



# YELLOW FEVER

1. **Agent:** Yellow fever virus.
2. **Identification:**
  - a. **Symptoms:** Acute onset with fever, backache, bradycardia, nausea, vomiting, jaundice, and hemorrhaging. Leukopenia, albuminuria, and anuria can also occur. Duration is short; severity varies.
  - b. **Differential Diagnosis:** Any viral hepatitis, leptospirosis, typhoid fever, dengue, bacterial sepsis, any hemorrhagic fever virus.
  - c. **Diagnosis:** Serologic tests. EIA or FA for viral antigen in blood or liver tissue; isolation of virus from blood; complement fixation (CF). Characteristic changes in the liver are also seen.
3. **Incubation:** 3-6 days.
4. **Reservoir:** In urban areas, humans and mosquitoes; in sylvan areas, primates and forest mosquitoes.
5. **Source:** Infected mosquitoes.
6. **Transmission:** Bite of infective mosquitoes.
7. **Communicability:** Not person-to-person. Human blood can infect feeding mosquitoes during first 3-5 days of illness. Mosquito is infected for life, and can transmit virus 9-12 days after feeding.
8. **Specific Treatment:** Supportive measures only.
9. **Immunity:** Permanent.

## REPORTING PROCEDURES

1. **Reportable.** *California Code of Regulations* Section 2500 and 2640. **Immediate telephone report of case or suspect case is required.**
  - a. Call Morbidity Unit during working hours.

- b. Call the Acute Communicable Disease Control Unit. After hours call County Operator and ask for the Administrative Officer of the Day.
2. **Report Form:** **YELLOW FEVER CASE REPORT (CDPH 8584).**
3. **Epidemiologic Data:**
  - a. Recent travel to endemic areas. The fatality rate in indigenous populations of endemic areas is <5%, but may reach 50% among non-indigenous groups and in epidemics.
  - b. Exposure to mosquitoes.
  - c. Reports of febrile illness or unexplained deaths in the area.

## CONTROL OF CASE, CONTACTS & CARRIERS

Immediate investigation required.

### CASE:

**Isolation:** Blood and body fluid precautions.

**Precautions:** Patient should be kept in a screened room for at least five days after onset.

### CONTACTS:

Recommend yellow fever vaccine if indicated.

## PREVENTION-EDUCATION

1. Vaccine is available for travelers to endemic areas.
2. Minimize contact with mosquitoes in endemic areas by using nets and repellents.

## DIAGNOSTIC PROCEDURES

Clinical and epidemiologic history is required to aid the laboratory in test selections.

1. **Serology:** Paired acute and convalescent venous or capillary sera recommended.



**Container:**

Red top or serum separator tube (SST, a red/gray top Vacutainer tube).

collection. If samples cannot be transported immediately, they may be held at 4-8°C for up to 72 hours before shipping. Otherwise, specimens should be frozen at -70°C and shipped on dry ice. |

**Laboratory Form: CDPH VRDL Specimen Submittal Form**

**Exam Requested:** Yellow fever serology.

**Material:** Whole clotted blood or serum. Allow whole blood to clot at room temperature for a minimum of 30 minutes and centrifuge.

**Amount:** 5-7 mL blood.

**Storage:** Samples should be transported on cold packs as soon as possible following collection. If samples cannot be transported immediately, they may be held at 4-8°C for up to 72 hours before shipping. Otherwise, specimens should be frozen at -70°C and shipped on dry ice.

**Remarks:** Collect first (acute) blood as early as possible, preferably within 5 days after onset. Collect second (convalescent) blood 10-14 days after first blood is drawn. Label all specimens with name of patient.

2. **PCR:** Blood samples collected within the first 5 days of illness must be transported immediately under refrigeration to the Public Health Laboratory for shipment to the State

**Container:**

Red top or serum separator tube (SST, a red/gray top Vacutainer tube).

**Laboratory Form: CDPH VRDL Specimen Submittal Form**

**Exam Requested:** Yellow Fever PCR.

**Material:** Whole clotted blood or serum. Allow whole blood to clot at room temperature for a minimum of 30 minutes and centrifuge.

**Amount:** 5-7 mL blood.

**Storage:** Samples should be transported on cold packs as soon as possible following