LESSON 7 - ARTHROPODS AND DISEASE
Lesson Objectives

- Match a list of terms with a list of correspondence definitions.
- Identify and select the habitats for each of the 6 arthropods important to military operations.
- Identify the ways arthropods affect human health.
- Identify how arthropods spread diseases.
- Name the arthropod-borne diseases and their vectors.
• **Definitions**

- **Arthropods** - animals, including ticks, spiders, mites, and other insects as well as crustaceans such as shrimp, lobster, and crab.

- **Vector** - a carrier.
Arthropods Important to Military Operations
Mosquitos - Life Cycle

Egg → Larva → Pupa → Egg

Life Cycle of Mosquito
Filth Flies
Filth Flies - Life Cycle

Life Cycle of Filth Fly

Pupa -> Larva -> Egg
Filth Flies - Habitat
Fleas
Fleas - Life Cycle

Life Cycle of Flea

- Egg
- Larva
- Pupa
Fleas - Habitat
Lice - Life Cycle

Egg → Nymph → Egg
Lice - Habitat
Cockroaches
Life Cycle of Cockroach

Nymph → Egg
Cockroaches - Habitat
Ticks and Mites - Life Cycle

Life Cycle of Ticks & Mites

Nymph

Egg

Larva
How Arthropods Affect Human Health

Head Lice

Body Lice
Direct Injury - Bites
Direct Injury - Envenomization

Capable of Envenomization
Direct Injury - Entomophobia
Direct Injury - Accidental Injury to Sensory Organs
Direct Injury - Allergies

- Reaction to cockroach feces and shed skin.
- Reactions to other arthropods such as dust mites.
How Disease is Spread

- Mosquito
- Filth Fly
- Tick
- Flea
- Cockroach
- Louse
Passive or Mechanical Transmission
Active or Biological Transmission
Diseases and Their Vectors - Mosquitos

- Malaria
- Yellow Fever
- Dengue Fever
- Encephalitis
Diseases and Their Vectors - Other

- Sand Fly Fever
- Leishmaniasis
- Epidemic Typhus
- Bubonic Plague

Leishmaniasis