

Current major event

Cholera in Yemen: cases rise

Cholera outbreak in Yemen continues while cases increase in recent time. As of date, a total of 7,730 suspected cases including 82 related deaths have been reported since the outbreak began during the first week of October (epidemiological week no 34)

Editorial note

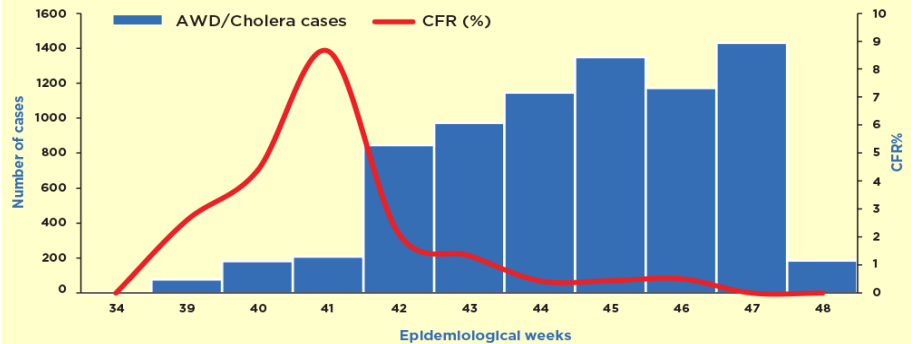
Cholera remains a serious public health problem in Yemen. The last major outbreak reported from the country in 2011 (please see the table), resulted in over 31,000 cases including 134 related deaths.

The current outbreak that began during the epidemiological week of 34 has now spread to 13 out of 20 governorates in the country. The number of districts reporting cholera cases include 135 out of the 333. The trend (Please see the epidemic curve above), has increased from week no 42 and continued to rise. It is unclear, owing to limitations of surveillance system and difficulties in timely reporting (owing to insecurity), whether the outbreak has peaked although 11 weeks have passed since the first laboratory-confirmed case of cholera was officially notified by the ministry of health to WHO on 4 October 2016.

During this ongoing outbreak, A total of 613 stool specimens were collected and tested for *V. cholera* and 20% (122) of the specimens were tested positive for *V. Cholera* 01 in 37 districts. Of these laboratory confirmed cholera cases, 51 were reported during the month of November signifying active and continued circulation of *Vibrio cholera* throughout the country even 10 weeks after the outbreak began.

During this ongoing outbreak, children below 5 years of age were the most affected group (35% of cases were reported in this age group alone). Although deaths reported from this outbreak is comparatively lower compared to what is expected given the unstable situation currently prevailing in the country. However, the death figure can be an underestimate of actual deaths that are occurring in this outbreak. The situation in Yemen

Epidemic curve of suspected cholera cases in Yemen, week no 34 to 48



Past cholera outbreaks reported from Yemen, 2009-2016

Year	Cases	Deaths	CFR (%)
2009	55	3	5.4
2010	532	5	0.9
2011	31789	134	0.4
2016*	7730	82	1

*Ongoing

remain volatile, the health systems are not functioning optimally, many areas remain accessible owing to insecurity. Therefore, deaths occurring in the community from cholera may not be reported back or not being picked up by the surveillance systems.

Despite all these difficulties, sustained and intensive efforts need to be put in place by the authorities as well as other health partners and NGOs operating on the ground. The key would be to do active case search, intensify wash and hygiene interventions at the household and community level and reinforce early treatment with oral rehydration salts.

The other complimentary intervention that can be considered is to use Oral Cholera Vaccines (OCV) in areas where it is feasible to organize a mass immunization campaign. The recent evidence that even one dose of OCV can be effective to contain an on-going outbreak may be an entry point to introduce OCV in these challenging settings of Yemen. The key would be to target areas with high attack rate for interrupting *Vibrio cholera* transmission

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia and Oman; 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%]
Oman	[1 (0),]

Cholera : 2016

Somalia	[14165 (497), 3.5%]
Yemen	[7730 (82), 1%]

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