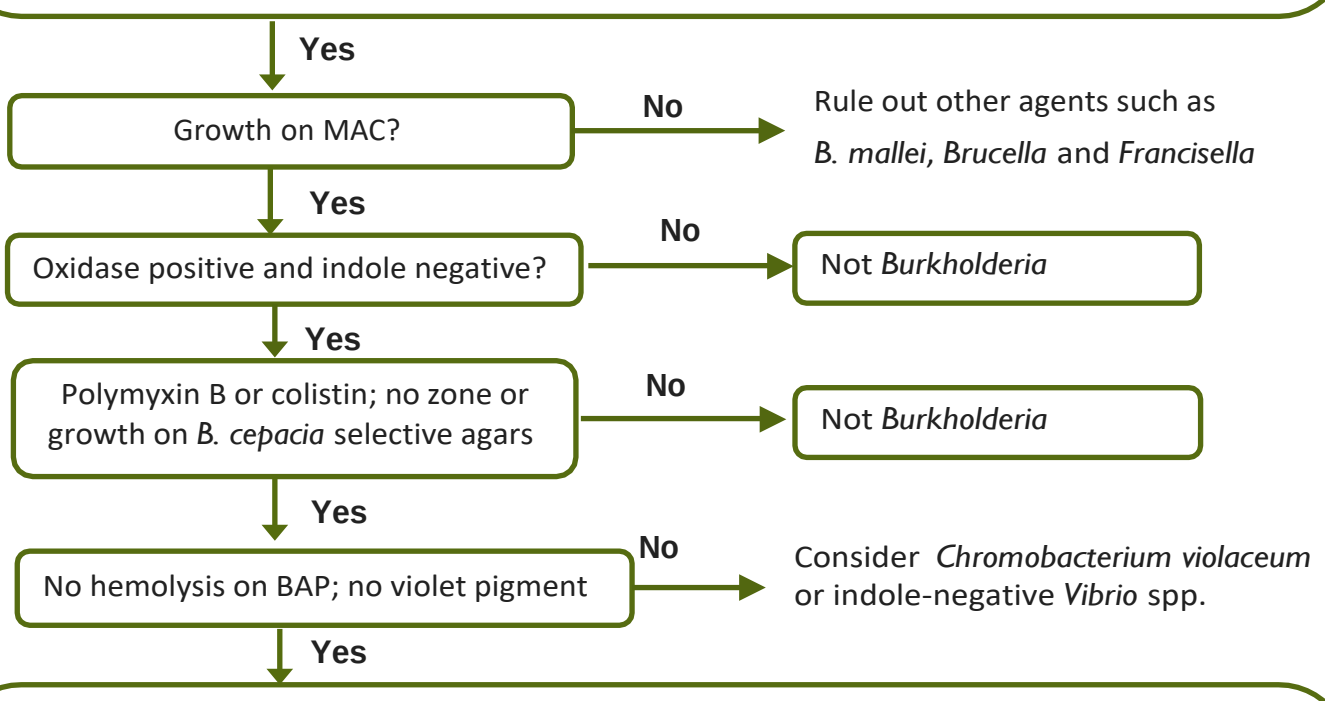
SAFETY: As soon as *Burkholderia* is suspected, perform ALL further work in a Class II Biosafety Cabinet using BSL-3 practices.

## Major characteristics of *Burkholderia pseudomallei*:

**Gram stain morphology:** Gram negative rod, straight or slightly curved, may demonstrate bipolar morphology at 24 h and peripheral staining, like endospores, as cultures age

**Colony morphology:** Poor growth at 24 h, good growth of smooth, creamy colonies at 48 h on BAP, may develop wrinkled colonies in time, nonhemolytic. Can demonstrate strong characteristic musty, earthy odor; growth on MAC/EMB in 48 h, no pigment is visible on Mueller-Hinton agar, may have non-violet pigment on BAP.

**Reactions:** Oxidase positive; indole negative




*B. pseudomallei* not ruled out, especially if colonies have musty odor.
*B. pseudomallei* is separated from *B. cepacia* by a susceptible amoxicillin-clavulanate test.
Although rare in *B. pseudomallei*, resistance cannot rule out the identification.
Contact your LRN Reference Level Laboratory to refer isolate.

**Report:** Possible *Burkholderia pseudomallei* submitted to LRN Reference Laboratory.
**Additional screening test:** *B. pseudomallei* and *B. mallei* are arginine positive, unlike other *Burkholderia*. (Test can be in kit identification systems.)
Unlike *B. mallei*, *B. pseudomallei* grows at 42°C in 48 h and is motile.

ASM, October 2014

This job aid is a component of the free, on-demand CDC training course "*Burkholderia*." Find the course at https://www.cdc.gov/labtraining