



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

J. Routh Reigart, M.D., Chair
Children's Health Protection
Advisory Committee
Medical University of South Carolina
171 Ashley Avenue
Charleston, SC 29425-3302

Dear Dr. Reigart:

Thank you for your letter of October 20, 2000, to Administrator Carol Browner requesting clarification on how the Environmental Protection Agency (EPA) assesses risks to farmworker children, and presenting recommendations for EPA's consideration to further protect children working in agriculture. Since the Office of Pesticide Programs (OPP) within the Office of Prevention, Pesticides and Toxic Substances is responsible for pesticide regulation, the Administrator has asked that I respond on her behalf.

We value the Committee's continuing interest and thoughtful recommendations concerning the protection of farmworkers and their families. I am happy to provide you with updates on EPA's activities in this area, and to respond to your requests for clarification.

As you know, the General Accounting Office (GAO) examined existing data on pesticide related exposure to farmworkers, and EPA's efforts to assure protection for farmworkers and their children from pesticide risks, particularly through the Worker Protection Standard (WPS). GAO made a number of recommendations pertaining to (1) improving the data on acute pesticide illnesses, (2) taking steps to protect children younger than 12 years old who work in agriculture or who might be otherwise present in pesticide-treated fields, (3) completing documentation of the adequacy of the WPS entry intervals for children, and (4) strengthening EPA's oversight of state implementation and enforcement of the WPS. Your letter requests information on the Agency's plan to implement GAO's recommendations.

OPP Briefing for the Children's Health Protection Advisory Committee

The OPP would be pleased to brief your committee on the scientific basis of its exposure and risk assessments. We look forward to being able to discuss the concerns of the Children's Health Protection Advisory Committee and the committee's suggestions for improvements.

National Assessment of EPA's Worker Protection Program

As you know, EPA is conducting a national assessment of the WPS program. On June 6-7, 2000, EPA convened the Initial Stakeholder Meeting for the National Assessment of the Worker Protection Standard Program in Austin, Texas. The Austin meeting officially launched the Agency's national assessment of the WPS program, beginning a multi-phase process that will take place over the next 12-18 months to conduct a comprehensive review of EPA's WPS program, including implementation and enforcement. The national assessment will help EPA determine whether the WPS program adequately meets its intended goals of addressing the risks to agricultural workers. The Workshop Report from the Austin meeting is enclosed for your reference.

Participants at the Austin meeting highlighted concerns about farm children and pesticide risks. The second Stakeholder Workshop, which took place on December 11-13, 2000, in Sacramento, CA, included a panel presentation on children's health issues and pesticide exposures. Children's health issues will also be included in future WPS assessment workshops. We urge your participation in the spring workshop in Orlando and in the culminating session in Washington, DC, next fall.

Additional EPA Activities on Safety of Farmworkers and their Children

In a recent letter to Congressman Waxman, EPA provided a detailed update on EPA's activities relating to GAO's findings and recommendations. A copy of this letter is enclosed for your reference.

Clarification Concerning Establishment of Restricted Entry Intervals (REIs).

Your letter requested clarification on how EPA uses a risk assessment to establish REIs. EPA establishes the REI as part of its multifaceted approach towards protecting farmworkers and their families from risks from pesticide exposure. EPA calculates the margins of exposures for workers by comparing residues available for exposure with information about the time spent in various agricultural tasks and actual contact with pesticide residues. The reentry interval is based upon the time it takes for pesticide residues to dissipate to a point where people can enter previously treated areas to work without excessive exposure and risk.

EPA calculates the margins of exposure from data from a variety of sources including data required to be submitted by pesticide manufacturers, data from EPA databases, and relevant information from the open literature. EPA has developed detailed test guidelines to provide guidance to those required to submit post-application exposure data. Post-Application Exposure Guidelines: Series 875-Group B can be found at EPA's website at www.epa.gov/scipoly/sap/1998/march/contents.htm.)

EPA believes that the REIs are as protective of children over 12 as they are for adults. The analysis supporting this finding is briefly discussed in the enclosed letter to Congressman Waxman. EPA will present a more detailed presentation of its analysis of the scientific basis for its conclusions when it briefs the Children's Health Protection Advisory Committee.

How Different Exposures are Considered as Part of Assessing Risks to Farmworker Children

EPA considers a wide spectrum of exposures and potential risks in conducting all human health assessments: residential, occupational, as well as dietary risks. In its risk assessment process for each regulatory decisions, EPA examines the special vulnerabilities of children, and how to estimate children's exposure.

EPA has also made considerable progress in developing procedures for assessing human health risks from both aggregate and cumulative exposure to organophosphorus pesticides. For example, in February 1999, EPA released a revised document entitled "Guidance for Identifying Pesticide Chemicals and Other Substances That Have a Common Mechanism of Toxicity." In June 2000, EPA asked for public comments on draft guidance for conducting cumulative risk assessments, and in August, EPA issued a revised science policy document entitled "Use of Data on Cholinesterase Inhibition for Risk Assessments of Organophosphorus and Carbamate Pesticides." In September, EPA presented to the FIFRA Scientific Advisory Panel (SAP) various approaches for modeling aggregate and cumulative exposures for these substances. These approaches reflect improvements and refinements suggested by the SAP and other experts at earlier meetings. Additional consultation with the SAP on cumulative risk assessment for the cholinesterase-inhibiting organophosphorus insecticides occurred on December 7 and 8, 2000. Your letter of September 26, 2000, on this topic was shared with the panel. We expect to publish revised guidance for conducting cumulative risk assessments in the spring of 2001.

An example of how EPA has acted to protect all people, and especially children, from unreasonable risks of pesticide exposures are the actions to phase out/eliminate certain uses of the organophosphorus pesticide chlorpyrifos. The agreement reached between EPA and the registrants includes the cancellation of uses in schools, parks, day care centers, and other settings where children may be exposed, such as in homes and yards. The agreement also will significantly reduce allowable residues on certain crops, including three fruits and vegetables regularly eaten by children.

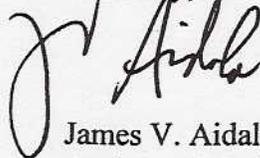
The Agency believes that its pesticide regulatory decisions protect all children. We continue to support development of additional data which will be used to further refine our risk assessment procedures. The primary objective of EPA's Office of Research and Development (ORD) children's health program is to conduct the research and provide the methods to reduce uncertainties in EPA risk assessments for children, leading to effective measures for risk reduction. ORD has recently released its Strategy for Research on Environmental Risks to Children, which can be viewed at their web page at <http://www.epa.gov/ncea/pdfs/strat4resrch.pdf>. Enclosed for your reference is a listing of studies which may be of interest to you. Information on each of the studies can be obtained from ORD's National Center for Environmental Research web page at <http://www.epa.gov/ncerqa>.

Recommendations from the Committee

EPA is actively incorporating many of the recommendations in your letter into its WPS and risk assessment activities. I have already discussed EPA's progress in revising its risk assessment procedures for the evaluation of risks posed by organophosphorus pesticides. Your letter highlights the need for additional research on pesticide exposures to children working in agriculture. EPA agrees, and such research is being supported through ORD. Another recommendation points towards the need for WPS training for children. Improving the education of farmworkers and their families is a critical component of EPA's WPS implementation. EPA has several programs underway to focus specifically upon teaching farm worker children about pesticide risks. One example is EPA's "Young Farmworkers' Academy." I have enclosed an article about the Academy, which I am sure you will agree is an exciting and successful approach for teaching farmworkers and their children about pesticide risks and safety.

Thank you again for your comments. We will continue to consider your recommendations as we refine our risk assessment procedures, and as we support further research concerning environmental risks to children. I look forward to continuing support and advice from the Children's Health Protection Advisory Committee on how we can best protect the health and safety of our children.

Sincerely,



James V. Aidala
Assistant Administrator

Enclosures