

TML\MSH Microbiology Department Policy & Procedure Manual	<b>Policy # MI\BI01\v01</b>	Page 8 of 9
<b>Bioterrorism Procedure Manual</b>		

4. *Y. pestis*:

- Gram Stain: Gram negative bacilli (1.0 by 0.5 µm) that may exhibit bipolar staining
- Culture: SBA - gray-white to slightly yellow opaque colonies after 48 hrs incubation; Beyond 48 to 72 hrs incubation, colonies develop fried egg appearance. Little or no hemolysis.
- MAC - small, lactose negative colonies after 24 hrs incubation.

Identify these isolates following standard laboratory procedures for gram negative bacilli including oxidase, Vitek card, API, or other tests as appropriate.

If a presumptive diagnosis of *Y. pestis*, proceed as outlined under "Reporting" below. Otherwise, report as noted elsewhere in the manual for gram negative bacilli.

### **III. REPORTING**

If any of the above organisms is presumptively identified, proceed as follows:

1. Notify the medical microbiologist on call immediately.
2. Prepare a subculture of the organism on Trypticase soy agar (TSA) for shipping to the Central Public Health Lab.
3. Notify the Central Public Health Lab [During Business Hours: Dr. Frances Jamieson (416) 235-5712 or Dr. Margaret Fearon (416) 235-5725; After Hours: Call the Duty Officer (416) 605-3113 ] that an isolate will be sent for further identification.
4. Do not report the presumptive result in the LIS until further instructions from the microbiologist.
5. If a presumptive *B. anthracis* colony is identified and suspected as a bioterrorist threat agent: Preserve original specimens pursuant to a potential criminal investigation.
6. The medical microbiologist will:
  - i) Contact the treating physician to review the case.
  - ii) Notify the senior hospital administrator on call.
  - iii) Notify the Infection Control Department.
  - iv) Notify Toronto Public Health:
    - During business hours: Tel: (416) 392-7411
    - After hours: Tel: (416) 690-2142

TML\MSH Microbiology Department Policy & Procedure Manual	<b>Policy # MI\BI01\v01</b>	Page 9 of 9
<b>Bioterrorism Procedure Manual</b>		

#### **IV. PACKAGING AND TRANSPORTING PROTOCOL**

- Suspected isolates will be packaged for transport to PHL according to the Transportation of Dangerous Goods regulation. Staff certified for transportation of dangerous goods will do the packaging.
- Inform Microbiologist to arrange for special courier (either special courier from PHL or lab personnel to drive to PHL)

#### **V. REFERENCES**

1. Klietmann WF and Ruoff KL. 2001. Bioterrorism: Implications for the Clinical Microbiologist. Clin Microbiol Rev 14:364-381.
2. Murray PR, Baron EJ, et al. 1999. Manual of Clinical Microbiology. 7<sup>th</sup> Ed. ASM Press, Washington, DC.
3. Basrur SV. Bioterrorism (Letter, October 10, 2001) Medical Officer of Health, Toronto Public Health.
4. CDC Guidelines for State Health Departments (Revised October 14, 2001)
5. CDC Basic protocol for the presumptive identification of Bacillus anthracis
6. Guideline and Fact sheet form Ontario Ministry of Health October 15, 2001