

The Medical Academy named after S. I. Georgievsky of Vernadsky CFU

LYMPHATIC FILARISIS & JAPANESE ENCEPHALITIS

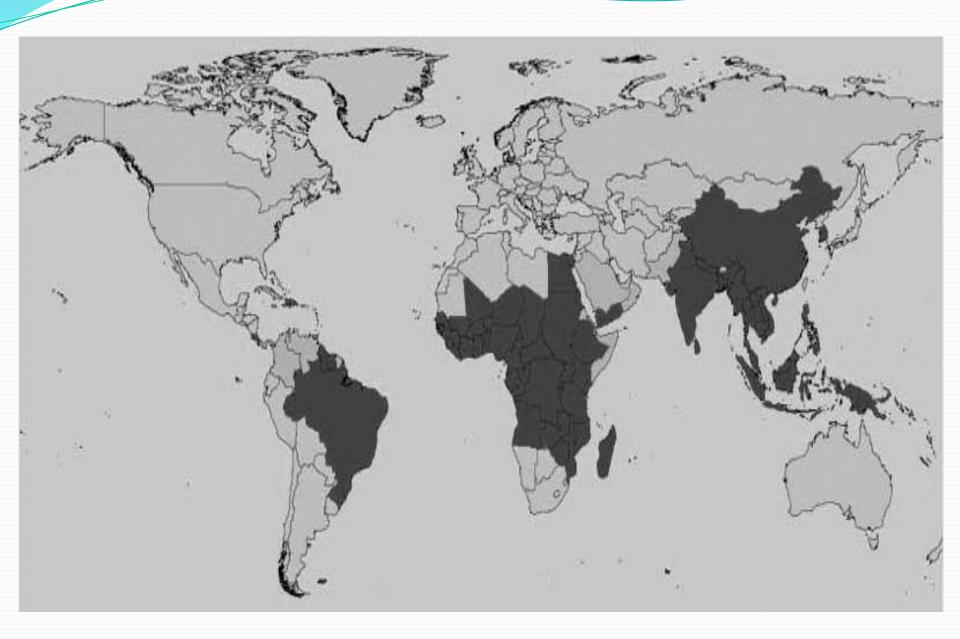
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Lymphatic filariasis-

- Lymphatic filariasis is a parasitic disease caused by three species of microscopic, thread-like worms. The adult worms only live in the human lymph system. The lymph system maintains the body's fluid balance and fights infections.
- Lymphatic filariasis affects over 120 million people in 72 countries throughout the tropics and sub-tropics of Asia, Africa, the Western Pacific, and parts of the Caribbean and South America. You cannot get infected with the worms in the United States.

Geographic distribution



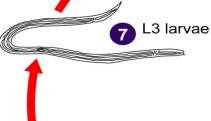
Life Cycle

Filariasis

(Wuchereria bancrofti)

Mosquito Stages

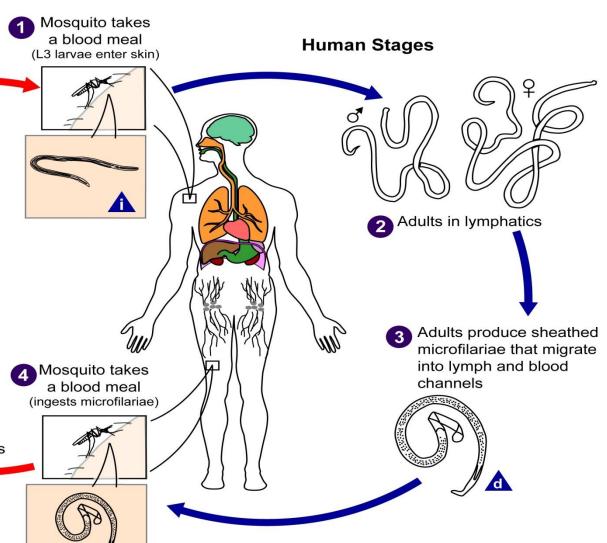
8 Migrate to head and mosquito's proboscis





Microfilariae shed sheaths, pentrate mosquito's midgut, and migrate to thoracic muscles

= Infective Stage
= Diagnostic Stage



Symptoms-

Most cases are symptomless. Rarely, long-term damage to the lymph system causes swelling in the legs, arms, and genitalia. It also increases the risk of frequent bacterial infections that harden and thicken the skin (elephantiasis).





Diagnosis-

 The standard method for diagnosing active infection is the identification of microfilariae in a blood smear by microscopic examination. The microfilariae that cause lymphatic filariasis circulate in the blood at night (called nocturnal periodicity).

Prevention-

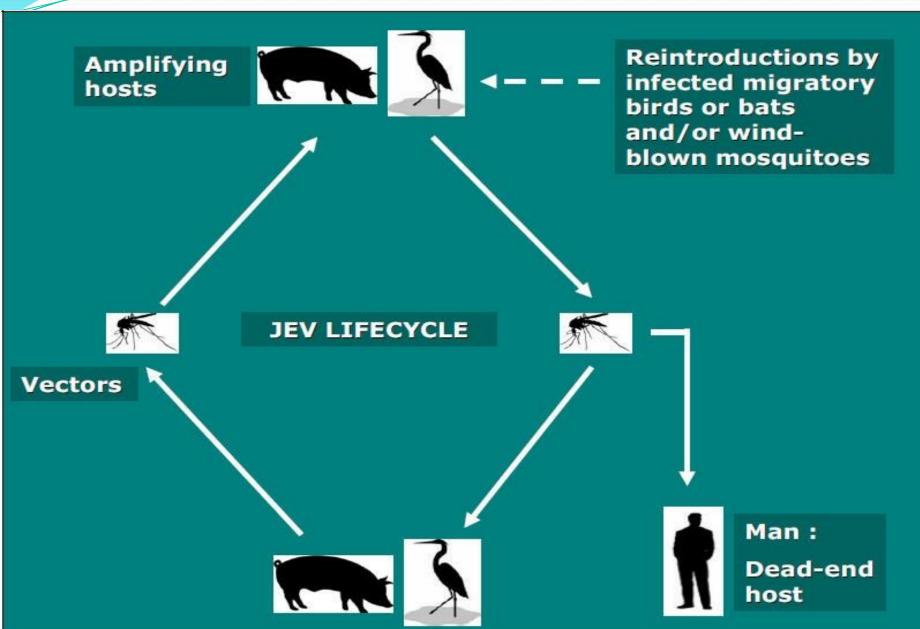
- Avoiding mosquito bites is the best form of prevention.
- Sleep under a mosquito net.
- Wear long sleeves and trousers.
- Use mosquito repellent on exposed skin between dusk and dawn.



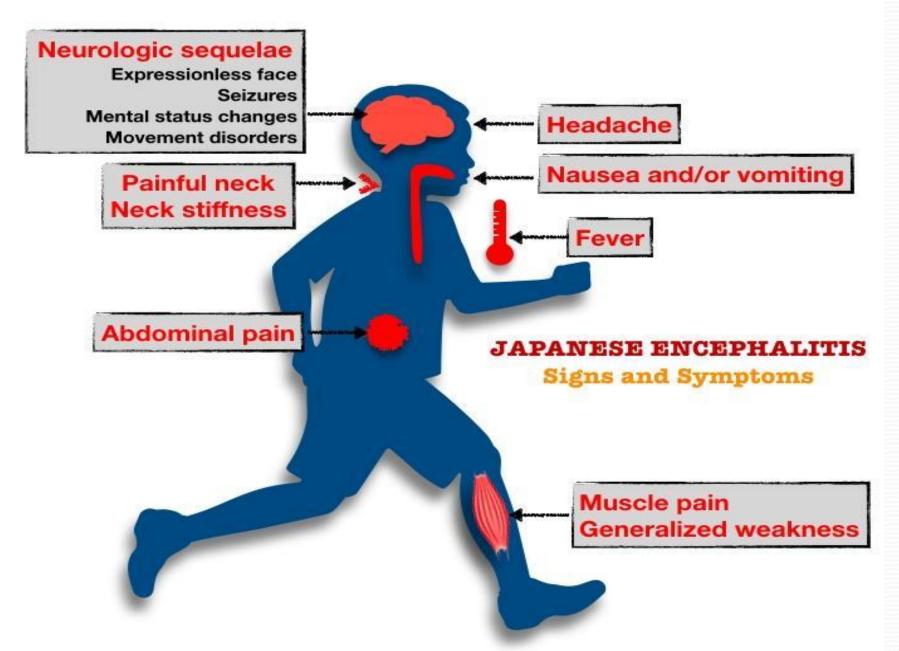
JAPANESE ENCEPHELITIS

An infection found in Asia and the west Pacific that can cause brain swelling. Japanese encephalitis is a virus spread by the bite of infected mosquitoes. It's more common in rural and agricultural areas.

Life Cycle-



Symptoms-



Diagnosis-

Laboratory diagnosis of JE is generally accomplished by testing of serum or cerebrospinal fluid (CSF) to detect virus-specific IgM antibodies. JE virus IgM antibodies are usually detectable 3 to 8 days after onset of illness and persist for 30 to 90 days, but longer persistence has been documented.



Prevention and control

The most effective way to prevent infection from Japanese Encephalitis virus is to prevent mosquito bites. Mosquitoes bite during the day and night. Use insect repellent, wear long-sleeved shirts and pants, treat clothing and gear, and get vaccinated before traveling, if vaccination is recommended for you.

Treatment

No specific treatments have been found to benefit patients with JE, but hospitalization for supportive care and close observation is generally required.

Treatment is symptomatic. Rest, fluids, and use of pain relievers and medication to reduce fever may relieve some symptoms.

REAKING IIS HEAD AGAIN

MICROFILARIA CASES

(*TILL JUNE)



2,492

2,245

1,372

877 2018*

THE GOAL

The National Health Policy envisages elimination of lymphatic filariasis by 2020

THE CONCERN

In Maharashtra's six endemic districts, the microfilariae rate continues to be over 1%

CHALLENGES

- ➤ Many people are complacent about prevention due to indifference towards the disease and the time it takes to manifest. Period could vary from 8-10 years
- Besides, several people fail to consume the medicine despite the government's door-to-door effort to deliver free and preventive doses

WHAT'S ELIMINATION

It is defined as the cessation of lymphatic filariasis as a public health problem when the number of microfilaria carriers in the community is less than 1% and children born after initiation of elimination of lymphatic filariasis are free from circulating antigenaemia, that is presence of adult filarial worm in human body

THE SPREAD

The disease spreads from person to person by mosquito bites. When a mosquito bites a person who has lymphatic filariasis, microscopic worms circulating in the person's blood enter and infect the mosquito. People get lymphatic filariasis from the bite of an infected mosquito

LOW AWARENESS

In a country that accounts for 40% of the global burden of elephantiasis, most people aren't even aware of the disease and its prevention



filariasis
can lead
to abnormal
enlargement of
body parts, causing
pain, disability and
social stigma

856 million people from 52 nations are threatened by it and require preventive chemotherapy to stop the spread



