

# PLAGUE



**ALL SUSPECTED CASES OF PLAGUE MUST BE REPORTED IMMEDIATELY TO NAPA COUNTY PUBLIC HEALTH COMMUNICABLE DISEASE UNIT**

**Contact Information:**

**During Business Hours:** (707) 299 -1499

**After Business Hours (Napa County Answering Service):** (707) 265 -3131

## **Epidemiology:**

- Highly infectious after aerosolization
- Person to person and animal-to-human transmission can occur with pneumonic plague via respiratory droplet

## **Clinical:**

- Incubation period is 2-3 days (ranges up to 7 days)
- Aerosolization would most likely result in pneumonic plague
- Pneumonic plague presents with acute onset of high fevers, chills, headache, malaise and a productive cough, that is initially watery before becoming bloody

## **Laboratory Diagnosis:**

- Bacterial cultures (blood, sputum, or lymph node aspirate specimens) should be handled in a Biosafety Level 2 facility
- Wright, Giemsa, or Wayson stain shows gram negative coccobacilli with bipolar "safety-pin" appearance
- Organism grows slowly (48 hrs for observable growth) on standard blood and MacConkey agar
- Immunofluorescent staining for capsule (F1 antigen) is diagnostic

## **Patient Isolation:**

- Strict respiratory isolation with droplet precautions (gown, gloves, and eye protection) until the patient has received at least 48 hours of antibiotics AND shows clinical signs of improvement

## **Treatment:**

- Streptomycin (1 g IM bid) or gentamicin (5 mg/kg IM or IV qd) are the preferred antibiotics
- Doxycycline, tetracycline or fluoroquinolones are alternative choices
- Co-trimoxazole is recommended for pregnant women and child between the ages of 2 months and 8 years
- Chloramphenicol should be used to treat plague meningitis

## **Prophylaxis:**

- Antibiotic prophylaxis is recommended for all persons exposed to aerosol or persons in close physical contact with a confirmed case.
- Tetracyclines or fluoroquinolones are recommended for 7 days from last exposure to a case.