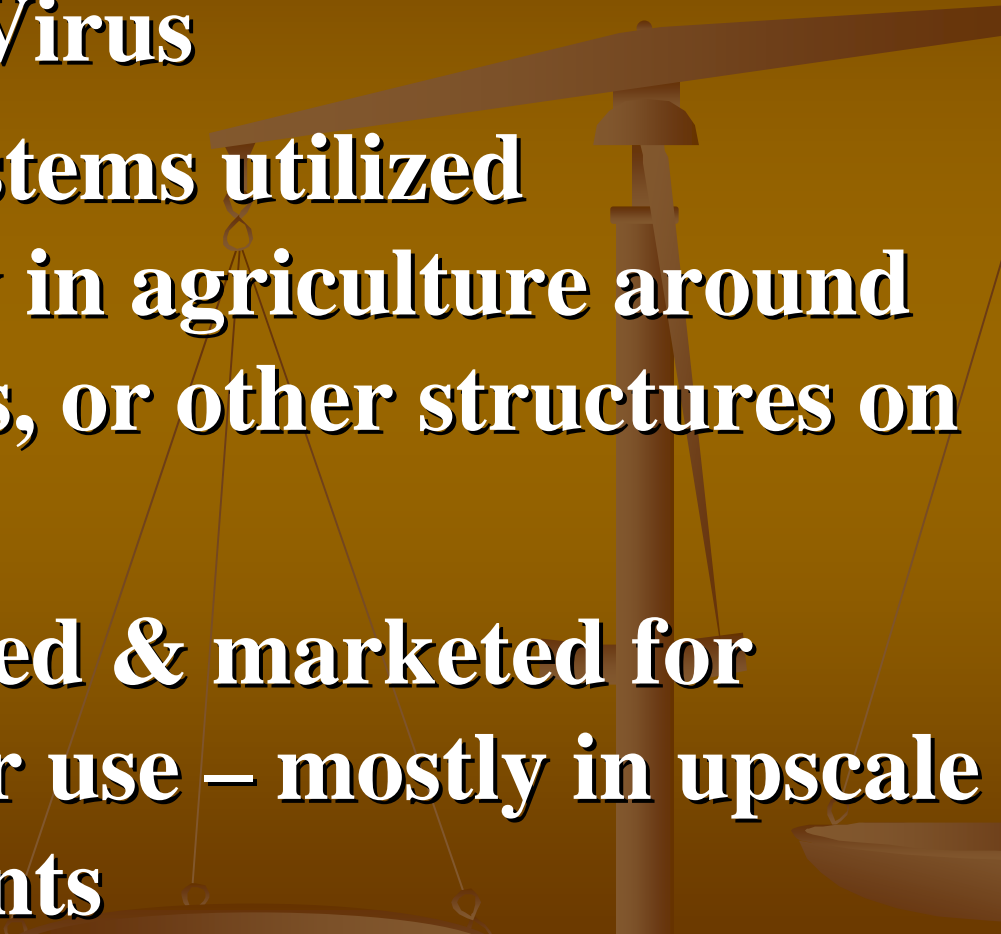




# Mosquito Misting Systems Quo Vadis?

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# Why?

1. **West Nile Virus**
  2. **Misting systems utilized historically in agriculture around barns, pens, or other structures on the farm;**
  3. **Now adapted & marketed for homeowner use – mostly in upscale developments**
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# What Does the Public Want?



1. **Desire to utilize outdoor living space**
2. **Large investment in backyard**
3. **Pools, hot tubes, patios, outdoor fire places, outdoor kitchens, sport courts, playgrounds**
4. **\$2000-\$25000**
5. **Quarterly charges**

# Typical System

1. **Misting nozzles installed around the structure or property perimeter.**
2. **Lines run to a reservoir (25 – 50 gallons) containing the insecticide.**
3. **A timer mechanism can be set to mist based on ‘anticipated’ need.**
4. **Systems can include an optional remote control & may be activated to mist between scheduled times if necessary.**
5. **Systems which include any of the optional weather sensors ensure the system does not unnecessarily mist during inclement weather.**



# Installed Misting System





# Drift













15/02/2005

# Minimum-Risk [25b] Products Used In Mosquito Misting Systems

1. **EcoEXEMPT IC-2 (EcoSMART Technologies)**
2. **Mosquito Barrier (Garlic Research Labs)**
3. **Nocdown III (CedarCide)**



# Concerns With Advertising



1. **Public Health Protection claims**
2. **Claims of ‘Safety’**
3. **Claims contrary to label - how and where the systems can be used**
4. **Lack of efficacy data that demonstrate that these systems provide a real benefit as sold for mosquito control**

# General Concerns



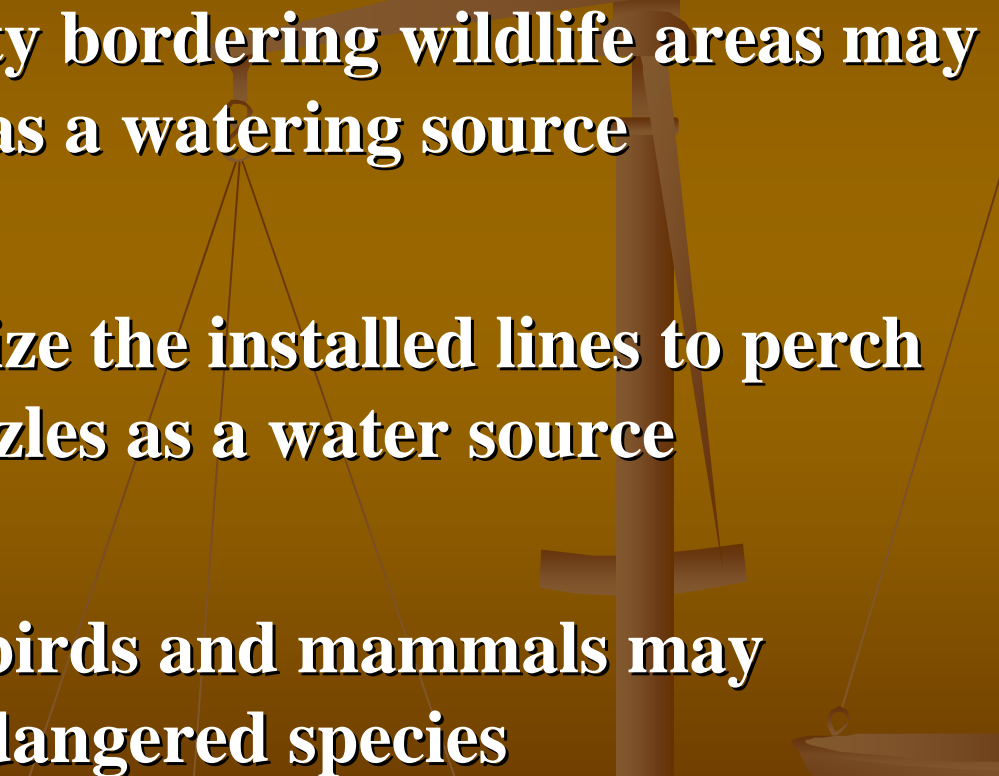
1. **Installation by companies not previously in pest management**
2. **Marketing of systems - 'Total Protection for Your Family and Loved Ones', 'Safe'**
3. **Homeowner maintenance of systems**
4. **Lack of specific label directions or precautions**

# Human Exposure Risks

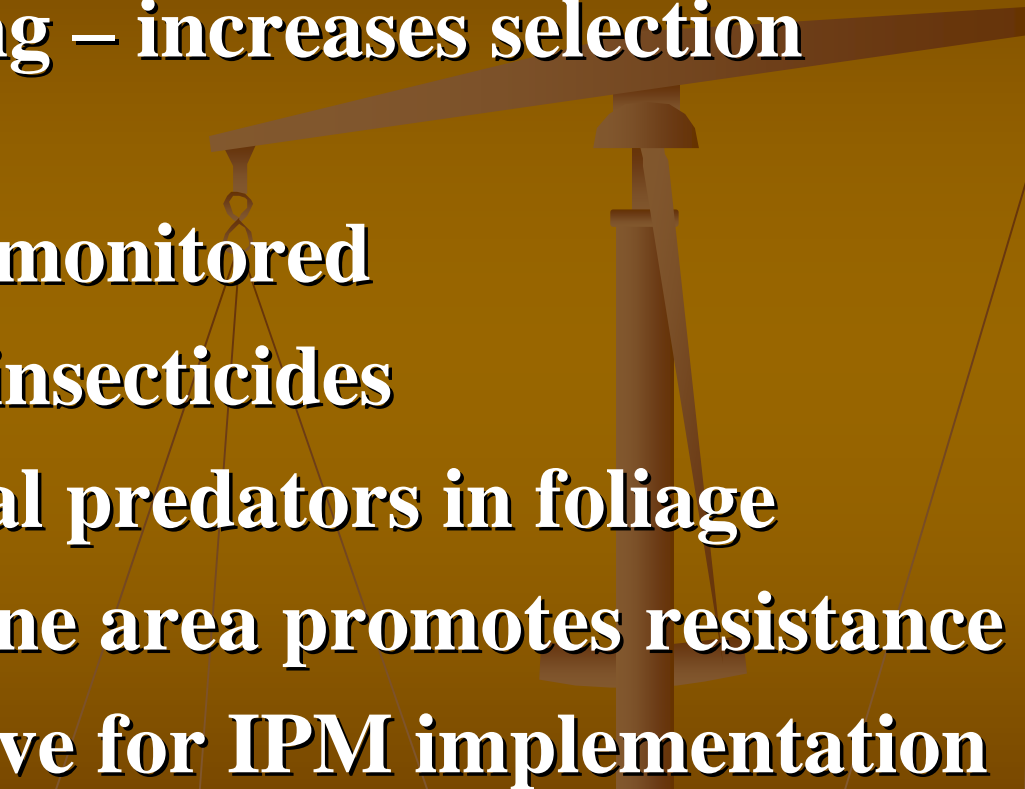


1. **Timed delivery units allow possible direct exposure to children playing outdoors or to pets**
2. **Pesticides sold or provided to the homeowners to ‘maintain’ the system without info on proper mixing, use, disposal, and the potential for harm**
3. **Large quantity of pesticide mix stored at resident’s home**
4. **In 2000 CDC identified 97 cases of human illness associated w/ automatic misters in restaurants due to poor equip. handling**

# **Non Target or Endangered Species Exposure**

- 1. Use on property bordering wildlife areas may draw animals as a watering source**
  - 2. Birds may utilize the installed lines to perch and utilize nozzles as a water source**
  - 3. Unsuspecting birds and mammals may possibly be endangered species**
- 

# Do MMS Contribute To Resistance?

1. **Sublethal dosing – increases selection pressure**
  2. **Resistance not monitored**
  3. **No rotation of insecticides**
  4. **May kill natural predators in foliage**
  5. **Saturation in one area promotes resistance**
  6. **Lessens incentive for IPM implementation**
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# States Issuing Position Statements/Consumer Advice

1. **TX Structural Pest Control Board (2004)**
  2. **New Mexico Dept of Ag (2005)**
  3. **Massachusetts Dept Ag (2005)**
  4. **Kansas State Univ (2005)**
  5. **Univ of Florida (2006)**
  6. **Illinois CES (2006)**
  7. **TX CES (2006)**
  8. **Oklahoma Dept Ag (2006)**
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# U.S. EPA Responses



1. **Strive for more specific and consistent labeling via Re-registration process**
2. **Conducted Risk Assessments for primary insecticides used**
3. **Drafted consumer web page targeted at both potential customers & those already owning systems**

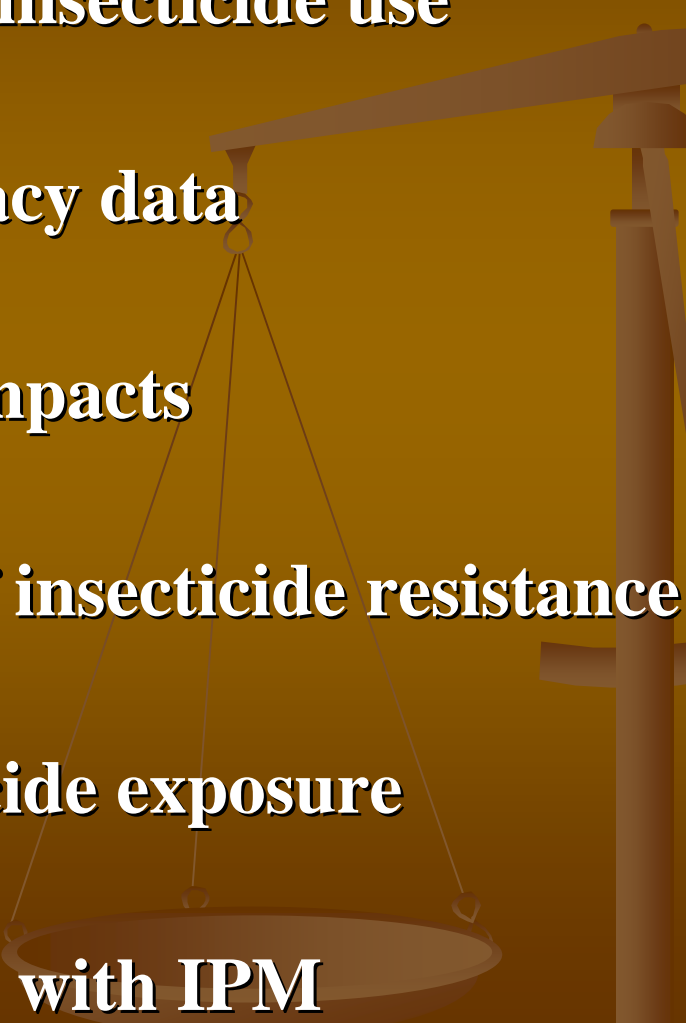
Description	Required Labeling Language For Outdoor Residential Misting Systems	Placement on Label
<i>End-Use Products</i>		
<p>Use-Specific Application Restrictions for all liquid and wettable powder labels (Outdoor residential misting system requirement) (Note: The maximum allowable application rate and maximum allowable seasonal rate must be listed as pounds or gallons of formulated product per acre, not just as pounds active ingredient per acre.)</p>	<p><b>Products not intended for use in outdoor residential misting systems must contain the following statement:</b>  “Not for use in outdoor residential misting systems.”</p> <p><b>Products intended for use in outdoor residential misting systems must contain the following statements:</b>  “Directions for use in outdoor residential misting systems:”</p> <p>“When using this product installers and service technicians must comply with the license, certification, or registration requirements of the state(s), tribe(s), or local authority(ies) where they are installed.”</p> <p>“If the system works on an automatic timer, set the timing for application when people, pets, and food are unlikely to be present.”</p> <p>“If the system works when a person operates a remote activation device, then application of this pesticide when people, pets, and food are present is prohibited.”</p>	<p>Directions for Use under General Precautions and Restrictions and/or Application Instructions</p>

Description	Required Labeling Language For Outdoor Residential Misting Systems	Placement on Label
<i>End-Use Products</i>		
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# National Pest Management Association Lead (2006)

1. **Sponsored/hosted Natl. Mosq Mist Stakeholder Forum Dec 13, 2005<sup>1</sup>**
  2. **Drafted MMS Best Management Practices (BMP) for industry**
  3. **Drafted MMS Advertising Standards for industry**
  4. **Hosted Another MMS Stakeholder Meeting Dec 18-19, 2006**
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# AMCA Position

1. **Unnecessary insecticide use**
  2. **Lack of efficacy data**
  3. **Non-target impacts**
  4. **Promotion of insecticide resistance**
  5. **Risk of pesticide exposure**
  6. **Incompatible with IPM**
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# Quo Vadis?

1. **AMCA Position**
2. **Lawsuits**
3. **CWA Issues**
4. **Efficacy**
5. **Surveillance????**

