

Community-acquired pneumonia (adults presenting to primary care)

Assess disease severity

If sepsis is suspected, assess and manage the person in line with [NICE's guideline on sepsis: recognition, diagnosis and early management](#).

Severity of CAP is assessed by clinical judgement guided by mortality risk score (CRB65):

- low-severity – usually equates to score 0
- moderate-severity – usually equates to score 1 or 2
- high-severity – usually equates to score 3 or 4.

Clinical judgement should always be used, as there may be situations where the mortality risk score does not align with the assessment of disease severity.



Decide place of care

Use clinical judgement together with the CRB65 score (bearing in mind this can be affected by other factors, for example, comorbidities or pregnancy) to stratify adults by disease severity and inform shared decisions about place of care.

Consider:

- CRB65 score of 2 or more: refer to hospital
- CRB65 score of 1: primary care-led services with safety netting advice, or referral to:
 - virtual ward, or
 - same day emergency care (SDEC) unit, or
 - hospital at home service, or
 - inpatient care.
- CRB65 score of 0: primary care-led services and safety netting advice.

When considering referral to a virtual ward, SDEC unit or hospital at home service, make a shared decision with the person (and their family or carers, where appropriate) about the most appropriate place of care, taking into account:

- the person's preferences and support network
- any advanced care plan or treatment escalation plan
- clinical risks, including any comorbidities or frailty
- the safety and suitability of the person's home environment.

Antibiotics

Start antibiotic treatment as soon as possible after establishing a diagnosis.

When choosing antibiotics, take account of:

- the disease severity
- the risk of developing complications, for example, if the person has a relevant comorbidity such as severe lung disease or immunosuppression
- local antimicrobial resistance and surveillance data (such as flu and *Mycoplasma pneumoniae* infection rates)
- recent antibiotic use
- previous microbiological results, including colonisation with multidrug-resistant bacteria.


Give oral antibiotics first line if the person can take oral medicines, and the severity of their condition does not require intravenous antibiotics.

If intravenous antibiotics are given, review by 48 hours and, if possible, consider switching to oral antibiotics to complete the course.

Stop antibiotics after 5 days unless microbiological results suggest a longer course is needed or the person is not clinically stable.

Reassess people if symptoms or signs do not improve as expected or worsen rapidly or significantly.

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Choice of antibiotic: adults aged 18 years and over	
Antibiotic	Dosage and course length
First-line oral antibiotic if low-severity disease	
Amoxicillin	500 mg three times a day (higher doses can be used - see BNF) for 5 days
Alternative oral antibiotics if low-severity disease, for penicillin allergy or if amoxicillin unsuitable (for example, atypical pathogens suspected)	
Doxycycline	200 mg on first day, then 100 mg once a day for 4 days (5-day course in total)
Clarithromycin	500 mg twice a day for 5 days
Erythromycin (in pregnancy)	500 mg four times a day for 5 days
First-line oral antibiotics if moderate-severity disease	
Amoxicillin	500 mg three times a day (higher doses can be used – see BNF) for 5 days, PLUS ONE of the following 2 options if atypical pathogens suspected
clarithromycin	500 mg twice a day for 5 days OR
erythromycin (in pregnancy)	500 mg four times a day for 5 days
Alternative oral antibiotics if moderate-severity disease, for penicillin allergy	
Doxycycline	200 mg on first day, then 100 mg once a day for 4 days (5-day course in total)
Clarithromycin	500 mg twice a day for 5 days
First-line antibiotics if high-severity disease	
Co-amoxiclav	500/125 mg three times a day orally or 1.2 g three times a day intravenously for 5 days, PLUS ONE of the following 2 options
clarithromycin	500 mg twice a day orally or intravenously for 5 days OR
erythromycin (in pregnancy)	500 mg four times a day orally for 5 days
Alternative antibiotic if high-severity disease, for penicillin allergy (consult a local microbiologist if fluoroquinolone not appropriate)	
Levofloxacin 	500 mg twice a day orally or intravenously for 5 days
Notes	
See over page.	

Community-acquired pneumonia (adults presenting to primary care)

Choice of antibiotic: adults aged 18 years and over, continued

Notes

For **all antibiotics**: see [BNF](#) for appropriate use and dosing in specific populations, for example hepatic impairment, renal impairment, pregnancy and breast-feeding, and administering intravenous (or, where appropriate, intramuscular) antibiotics.

For **erythromycin**: erythromycin is preferred if a macrolide is needed in pregnancy, for example, if there is true penicillin allergy and the benefits of antibiotic treatment outweigh the harms. See the [Medicines and Healthcare products Regulatory Agency \(MHRA\) Public Assessment Report on the safety of macrolide antibiotics in pregnancy](#).

For **amoxicillin with clarithromycin or erythromycin if atypical pathogens suspected**: mycoplasma pneumoniae infection occurs in outbreaks approximately every 4 years. If used as first-choice oral antibiotics if moderate severity, consider adding a macrolide to amoxicillin if atypical pathogens suspected. Review when microbiological results available.

⚠ **Warning**: for **levofloxacin**, see the [MHRA January 2024 advice on restrictions and precautions for using fluoroquinolone antibiotics](#) because of the risk of disabling and potentially long-lasting or irreversible side effects.