

Current major event

Use of single dose OCV: New strategies for cholera control

Recent evidence has emerged on the effectiveness of single dose of oral cholera vaccine for outbreak response. This finding has generated interest in the control of cholera outbreaks in the epidemic belt of the Eastern Mediterranean Region.

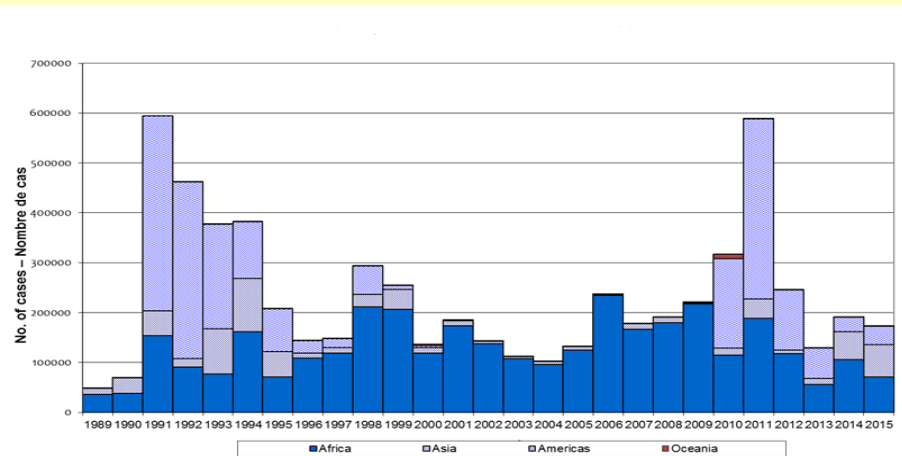
Editorial note

Cholera remains a serious public health problem globally as well as in the Eastern Mediterranean Region (EMR) of WHO (*Please see the graph*). At-least 8 out of the 22 countries in the Region are endemic for cholera with repeated outbreaks resulting in disproportionate morbidity and mortality amongst the poor and marginalized populations.

In the year 2016, cholera outbreaks have been reported from Somalia and Yemen while a number of other countries have also reported sporadic laboratory-confirmed cases. In recent time, the use of oral cholera vaccines (OCV) has proved to be an effective and complementary public health intervention along with other traditional intervention such as improving access of the at-risk population to safe water and sanitation including hygiene promotion. Typically, the OCV is given in two doses 14 days apart and studies have shown its efficacy and effectiveness with this dosing schedule. A recent study conducted in Juba, South Sudan has shown that use of one dose of OCV can be equally effective (adjusted single-dose vaccine effectiveness was 87.3%) for reducing medically attended cholera for upto 2 months.

The present study findings on the use of single dose OCV provides a renewed push for cholera control in the Region. The use of one dose of vaccine for an outbreak response would reduce costs and double the number of people that could be served considering the global shortage of vaccines that is expected to last for the next few years. Its use during an ongoing epidemic has also provided evidence that OCV can thwart an ongoing epidemic contrary to earlier beliefs that the use of OCV during an ongoing

Cholera cases reported globally by year, 1989-2015



Some major cholera outbreaks reported in the Eastern Mediterranean Region

Year	Country	Cases	Deaths	CFR (%)
2001	Afghanistan	4499	114	2.5
2006	Sudan	30662	1011	3.2
2011	Pakistan	11489	219	1.0
2011	Somalia	77636	1130	1.4
2012	Somalia	22576	200	0.88
2012	Iraq	4693	4	0.08
2011	Yemen	31789	134	0.42

outbreak may not be a useful intervention owing to the time needed to develop optimal immunity amongst the at-risk population following completion of the second dose of the vaccine.

In the Eastern Mediterranean Region of WHO, the OCV has been introduced in two countries so far— Iraq in 2015 and Sudan in 2016. Its use may potentially be considered in some other countries where cholera is endemic with repeated outbreaks. The health authorities of these countries may consider the option of using a single-dose vaccination campaign as part of an emergency outbreak response.

In view of the need to scale up strategies for cholera control, the goal of universal access of populations to water and sanitation is important. It is equally urgent to consider innovative approaches for cholera control such as the use of OCV. The growing evidence of the effectiveness of the use of OCV should play a central part in the new strategies for cholera control in the Region.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; Cholera in Somalia; Cholera in Yemen

Current public health events of international concern [cumulative N° of cases (deaths), CFR %]

Avian Influenza : 2006-2016

Egypt (A/H5N1)	[356 (121), 33.9%]
Egypt (A/H9N2)	[3 (0)]

MERS-CoV: 2012-2016

Saudi Arabia	[1414 (601), 42.5%]
Bahrain	[1 (1), 100%]

Cholera : 2016

Somalia	[13728 (497), 3.6%]
Yemen	[2241 (47), 2.4%]

Yellow fever: 2015-2016

Angola	[4347 (377), 8.7%]
DRC	[2987 (16), 0.5%]

Lassa fever : 2015-2016

Nigeria	[273(149), 54.5%]
Benin	[54(28),51.8%

Avian Influenza A (H7N9) : 2013-2016

China	[775 (307),36%]
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Avian Influenza A (H5N6) : 2016

China	[4 (0)]
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Wild poliovirus: 2014-2016

Pakistan	[376(0)]
Afghanistan	[66(0)]

Zika Virus Infection: 2007-2016

73 countries and territories have reported transmission so far