

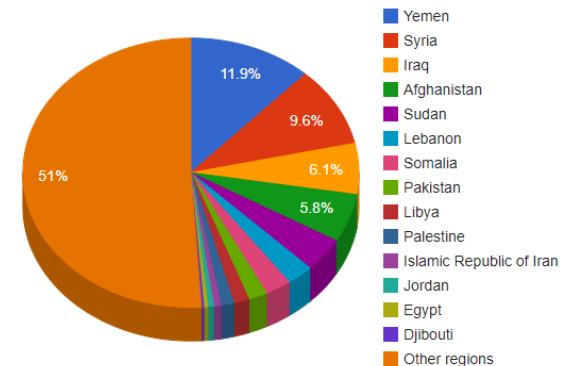
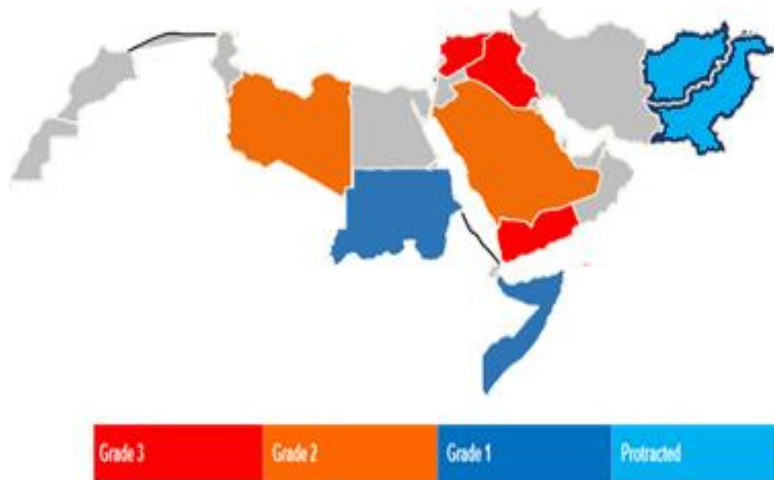
# 4<sup>th</sup> GTFCC SURVEILLANCE Working Group Annual Meeting 15-17 April 2019

**Dr. Muhammad Tayyab**

Infectious Hazard Management (IHM) Unit  
World Health Organization  
Regional Office for the Eastern  
Mediterranean

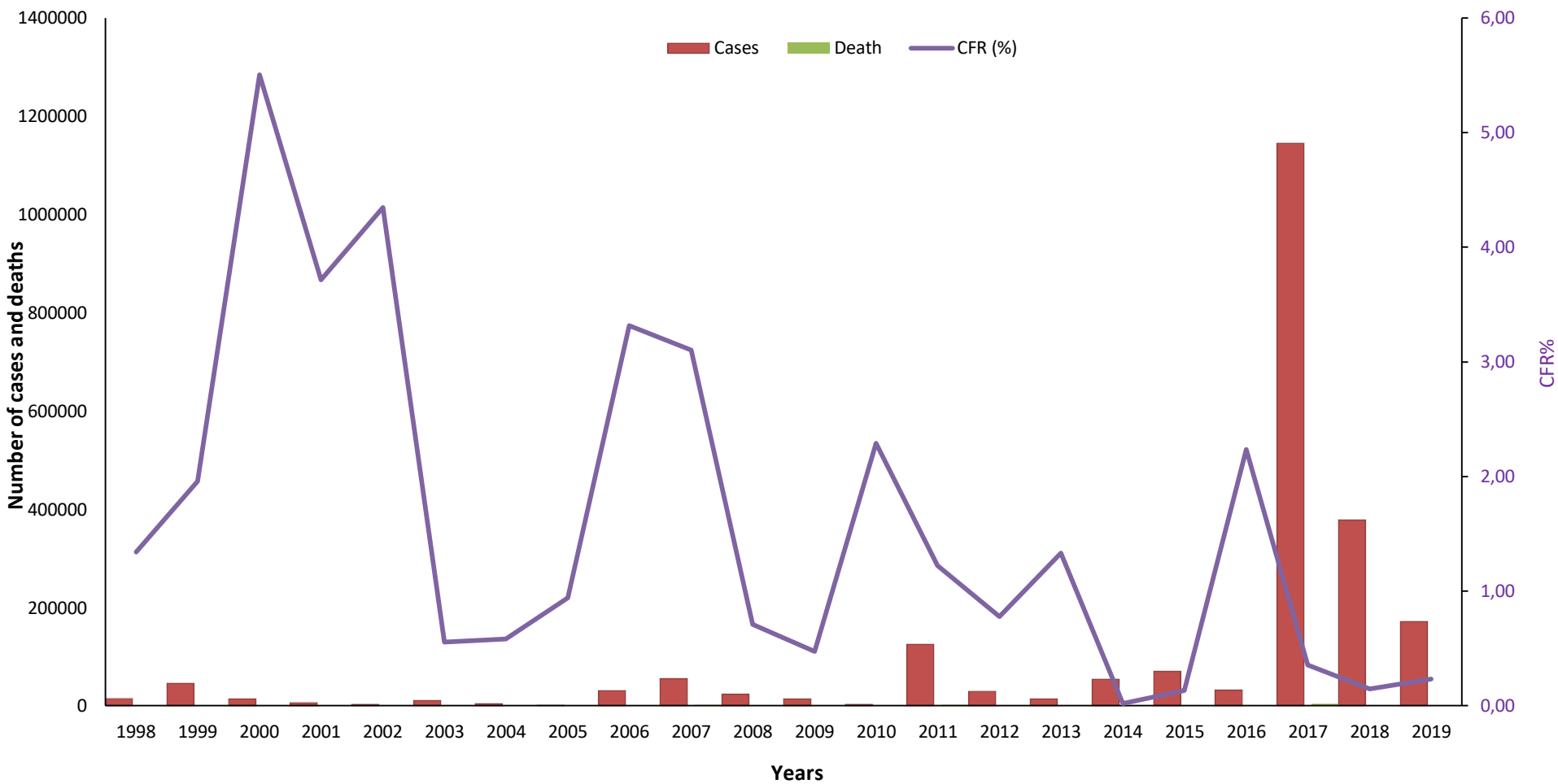
# EMR context

- Cholera remains a major public health risk in the Eastern Mediterranean Region.
- At least **13** out of the 22 countries in the region have reported cholera cases in the last decade
- More than **76 million** people in the Region are directly or indirectly affected by political **conflict**, environmental threats and natural disasters
- Hosting the largest caseload of **displaced populations**, including 17.1 million internally displaced people and 16.7 million refugees.
- Almost two-thirds of the Region's countries are directly or indirectly affected by complex emergencies



People in need of health services as a result of emergencies in the Eastern Mediterranean Region compared to other WHO regions  
Source: United Nations Humanitarian Response Plans 2016

# Cumulative number of cholera cases and deaths and CFR reported from the Eastern Mediterranean Region, 1998-2019

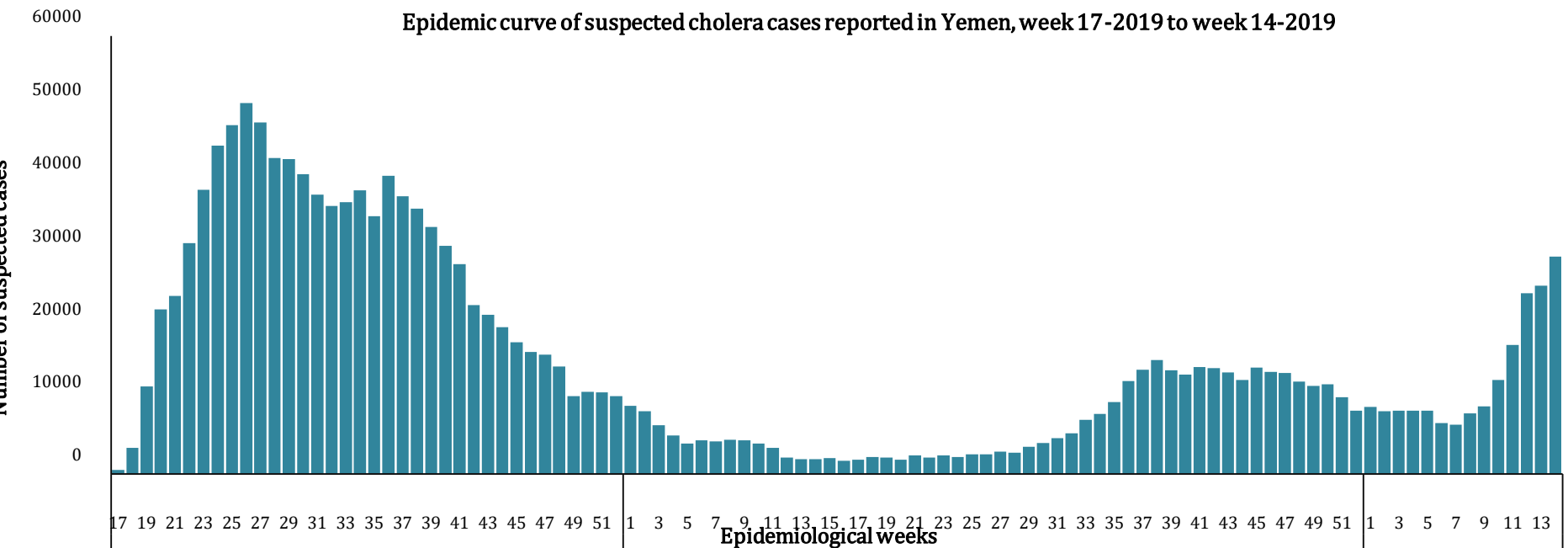


# Cholera cases reported in EMR during 2017

Country	Total cases	Imported cases	Deaths	CFR (%)
Afghanistan	33	-	1	3.0
Iran (Islamic Republic of)	634	625	4	0.6
Qatar	-	5	-	0
Saudi Arabia	5	5	-	0
Somalia	75,414	-	1,007	1.3
Syrian Arab Republic	-	-	-	0
Tunisia	-	-	-	0
United Arab Emirates	12	12	-	0
Yemen	1,032,481	-	2,261	0.2
Sudan	29,024	-	634	2.2
Iraq	328	-	3	0.9

# Example (Yemen)

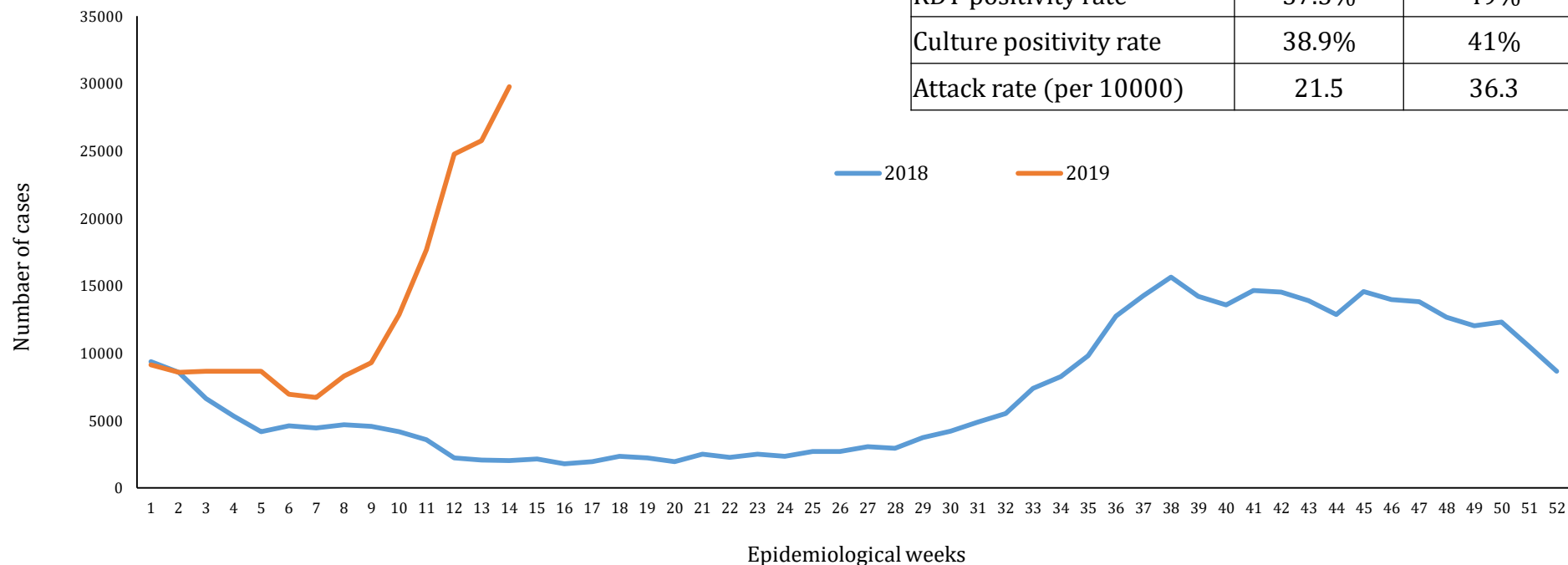
- The cholera outbreak is persisted with periodic resurgence since 2016:
  - **2016:** 25 827 (129)
  - **2017:** 1 022 436 (2 238)
  - **2018:** 371 323 (505)
  - **April 2019:** 194 595 (406 )



# Yemen 2019

– April 2019: 194 595 (406 )

Week 11 of 2018 and 2019		
Indicators	2018	2019
Total suspected case	60036	108889
Associated deathth	30	190
Case fatality rate	0.05%	0.17%
< 5 children	32%	26%
Proportion of sever cases	12.70%	14%
RDT positivity rate	37.5%	49%
Culture positivity rate	38.9%	41%
Attack rate (per 10000)	21.5	36.3



# Surveillance capacities

- Data recording systems
  - Early Warning Alert and Response Network (EWARN) 7 Countries
  - National health information systems (HMIS, DHISII)
- Paper based/ manual data recording and reporting system at health facility level.
  - Errors in recording
  - Duplication / under reporting
- Non adherent to standard case definition
  - Missing cases
- Laboratory confirmation is rare
  - lack willingness for the lab tests
  - Non availability of RDTs
  - Lab and Epi data are not linked
- Response
  - Fragmented mostly focused on case management
- Other factors
  - Member states willingness to report
  - Fear of economy loss

سجل معاينة المرضى اليومي

المرقعي الصحي: ..... المديرية: ..... المحافظة: .....  
 رقم الملف: ..... التاريخ: .....

العلاج	المرقعي	الرقم	الجنس	العنوان	تاريخ	زيادة جديدة	زيادة مبررة	درجة الحرارة	نبض	سوي التنفس	الحالة
			الجنس	العنوان	تاريخ	زيادة جديدة	زيادة مبررة	درجة الحرارة	نبض	سوي التنفس	الحالة
Re - Caput	1	1	♂	ساح بوعاد	18/05/2014						
Re - Fluor	2	2	♀	شباب المعونات	18/05/2014						
Re - Fluor	3	3	♀	سليمي خليل	18/05/2014						
Re - Sept	4	4	♀	الفا صقر صالح	18/05/2014						
Re - Sept	5	5	♀	احسان محمد دحمان	18/05/2014						
Re - Sept	6	6	♀	ماريا محمد عاصم بشار	18/05/2014						
Re - Sept	7	7	♀	اليا مينا نور جمالين	18/05/2014						
Re - Sept	8	8	♀	فاطمة عبد الحكيم	18/05/2014						
Re - Sept	9	9	♀	عصم	18/05/2014						



# OCV Campaign in Yemen

- Cholera vaccination campaigns have reached **over 900 000** people in several districts:
  - **First dose** (May 2018): Aden/Ibb/Hudaydah (eight districts) **662040**,
  - **Second dose** (September and October 2018): Ibb/Hudaydah (Three districts) **309 603**
- Additional **1.2 million doses** made available for planned implementation in April 2019





# Challenges

- **Hard to reach areas** due to insecurity, and restricted access to affected population in many parts of the country
- Slow deployment of needed **critical technical support** because of onerous administrative requirement of the local authorities
- Near complete **collapse** of the local water and sanitation infrastructure in the affected areas
- Increased demand of **OCV** with inadequate global stock



# Cholera Outbreak Portal (COP)

COP: [http://199.33.126.98/copnew/index.php?\\_pages=login](http://199.33.126.98/copnew/index.php?_pages=login)

## Cholera Outbreak Portal (COP)



### login Details

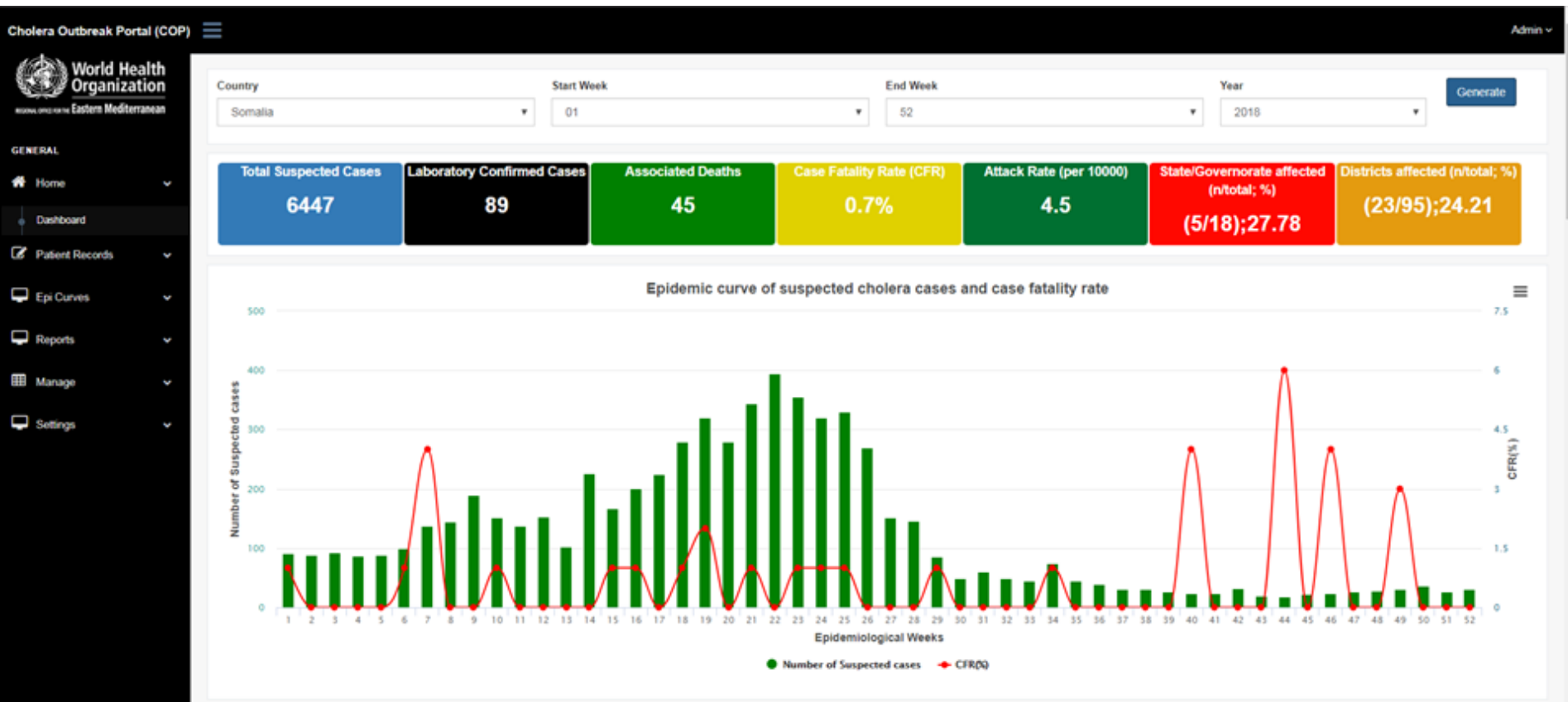
Don't have an account yet? [Sign Up](#)

Login

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This is a centralized web repository for Cholera Outbreak Portal reported in the Eastern Mediterranean Region of WHO. The information on outbreaks and events posted on this portal are gathered from various sources including from the official notification of the IHR National Focal Points to WHO

# COP Dashboard



# COP data entry (cases based)

Cholera Outbreak Portal (COP) Admin

World Health Organization  
Regional Office for the Eastern Mediterranean

GENERAL

- Home
- Patient Records
  - Search and Export Records
  - Add Record
  - Import Records
  - View Patients Information
  - Draft Patient Record
  - Import File List
- Epi Curves
- Reports
- Manage
- Settings

Data entry form Add Entry

General Information ^ x

Country \* :  Governorate \* :

District \* :  Health Facility \* :

Village/Sector \* :  Cholera Treatment Center (CTC) :

ORT - Center/Corner :  Gender \* :  Male  Female

Age \* :

Date of onset of Symptoms \* :

Date of visit to Health Facility \* :

Hospitalization \* :  Yes  No

Signs & Symptoms ^ x

Degree of Dehydration \* :  Severe  Mild/Moderate/Some

Vomiting \* :  Yes  No

Rice Watery Diarrhoea \* :  Yes  No

Blood in Stool :  Yes  No

Fever :  Yes  No

Other :  Oriented  Disoriented

Treatment received :  I/V fluids  Antibiotics  ORS

Laboratory Diagnosis ^ x

\* Stool samples taken  Yes  No

\* Outcome  Discharged  Expired/Died  Admitted  Left without permission

Vaccinated with OCV  Yes  No

Comments

# COP – Import data

The screenshot displays the Cholera Outbreak Portal (COP) interface. The top navigation bar includes the WHO logo and 'Regional Office for the Eastern Mediterranean' on the left, and 'Admin' on the right. A dark sidebar on the left lists menu items: Home, Patient Records, Search and Export Records, Add Record, Import Records, View Patients Information, Draft Patient Record, Import File List, Epi Curves, Reports, Manage, and Settings. The main content area is titled 'Patient Record' and contains a sub-section 'Import Patient from CSV'. This section features a file upload interface with a 'Choose File' button, a text field showing 'No file chosen', and 'Cancel', 'Reset', and 'Submit' buttons. Below the upload area, there is an information icon and a note: 'Note: To create a bulk linelist in Excel and upload to the website, please download the Excel Template. The Excel template contains instruction about how to feed data in the template.' A link 'Click here to Download the Excel Template' is provided. Further down, there is an Excel icon and a section titled 'Import Data from Excel file (.xls files)', with links for 'Click here to open the Application' and 'Click here to download the user manual'.

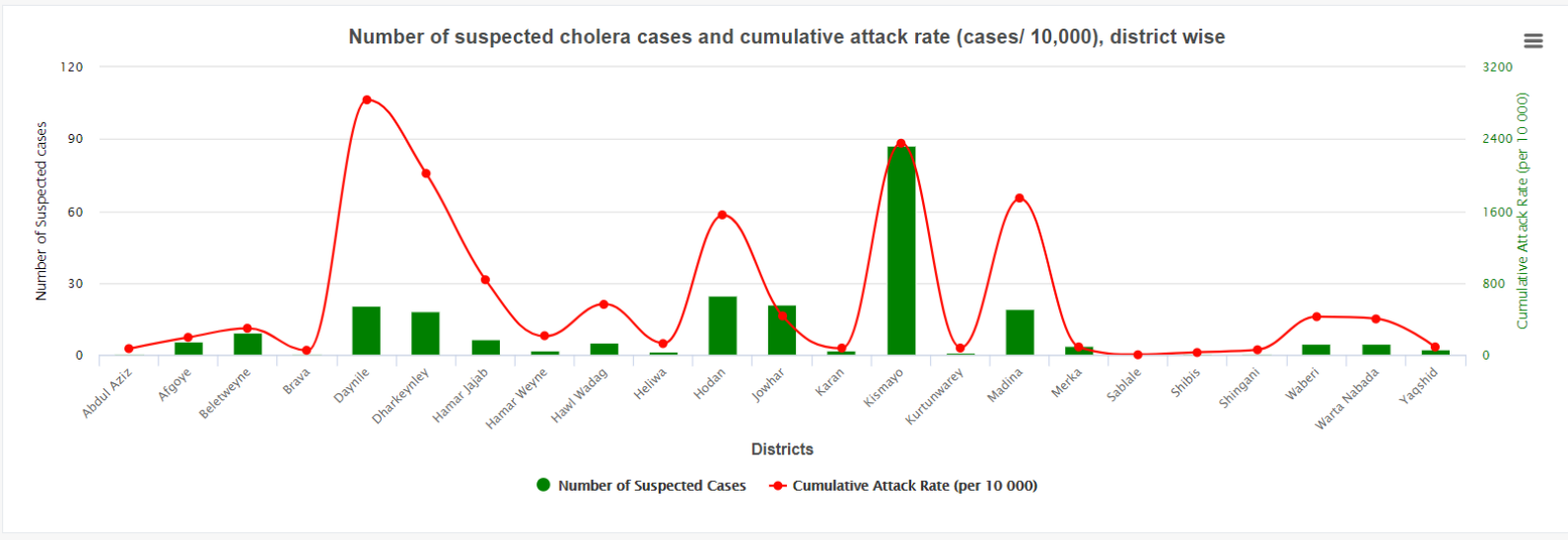
# COP – automated data analysis

**World Health Organization**  
Regional Office for the Eastern Mediterranean

GENERAL

- Home
- Patient Records
- Epi Curves
  - District Wise Cases Attack Rate Graph
  - Governorates Wise Suspected Cases, deaths and CFR
  - Month Wise Suspected Cases and CFR
  - Week Wise Suspected Cases and CFR
  - Week Wise Suspected Cases and Cumulative Attack Rate Graph
  - Week Wise Suspected Cases Rapid Diagnostic Test Performed And Positivity Rate
  - Week Wise Suspected Cases Culture Test Performed and Positivity Rate
  - Age Group Suspected Cases CFR

Country:  Start Week:  End Week:  Year:




Number of suspected cholera cases and cumulative attack rate (cases/ 10,000), district wise

Export to xlsx | Export to xls | Export to csv | Export to txt

District	Population	Suspected cases	Cumulative Attack Rate (per 10 000)
Abdul Aziz	35019	9	2.57
Afgoye	35019	10	2.85
Balelaweyne	35019	15	4.29
Brava	35019	5	14.29
Daymle	35019	20	57.14
Dharkeynley	35019	20	142.86
Hamar Jajab	35019	10	285.71
Hamar Weyne	35019	5	428.57
Hawl Wadag	35019	10	714.29
Heliwa	35019	5	1428.57
Hoban	35019	25	1714.29
Jowhar	35019	20	1428.57
Karan	35019	5	1000
Kismayo	35019	90	2571.43
Kurtumwaley	35019	5	1714.29
Madina	35019	20	1428.57
Merka	35019	5	1000
Sablale	35019	5	1428.57
Shibus	35019	5	1714.29
Shingami	35019	5	2142.86
Waberi	35019	10	2571.43
Warra Nabada	35019	10	2857.14
Yaqshid	35019	5	3428.57

# COP – Management section

Cholera Outbreak Portal (COP) Admin










 **World Health Organization**  
Regional Office for the Eastern Mediterranean

GENERAL

- Home
- Patent Records
- Epi Curves
- Reports
- Manage**
  - Add Country
  - Add Governorate
  - Add District
  - Add Health Facility
  - Add Village
  - Add Degree of Dehydration
  - Add Treatment
  - Add Bacteria
  - Cholera Treatment Center


### Add Country


\* Country Name  \* Total Population  Country Code

No.	Name	Country Code	Population	Action
1	Egypt	EGY	96375741	  
2	Afghanistan	AF	35914778	  
3	Somalia	SO	14320000	  



# COP – Settings

Cholera Outbreak Portal (COP) 

 **World Health Organization**  
REGIONAL OFFICE FOR THE Eastern Mediterranean

**GENERAL**

- Home
- Patient Records
- Epi Curves
- Reports
- Manage
- Settings**
  - General Settings
  - Manage Role
  - Manage Menus
  - Manage Users
  - Add Menu
  - Chart Color Scheme
  - SMTP Settings

**General Settings**

**Application Name/ Company Name**

This Name will be shown on the Title

**Default Admin Email 1**

Send email for new user and active user

**Default Admin Name 1**


Send email for new user and active user

**Default Admin Email 2**

Send email for new user and active user

**Default Admin Name 2**

**Logo**

 Logo

**Upload New Logo**

No file chosen

This will replace existing logo. You may also change logo by replacing file - uploads/system/logo.png

A person is rappelling down a rock face. The person is shirtless, wearing green pants and a harness. They are holding onto a rope that is attached to a rock ledge above. The background shows a large body of water, likely a lake, and mountains in the distance under a sunset sky. The overall scene is one of adventure and challenge.

Thank You

**BIG SUCCESS**

doesn't come  
without

**BIG CHALLENGES**



World Health  
Organization

Regional Office for the Eastern Mediterranean