Statement on the use of child-friendly fixed-dose combinations for the treatment of TB in children

In December 2015, the World Health Organization (WHO) and the Global Alliance for TB Drug Development (TB Alliance), with support from UNITAID, launched child-friendly fixed-dose combinations (FDCs) for the treatment of drug-susceptible tuberculosis (TB) in children weighing less than 25 kg.

The formulations available are as follows:

- **For the intensive phase of treatment.** 3 FDC (rifampicin 75 mg + isoniazid 50 mg + pyrazinamide 150 mg).
- **For the continuation phase of treatment.** 2 FDC (rifampicin 75 mg + isoniazid 50 mg).

The child-friendly FDCs were developed in line with the revised dosing to achieve the appropriate therapeutic levels, which was published in the WHO *Guidance for national tuberculosis programmes on the management of tuberculosis in children*, second edition (2014) (see table below).

Medicine	Dosage (mg/kg)[a]
Isoniazid (H)	10 (range 7–15)
Rifampicin (R)	15 (range 10–20)
Pyrazinamide (Z)	35 (range 30–40)
Ethambutol (E)	20 (range 15–25)

[a]As children approach a body weight of 25 kg, adult dosages can be used.

These new FDCs are water-dispersible tablets, which have a pleasant taste. They offer the opportunity to simplify and improve treatment for children around the world and are therefore likely to enhance adherence and completion of treatment, as well as to prevent the development of drug resistance.

The introduction of the new FDCs does not alter the basic principles, regimen or duration of childhood TB treatment.

These FDCs should be administered on the basis of the child's weight as follows.

	Numbers of tablets	
Weight band	**Intensive phase: RHZ 75/50/150[a]**	**Continuation phase: RH 75/50**
4–7 kg	1	1
8–11 kg	2	2
12–15 kg	3	3
16–24 kg	4	4
⩾25 kg	Adult dosage recommended	Adult dosage recommended

[a]Ethambutol should be added in the intensive phase for children with extensive disease or living in settings where the prevalence of HIV or of isoniazid resistance is high.

The FDCs are obtainable from the Global Drug Facility. For more information, please consult www.stoptb.org/gdf

WHO and UNICEF advise against the continued use of the former sub-optimally dosed FDCs or adult formulations (crushed tablets), which may lead to under- or over-dosing, unfavourable treatment outcomes, and increase the likelihood of developing drug resistance.

WHO and UNICEF therefore urge all national TB programmes to discontinue and replace the previously used medicines for children weighing less than 25 kg with the child-friendly dispersible TB FDCs as soon as possible.

Similarly, WHO and UNICEF strongly encourage donor agencies to provide funding for procurement of only the new child-friendly formulations.

WHO, UNICEF and other technical partners remain committed to providing the needed technical support to enable countries to prepare for and adopt the new child-friendly formulations.

In the meantime, as children enter the health system outside the national TB programmes, WHO and UNICEF encourage countries to implement additional activities in order to identify all children with TB (or at risk of TB) and to treat them as early as possible.

For more information:
Global TB Programme, World Health Organization
http://www.who.int/tb/areas-of-work/children

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