

Current major event

Diphtheria situation update – Yemen

As of epidemiological week 30, the Ministry of Public Health and Population in Yemen reported 567 probable diphtheria cases and 32 associated deaths (CFR 5.6%) from 14 out of 23 governorates. The most affected governorates are Sa'ada (18% of cases) and Al Hudeydah.

Editorial note

Diphtheria is a highly contagious bacterial disease that primarily infects the throat and upper airways, and produces a toxin affecting other organs. The infection can lead to difficulty in breathing, heart failure, paralysis and even death. Transmission occurs from person to person through close respiratory and physical fluid contact. Vaccinations are available and recommended for its prevention.

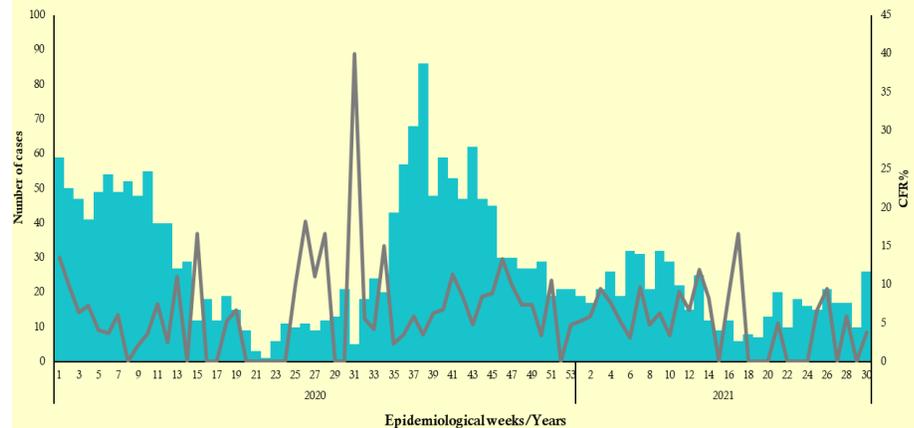
Diphtheria is endemic to Yemen. The complex emergency situation in Yemen has led to an increased displacement of the highly vulnerable population that is unvaccinated and malnourished. A weak health system and other risk factors have contributed to, and expedited the recurrence and spread of diphtheria cases.

Since October 2017, Yemen has been experiencing a diphtheria outbreak which affected most of its governorates. From epidemiological week 33 of 2017 to week 30 of 2021, a total of 7332 clinically diagnosed cases and 465 associated deaths were reported (CFR 6.34%) (*see table*).

In 2021 and up to week 30, a total of 567 probable cases and 32 associated deaths (CFR 5.6%) were reported from 14 out of 23 governorates. The most affected governorates are Sa'ada (103 cases; 18% of all cases), Al Hudeydah (99; 17%), and Amanat Al Asmiah and Hajjah (83; 15% each). The highest CFR was reported from Al Jawf (25%) followed by Ibb (16%) and Dhamar (11.5%). Among the reported cases, females were more affected than the males (2.5:1). The most affected age group was the 5 to 14 year-olds representing 42% of reported cases and 66% of reported deaths, followed by 15 to 29 year-olds representing 26% of cases and 9% of deaths, and then those younger than 5 years representing 16% of cases and 19% of deaths.

Even though diphtheria is endemic to

Probable diphtheria cases in Yemen, week 1-2020 to week 30-2021



Diphtheria cases and deaths in Yemen (2017 to week 30-2021)

Years	Cases	Deaths	CFR%
2017	429	42	9.79
2018	2606	128	4.91
2019	2020	129	6.39
2020	1710	134	7.84
2021	567	32	5.64
Grand total	7332	465	6.34

Yemen, incidence of the disease has declined significantly in recent months due to the improvement in immunization coverage. In 2021, the 567 cases and 32 deaths reported till week 30 represent a decline when compared to the same period in 2020 when 844 cases and 53 deaths were reported (*see graph*).

The majority of suspected cases are over 5 years of age (81% of total cases), which is consistent with the expected occurrence patterns of diphtheria in low incidence settings with failing immunization programmes typical of countries such as Yemen that are only using the primary immunization schedule. Potentially waning immunity after the primary series might have also contributed to this surge.

Appropriate case management, use of diphtheria antitoxin (DAT), contact tracing and appropriate prophylactic treatment will save lives and limit transmission, while targeted vaccination campaigns in the most affected districts will be key to interrupt transmission.

WHO recommends the development of a long-term strategy to enhance immunization coverage in all areas of the country and to identify hotspots through surveillance.

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): 2019-2021

Afghanistan	[153 534 (7141), 4.7%]
Bahrain	[272 916 (1388), 0.5%]
Djibouti	[11 775 (157), 1.3%]
Egypt	[289 684 (16 776), 5.8%]
Iran (Islamic Republic of)	[5 103 537 (110 064), 2.2%]
Iraq	[1 912 395 (21 042), 1.1%]
Jordan	[800 240 (10 463), 1.3%]
Kuwait	[410 270 (2423), 0.6%]
Lebanon	[606 536 (8089), 1.3%]
Libya	[315 418 (4323), 1.4%]
Morocco	[881 042 (12 993), 1.5%]
occupied Palestinian territory (oPt)	[381 222 (3988), 1%]
Oman	[302 599 (4075), 1.3%]
Pakistan	[1 179 305 (26 175), 2.2%]
Qatar	[233 437 (602), 0.3%]
Saudi Arabia	[545 123 (8572), 1.6%]
Somalia	[17 726 (997), 5.6%]
Sudan	[37 873 (2791), 7.4%]
Syrian Arab Republic	[28 423 (2033), 7.2%]
Tunisia	[675 191 (23 846), 3.5%]
United Arab Emirates	[722 292 (2045), 0.3%]
Yemen	[8056 (1519), 18.9%]