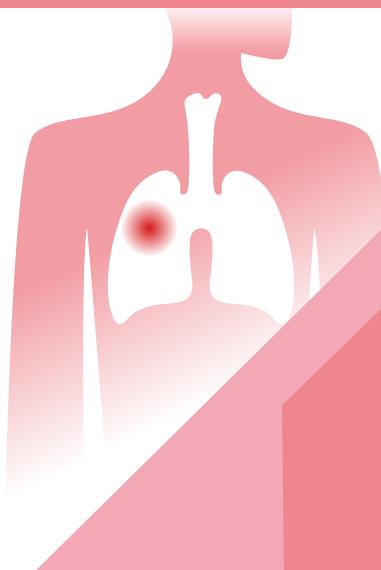


Acute Exacerbation of Chronic Obstructive Pulmonary Disease



Clinical diagnosis of acute exacerbation of chronic obstructive pulmonary disease (COPD)

Increased respiratory symptoms worsening over <14 days
(May be accompanied by tachypnoea and/or tachycardia)

For patients in the community setting with:

- 3 cardinal symptoms: increased dyspnoea + increased sputum volume + increased sputum purulence
or
- Increased sputum purulence + one other cardinal symptom
or
- Requiring mechanical ventilation

Yes

Prescribe antibiotics

No

Consider no antibiotics

Table 1: Recommended antibiotic treatment for acute exacerbation of COPD

Drug (Route)	Dosage and Frequency (Usual)	Duration (Usual)	Remarks
First line			
Amoxicillin-clavulanate or other beta-lactam-beta-lactamase inhibitors (BLBLIs) combinations* (oral)	1 g (875 mg/125 mg) twice daily; or 625 mg (500 mg/125 mg) three times daily	5 days	Amoxicillin-clavulanate is active against beta-lactamase-producing organisms (e.g. <i>Haemophilus influenzae</i> , <i>Moraxella catarrhalis</i> and methicillin-sensitive <i>Staphylococcus aureus</i>).
Second line			
Cefpodoxime (oral)	200 mg twice daily	5 days	For Non-type I hypersensitivity to penicillin [†] . Antacid may decrease the absorption of the drug. Dosage should be adjusted appropriately in patients with renal insufficiency.
Cefuroxime (oral)	500 mg twice daily	5 days	For Non-type I hypersensitivity to penicillin [†] .
Ceftriaxone (IM)	1 g once daily	5 days	For Non-type I hypersensitivity to penicillin [†] .
Levofloxacin (oral)	500 mg once daily	5 days	For outpatients who have:
Moxifloxacin (oral)	400 mg once daily	5 days	<ul style="list-style-type: none">• Type I and Non-type I hypersensitivity to the first line agent[†], or;• Documented infection by <i>S. pneumoniae</i> resistant to penicillin Consider levofloxacin if <i>P. aeruginosa</i> infection is suspected.

*Beta-lactam-beta-lactamase inhibitor combinations e.g. ampicillin-sulbactam.

[†]Type I hypersensitivity: Reaction typically occurs within 1 hour after drug exposure. Symptoms usually manifest as urticarial (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock.

Non-type I hypersensitivity: Reaction usually occurs more than 1 hour after exposure, up to days or weeks. Lesions may last from days to weeks. Cutaneous manifestations are not urticarial in nature, and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis.

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Disclaimer:

These guidance notes are intended for medical professionals for reference only and are not intended to be prescriptive or a substitute for clinical judgement on management of individual patient. These are not complete authoritative diagnostic or treatment guides. Medical professionals are recommended to obtain relevant information from other sources, including latest drug alerts, and provide patient management based on clinical judgement.

These guidance notes will be updated hereafter. Please visit the website of Centre for Health Protection, Department of Health for the latest update and other information.

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