*Francisella tularensis*

Identification Flowchart

Not *Francisella*



Major characteristics of *Francisella tularensis*

**Gram stain morphology:** Aerobic, pleomorphic, minute (0.2 to 0.5 by 0.7 to 1.0 µm) faintly staining, Gram-negative coccobacillus

**Colony morphology:** No growth on MAC, scant to no growth on BAP after >48 h. Produces 1-2 mm gray to grayish-white colonies on CHOC after >48 h.

*Perform all work in a biosafety cabinet using BSL-3 precautions.*

Does the organism grow on CHOC but not

BAP in 24h? Or does it grow better on CHOC than on BAP in 48 hours?

**No**

**Yes**

Do colonies fail to exhibit enhanced growth (satellite) around

S. *aureus*, indicating no requirement for X and V factors?

**No**

Not *Francisella*,

consider *Haemophilus*

**Yes**

Oxidase negative and catalase weakly positive or negative?



**No**

Not *Francisella*

**WARNING:** Automated identification systems may key out as non-*F. tularensis*

(e.g. *Haemophilius influenze* and *Aggregatibacter*)



**Yes**

β-lactamase: positive? No Growth on MAC

**No**

**Yes**

Not *Francisella* Continue

identification per routine

laboratory procedures

*F. tularensis* not ruled out. Send to LRN Reference Level Laboratory.

**Report:** *F. tularensis* cannot be ruled out; isolate referred to LRN Reference Level Laboratory

**Note:** Biochemical test procedures and quality control instructions can be found at the end of the General Recommendation and Biochemical Testing Procedures document.