



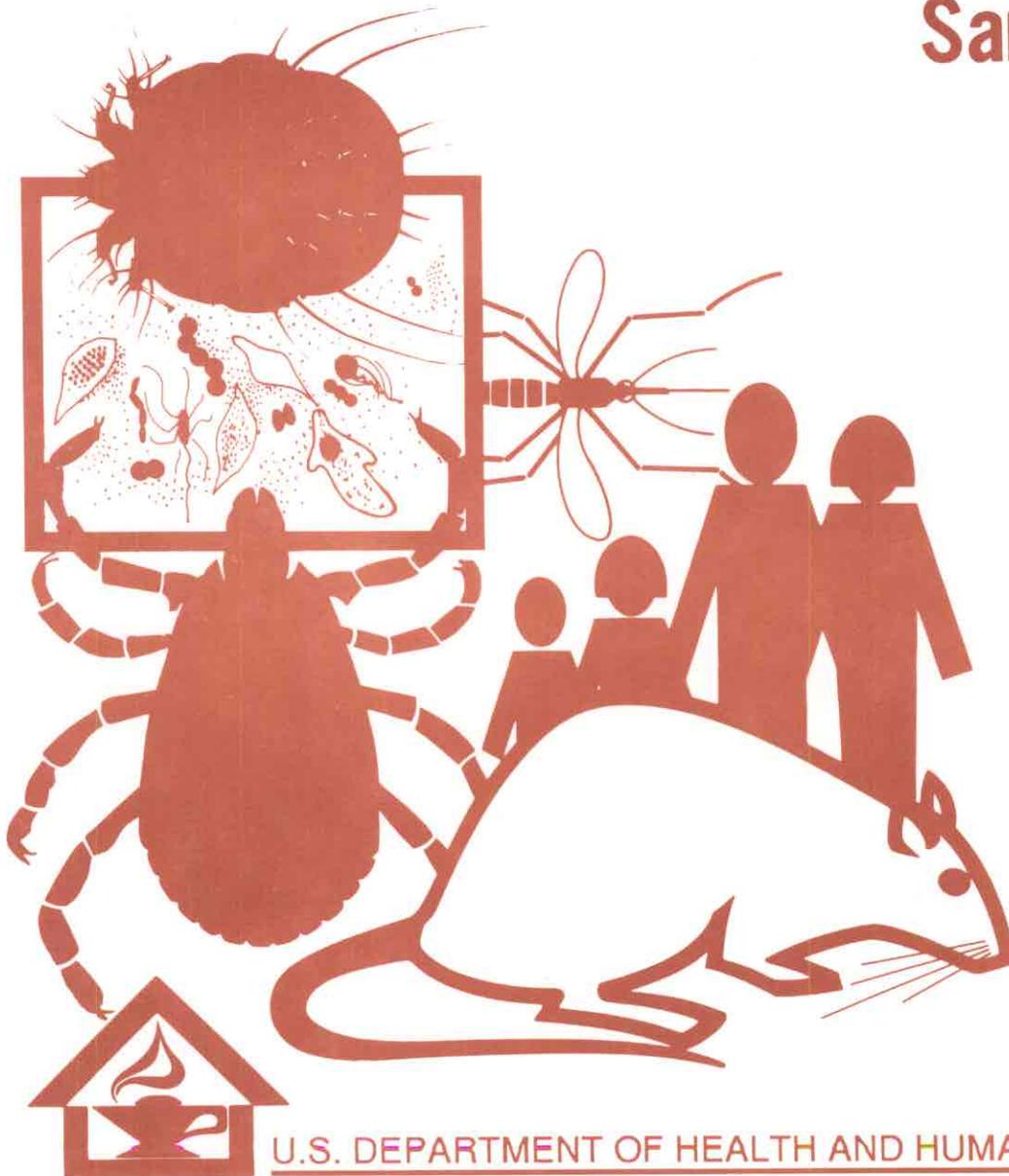
LESSON

4

SELF-STUDY COURSE 3013-G

# Vector-Borne Disease Control

## Sanitation



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**SELF-STUDY**

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

PUBLIC HEALTH SERVICE  
Centers for Disease Control  
Public Health Practice Program Office  
Atlanta, Georgia 30333

VECTOR-BORNE DISEASE CONTROL

Self-Study Course 3013-G

LESSON 4: SANITATION

I: LESSON CONSISTS OF:

- Part I: 20 multiple choice questions
- Part II: 20 true-false questions

II: REFERENCE:

Sanitation in the control of insects and rodents of public health importance.

III: TOPICS AND READING ASSIGNMENTS:

	<u>Sanitation</u>
A. Introduction	1- 2
B. Refuse Storage	3- 9
C. Refuse Collection	10-15
D. Refuse Processing and Disposal	16-26
E. Refuse Handling in Small Communities and in Rural Areas	27-28
F. Other Sanitation Factors in the Control of Insects and Rodents	29-34
G. Sanitation as Related to Insect and Rodent Control in Business, Industrial and Insti- tutional Establishments	35-36
H. Promoting Public Cooperation	37-40

## VECTOR-BORNE DISEASE CONTROL

### Lesson 4 - Objectives

Upon successful completion of Lesson 4, the student should be able to correctly:

- Identify the differentiating features of garbage, refuse, and rubbish.
- Identify the sanitation procedures used in insect and rodent control programs.
- Identify the differentiating characteristics of selected methods of garbage and refuse disposal.

VECTOR-BORNE DISEASE CONTROL

LESSON 4: SANITATION

Part I: Multiple Choice

1. Which one of the following terms is best defined as nonputrescible solid waste, consisting of both combustible and noncombustible materials?
  - A. Refuse
  - B. Garbage
  - C. Rubbish
  - D. Ashes
  
2. Putrescible animal and vegetable wastes resulting from the handling, preparation and consumption of foods is referred to as:
  - A. Refuse.
  - B. Garbage.
  - C. Rubbish.
  - D. Ashes.
  
3. Collectively, all putrescible and nonputrescible solid wastes (except body wastes) are referred to as:
  - A. Refuse.
  - B. Garbage.
  - C. Rubbish.
  - D. Ashes.
  
4. At the present time, average residential refuse production per capita per day in the United States is in the range of:
  - A. 1 - 2 pounds.
  - B. 2 - 3 pounds.
  - C. 3 - 6 pounds.
  - D. 6 - 9 pounds.
  
5. Which of the following trends concerning household wastes applies to the United States today?
  - A. The volume of garbage produced per capita is increasing.
  - B. There is a marked increase in household rubbish such as paper containers, etc.
  - C. Conversion to gas and oil from coal will mean more ashes.
  - D. The use of household garbage grinders is decreasing.

6. All of the following statements with ONE EXCEPTION cite benefits of using paper or plastic bags as liners for garbage containers. Which statement considers a factor that is NOT a benefit? Liners:
- A. Reduce the possibility of disagreeable odors.
  - B. Make the garbage less accessible to flies.
  - C. Reduce corrosion of cans.
  - D. Are a nuisance where garbage is fed to hogs.
7. Of the statements below, which one DOES NOT apply to an approved type of garbage can?
- A. Water tight
  - B. At least 50- to 55-gallon capacity
  - C. Provided with a tight fitting lid
  - D. Furnished with side handles or a bail
8. Which of the following is correct regarding the use of sunken garbage cans?
- A. The pit is not difficult to keep clean.
  - B. Less lifting effort is required of collection personnel.
  - C. There are problems if the water table is low.
  - D. Cans are out of sight and inaccessible to cats and dogs.
9. Of the following, which answer best represents the amount of household refuse that a home refuse compactor can compress into the treated bag?
- A. 6 - 10 pounds
  - B. 11 - 20 pounds
  - C. 20 - 30 pounds
  - D. 30 - 50 pounds
10. Which two methods of refuse disposal are considered to be the most satisfactory?
- A. Open dumps and hog feeding
  - B. Sanitary landfills and incineration
  - C. Incineration and grinding
  - D. Composting and open dumps
11. Of the following listed ways of garbage disposal, which one is the least satisfactory in the United States?
- A. The open dump
  - B. The sanitary landfill
  - C. Incineration
  - D. Composting

12. The sanitary landfill is especially suited for proper disposal of refuse in cities with populations up to:
- A. 10,000.
  - B. 50,000.
  - C. 100,000.
  - D. 500,000.
13. Approximately how many acres of land per year are required for a landfill serving a town of 10,000?
- A. 1
  - B. 2.5
  - C. 5
  - D. 10
14. The final compacted earth cover on a completed sanitary landfill should be one of the following depths. Which is correct?
- A. 6 inches
  - B. 12 inches
  - C. 18 inches
  - D. 24 inches
15. The final slope on a completed sanitary landfill should be:
- A. Level.
  - B. 0.5 to 1 percent.
  - C. 1 to 5 percent.
  - D. 5 to 10 percent.
16. The aerobic process of composting used in the United States generates temperatures of approximately:
- A. 120°F.
  - B. 140°F.
  - C. 160°F.
  - D. 180°F.
17. All of the following statements with ONE EXCEPTION apply to the home grinding of garbage. Which one does NOT apply?
- A. It is efficient and clean.
  - B. It practically solves the garbage disposal problem in the home.
  - C. It may be advantageous to the operation of a sewage treatment plant.
  - D. It eliminates the need for the storage and collection of rubbish at the home level.

18. With which one of the following methods of refuse disposal may the diseases vesicular exanthema, hog cholera, and trichinosis, be associated?
- A. Sanitary landfill
  - B. Composting
  - C. Hog feeding
  - D. Grinding
19. The recommended height off the ground for proper storage of materials to prevent rat harborage is:
- A. 6 inches.
  - B. 9 inches.
  - C. 12 inches.
  - D. 18 inches.
20. In CITIES where the problem was studied, the two major sources of flies were:
- A. Dead animals and coffee grounds.
  - B. Garbage and dog-droppings.
  - C. Grass clippings and fowl manure.
  - D. Meat and human wastes.

Part II: True-False - Mark "A" for True, "D" for False.

1. Chemical control is the most important principle in the control of flies and rodents.
2. The local health department should have the authority to require sanitary refuse storage at all premises.
3. In general, the disadvantages of sunken garbage cans outweigh the advantages.
4. Bulk storage containers are usually quite satisfactory at apartment buildings, housing projects, or business establishments.
5. Storage racks for refuse containers should have solid bottoms and be not more than two inches off the ground.
6. Public (municipal) collection of refuse is often less expensive because of its nonprofit, tax-exempt status.
7. One disadvantage of private collection is that of incomplete coverage.
8. Separate collection following segregated storage is the most practical and economical method, where disposal is by sanitary landfill.
9. Curb or alley collection is more economical than yard collection, because it reduces the pick-up time for each residence.
10. In residential areas, the garbage should be collected at least twice a week during the fly breeding season.
11. Sandy loams are the most desirable soils for landfill covers.
12. Decomposition of refuse in landfills is very rapid.
13. The sanitary landfill is usually operated at considerably less than the cost of incineration.
14. Completed landfills have been used for airports, parking lots, parks, playgrounds and other recreational purposes.
15. The energy crisis has increased concern for the use of incineration to convert solid waste into useful energy.
16. If community incinerators are used, then garbage and rubbish must be collected separately.
17. Composting may be defined as a biological method for converting wastes into a usable humus-like material.

18. The trench method of sanitary landfill is best suited for areas that have high water tables.
19. Approved collection and disposal of refuse for small communities must wait until the community can be incorporated into a city.
20. Feed lots, abattoirs, meat packing plants, stockyards, and foundries are seldom troubled by rodent or insect infestations.

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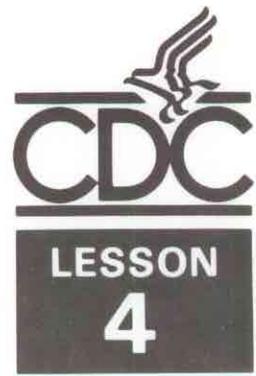
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# SELF-STUDY COURSE 3013-G

# Vector-Borne Disease Control

## ANSWER SHEET

PART I					PART II		
NO.	A	B	C	D	NO.	A	D
1	0	0	0	0	1	0	0
2	0	0	0	0	2	0	0
3	0	0	0	0	3	0	0
4	0	0	0	0	4	0	0
5	0	0	0	0	5	0	0
6	0	0	0	0	6	0	0
7	0	0	0	0	7	0	0
8	0	0	0	0	8	0	0
9	0	0	0	0	9	0	0
10	0	0	0	0	10	0	0
11	0	0	0	0	11	0	0
12	0	0	0	0	12	0	0
13	0	0	0	0	13	0	0
14	0	0	0	0	14	0	0
15	0	0	0	0	15	0	0
16	0	0	0	0	16	0	0
17	0	0	0	0	17	0	0
18	0	0	0	0	18	0	0
19	0	0	0	0	19	0	0
20	0	0	0	0	20	0	0