Department of Community Health

Tularemia (*Francisella tularensis*)

Information for Health Care Providers

Cause	*Francisella tularensis* ▪ Aerobic, gram-negative, non-spore forming, non-motile, coccobacillus (between a coccus [round shaped] and a bacilli [rod shaped])
Systems Affected	▪ Lymphatic (glandular) ▪ Respiratory (pneumonic) ▪ Cutaneous ▪ Ocular ▪ Oropharyngeal
Transmission	▪ Inoculation of skin, conjunctival sac or oropharyngeal mucosa with blood, tissue or other fluids of infected animals or insects ▪ Bite from an arthropod ▪ Ingestion of contaminated water or food ▪ Inhalation of contaminated dust ▪ Animal bites (rare) ▪ No person-to-person
Reporting	▪ If this is considered an unusual occurrence, immediately report any suspected or confirmed case of tularemia to your local or state health department ▪ Confirmed cases must be reported to the local health department within three working days (e.g., patients with travel history to endemic areas, etc.)
Incubation Period	▪ 3-5 days (range 1-14 days); related to the virulence of the strain, size of dose and route of introduction
Typical Signs/Symptoms	▪ Abrupt onset of fever, headache, chills and general body aches ▪ Dry or slightly productive cough and substernal pain or tightness often occur with or without objective signs of pneumonia ▪ Continuing illness characterized by sweats, fever, chills, progressive weakness, malaise, anorexia, weight loss, sepsis and inflammatory response syndrome ▪ Cutaneous: papule to pustule to vesicle at site of inoculation ▪ Glandular: lymphadenopathy without ulceration ▪ Ocular: ulceration of conjunctival sac ▪ Oropharyngeal: pharyngitis or tonsillitis ▪ Chest X-ray: Peribroncial infiltrates leading to bronchopneumonia in one or more lobes, often accompanied by pleural effusion and enlarged hilar nodes

<table>
<tr><td>Differential Diagnosis</td><td colspan="3">Bubonic plague
Anthrax
Q Fever
Community-acquired pneumonia</td></tr>
<tr><td>Laboratory</td><td colspan="2">Specimens
Obtain specimens appropriate to the system affected:
Blood (essential)
Respiratory secretions
Lesion exudates
Cerebral spinal fluid (CSF)
Skin lesions</td><td>Clues to diagnosis
Tiny, pleomorphic, poorly staining gram-negative coccobacillus visible in specimen or culture</td></tr>
<tr><td>Treatment</td><td>Adults
Streptomycin: 1Gm, IM, bid x 10 days
Gentamicin: 5mg/kg IM or IV x 10 days *</td><td>Pediatric
Streptomycin: 15mg/kg, IM, bid x 10 days (not to exceed 2Gm/day)
Gentamicin: 2.5mg/kg, IM or IV, tid x 10 days*</td><td>Pregnant Women
Gentamicin: 5mg/kg, IM or IV x 10 days*
Streptomycin: 1Gm, IM bid x 10 days</td></tr>
<tr><td>Precautions</td><td colspan="3">Standard contact precautions</td></tr>
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*Not U.S Food and Drug Administration approved