

# Pathway for primary care assessment of possible respiratory tract infection and community acquired pneumonia (>16 yrs age)

Excludes people with known COVID-10

Based on <https://www.nice.org.uk/guidance/ng237>

## Initial Clinical Assessment of Patient with symptoms of acute respiratory tract infection

Remote or Face to Face assessment

Ardens Template for Acute Cough can be used to support clinical assessment

Identify red flags for sepsis or serious illness

**Refer urgently to hospital if sepsis suspected**

UK Sepsis Trust Tools for general practice:

- [Patients aged 16 years and older](#)
- [Pregnant women or up to 4 weeks postpartum](#)

**Assess symptom severity and rate of deterioration**

Consider if adequate assessment can be made remotely?

Does patient use a smart watch that provides additional information e.g. O<sub>2</sub> sats?

Remote assessment if symptoms suggest patient can self-care at home

**Face to Face assessment in patients with:**

- Difficulty communicating
- Co-morbidity that maybe exacerbated by ARI
- Serious illness suspected
- Considering prescribing antibiotic

**Symptoms that can be managed at home:**

Give advice:

- On self-care
- Likely duration of illness
- When and how to seek medical help if symptoms worsen rapidly/do not improve/become systemically unwell

**Symptoms and signs of concern:**

- Breathlessness
- Confusion that is new or increased (without clear cause or typical symptoms)
- CAP risk assessment -use CRB65 score

**Considering prescribing antibiotics**

**Unsure if antibiotics needed and POC-CRP test available**

**See next page for community acquired pneumonia risk assessment**

**Refer to appropriate anti-microbial prescribing guideline:**

- ☐ [NG191 for people with confirmed COVID-19](#)
- ☐ [NG120 for people with acute cough](#)
- ☐ [NG114 for people with COPD](#)
- ☐ [NG79 for people with acute sinusitis](#)
- ☐ [NG84 for people with acute sore throat](#)
- ☐ [NG138 for pneumonia \(community acquired\)](#)

**Consider POC C-reactive protein test**

CRP >100 mg/L = Offer immediate antibiotics

CRP 20mg/L to 100mg/L\* = Consider back-up Rx

CRP < 20mg/L = Do not routinely offer antibiotics

\* CRP > 50mg/L favours the need for antibiotics, especially in the presence of productive cough with purulence

# Clinical diagnosis of community acquired pneumonia in adults

## Risk factors for community acquired pneumonia

- Age >65yrs
- Chronic respiratory disease
- Exposure to cigarette smoke
- Malnutrition
- Chronic liver disease due to alcohol abuse
- Chronic heart disease
- Poor oral hygiene
- Severe physical disability causing impaired airway protection
- COPD patients on inhaled corticosteroids
- Use of opioids
- Cold damp housing

## Use CRB65 score when making a clinical diagnosis of pneumonia

*Learning from NCEPOD:*

- Diagnosis of CAP not always apparent at first clinical assessment
- Clinical judgement alone has been shown to underestimate severity of CAP, use severity scores to aid decision making

## CRB65 score for risk assessment of pneumonia:

CRB65 score is calculated by giving 1 point for each of the following prognostic features:

- **Confusion** (abbreviated mental test score of 8 or less, or new disorientation in person, place, or time)
- **Respiratory rate raised** (30 breaths per minute or more)
- **Blood pressure low** (systolic less than 90 mmHg or diastolic 60 mmHg or less)
- **Age 65 years or more.**

People are stratified for risk of death (within 30 days) as follows:

CRB65 **0**: low risk (less than 1% mortality risk)

CRB65 **1 or 2**: intermediate risk (1 to 10% mortality risk)

CRB65 **3 or 4**: high risk (more than 10% mortality risk)

CRB65 score = 0      Consider home based care

CRB65 score = 1      Discuss options and make a shared decision about best care pathway

CRB65 score  $\geq 2$       Consider hospital assessment

Ensure treatment escalation plan in place if signs of deterioration

## References:

[NICE NG237](#): Suspected acute respiratory infection in over 16s: assessment at first presentation and initial management

[NHS England Right Care Pneumonia toolkit / UptoDate](#)

[National Confidential Enquiry into Patient Outcome and Death](#) (NCEPOD) 2023 Community acquired pneumonia.

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