



ACT 25th Annual Meeting: Cross-Border Issues in Environmental Toxicology – the US EPA Experience

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Border 2012 Strategy: Environmental Health Objectives

- Today's focus: EPA/Mexico cross-border environmental health work
 - Supporting U.S./Mexico Border 2012 Strategy
 - Emphasis on pesticides

U.S. EPA Cross-Border Work

Leveraging work across across organizations & projects is key for EPA, including

- U.S./Mexico Border 2012 – national & state levels
- NAFTA Technical WG on Pesticides
- NA Commission for Environmental Cooperation
- NIOSH SENSOR program for acute poisonings
- Health Care Providers Initiative

Border 2012: U.S./Mexico Environmental Program

- Border 2012 Ten-Year Plan signed April 2003
- Border 2012 Environmental Health Work Group
 - Pesticides: reporting poisonings; training workers; distance learning; health care provider training
 - Air: evaluate measures of respiratory health
 - Water: evaluate measures of gastrointestinal illness

NAFTA TWG

The NAFTA TWG on Pesticides is the focal point for addressing pesticide issues at national level among Mexico, Canada, & U.S.

- ❖ CICOPPLAFEST (Mexican agencies)
- ❖ U.S. EPA Office of Pesticide Programs
- ❖ Pest Management Regulatory Agency in Health Canada

North American Initiative Goals

- NAI for pesticides announced in 1998
- North American market for pesticides
- Routine joint reviews and work sharing
- Defined roles of regulators, manufacturers and growers
- Health and environmental protection

NAFTA TWG

Accomplishments

(1st Five Years)

- 15 joint reviews plus work shares.
- Harmonized:
 - Most data requirements and protocols.
 - Most data review templates.
- Eco-region & residue zone maps.
- Process for addressing ‘trade irritants.’
- NAFTA label – a biopesticide NAFTA label was produced and will be used in Canada
- Resistance Management Labeling.
- Worker Protection Program.
- Milestone Report (2001)
 - Trilateral document.
 - List of accomplishments

New Five Year Initiative (Dec 2003)

Vision: North America to serve as the world model in the safety of foods and pesticide products and in the training of the pesticide labor force.

- Three additional objectives
 - Full North American Collaboration.
 - Equal Access.
 - Broadening the Dialog.
- Four Work Areas
 - Trade.
 - Safety.
 - Sustainability.
 - Communication.



Reducing Pesticide Risks to Workers

- Mexico/U.S. program – initially NAFTA TWG
 - Recognizes common work force
 - Coordination of regulatory & educational pesticide programs
 - Includes farm owners, pesticide applicators, farm workers & their families
 - Train-the-Trainer → then train the workers
- Coordination between NAFTA TWG & Border 2012



Program History



- U.S. & Mexico collaboration through a working group as part of NAFTA.
- Mexico's adoption of regulations that were similar to U.S. worker protection regulations.
- Coordinated efforts for education on risks of pesticide use and safe handling techniques.
- U.S. pilot funding. Mexico ongoing funding.

Train-the Trainer Workshops

- 3 to 4 days each
- Practical hands-on component
- Participants represented various agencies and state committees
- Experienced master trainers – established base of Mexican expert trainers
- Pre- and post-training testing

Train-the-Trainer Workshops

- Program has expanded to provide training for:
 - Farmworker families
 - Pesticide distributors
 - Pesticide manufacturers
 - Agronomy students
- The program has also distributed 1400 Personal Protective Equipment kits

Workshop themes included...



- Pesticide Labels
- Health Effects
- Safe Handling
- Environmental risks
- Laws and Regulations
- Personal Protective Equipment (PPE)
- Calibration
- Training Techniques

Results of Worker Training Collaboration



- Thousands of trainers have completed the course
- Numerous courses for fieldworkers
- Resource and expertise exchange
- National training materials
- U.S. pilots completed
- WPS Pesticide Inspector Training - Oct 2004

Future Directions: Train-the-Trainer

- WPS Train the Trainer Course – Nov/Dec in AZ
- Continuous train-the-trainer workshops throughout Mexico
- Expand to include training for doctors in Mexico on recognition & management of poisonings
- Opportunities for trainer & researcher exchange programs
- Collaborative outreach efforts into Central American countries

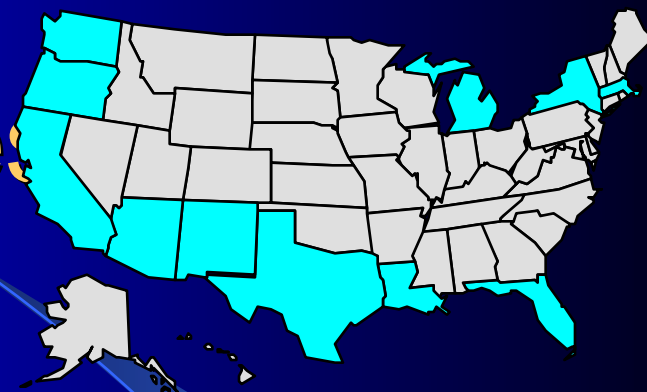
North American Commission for Environmental Cooperation

- CEC Sound Management of Chemicals (SMOC) Workgroup (Mexico, U.S., Canada)
- Pesticide focus on North American Regional Actions Plans (NARAPs)
 - Chlordane: eliminated production and use in North America
 - DDT: elimination of public health uses in Mexico; trilateral work to promote alternatives
 - Lindane: ongoing development of NARAP

CEC Lindane NARAP

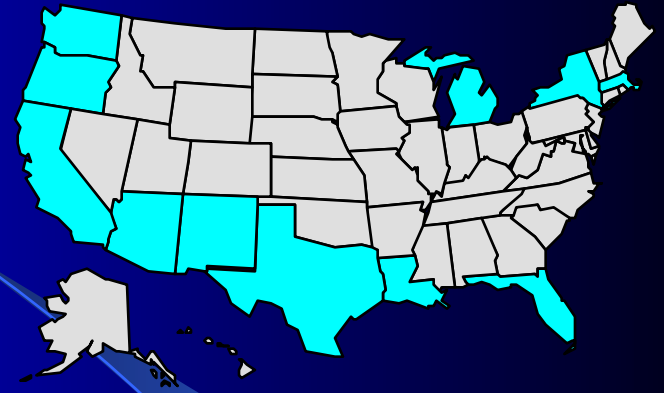
- Establishment of Task Force
 - 1st formal meeting July 2003
 - Includes environmental NGOs, academia/children's health advocates, industry, indigenous peoples
 - Government representatives from environment & health sectors
- Two public meetings: Guadalajara Sept 2003, Anchorage (Feb 2004)
- Commitment from Mexico to phase-out all uses
- Public comment & outreach to tribes
- Scheduled for completion: June 2005

NIOSH SENSOR – Pesticide Reporting



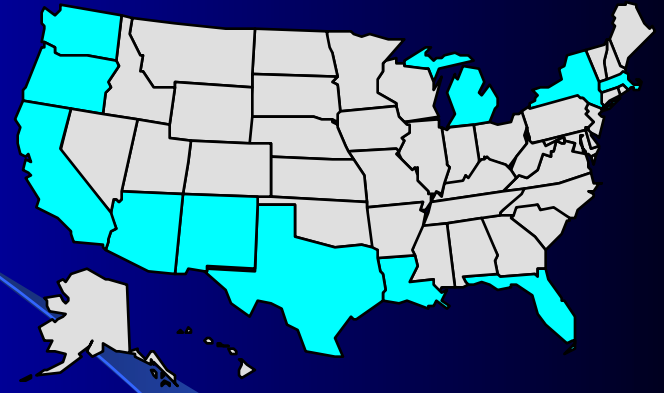
- **Sentinel Event Notification System for Occupational Risk – NIOSH/CDC lead**
- **Tracking acute occupational pesticide-related illness in U.S.**
- **Funding provided by States, NIOSH and EPA, beginning 1987**
- **Supports Border 2012**

SENSOR-Pesticides



- **State-based surveillance – 12 states**
- **“Sentinel” case identification and follow-up**
- **Timely opportunities for prevention & intervention**
- **Develop state-based models for national implementation**
- **Standardized case definition, variables, and severity index**

SENSOR-Pesticides



- **Under the Pesticide Registration Improvement Act, EPA will provide funds to expand SENSOR to 3 more states**
- **Good coverage along the Western migrant stream and the US-Mexico border**
- **Plan to add states on Central & Eastern migrant streams for more complete picture**

SENSOR Goals: Mechanisms to Strengthen Acute Pesticide Poisoning Surveillance

- Bolster case ascertainment
- Increase the number of states conducting surveillance
- ***Improve training of health care professionals***
 - EPA and NEETF are spearheading efforts in U.S.
- Increase the availability and quality of biological markers
 - Need tests that are reliable and affordable
- Improve dissemination of surveillance data

EPA Region 9 Border Projects

- **Border Pesticide Poisoning Tracking System:** CA DPR & Mexico on reporting system for acute pesticide incidents
- **Hazard Communication:** Farmworker Justice Fund will develop pesticide HazCom program
- **Arizona/Sonora Children's Environmental Health Campaign:** to reduce exposures to environmental contaminants
- **Pesticide Use Data on Border:** AZ Dept of Agriculture will analyze applicators' use data

National Strategies for Health Care Providers (U.S.)

- U.S. EPA/OPP in cooperation with National Environmental Education & Training Foundation (NEETF) for work funded so far
- 2002 – 2012
- In collaboration with HHS, USDA, DOL

2002-2012 Health Care Providers Activities

- Develop good resource materials
- Train Health Care Providers on recognition & management of pesticide related health conditions
- Good environmental health model
 - See NIEHS Environmental Health Perspectives: August 2003

Health Care Providers Initiative – Progress & Plans

- National guidelines developed
 - (1) National Pesticide Practice Skills Guidelines for Medical & Nursing Practice
 - (2) National Pesticide Competency Guidelines for Medical and Nursing Education.
- Recognition & Management of Pesticide Poisonings updated (1999) – available in Spanish
- OPP plans to fund projects:
 - Macro level -- to engender changes in the professions &
 - Micro level, to implement professional change in the field

Border 2012 Health Care Providers Initiative

- EPA/ORD & Mexico to deliver health & safety training for pesticides & water
- OPP will work closely with EPA/ORD & Mexico to ensure close linkage of these related efforts along the border

Conclusion – Cross-Border Pesticide Activities

- Diverse cross-border pesticide efforts are ongoing in a number of fora
- Activities contribute directly to Border 2012
- Important that Border 2012 leverage ongoing work & resources

More Information:

- NAFTA TWG:
<http://www.epa.gov/oppfead1/international/naftatwg/>
- NA CEC: <http://www.cec.org/>
- Border 2012:
<http://www.epa.gov/usmexicoborder/>