

IPM CURRICULUM FOR TEACHERS

LOW-RISK INTEGRATED PEST MANAGEMENT TRAINING

William and Jean Currie, International IPM Institute

INSTRUCTION UNITS IN THIS LESSON PLAN:

1. Low-risk IPM policy overview and implementation.
2. The policy's guidance on pesticide use.
3. All other policies must conform to the low-risk IPM policy.
4. All staff must be trained on the IPM policy and their roles in its implementation.
5. Understand important health and safety roles for teachers.

PERFORMANCE OBJECTIVES:

| Unit # | Objective of Performance | Importance | Learning Difficulty |
|--------|--|----------------|-----------------------|
| 1 | Summarize the low-risk IPM policy, what it does, what not to do and how it works. Realize that full implementation of the IPM policy may take time. | Very Important | Moderate |
| 2 | The policy's guidance on pesticide use. | Important | Moderate |
| 3 | Understand that all other policies must conform to the low-risk pest management policy. | Important | Difficult |
| 4 | Understand that <u>all</u> staff must be trained to be aware of the IPM policy. Understand your role in policy implementation and know how to get low-risk pest management help. | Very Important | Moderate to Difficult |
| 5 | Understand important health and safety roles for teachers. | Very Important | Moderate to Difficult |

KEY:

IMPORTANCE:

Very important, important, not too important

OBJECTIVE OF PERFORMANCE:

Must know, be familiar, have knowledge, understand, perform, Demonstrate, etc.

LEARNING DIFFICULTY:

Difficult, Moderate, Easy, Moderate to Very Difficult

TEACHER LESSON PLAN

PREPARATION DATE: May 9, 2008

PREPARED BY: William E. Currie

UNIT OF INSTRUCTION: Low-risk IPM Policy Implementation

TITLE OF LESSON: Policy, roles, identify pests and their needs

INSTRUCTIONAL OBJECTIVE: Participants will understand the low-risk IPM policy, their role in its implementation, and basic pest needs.

TIME ALLOTTED FOR LESSON: 1.5 – 2 hours
METHOD OF INSTRUCTION: Lecture, guided discussion, PPT
INSTRUCTIONAL RESOURCES: Manual, Experience, Lesson Plan
A/V EQUIPMENT: Laptop, PPT, Flip chart and Stand, Screen

GENERAL PLAN OF PRESENTATION: Introductions, low-risk IPM policy, Precautionary Principle, reduced use of pesticides. Your role to implement the IPM policy in your site. Pest management help. Health and safety issues for students and staff. Exclusion, sanitation, habitat modification (clutter, food and water).

INTRODUCTION: Fire alarms and exits, restrooms, expect participation. Policy history. Innovative state-of-the-art policy.

EXPLANATION/APPLICATION/PRESENTATION:
IPM defined (risk reduction), Precautionary Principle. Approved list of products. Annual notification, special notification. Posting (72 hours or 5 half lives). Staff training.

Pest and pesticide-free environments have a positive impact on the learning conditions for students, staff, parents and the community.

Don'ts: Only licensed Pest Management Technicians apply pesticides. No ban – phase out pesticides as technology develops. Remove or eliminate clutter. Roles. Sanitation (no food or water). Observation and reporting. Pest sighting log. Facility Manager is the site point of contact. Pest Management log book in main office for public access. Pest Management Technician responds, monitors and baits, then follows up with other crafts for repairs. Student responsibility to clean up after themselves. Use trash containers.

Feral cats (and other animals) – do NOT allow food, water and shelter for them.
No food in classrooms. If necessary, store in pest-proof metal containers.
Report evidence of pest presence to your Facility Manager.

CONCLUSIONS/SUMMARY: Low-risk pest management requires dedication and may be tedious and time-consuming when performed correctly. A thorough understanding of why such procedures are so important frequently imparts a degree of significance to even the most mundane task. Pests live where conditions favor them. Good pest management practices prevent pest presence by eliminating pest access to their needs.

TEACHER LESSON PLAN UNIT ONE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
 SUBJECT MATTER: Policy, Roles, How to Activate Pest Management Help
 UNIT OF INSTRUCTION: Unit 1: Lecture, PPT, Guided Discussion – 20 minutes

INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks) | Instruction Method (Performance) | Learning Difficulty |
|-----|--|----------------------------------|---------------------|
| 1 | Introduction, policy, history, implementation | Lecture | Easy |
| 2 | IPM defined (risk reduction) – Precautionary Principle – approved product list – implementation will take time. | Lecture | Easy |
| 3 | Pest and pesticide-free environments have a positive impact on the learning conditions for students, teachers and staff. | Lecture, Guided Discussion | Moderate |

TEACHER LESSON PLAN UNIT TWO

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
 SUBJECT MATTER: Policy Guidance on Pesticide Use
 UNIT OF INSTRUCTION: Unit 2: Lecture – 15 minutes

INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks) | Instruction Method (Performance) | Learning Difficulty |
|-----|--|----------------------------------|---------------------|
| 1 | IPM policy provides guidance to reduce reliance on pesticides to manage pests. | Lecture | Easy |
| 2 | Current and proposed pesticides reviewed often. Decide whether and how products may be used by PMTs. | Lecture | Moderate |
| 3 | Goal is to phase out the use of pesticides. Use exclusion, sanitation and habitat modification. | Lecture, Guided Discussion, PPT | Difficult |

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

TEACHER LESSON PLAN UNIT THREE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
 SUBJECT MATTER: All Other Policies Conform to the Low-Risk Pest Management Policy
 UNIT OF INSTRUCTION: Unit 3: Lecture, Guided Discussion – 20 minutes

INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks) | Instruction Method (Performance) | Learning Difficulty |
|-----|---|----------------------------------|---------------------|
| 1 | Pests pose risks to students and staff, as well as compromising school building's structural integrity. | Lecture, Guided Discussion | Easy |
| 2 | Rats, mice, opossums, and feral cats carry fleas, ticks, and lice which may also carry diseases. Hantavirus, plague, Lyme disease, tularemia, fungus and other diseases. Present health risks and distractions to students and staff. | Lecture, PPT, Guided Discussion | Moderate |
| 3 | Insects, wasps, bees, mosquitoes, flies, ants, and various biting bugs may also pose health risks to students and staff. | Lecture, PPT, Guided Discussion | Moderate |
| 4 | Termites, wood borers, mold, wood rot, and rodents can damage the structural integrity of school buildings. | Lecture, PPT, Guided Discussion | Moderate |
| 5 | Student and staff health and safety, and maintaining the building's structural integrity are very important. | Guided Discussion | Easy |

TEACHER LESSON PLAN UNIT FOUR

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
 SUBJECT MATTER: Staff Awareness and Responsibility of the IPM Policy
 UNIT OF INSTRUCTION: Unit 4: Lecture, Guided Discussion – 15 minutes

INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks) | Instruction Method (Performance) | Learning Difficulty |
|-----|---|----------------------------------|---------------------|
| 1 | The low-risk IPM policy applies to all staff (including teachers) and students. | Lecture | Easy |
| 2 | What attracts pests to school sites? Food, water, shelter, temperature. | PPT, Guided Discussion | Moderate |
| 3 | How can staff and students help? No food (crumbs) available. Use trash receptacles. Eliminate (or report) leaks. Eliminate clutter (harborage). Report pest entry points (close doors and windows). | Guided Discussion | Moderate |
| 4 | Report pest activity to Facility Manager. Report breaches in exclusion, sanitation and habitat modification. | Lecture | Easy |

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion

TEACHER LESSON PLAN UNIT FIVE

COURSE DESCRIPTION: Low-Risk Integrated Pest Management Implementation
 SUBJECT MATTER: Important Health and Safety Roles for Teachers
 UNIT OF INSTRUCTION: Unit 5: Lecture, PPT, Guided Discussion – 40 minutes

INSTRUCTIONAL PROCEDURE:

| No. | Instructional Sequence (Tasks) | Instruction Method (Performance) | Learning Difficulty |
|-----|---|----------------------------------|----------------------------|
| 1 | Eliminate clutter in classrooms and work areas to reduce shelter, harborage and hiding spaces for insects and rodents (mice and rats). | Lecture, Guided Discussion, PPT | Moderate |
| 2 | Eliminate food products in classrooms. Store food in metal pest-proof containers. Clean all food residue (and crumbs) from the site to reduce food for mice, rats and insects (ants, flies, silverfish, beetles, cockroaches). | Lecture, Guided Discussion, PPT | Moderate to Difficult |
| 3 | Students, teachers and staff must NOT provide shelter, food or water for feral cats or other wildlife. These animals carry disease, fleas, ticks and other pests. Leftover food feeds ants, flies, mice and rats. | Lecture, Guided Discussion, PPT | Moderate to Difficult |
| 4 | Teacher's role is to encourage student responsibility to clean up after themselves and utilize provided trash receptacles. Pigeons, mice, rats, ants, flies and other pests are attracted to even small amounts of leftover food. | Lecture, Guided Discussion, PPT | Moderate to Very Difficult |
| 5 | Teachers, staff and students are NOT to bring pesticides to the school site. The Facility Manager can contact the Pest Management Technician to treat, if necessary, to eliminate pest presence. Unauthorized pesticides pose a health risk to students and staff. Most pesticides may also be ineffective for long-term prevention of pest presence. Aerosols should never be used in a classroom or school. | Lecture, Guided Discussion, PPT | Moderate to Very Difficult |

INSTRUCTIONAL SEQUENCE: What comes first, chronological order
 METHOD OF INSTRUCTION: Lecture, demonstration, performance, discussion