

Patient presents with productive cough

- No clinical signs of bacterial infection/pneumonia*

Do not send sputum sample*

*Note: a positive sputum sample for bacteria from a person without clinical signs of infection does not mean anything. It does not indicate that antibiotics are required. It indicates colonisation, which is expected.

**Clinical signs of bacterial infection/pneumonia:

- Fever
- Evidence of consolidation e.g. dullness to percussion, chest x-ray changes
- Elevated respiratory or heart rate
- Low oxygen saturations
- For COPD exacerbations, 2 or more of:
 - Increased dyspnoea
 - Increased sputum volume
 - Increased sputum purulence

Patient presents with productive cough

- Clinical signs of bacterial infection/pneumonia**

Does the patient meet any of these criteria:

- Exacerbation of cystic fibrosis
- Exacerbation of bronchiectasis
- Community acquired pneumonia and not responding to empiric therapy***

Yes

Send sputum sample for culture

Instruct patient to rinse mouth thoroughly with water prior to collection and to expectorate sample directly into pot, minimising retention in the mouth.

Provide clinical details on the form including indication and antibiotic therapy.

No

Empiric treatment

Sputum culture not required

***Consider:

- Legionella if spring/summer and/or risk factors e.g. potting mix exposure
- Tuberculosis, if prolonged symptoms and risk factors for TB

Review microbiology results when available

- Modify treatment if patient not responding and resistant organism detected