Reporting Obligations

Individuals who have or may have yellow fever shall be reported as soon as possible to the local Health Unit.

Epidemiology

Aetiology Agent:
Yellow fever is caused by the Yellow Fever virus: genus Flavivirus and family Flaviridae.

Clinical Presentation:
Yellow fever is an acute viral disease of short duration and varying severity. The mildest cases may be clinically indeterminate. Typically, the clinical presentation is characterized by sudden onset of fever, chills, headache, backache, generalized muscle pain, prostration, nausea and vomiting. The pulse may be slow and weak out of proportion to the elevated temperature (Faget sign). Jaundice is moderate early in the disease and intensifies later.

Most infections resolve after the 5th day, however some cases progress after a brief remission of hours to a day into the ominous stage of intoxication manifested by hemorrhagic symptoms including epistaxis, gingival bleeding, hematemesis (coffee ground or black), melaena and liver and renal failure. 20-50% of jaundiced cases are fatal.

Modes of transmission:
Yellow fever is transmitted via the bite of infected mosquitoes, primarily those of the genus Aedes. There is no human to human transmission.

Incubation Period:
3-6 days

Period of Communicability:
Mosquitoes can acquire the virus from an infected person shortly before onset of fever and for the first 3 – 5 days of illness. The disease is highly communicable where many susceptible people and abundant vector mosquitoes coexist; it is not communicable through contact or common vehicles. Aedes aegypti mosquitoes require 9 to 12 days after a blood meal to become infectious and remain so for life.

Risk Factors/Susceptibility

Vaccine preventable; recovery from yellow fever is followed by lasting immunity; mild unapparent infections are common in endemic areas; previous infections with dengue give some degree of immunity.
- Not immunized
- Travelling to an endemic area
- Recent history of mosquito bites

Attention: Persons with a history of yellow fever or recent immigration from, or travel to, endemic countries should not donate blood.

Diagnosis & Laboratory Testing

Diagnosis is made by isolation or detection of viral antigen or nucleic acid of the yellow fever virus from the body fluid or tissues, or serological confirmation; this is supported by clinical and epidemiological evidence.

Treatment & Case Management

Provide education about transmission of infection and use of personal protective measures against mosquito bites. There is no specific treatment for yellow fever except for supportive treatment.

Preventive measures include: immunization of travellers with yellow fever vaccine when appropriate and travelling to endemic areas; use of protective clothing, bed nets and repellents with DEET in high risk areas.

Patient Information

Additional Resources
1. PHAC. “Canadian Immunization Guide. Yellow Fever Vaccine.”
2. Centers for Disease Control. “Yellow Fever”

References

Leeds, Grenville & Lanark District Health Unit, April 2016