

Select Vector Borne Diseases

There is no one Chapter in your text on this particular topic. Topics are dispersed among several chapters. Please be aware that your index as well as the page numbers below will direct you to several places in your text.

1. Introduction
 - A. Skin as a Barrier (p. 590)
 - B. Vectors (pp. 363 - 365; 412 - 413)
 - i. Representative
 - ii. Mode of Pathogen Transport
 - a. Mechanical
 - b. Blood Meal

2. *Yersinia Pestis* (pp. 655 - 658)

A. History

i. Black Death

B. Reservoir

C. Disease

i. Bubos

D. Virulence Factors

i. Antiphagocytic Capsule

ii. Antiphagocytic Antigen

iii. Intracellular Toxin

E. Plagues

i. Sylvatic Plague

ii. Bubonic Plague

iii. Septicemic Plague

iv. Pneumonic Plague

F. Control

G. Vaccines

3. *Borrelia recurrentis* (P. 658)

A. Relapsing Fever

- i. Human Body Louse
- ii. Other *Borrelia sp.*

B. Pathogenesis

C. Antigenic Variations

- i. Linear Plasmid
- ii. “*Variable Major Protein*”

4. *Borrelia burgdorferi* (pp. 658 - 660)

- Lyme Disease

CDC: <http://www.cdc.gov/ncidod/dvbid/Lyme/>

Lyme Disease Foundation: <http://www.lyme.org/>

A. Reservoir

B. Vector - *Ixodes sp.*

i. Life Cycle (see handout)

C. Symptoms

i. First - Erythema Migrans

ii. Second - “Flu-like Symptoms”

iii. Third - arthritis

iv. Fourth

C. Diagnosis

i. ELISA

ii. Western Blot

5. Rickettsia prowazekii (p. 660)

- A. Epidemic Typhus
- B. Reservoir
- C. Vector: Human Body Louse
- D. Control

6. *Rickettsia Typhi* (p. 660)

- A. Endemic Murine Typhus
- B. Reservoir
- C. Vector
- D. Control

7. *Rickettsia reckettsii* (p. 661 - 662, See diagram, p, 661)

- A. Disease: Rocky Mountain Spotted Fever
 - i. Reservoir
 - Transovarian Route
 - ii Vector - Dog tick
 - iii Control
- B. Symptoms

8. West Nile Virus

Use the following web site for supportive information:

<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

- A. Reservoir
- B. Vector
- C. Disease
- D. Control