US EPA ARCHIVE DOCUMENT

School IPM

Protecting Children from Pests and Pesticides

Center of Expertise for School IPM

school.ipm@epa.gov

June 5, 2014

Objectives

- Create demand
- Empower schools
- Enhance involvement with national and regional school IPM working groups
- Formalize stakeholder network
- Strengthen and leverage federal partnerships
- Align with other Agency school programs
- Facilitate school IPM becoming the way schools practice pest management

Create Demand for School IPM

Articles and blogs through national orgs.

Webinars

Partnerships with change agents

Mass outreach

National PTA
everychild.onevoice.
One Voice

Home | About PTA | About One Voice | PTA Website

School Smart IPM: The Sensible Way to Work the Bugs Out

APRIL 27, 2014 BY DAWN GOUGE | 3 COMMENTS

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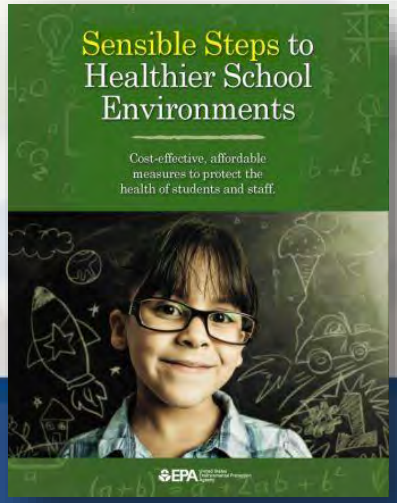
Dawn H. Gouge Ph.D. is an overly enthusiastic entomologist. Associate Professor, University of Arizona, College of Agriculture and Life Science.

One of the funniest things I recall from my youth was my Mum's reaction to the imposing Giant House Spiders that cohabited with us in our lovely English duplex. Now the spiders can reach a fairly good size of 2-3 inches, and they are fabulously agile and rather fast moving when they want to be. But back to my Mum: the alert would usually begin with ear piercing shrieks and the sound of thrown slippers, newspapers, and the slamming of doors (please note "a tactical withdrawal is the most desirable form of retreat" Sun Tzu, the Art of War). Our Mum, a 5 foot, 95 pound protector would dash back and forth hammering the



Efforts to Create Demand

- Publications
  - *Saving Dollars and Making Sense: Keeping Bugs Out of the Classroom*
  - *The Role of School Nurses in Integrated Pest Management: Protecting Children From Pests and Pesticides, School Nurse* magazine
  - NASN *Weekly Digest* - school IPM shorts - summer 2014
- Blogs
  - *Is Your Child's School Stuck on a Pest Control Treadmill?*
    - Jim Jones, EPA Connect, Mar. 2014
  - *School Smart IPM: The Sensible Way to Work the Bugs Out*
    - Dawn Gouge, PTA *One Voice,* April 2014
  - What You Don't Know About Pests, Can it Hurt You?
    - Tom Green, PTA *One Voice,* Summer 2014

Outreach Events

- New Orleans School Visit
  - OCSPP Assistant Administrator Jim Jones, Jan. 2014
- Green Schools National Conference
  - EPA keynote and school environmental health session, Mar. 2014
- University of Arizona School IPM Big Check Event
  - OCSPP Assistant Administrator Jim Jones, Apr. 2014
- National Conference on Urban Entomology
  - School IPM Presentation, May 2014
- National Association of School Nurses Annual Conference
  - Poster presentation, Jun. 2014
- PestWorld 2014
  - OPP Office Director invited to speak at a school IPM symposium
- Entomological Society of America National Meeting
  - *Cockroaches, their management, and linkage to asthma in schools* symposium, Nov. 2014
- International IPM Symposium
  - OCSPP Assistant Administrator Jim Jones keynote, Mar. 2015

Empower Schools and IPM Champions

Model Pesticide Safety and IPM Guidance Policy for School Districts

School IPM Business Case

Saving Dollars and Making Sense: Keeping Bugs Out of the Classroom

Stock PowerPoints:

General audience, school nurses, facility staff

National School IPM Expert List

Non-Government Organization partnerships

Update *Pest Control in the School Environment: Adopting IPM* (aka the Rat Book – e-reader option?)

Providing Information

- Publications
  - *Model Pesticide Safety and IPM Guidance Policy for School Districts*
  - *Tick Safety in Schools: IPM for Protecting Children from Tick-Borne Diseases*
- In-Person Training
  - Region 10 school IPM pilot training for Portland Indian Health Service Environmental Health Officers – Dec. 2013
- Videos
  - California Dept. of Pesticide Regulation School IPM Video Series (EPA Region 9 funding)
    - 11 videos - Healthy Schools Act, IPM basics, and specific management techniques for a variety of school pests. Available Jan. 2015. (e.g., http://apps.cdpr.ca.gov/schoolipm/childcare/video_series.cfm)

Providing Information

- Webinars
  - *Understanding Bed Bugs in Schools* with NPMA - Apr. 2013
  - *IPM in Schools: Protecting Children in Schools from Pests and Pesticides*
    - *Green Strides* Webinar Series - Mar. 2013
    - EPA Sensible Steps to Healthier School Environments Series - Jul. 2013
  - *Real Time Assistance to Implement EPA School Environmental Health Programs*
    - EPA Sensible Steps to Healthier School Environments Series - Apr. 2014
  - Mosquito Management with Mike Merchant – Jul. 2014
  - IPM for Ticks around Schools with Tom Mather – Aug. 2014
  - Outdoor IPM around Schools – Sept. 2014
  - General School IPM – Oct. 2014
  - School IPM for Nurses with NASN – Fall 2014
  - Rodent Control with Bobby Corrigan – Dec. 2014

Center of Expertise Activities

Coordinate and collaborate with Regional School IPM Coordinators and external partners

(Regional tech team and PPDC meetings)

Compile and evaluate existing materials

(School IPM materials workgroup)

School IPM Strategic Plan

Provide technical assistance

Align EPA school-related programs

(Office of Children's Health Protection and Office of Air and Radiation)

Washington State School IPM Project

Juliann Barta

EPA Region 10

&

Carrie Foss

Washington State University Extension

Pilot Goal & Objectives

- Goal
  - Create a model for statewide diffusion of school IPM
- Objectives
  - Increase school IPM partnerships
  - Increase IPM implementation in K-12 public schools
  - Document what works and lessons learned

Pilot Resources

- EPA Region 10 & Center of Expertise
- Urban Pesticide Education Strategy Team
  - Cooperative effort with state, federal and local agencies providing sensible pest management solutions to people who need them
- PPDC IPM Workgroup
- OPP STAG funding
  - $62K augments cooperative agreement between EPA Region 10 and the WA Dept. of Agriculture

Mechanisms

- School district focus groups
  - Organize a *Core of Champions*
    - Pilot different tools
    - Use as a coalition panel for peer-to-peer mentoring
  - Hold district meetings at the Washington Association of Maintenance and Operation Administrators conference
  - Get district input on needed resources and incentives
- *Stop School Pests* recognition program
- New partnerships

Thanks

- Janet Hurley
- Marc Lame
- Carrie Foss

Behavioral momentum
Newton's second law of movement states - the change in velocity of a moving object when an outside force is applied is directly related to that force and inversely related to the object's mass

The magic S word is Sustainability

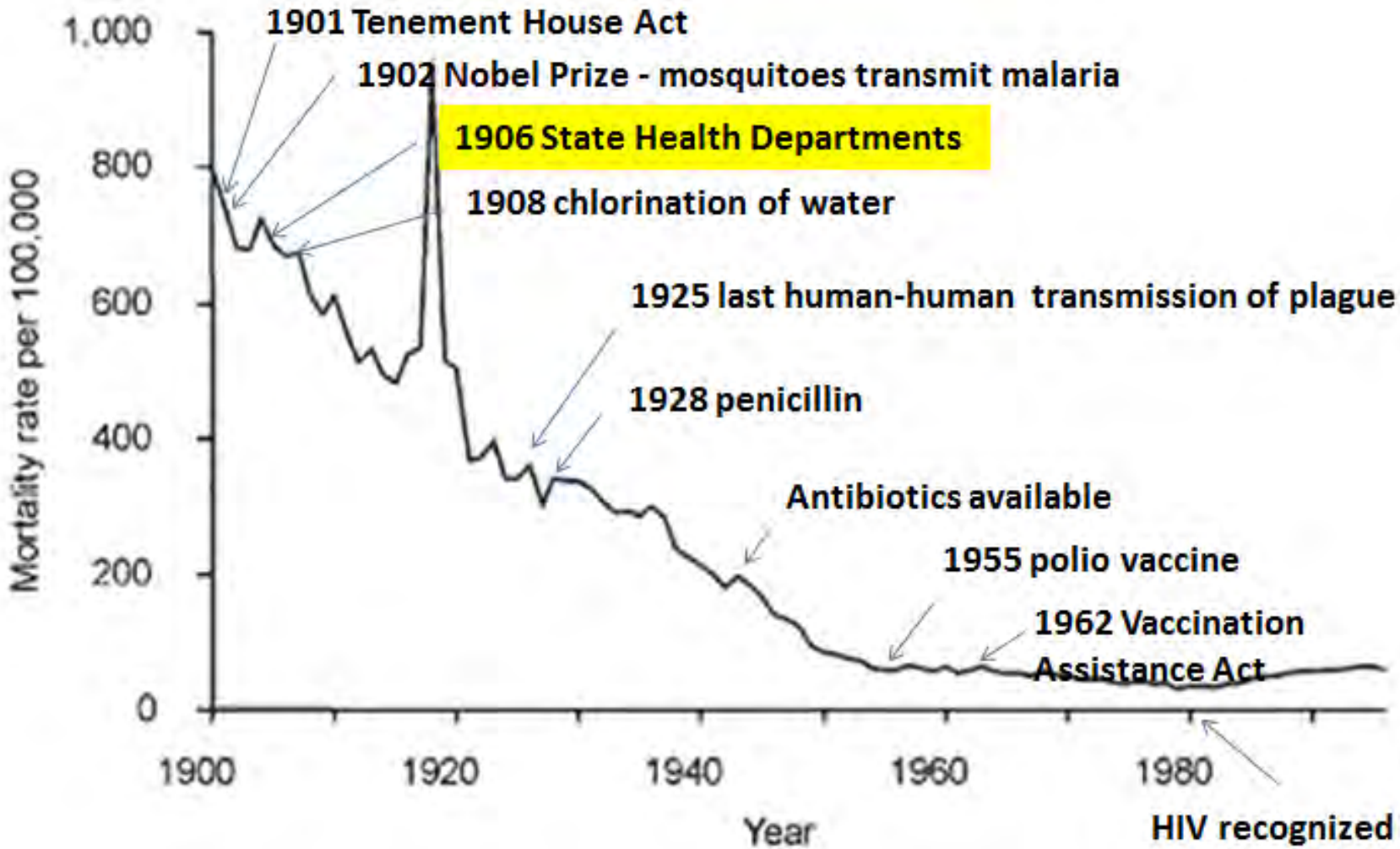
- Build the change agent core
- Comprehensive school community involvement
- Marketing – brand recognition
  (e.g. Stop School Pests)
- Top down and bottom up
- New partnerships with stakeholder associations

The magic S word is Sustainability

- *Stop School Pests* recognition program for schools meeting appropriate standards (tiered approach)
- Procurement contracts and model policy
- Environmental Health committees
- Public Health Departments
- **Statewide** enhancement project (Carry Foss and Juliann Barta)

The power of public health

Deaths from infectious diseases fell in the US during the 20th century



Change Agent Tools for Sustaining ***SIPM:***

1. Demand side IPM messaging
   a) Create awareness of need
   b) Generate consumer interest by generating news stories that demonstrate how consumers can benefit
   c) Generate commercial business interest by generating articles that demonstrate benefits to businesses
   d) Generate better community relations, communicate with **all** stakeholders
   e) Drive readers to consumer-related websites containing education forums

Change Agent Tools for Sustaining SIPM:

2. Environmental Health & Safety Committees (EHS)

Change Agent Tools for Sustaining SIPM:

3. Pest presses

School Integrated Pest Management (IPM) Newsletter – December 2013

THE UNIVERSITY OF ARIZONA

COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

View this newsletter as a PDF.

Rodents: Get Them Out of Your School, House and Yard

The house mouse is one of the most troublesome and economically important rodents in the United States. They feed on human food and contaminate food with droppings and urine. They cause structural damage to buildings by building nests and gnawing; they chew on furniture and electrical wires. In addition, house mice can spread disease transmitting pathogens or parasites to humans and pets, including salmonellosis (food poisoning), ringworm, mites, tapeworm and ticks. They generate allergens, which are asthma triggers and should not be tolerated inside schools. Effective, low hazard options to eliminate these pest mice are available and have been presented in previous newsletter. Here we address the use of rodenticides in schools.

The adult house mouse. maine.gov

Rodenticides in schools – only when all else fails!

Understanding baits

Baits are designed to be attractive food resources and additionally contain a toxin that proves deadly if a sufficient amount is consumed. There have been recent changes in rodenticide regulations to reduce rodenticide hazards to wildlife, pets and children. Manufacturers are now required to produce over-the-counter products that are sold as ready-to-use, disposable bait stations. Agricultural producers and professional pest management professionals have access to a wider array of rodenticide options, including restricted use pesticides.

Anticoagulant rodenticides

Anticoagulants cause blood-thinning in almost all warm-blooded animals. They are a relatively humane toxicant that causes little in the way of pain and suffering. The rodenticides are slow acting and animals may continue to be active for up to a week before dying. The animal dies of internal bleeding. Until recently there have been two groups of anticoagulants available: first generation (multiple doses are required to cause death of the animal) and second generation (may be fatal after only one feeding). However, because of the higher relative risk, second-generation anticoagulants are no longer allowed to be manufactured for sale to the general public. Consumers are now able to purchase only prepackaged, ready-to-use bait stations containing the first-generation anticoagulants (e.g., warfarin, chlorophacinone, or diphacinone) or non-anticoagulants (e.g., bromethalin or cholecalciferol).

Upcoming Webinars and Events

Attend Free Sessions of the Green Strides Webinar Series

The Green Strides Webinar Series provides school communities the tools to reduce their schools' environmental impact and costs; improve health and wellness; and teach effective environmental literacy, including STEM, green careers, and civic engagement. Find more sessions for educators, facilities managers, and advocates weekly, click here.

December 11, 2013, 4-5 p.m. Eastern / 2-3 p.m. Arizona: Physical Health and Wellness Benefits of Participating in Archery (DOI)

December 11, 2013, 7:30-9 p.m. Eastern / 5:30-7 p.m. Arizona: ClimateChangeLIVE Education Resources Highlights – Part 2 (USFS)

For more information about the EPA Schools program, visit: http://www.epa.gov/schools/

For more information about the Community IPM, visit: http://www.extension.org/pages/23359/urban-integrated-pest-management-community-page

schoolipm

ARIZONA PEST MANAGEMENT CENTER

For more information about School IPM in Arizona, visit: http://cals.arizona.edu/apmc/westernschoolIPM.html

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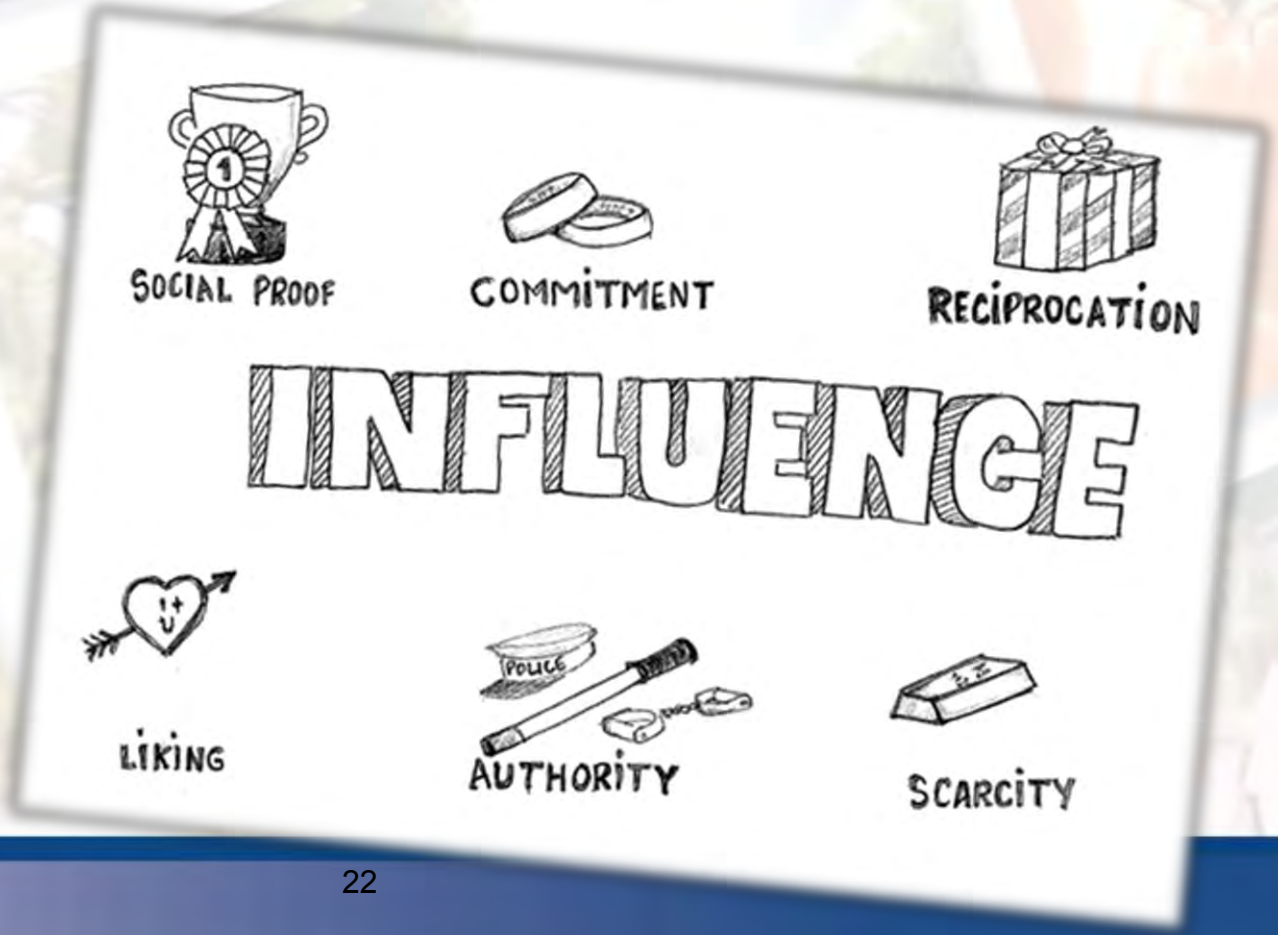
Change Agent Tools for Sustaining SIPM:

4. PMP partners PMP - partnership w/ thoughtful procurement (IPM contract)

Change Agent Tools for Sustaining SIPM:

5. Genuinely care and influence

John C. Maxwell — 'People don't care how much you know until they know how much you care'



Change Agent Tools for Sustaining SIPM:

6. Area-wide Coalitions

Change Agent Tools for Sustaining ***SIPM:***

7. Recognition Program huge ramifications! Increase professionals credibility, increase stakeholder engagement, expanded both change agent and stakeholder group.

Change Agent Tools for Sustaining SIPM:

8. GET DIRTY!

Mosely because it's fun, but it does make a difference.

Change Agent Tools for Sustaining ***SIPM:***

9. Non-pesticide-centric rules and regs

Pest resource reduction:

water, waste, clutter, sanitation pest-proofing, etc.

Critical Mass In Diffusion: ***The Point After Which Further Diffusion Becomes Self-sustaining***

•Occurs at the point at which enough individuals in a system have adopted an innovation so that the innovation's further rate of adoption becomes self-sustaining

•*Threshold* occurs at the individual level of analysis , whereas the critical mass operates a the system level

Dr. Marc Lame,
Indiana University

People are motivated by **perceived threat**

660,000 malaria

5

People take action based on **perceived <u>ease</u> and <u>efficacy</u>** – how to reduce high blood pressure

Discussion and Feedback