

## Gram stain: *Francisella tularensis*

- Faintly-staining, tiny, pleomorphic, Gram-negative coccobacilli
- Mostly single cells (0.2-0.5 x 0.7-1.0µm)

### Colony morphology:

- Smooth, shiny, and butyrous
- Tiny, grey-white, and opaque on Sheep Blood agar, Chocolate agar, Thayer- Martin agar, and BCYE agar



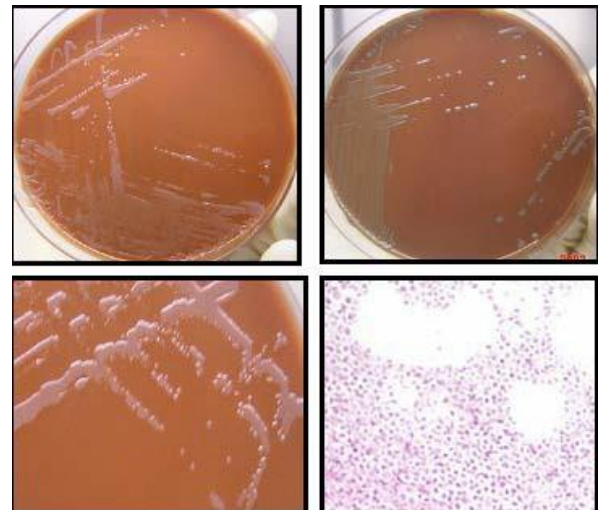
### Growth:

- Usually too small to be seen at 24h
- May require cysteine supplementation
- Scant to no growth on Sheep Blood agar after 48h
- No growth on MacConkey or EMB agar
- Slow growth in broth **Biochemicals:**

- Oxidase and satellite (or XV) negative
- Catalase negative or weakly positive
- Beta-lactamase positive



**Refer Cultures to your  
LRN Reference Lab**



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