Should I Collect a Respiratory Specimen for Bacterial Culture? Algorithm for Adult Intensive Care Unit Patients

Developed by The Johns Hopkins Hospital Department of Antimicrobial Stewardship

START HERE

Does the patient have at least 2 of the 4 following signs and symptoms?

- New oxygen requirement despite suctioning
- Purulent respiratory secretions
- New infiltrate on chest X-ray (atelectasis and edema are not considered infiltrates)
- Fever/hypothermia (not induced) OR increased peripheral white count (leukocytosis)

YES

Did the patient have a respiratory specimen collected for bacterial culture within the last 72 hours that was sent to work up respiratory symptoms?

YES

Do not collect a respiratory specimen for bacterial culture, communicate with ordering provider

NO

Collect respiratory specimen for bacterial culture

NO

Do not collect a respiratory specimen for bacterial culture as pneumonia is unlikely, communicate with ordering provider

Consider other reasons for the patient’s signs and symptoms

YES

Do not collect a respiratory specimen for bacterial culture for:

- Assessment of treatment response
- Isolated fever or leukocytosis in patients not meeting above criteria
- Isolated increased secretions
- Change in color of respiratory secretions

Kalil et al., Management of Adults With Hospital-acquired and Ventilator-associated Pneumonia: 2016 Clinical Practice Guidelines by the Infectious Diseases Society of America and the American Thoracic Society