

US EPA ARCHIVE DOCUMENT

## **October 2011 PPDC Update on “Revised Risk Assessment Methods for Workers, Children of Workers in Agricultural Fields, and Pesticides with No Food Uses”**

### **Consistent Application of Safety/Uncertainty Factors in Risk Assessment**

The policy document describing consistent application of safety and uncertainty factors in pesticide risk assessments is undergoing incorporation of comments. We anticipate releasing an updated policy document along with a response to applicable comments during the first half of 2012.

The policy assures appropriate and consistent application of safety factors used in risk assessments to protect the public (including pregnant women, infants, and children) who may be exposed to pesticides regardless of setting (residential or occupational). The policy provides for a comprehensive and consistent evaluation of safety and uncertainty factors in assessing potential risks of food use, non-food use pesticides and occupationally related exposures. Application of safety and uncertainty factors will be consistent with good scientific practice. Risk management decisions will continue to be made in accordance with applicable statutes – FFDCFA or FIFRA.

### **Youth Workers**

To address environmental justice concerns and improve children’s health protections, EPA continues to examine whether current occupational risk assessment methods adequately address exposure of youth workers. At the April 2011 PPDC meeting, we described our ongoing analysis of a series of “Youth in Agriculture” studies which measured the exposures of working children who harvested several crops such as blueberries, strawberries, and cucumbers. These studies resulted from a collaborative effort between the EPA, US Department of Labor and seven universities. Progress reviewing, compiling and analyzing the exposure data has been steady since the April 2011 PPDC meeting. Since that time we have completed the primary analysis of much more of the data; about 1,300 of the approximate 1,500 exposure days monitored in 22 distinct studies. To determine whether exposure for youth workers is significantly greater than for adult workers, EPA has statistically analyzed approximately 10% of the data. Thus far, the results are similar to what we reported earlier in that there is no indication that our current exposure assessment methods are not protective of working children. EPA staff expects to complete the analysis in 2012. Once completed, we will make all related documents available on our docket.

### **Children and Bystander Exposure Near or In Agricultural Fields**

In conjunction with our effort to revise standard operating procedures (SOPs) for evaluating residential exposure, including exposure from volatilization and spray drift, our goal is to develop methods for assessing bystander exposure. A key aspect of this is the investigation of potential exposure to non-working children in or near fields. To date, a comprehensive literature database has been screened (>300 peer-reviewed articles), catalogued (~100) and partially reviewed (25% of ~100 pertinent articles).

These studies are very diverse. For example, some describe methods for estimating exposures while others report exposure values for select populations (e.g., children, border communities, migrant worker families). Ongoing efforts related to the Worker Protection Standard, spray drift and chemical volatilization will also be considered in the context of how they may impact these types of exposures.

### **Future Goals**

As stated in April, given the complex nature of the aggregate, cumulative, volatilization and spray drift elements of *Revised Risk Assessment Methods for Workers, Children of Workers in Agricultural Fields, and Pesticides with No Food Uses*, our efforts will be on a longer timeline. Stakeholder input will be solicited in a public process as the Agency moves forward in this area.