# Revised WHO classification and treatment of childhood pneumonia at health facilities

## QUICK REFERENCE GUIDE

Pneumonia kills more children under the age of five years than any other disease. In 2013, it took the lives of over one million children around the world, most in resource-poor settings. WHO and UNICEF have developed the integrated *Global Action Plan for the Treatment and Control of Pneumonia and Diarrhoea (GAPPD)* aimed at ending preventable deaths from these two major killers by 2025. The GAPPD gives guidance to governments to develop a plan to protect against, treat and control pneumonia and diarrhoea in young children.

Currently, only 60% of child caregivers seek appropriate care for suspected pneumonia; proper antibiotic treatment is given only in about one-third of pneumonia cases.[1]

**With the goal of getting appropriate treatment to more children, the WHO guidance for classifying and treating childhood pneumonia at the first-level health facility and outpatient department has been revised.**[2,3]

### CHANGE 1
### RE-CLASSIFICATION TO TWO CATEGORIES OF PNEUMONIA

The two new classification categories are:

- **pneumonia*** treated with oral amoxicillin and home care advice
- **severe pneumonia** requiring injectable antibiotics.

* The classification "pneumonia" includes the previously classified 'fast breathing' pneumonia and 'chest indrawing' pneumonia. They can both be treated effectively with oral amoxicillin and home care advice (see **Figure and Change 2**).

#### WHY THIS CHANGE?

The new approach will:

— simplify the management of pneumonia at outpatient level

— reduce substantially the number of referrals for hospitalization

— achieve better treatment outcomes.

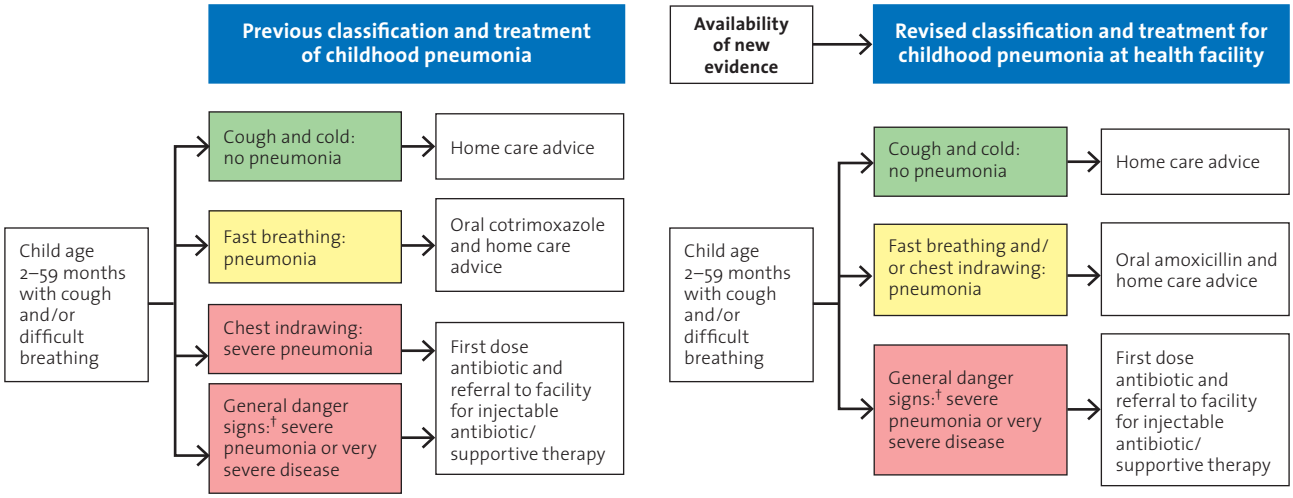
### CHANGE 2
### ORAL AMOXICILLIN REPLACES ORAL COTRIMOXAZOLE AS FIRST-LINE TREATMENT OF PNEUMONIA

- For children 2–59 months of age diagnosed with pneumonia and presenting "fast breathing" and "chest indrawing" clinical signs, oral amoxicillin is the first line of treatment, delivered on an outpatient basis.
- **Dosage:** New guidance is available on appropriate dosages of oral amoxicillin per age of the child (see **Table**, overleaf). Amoxicillin is recommended for use in a child-friendly dispersible tablet formulation that is dissolvable in breast milk or water, making it easy to swallow. The tablets are also easier to distribute, store and dispense than suspension forms.

#### WHY THIS CHANGE?

— Oral amoxicillin is the most effective treatment for both fast breathing and chest indrawing pneumonia.

**FIGURE. Comparison of previous and revised classification and treatment of childhood pneumonia at health facility**




† Not able to drink, persistent vomiting, convulsions, lethargic or unconscious, stridor in a calm child or severe malnutrition.


1 UNICEF. State of the World's Children. UNICEF New York 2014.

2 Integrated Management of Childhood Illness (IMCI) (revised). Geneva, World Health Organization/The United Nation Children's Fund (UNICEF), 2014.

3 WHO. Recommendations for management of common childhood conditions: Evidence for technical update of pocket book recommendations. Geneva, WHO, 2012. http://www.who.int/maternal_child_adolescent/documents/management_childhood_conditions/en/index.html

**TABLE. Doses of amoxicillin for children 2–59 months of age with pneumonia**

| TOOLS | CATEGORY OF PNEUMONIA | AGE/WEIGHT OF CHILD | DOSAGE OF AMOXICILLIN DISPERSIBLE TABLETS (250 mg) |
|---|---|---|---|
| iCCM tool for community health workers: **no change** | Fast breathing pneumonia | 2 months up to 12 months (4–<10 kg) | 1 tab twice a day x 5 days (10 tabs) |
| | | 12 months up to 5 years (10–19 kg) | 2 tabs twice a day x 5 days (20 tabs) |
| IMCI tool for professional health workers at health facilities: **revised** | Fast breathing and chest indrawing pneumonia | 2 months up to 12 months (4–<10 kg) | 1 tab twice a day x 5 days (10 tabs) |
| | | 12 months up to 3 years (10–<14 kg) | 2 tabs twice a day x 5 days (20 tabs) |
| | | 3 years up to 5 years (14–19 kg) | 3 tabs twice a day x 5 days (30 tabs) |

## TO NOTE

- An **HIV positive child with chest indrawing will still need to be referred** to the hospital for inpatient treatment.[4]
- **Guidance for community case management of pneumonia does not change:**
  - Community health workers (CHWs) will continue to refer children with chest indrawing and/or general danger signs to health facilities where a higher level of care can be provided.
  - CHWs will continue to dispense oral amoxicillin at existing dosages for children 2 to 59 months of age with fast breathing pneumonia as indicated in the WHO/UNICEF iCCM guidelines.[5]

## For further reading

Pocket book of hospital care for children: Guidelines for the management of common illnesses. Second edition. Geneva: World Health Organization; 2013.

Revised WHO classification and treatment of childhood pneumonia at health facilities. Evidence summaries. Geneva, World Health Organization, 2014.

Revised WHO classification and treatment of childhood pneumonia at health facilities. Implications for policy and implementation. World Health Organization, 2014.

### ADVANTAGES OF REVISED WHO PNEUMONIA RECOMMENDATIONS

- Increased access to antibiotic treatment closer to home
- One oral antibiotic for the treatment of both fast breathing pneumonia and chest indrawing pneumonia
- Decreased need for referrals to higher level facilities
- Simplified pneumonia classification and management (two categories instead of three)
- Simplified training of health workers
- Cost benefits at individual, household, community and health facility levels
- Decreased probability of hospitalization and thus the risk of hospital-acquired and injection-borne diseases
- Reduced probability of increasing antimicrobial resistance, due to better adherence to simplified treatment

### CHANGES TO POLICY AND PRACTICE FOR PNEUMONIA TREATMENT

- WHO recommends that national programmes switch to oral amoxicillin as the first-line treatment for pneumonia and to the simplified two categories for classification of pneumonia.
- National essential medicine lists will need revision to recommend oral amoxicillin.
- In order to reap the full benefits of the new scientific evidence, further local adaptations will need to be carried out and health workers will need to be re-trained according to the new guidelines.

4 WHO recommendations on the management of diarrhoea and pneumonia in HIV-infected infants and children. Geneva: World Health Organization; 2010 (http://www.who.int/maternal_child_adolescent/documents/9789241548083/en)

5 Caring for a sick child in the community. Manual for community health workers. Geneva, World Health Organization/The United Nation Children's Fund (UNICEF), 2013.

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