

Foundations of American Agriculture



Issue at a Glance

American agriculture depends on essential modern technologies—including crop protection products, seed innovations, fertilizers, soil fumigants, biostimulants, adjuvants and precision application tools—to deliver safe, affordable, and nutritious food while conserving land, water, and other natural resources. These technologies support food quality, nutrition, and preventive public health by helping farmers manage pests, disease, and naturally occurring toxins that can compromise the food supply.

The central policy question is **how these technologies are regulated**. For decades, the United States has relied on **science-based, risk-based regulation** under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). This science-based, risk-based framework was strengthened by the Food Quality Protection Act (FQPA), which requires EPA to protect human health – especially infants and children-by evaluating real-world exposure, cumulative risk, and enforceable safety margins. Some proposals would replace this approach with hazard-only or precaution-driven frameworks that disregard real-world exposure, benefits, and risk mitigation.

ARA urges Congress to reaffirm science-based, risk-based regulation to protect public health, food security, environmental outcomes, and U.S. agricultural competitiveness.

Why These Issues Matter



Public Health and Nutrition:

Risk-based regulation evaluates real-world exposures and use conditions to protect food safety, nutrition and public health. FQPA strengthened this framework by requiring EPA to protect human health – especially infants and children-through cumulative risk assessment and enforceable safety margins



Food Security and Affordability:

Removing essential technologies increases production costs, reduces yields, and raises food prices for American families.



Environmental Stewardship:

Precision technologies and improved formulations reduce unnecessary use, limit off-target movement, and support conservation goals.



Domestic Food Resilience:

Science-based regulation keeps food production in the United States rather than shifting it to countries with weaker oversight.



Risk-Based Regulation Works

Under FIFRA, products are evaluated based on how they are actually used, expected exposure levels, and enforceable mitigation measures. This risk-based framework allows regulators to manage potential hazards proportionally while preserving benefits to farmers, consumers, and the environment. Transparent, evidence-based decision-making also strengthens public confidence in food and environmental safety.

By contrast, hazard-only approaches focus on whether a substance can cause harm under any circumstance, without accounting for exposure, benefits, or risk management. These approaches can eliminate tools despite negligible real-world risk and create unintended consequences for food safety, affordability, and domestic production. The Food Quality Protection Act (FQPA) explicitly rejects hazard-only decision-making by requiring EPA to consider exposure, cumulative risk, and safety factors that protect the most vulnerable populations

Implementing Science-Based Protections in the Real World.



- ✓ Ensure products are sold, stored, and applied according to federal and state law
- ✓ Employ Certified Crop Advisors (CCAs), recognized as trusted, professional partners for farmers, bridging the gap between scientific research and on-farm application to improve productivity and sustainability
- ✓ Employ highly trained commercial pesticide applicators on label compliance and exposure-reduction practices
- ✓ Support adoption of precision agriculture technologies that reduce drift, runoff, and overuse

Key Policy Priorities



Preserve FIFRA's integrity:

Maintain the risk-based, peer-reviewed pesticide registration and re-registration process, with EPA as the primary federal authority and state lead agencies providing essential local expertise.



Align FIFRA and the Endangered Species Act (ESA):

Provide clarity and certainty so compliance strategies are achievable under real-world farming conditions and avoid one-size-fits-all restrictions that reduce food production without meaningful conservation gains.



Maintain access to essential tools:

Crop protection products, fertilizers, soil fumigants, biostimulants, adjuvants and precision technologies are critical to preventing crop disease, reducing naturally occurring toxins, and preserving yield, quality, and nutrition. Tools should not be removed before effective alternatives are available.



Support precision agriculture:

Expand conservation and technical assistance programs and ensure EPA's Drift Reduction Technology (DRT) program fully recognizes modern equipment and practices that reduce unnecessary exposure.



Advance evidence-based stewardship:

Support state-led pollinator protection plans grounded in credible science, recognize proven recycling programs such as the Agricultural Container Recycling Council (ACRC), and avoid extended producer responsibility (EPR) mandates that could create unintended safety or supply-chain risks.



Bottom Line

Science-based, risk-based regulation protects people, food, and the environment. By supporting essential modern agricultural technologies and precision risk management, Congress can advance public health, environmental stewardship, food affordability, and domestic food resilience.

Healthy people require healthy food. Healthy food depends on healthy crops. Healthy crops depend on science-based policy.