

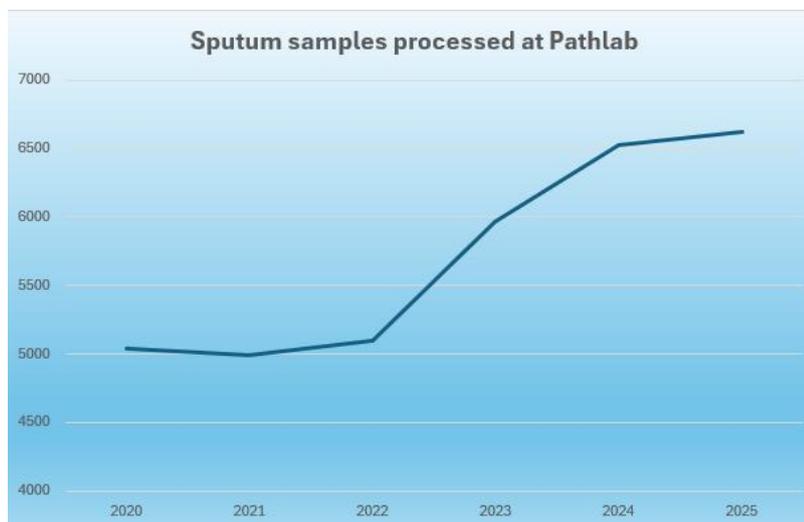


## Indications for Sputum Culture in the Community Setting

Sputum culture is in general a low value microbiology test, due to poor sensitivity and specificity in identifying bacterial pathogens.

In addition, the vast majority of results do not change patient management. We analysed 3200 sputum samples between July 2023 and June 2024. 6% of the total samples grew a respiratory pathogen that was resistant to amoxicillin, and only 0.7% of the sample cohort grew a respiratory pathogen resistant to doxycycline. (excluding Pseudomonas)

The number of sputum samples being processed at Pathlab has been increasing in the last few years (see graph below)



Sputum culture in the community setting is only indicated in the following circumstances:

- **If the patient has clear clinical evidence of a bacterial infection of the lower respiratory tract and has failed empiric antibiotic therapy with either amoxicillin and/or doxycycline.**
- **Monitoring of patients with bronchiectasis or cystic fibrosis, or management of acute exacerbations of bronchiectasis or cystic fibrosis**

In order to support good diagnostic stewardship principles, we would be grateful if you could adhere to the recommendations above before sending a sputum sample to the laboratory. As always, appropriate clinical details are pre-requisite on the request. To ensure appropriate testing, Pathlab may decline requests for sputum culture in patients that do not fall into the above categories.

Thank you for your co-operation with this diagnostic stewardship initiative.

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