

OBTAINING DATA ON URBAN PESTICIDE USE IN CALIFORNIA

Nan Singhasemanon
Dept. of Pesticide Regulation

Why Are Urban Use Data Important?

- In many areas of CA, urban uses dwarf agricultural uses.
- Help establish use trends and evaluate impacts
- Help in regulatory decision making
- Helps determine monitoring priorities
- Urban Total Maximum Daily Loads & implementation
- Outreach design & success validation

Are There Urban Use Data in DPR's Pesticide Use Reports?

What Urban Use Categories Are Represented?

Use Reporting Requirements

- CCR Section 6624 – Pesticide Use Records
 - Why, Who, What, When, How of use reporting
- FAC section 11408 – Agricultural Use
 - Defines agricultural use
- DPR also defines additional “Ag.” uses
 - If a use does not fit the “Non-Ag.” criteria in FAC 11408, it's an Ag. use and must be reported.

Urban Use Categories in PUR

- Structural pest control
 - any pest control work performed within or on buildings and other structures.
- Landscape maintenance
 - any pest control work performed on landscape plantings around residences, or other buildings, golf courses, parks, cemeteries, etc
- Rights-of-ways
 - any pest control work performed along or on residences, power lines, ditch banks and similar sites

Urban Use Categories in PUR (cont.)

- Public health pest control
 - any pest control work performed by or under contract with State or local public health or vector control agencies (e.g., vertebrate & mosquito control)
- Regulatory pest control
 - any pest control work performed by public employees or contractors in the control of regulated pests (e.g., CDFA pest eradication)

Major Reported Urban Uses in 2002

Site of Use	Pounds Used	Relative Rank
Structural Pest Control	5,467,113	10
Landscape Maintenance	1,439,222	24
Rights of Way	3,641,417	12
Public Health	1,089,852	28
Regulatory Pest Control	181,877	62

Additional Reporting w/ Urban Use Relevance

- Groundwater pollutants
 - Any application of a pesticide with the potential to pollute ground water when used outdoors in industrial and institutional settings
- Restricted materials
 - Any application of a restricted materials
- School sites (not a PUR requirement)
 - “Healthy Schools Act of 2000”
 - Pest control businesses submit annual reports on school applications.
 - School’s own applications are recorded & maintained (4 yrs.)

Limitations of Urban Uses Reported in the PUR

- Urban data in the PUR do not represent all urban pesticide uses!
 - Ex: Two independent studies estimated unreported use for diazinon in Orange Co. in 1999 to be 54% and 55%.
- Monthly reporting format
 - County-level; lose site-specificity
 - Lose application details

Uses Not Reported in the PUR

- Residential/Home Use
 - in a household or its immediate environment
- Industrial Use
 - for or in a manufacturing, mining or chemical process; or use in the operation of factories, processing plants, etc.
- Institutional Use
 - within the confines of, or on property necessary for the operation of, buildings such as hospitals, schools, libraries, auditoriums, and office complexes.
- Others
 - Unaccounted OTC?
 - Non-licensed applicators?
 - More identified by current UCIPM study?

How Can We Supplement the Urban Use Data in the PUR?

Use Surveys

- Survey of urban pesticide users: residential and other urban user groups
- Recent surveys done in San Diego, Orange Co., Sacramento, Stockton, and S.F. Bay Area.
- Reveals many aspects of use behaviors:
 - Acquisition habits
 - Use habits
 - Disposal habits
- May not provide quantitative use numbers, but revealing in so many ways

Shelf Surveys

- Most up-to-date indicator of product availability
- Relatively cheap and quick to conduct
- Availability not a direct indicator of usage but rather possible usage
- UCIPM and TDC Environmental have done recent shelf surveys in S.F. Bay Area and Sacramento.

Direct Retail Sales Data

- A great quantitative measure of sales, which is a step beyond availability
- Limited Success - some businesses are more receptive than others.
- Fear of losing competitive advantage
- In 2000, UC IPM was able to collect sales data from 6 hardware stores & 2 nurseries
- Extrapolation provided county-level estimates on sales, unreported use, and total use.

Wholesale/Distributor Sales Data

- Would also provide quantitative data
- Deal with fewer companies
- One more step removed from actual usage
- Distributor also somewhat hesitant at disclosing sales
- One attempt in 2000 by DPR/UCIPM unsuccessful, but still promising

Market Research Data

- Purchase of national market data is possible.
- Data quality is not clear
- Potentially expensive
- In 2000, UCIPM and U.S. EPA attempted acquisition from this source.
- Negotiation delays and data format issues stalled the process.
- Area to explore in the future

Sales Database Estimations

- Using DPR's Sales Database
- Sales data submitted quarterly for mil assessment purposes.
- How?
 - Identify urban products
 - Can determine lbs. sold
- Confidentiality Issues
- Sales (again) is an indirect indicator of use
- Goal: ongoing tracking of statewide trends in urban sales and therefore.... use.

Urban Monitoring

- Runoff, sewage, air, groundwater
- May highlight products, active ingredients, formulations, and uses that are environmentally "problematic"
- What do we look for?
- Cost prohibitive

Considerations

- PUR offers some urban data
- Urban use reporting in the PUR will never reach the level of Ag. reporting
- We can supplement the use-picture in other ways
- We should work together to explore and improve the access to and the quality of urban data