U.S. Environmental Protection Agency
Office of Inspector General

2006-P-00009
January 10, 2006

At a Glance

Catalyst for Improving the Environment

Why We Did This Review

We sought to determine the impact of the 1996 Food Quality Protection Act (FQPA) on the need of the Environmental Protection Agency (EPA) for scientific data on how pesticides impact children's health. We evaluated whether EPA enacted guidelines and procedures, and addressed new aggregate exposure and cumulative risk assessment efforts. We also sought opportunities for improvement.

Background

FQPA changed the way EPA regulates pesticides, including the introduction of aggregate exposure and cumulative risk assessments. FQPA required the Office of Pesticide Programs (OPP) to take into account children's unique patterns of exposure and vulnerability regarding pesticides. Additional data needs were identified to achieve the Act's mandates.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link:

www.epa.gov/oig/reports/2006/20060110-2006-P-00009.pdf

Opportunities to Improve Data Quality and Children's Health through the Food Quality Protection Act

What We Found

To meet the requirements of FQPA, EPA instituted numerous data requirements designed to provide infants and children with better protection against the health risks of pesticides. FQPA established a single, health-based standard that eliminated discrepancies, and emphasized infants and children.

FQPA resulted in the revision of many regulations, guidelines, and procedures. OPP made substantial changes to the aggregate risk assessment process, which considers multiple routes and pathways of exposure for a particular pesticide, to acquire more and better data on children's exposure. OPP also took steps to collect data on the cumulative effects of pesticides sharing a common mechanism of toxicity, which represent the combined risks to children from a group of pesticides.

Significant challenges nonetheless remain. EPA's required testing does not include sufficient evaluation of behavior, learning, or memory in developing animals. There is no standard evaluation procedure for interpreting results from developmental neurotoxicity tests (involving substances that damage a developing nervous system, including the brain). OPP has requested data on developmental neurotoxicity for certain pesticides, but to date no summaries have been released or conclusions drawn. OPP is unable to collect sufficient data on aggregate risk due to time and cost constraints and relies on other agencies for data. Specific opportunities for improvement involve finalizing Science Policy papers, assessing alternative testing strategies, using logic models, and developing a multi-year strategic plan.

What We Recommend

We made recommendations to EPA for improving data collection. EPA should develop a standard evaluation procedure, evaluate certain testing methods, and take steps to reduce uncertainties. EPA can take various steps to improve its aggregate exposure and cumulative risk assessments, including updating databases and expanding partnerships with other Federal organizations. EPA can also take steps to enhance accountability, act on Science Policy papers, try alternative testing strategies, and develop an overarching logic model and long-term strategic plan. The Agency concurred with many of our recommendations but expressed concern with certain issues raised.