E&PP Info Note#704
Orig. 09/03/02, Modified 7/26/10, 8/9/12

THE UNIVERSITY of TENNESSEE Extension

Child-Serving Facility IPM Logbook

Facility Name:_____

Facility Address:_____

_____

_____

_____

Directions for Using the IPM Logbook

Maintaining a logbook facilitates communication among IPM participants. Good record keeping is essential to smoothly execute and soundly evaluate an IPM program. Interested parties can both record and find information here.

- **Pest sighting log -** Record who sighted the pest(s) and where and when. Be specific in noting the type and number of pest(s) and any damage. For convenience to staff, place an additional log in the kitchen. Be specific; indicate the type, number and any damage that was done. The pest control technician can view the log, investigate the situation and treat or make suggestions to correct conditions that are contributing to the problem. The structural repair log alerts the maintenance staff about needed repairs. Both the pest sighting and the structural repair logs have a place to note what action has been taken and when.

- **Inspection forms** – Prior to the start of school, it is a good practice to inspect the school to see what repairs are needed to correct pest-conducive conditions such as leaky pipes or unsealed pipe penetrations and worn weather stripping. The inspection checklist helps to remind IPM participants that sanitation and exclusion are key to preventing pests.

- **Maps and traps-** Monitoring for pests with sticky traps is a valuable tool for detecting hot spots and for determining the effectiveness of treatments. Replace traps when dusty or full. Dating and numbering traps and recording their location on a map allows anyone to check them and fill in the pest surveillance sheets. Examples of a trap log and facility map are included.

- **Pesticide application records -** State laws require for each application of a pesticide that the name and certification number of the applicator; the name of and the amount of the product applied, the active ingredient and its percentage; the location and time of the application; and the target organism for which the product was applied be recorded. Records must be kept for two years.

- **Time log** - The pest control technician records the time span and date of visits on this log sheet.

- **Labels and MSDS** - This section of the logbook contains copies of all labels and material safety data sheets (MSDS) for the pesticides used by the pest control technician. Anyone having questions about the products can refer to these materials for information.

- **Policy and plans** - IPM policy is a commitment to manage pests using a variety of methods such as sanitation and exclusion and treating only when the pest or evidence of the pest is present. Plans include the thresholds that trigger action and the strategies for pest management. Policies and plans will vary according to the standards each school system chooses to adopt. Examples of policies, plans and pest thresholds can be found at schoolipm.utk.edu.

- **Newsletters and Websites-** Place copies of the UT School IPM newsletter and other appropriate pest management information in this section. Refer to this section for timely information on preventing and controlling pests in the school environment.

Pest Sighting & Structural Repair Logs

PEST SIGHTING LOG

School/Facility Name: _____ _____

To be filled by School personnel				To be filled by the pest manager		
Date	Type of pest seen	Name of person reporting	Specific location where pest was seen	Date	Action taken and recommendations	Technicians name

Modified from School IPM Program of North Carolina State University

E&PP Info Note # 803
December 7, 2009

THE UNIVERSITY of TENNESSEE Extension

Structural Repair Log

Repair needed	Person requesting repair	Location	Date Requested	Date Completed

Inspection Forms

School IPM Inspection Checklist

School Name:_____

Name of Inspector:_____

Exterior Areas					
Building features	**OK**	**Needs Work**	**N/A**	**Location**	**Comments**
Doors sealed tightly – weather-stripping/door-sweeps are in place					
Windows and vents are screened or filtered					
Building eaves, walls, gutters and roofs are sound					
Cracks in walls, plumbing and electrical penetrations are properly sealed					
Adequate water drainage around foundation					
Awnings, breezeways, and other overhang structures free from bird nests					
Surplus items stored away from building					
Landscaping	**OK**	**Needs Work**	**N/A**	**Location**	**Comments**
Adequate visibility between plantings and buildings (18 inches)					
Building free from direct contact with trees, shrubs, and vines					
Building free of limbs overhanging roof					
Dumpster and trash collection	**OK**	**Needs Work**	**N/A**	**Location**	**Comments**
Dumpsters /trash cans sealed properly or with tightly fitting lids					
Dumpsters located adequate distance from doors- 50 ft.					
Dumpsters on well-drained surface- concrete, asphalt, gravel					
Area around dumpsters free from spillage					
All waste is sealed in plastic bags before disposal					
Grease trap emptied routinely; area around it clean					

Interior Areas					
Kitchen/Cafeteria	**OK**	**Needs Work**	**N/A**	**Location**	**Comments**
Ceiling tiles are in good condition (no openings or missing tiles, no evidence of leaks)					
Interior walls are free from cracks and crevices					
Plumbing and electrical penetrations are properly sealed					
Plumbing is kept in good repair (no leaking faucets or pipes)					
Permanent bulletin boards, mirrors, electrical boxes and other wall fixtures in food preparation and serving areas are caulked					
Surfaces in food preparation and serving areas are regularly cleaned of grease deposits					
Floors are clean (free of spillage) by end of day, especially under food prep and serving areas					
Floor and sink drains are clean and traps are kept full of water					
No standing water in sinks or steam tables overnight					
All surfaces, trays, dishes cleaned and dried by end of day					
Trash cans are clean and lined with trash bags, daily					
Is there evidence of pest monitoring throughout the kitchen area?					
Bulk stored products are stored on open wire racks and not in original cardboard shipping containers					
Stored products rotated on “first in first out” basis					
Inspection aisles ($\geq$ 6”) are maintained around bulk stored products					
Packaging and shipping materials are promptly removed from food storage areas					
Food items are stored in tightly closed containers overnight (e.g. bread, cookies, flour, etc.)					

Kitchen/Cafeteria continued	OK	Needs Work	N/A	Location	Comments
Cafeteria furniture does not provide pest harborage (e.g. metal tube frames are sealed, upholstered furniture not present)					
Vending machines are clean inside and out					
Mops and mop buckets are properly dried and stored (e.g. mops hung upside down, buckets emptied)					
Recycling					
Recycling bins-lined with plastic garbage bags, cleaned and emptied frequently?					
Concession Area					
Inspected often, kept clean, well sealed, monitored for pests					
Food stored in pest-proof containers					
Teachers Lounge					
Teachers lounge cleaned daily					
Refrigerators, microwaves located in teachers lounge cleaned at least monthly					
Food items are kept in pest-proof containers					
Plumbing in good repair; pipe penetrations sealed					
Permanent bulletin boards, mirrors, electrical boxes and other wall fixtures caulked					
Culinary Arts Classrooms					
All surfaces, equipment, dishes cleaned, freed of grease, and dried by end of day					
Floors are clean (free of spillage) by end of day, especially under food prep area					
Plumbing is kept in good repair (no leaking faucets or pipes; pipe penetrations sealed)					
Food items are kept in pest-proof containers					
Trash cans are cleaned daily and double-lined with trash bags					
Is there evidence of pest monitoring throughout the kitchen area?					

Classrooms/ Hallways/Offices	**OK**	**Needs Work**	**N/A**	**Location**	**Comments**
Ceiling tiles are in good condition (no openings or missing tiles, no evidence of leaks)					
Interior walls are free from cracks and crevices					
Ceiling plenums are accessible and are free of pest activity					
Floor in good repair; cleaned regularly					
Classrooms free from clutter					
Classrooms free from food *(Food, if present, kept in pest resistant containers)*					
Trash cans are clean and lined with trash bags, daily					
Rest Rooms					
Wall/Floor tiles in good condition/no cracks					
Bathrooms, urinals, and sinks sanitary and clean?					
No signs of insect infestation around soap and towel dispensers					
Sinks & faucets in good repair; pipe penetrations sealed					

Sources:

http://www.maine.gov/agriculture/pesticides/schoolipm/docs/school-ipm-checklists_pp15-62.pdf
http://schoolipm.ncsu.edu/resources.htm
IPM in schools inspection checklist for PRIA (School Demonstration Inspection Form)
http://schoolipm.utk.edu/SchoolIPMsite/wwwroot/School%20Sample%20Site/GettingStartedSchool.htm

Map of Facility & Monitoring Station Location Logs

THE UNIVERSITY of TENNESSEE Extension

extension more mind reach

School Integrated Pest Management: Monitoring

Last Updated: May 20, 2009

Introduction

Cockroach Monitoring Station

One important component of pest identification is monitoring. An organism should not be considered a pest until it is proven to be one, and this can be done through monitoring. Monitoring will allow you to pinpoint where the pest problems are, and when they are occurring.

Monitoring will also provide you specimens so the pest can be identified. When monitoring, it is important to keep records. Records will help you to see patterns, and will help you to solve reoccurring pest problems. With monitoring, you can determine if the pest population is declining or growing. You can determine the life stage of the pest, you can look for natural enemies, and you can determine the amount of pest damage.

Hearsay or casual reports of pests are not particularly helpful. They may guide you to places that need monitoring, but they don't provide you with the accurate information you need. You are the professional, the diagnostician, and you have to gather the appropriate data before you take action. Monitoring is a crucial part of that information. Information gathered during monitoring should always be written down in a monitoring log.

Monitoring involves problem solving, ongoing inspection and observation (this may include monitoring at different times of the day or night), and communication with other professionals. It helps if you can coordinate your monitoring with routine maintenance activities. As you go about your daily job, be sure to jot down notes about pests in monitoring stations and other problems you see. You can then return to that area and place or replace monitoring stations or can put in a work order to get an area sealed or a leak fixed.

There are certain areas that consistently harbor pests. These are known as pest vulnerable areas or PVAs. To reduce pests in schools, you must reduce pest conducive conditions. These conditions are often found to be PVAs. These are areas that have the things a pest needs for survival such as food, water and harborage. Once an infestation is identified through monitoring, measures can be taken to reduce the infestation including, exclusion, reduction of food, water and harborage, and the judicious use of pesticides, usually in a targeted bait application.

By using integrated pest management principles, we can reduce the number of pests as well as maintain a healthy learning environment. By continual monitoring, you will gain knowledge about your pest situation. You can evaluate the effectiveness of your treatment and see if any adjustments need to be made.

When monitoring, you should look for and document pest conducive conditions (leaky pipes, clutter including excessive cardboard, unsealed foods including foods used in art classes, access points like uncovered vents, or unsealed holes, live pests, pest droppings, and pest damage.

General Information

General Information: Monitors should be placed on the floor against walls and/or on window ledges. If monitors are likely to be moved, use the double sided tape to fasten the monitor in place. If monitors are not catching pests, think about how the pests may be entering and re-locate the monitor to a more suitable location. Don't forget to use other structural elements as monitors. Window ledges, floor drains, light coverings, and spider webbing all serve to help you monitor for pests. Monitoring stations should not be stored alongside volatile pesticides.

Things to Remember When Placing Monitors

1. Monitors should be placed in all pest vulnerable areas (PVAs) and hot spots.
2. Monitors should be placed against a wall and/or on a window ledge. Secluded corners are often good spots.
3. Monitors should be placed out of the way of people or activities.
4. All monitors should have a placement date and number.
5. Monitor placement should be documented in case someone else has to retrieve them.
6. Monitor locations should cover the site well. Use too many as opposed to too few.
7. Place traps near to persistent pest conducive conditions (PCCs). This can document the effect of the PCC so a maintenance or repair order can be placed.
8. Monitors should be re-locatable so you can target the pest.
9. If monitors are placed in a classroom, the teacher should be informed of its purpose.
10. Monitors should be "read" monthly and should be changed when it is filled with pests, dust/dirt, or when three months have passed.
11. Typically an elementary school will require 20 monitors, a middle school 35, and a high school 40.

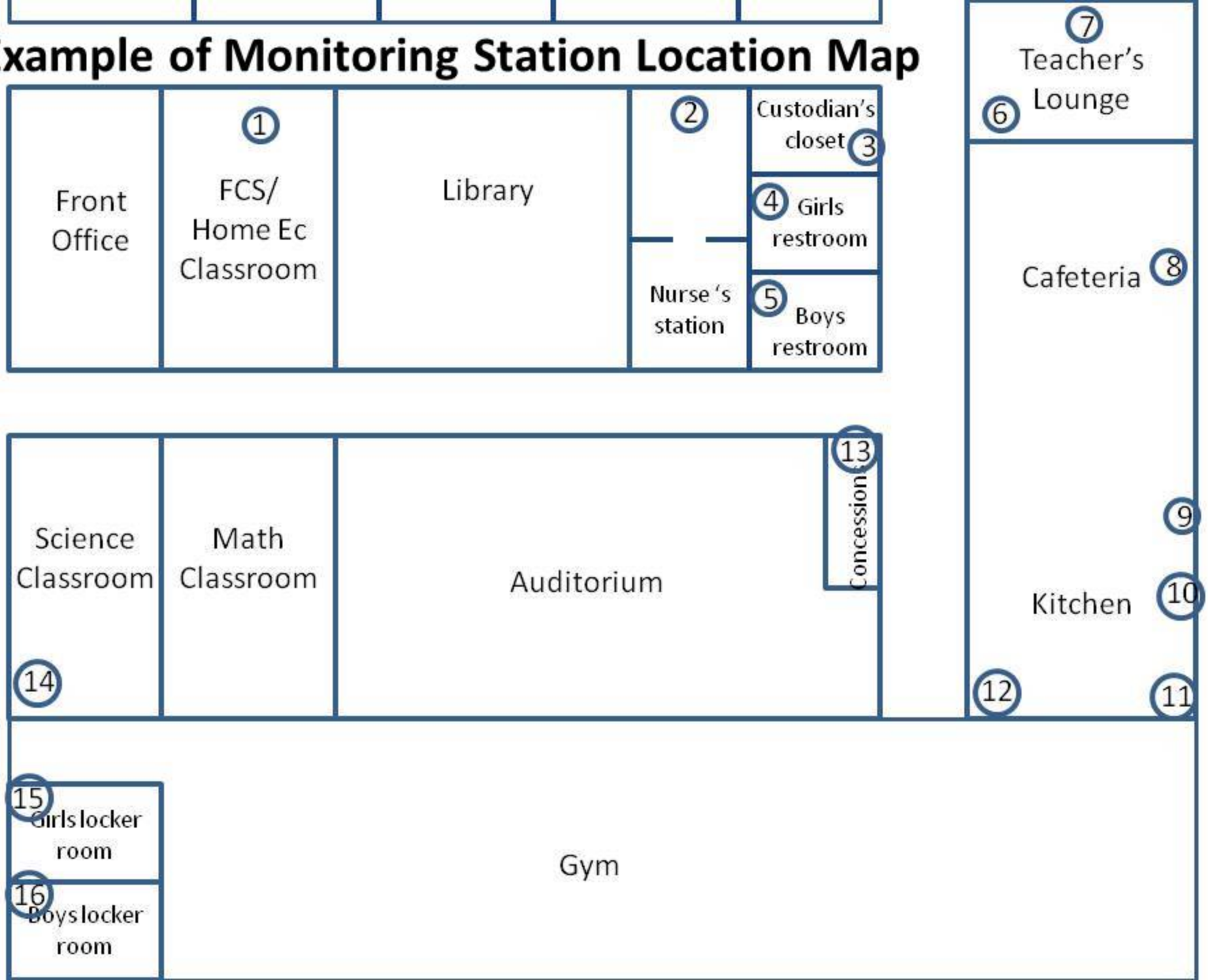
PVAs	Monitor Placement Area
Kitchen/cafeteria	Dry storage and pantry, dishwasher area, near external cafeteria doors, near floor drains, and within the lower panels of serving counters
Staff lounge	Behind vending machines, in counter or drawer, behind microwave, and next to refrigerator
Custodian's storage	Under shelving, near to floor sink, near external door (if present)
Reported hot zones from pest sighting log	Under counters, sinks, near windows
Special Education or kindergarten classrooms	Near food preparation area, near backpack storage, under sink
Home economics/ Life skills classrooms	Near stove or refrigerator, near washer/dryer, under counter
Stage areas	Under stage storage, equipment room
Locker areas	Under lockers
Concession stands	Under counters or equipment
Classrooms with animals/plants	Near pet food or plants
Cluttered classrooms	Remove clutter, monitor in storage areas, under sinks
Bathrooms (if there is a problem)	Near external doors, near cracks and crevices, near utility pipes without escutcheon plates
Nurses station (if there is a problem)	Under desk, under sink, near external door

Source: http://www.extension.org/pages/School_Integrated_Pest_Management:_Monitoring/print/

Pest Monitoring Station (Sticky Traps, Glue boards) Location Log

Date	Trap #	Location	Condition	Pest Type & #	Damage or Other Evidence	Pest Management Required	Remarks

Example of Monitoring Station Location Map



Example of Pest Monitoring Station (Sticky Traps, Glueboards) Location Log

Date	Trap location	Trap condition	Pest	Number	Damage or other evidence	Pest management required	Remarks
8/20/10	1, FCS sink	Pests	German roach	4	Feces on under sink	**Better sanitation**, seal harborages , bait	
8/20/10	2, nurse stn	Good					
8/20/10	3, cust. clos.	Dusty				Replace glueboard	
8/20/10	4, girl's restroom	Good					
8/20/10	5, boy's restroom	Good					
8/20/10	6, teacher's l. sink	Pest	mouse	1		Better sanitation, seal C&C & escutcheon plate	Door sweep needed on cafeteria door?, add trap
8/20/10	7, teacher's l. vending mach.	Good					
8/20/10	8, cafeteria door	Pest	Ground beetle	2		Door sweeps needed	
8/20/10	9, kitchen dishwasher	Pest	German roach	5		Seal cracks, crevices; remove shelter; bait away from water /heat	Keep area dry between washings
8/20/10	10, kitchen lower panels	Pest	German roach	25		Better sanitation clean grease, bait away from water /heat	If needed, IGR to shelter; Boric acid to dry, closed voids; spray C&C?
8/20/10	11, kitchen dock door	Pest	mouse	1		Add door sweeps	Add snap trap or multiple catch trap
8/20/10	12, kitchen pantry	Pest	Mouse, German roach	1, 5		Remove cardboard, bait near infestation, use pest-proof containers	Add snap trap or multiple catch trap
8/20/10	13 concession sink	Pest	mouse	1		Better sanitation, remove garbage after use, seal pipe collar	Add snap trap or multiple catch trap
8/20/10	14, science pet cage area	Pest	mouse	1		Clean pet bedding more frequently, put pet food in pest-proof container	Add snap trap or multiple catch trap
8/20/10	15, girls loc. sink	Good					
8/20/10	16, boys loc. sink	Good					

Pesticide Application Records

Pesticide Application Records

According to **0080-6-16-.05 RECORDS** of TDA's *Laws and Regulations Governing Pest Control Operators and Applicators of Restricted Use Pesticides,* all commercial applicators and commercial pest control operators are required to keep records which include pesticide used; target pest; site (crop, plant, house, business or building a pesticide is applied on or to and location thereof); dosage rate; the landowner, producer or other person employing such applicator; date used and amount of pesticide applied. These must be retained for two years and made available to the Commissioner of Agriculture or his designee on demand. The following table can be used to record pesticides used in child-serving facilities and should provide information in excess of that needed to comply with the above rule.

Child-serving facility:_____
IPM Coordinator:_____
Logbook overseer:_____
Facility Address:_____
_____
_____

Pest Control Company:_____
Licensed Operator and Charter#:_____
Address:_____
_____
_____
Phone #:_____

Date	Time	Site (area and room number, other)	Target pest	Pesticide trade name EPA registration number	Application Rate	Percentage of mixed use dilution	Total amount pesticide used	Common or chemical name of active ingredient	Total area treated	Name of certified applicator TDA assigned certification #	Notes

Time Log

Time Log

Date	Technician	Time In	Time Out

Labels and Material Safety Data Sheets (MSDS)

IPM Policy, Plans & Contract

Download examples of bid specifications and IPM polices
at http://schoolipm.utk.edu

Download examples of action plans
at http://www.extension.org/pages/20295/school-integrated-pest-management-action-plans

School IPM Newsletters, Websites & Other IPM Information

E&PP Info #797
7/21/09, mod. 8/10/12

UT Extension

School IPM Newsletter & Websites

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The University of Tennessee School IPM newsletter
(http://schoolipm.utk.edu/newsletter.html)

There are many websites pertaining to school IPM, most are linked from the following sites:

University of Tennessee Child-serving Facility IPM
(http://schoolipm.utk.edu)

eXtension Pest Management In and Around Structures - Urban Integrated Pest Management
(http://www.extension.org/Urban Integrated Pest Management)

University of Florida - School IPM
(http://schoolipm.ifas.ufl.edu)

IPM Institute of North America, Inc.: School IPM
(http://www.ipminstitute.org/school.htm)

EPA Integrated Pest Management (IPM) in Schools
(http://www.epa.gov/pesticides/ipm/

Southern Region School IPM Working Group
(http://www.sripmc.org/schoolIPM/)

Listservs allow information to be shared among many individuals and is also used to inform subscribers of additions and updates, in this case, to school IPM and children's environmental health.

- **School IPM Listserv** (http://schoolipm.ifas.ufl.edu) under National Listserv
- **Children's Environmental Health Network** (http://www.cehn.org/involved/subscribe)

Download newsletters at http://schoolipm.utk.edu/newsletter.html