

Yersinia pestis Identification Flowchart

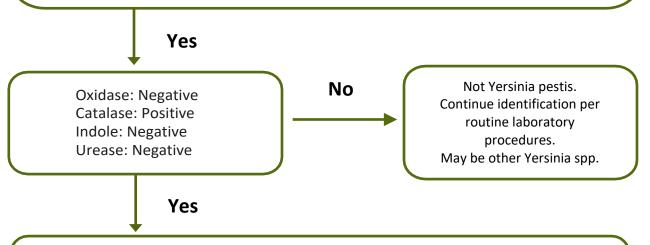
SAFETY: As soon as Yersinia is suspected, perform ALL further work in a Class II

Biosafety Cabinet using BSL-3 practices

Major characteristics of *Yersinia pestis*:

Gram stain morphology: Gram negative rods, 0.5 x 1-2 μm Colony morphology: Slow growing, pinpoint colonies after 24h; colonies are 1-2 mm, gray-white to slightly yellow and opaque on BAP after 48 h; non-lactose fermenter on MAC/EMB; growing both at 25-28°C and at 35-37°C.

Specimen is blood, sputum, or lymph node aspirate



Y. pestis is not ruled out. Contact LRN Reference Level Laboratory to refer isolate.

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

WARNING: Some of the automated identification systems do not identify *Y. pestis* adequately.

Y. pestis has been falsely identified as Y. pseudotuberculosis, Shigella, H₂S negative Salmonella, Acinetobacter and Pseudomonas species.

ASM, February 2014