**CONTEXT**

- Diphtheria, Tetanus, and Pertussis (DTP) vaccines have been part of the Expanded Programme of Immunization (EPI) vaccination schedule since 1974. Whereas both DTwP and DTaP vaccines have excellent safety profile and equivalent effectiveness, UNICEF primarily procures DTwP standalone (10-dose) and DTwP combination vaccines (1- and 10-dose) presentations.

- To be protected throughout life, WHO recommends that an individual receives 6 doses (3 primary plus 3 booster doses) of tetanus containing vaccines.

- Following scale up of Pentavalent vaccine market and demand, since 2013 DTwP standalone vaccine demand through UNICEF has been mainly driven by the countries that implement the DTwP 4th-dose with booster vaccination in the second year of life.

- In June 2023 Gavi recommended to proceed with the funding, design and roll-out of the DTwP booster dose vaccination in the second year of life (2YLF), which was approved in principle in 2018 and paused since 2020. The timing for the programme launch as well as the recommended DTwP-containing vaccines are currently being discussed by the partners.

- DTwP is WHO prequalified in 1-dose, 10-dose and 20-dose presentations. However, the 1-dose and 20-dose presentations are not actively produced, and UNICEF procures DTwP only in 10-dose presentation.

- DTP is currently a relatively affordable vaccine with a 2023 projected WAP of $0.18 per dose.

**SUPPLY & DEMAND**

- DTwP vaccine is WHO prequalified by three manufacturers and UNICEF currently has supplier arrangements with two of these manufacturers.

- UNICEF procures DTwP on behalf of 20-25 of countries, five of them represent 70% of the volumes procured. Fluctuations in demand have minimal impact as manufacturers re-allocating bulk based on demand.

- Demand for DTwP as a standalone vaccine is relatively low and unpredictable (average of seven million doses annually), as the vast majority of the DTwP is used as bulk for combination vaccines. The three WHO prequalified producers of DTwP as standalone vaccines have also a WHO prequalified pentavalent vaccine and, therefore, there is sufficient capacity and possibility to reallocate bulk to respond to any fluctuations in the demand for DTwP as a standalone vaccine.

- Once the demand forecast, the funding mechanism and the DTwP-containing vaccine of choice, that are required to support the DTwP booster (2YLF) programme, are defined, UNICEF will work with manufacturers to understand production capacity and timing to cover these additional requirements.

**ISSUES & CHALLENGES**

- There is enough capacity in the market to cover the current DTwP demand. However, supply availability for DTwP as a standalone vaccine requires continued and close to ensure the right bulk allocation between the different DTP containing vaccines.

- Following UNICEF’s awards in 2022, UNICEF expected WAPs for 2023 and 2024 to remain at similar levels as the previous years. However, prices offered to UNICEF for the outer years of the tender period for 2025-2027 show an upward trend in the WAP starting from 2025.

**LOOKING AHEAD**

- UNICEF will collaborate with partners on the design and implementation of the DT booster programme, including working with manufacturers to ensure sufficient supply to support the programme without disrupting the supply of DTwP containing vaccines for routine programmes.

- Phase I of the portfolio tender including DTwP standalone, Pentavalent and Hexavalent vaccines was concluded during Q3 2022 awarding two DTwP suppliers for supply during 2023-2025. UNICEF is expecting to issue phase II of the tender in Q3, 2024.

**FURTHER QUESTIONS OR ADDITIONAL INFORMATION? PLEASE CONTACT:**

Nuria Cardalliaquset Amich  
Contracts Specialist  
n Cardalliaquset Amich@unicef.org

https://www.unicef.org/supply/