



## B. mallei Identification Flowchart

**SAFETY:** As soon as *Burkholderia* is suspected, perform ALL further work in a Class II Biosafety Cabinet using BSL-3 practices.

### Major characteristics of *Burkholderia mallei*:

**Gram stain morphology:** Gram negative coccobacilli or small rods

**Colony morphology:** Poor growth at 24 hr; better growth of gray, translucent colonies without pigment or hemolysis at 48 hours on BAP; poor or no growth on MAC/EMB in 48 h; no distinctive odor

**Reactions:** Oxidase-variable; indole negative; catalase positive

Yes

Indole negative, catalase positive, non-hemolytic, no pigment, poor growth or no growth on MAC

No

Not *B. mallei* or *B. pseudomallei*

Yes

Polymyxin B or colistin: no zone, Amoxicillin-clavulanate susceptible, Penicillin resistant

No

Not *B. mallei* or *B. pseudomallei*; may be *Brucella*

Yes

No growth at 42°C, no odor

No

Not *B. mallei*; May be *B. pseudomallei*

Yes

Non-motile?

No

Not *B. mallei*

*B. mallei* not ruled out.

Contact your LRN Reference Level Laboratory to refer isolate.

**Report:** Possible *Burkholderia mallei* submitted to LRN Reference Level Laboratory.

**Additional screening test:** *B. mallei* is Arginine positive, unlike many other *Burkholderia* spp. (Test can be observed in kit identification systems.)