ENVIRONMENTAL AND HUMAN HEALTH ASSESSMENT OF THE AERIAL SPRAY PROGRAM FOR COCA AND POPPY CONTROL IN COLOMBIA

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PANEL

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**APPROACH**

**RESEARCH**
- Laboratory and field observations
- Information on extrapolation methods
- Field measurements, characterization of populations
  
**RISK ASSESSMENT**
- Problem Formulation and Hazard Identification
- Dose-response characterization
- Exposure characterization
- Risk Characterization
- Regulatory decision

**RISK MANAGEMENT**
- Development of regulatory options
- Evaluation of public health, environmental, economic, social, and political consequences of regulatory options

**ANALYSIS**

**PLAN**

**Scientific Assessment Team**
- Review publications and reports on use of glyphosate and adjuvants
- Conduct site visit
- Formulate questions and hypotheses
- Design field studies to collect local data
- Assess data and incorporate into risk assessment
- Refine risk assessment
- Incorporate new data into risk assessment
- Complete risk assessment

**Permanent Technical Mobile Monitoring Group (PTG)**
- Choose PTG leader
- Collect information on local issues and questions
- Conduct field sampling and analysis
- Conduct field sampling and analysis

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**Regulatory decision**
PRODUCTS

- State of the science review of the human and environmental risks of the use of glyphosate and formulates in Colombia
  - Report to OAS
  - Useful to countries other than Colombia
  - Publication in peer-reviewed literature
- Tier-1 review of other substances used in the production of cocaine and heroin

SITE VISIT

- February 2004
- Several Panel members
- Very helpful in understanding the extent of the issue and the logistics of data collection.
GLYPHOSATE REVIEW

- Review of literature ongoing
- Data collection studies in planning stage
  - Exposure of bystanders to glyphosate
  - Effects on humans (epidemiology)
  - Environmental toxicity of the spray mixture
  - Impact of coca and poppy production on the Colombian ecosystem
  - Long term effects of glyphosate use
  - Extent of spray drift in the field
  - Glyphosate residues in the environment: soils
  - Glyphosate residues in the environment: surface waters
TIER 1 ASSESSMENT OF OTHER SUBSTANCES

- Data collection complete, report in final review
- Use of these substances in cocaine and heroin production
- Total of 66 substances
  - Pesticides and industrial chemicals
  - Human and environmental fate and effects
  - Regulatory standards
- Intent
  - Tier-1 guidance for prioritization and further review

THANK YOU