### Burkholderia mallei

**Colonial Morphology**
- Pinpoint to small grey colonies at 24 h that may become smooth, grey, and translucent at 48 h on Blood Agar (BA)
- No growth or colorless to light pink colonies on MacConkey (MAC) agar

**Gram Stain**
- Faintly staining gram-negative rods or slightly curved coccobacilli (1-3 µm x 0.3 µm)
- May be arranged singly, end to end pairs, in parallel bundles, or letter form, irregularly arranged

**Biochemical/Test Reactions**
- Oxidase: Negative or variable
- TSI: No change
- Motility: Non-Motile

**Additional Information**
- May be misidentified as: Other nonfermenting gram-negative bacilli by automated ID systems
- Infectious Dose: 10 colony forming units
- Biosafety Level 2 agent
- (Use BSL3 for large or high titer volume culture)
- Transmission: Inhalation, wound contamination, direct contact with infected animals
- Contagious: No infections have been reported

**Acceptable Specimen Types**
- Abscess material, tissue aspirate, tissue biopsy
- Whole blood: 5-10 ml blood in EDTA, and/or inoculated blood culture bottle
- Urine (≥ 5 ml)

### Burkholderia pseudomallei

**Colonial Morphology**
- Smooth, creamy-white colonies at 24 h that may become dry or mucoid at 48 h on Blood Agar (BA)
- Heavy growth at 42°C
- Pink or colorless colonies after 24 h that may remain pink or turn colorless at 48 h on MacConkey (MAC) agar

**Gram Stain**
- Gram-negative rods 1-3 µm x 0.3 µm
- Possible bipolar staining
- May appear as long thin bundles or irregularly arranged

**Biochemical/Test Reactions**
- Oxidase: Positive
- TSI: No change or slight oxidation (picture on back of card)
- Motility: Motile

**Additional Information**
- May be misidentified as: Chromobacterium violaceum and other nonfermenting gram-negative bacilli by automated ID systems
- Infectious Dose: 10 colony forming units
- Biosafety Level 2 agent
- (Use BSL3 for large or high titer volume culture)
- Transmission: Inhalation, wound contamination

**Acceptable Specimen Types**
- Abscess material, tissue aspirate, tissue biopsy
- Whole blood: 5-10 ml blood in EDTA, and/or inoculated blood culture bottle
- Urine (≥ 5 ml)
**Sentinel Laboratory Rule-Out**

### Burkholderia mallei
- Small grey-white colonies on BA (48 h)
- Colorless colonies on MAC (72 h)
- Gram-negative coccobacilli

#### Perform all additional work in a certified Class II Biosafety Cabinet

- **Oxidase:** Negative or Variable
- **TSI:** No Change
- **Motility:** Non-Motile
  (use semi-solid media rather than wet mount; 2,3,5-triphenyltetrazolium chloride indicator)

*Oxidase and Motility: Appearances of test results are not agent-specific. Photos represent typical reactions*

- **Yes**
- **No**

- **Continue laboratory identification procedures**
- **Immediately notify Wadsworth Center Biodefense/Bacteriology Laboratories if within the 5 boroughs of NYC, please call (212) 447-1091**

### Burkholderia pseudomallei
- Creamy-white colonies on BA
- May become dry or mucoid on BA (48 h)
- Pink to colorless colonies on MAC (24 h)
- Gram-negative, bipolar staining rods

#### Perform all additional work in a certified Class II Biosafety Cabinet

- **Oxidase:** Positive
- **TSI:** No Change or Slight Oxidation
- **Motility:** Motile
  (use semi-solid media rather than wet mount; 2,3,5-triphenyltetrazolium chloride indicator)

*Oxidase and Motility: Appearances of test results are not agent-specific. Photos represent typical reactions*

- **Yes**
- **No**

- **Continue laboratory identification procedures**