

Chest Infection (Pneumonia)

For use by healthcare professionals only



Clinical Assessment/Management tool for Children

Primary and Community Care Settings

Clinical Assessment

- Fever
- Cough, chest pain
- Increased work of breathing
- Difficulty in breathing

Examination Findings

- Coarse crackles, usually focal
- Wheeze may be present but no hyperinflation
- Respiratory distress
- Tachypnoea

Vital signs values

Risk Factors

- High risk groups
- Chronic lung disease
 - Prematurity (<32 weeks gestation)
 - Haemodynamically significant congenital heart disease
 - Neuromuscular disorders
 - Long distance to healthcare
 - < 3 months of age
 - Immunodeficiency
 - Carer Factors

Red Flags

- Unwell/septic appearance
- Severe increased work of breathing
- Cyanosis or saturations <92% on pulse oximetry
- No improvement/deterioration despite 48 hours of oral antibiotics
- Apnoea or pauses in breathing

GREEN Mild

AMBER Moderate

RED Severe

Respiratory

- No respiratory distress
- O₂ sats >95%
- No nasal flaring or recessions

Circulation and Hydration

- Tolerating 75% of fluid
- Occasional cough induced vomiting
- Moist mucus membranes

Colour and activity

- Normal skin colour
- CRT <3 seconds
- Normal skin turgor
- Warm extremities
- Responds normally to social cues

Other

- Systemically well
- Explore other concerns/holistic assessment

Respiratory

- Tachypnoea
- Moderate recessions
- May have nasal flaring
- O₂ sats 92% to 94%

Circulation and Hydration

- 50% to 75% of fluid intake over the last 4 feeds
- Cough induced vomiting
- Reduced urine output

Colour and Activity

- Normal skin colour
- Pallor reported by parent or carer
- Cool peripheries
- Reduced activity
- Altered response to social cues

Other

- Age 3 to 6 months - T >39° C
- Fever >5 days
- Rigors
- Parental anxiety

Respiratory

- Significant respiratory distress
- Apnoea
- Grunting
- Nasal flaring
- All ages >60 BPM
- O₂ Sats <92%

Circulation and Hydration

- 50% or less fluid intake over 2 to 3 feeds
- Cough induced vomiting frequently
- Significantly reduced urine output

Colour and Activity

- Pale, mottled, ashen
- Cold extremities
- CRT >3 seconds
- Not responding normally or no response to social cues
- Unable to rouse or if roused does not stay awake
- Weak or continuous cry
- Appears ill

Other

- Age <3 months T >38°C

Green Action

- Can be managed at home
- Optimise analgesia
- GP to consider antibiotics
- Provide information
- If unwell at 48hrs seek advice from secondary care and consider
- Add Clarithromycin
- ? Complications
- Any risk factors for severe infection

Management

- Same day review by primary care
- Give antibiotics for 5 to 7 days
- Consider discussing with paediatrics
- Maintain hydration
- Consider lateral flow test for Covid

Send to hospital

- Refer immediately to emergency care or paediatric unit - consider 999
- Commence stabilisation treatment
- Consider high flow oxygen
- Consider early antibiotics administration if possible

Antibiotics

- 5 day course
- Amoxicillin (dose as per BNFC) is first line
- For penicillin allergic use a macrolide (ie clarithromycin/azithromycin)
- See [UKPAS](#)