered regarding their long-term health impact. Ultimately, our children and families deserve to be safe and completely protected above all other priorities particularly above government political agendas and corporate welfare. [1,2,3,15,16,20,23]

References

- 1. A Comparative Study of Allowable Pesticide Residue Levels on Produce in the United States. (2012). *Globalization and Health*. R.A. Neff et al.
- 2. Barriers To, Efforts In, and Optimization of Integrated One Health Surveillance: A Review and Synthesis. (2015). *Eco Health*. N. Uchtmann et al.
- 3. Baseline Toxic Mixtures of Non-toxic Chemicals: "Solubility Addition" Increases Exposure for Solid Hydrophobic Chemicals. (2013). *Environmental Science and Technology*, K. E. C. Smith et al.
- 4. Chemical Industry Political Funding Surges.(2014). *Environmental Working Group*. L. Foley.

- Conference Deplores Corporate Influence on Academic Science. (2003). The Lancet. D. S. Greenberg.
- 6. Corporate Practices and Harmful Consequences: Learning from the Holocaust. (2014). *Humanity and Society*. S. Halebsky.
- 7. Corruption Control in the United States: Law, Values, and the Political Foundations of Reform. (2012). *International Review of Administrative Sciences*. M. Johnson.
- 8. Data Disclosure for Chemical Evaluations. (2013). *Environmental Health Perspectives*. R. Lutter et al.
- 9. Food Safety Measures Severely Underfunded. (2015). CBS News. J. Firger.
- 10. Food Supply and food safety issues in China. (2013). The Lancet. H. Lam et al.
- 11. Funding Gap Hinders Law for Ensuring Food Safety. (2015). New York Times. R. Nixon.
- 12. Going Beyond Open Data: Challenges and Motivations for Smart Disclosure in Ethical Consumption. *Journal of Theoretical and Applied Electronic Commerce Research*. (2014). D.S. Sayogo et al.
- 13. How Corporations Corrupt Science at the Public's Expense. (2012). *Union of Concerned Scientists*. F. Grifo et al.
- 14. New Industry Hire Highlights Revolving Door at EPA. (2015). Beyond Pesticides.
- 15. Organizational Challenges to Regulatory Enforcement and Compliance. (2013). *The American Academy of Political and Social Sciences*. S.S. Silbey
- 16. Pesticide Mixtures, Endocrine Disruption, and Amphibian Declines: Are We Underestimating the Impact? (2006) *Environmental Perspectives*. T. Hayes et al.
- 17. Research on Prioritizing Chemicals for Potential Endocrine Disruption. (2015). *U.S. Environmental Protection Agency*.
- 18. Special Interests, Regulatory Quality, and the Pesticides Overload. (2011). *Review of Policy Research*. C. Marcoux.
- 19. Strategic Agricultural Initiative Needs Revisions to Demonstrate Results. (2007). *Environmental Protection Agency*. J. Dorsey et al.
- 20. Synergy for Salmon: Study Spawns Insight into Pesticide Mixtures. (2009). *Environmental Health Perspectives*. B. Weinhold.
- 21. The Radical Potential of the Food Justice Movement. (2014). *Radical Teacher*. N. Romer.
- 22. The "Revolving Door" between Regulatory Agencies and Industry: A Problem That Requires Reconceptualizing Objectivity. (2011). *Agricultural and Environmental Ethics*. Z. Meghanti, J. Kuzman.
- 23. Toxic Interactions among Environmental Pollutants: Corroborating Laboratory Observations with Human Experience. (1994). *Environmental Health Perspectives*. K. Krishnan, J. Brodeur.
- 24. U.S. Food Imports. (2018). U.S. Department of Agriculture, Economic Research Service.
- 25. Want to reduce the influence of super PACs? Strengthen state parties. (2016). *Brookings Institution*. R. J. La Raja and J. Rauch.
- 26. Why glyphosate is not the issue with Roundup. (2015). *Journal of Biology, Physics, and Chemistry*. G.-E. Séralini et al.