

YELLOW

Yellow fever can be a fatal disease.

It starts out with fever, aches, jaundice and sometimes vomiting. After 3 or 4 days, some people get better. Some get much worse. Within a day, multiple organs fail. By 10-14 days into the disease, about half the people get better, but the other half die.

Yellow fever is caused by a virus.

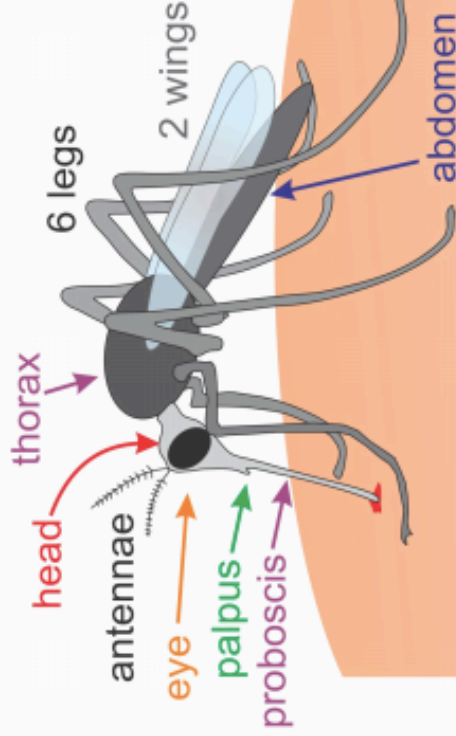
Viruses also cause many other diseases from the common cold to measles and polio. A virus cannot live or grow on its own. It has to be inside a living cell. It takes over the cell's own machinery and makes copies of itself that go out and infect other cells. There are viruses that infect plants, animals, and even mushrooms.

Viruses are submicroscopic.

Submicroscopic means that they are so small that you cannot see them even with a powerful light microscope.

In 1881, Cuban physician Carlos Finlay proposed that mosquitoes transmitted yellow fever. Army pathologist James Carroll showed this was true in 1900 when he let an infected mosquito bite him, and he got yellow fever. The virus was isolated in 1927. A vaccine for yellow fever became available in the 1950s.

FEVER



a mosquito biting

Mosquitoes are part of an order of insects called diptera. The diptera include flies and midges. All diptera have two wings. *Di* means two and *ptera* means wing. All insects have six legs and three main body parts: head, thorax, and abdomen.

Only female mosquitoes bite. Mosquitoes inject a blood thinner that prevents clotting during feeding. A mosquito bites with its proboscis, which acts as a hollow needle. The palpus is used to taste and smell.

Mosquitoes carry many different viral diseases, including yellow fever, dengue fever, and West Nile virus. They can also carry parasites that cause malaria.

Aedes aegypti is the mosquito that carries yellow fever. *Aedes* is the genus, and *aegypti* is the species. Both the genus and species are written in italics or underlined.



Did you know?

Mosquitoes can detect carbon dioxide from your breath and the heat of your body. Hot!

You cannot catch yellow fever by direct contact with a person who has it. An infected mosquito must bite you. Ouch!

What is jaundice? Jaundice is a yellowing of the skin and eyes that occurs when red blood cells break down and bilirubin builds up. The liver removes bilirubin in healthy people. Yellow fever affects the blood and the liver.