WHO names dispersible amoxicillin in 250 mg tablets as the optimal product for pneumonia treatment.

The World Health Organization (WHO) has established dispersible amoxicillin as the newly recommended first-line treatment for pneumonia in children under the age of five. Details can be found in the WHO Recommendations for Management of Common Childhood Conditions. 5

Oral amoxicillin is preferred over co-trimoxazole as first-line treatment because it is effective against both nonsevere and severe pneumonia in low-HIV settings and because of increased resistance to co-trimoxazole and lower efficacy of co-trimoxazole than amoxicillin. In high-HIV settings, amoxicillin is also preferred because oral co-trimoxazole is recommended for Pneumocystis pneumonia prophylaxis.

Although 500 mg amoxicillin capsules and tablets are widely available, this strength is not suitable to treat pneumonia in younger age groups (lower weight bands), and capsules cannot be split.

Traditionally, amoxicillin powder for oral suspension has been the dosage form of choice for children under the age of five years. However, dispensing complications are associated with this formulation, which makes it unsuitable for some settings; for example, it requires clean water and a measuring device for mixing, cold storage after reconstitution, and another marked measuring device for administering the medicine. In addition, the mixed suspension has a short shelf life of 14 days.

Amoxicillin dispersible tablets are equivalent to the oral suspension powder, but each dose is pressed into a tablet that quickly disperses in a small amount of water (5–10 mL) or breast milk at the time of use. Furthermore, older children and adults can swallow dispersible tablets just as they do other, nondispersible tablets.

Community case management of pneumonia by community health workers (CHWs) presents unique supply chain considerations—

- Often long distances are traveled to resupply points.
- Products are transported on bicycle, foot, or donkeys, presenting temperature and space challenges.
Amoxicillin dispersible tablets are child- and caregiver-friendly and appropriate for both the supply chain and management by CHWs. Storage space is limited, and products are exposed to sunlight, heat, and rain during transport and community use. The repackaging environment is unclean.

Amoxicillin dispersible tablets meet the special needs of CHWs.

Dispersible tablets—
- Are child- and supply chain-friendly
- Come in appropriate strengths and pack sizes to meet the needs of CHWs, caregivers, and children
- Are packaged for easy dispensing and inventory management—course of treatment is one or multiple blister strips
- Do not have to be split to get the correct dosage
- Are packaged with information and pictures for caregivers to remember instructions for administration

Dispersible tablets are also more cost-effective. Suspensions—even the dry powder for oral suspension—are bulkier and therefore costlier to ship and more challenging to distribute. In addition, the price of treating an 11-month-old child with amoxicillin syrup ranges from US$0.44 to US$1.60, whereas the cost of treatment with amoxicillin dispersible tablets ranges from US$0.21 to US$0.86.

The dosing specifications for amoxicillin dispersible tablets used at community level are summarized below. They are described in detail in WHO’s Integrated Management of Childhood Illness: Caring for Newborns and Children in the Community Handbook and in the new CHW training package from UNICEF and WHO.

With simple dosing and clear, easy instructions on prescribing and administration, the most effective and practical treatment is oral amoxicillin dispersible tablets.

Amoxicillin dispersible tablets are child- and caregiver-friendly and appropriate for both the supply chain and management by CHWs.

<table>
<thead>
<tr>
<th>Age</th>
<th>Pneumonia*</th>
<th>Severe pneumonia with danger signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–11 months</td>
<td>1 × 250 mg tablet twice a day for 5 days</td>
<td>Give 1 × 250 mg tablet immediately, and refer urgently to a health facility</td>
</tr>
<tr>
<td>12–59 months</td>
<td>2 × 250 mg tablets twice a day for 5 days</td>
<td>Give 2 × 250 mg tablets immediately, and refer urgently to a health facility</td>
</tr>
</tbody>
</table>

*Classification based on assessment of respiratory rate (RR): RR > 50/min (2-11 mo.); RR > 40/min (12-59 mo.)

This brief was produced by the Amoxicillin subgroup of the Diarrhea and Pneumonia Working Group. The following organizations contributed to this work: Bill and Melinda Gates Foundation, CHAI, FHI360, JSI, MDG Health Alliance, MSH, PATH, PSI, Save the Children, SIAPS, UNICEF, USAID, WHO.

7 Prices from UNICEF Supply Division.
8 Three days in a low-HIV setting.