

Current major event

Consultative Meeting on Typhoid Fever Surveillance and Vaccine Introduction in the Eastern Mediterranean Region

WHO Regional Office for the Eastern Mediterranean (EMR) conducted a two-days virtual consultative meeting from 25 to 26 July, 2022 to review and discuss typhoid surveillance and vaccine introduction in the EMR.

Editorial note

Typhoid fever is an important public health problem in many low and middle income countries as it contribute to considerable annual morbidity and mortality. The actual burden of typhoid fever in the EMR remains unknown and information on typhoid surveillance and vaccination programs is deficient.

WHO and the US CDC conducted a survey in 2021 to collect information on typhoid fever control programs from the EMR. The findings, revealed that the situation of the typhoid control programs varies from one country to another within the Region. It also, identified many implementation gaps. According to the findings, typhoid surveillance and antimicrobial resistance (AMR) testing routinely using the standard confirmatory test is on *ad hoc* basis or very few countries were implementing them. Only two countries had vaccination recommendations against typhoid.

According to the meeting findings, there are many challenges hampering the implementation of typhoid control programs in EMR. Such as, lack of burden data, competing priorities, lack of standard guidelines, unavailability of laboratory supplies and equipment, poor multi-sectoral coordination, fragmentation of infectious diseases surveillance systems, and high turn-over and shortage of Health Human Resources.

The meeting participants and experts emphasized the importance of having national multi-sectoral approaches to enhance surveillance, appropriate data collection, laboratory diagnosis, case management, community engagement and robust water sanitation and hygiene (WASH) interventions, to prevent and control outbreaks of typhoid fever.

Typhoid burden and severity data are necessary to inform national, regional and global policy decisions. While the rollout

To enhance the Typhoid Control Programs in the EMR:

There is a need for ;

- Advocacy among the national stakeholders to prioritize the typhoid agenda
- Supporting evidence generation and conduction of burden estimates
- Strengthening partnership and multi-sectoral coordination
- Building the national capacity to conduct AMR testing
- Strengthening the laboratory capacities, including the sequencing capacity, in the Region for diagnosis of typhoid using appropriate methods of testing
- Supporting introduction and scale up utilization of typhoid vaccines

Opportunities to strengthen typhoid control programmes in the Region:

Considering the challenges reported by the countries, following are the opportunities to strengthen typhoid control programmes in the Region:

- Presence of typhoid specific tools, strategic documents, guidelines, and standards developed by WHO.
- Growing regional and global partnerships with CDC and GAVI.
- Presence of effective and safe typhoid vaccines.
- WHO's collaborating centers' support and growing spread of knowledge.
- Enhanced regional next generation sequencing (NGS) capacities for COVID-19 that might be used for other high threats pathogens such as typhoid.

of typhoid conjugate vaccine (TCV) is preferred for all ages as part of routine programmes due to its improved immunological properties, understanding the burden of typhoid in the Region is also relevant to high-income countries with lower typhoid risk due to regional migration and travel associated risks. Enhancing laboratory surveillance is further critical to monitor the existence of multi-drug resistance typhoid fever.

WHO is strengthening typhoid surveillance system and laboratory diagnosis and it recommends typhoid fever vaccination as a control strategy for endemic and epidemic disease along other measures including health education, water quality and sanitation improvements, and offering training for health professionals in diagnosis and treatment.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in 22 EMR countries

Current public health events of concern

[cumulative N° of cases (deaths), CFR %]

Coronavirus disease 2019 (COVID-19): 2019-2022

Afghanistan	[187 442 (7752), 4.1%]
Bahrain	[662 406 (1511), 0.2%]
Djibouti	[15 690 (189), 1.2%]
Egypt	[515 082 (24 781), 4.8%]
Iran (Islamic Republic of)	[7 434 945 (142 398) 1.9%]
Iraq	[2 450 637 (25 325), 1%]
Jordan	[1 720 778 (14 090), 0.8%]
Kuwait	[655 732 (2562), 0.4%]
Lebanon	[1 185 405 (10 546), 0.9%]
Libya	[505 705 (6433), 1.3%]
Morocco	[1 262 501 (16 256), 1.3%]
occupied Palestinian territory (oPt)	[697 447 (5691), 0.8%]
Oman	[397 231 (4628), 1.2%]
Pakistan	[1 559 201 (30 505), 2%]
Qatar	[413 489 (681), 0.2%]
Saudi Arabia	[810 887 (9260) 1.1%]
Somalia	[27 020 (1361), 5%]
Sudan	[63 128 (4960), 7.9%]
Syrian Arab Republic	[56 474 (3153), 5.6%]
Tunisia	[1 134 660 (29 105), 2.6%]
United Arab Emirates	[997 769 (2337), 0.2%]
Yemen	[11 895 (2152), 18.1%]