

**Table 1.** Primary and secondary findings are necessary to initiate antibiotics for bacterial pneumonia (PNA) or COPD exacerbation.

Clinical Findings			Clinical Response	
Primary		Secondary	Primary and secondary both present	Either Primary or Secondary absent
Afebrile	Other comorbidities	New productive cough +	Start antibiotics	Start active monitoring  Re-evaluate next day  (do not start antibiotics)
	COPD pre-existing	Increased sputum purulence +		
Fever	>100°F <u>or</u> > 2.0°F above baseline <u>or</u> 2 X >99°F	<b>&gt;1 of the following symptoms (include at least 1 Respiratory Specific)</b>		(Tables 2 & 3)
		<b>Respiratory Specific– at least one</b>	<b>Respiratory Non-Specific</b>	
		-New or increase cough -New or increase sputum	-Delirium - <b>Total WBC &gt; 14,000*</b> - <b>Hypoxia (O2 sats &lt; 90%)*</b> -Pleuritic chest pain -Respiratory rate > 25 breaths/min -Consolidation (on exam)	
	High (>102F)	Respiratory Rate >25 <b>and/or</b> New Productive Cough	Consider ED	

\* Secondary findings *italicized* may be documented/obtained by ordering these tests during active monitoring if resident initially does not meet criteria to start antibiotics

\*\* Consider ordering chest X-ray and CBC with differential for febrile residents with cough and any of these criteria (HR >100, worsening mental status, or rigors) Antibiotics should not be used for up to 24 h after large-volume aspiration in those without COPD but with temp ≤38.9°C (102 °F) and non-productive cough

**TABLE 2. CLINICAL RESPONSE DETAILS**

Start Antibiotics: Primary & secondary findings both present	Start Active Monitoring: Either Primary or Secondary findings are absent
<ul style="list-style-type: none"> <li>• <b>Test COVID PCR (+ isolation) if still active</b></li> <li>• <b>IF SEASONAL, √ RSV/INFLUENZA TESTING</b></li> <li>• Choose antibiotic (<b>Table 3</b>)</li> <li>• Diagnostics only if                             <ul style="list-style-type: none"> <li>○ If community/hospital legionella problem – test urine Legionella</li> <li>○ If not improving consider CXR, pulse oximetry, CBC</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Do not start antibiotics</b></li> <li>• <b>Consider COVID PCR test if still active monitoring</b></li> <li>• If seasonal, consider √ RSV/influenza testing</li> <li>• If concerned or not improved <b>√ CBC +/- CXR</b></li> <li>• Re-evaluate signs and symptoms every 24 hours.                             <ul style="list-style-type: none"> <li>○ If not improved, consider                                     <ul style="list-style-type: none"> <li>▪ upper respiratory infection (URI) (if productive cough is not noted)</li> <li>▪ non-infectious causes of pulmonary infiltrate, other infection source.</li> </ul> </li> </ul> </li> </ul>

\* In patients where suspicion of Legionella is low, and the burden/risks of sputum or urine acquisition is high, testing not justified. Urinary catheterization, induced sputum production, or nasotracheal suctioning are only necessary in patients or residents when suspicion of Legionella is high and require proper consent.

2019 American Thoracic Society/IDSA guidelines: (1) suggest Legionella antigen testing in cases where a known outbreak is occurring or severe disease in hospitalized patients; (2) adults with CAP when influenza viruses are circulating in the community test for influenza with a rapid molecular assay.