

HEALTH EDUCATION III

MODULE 1

What's D' Buzz?



What this module is all about

Insects, rats and other pests are considered nuisances. They disturb people while sleeping, eating, resting and working by creating noise, biting, destroying properties and worst of all - transmit disease from one person to another.

Various diseases are spread by these pests either biologically or mechanically. Malaria is a disease transmitted by the female anopheles mosquito through biological means. The microbe undergoes changes inside its body before it is transmitted to a person through biting. Flies and cockroaches may transfer diseases-causing microorganisms on their feet, appendages, or by using their entire bodies as mechanical means.

This module emphasizes preventive measures that can be adapted in the homes to eradicate insects, rats and pests and to ensure sanitation to prevent diseases that may directly and indirectly affect the health of household members.



What you are expected to learn from this module

At the end of this module, you shall have:

- a. followed preventive measures to eradicate insects, rats and pests to avoid the prevalence of diseases.
- b. maintained sanitation in the house at all times to ensure a healthful environment.
- c. coordinated with both public and private health agencies for the promotion of both personal and community health.



How to learn from this module

1. This module is like a friend, you must take good care of it at all times.
2. Do not write anything on the module. You must have a notebook where you will answer all the activities of all lessons in this module.
3. Before you go on reading the lessons, you must answer the PRETEST at the beginning of the module. A POST TEST is also provided which you will answer after reading the lessons and after doing all the activities. You may now begin.

PRETEST

Identification: Identify what is referred to in each item. Choose your answer from the list below. Write letter of the correct answer in your notebook.

- | | |
|----------------|--------------------------|
| A. Insecticide | F. Lice |
| B. Adulticide | G. Proper waste disposal |
| C. Rodenticide | H. Rats |
| D. Repellant | I. Malaria |
| E. Larvicide | J. Dengue |

1. A chemical substance used to eradicate rodents.
2. These are small wingless insects which suck human blood for food.
3. This is one of the best ways of controlling flies.
4. These may be driven away by cleaning up pile of garbage and debris
5. Insecticide designated to destroy mature or adult forms of anthropods.
6. A disease caused by the bite of anopheles group of mosquitoes.
7. A chemical applied to the skin or clothing to avoid insects or pests.
8. Any chemical substance used for the destruction of insects.
9. It is used to destroy immature stages of anthropods.
10. A disease caused by the bites of Aedes mosquitoes.
from one person to another.

You may look to the key to corrections

Lesson 1

PREVENTIVE MEASURES AGAINST INSECTS, RATS, AND PESTS THAT CAUSE DISEASES

Insects, rats and pests are carriers of diseases so its control and eradication is a great responsibility of community members. It is quite impossible to eliminate them totally but the best way we can do is to control and prevent them from multiplying.

Many diseases are spread through biological and mechanical means. Malaria is transmitted through the bite of anopheles mosquito; H-fever and Dengue are spread through the bite of *Aedes egypti* mosquitoes. This transmission is through biological means.

Thypoid, dysentery, amoebiasis are spread through flies and other insects, while bubonic plague and leptospirosis are spread by rats and rodents. This transmission is through mechanical means.

Maintaining household sanitation must be practiced in order to avoid outbreaks of diseases caused by insects, rats and pests. The areas where these pests abound must always be kept clean.

INSECTS / PESTS

TRANSMITTERS OF DISEASE	PREVENTION	TREATMENT
MOSQUITOS FLEAS BEDBUGS ANTS SPIDERS BEES ROACHES	Household sanitation Elimination of sources Screening with wire or plastic netting Elimination of breeding places Use of trap	Remove stinger by scraping Rub affected areas with repellent For ticks, apply petroleum jelly Clean round and apply ice pack



RATS / RODENTS

These cannot be eliminated by clubbing or using a mousetrap, although they can be a help too. You can destroy them by poisoning. Zinc phosphide is a rat poison that can kill them quickly.

Activity 1 “FIND-AND-CHECK THE NUMBER”

Direction: Listed below are seven ways to avoid or kill rats. Identify them by putting a check (✓) mark after the number written in your notebook.

- | | |
|----------------------|----------------------------------|
| 1. moth balls | 6. larvicide |
| 2. stick-on paper | 7. mouse traps |
| 3. remove trash pile | 8. repellent |
| 4. insecticide | 9. deprivation food, food scraps |
| 5. racumin powder | 10. Zinc phosphide |

You have just learned some preventive measures to eliminate rats. They are physical, chemical, and environmental methods.

OTHER PESTS

Conflict between people and pests existed long time ago. These pests cause annoyance and discomfort aside from being vectors or carrier of diseases.

Activity 2 “2 USE OR NOT 2 USE”

Direction: The following are ways to eradicate and minimize pests, they may be harmful or useful to man. Write the word 2 USE if it is useful to man and the words NOT 2 USE if it is harmful to man. Give 2 reasons each for your answer.

_____ 1. Use of insecticides

a. _____

b. _____

_____ 2. Use of rodenticide

a. _____

b. _____

_____ 3. Use of repellent

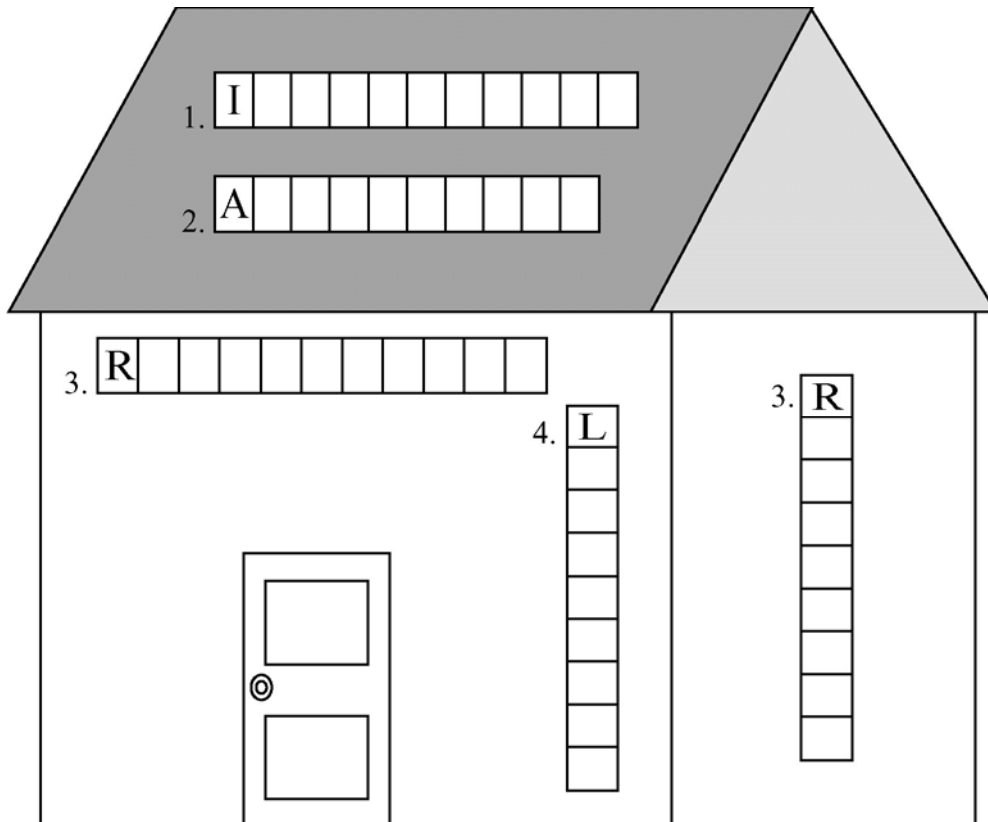
- a. _____
- b. _____

_____ 4. Use of screened doors and windows

- a. _____
- b. _____

Activity 3 “HOME SWEET HOME”

Direction: In this house, you will find the first letter of the words that refer to preventive measures for pests. Read the clues for easier identification.



A = Insecticide designated to destroy mature or adult forms of anthropods

I = Any chemical substance use for destruction of insects.

L = Term for the destruction of immature stages of anthropods

R = Chemical applied to the skin or clothing to avoid the bite of insects and pests.

R = Use of chemical substance for the destruction of rats and rodents.

Lesson 2

MAINTENANCE OF CLEANLINESS IN THE HOUSE

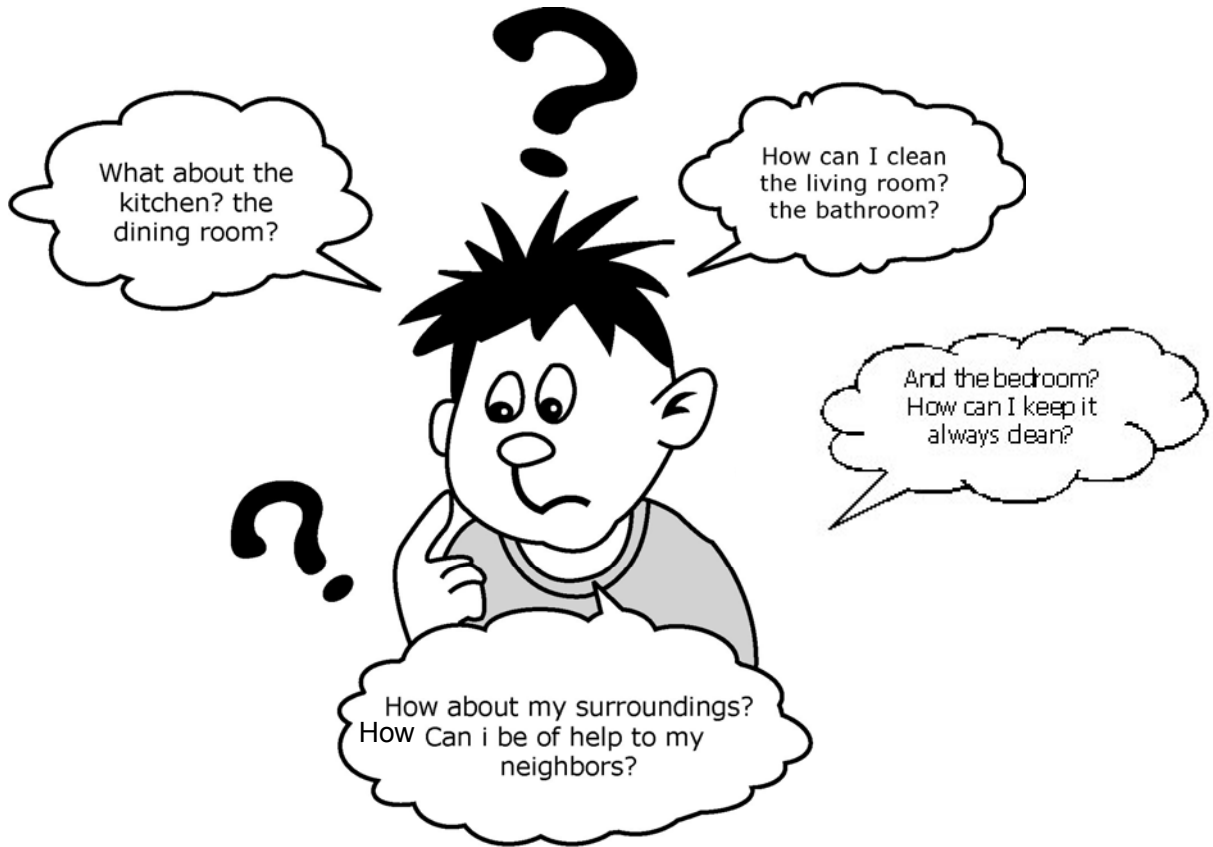
Cleanliness is a good habit. No one of us would like to use an unflushed toilet. No one of us would tolerate a neighbor spitting from the balcony. There can be no two opinions about the regular visits of the garbage truck near our residences.

Are you familiar with the saying, “Cleanliness is next to Godliness?” When everything in the house is clean and in order there is tranquility and peace just like when we are at peace with God.

As a responsible member of your family, you can greatly help in the maintenance of cleanliness by performing essential tasks at home and your surroundings.

Activity 1 “MARIO’S DILEMMA”

Mario is having a hard time cleaning his house. Can you help him? You may give some tips to follow. Give at least two suggestions.



A. Cleanliness in the Living Room

1. _____
2. _____

B. Cleanliness in the Bedroom

1. _____
2. _____

C. Cleanliness in the Bathroom

1. _____
2. _____

D. Cleanliness in the Dining Room

1. _____
2. _____

E. Cleanliness in the Kitchen

1. _____
2. _____

F. Cleanliness in the Surroundings

1. _____
2. _____

Activity 2 “READ BETWEEN THE LINES”

Read the numbered paragraphs on how to control insects, rats and pests. Answer the questions after these paragraphs by writing the number of the lines/statement in your notebook.

¹ Proper disposal of waste is the best means of controlling flies. ² Food should be properly covered. A fly swat or fly ³catcher can lessen the swarm of flies but these are not ⁴enough to eradicate them totally.

⁵Cockroaches have been shown to carry germs that ⁶caused cholera, tuberculosis and dysentery. Garbage and ⁷ leftover foods must be properly disposed. Use insecticides ⁸to eradicate cockroaches.

⁹ Fleas come into the house as uninvited guests.¹⁰They enter on dogs, cats, rats and on human beings. If ¹¹fleas are in the house, cracks and crevices should be ¹²soaked with kerosene or soap suds to eradicate them.

¹³Lice are small wingless insects which suck human ¹⁴blood for food. Lice can be eliminated by shampooing ¹⁵the hair. Vinegar and kerosene have also been found ¹⁶to be effective against lice. These can easily be ¹⁷transferred through combs and hair brushes.

¹⁸Bedbugs are not easily eradicated since they stay ¹⁹in their hiding places. Use an insecticide for a spray and ²⁰repeat several times to eradicate them totally.

²¹Rats may be driven away by cleaning up ²²piles of garbage and disks both indoors and outdoors. ²³Set traps and poisons in strategic locations and maintain ²⁴them even after you have stopped an infestation.

²⁵Pests can be controlled by applying pesticides. ²⁶Use the right amount of pesticide only in the areas specified ²⁷on the labels. Keep them out of reach of ²⁸children, pets and livestock.

²⁹Like other insects, mosquitoes lay their eggs ³⁰in water. Malaria is a disease carried by a mosquito ³¹ that belongs to the anopheles group. They are usually ³²found in running stream. Dengue fever is carried ³³ by Aedes mosquitoes from one person to another. They ³⁴lay their eggs in breeding places such as flower vases, ³⁵bottles and tin cans with water. Screened doors and ³⁶windows are great protection against mosquitoes. Spraying ³⁷insecticides and oil over swamps and stagnant water ³⁸can help the mosquitoes from breeding. Use of ³⁹repellant on the skin is also effective. Always cover ⁴⁰water containers at home.

Questions

- a. What are the 3 ways to control flies? Line(s) _____
- b. What diseases are brought about by cockroaches? Line(s) _____
- c. How do fleas enter the house? Line(s) _____
- d. What are small wingless insects that suck the blood? Line(s) _____
- e. How can you avoid bedbugs? Line(s) _____
- f. What are you going to do to eradicate rats? Line(s) _____
- g. When is the best time to use pesticides? Line(s) _____
- h. Where do mosquitoes lay their eggs? Line(s) _____
- i. What disease is brought about by the anopheles group of mosquitoes? Line(s) _____
- j. How are you going to protect your family from mosquito bites? Line(s) _____

Activity 3 “RESPONSIBILITY IN ACTION”

Direction: Complete the following IF-THEN statements.

1. If I will not clean the kitchen, then _____
2. If fleas enter my house, then _____
3. If there is stagnant water in my surroundings, then _____
4. If I have lice, then _____
5. If my friend is bitten by a rat, then _____
6. If my mother leaves food particles on the table, then _____
7. If I will not spray insecticides, then _____
8. If my friend has dengue fever, then _____
9. If I protect my skin with repellent, then _____
10. If I always clean my bedroom, then _____

Lesson 3

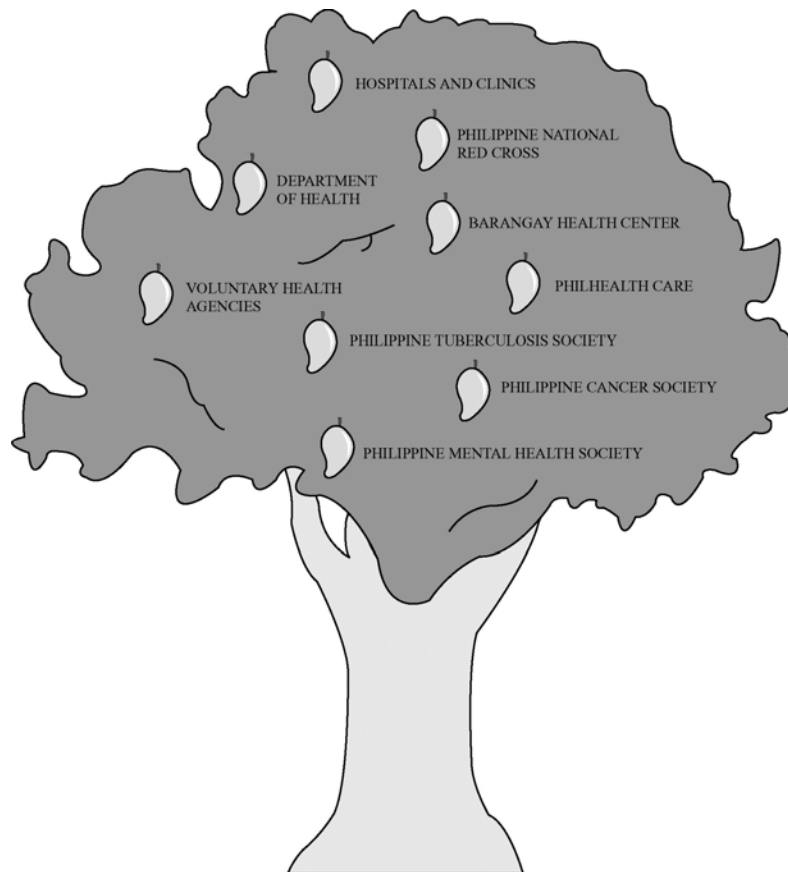
PUBLIC AND PRIVATE HEALTH AGENCIES CONCERNED WITH COMMUNITY HEALTH

Health promotion and protection is one of the responsibilities of every community member. This can be realized through the help of various agencies, public and private, civic and religious organizations in the community and in the whole country.

The Department of Health institutes responsibility for the protection and maintenance of the nation's health and has followed logical and scientific trends in keeping its achievements and growth at par or similar with the rest of the world.

Let's identify these agencies and their services rendered in keeping with the ideals of primary health care.

Take a look at this mango tree. Its fruits represent some of these agencies. Let's do Activity 1.



Let's Summarize

Lesson 1

PREVENTIVE MEASURES AGAINST INSECTS, RATS AND PESTS THAT CAUSE DISEASES

Tell your friends that “An ounce of prevention, is better than a pound of cure.” It applies in our lesson on preventive measures to eradicate insects, rats and pests to keep us away from diseases.

Lesson 2

MAINTENANCE OF CLEANLINES IN ONE'S HOUSE

The saying, “Cleanliness is next to Godliness”, clearly states the value of cleanliness. The value of cleanliness must be internalized if we want to achieve a healthful environment.

Lesson 3

PUBLIC AND PRIVATE AGENCIES CONCERNED WITH COMMUNITY HEALTH

The health of a community is both the responsibilities of its leaders and members. The government must be aware of its duties and responsibilities as far as the health of the people is concerned. Even if private agencies or organizations help, still the government must take the lead. Another saying fits this situation, “A Healthy Nation is a Wealthy Nation.”

POST TEST

Direction: Fill in the blanks. Rearrange the letters to get the correct answer.

- _____ 1. (LLANTPEREP) A chemical applied to the skin on clothing
to avoid insects or pests.
- _____ 2. (ICEL) Small wingless insects that suck human blood for
food.
- _____ 3. (NGDEUE) Disease caused by the bite of Aedes mosquitoes.
- _____ 4. (CESNITIDECI) Any chemical substance used to destroy
insects
- _____ 5. (ATSR) Cleaning up the piles of garbage and debris will
drive these pests away.
- _____ 6. (DALUITICDE) Insecticide designated to destroy mature
forms of anthropods.
- _____ 7. (PRPORE AWTSE IDSOPSAL) This practice is the best
means of controlling flies.
- _____ 8. (ORIEDINCTIDE) Chemical substance used to destroy rats
and rodents.
- _____ 9. (ALMARIA) Disease caused by the bite of anopheles group
of mosquitoes.
- _____ 10.(ALVRCIIDE) Way designated to destroy immature stages
of anthropods.

Key to Corrections

PRETEST

- | | |
|------|-------|
| 1. C | 6. I |
| 2. F | 7. D |
| 3. G | 8. A |
| 4. H | 9. E |
| 5. B | 10. J |

Lesson 1 Activity 1

1. stick-on-paper
2. remove to ash pile
3. racumin powder
4. larvicide
5. mouse trap
6. deprive of food / food scraps
7. zinc phosphide

Activity 3

1. Insecticide
2. Adulticide
3. Repellant
4. Larvicide
5. Rodenticide

Lesson 2 Activity 2

1. Lines 1, 2, 3, 4
2. Line 6
3. Line 10
4. Line 13
5. Line 20
6. Lines 22, 23, 24
7. Line 26
8. Lines 30, 34, 35
9. Line 31
10. Lines 36, 37, 39

Lesson 3 Activity 1

1. DOH
2. PHILHEALTH CARE
3. VOLUNTARY HEALTH AGENCIES
4. Philippine Tuberculosis Society, Inc.
5. Philippine National Red Cross
6. Barangay Health Centers
7. The Philippine Cancer Society
8. Philippine Mental Health Association
9. Hospital and Clinics

POST TEST

1. Repellant
2. Lice
3. Dengue
4. Insecticide
5. Rats
6. Adulticide
7. Proper Waste Disposal
8. Rodenticide
9. Malaria
10. Larvicide