

NICE COVID-19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community

The above rapid guideline (NG165) was published by NICE on 3 April 2020. The purpose of this guideline is to ensure the best treatment for adults with suspected or confirmed pneumonia in the community during the COVID-19 pandemic. The recommendations are based on evidence and expert opinion and have been verified as far as possible. NICE will review and update the recommendations as the knowledge base and expert experience develops.

Where these new recommendations cover existing recommendations in the NICE guidelines on pneumonia in adults: diagnosis and management and pneumonia (community-acquired): antimicrobial prescribing **follow the recommendations in the rapid guideline (NG165) during the pandemic.**

The guideline highlights that it is difficult to determine whether pneumonia has a COVID-19 viral cause or a bacterial cause (either primary or secondary to COVID-19) in primary care, particularly during remote consultations. However, as COVID-19 becomes more prevalent in the community, patients presenting with pneumonia symptoms are more likely to have a COVID-19 viral pneumonia than a community-acquired bacterial pneumonia.

COVID-19 viral pneumonia may be more likely if the patient:

- presents with a history of typical COVID-19 symptoms for about a week
- has severe muscle pain (myalgia)
- has loss of sense of smell (anosmia)
- is breathless but has no pleuritic pain
- has a history of exposure to known or suspected COVID-19, such as a household or workplace contact.

A bacterial cause of pneumonia may be more likely if the patient:

- becomes rapidly unwell after only a few days of symptoms
- does not have a history of typical COVID-19 symptoms
- has pleuritic pain
- has purulent sputum.

Antibiotic Treatment

The guideline recommends offering an oral antibiotic for treatment of pneumonia in people who can or wish to be treated in the community if:

- the likely cause is bacterial or
- it is unclear whether the cause is bacterial or viral and symptoms are more concerning or
- they are at high risk of complications because, for example, they are older or frail, or have a pre-existing co-morbidity such as immunosuppression or significant heart or lung disease (for example bronchiectasis or COPD), or have a history of severe illness following previous lung infection.

When starting antibiotic treatment, the first-choice oral antibiotic is:

- **doxycycline 200 mg on the first day, then 100 mg once a day for 5 days in total* (not in pregnancy) or**
- **alternatively: amoxicillin 500 mg 3 times a day for 5 days.**

PLEASE NOTE THAT THIS RECOMMENDATION IS DIFFERENT TO THE EXISTING NICE/PHE SUMMARY OF ANTIMICROBIAL PRESCRIBING GUIDANCE – MANAGING COMMON INFECTONS.

Antibiotic options for penicillin allergic patients, pregnancy, more severe disease and where atypical organisms are suspected, can be located in NICE guideline NG138; Pneumonia (community-acquired): antimicrobial prescribing.

*NB. NICE has updated these guidelines (23 April 2020) with further clarification on antibiotic treatment. The main points from the update are summarised below:

1. Doxycycline remains the first choice antibiotic at a dose of 200mg on the first day followed by 100mg once daily for 4 days i.e. a total course of 5 days;
2. Doxycycline is preferred during the COVID-19 pandemic as it has a broader spectrum of activity than amoxicillin, particularly against *Mycoplasma pneumoniae* and *Staphylococcus aureus*. These atypicals are more likely to be secondary causes of bacterial pneumonia during the pandemic.

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