

**THE JOHNS HOPKINS HOSPITAL  
PROCEDURE FOR CULTURING BRONCHOSCOPES  
DEPARTMENT OF HOSPITAL EPIDEMIOLOGY AND INFECTION CONTROL**

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In an effort to ascertain whether or not our bronchoscopes were contaminated we recently cultured all of them using the following methodology:

- Clean & decontaminate the scope in the usual fashion
- When the scope is deemed “ready for patient use”
  - Attach a sterile specimen trap to the suction channel of the bronchoscope and attach that to wall or portable suction
  - Using a sterile 50 cc syringe with a tapered tip, draw up 50 cc sterile water
  - Inject 50cc sterile water into the biopsy port of the bronchoscope catching it in a sterile cup
  - Using the suction button on the bronchoscope, suction back 25 cc of the water into the suction trap. Be sure to use intermittent suction (i.e., press & release the button several times)
  - Place cap on cup of sterile water and seal top of suction trap and label appropriately.
    - For ease of recognition, we labeled the suction trap “out port” & and the water cup “in port”...we also labeled each specimen with the serial number of the scope
  - Transport both specimens to the lab. The following procedure was performed separately for the water in the cup and that in the trap:
    - Using aseptic technique 0.1 ml of water was inoculated on to a blood agar plate and evenly spread using a plastic spreader.
    - The remaining fluid was put through a filter to concentrate the organisms.
    - The filter was placed on a McConkey agar plate
    - Both plates were incubated for 48 hours in CO<sub>2</sub>
    - The plates were read at 24 & 48 hrs and results reported Infection Control
    - Positives were speciated and sensitivities were done

Although we did not do this, our colleagues in Tenn. (where first cases were noted) advised us that they cultured the loose caps and biopsy ports in the following manner:

- If a loose cap is found, **before returning it** to Olympus:
  - Carefully remove the loose cap
  - Using a culturette, after breaking the vial to moisten the swab, swab the inside of the cap
  - Using another culturette, swab the threads and inside of the exposed biopsy port
  - Carefully place each swab back in its holder and transport to lab

**FINAL SUGGESTIONS:**

- Save all positive isolates from scopes or other environmental sources
- Save corresponding positive patient isolates
- Perform pulse field gel electrophoresis on all “like” isolates to see if they are the same