

# Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

# Food Quality Protection Act (FQPA)



The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) mandates that the U.S. Environmental Protection Agency (EPA) regulate the use and sale of pesticides to protect human health and preserve the environment. It requires the EPA to register (license) all pesticides distributed or sold in the U.S. Companies wishing to market a pesticide must show that use of the product in a specified manner will not “generally cause unreasonable adverse effects on the environment.”<sup>1</sup>

The Food Quality Protection Act (FQPA), passed in 1996, amends FIFRA by requiring pesticides used on food to undergo a health-based assessment before being sanctioned by the EPA. FQPA requires the use of scientific data on pesticide toxicity as well as provides special protections for infants and children to ensure that safety levels (or tolerances) for pesticide residues in food will not negatively impact the public's health.

FIFRA authorizes the EPA to issue regulations to protect worker health, including the Worker Protection Standard (WPS).<sup>2</sup> A guide to the WPS can be found [here](#).

## Important Considerations for Clinicians

Approximately one billion pounds of pesticide active ingredients are used annually in the U.S., and over 16,000 pesticide products are on the market.<sup>3</sup> The EPA estimates that up to 3,000 acute pesticide exposure incidents occur every year.<sup>4</sup> However, pesticide poisonings are not tracked nationally and only 12 states have an active pesticide surveillance system. These numbers do not factor in the known under-reporting of pesticide poisonings and illnesses nor do they include workers and family members who suffer chronic health problems as a result of pesticide exposures. Clinician reporting of suspected or confirmed pesticide poisonings is important as the EPA considers this information in its assessment of pesticides that are currently on the market. MCN and FJ have developed a reporting tool with state-by-state information about reporting requirements and state enforcement agencies, [available here](#).

<sup>1</sup> 7 USC §136(bb)z

<sup>2</sup> 7 USC §136w(a)

<sup>3</sup> See, Pesticide Action Network of North America, “Pesticides 101,” available at <http://www.panna.org/pesticides-big-picture-pesticides-101>

<sup>4</sup> 80 Federal Register 211 (November 2, 2015), p. 67502

FIFRA requires that the impact of pesticides on workers' health be taken into account in the registration process. Yet the FQPA does not mandate that EPA take into account occupational exposure to pesticides in its residue tolerance determinations. The impact of pesticides on agricultural workers is instead taken into account as part of the cost-benefit analysis under FIFRA, which balances the profits from using a pesticide against the dollar value of harm caused by that pesticide to human health and the environment.

When a pesticide poses risks to human health based on scientific studies, EPA will require that workers adopt mitigation measures, including personal protective equipment and application systems that reduce applicators' contact with the pesticide. When these measures fail to protect workers' health, EPA determines that the pesticide poses a "risk of concern."

However, under the FIFRA cost-benefit analysis, even a pesticide that poses a "risk of concern" to workers can be registered for use if the estimated benefits derived from its use outweigh the risks to humans and the environment. Thus, while the FIFRA standard gives EPA the authority to restrict the use of pesticides with harmful health effects, it allows for circumstances in which pesticides are approved despite demonstrated risks for workers.

## Major Provisions of FIFRA

FIFRA sets out the process and standards by which pesticides are registered and categorized, and provides for emergency exemptions, suspension and cancellation of registration, re-registration, and licensing of pesticide-producing establishments. It also includes requirements for pesticide labels and for certification of pesticide applicators.

## Registering Pesticides

Pesticide manufacturers are often required to submit a series of environmental, health, and safety data on the product when applying for registration.

- After a pesticide is registered, the applicant or "registrant" must also notify the EPA of any newly uncovered facts concerning adverse environmental or health effects. Such adverse effects include reports from healthcare providers about suspected illnesses related to the product.
- The EPA must classify the pesticide as either "general" or "restricted" use. "Restricted use" pesticides are those that may cause unreasonable adverse effects even when used as directed on the product labeling. Restrictions may relate to methods of application, amounts to be used, geographic areas of use, and species of targeted pests. Use of these pesticides is limited to pesticide applicators who meet certain training requirements, or to those under the supervision of a certified applicator.

## Pesticide Labels and Tolerances

- The EPA determines what information is to be included on the pesticide label for each registered product. Labels communicate important safety information, including warnings and precautionary statements, exposure symptoms, first aid information, and emergency decontamination instructions. They also contain information about how and under what conditions pesticides can be applied, mixed, stored, loaded or used; when treated fields can be re-entered after application; and when crops can be harvested.
- For pesticides used on raw agricultural products, the EPA sets a “tolerance” - the maximum amount of a pesticide residue that can be on a raw product when it is used and still be considered safe. In determining safe levels of pesticide residue, EPA must include an additional ten-fold safety factor (above the level considered safe for adults) to take into account the special sensitivity of pre- and post-natal exposure to toxicity, unless reliable data indicate that other levels will be safe for children and infants.

## Recordkeeping

- FIFRA requires that certified applicators of restricted use pesticides keep records noting the name of the pesticide, the approximate date it was applied, the amount, and the location of the application for two years after a pesticide was used.<sup>5</sup>

## Re-registration and Cancellation

- The FQPA directs the EPA to conduct periodic reviews of pesticide registration, and to review all existing tolerances within 10 years to ensure compliance with the health-based safety standard.
- At any time, the EPA may propose cancellation of a registration and initiate cancellation proceedings if there is evidence that a pesticide does not comply with FIFRA, or if it generally causes unreasonable adverse effects on the environment.

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<sup>5</sup> 7 USC §136i-1