



Medicine for Managers

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Yellow Fever

Yellow fever is a viral illness. The disease is spread by the bite of some species of mosquitoes which are found in the tropical and sub-tropical parts of twenty-seven African and thirteen South American countries. The mosquitoes become infected when they bite primates who carry the disease. The disease is acquired by people who live and work in the jungles or who are visiting the areas

About 200,000 people a year contract the infection and about 30,000 die, mostly if they have the severe form of the disease. Most of the cases and deaths are in Africa.

The disease itself is not contagious. It therefore is not possible to transmit it by physical contact, coughing or kissing.

However, if an individual is already infected, the disease can be transmitted if the person is bitten by a mosquito, which then bites someone else. The incubation period for the disease is about three to six days.

Symptoms of Yellow Fever

Some people do acquire the disease without suffering any, or only minor symptoms. Usually, though, the infected person may experience a

range of symptoms. **Less severe symptoms** include:

- Headache
- Fever
- Weakness and lassitude
- Generalised aching
- Nausea and vomiting

The 15% of people who suffer **more severe constitutional symptoms** are much more ill and **up to half of them** will die from the disease.

- Extreme weakness
- High fever
- Liver failure with jaundice
- Kidney failure
- Bleeding from the nose, mouth and eyes
- Shock and death



Diagnosis of Yellow Fever

Ill patients attending a doctor with symptoms may be suspected of having acquired yellow

fever if they have attended endemic areas and have the symptoms outlined above. The symptoms may also resemble malaria, viral hepatitis, leptospirosis and other acute viral diseases. The diagnosis can be confirmed by blood tests which check in the early stages for the presence of particular enzymes. Later, antibodies may be detected to make the diagnosis.

Treatment of Yellow Fever

Unfortunately, there is no treatment for the disease and, in the absence of a cure, the management is to provide supportive medical assistance to try to maintain the patient until the body defeats the infection.

Patients with more mild symptoms should rest, drink plenty of fluids and have any necessary symptomatic treatment. Patients with a more severe presentation should be admitted to a hospital with an intensive care facility for medical support to maintain bodily systems until spontaneous recovery. Sometimes antiviral drugs may be administered but they are not a specific recommended treatment.

Prevention of Yellow Fever

Simple precautions are obvious

- Get vaccinated 3-4 weeks before travel
- Wear appropriate clothing to remain covered and repel mosquitoes
- Use a bed net
- Most infection-carrying mosquitoes are most active from dusk to dawn and so avoiding being outside is wise

Vaccination

Yellow fever vaccine is very effective. It provides **lifelong immunity** and no booster is required. The immunity develops in over 80% of people within ten days and for 99% within a month.

Care should still be taken to avoid insect bites because mosquitoes carry other serious diseases besides yellow fever.

Some groups cannot have the vaccine and they include:

- Babies under six months old
- People over 60 (unless high risk and vaccination is unavoidable)
- People with egg allergy
- People with weakened immunity

Other groups should be assessed individually and include breastfeeding women, patients taking steroid drugs, patients

with HIV and women who are pregnant.

Although the vaccine may cause side effects, they are outweighed by the risk of not receiving the vaccine. They include

- Pain at the injection site
- Headache
- Muscle Pain
- Raised Temperature

Some countries may require a vaccination certificate, available only from registered Yellow Fever vaccination centres. The cost of the vaccination is estimated to be about £80.

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